



**CGIAR**  
**GENDER EQUALITY AND**  
**SOCIAL INCLUSION**

# **Gender Transformative Socio-Technical Innovation Bundles: Evidence from Collaborative Work in Ejere and Welmera Woredas**

Cosmas Kweyu Lutomia, Dessalegn Ketema, Solomon  
Zewdu, Eileen Nchanji



**GENDER  
EQUALITY**



**YOUTH**



**SOCIAL  
INCLUSION**

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Addis Ababa



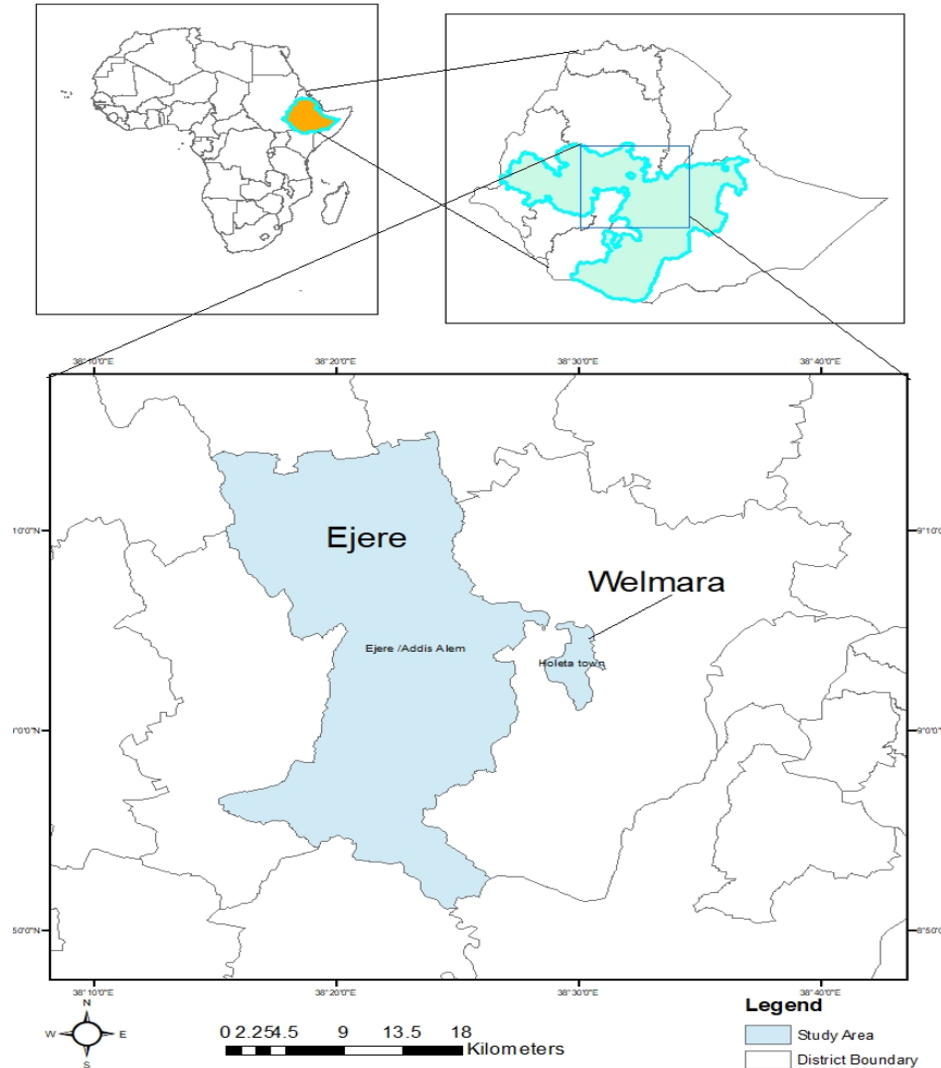
# Methodology

## Study area:

- Veggies 4 Planet & People site (HER+ learning labs).
- Welmera
- Ejere

## Study area:

- Vegetable Business Network (VBN) - (V4P&P) participants)



## Welmera Kebeles:

- Bekeka Kore Odo
- Berfeta 1fa
- Duwaf Lafto
- Geresu Sida
- Robe Gebeya
- Tuluwato Dalecha
- Welmera Choke

## Ejere:

- Telbo
- Amaro
- Enaftu
- Endode
- Goli
- Hora
- Kimoye





# Study Sample

## Sampling frame and sample size

- 649 in Ejere, 1028 in Welmera participating in (V4P&P)
- 103 in Ejere and 160 Welmera – PPS
- 526 non-beneficiaries selected from treated kebeles



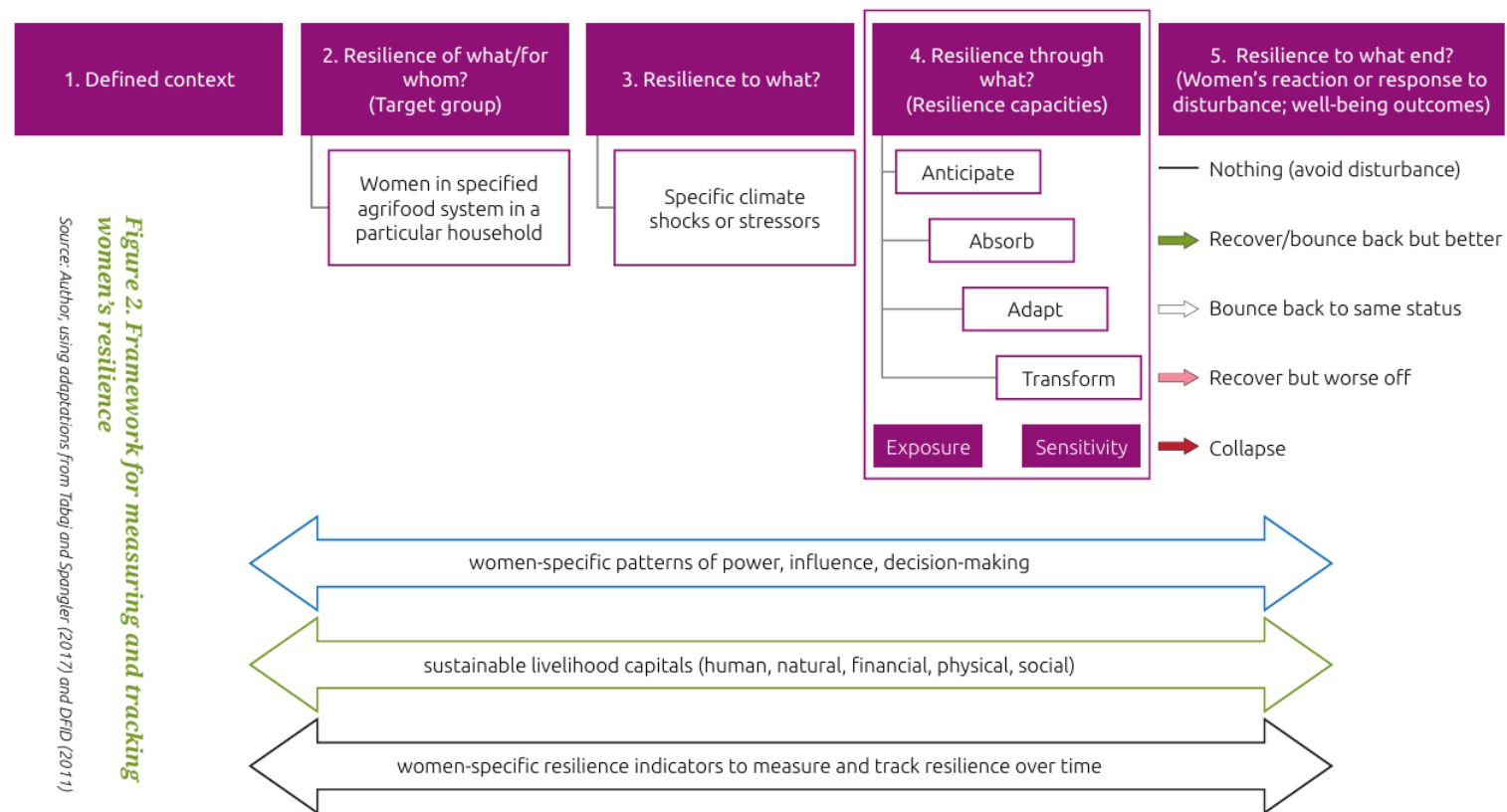
# Data collection tools

CGIAR GENDER Impact Platform · Working Paper #024

FEBRUARY 2025

## *A framework for measuring and tracking the climate resilience of women in agrifood systems*

By Pricilla Marimo, Abiyot Eliyas Anbacha, Ranjitha Puskur, Chandana Rajasekharan Bindu, Aayushi Malhotra, Pooja Kori



## Measuring Empowerment: the Women's Empowerment in Agriculture Index (WEAI) and project-level Women's Empowerment in Agriculture Index (pro-WEAI)

Ruth Meinzen-Dick, Agnes Quisumbing, Hazel Malapit, and Nancy Johnson  
October 30, 2018

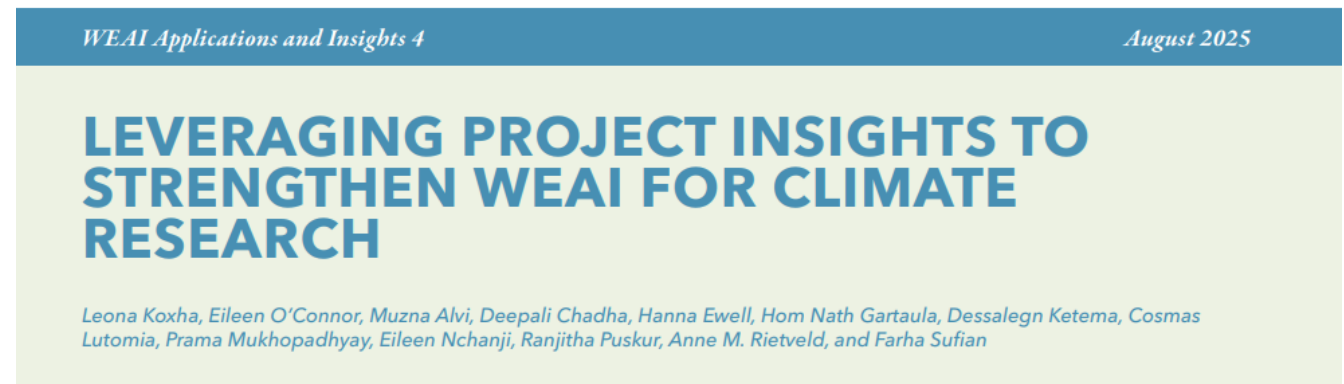




# Development of Women's Climate Change Resilience Index (WCCRI)

## WCCRI

- Anticipatory capacity – Info exposure; preparedness behaviours; efficacy/EWS performance
- Absorptive capacity – Coping (during); recovery (after); coping self-efficacy & effectiveness; reliance on social/organizational support
- Adaptive capacity – Practice/tech & HC change; Efficacy/effectiveness
- Transformative – Governance & voice; intra-HH agency & norms; social norms & salience; Property & alienation rights; associational membership.



