



*Better lives through livestock*

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

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**Immaculate Omondi<sup>1</sup> †\*, Esther Njuguna-Mungai<sup>1</sup> †, Melkamu Derseh<sup>2</sup>, Nils Teufel<sup>1</sup>, Eunice Kariuki<sup>1</sup>, Nelly Njiru<sup>1</sup>, Alessandra Galiè<sup>1</sup>, Chris Stephen Jones<sup>1</sup>, Isabelle Baltenweck<sup>1</sup>, Annet Abenakyo Mulema<sup>3</sup>**

ILSSI Project Closing Meeting

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Addis Ababa, Ethiopia

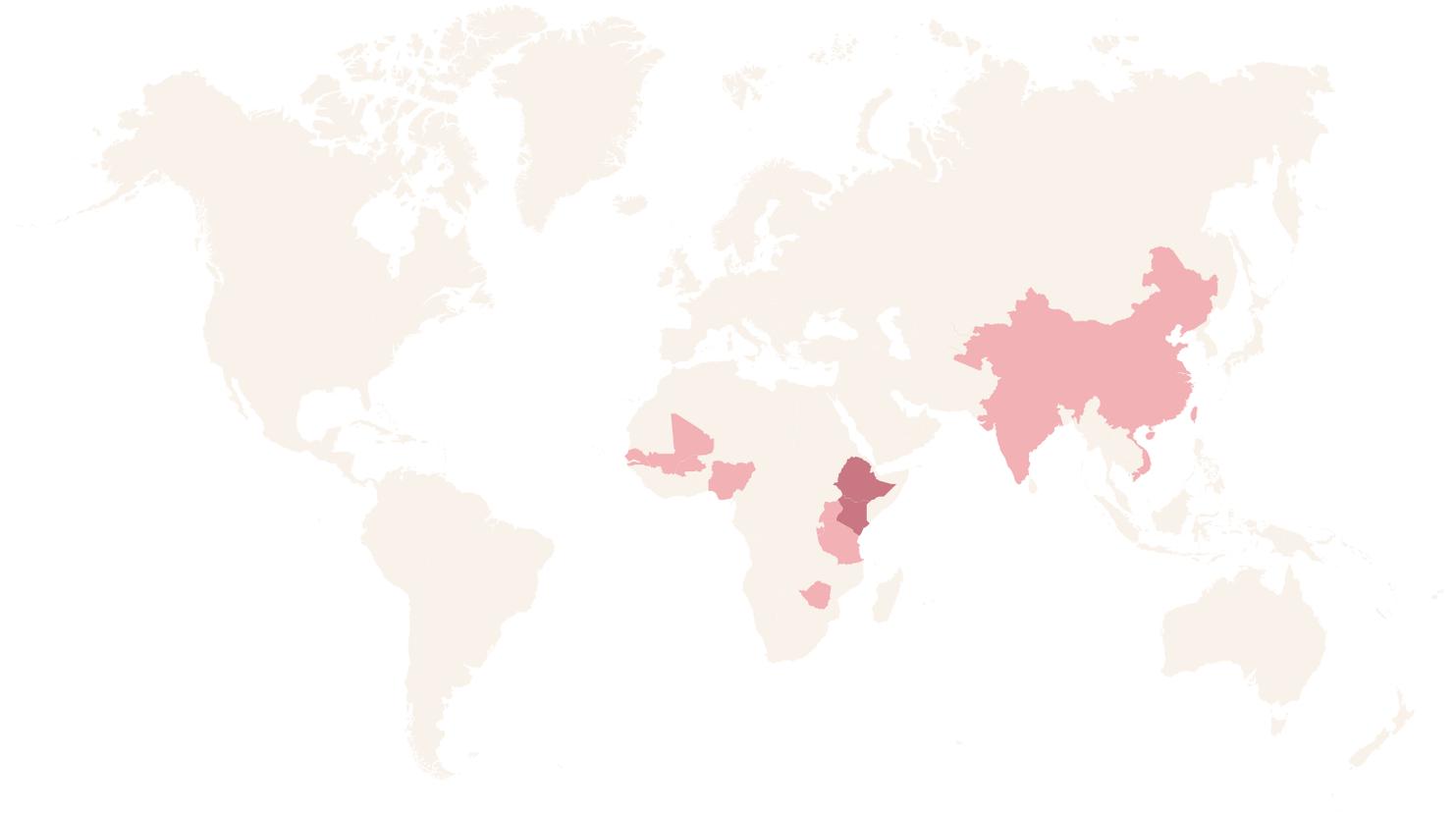
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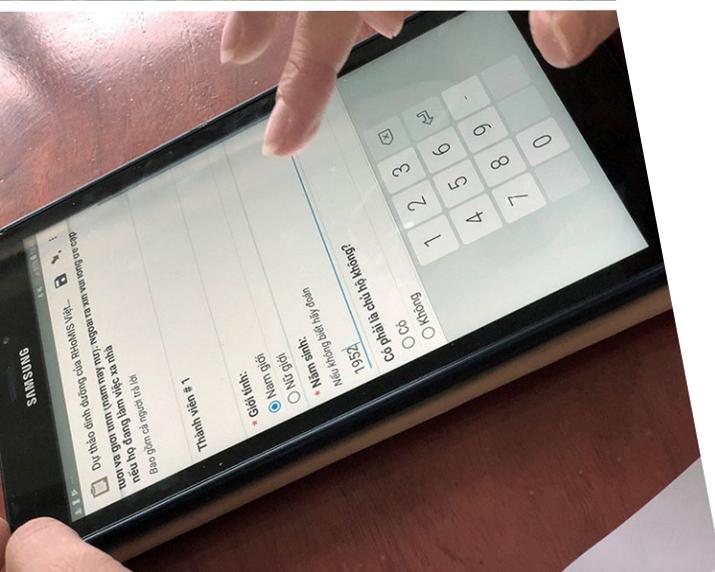


