



The role of paid and unpaid labour on sorghum and finger millet production in Northern and Eastern Uganda.

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Introduction



- ❖ Labour is a key factor of production which to billions of people the world over is a source of livelihood and to any economy it plays important socio-economic roles (Schneider 2005).
- ❖ There are 3 different types of labour available to farmers in crop production; family labour use pattern, Hired or paid labour pattern and exchange labour pattern (OI, 2008).
- ❖ The extent of work that can be done in a farm and subsequently the productivity of the sector are determined by labour availability (Shimeles et al., 2018).

Objectives

- To identify types of labour available for sorghum and finger millet production among small holder farmers of Northern and Eastern Uganda.
 - To understand farmer typologies and their differentiation based on labour.
 - To explore the relationship between labour availability and improved variety adoption among small holder farmers of Northern and Eastern Uganda.
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- The slide features a decorative background with three overlapping triangular shapes. The top triangle is white and contains the text. The bottom-left and bottom-right triangles are filled with a close-up image of small, round, light-brown grains, likely finger millet. The central area where the triangles meet is filled with a close-up image of larger, smooth, light-brown grains, likely sorghum.

Data collection

- **Quantitative household survey**

Sample_377 sorghums and 254 finger millets growing.

Sampling_ purposive from Region, district to sub-counties, selecting sub-counties with and without interventions and at village level the households were selected at random.

- **The qualitative process**

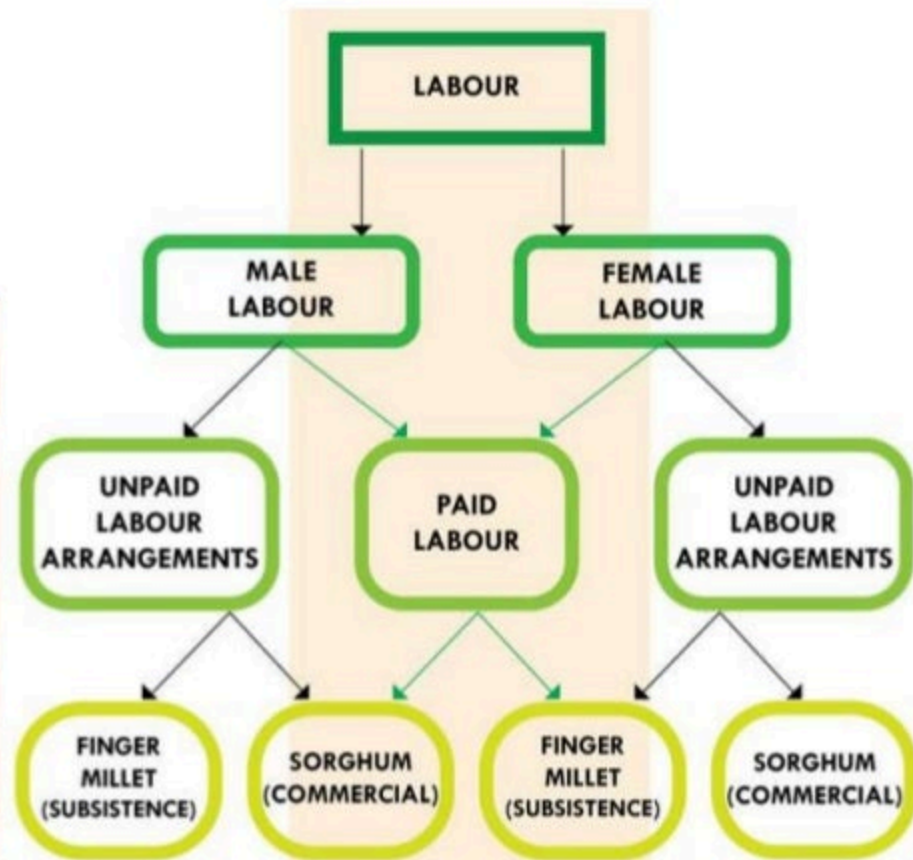
Sample_48 focus group discussions (FGDs) _3 categories of respondents.

sampling_ purposive, in the same places as the quantitative.

Tool_ Vignette that was used to guide in-depth conversations with the community representatives in the different groups.