**Negative coping:** Severe(sell land/equipment, distress migration, sell remaining key productive assets); Moderate(sell livestock/essential HH goods, reduce/skip meals, migration for work); Mild (high-risk borrowing, heavy labour reallocation)





## Data analysis

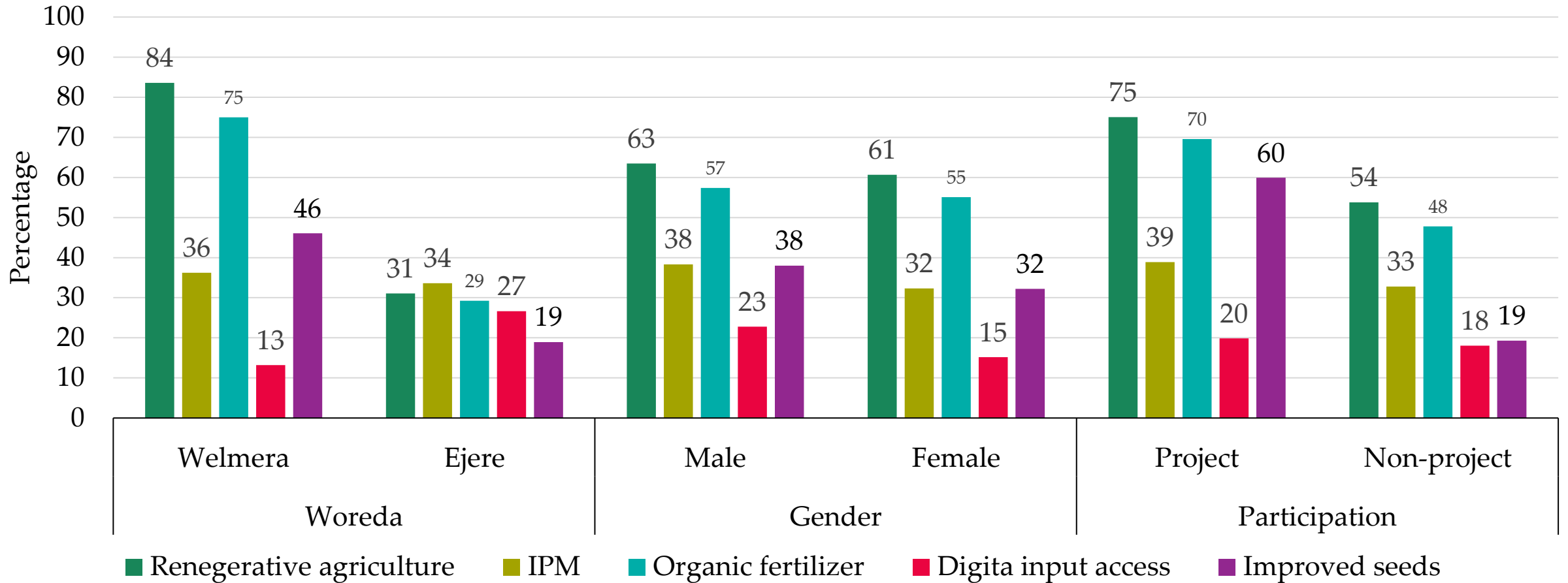
- Calculation of WCCRI – subdomains, NCI, and over resilience
- Calculation of Pro-WEAI
- Matching – individual (age, sex, education, marital status, occupation) – household (farm size, household size)
- Descriptive, inferential, bivariate

HH type	Treated	Control	Total
Dual	490	758	1,248
Female adult only	19	56	75
Total	509	814	1,323