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- Paper under review for publication in the Frontiers of Animal Science Journal

# Summary of activity

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- 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

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## What we learn about 'decision making and empowerment' in small scale irrigated forages



# Combining Napier Grass and Desho is the most common combinations of forage types among men and women farmers

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



11.8% of the farmers are cultivating and irrigating forages while 54.4% cultivate the forages without irrigating

7

	Irrigating (n)	Not irrigating (n)	Total number of respondents (n)
Cultivating forages	11.8	54.4	66.2
No forages	0	33.8	33.8
Total number of respondents	11.8	88.2	100

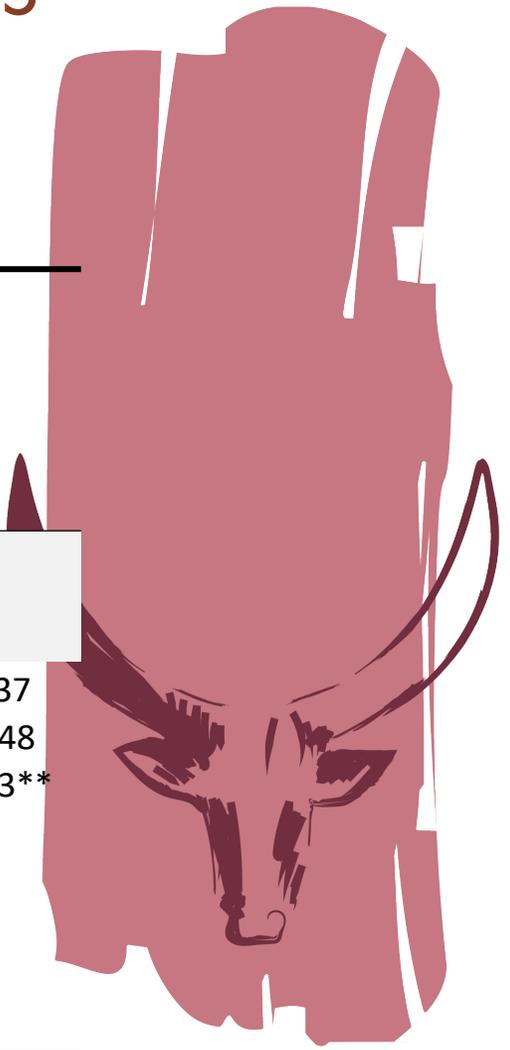
In over 83% of cases, women are predominant decision maker on the production and utilization of forages.



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	37.00	63.00	17.00	83.00

# Women with predominant decision-making on irrigated forage production and utilization of forages are more empowered

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	<b>0.82</b> <b>(0.02)</b>	<b>0.89</b> <b>(0.01)</b>	t = 3.48 df = 248 p = 0.02**	<b>0.86</b> <b>(0.03)</b>	<b>0.87</b> <b>(0.01)</b>	t = 0.37 df = 248 p = 0.03**
Disempowerment score (1 – 3DE)	0.13 (0.01)	0.09 (0.01)	p = 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	<b>70.25</b>		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)	



# Women practicing small scale irrigation are more empowered



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

## Learning...

In program intervention, combine technical innovations with social and transformative innovations that enhance the decision making of women in the households.



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