

# REFLECTIONS ON GENDER AND NUTRITION ASPECTS OF VALUE CHAINS OF FONIO, BAMBARA GROUNDNUT AND CORCHORUS IN MALI

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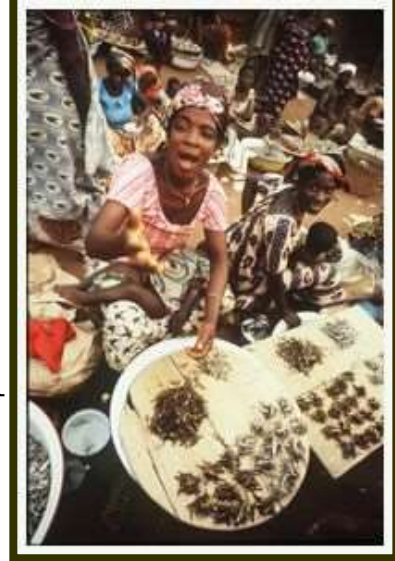
# PLAN OF PRESENTATION

- Myth in marketing
- Some key concept and elements of marketing system
- Case study of VC intervention in Cameroon
- Importance of VC analysis with gender and nutrition lenses
- Background on VC development of fonio (*Digitaria exilis*), Bambara groundnut (*Vigna subterranea*) and *Corchorus olitorius*
- Some reflexion points related to gender and nutrition-sensitive VC of fonio Bambara groundnut and *Corchorus olitorius*



# MARKETING MYTHOLOGY

- If we build it, they will come (produce more = sell more) / First understand the demand because producing more might even glut the market
- Forming the group is the first step / The market determine the enterprise model because groups may not be appropriate
- Traders and middle men are exploiters / traders perform an essential and risk function, margins and high because costs and risks are high
- Markets need more regulations / over-regulation inhibits market performance because lowing transaction costs enhances investment
- Value addition always add value / Value addition can be more expensive and labor-intensive than it's worth



# KEY CONCEPT



- Demand: starting point, consumers need, how to identify the type of consumers
- Product: what level of processing or finishing (raw product, semi-processed, refined, bundled/packaged, certified)
- Value chain: products move from producer to consumer through different levels, some products have short chains but others are much more complex, when one part of the chain is weak, the whole chain is weak



# ELEMENTS OF SYSTEM

## People

- Producers and producer groups
- Transformers, processors
- Traders, middlemen
- Manufacturers
- Retailers, vendors
- Consumers
- Policy makers

## Relationship

- Transport
- Client
- Contract
- Credit
- Outgrower

Infrastructure and institutions and policies



# HOW SYSTEM WORK

- The product or service has to meet a demand
- Market imperfections are the rules not the exception
- Market systems change rapidly



# FUNCTIONING MARKETS ARE ESSENTIAL FOR SUSTAINABLE DEVELOPMENT BUT .....

- Markets always involve risk and uncertainty
- Markets don't solve all problems ..... in fact they can deplete natural resources and deepen poverty
- Be aware of all trends



**COMPARISON OF THREE MODES OF  
IMPROVING BENEFITS TO FARMERS  
WITHIN AGROFORESTRY PRODUCT  
MARKET CHAINS IN CAMEROON**





# BACKGROUND / INTRODUCTION

- Studies in Asia (ANSAB, 2004), Africa (Facheux and al, 2007) and world wide (Brian Belcher, Schreckenberg 2007) on trade of NTFPs have demonstrated important problems in their marketing:
- Partial information or inadequate knowledge to producers on types and quantity of products required by market and their prices favoring the buyer;
- Poor access to desired markets due to production and post-harvest constraints;



# PROBLEM STATEMENT

- Lack of up to date market information and inability to visit traders or interact closely with them due to financial constraints and lack of a established systems;
- Inadequate funding mechanism at local level to support small scale NTFP enterprise;
- Lack of organization of farmers as small-scale producers group, organized marketing and need for wholesale markets.



# OBJECTIVES

- Compare three types of interventions in market chains for two products, *Cola spp* and *Ricinodendron heudelotii*,
  - 1) bringing farmers directly in contact with buyers at farm gate;
  - 2) facilitating a village-level stabilization fund to allow for off-season sales;
  - 3) storage methods to sell off-season.