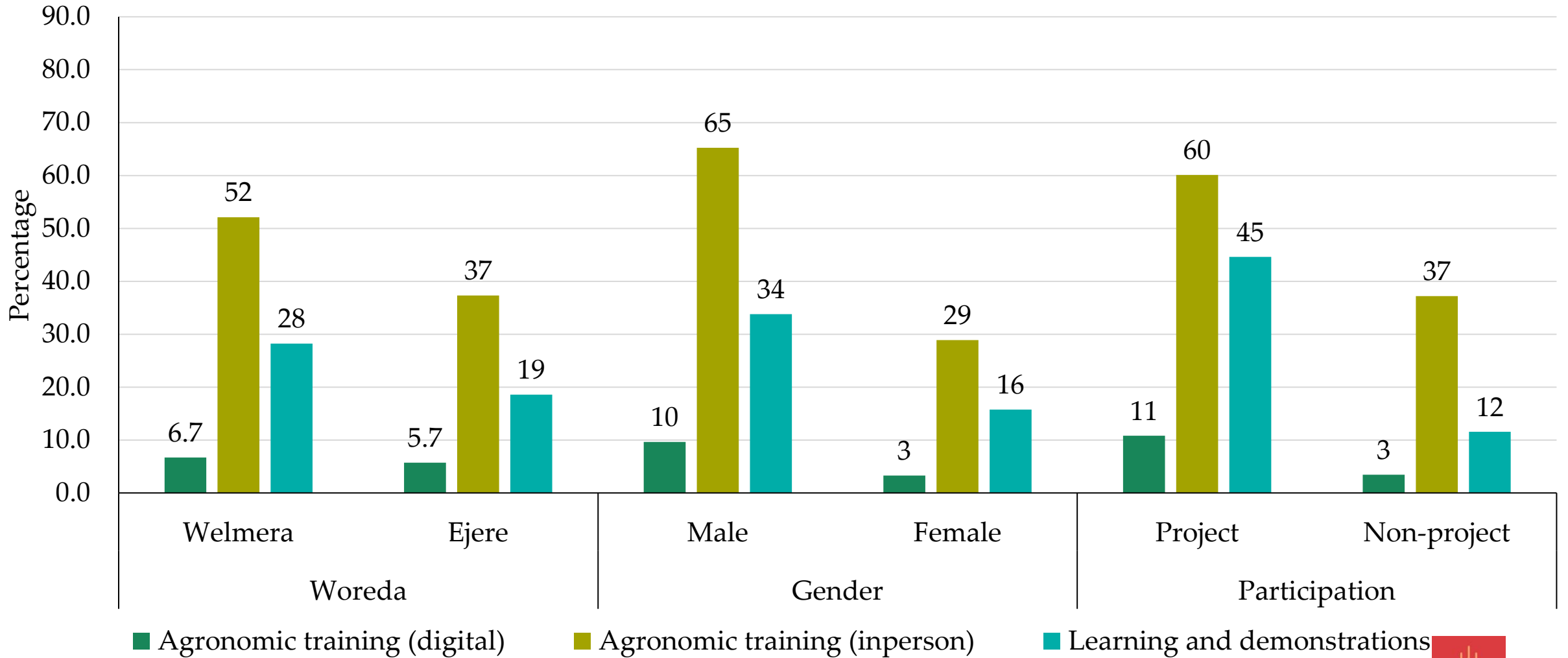


# Technological innovations adoption rates (%)



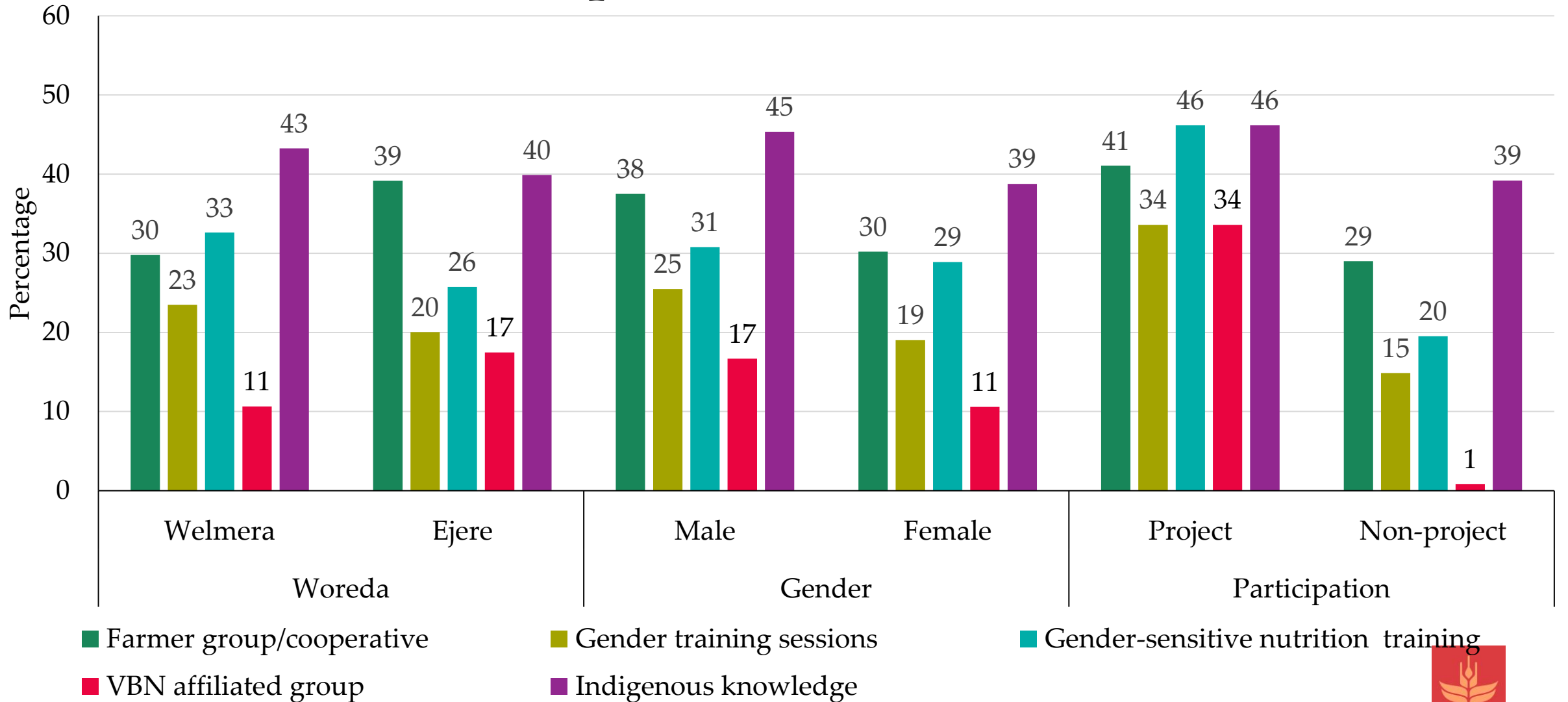


# Technical innovations adoption rates (%)



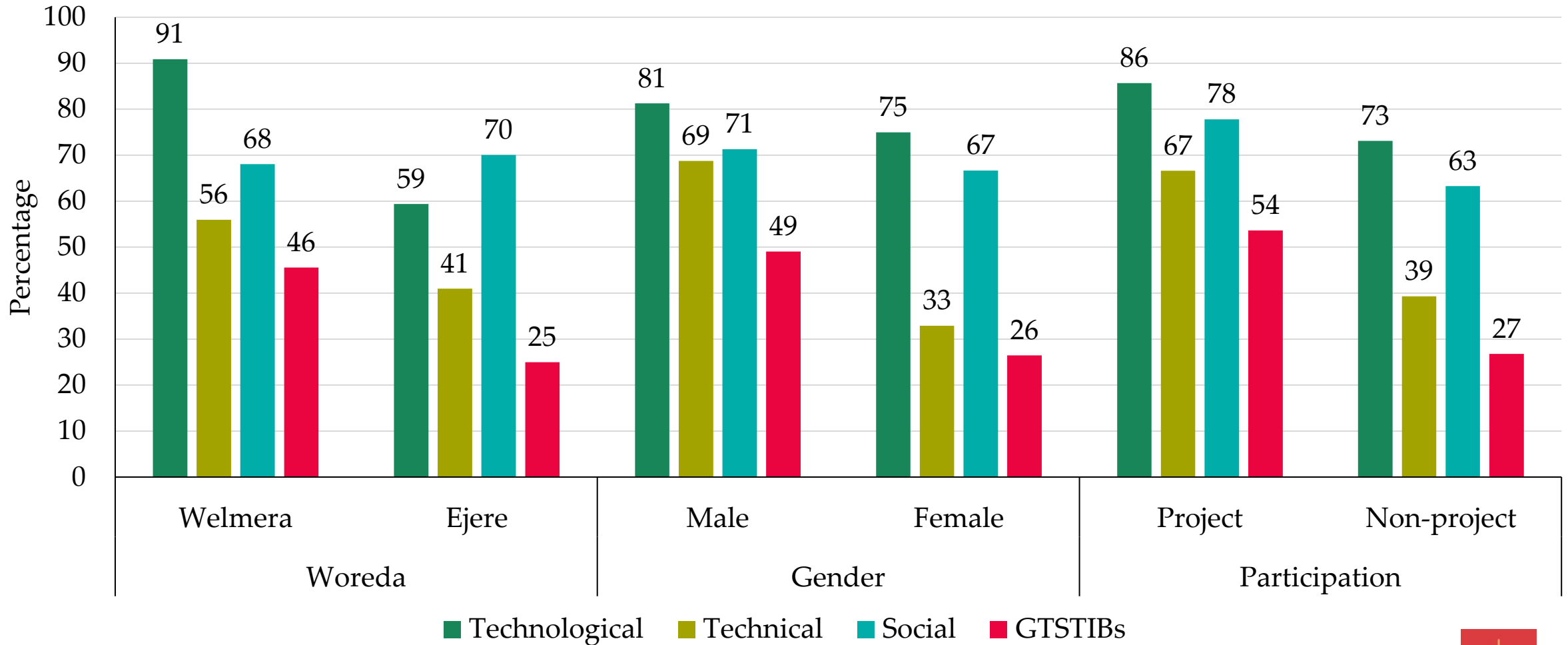


# Social innovations adoption rates (%)



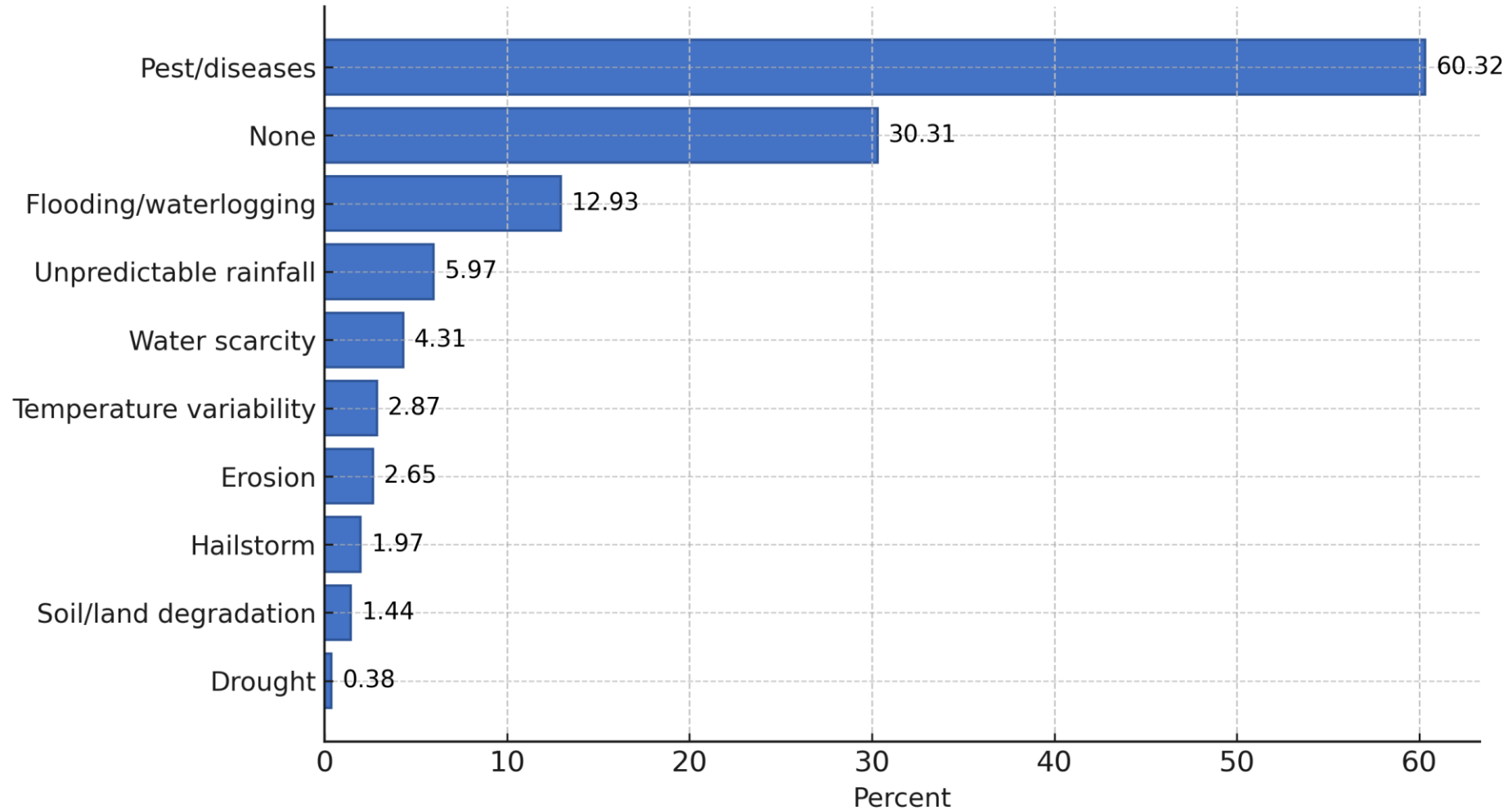


# Innovation bundles adoption



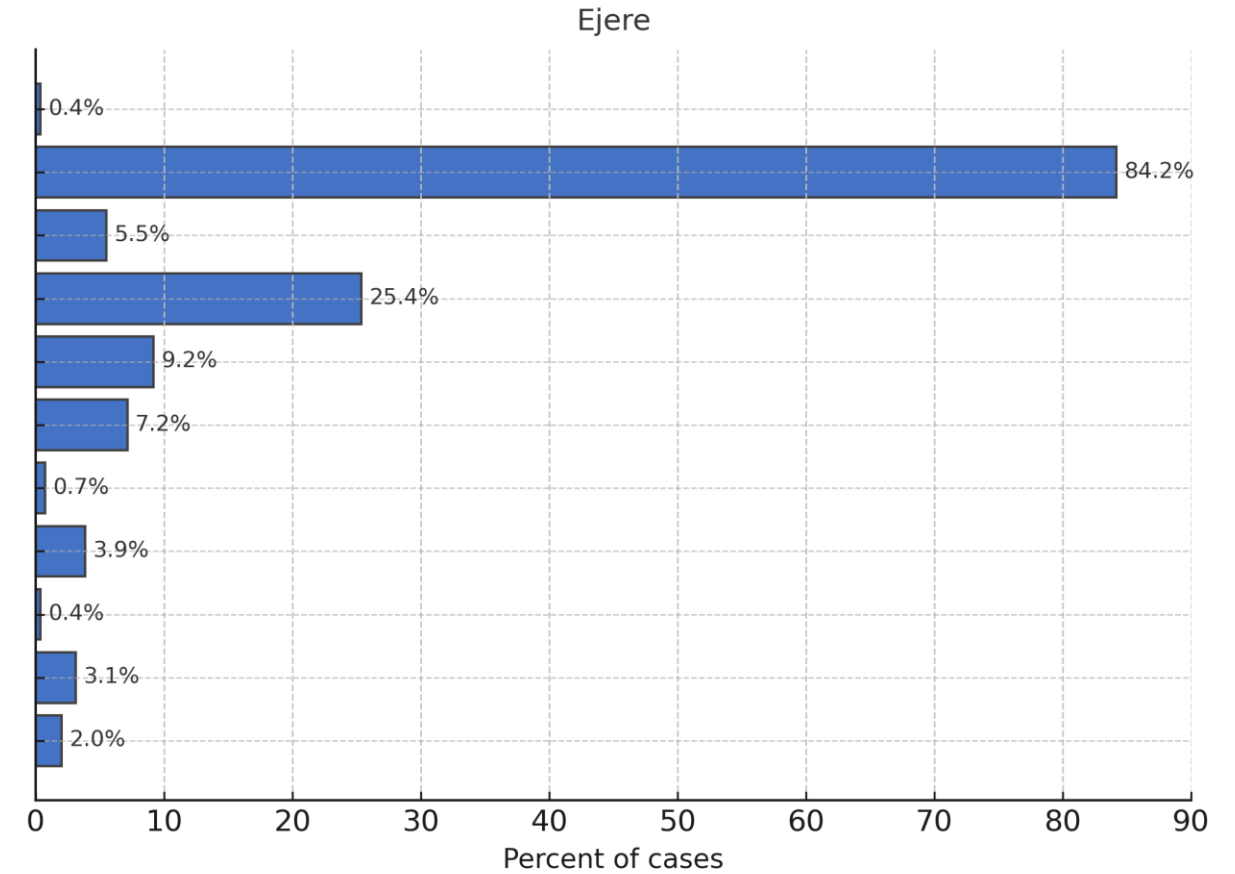
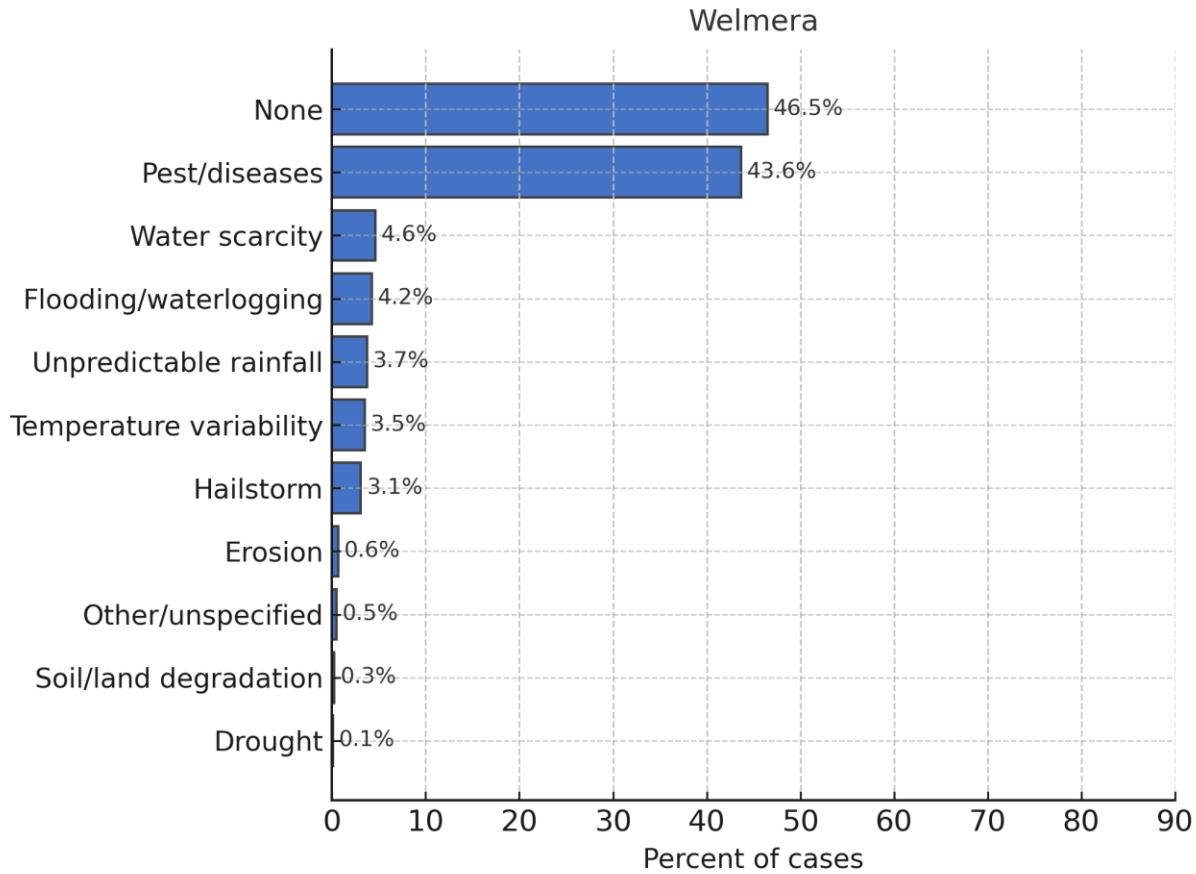


