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Gender Relations and Women's Empowerment in Small-scale Irrigated Forage Production in the Amhara and SNNP Regions of Ethiopia

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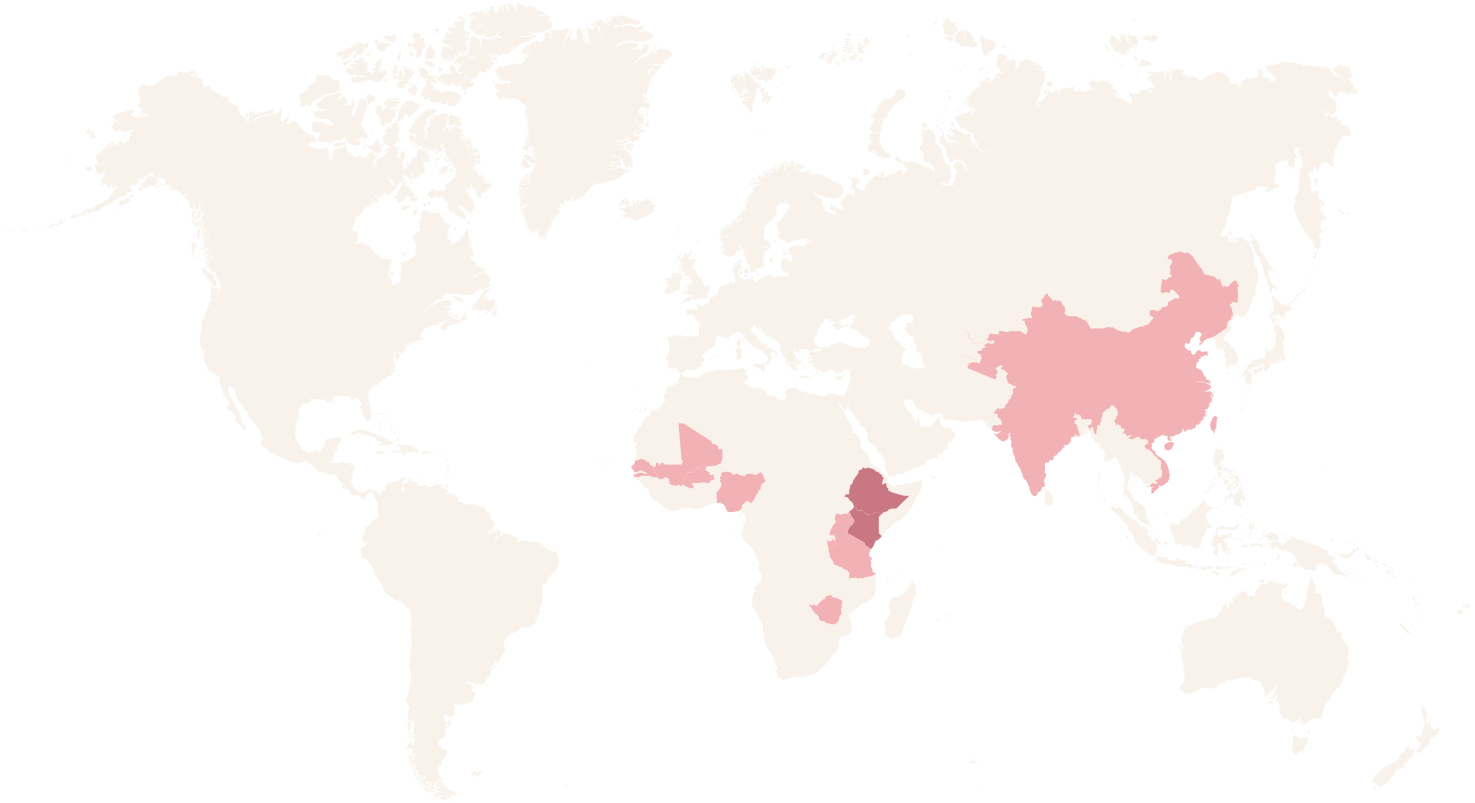

