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Outline

- 1. Background and objectives of the study
- 2. Methods and approaches of the study
- 3. Sweetpotato farming systems, food security and the role of gender
- 4. Sweetpotato consumptions among rural and urban households
- 5. Sweetpotato value chains and the role of gender
- 6. Men and women's perceptions to agricultural extension and their participations
- 7. Conclusion and recommendations



1. Background and objectives

- ➤ Ethiopia is one of the top producers of Sweetpotato in Africa with 2.7 million tons in 2015 (CSA, 2015).
- ➤ However, the impact on the food system is still low with an average consumption of 28.7 kg/cap/yr (CSA, 2015).
- ➤ Malnutrition and micro-nutrient deficiency are major public health problems in Ethiopia (Gebremedhin et al., 2013).
- ➤ 50% of rural people are below food poverty (< 2,200 K/calorie equiv. per adult per day' (ADB, 2004).
- ➤ 38% of children under 5 are stunted in Ethiopia (EHDS, 2016)
- Therefore, adoption of Vitamin A rich sweetpotato varieties would benefit 33% of the population due to increased intake of beta-carotene (Anderson et al., 2007).



1. Background (Contd...)

- ➤ Therefore, the EU-funded Sustained Diet Quality Improvement by Fortification with Climate-smart, Nutrition-Smart Orange-fleshed Sweetpotato (OFSP) project has four result areas:
 - 1) Establishment and strengthening of vine multiplication sites
 - 2) Increased awareness of male and female smallholder farmers on OFSP's benefits, recipes for their use and child nutrition practices
 - 3) Improved supply of and demand for OFSP products in the urban areas,
 - 4) Evaluation and learning to recommend value for money models for large-scale OFSP dissemination.
- **Gender** is considered as a cross-cutting issue along the sweetpotato value chains development process.
- > Therefore, this particular study was aimed to:
 - Investigate current roles of men and women in smallholder sweetpotato production and marketing
 - Understand current gender-based constraints to sweetpotato production and marketing
 - Examine gender-based interventions to enhance sweetpotato value chains



2. Methods and approaches of the study

2.1 Description of the study area

• This study was conducted in two selected districts representing the Sidama and Gedeo zones of the SNNP

	Attributes	Gedeo (Dilla Zuria)	Sidama (Aleta Chuko)
	Population density	750 person per km ²	443 persons per km ²
7	Growing season	Two seasons: Small and long rainfall season	Two season; Small and long rainfall season
	Major farming systems	Coffee and enset- based home garden Agroforestry	Khat-based farming; maize-based cereal farming
	Proportion of women	50%	49%
***************************************	Land holding size (ha/household)	0.23	0.31

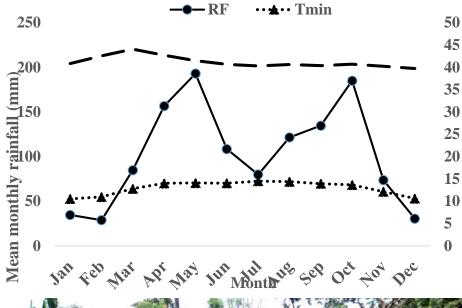


2. Methods (Contd....)











Khat being growing as a dominant crop in Sidama

2. Methods and approaches of the study

- ➤ Data was collected through:
 - Sex disaggregated focus group discussions (FGDs) 8 FGDs
 - Field observations and transect walks-examine the percentage of the different crops and the status of SP
 - In-depth individual interviews with actors and service providers

4	Type of interviewee	Number of
		participants*
	Producers	16 (8F)
	Assemblers	4 (2F)
	Wholesaler	1 (0M)
ad d	Retailers	8 (1M)
	Consumers	26 (1M)
A ST OF THE ST O	Extension staff	8 (0F)
	Total	63 (39F)