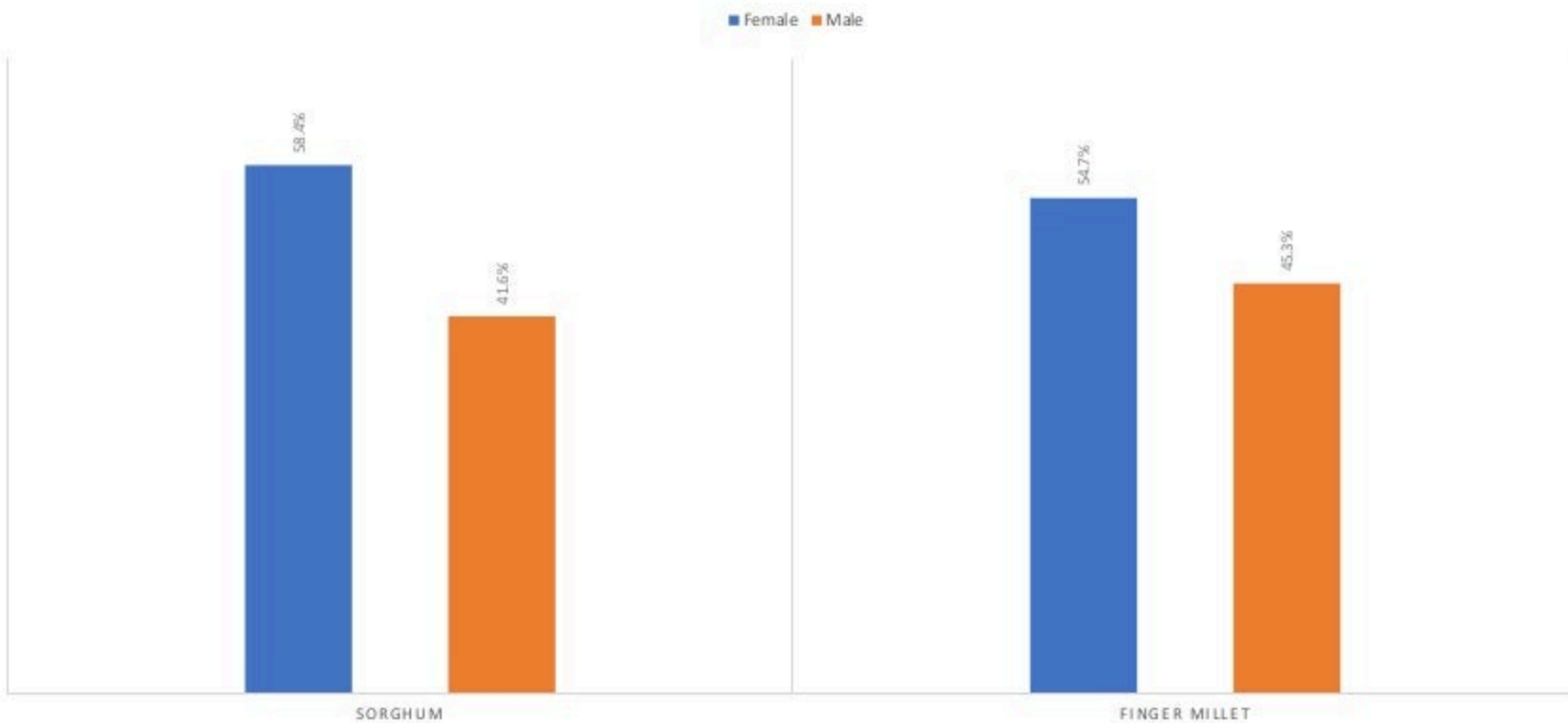
Region: Northern and Eastern Uganda, more specifically Serere, Kumi, Dokolo and Nwoya Districts.

Conceptual Framework



Households growing sorghum and finger millet in Northern and Eastern Uganda.

(sorghum, N=377; finger millet, N=254)



Farmer typologies based on labour

		sex of the farmer	
		Female(n=291)	Male(n=223)
Labour Type used by Farmer		Column N %	Column N %
Family labour	No	0.0	.4
	Yes	100.0	99.6
Hired Labour	No	44.3	42.2
	Yes	55.7	57.8
Both family and hired labour	No	44.3	42.6
	Yes	55.7	57.4
Community shared labour	Eleja		
	Aleya		

Labour available for Sorghum Production in Northern and Eastern Uganda

Sex of the farmer (Sorghum)	H/H	N	Mean	Std. Deviation	Std. Error Mean	t - value	Sig. (2-tailed)
number of Males family labour	Female	188	1.93	1.330	.097	-.072	.942
	Male	156	1.94	1.318	.106		
number of Female Family labour	Female	219	1.93	1.297	.088	-2.090	.037
	Male	156	2.26	1.756	.141		
number of Male hired Labour	Female	104	5.21	4.047	.397	-.881	.379
	Male	85	5.74	4.189	.454		
number of Female hired Labour	Female	106	7.54	5.647	.548	.266	.791
	Male	86	7.31	5.993	.646		
number of hours Male worked	Female	105	4.11	1.050	.102	.808	.420
	Male	85	4.00	.859	.093		
number of hours Female worked	Female	107	4.21	1.097	.106	2.391	.018
	Male	86	3.86	.856	.092		
Per Day	Female	108	3149.07	1778.611	171.147	-.516	.607
	Male	86	3282.56	1805.690	194.713		
Per Month	Female	16	77150.00	96401.314	24100.328	.204	.840
	Male	11	70167.36	72163.698	21758.174		