# THE DIMENSIONS OF THE COMPARISON

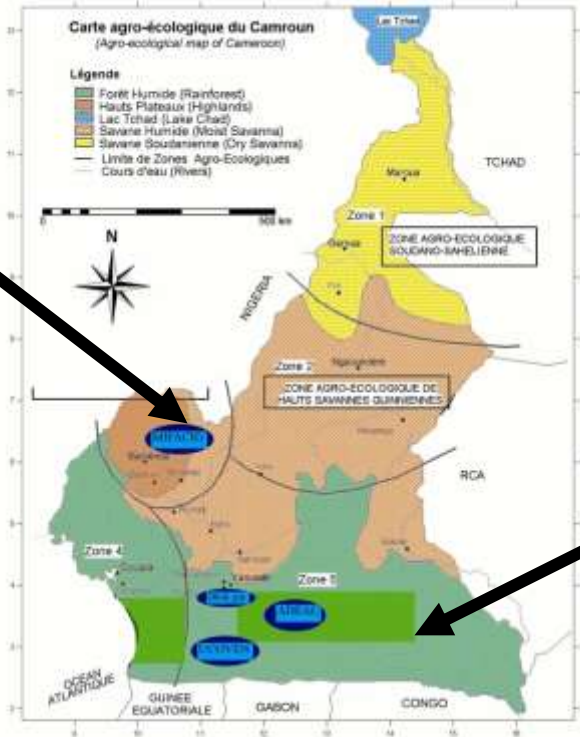
- **financial costs and benefits**, comparing normal prices and prices obtained after the intervention less the costs of the intervention and the number of individuals benefiting.
- **social costs and benefits**: a matrix of social factors is provided that shows which methods affect which aspects of household and village life.
- **sustainability of each option** in terms of potential for farmers and community-based organizations and/or traders to take up the method without external assistance.



# SITES/ PRODUCTS



Kola nut (*Cola* spp)



Njansang (*Ricinodendron h.*)