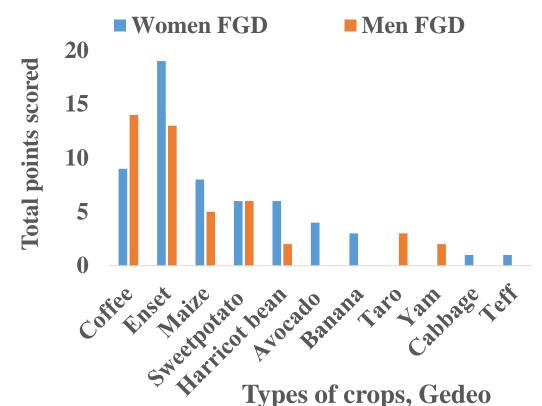


Assembler (left) and wholesaler



Retailer

- 3. The farming systems (Contd...)
- 3.1 Priority crops and gender dimensions
- Enset, coffee, maize, sweetpotato and haricot bean were the most important crops in Gedeo
- Enset, Khat, maize, sweetpotato and haricot bean were the five most important crops in Sidama
- ➤ Women gave more value for food crops and low value for cash crops while men gave the rank for high value cash crops (e.g. coffee)



Selection criteria for women

- Food crops
- Source of additional incomes
- have a short growing time
- Homestead crop
- Livestock feed (e.g. Enset and SP are sources of food and feed).



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3. The farming systems (Contd...)

3.2 Sweetpotato production systems in the study area



1) SP as part of the coffee and enset agroforestry system in GEDEO

- Good for vines/seed production as the shades prevent the vines from heating during the dry season
- Root yields are low due to poor access to light and fertile soils
- Considering recipes from leaves could be part of the intervention



2) Maize overlay cropping: Planting SP once the maize started tasseling

- ➤ Good to have two successive crops per year per plot of land; SP is short maturing and can resist early cessation of the rainfall
- ➤ Root yield is good as the sweetpotato will grow openly once the maize is harvested



3. Farming systems (Contd...)

3.2 Sweetpotato production systems



3) Sweetpotato grown as a sole crop

- Competing with other high value crops (Khat, coffee and enset) given the land scarcity
- There is a difficulty to get wider area of open lands in the homegarden agroforestry systems



4) Khat (Catha edulis) intercropped with sweetpotato

- Khat is grown at the expense of coffee and other cereals due to high market potential
- The spacing between Khat crops can allow sweetpotato to grow and produce good root yields
- Combining cash and food security crops can be considered as a good opportunity



3. Farming systems (Contd...)

3.3 The role of men and women in SP production and decision

> Women are making a significant contribution in sweetpotato production

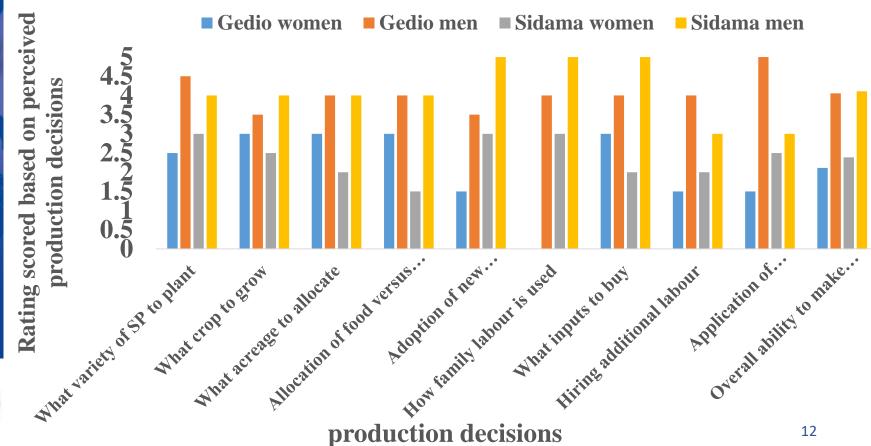
		O			• •
	Farm activity	Men	Women	Young M	Materials required
A	Land preparation (manual)	XXX	XX	XX	Land, Rake, Oxen
8					Watering can, shovel,
					machete
	Planting the vines	XXX	XXX	XXX	The planting material like
1					seed
\ \	Addition of manure and	XX	XXX	X	Manure, sacks or basket
	compost				
	Hoeing	XXX	X	XX	Rake
K,	Weeding	XXX	X	XX	Rake, Hoe, hand
ľ	Protecting from animals	X	XXX	YYX	Materials for fencing
	Harvesting	XX	XXX	XXX	Hands, Hoe
	Marketing	XXX		X	Donkey carts, vehicles,
ì	War Ketting	717171	7X 7X 7X	11	manual labour
		3 7	373737	373737	
	Collecting vines for animal	X	XXX	XXX	Horse, donkeys, human
TO BE	feed				labour