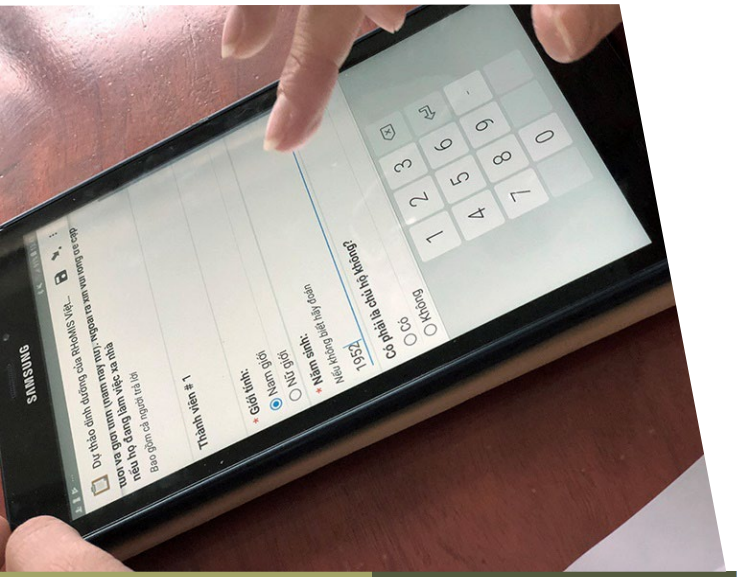

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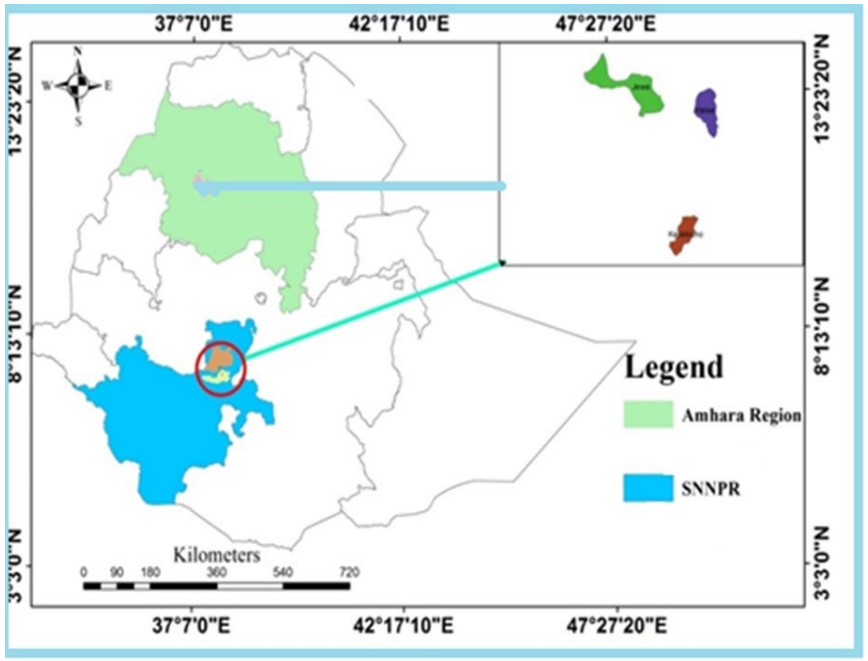
Introduction

- A sub activity under the ILSSI project in Ethiopia that promoted adoption of small-scale irrigation techniques in fodder production.

- Assess the linkage between women's empowerment and gender relations in the production and utilization of irrigated forages in smallholder settings in Ethiopia

- Quantitative data gathered from a cross-sectional survey of 250 men and 250 women (from 250 households) and qualitative data collected from eight focus group discussions with men and women smallholder farmers in the Amhara and Southern Nations, Nationalities, and Peoples' regions

Mixed methods approach



- The data is from ILSSI-Ethiopia project's 2022 face-to-face gender survey of 250 women and 250 men from 250 livestock-keeping households, sampled from **members of dairy cooperatives** from the Amhara and SNNP regions of Ethiopia

- For comparability, the gender survey collected data between February and March 2022 from the **ILSSI-Ethiopia project's intervention *woredas*** (districts) covering both *kebeles* (wards) where ILSSI interventions were implemented and *kebeles* that had **dairy cooperatives but were not part of the ILSSI intervention**.

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Mixed methods approach

- Qualitative data focused on local meanings of empowerment and explore gender relations. Qualitative data collection preceded quantitative data collection and was used as an input to refine the quantitative study tool

- Quantitative data collected from an Index woman in the household. Incase of female headed households where there is no adult man, then only the woman is interviewed.

- **Quantitative data** to **derive empowerment indices of women farmers** then compared the empowerment levels by forages planted, use of small-scale irrigation, and the levels of women's engagement in decision making regarding production and utilization of planted forages

WE focus on ‘decision making and empowerment’ ion forages

The paper has key result areas:

1. Division of labour
2. Social Norms
3. *Decision making*
4. *Empowerment score*

Frequency of responses from men and women on the combinations of forage types grown in their households

Forage combinations grown	Value type	Respondent category and sex		
		Husband/main male adult in the household	Index woman	Total
Napier grass (only or grown together with other forages—excluding desho grass)	Number	50	51	101
	Frequency (%)	30.30	30.72	30.51
Desho grass (only or grown together with other forages—excluding Napier grass)	Number	42	43	85
	Frequency (%)	25.45	25.90	25.68
Desho and Napier grasses grown together (only or with other forages)	Number	68	68	136
	Frequency (%)	41.21	40.96	41.09
Other forages (not grown together with Napier or desho grass)	Number	5	4	9
	Frequency (%)	3.03	2.41	2.72
Total	Number	165	166	331
	Frequency (%)	100.00	100.00	100.00

