



Towards a gender responsive cassava breeding program in Nigeria

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Introduction

Cassava is a multi-faceted crop and a major food crop in Nigeria. It is used to make a great variety of food products such as gari. A unique aspect of cassava is that smallholder farmers add value to the crop by processing it. Processing is mainly done by women, making a gender responsive breeding strategy especially important given the possible effects of variety change on cassava related work and its value chains.

Reasons of men and women to prefer traits differ but do not contradict, but rather complement each other

Detailed research on preferred variety traits within eight communities in Southwestern and Southeastern Nigeria showed that men and women prioritized similar traits such as ease of peeling/root size, early maturing, in ground storability and food quality traits. Women described food quality traits in more detail. Reasons for the preferred traits however differed between men and women and showed that these reasons largely relate to the different cassava related work of women and men (Tab. 1)

Tab. 1: Reasons for cassava variety preferences for three popular cassava varieties; summarized from FGDs in all study sites.

Variety name (type)	Reasons for preference	
	Men	Women
<i>Molekanga</i> (local)	high yielding, poundable, good for <i>gari</i> , marketable, early maturing (6-9 months), Also called poverty removal crop	poundable, root size, high yielding, weed suppression, low cost of production and early maturing, Also called food security friendly cassava variety
<i>Oko Iyawo</i> (local)	poundable, mealy, high yielding, early maturing (7-12 months) and resistant to pest and diseases	mealy, short time to cook, good taste and product quality for <i>gari</i> , <i>eba</i> , <i>fufu</i> and <i>lafun</i>
<i>Dangaria</i> (Improved)	good taste, white color, very tall with multiple stems for planting materials, good for feeding livestock	high market demand, poundable, good root and product color, weed suppression, tall stems, good product quality for <i>gari</i> , <i>fufu</i> , and <i>lafun</i>

Shifting preferences of different social (gendered) groups

Mechanization and upscaling of small processing centers and emergence of larger ones, might change trait preferences due to:

- Changes in division of labor and gender roles in processing
- Greater geographic and/or social distance between processing and cultivation, potentially limiting women's participation
- Emergence of processing and cultivation benefiting a select group, potentially marginalizing women.

From comparing men and women to identifying how gender is articulated within different social groups

Research approaches mainly using sex-disaggregated data may fail to provide understanding of gender roles because they are often determined by the other social sections women and men are part of. To see how gender is articulated we have to inquire into the gender based constraints and opportunities for women and men and how they are constructed.

Collaboration between breeders and social scientists provides opportunities through participatory trials (PVS) to “indirectly” access sensitive social issues:

- Regular contact with communities while evaluating field trials
- >> mutual confidence
- A concrete shared activity, a performative interaction¹
- >> entry point to discuss the social issues around cassava work
- Shared attention for cassava cultivation and processing creates an epistemic or learning culture² that facilitates more horizontal and open communication.
- We can actually evaluate (Fig 1) how different participants act and find a role in the PVS trial evaluation: we can evaluate their restrictions and possibilities and how gender is articulated.

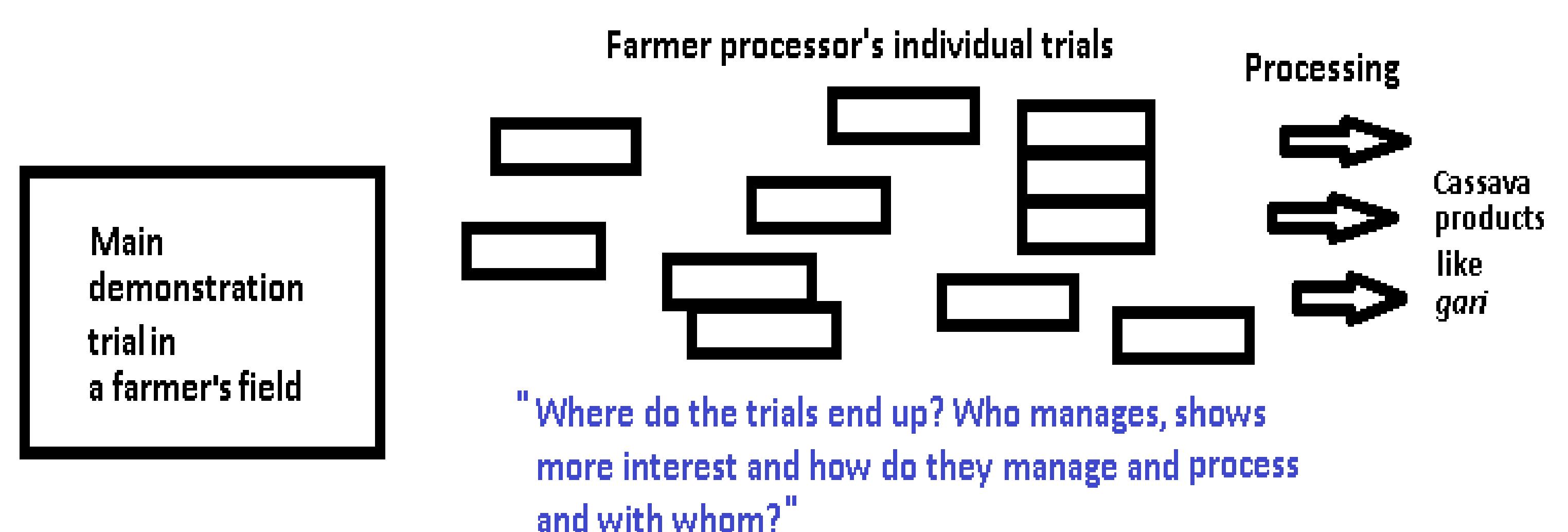


Fig. 1: Interdisciplinary trial approach combining social science with PVS

- We can tacitly access the varieties that different people like by letting them evaluate local varieties from cultivation to processing along with new ones and inquire into important traits such as taste and suitability for different cassava products, because most of this knowledge is tacitly known (Fig.2).