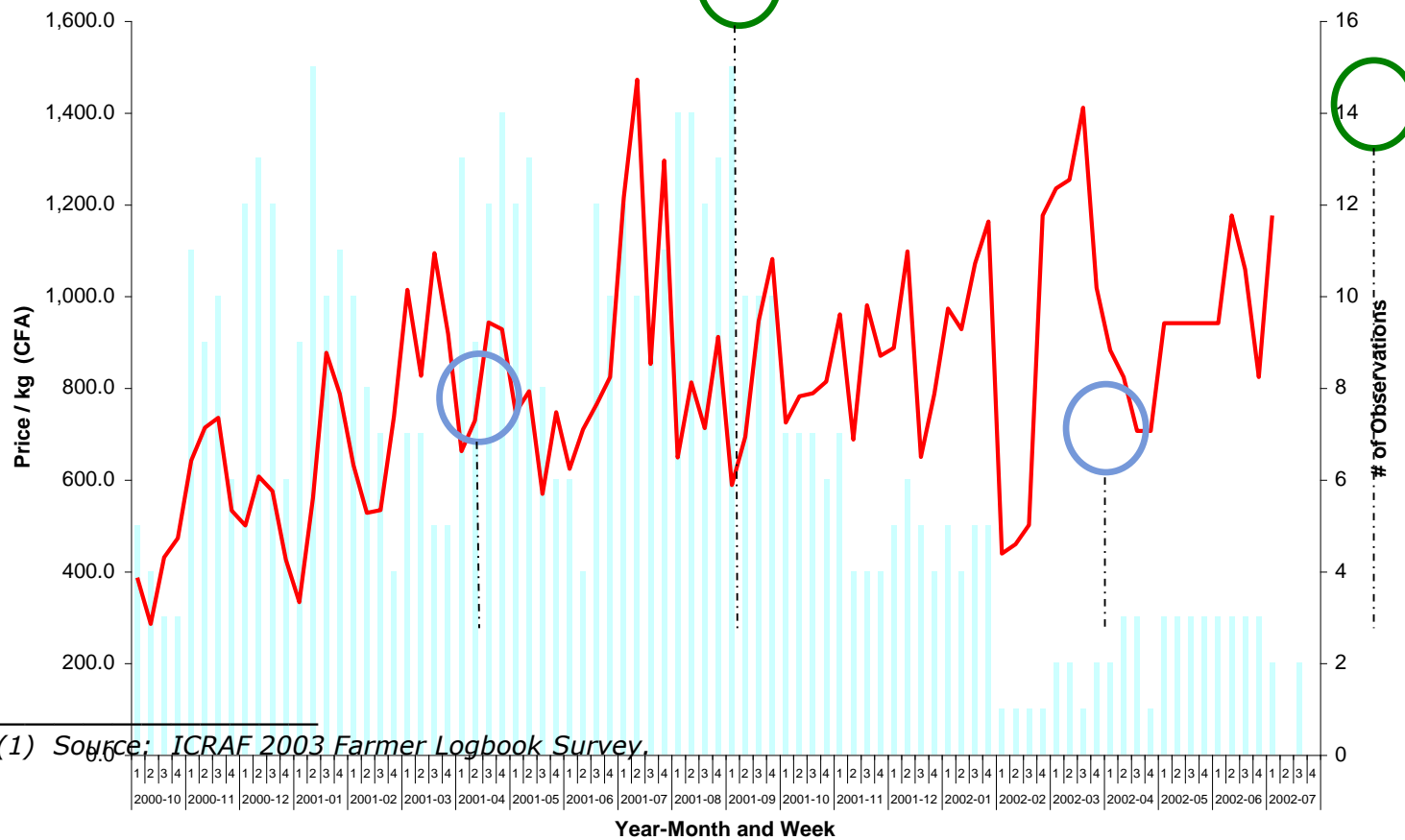
# BOTTLENECKS TO TRADE IN THESE PRODUCTS

1. Infrastructure
2. Trade and information system
3. Inability to sell in group
4. Inability to wait out season



# MARKET TRENDS

Weekly Prices of Cola Acuminata <sup>(1)</sup>

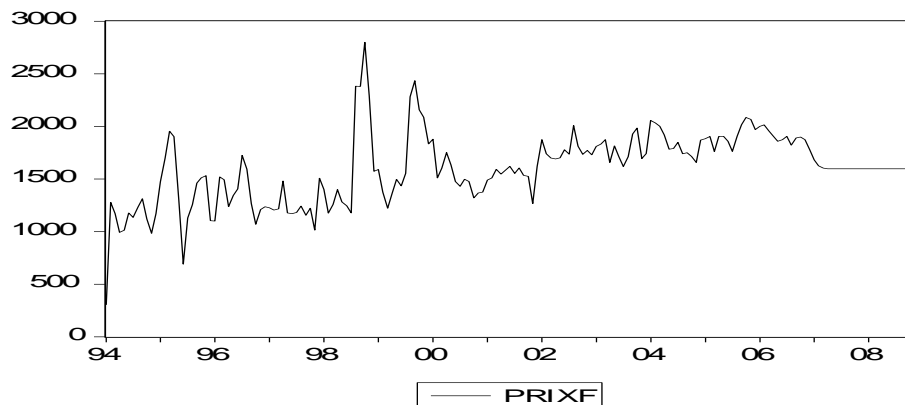


(1) Source: ICRAF 2003 Farmer Logbook Survey.



# EVOLUTION OF NJANSANG PRICES

Evolution of Njansang prices (1994-2008)



$$\text{Pr ix}_t = 1601 + 0.8\varepsilon_{t-1} + 0.6\varepsilon_{t-2} + 0.3\varepsilon_{t-3}$$