# Reported climate changes related events/shocks (%)



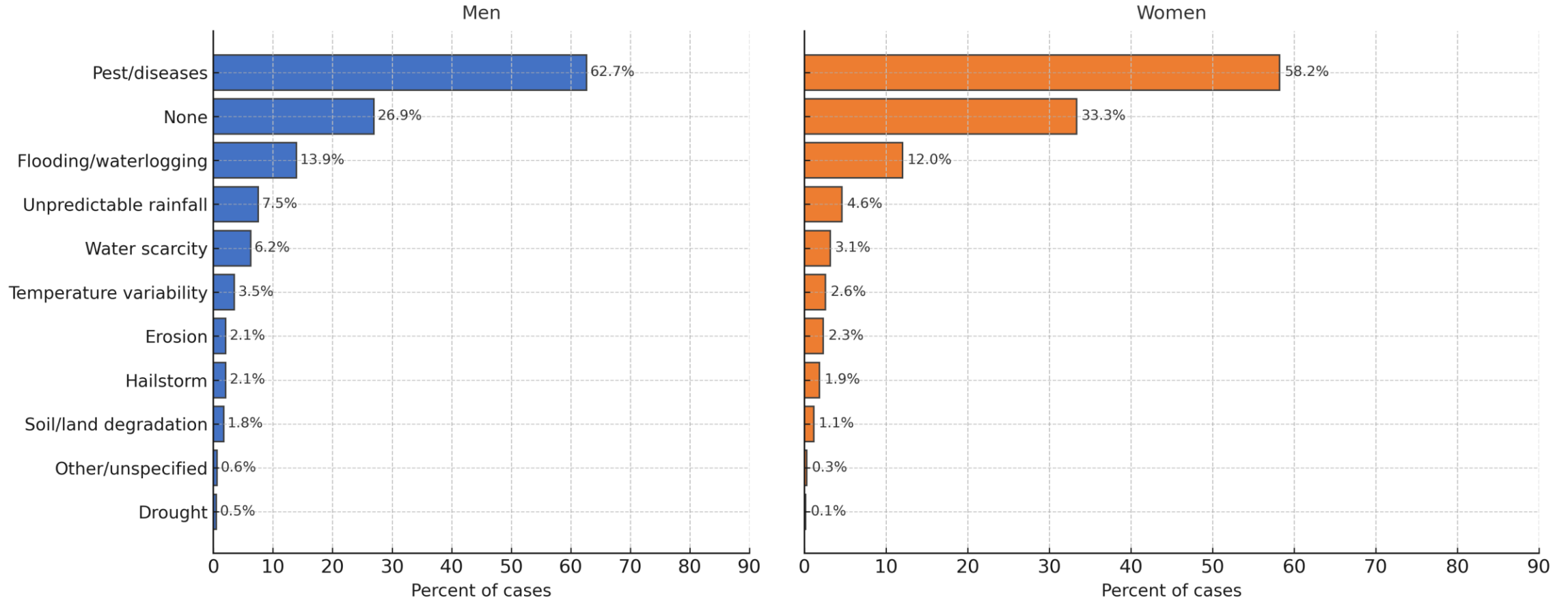


# Reported climate changes related events/shocks (%) by woreda



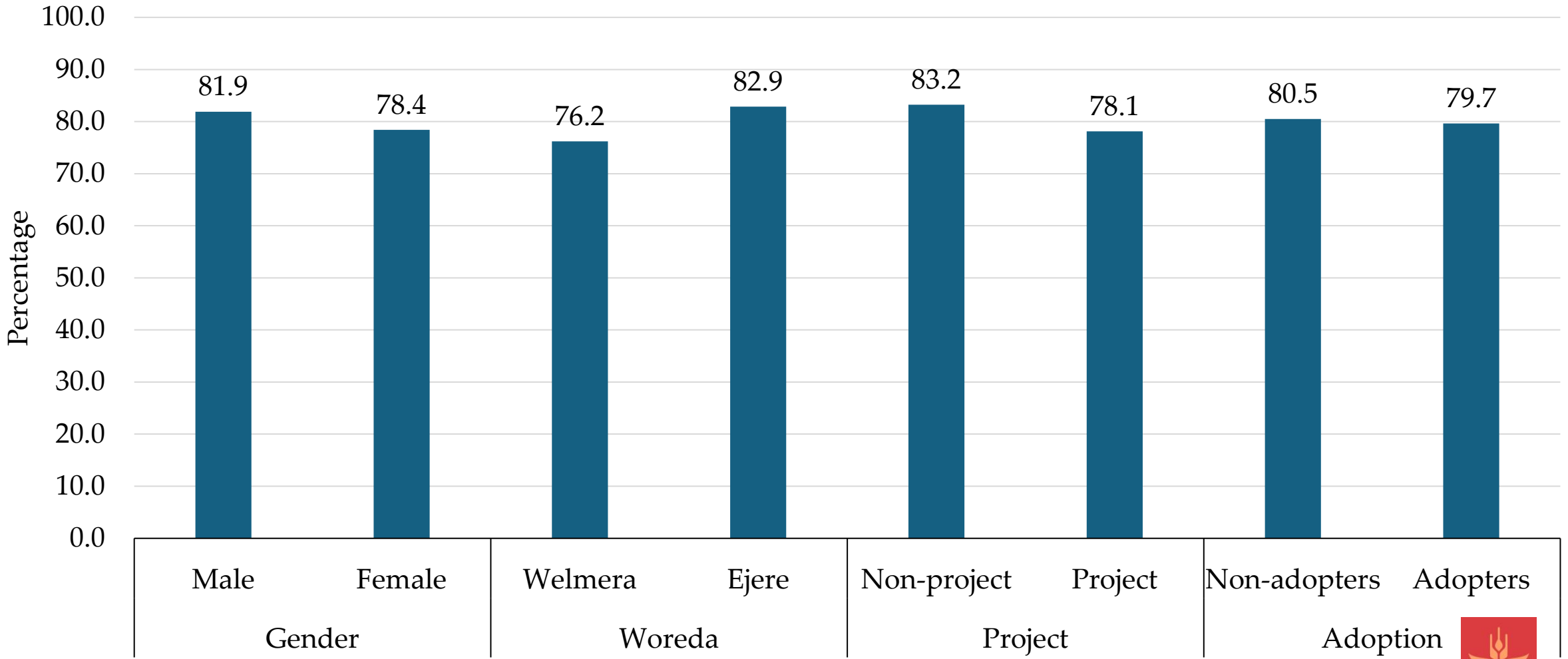


# Reported climate changes related events/shocks (%) by gender



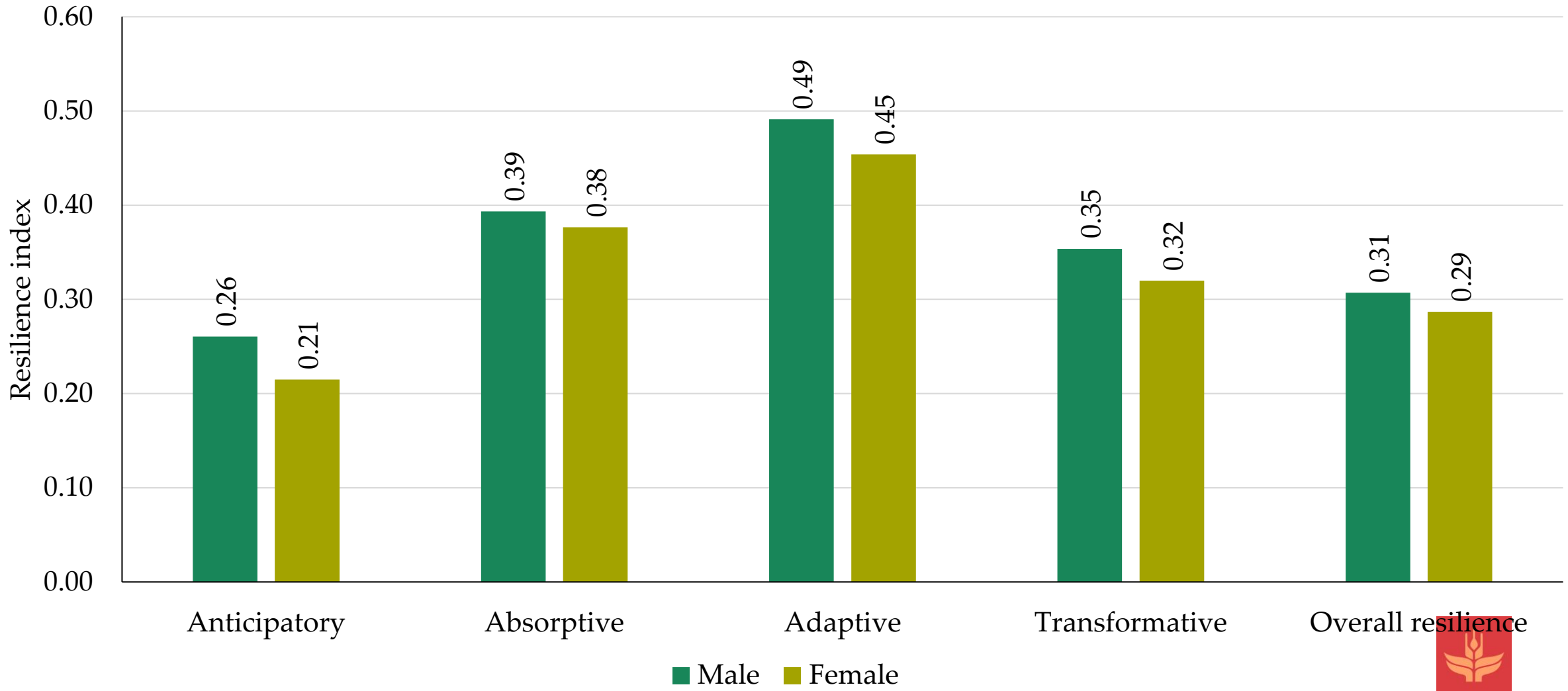


# % affected by climate change related events/shocks



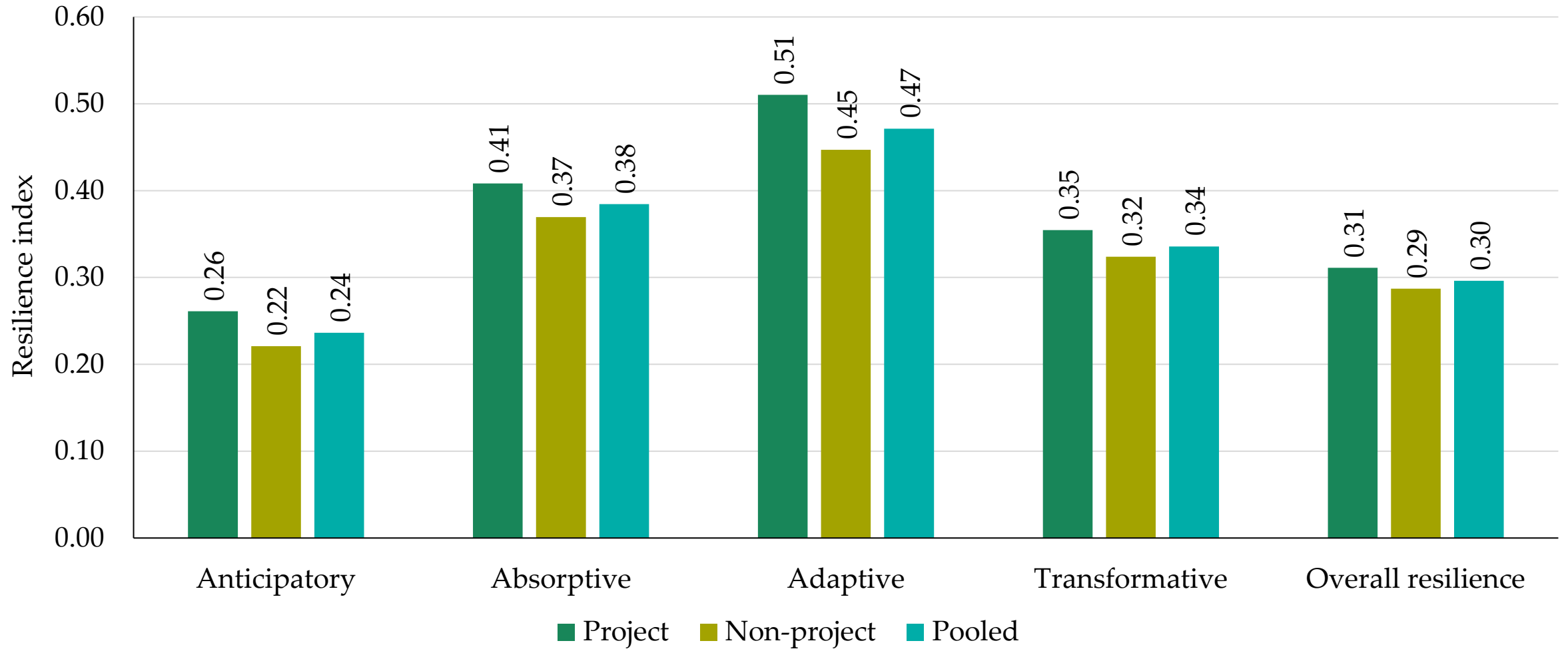


# Resilience capacities (0-1) by gender



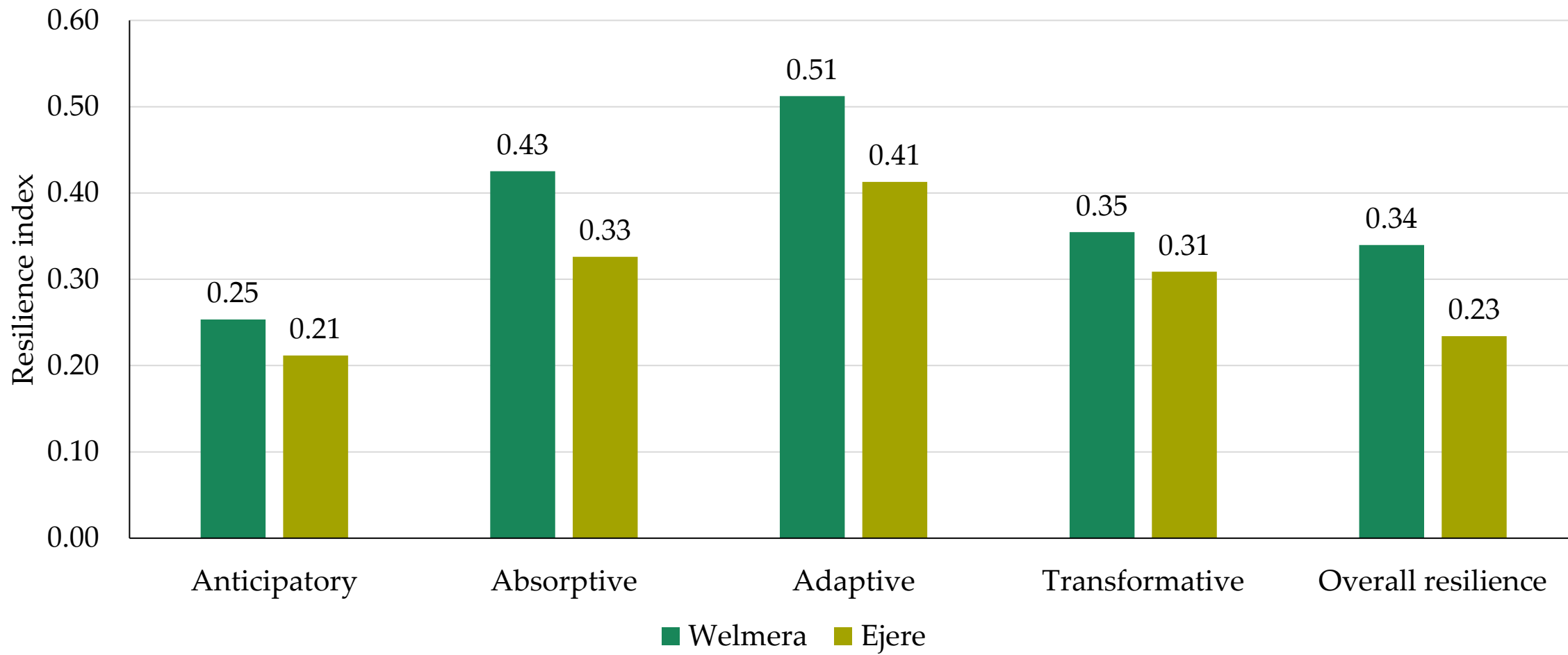


## Resilience capacities (0-1) by project participation



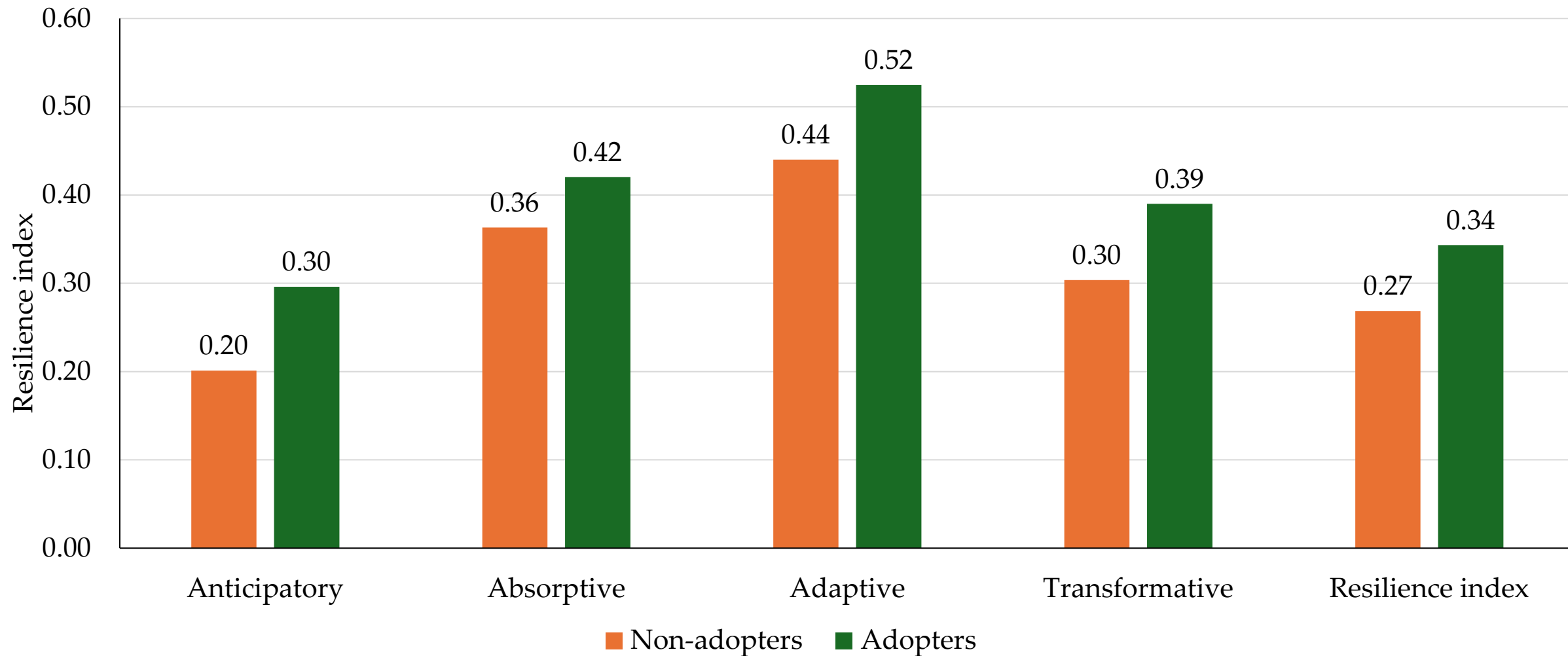