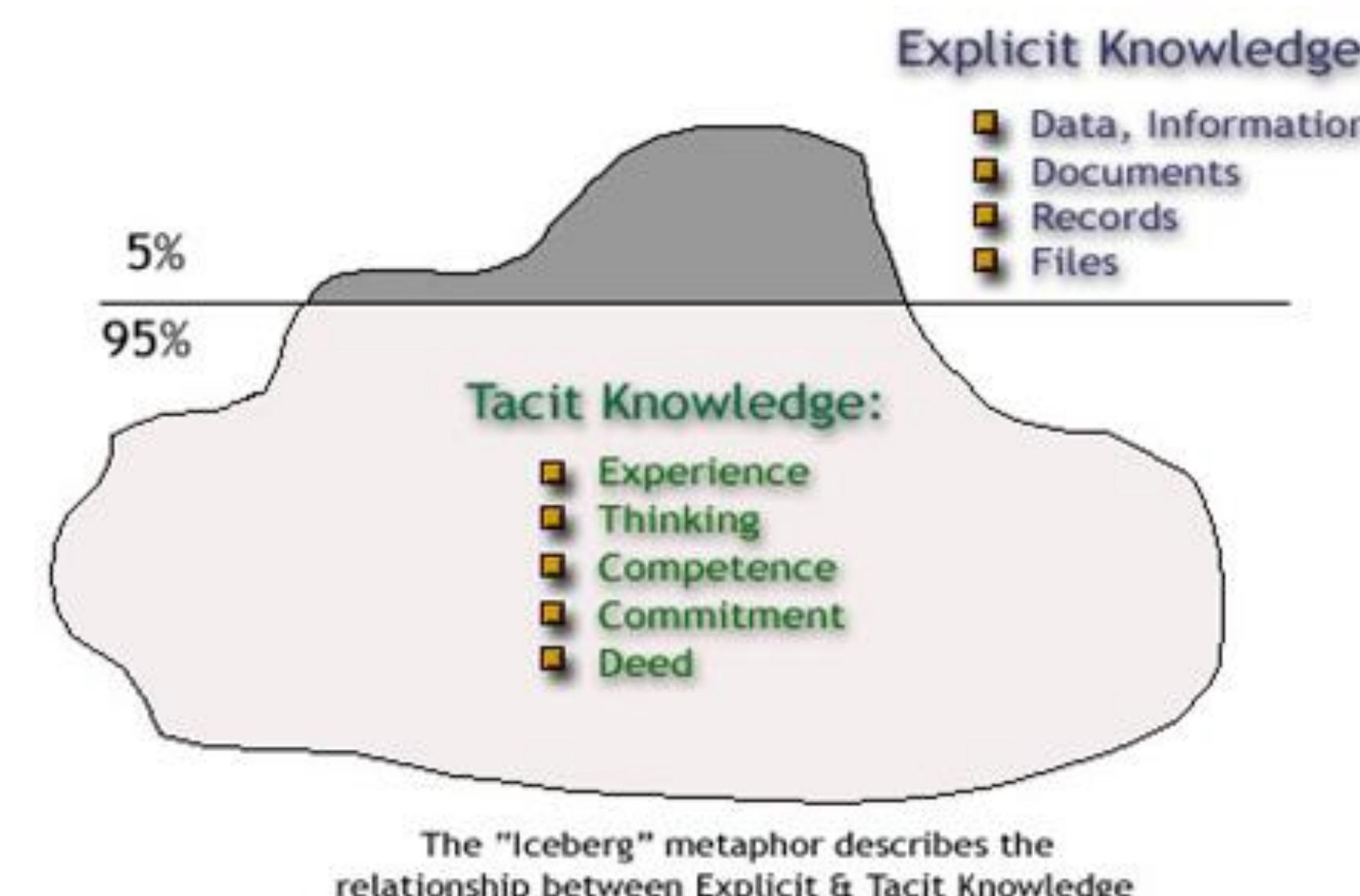


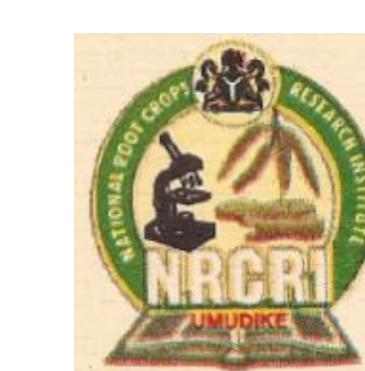
Fig. 2: The “iceberg” showing the importance of tacit knowledge (after Polanyi, 1966³)

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References

- 1 Richards, P. (2007) How does participation work? Deliberation and performance in African food security. IDS Bulletin 38(5): 21–35
- 2 Knorr-Cetina, K. (1999). Epistemic cultures: how the sciences make knowledge. Harvard University Press
- 3 Michael, P. (1966). The tacit dimension. Peter Smith, Gloucester.



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