# SOLUTIONS TESTED

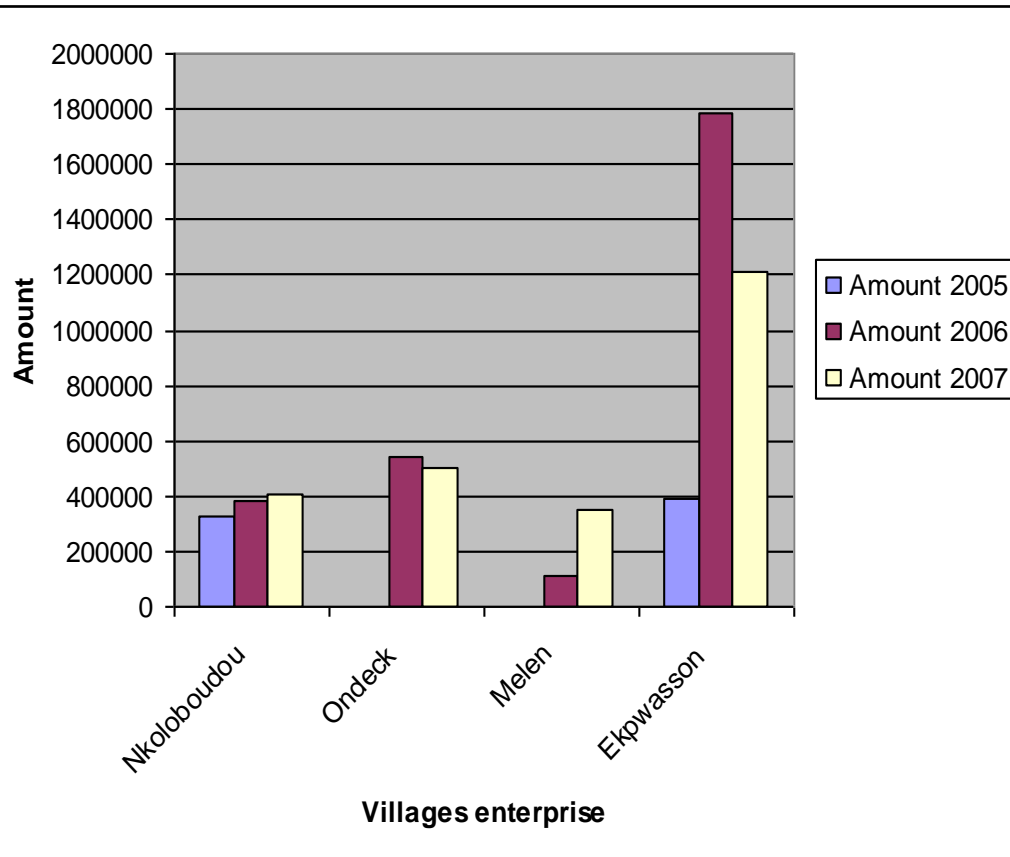


# IMPROVE STORAGE TO SELL OFF-SEASON : KNE'S NPV ANALYSIS

- Producers' income improved up to 38 %



# DIRECT LINKAGES BETWEEN TRADERS AND PRODUCERS



- In 2005, 45 households received 709,075 FCFA (around USD 1,420) from the sale of 833 kg of njansang,
- in 2006, 105 households received 2,826,000FCFA (around USD 5,652) from the sale of 3,000 kg of Njansang,
- in 2007 148 households received 2,472,150FCFA (around USD 4,945).

# DIRECT LINKAGES BETWEEN TRADERS AND PRODUCERS

- Njansang farmers realized an average 31% increase in their selling price.
- while those of kola obtained a 16% increment, as compared to what they would have received through individual sales



# GUARANTEE FUNDS TO FACILITATE SELLING OFF SEASON

- Solution tested in one village in ADEAC area is the use of “guarantee funds.”
- Seventy farmers are involved in this financial option to secure farmer production until njansang production can be sold in the off season.
- The guarantee funds requested for these farmers will enable them to store their produce and only sell when they can obtain the best price.



# GUARANTEE FUNDS TO FACILITATE SELLING OFF SEASON

- A loan agreement was signed individually with farmers marketing njansang.
- The notion group is very important here as the farmer organizations plays the role of social guarantee and helps the repayment of the loan.
- The loan is given out at a monthly interest rate of 2%.
- The management fee for this loan at the level of the farmer organisation will be kept low since the loan will be reimbursed at the grouped sale of their products.



# GUARANTEE FUNDS TO FACILITATE SELLING OFF SEASON

- After considering several possibilities,
  - it was decided that farmers themselves will store their products in their houses.
  - They brought their entire production in July for the grouped sales.
  - The month of July has been adopted following the weekly prices inspection of njansang.

(Figure of results)



# CONCLUSION

- Bringing farmers and traders together in group sales has the advantage of quick returns and building confidence of farmers but it requires facilitation that in the long run will be expensive if it has to occur each time there is a sale.
- The guarantee fund option is perhaps the riskiest given the possibility that sales will not occur or prices will decline as well as risks of non-repayment.
  - However when linked to micro-credit facilities it may be a quite flexible and useful option.
  - The cost of the guarantee fund here is simply the interest rate of 2%.





# COMPARISON MATRIX FOR THE 3 MARKET FACILITATION MODES

Mode	Financial cost and benefits	Social cost and benefits	Sustainability
<b>Improve storage to sell off-season</b>	<ul style="list-style-type: none"> <li>• long term benefit</li> <li>• procure good comparative advantage</li> </ul>	<ul style="list-style-type: none"> <li>• need a good farmer organization</li> <li>• affects more people indirectly</li> </ul>	<ul style="list-style-type: none"> <li>• good, depending of the cost of the technology</li> <li>• maintenance is important</li> </ul>
<b>Direct contact traders-producers</b>	<ul style="list-style-type: none"> <li>• short term benefit</li> <li>• develop farmer bargaining power</li> </ul>	<ul style="list-style-type: none"> <li>• No need of farmer organization</li> <li>• Directly affect household income level</li> </ul>	<ul style="list-style-type: none"> <li>• Fragile if there is no organization (NGOs, CBOs) to supervise.</li> <li>• could be continued if trade goes well</li> </ul>
<b>Guarantee funds to allow selling off season</b>	<ul style="list-style-type: none"> <li>• short and mid-term benefit</li> <li>• need to master price and market information</li> </ul>	<ul style="list-style-type: none"> <li>• No need of farmer organization</li> <li>• Directly affect household income level</li> </ul>	<ul style="list-style-type: none"> <li>• fragile, if reimbursement process is not well developed</li> <li>• Could be linked to savings and micro credit schemes</li> </ul>