# Resilience capacities (0-1) by woreda



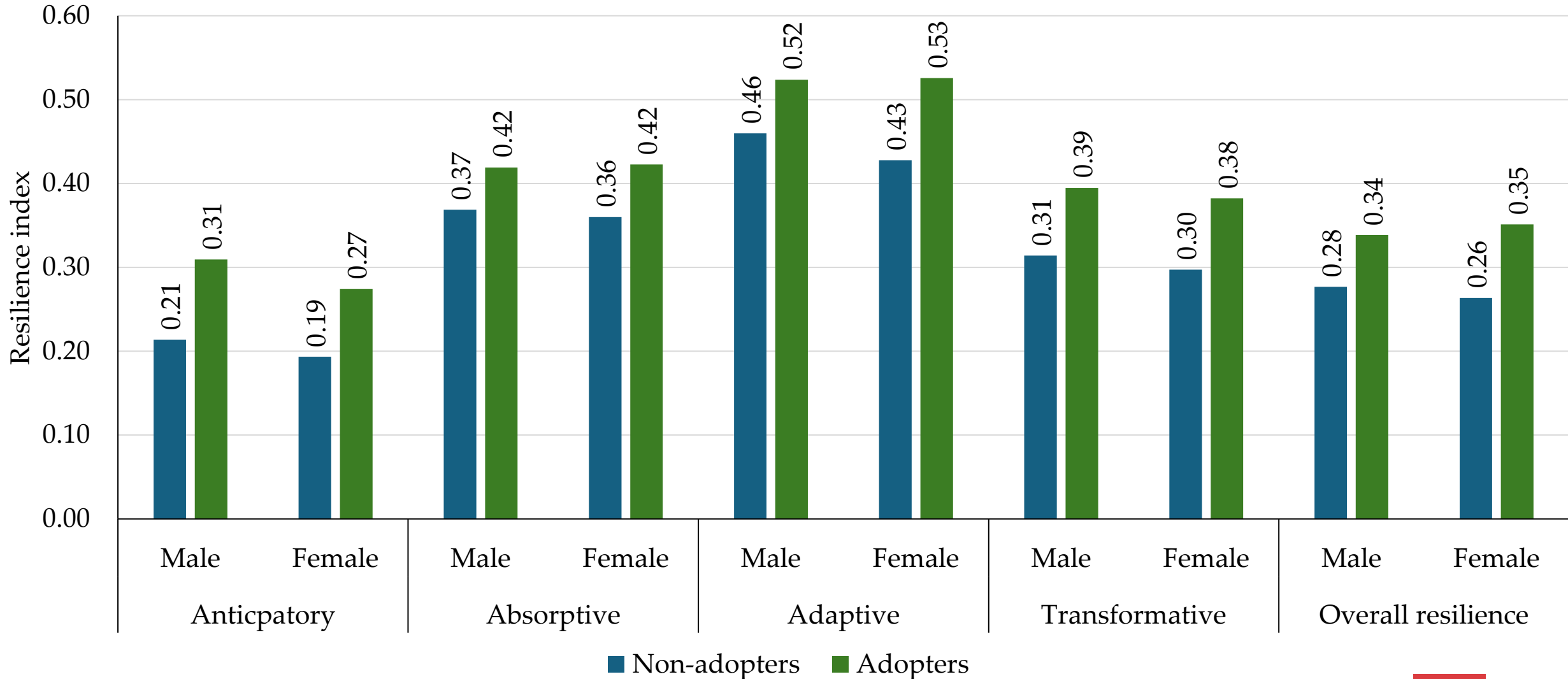


# Resilience capacities (0-1) by GTSTIBs adoption



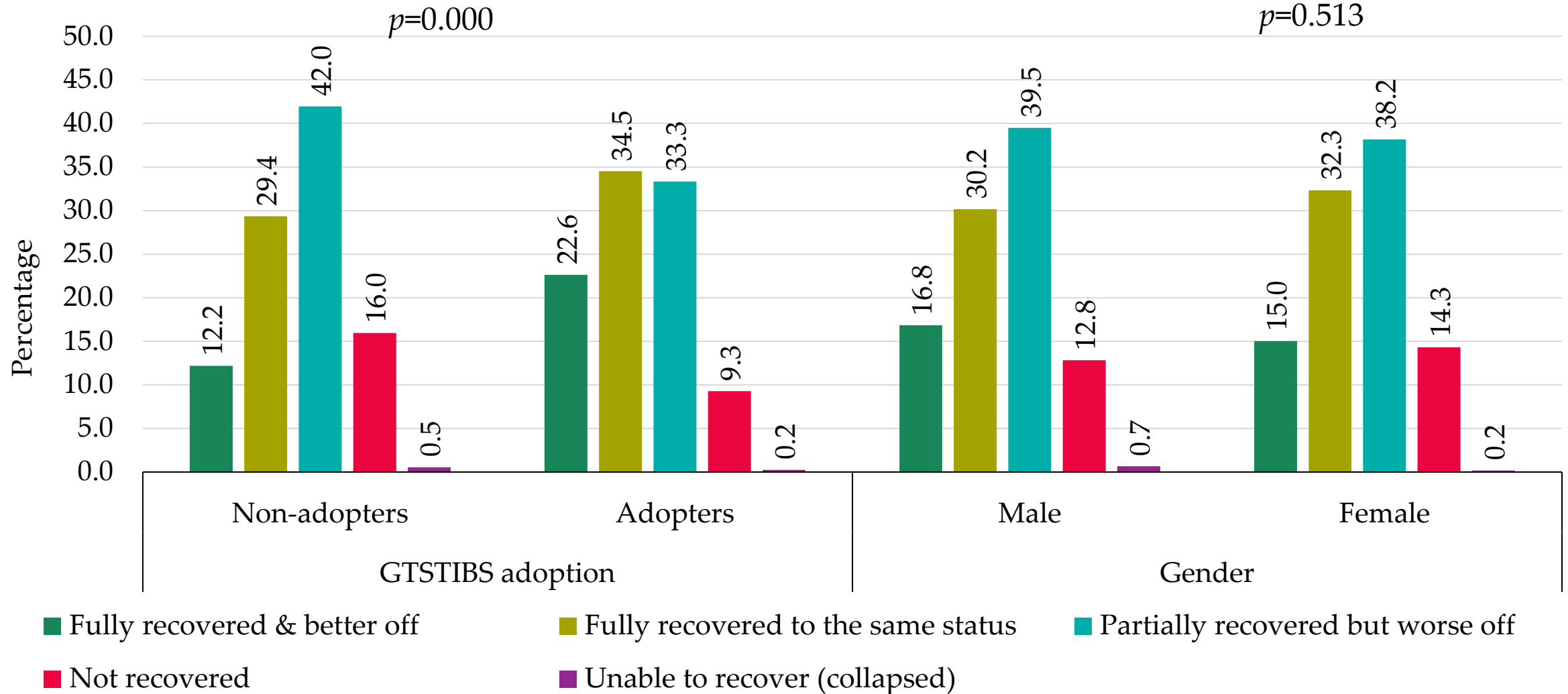


# Resilience capacities by gender and GTSTIBs adoption



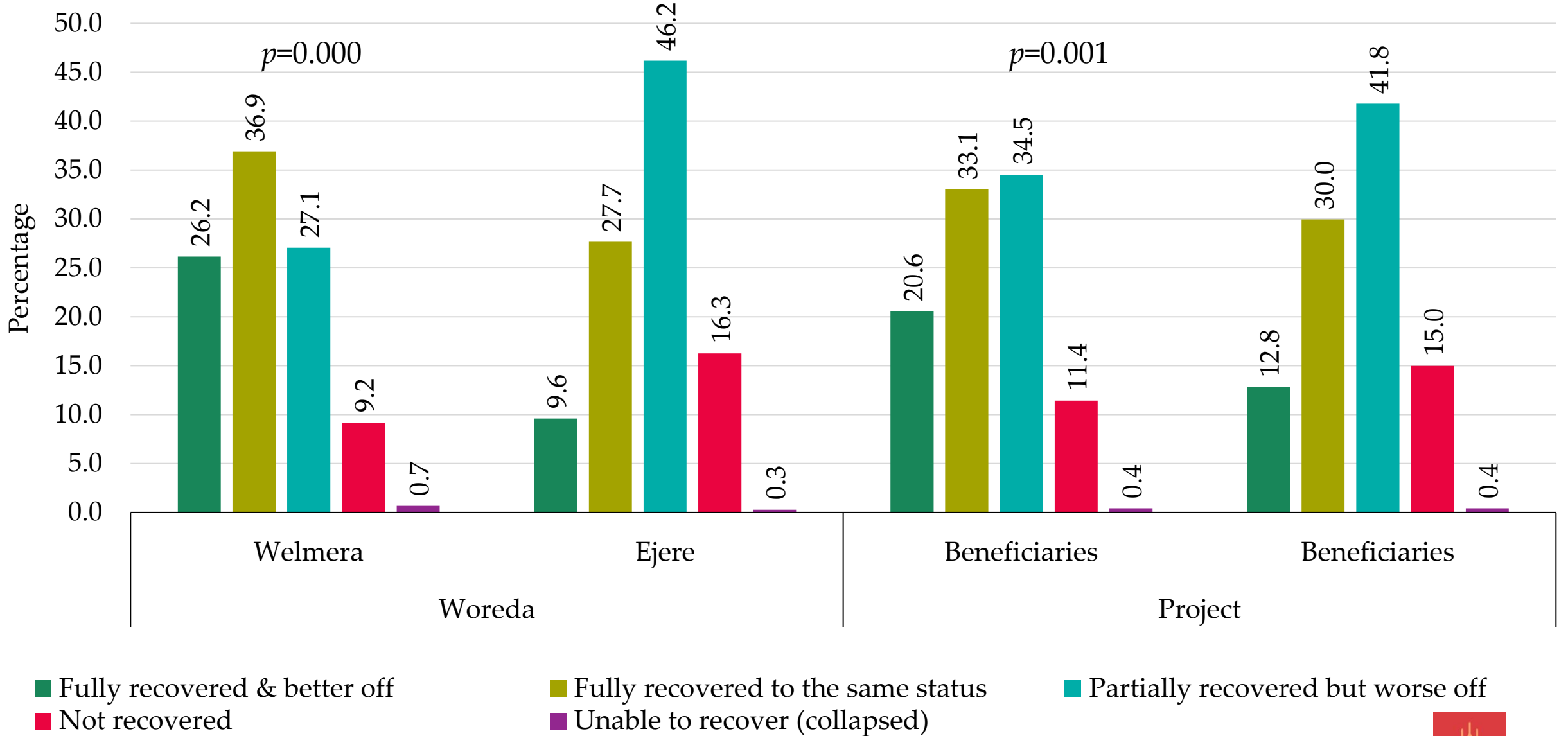


# Perceived recovery status after most recent shock/event



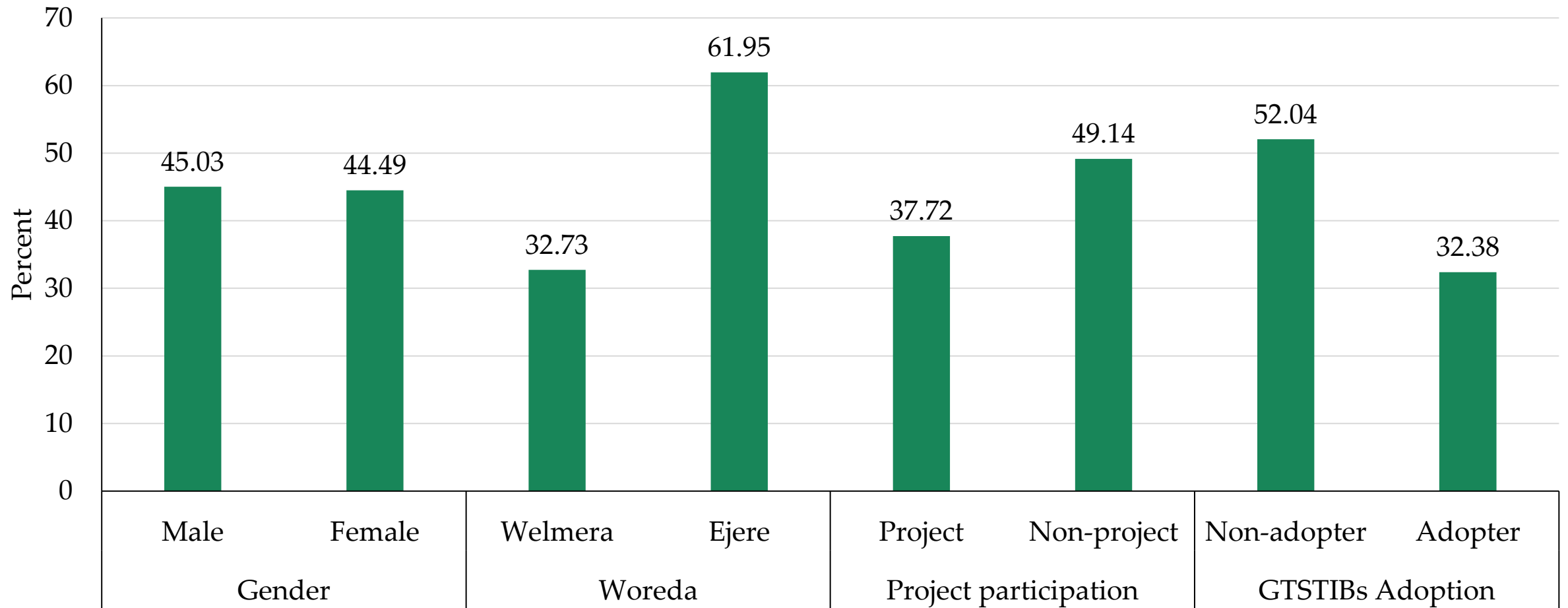


# Perceived recovery status after most recent shock/event



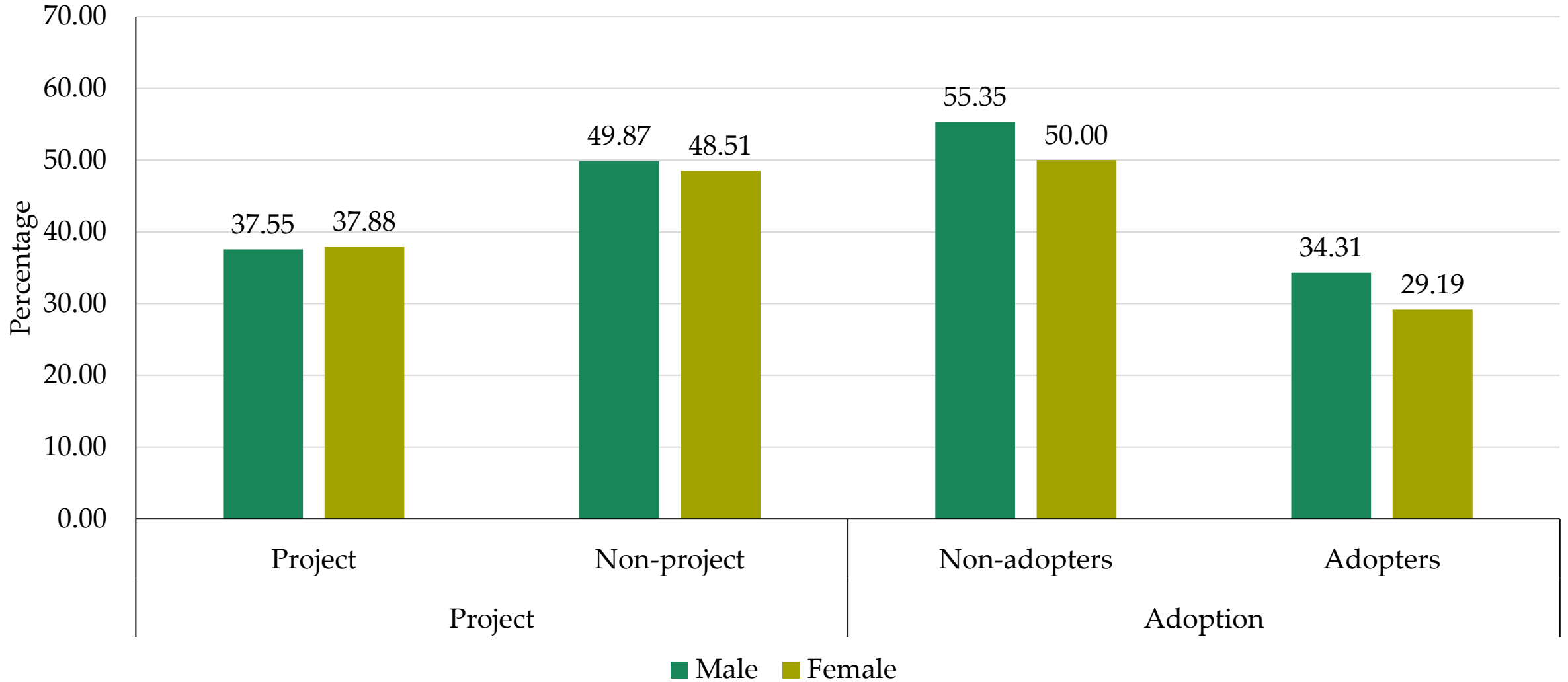


# Proportions of farmers reporting food shortages



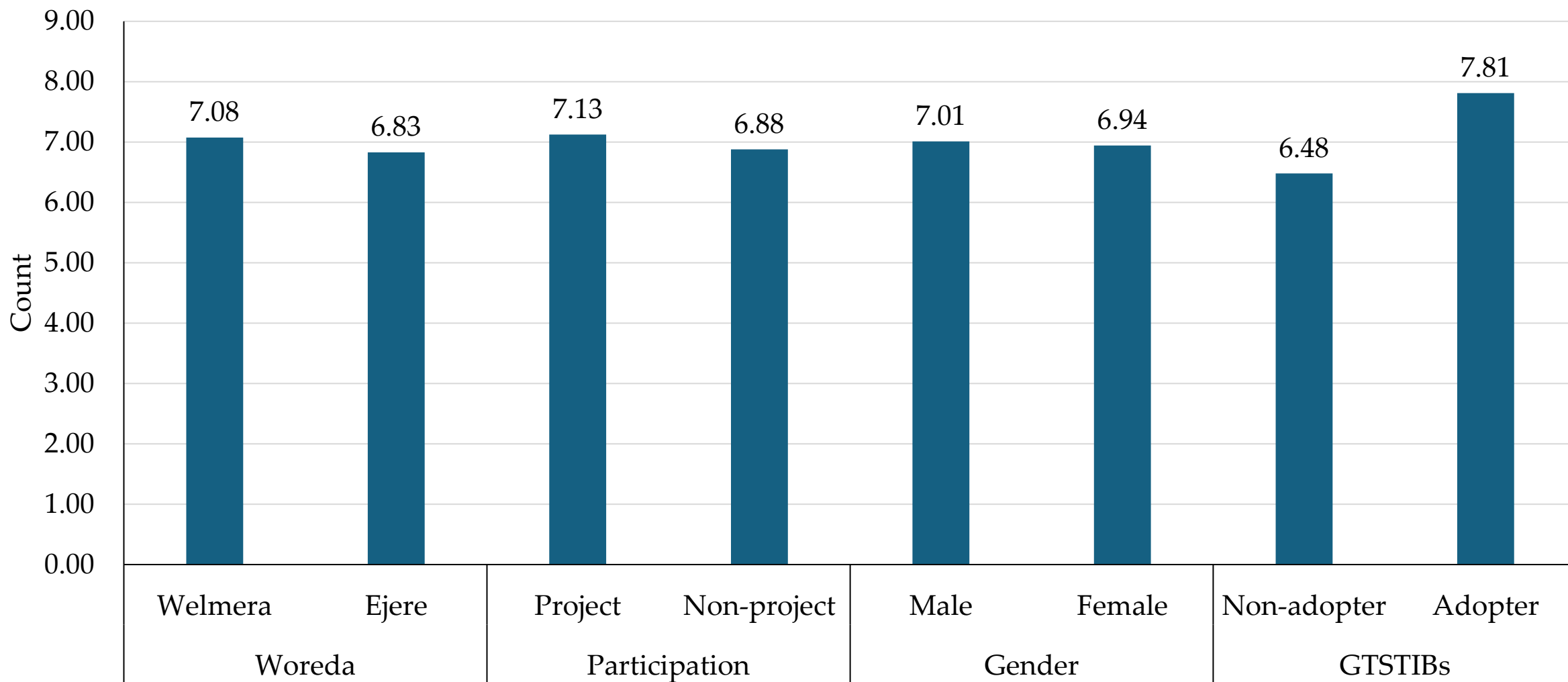


# % Food shortages by project, adoption, and gender



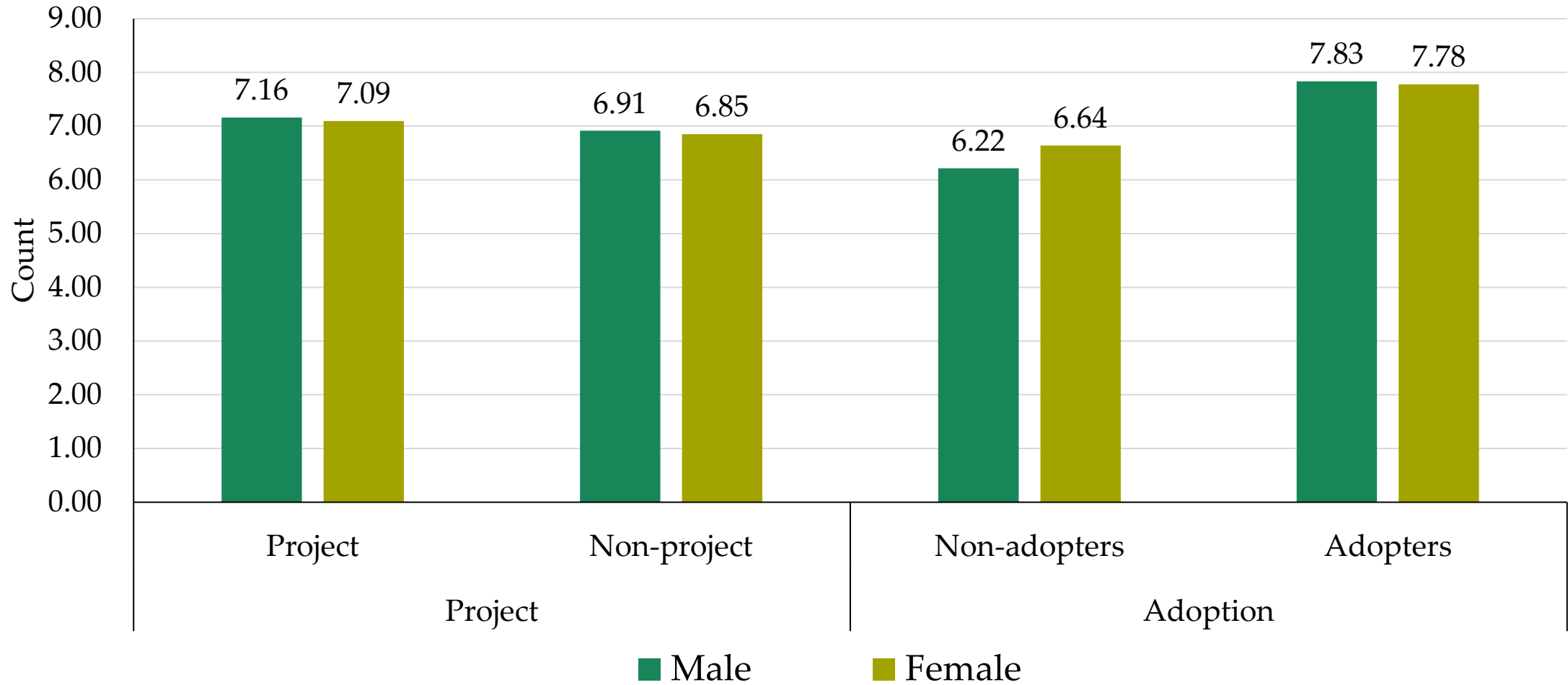