On average, male headed h/h have more female family labour compared to female headed h/h. This is significant 5%

women providing labour in female headed h/h provide substantial farm labour compared to their counterparts in male headed h/h. This is significant at 5%

Labour available for Finger millet Production in Northern and Eastern Uganda

Sex of the farmer	HH	N	Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
number of Males family labour	Female	122	2.07	1.401	.127	-.166	.868
	Male	115	2.10	1.389	.130		
number of Female family labour	Female	138	2.08	1.440	.123	-1.551	.122
	Male	115	2.40	1.844	.172		
number of Male hired	Female	77	5.68	4.153	.473	-1.365	.174
	Male	74	6.77	5.619	.653		
number of Female hired	Female	81	7.63	5.772	.641	-.544	.587
	Male	73	8.18	6.742	.789		
number of hours Male worked	Female	77	4.10	.836	.095	1.135	.258
	Male	74	3.95	.874	.102		
number of hours Female worked	Female	81	4.14	.877	.097	2.206	.029
	Male	73	3.82	.887	.104		
Per Day	Female	84	3102.38	1528.916	166.818	.732	.465
	Male	77	2906.49	1862.747	212.280		
Per Month	Female	5	36800.00	41984.521	18776.049	-1.737	.116
	Male	6	74000.00	29003.448	11840.608		

women in female headed h/h provide substantial farm labour compared to their counterparts in male headed h/h. This is significant at 5%

Labour use and improved varieties

Labour type	Farmer			
	Female		Male	
	Used improved sorghum	Not used improved sorghum	Used improved sorghum	Not used improved sorghum
	%	%	%	%
Ploughing and planting				
Male hired	46.9	33.5	43.5	33.8
Female hired	44.9	23.2	34.8	19.2
Male Family	69.4	63.9	82.6	78.5
Female Family	73.5	75.5	87.0	70.8
weeding				
Male Hired	40.8	20.6	47.8	31.5
Female Hired	55.1	31.6	52.2	43.1
Male Family	63.3	57.4	69.6	71.5
Female Family	73.5	79.4	69.6	73.8
Harvesting				
Male Hired	36.7	12.9	34.8	16.2
Female Hired	49.0	21.9	39.1	30.0
Male Family	75.5	66.5	82.6	81.5
Female Family	93.9	91.6	87.0	86.9

Cont'd Labour use and improved variety

Labour type	Farmer			
	Female		Male	
	No use of improved finger millet	Used improved finger millet	No use of improved finger millet	Used improved finger millet
	%	%	%	%
Ploughing and planting				
Male hired	42.4	11.1	35.3	66.7
Female hired	30.6	44.4	20.6	66.7
Male Family	65.9	66.7	76.5	100.0
Female Family	78.8	88.9	70.6	91.7
Weeding				
Male Hired	27.1	22.2	23.5	75.0
Female Hired	44.7	44.4	45.6	66.7
Male Family	58.8	88.9	55.9	91.7
Female Family	84.7	88.9	69.1	91.7
Harvesting				
Male Hired	22.4	33.3	20.6	66.7
Female Hired	40.0	33.3	38.2	58.3
Male Family	61.2	88.9	67.6	100.0
Female Family	84.7	100.0	80.9	100.0

Key takeaways

- Community shared labour a huge player as a farmer typology eg highly utilized in the North with commercialized sorghum and pay done end of month at times season.
- *Aleya* – a great source of labour for the two crops, economic gains for women, reduction of the labour burden, ensuring farm activities are done in a timely manner, information and germplasm exchange platforms.
- Use of improved varieties results in increased labour use.

Conclusion and Recommendations

- **For rural development**

As agricultural sector employs most of the rural labour there is need to understand the labour relations if we are to realize the desired change.

- **For Gender equality and equity**

There are still gaps in labour compensation between male and female farmers that need to be addressed.

- **For improved varieties adoption**

The labour groups are a platform for germplasm exchanges and seed that's at times used to pay work hence need for organizations to work with them and ensure what is being exchanged is of the improved varieties.

- **For future research**

Need for more research in understanding the labour groups(Aleya), how they ensure productivity for each member and the factors ensuring sustainability of the groups, how they are managed, by who(trust maybe?)



RESEARCH PROGRAM ON
Grain Legumes and
Dryland Cereals

