Roasted Bambara groundnut (*Vigna subterranea* L. *verdc*): An emerging income source for women in Mali

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### Rationale
Women are often the primary actors involved in cultivation and marketing of traditional crops, which are valued for family nutrition. These crops generally have poor yields, difficult processing, poorly developed markets and other constraints that challenge their marketability. However, while presenting barriers, the neglected and small-scale status of traditional crops can also offer a space of opportunity for women to generate profitable small enterprises that are complementary to market activities. In this study a gendered value chain analysis was performed for Bambara groundnut in Mali to understand the current levels of involvement of men and women in cultivation, marketing and to identify interventions to strengthen women’s income earning opportunity from this crop.

### Key messages
1. In alignment with traditional roles and different land access, men were more involved in cultivation and sale of raw grains and women were more integrated in processing and sale of roasted grains.
2. Traders of Bambara groundnut in the markets were predominantly individual women from nearby villages specialized on the one product which provided approximately 75% of their personal income.
3. Poor quality of transformed products due to women’s lack of knowledge of appropriate processing and storage techniques and lack of processing equipment were found to be the major constraints which can be addressed with training, building collective marketing, and providing access to processing equipment.

### Research Methodology
A combination of qualitative and quantitative methods were used in 8 villages and 9 rural and urban markets, including focus group discussions, household survey (N=414, 464 female heads interviewed), and individual interviews with producers (N=41, 29% women) and traders (N=26, 100% women). Producers were invited to mixed-gender focus groups in each community. Households were randomly selected for the household survey, while individual producers were selected through a snowball sampling approach aiming to interview both male and female producers of Bambara groundnut. The market survey took place during the scarcity period (June 2017). Traders were randomly selected in markets with more than 10 vendors, but in markets with less than 5 vendors, all were interviewed (Figure 1). An econometric approach was used to analyze associations traders sold and the selling price obtained per kg. Ordinary Least Squares (OLS) regression was used to analyze the factors that influenced quantities sold and the selling price obtained per kg of roasted Bambara groundnut.

### Key findings

#### Gendered production
Bambara groundnut is managed primarily by women in two communities, primarily by men in two communities, and by both genders in four communities (Figure 2). Both genders are engaged in all phases of crop production for Bambara groundnut, but women are more prominent in seed sowing, weeding and harvesting, while men are more engaged in soil preparation and pest management (Figure 3). Most men and women producers of Bambara groundnut had access to family and association plots. More men had access to private plots than women (86% of men vs. 33% of women) (Figure 4).

#### Gendered crop management

<table>
<thead>
<tr>
<th>Gender</th>
<th>Access to production spaces</th>
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<tbody>
<tr>
<td>Men</td>
<td>86%</td>
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<tr>
<td>Women</td>
<td>33%</td>
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### Use of Bambara groundnut

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- **Groundnuts**
- **Roasted groundnuts**
- **Groundnut oil**
- **Groundnut paste**
- **Groundnut powder**
- **Groundnut husk**

- **Roasted groundnut**

#### Gendered marketing

Producers estimated they used a 50% of their Bambara groundnut harvest for personal consumption, 30% for sale, 10% for gifts and 10% for seed (N=311). More men were selling their Bambara groundnut production (48% of men vs. 33% of women), whereas more women were involved in selling raw grains of Bambara groundnut (37% of men vs. 12% of women), while women were more involved in sale of roasted groundnuts (22% of women vs. 0% of men). Mean annual income from Bambara groundnut reported for men was 28,107 FCFA as compared to 18,000 FCFA for women. Focus groups reported that the income from transformed products tends to be more stable and that men decide how to use the money, while income from raw grains tends to go to men.

### Traders of roasted Bambara groundnut encountered in the markets were predominately women

- **Roasted groundnut**
- **Groundnut oil**
- **Groundnut paste**
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- **Groundnut husk**

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### Opportunities and constraints for women

Marketing of roasted Bambara groundnut is a viable alternative for women who are excluded from high-value markets (groundnut, cowpea). Bambara groundnut may provide lower income but it also has lower marketing barriers (market risks and transactions costs). Poor quality of transformed products due to women’s lack of knowledge of appropriate processing and storage techniques and lack of processing equipment were found to be major constraints. In addition, markets’ poor access skills and lack of interest led to failure to sell the transformed products. Major difficulties in selling roasted Bambara groundnut are low capital of traders (50%) and lack of buyers/consumers (38%), slow rhythm in sales during the abundance period and high price of grains (4%). Processing training coupled with good market orientation and links will boost both production and commercialization of Bambara groundnut.

### References


## Acknowledgements

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