



- *Ricinodendron heudelotii* (Njansang) is a tree native to West and Central Africa.
- Sale of kernels provide cash income for many households (Ayuk et al., 1999)
- Kernel is traded in local, national and, to a lesser degree, international markets (Plenderleith, 2004)

Background

- Recognition of contribution of under-utilized food products to rural livelihoods by development and research practitioners over past decade (Gruere et al. 2006, Facheux et al. 2012).
- In Cameroon, 10 years of collective action interventions aimed at promoting commercialization of njansang using farmer groups.

Problem statement

- After 10 years of promoting njansang through Value Chain Development, its effects and impacts have not been evaluated in a systematic way.

Objectives

- Identify the level of involvement of producers and traders in collective action interventions promoted by NGOs in the njansang VCD.
- Assess impacts of interventions on livelihoods of farmers and traders business performance

Methodology

- Sustainable Livelihoods Framework (fig 1; DFID, 1999).
- 3-points likert range questions: 1= improved/increased; 2= the same/no change; and 3= reduced/worst
- 16 villages in 3 regions in the humid forest zone of Cameroon (Fig 2).
- Focus group discussion with 16 producer groups and 3 trader associations
- Structured interviews with 169 njansang producers and 10 wholesalers (Table 1).



Fig 1: Sustainable Livelihoods Framework with 5 capitals and indicators used in the study

Table 1: number of producer groups and producers interviewed per region

Region	Producer groups	Men	Women	Total
East	7	12	24	36
South	7	13	73	86
Centre	2	10	37	47
Total	16	35	134	169



- Less than 50% of producers are involved in tree propagation in nursery groups (Table 2). This is explained by the fact that the study area is located in the tropical forest area where njansang trees still grow naturally in large quantities.
- The number of producers involved in nursery activities who have witnessed improvements in planting techniques (43.6%) are twice as many as those involved in group harvesting and processing (24.1%) and in group sales (23.8%).
- More than 95% of producers have seen an improvement in their total annual income and income from njansang sales. Among others, increase in income could be explained by increases in quantities produced and in the unit selling price thanks to better bargaining by the group.
- More than 80% of producers have perceived an improvement in their public communication skills. Members are encouraged and feel more confident to express themselves during trainings and in group meetings.
- A greater proportion of men (54.3%) have observed an improvement in their positions in the community than women (40.3%; Fig 4). A reason for this is that, njansang is predominantly a female activity involving few men whose participation is motivated by posts of responsibility in the groups, later reflected in the community at large (Cosyns, 2013).
- Overall, more than 80% of the respondents mentioned an improvement in their ability to pay children's school fees and in their capacity to process njansang. However, the proportion of producers in the Centre region with improvement in their capacity to process (55.6%) and their capacity to grade and preserve njansang (30.6%) is lower than the proportion of farmers in the East and South regions (Fig 5).
- All the traders pointed out improvements in terms of market information exchange, partnerships with suppliers and quality of products bought from producers due to collective action (Fig 6).

Conclusion

- 10 years of collective action interventions in the njansang value chain in Cameroon have resulted in positive changes in terms of natural, social, financial and human capital at producer level.
- The effect of collective action varies by gender, region and type of collective action activities the producer is involved in.
- Collective action has also improved business performance of njansang traders.
- The 5 capitals tool appears to effectively capture effects of collective action interventions on producer livelihoods and on traders' business performance

Table 2: Involvement of producers in different collective activities

Collective action intervention	Region	Number of groups		Number of producers	
		Men	Women	Total	
Tree propagation in group nursery	East	3	5	25	30
	South	3	6	14	20
	Centre	2	12	16	28
	Sub total	8	23	55	78
Harvesting and processing of njansang	East	7	10	68	78
	South	7	7	27	34
	Centre	1	10	18	28
	Sub total	15	27	113	140
Group sales of njansang	East	7	12	66	78
	South	6	6	30	36
	Centre	2	12	24	36
	Sub total	15	30	120	150

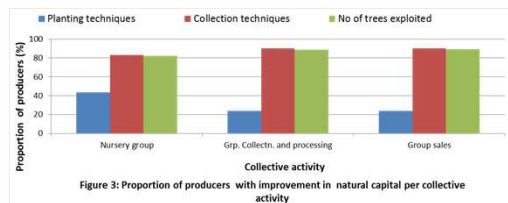


Figure 3: Proportion of producers with improvement in natural capital per collective activity

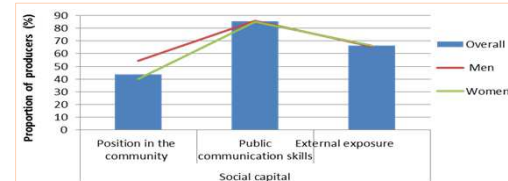


Fig 4: Proportion of producers with improvements in social capital by gender

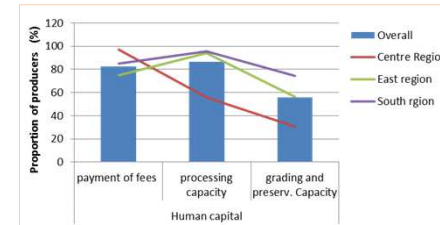


Fig 5: Proportion of producers with improvements in human capital by region

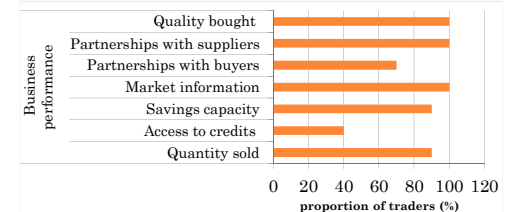


Fig 6: Proportion of traders with improvements in business performance

Bibliography

Ayuk, ET, Duguma B, Franzel S, Kengue J, Mollet M, Tiki-Manga T and Zekeng P. (1999). Uses, management and economic potential of *Garcinia kola* and *Ricinodendron heudelotii* in the humid lowlands of Cameroon. *Journal of Tropical Forest Science* 11 (4), 746-761.

Cosyns H., Van Damme P, De Wolf R and Degrande A. (2013). Can rural development projects generate social capital? A case study of *Ricinodendron heudelotii* kernel marketing in Cameroon. *Small-scale Forestry DOI* 10.1007/s11842-013-9247-1 (on-line first)

DFID (1999). Sustainable livelihoods guidance sheet. Department for International Development, UK.

Facheux C, Gyau A, Russell D, Foundjem-Tita D, Mbosso C, Franzel S and Tchoundjeu Z. (2012). Comparison of three modes of increasing benefits to farmers within agroforestry tree products market chains in Cameroon. *African Journal of Agricultural Research* 7 (15): 2336-2343

Guere G, Nagarajah L and King O. (2008). The role of collective action in the marketing of underutilized plant species: lessons from a case study on minor millets in South India. *Food Policy* 34:39-45.

Plenderleith K. (2004). Njansang (*Ricinodendron heudelotii* subsp. *Africanum*). In Clark LE and Sunderland TCH. (Eds.) *The key non-timber forest products of Central Africa: state of the knowledge. Technical Paper No 122*, USAID. pp. 63-86.