# Number of food groups consumed (individual level dietary diversity)



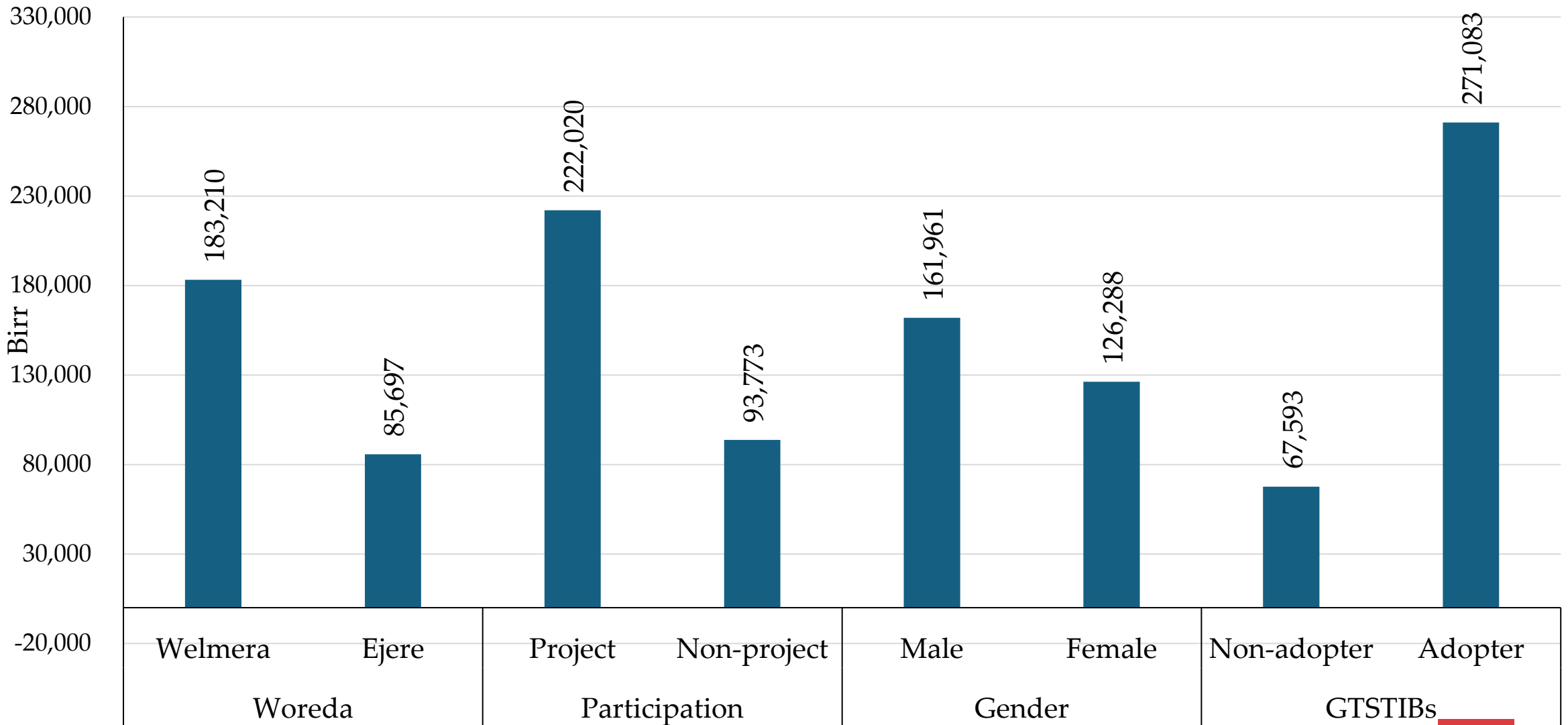


# Number of food groups consumed (individual level dietary diversity)



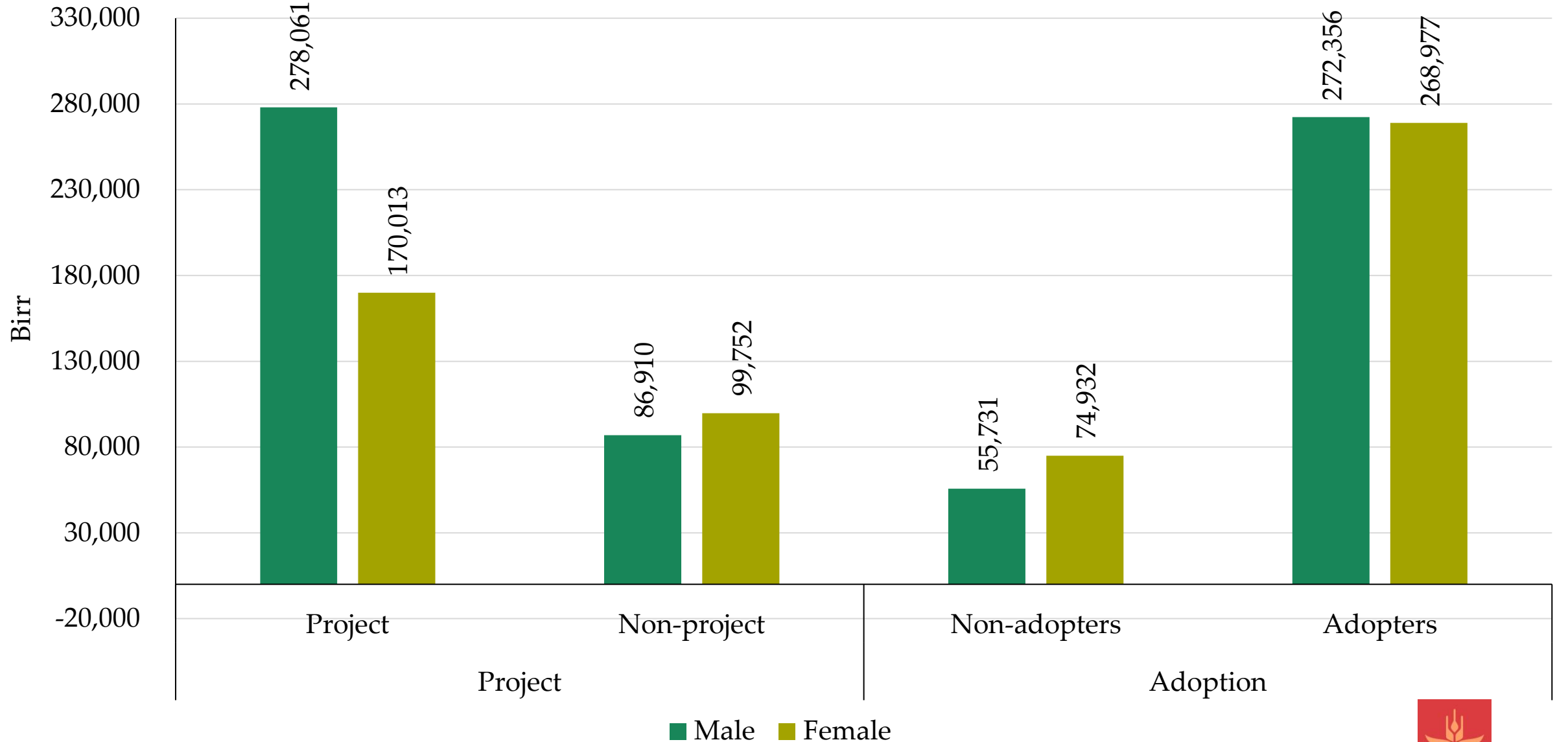


# Individual income (annual)





# Annual income by adoption and project participation





## Women's empowerment in agriculture (project participation status)

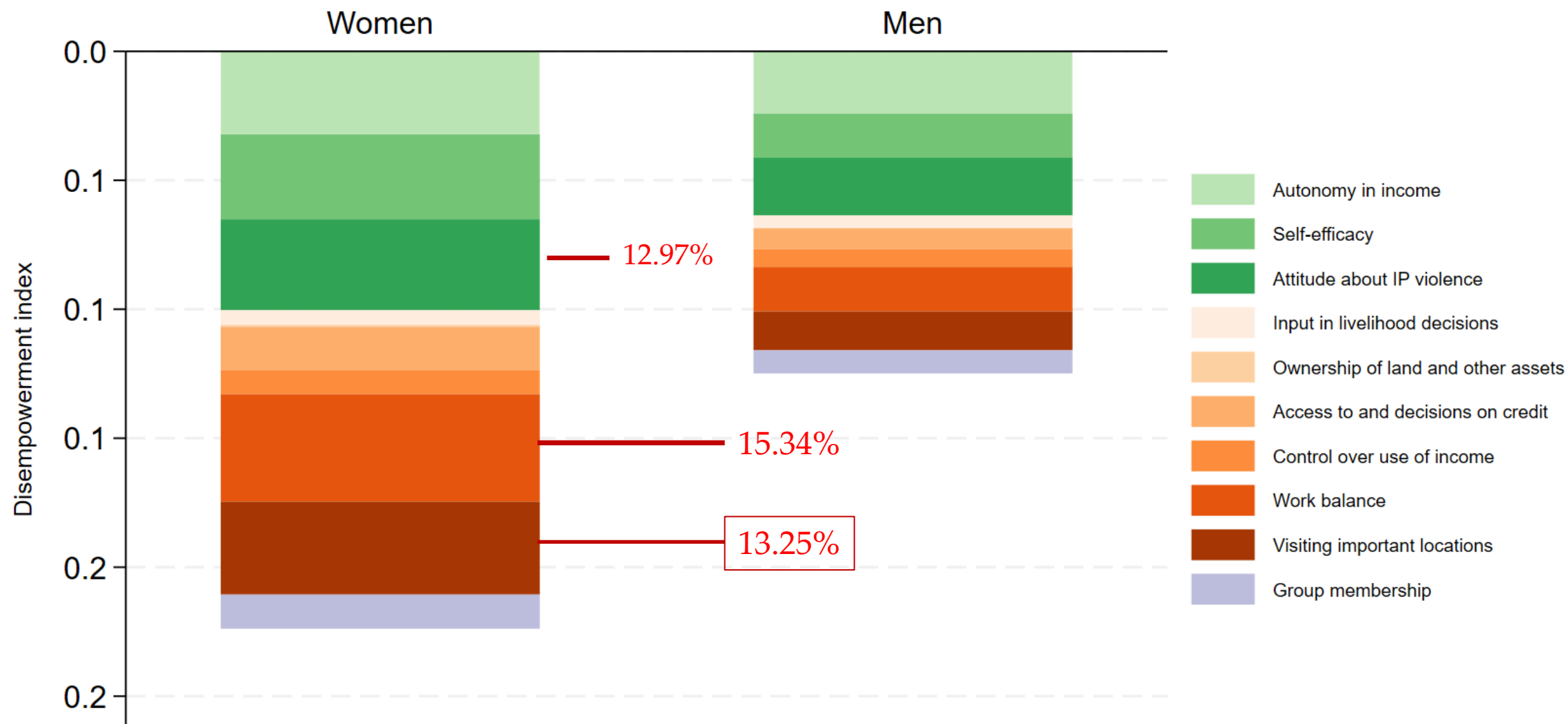
	Pooled		Non-project		Project	
	Women	Men	Women	Men	Women	Men
WEAI/A-WEAI/pro-WEAI	0.774		0.765		0.788	
5/3DE Index	0.760	0.871	0.751	0.868	0.776	0.875