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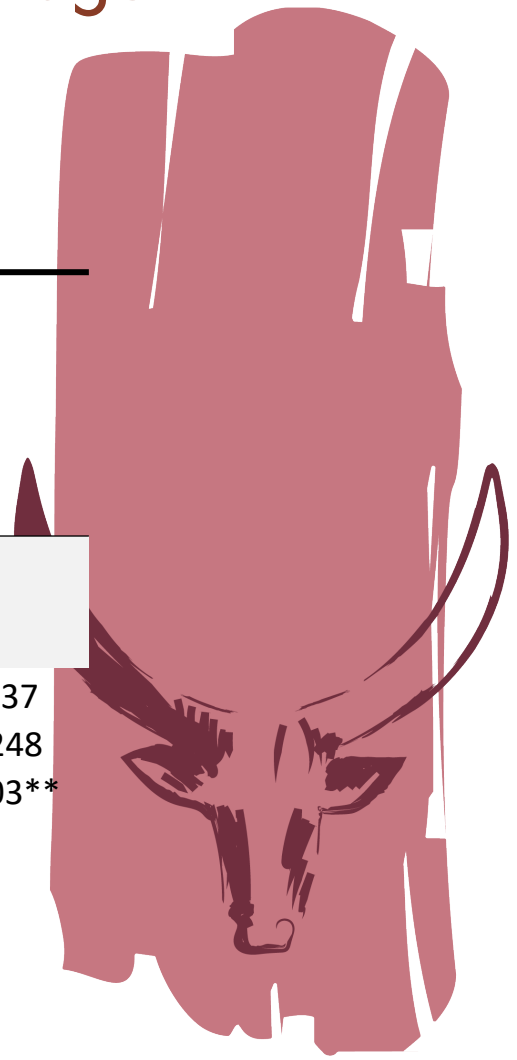
Total number of households practicing small scale irrigation in the sample

	Irrigating (n)	Not irrigating (n)	Total number of respondents (n)
Cultivating forages	59	272	331
No forages	0	169	169
Total number of respondents	59	441	500

Frequency of participation (%) in decision-making on the production and utilization of irrigated forages.

Respondent category and sex		Level of participation (%) in decision-making regarding production of irrigated forages		Predominant decision-maker on utilization of forages	
		Zero to low	High level	Male	Female
Husband/main male adult in the household	Male (n = 250)	36.00	64.00	14.00	86.00
Index woman	Female (n = 250)	37.00	63.00	17.00	83.00

The WELI scores by sex and decision-making on irrigated forage production and utilization of forages



Indicators	Sex of the respondent			Level of women's participation in decision-making on irrigated forage production			The predominant decision-maker on the utilization of forages		
	Women	Men	t-test	Zero to low	High	t-test	Men	Women	t-test
Number of observations	250	250		92	158		38	212	
3DE score	0.87 (0.01)	0.91 (0.01)	t = 2.83 df = 498 p = 0.01**	**0.82 (0.02)**	**0.89 (0.01)**	t = 3.48 df = 248 p = 0.02**	**0.86 (0.03)**	**0.87 (0.01)**	t = 0.37 df = 248 p = 0.03**
Disempowerment score (1 – 3DE)	0.13 (0.01)	0.09 (0.01)		0.18 (0.02)	0.11 (0.01)		0.14 (0.03)	0.13 (0.01)	
% achieving empowerment	63.20	74.00		51.09	**70.25**		63.16	63.21	
WELI score	0.88 (0.01)			0.83 (0.02)	0.90 (0.01)		0.87 (0.15)	0.88 (0.02)	

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WELI Indices, for women, by forages grown and small-scale irrigation practice

Indicator	Forages grown			Irrigation practice				
				Households growing forage			Households not growing forage	
	Napier grass©	Desho and Napier©©	*t*-test	Irrigating	Not irrigating	*t*-test^	Not irrigating	*t*-test^^
Number of observations	50	68		31	137		86	
3DE score	**0.91** *(0.02)*	**0.92** *(0.02)*	$t = 0.35$ df = 113 $p = 0.03$**	**0.93** *(0.03)*	**0.88** *(0.01)*	$t = 16.48$ df = 166 $p = 0.00$***	**0.82** *(0.02)*	$t = 22.80$ df = 115 $p = 0.01$**
Disempowerment score (1 – 3DE)	0.09 *(0.02)*	0.08 *(0.02)*		0.07 *(0.03)*	0.12 *(0.01)*		0.18 *(0.02)*	
% achieving empowerment	74.00	76.92		77.42	66.42		51.16	
WELI score	0.92 *(0.03)*	0.93 *(0.02)*		**0.93** *(0.02)*	**0.89** *(0.01)*		**0.82** *(0.02)*	

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Discussions and conclusions

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