**NO MENTION OF GENDER AND  
NUTRITION AT FIRST PLAN**

**How can this be changed ????**

# VALUE CHAIN ANALYSIS

- Since 1990, VC analysis is a novel methodological tools for understanding the dynamics of economic globalization and international trade
- VC interventions are distinguished from more general programmes aimed at stimulating economic growth, developing the private sector and increasing the commercialization of economic activities
- Focus: Improve vertical linkage among VC (production, processing, trade functions) with the view of improving the terms of participation of selected targeted groups



# GENDER AND NUTRITION-SENSITIVE VALUE CHAIN

- To ensure gender issues are taken into consideration in VC-related intervention is vital for facilitating the development of inclusive VC that benefit both women and men
- Good to examine which gender issue are important when and where in VC based on findings of existing evaluations completed by others relevant studies



# CASE STUDY OF FONIO (*DIGITARIA EXILIS*), BAMBARA GROUNDNUT (*VIGNA SUBTERRANEA*) AND *CORCHORUS OLITORIUS*

- Native, underutilized crops, such as fonio (*Digitaria exilis*), Bambara groundnut (*Vigna subterranea*) and *Corchorus olitorius* are well-adapted to the arid conditions of the Sahel and can help secure production under climate change
- In the context of marketing, these NUS are generally under-researched and the most important constraints in Mali are not well documented.
- For instance, who are producers of these NUS, how are they organized, how the market system performed and what are specific constraints they are facing in order to develop the VC.



## GENERAL OBJECTIVE

- To conduct a value chain analysis of fonio, Bambara groundnuts and Corchorus in Mali with emphasis on gender and nutrition aspects



# SPECIFIC OBJECTIVES

- To identify all stakeholders (actors) and the activities in the value chains of fonio, Bambara groundnuts and Corchorus, in order to promote benefits of men and women
- Understand the strengths, weaknesses, opportunities and treats along the value chains including actors (women, men and youth), products, process
- Understand how are values added created along chain and what are the critical nutritional and quality points along the value adding process (including processing)
- Assessing the value chain performance with emphasis on product quality and nutritional value conservation added created by each actors
- Identify the best quality and nutritional upgrading strategies for each value chain



# STUDY SITES

Region	Cercle	Village	Ethnic group
Segou	San	Somo	Bobo
	Touminian	Boulimasso	Bobo
	Touminian	Boumboro	Dafing
	San	Kiby	Bobo
Sikasso	Sikasso	Siramana	Senoufo
	Koutiala	Finkoloni	Minianka
	Koutiala	N'goutjina	Minianka
	Sikasso	Chicolomba	Senoufo





# DATA COLLECTION APPROACH:

- A combination of focus group discussions and semi structured interviews was used to collect data for the exercise.
- Focus group discussions' objective: to bring specific actors in the market chain in order to elaborate the market map, explore key issues in details, identify major constraints and opportunities, and build relationships maps.



## SAMPLING OF RESPONDENTS

- In each village a focus group discussion using question guide was conducted.
- The groups was made up of 3-6 people per actor (half female when possible) including producers, processors (inputs suppliers, traders, support services, later on).
- Criteria to select the actor was be their experience in performing fonio, Bambara groundnuts and Corchorus-related activities and their knowledge in these different sectors mainly the constraints and opportunities.



# SOME REFLECTION POINTS RELATED TO GENDER AND NUTRITION-SENSITIVE VALUE CHAIN



## GENDER OBJECTIVES (1/4)

- Which VC help women to achieve a better functional position? (fonio)



## GENDER OBJECTIVES (2/4)

- Which VC seeks to include more women? (fonio and Bambara groundnut)



## GENDER OBJECTIVES (3/4)

- Which VC seeks to improve the terms of inclusion of existing female actors in the chain (fonio)



## GENDER OBJECTIVES (4/4)

- Which VC is targeting on women (Corchorus)





## UPGRADING STRATEGIES

- Which VC aim to shifting to more rewarding position in the chain (fonio and Bambara groundnut)
- Which VC making products that can provide more better returns to womens' producers (Corchorus )





# DEMAND AND SUPPLY FOR NUTRITIOUS FOODS

- VC of fonio, Bambara groundnuts and Corchorus promote consumption of nutritious food
- VC of fonio, Bambara groundnuts and Corchorus enhance the supply of nutritious food by reducing labor, increasing output and economic returns along the VC
- VC of fonio, Bambara groundnuts and Corchorus affecting food availability, quality and affordability



THANKS FOR YOUR ATTENTION