3. Farming systems (Contd...)

3.3 The role of men and women in SP production

- Although women share a significant contribution in the production processes, their decision making power is generally lower than men.
- Men are considered as farmers and owners of farms and women as helpers
- Although women in men-headed households may be consulted in decision making, their power is low.





- 3. Farming systems (Contd....)
- 3.4 The role of Sweetpotato for food security
- All discussants and respondents agreed that food insecurity is a severe challenge in the study area.
- The perceived threats to food security were not different between the men and women focus group discussions.
 - Drought, land shortage and continuous fragmentation, burgeoning population and lack of alternative income generating activities (competition for few job opportunities), personal reasons such as laziness, high food prices
- Important attributes of SP that contribute to its being food security crop:
 - 1) Drought tolerant
 - 2) Can mature and be harvested during the hunger season (twice per year)
 - 3) Early maturity
 - 4) Piecemeal harvesting
 - 5) High yielding compared to other crops
 - 6) It is an important livestock feed as it improves milk yield



3. Farming systems (Contd....)

3.4 The role of Sweetpotato for food security

Months	Jan	Fe b	M ar	A pr	M ay	Jun	Jul	Aug	Sept	Oct	No v	De c
Rainfall season	Dry Season	Belg	g Sea	son		Kiremt/M	Ieher (Mai	in growing S	Season)		Dry Seas	
Coffee										Harv	est	
Enset												
Khat												
Maize & other annual crops like Haricot bean			Plai	nting					harvesting			
Sweetpotato												
Sweetpotato	Harvesti	Harvesting					Harvesting of vines and roots; planting for the main season				vestin	(To

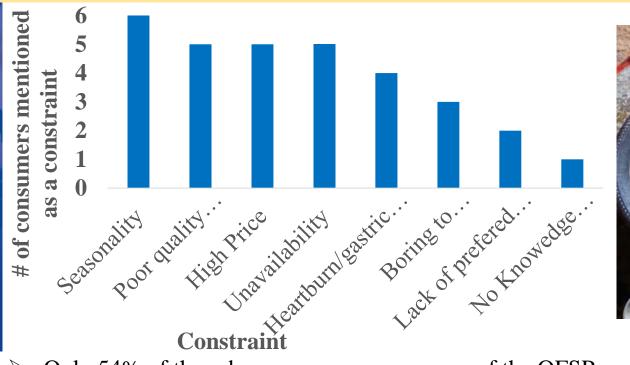


The harvest of belg season sweetpotato is locally known as *Hidufune*, meaning we got it in hunger period

4. Sweetpotato consumptions

- > Sweetpotato is consumed as a snack or coffee starter, not as a regular meal.
- ➤ It has been consumed only by boiling, not integrated to traditional culinary system
- Forty-six percent of urban consumers at Hawassa central market were purchasing sweetpotato at least once in two months

The major constraints and challenges that caused low consumption of SP







Only 54% of the urban consumers are aware of the OFSP.

Only 15% had ever consumed the OFSP while the rest have only heard about its importance.

5. Sweetpotato value chains and the role of Gender

Input	Producti		Assembling	Wholesali ng	L	→ Retailing		Consumptio
supply	on				ng		Retailing	

- > There are clear roles of gender in SP value chains

The roles depend on VC stage, market type and volume of product marketin									
المعتمر	Value chain stage	Gender roles							
	Input supply	TVMs are dominantly men; low volume vine selling at village and district markets by women							
7	Production	The sellers (producers) could be men when it is done at the farm gate or district markets (large volume) or women when it is done at the village markets with low volumes							
	Assembling	 All the assemblers who are collecting and selling at village markets are women. They sell their products to village level retailers All the assemblers who are collecting from producers in villages and sell that to retailers at district markets or large markets (Hawassa and Dilla) are men 							
	Wholesaling	 Not yet developed: Only two women wholesalers 							
AF TO ALS	Retailing	 It is entirely done by women at all markets including village, district and central markets 							

5. Sweetpotato value chains (Contd....)

retailers

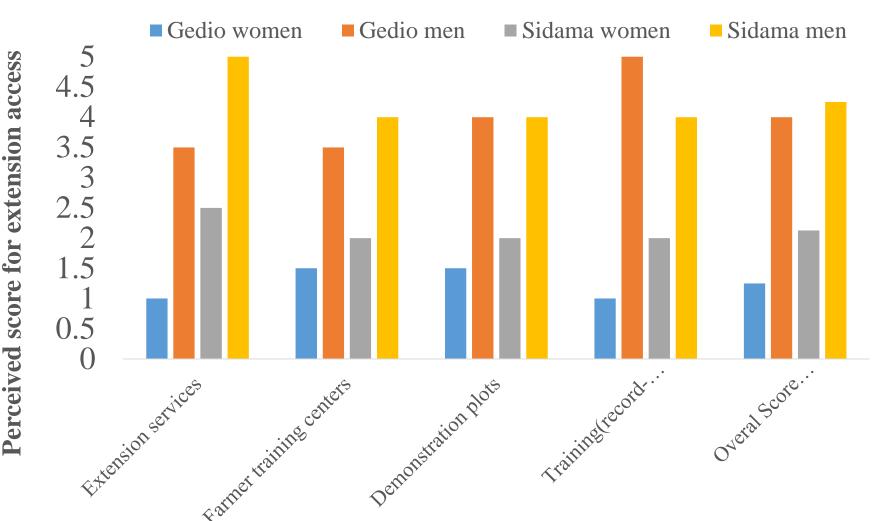
Major sweetpotato value chain constraints/challenges affecting the actors and suggested solutions to address

	suggested solutions to dadress									
	Value chain challenges/constraints	Actors affected	Suggested solutions/potential interventions							
	Seasonality of the crop (not dependable as a single commodity)	Assembler Wholesalers retailers consumers	 Increasing product availability (irrigation/staggering) Shift to other commodities 							
	Short shelf life and lack of storage technologies causing losses	Producers Assemblers Retailer consumers	 Improved packaging and transport Introduction of improved storage technologies Processing to other forms of the product 							
	Low quality products (pests, diseases, trampling by animals, improper packing and transport)	Producers Assemblers wholesalers retailers	 Harvesting crops at the proper physiological maturity crop protection from roots Improved packing and transportation 							
P. F. D. O.S.	Price fluctuation; Peak harvest and low price risk	Producers Assemblers wholesalers	 Staggered planting and intercropping with khat Use of supplementary irrigation 							

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6. Men and women participation in Extension

- > Generally, women have marginally been considered in the extension services
- ➤ E.g. Women under men-headed households are invited for FTC trainings only when the husbands are not available.





7. Conclusion and recommendations

- ➤ OFSP production interventions need to build upon the existing whitefleshed sweetpotato production systems (intercropping, sole cropping and overlay cropping) and kitchen garden.
- In the coffee and enset agroforestry systems of Gedeo, SP intercropping could be associated with promotion of improved recipe from leaves as root yields are very low.
- The low participation of women in the current extension approaches entail the need for new testified approaches:
 - Couples approach (in extension trainings, field days, etc.) important choose convenient times for women
 - Household approach of coaching and mentoring
- Participatory recipe (both men and women) development and adapting sweetpotato to the existing culinary system (Kocho and Enjera)
- ➤ Gender modules should be integrated in agricultural and health extension services to promote household level decision making
- ➤ Select women as hosts of demonstration plots where other farmers come and learn about improved OFSP production techniques
- Target women-headed households as part of the DVMs
- Information on markets should be disseminated through women friendly channels as they are active participants





Thanks!



