Gender Parity Index (GPI)	0.897		0.896		0.899	
% Not achieving empowerment (H)	60.2	35.1	62.8	36.1	56.1	33.5
Mean disempowerment score (A)*	0.398	0.368	0.397	0.364	0.399	0.373
% Without gender parity (HGPI)	45.1		45.7		44.1	
Mean empowerment gap (IGPI)	0.227		0.227		0.229	
Number of dual households	610		374		236	
Number of observations	699	624	435	379	264	245

\* Refers to the mean disempowerment score among only women/men who are disempowered.  $5/3DE = 1 - (H \cdot A)$ ;  $GPI = 1 - (HGPI \cdot IGPI)$



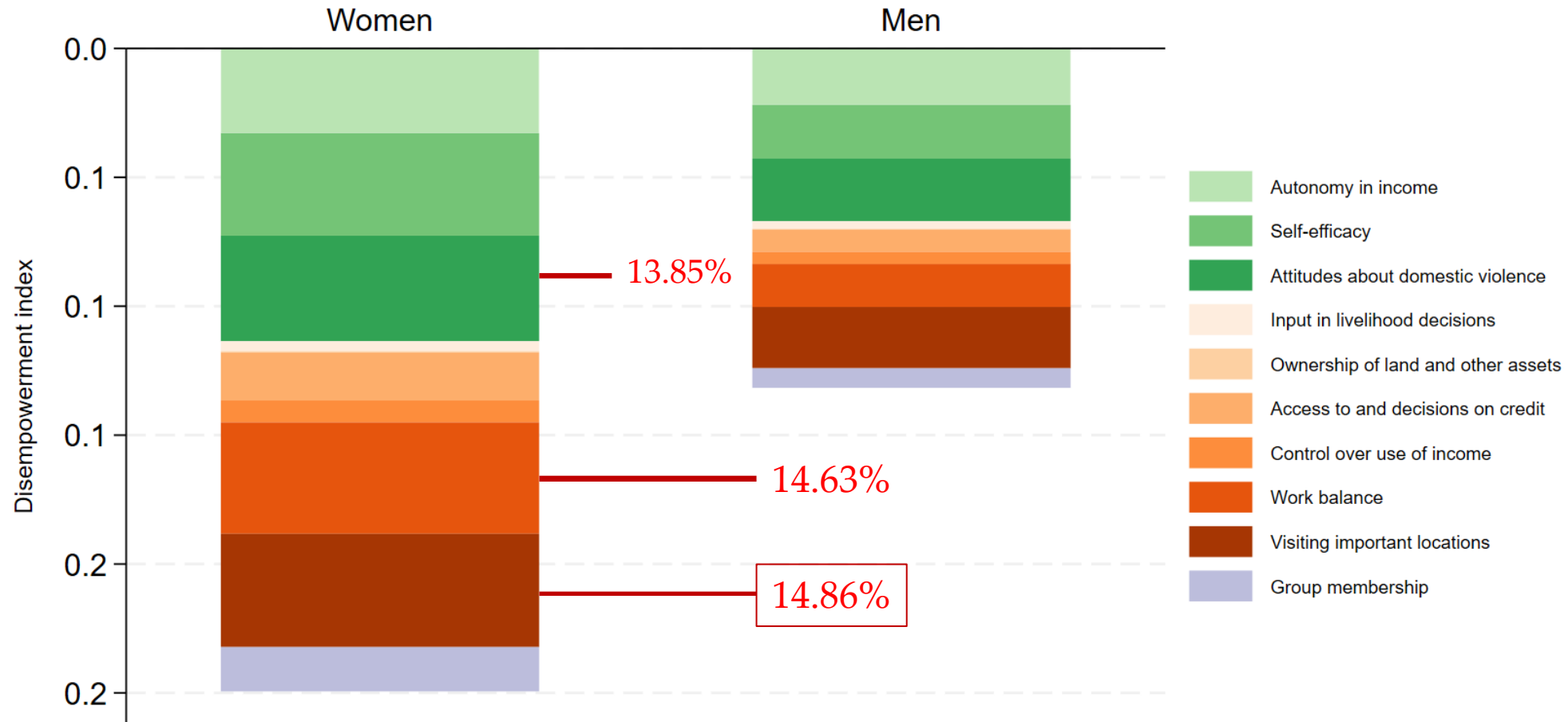


# Indicator contribution to disempowerment (project)





# Indicator contribution to disempowerment (non-project)





## Women's empowerment in agriculture (Adoption status)

	Non-adopter		Adopters	
	Women	Men	Women	Men
WEAI/A-WEAI/pro-WEAI	0.746		0.853	
5/3DE Index	0.730	0.837	0.844	0.906
Gender Parity Index (GPI)	0.891		0.933	
% Not achieving empowerment (H)	66.5	43.4	42.7	26.5
Mean disempowerment score (A)*	0.406	0.375	0.365	0.354
% Without gender parity (HGPI)	48.9		32.2	
Mean empowerment gap (IGPI)	0.223		0.208	
Number of dual households	276		118	
Number of observations	514	318	185	306

\* Refers to the mean disempowerment score among only women/men who are disempowered.  $5/3DE = 1 - (H \cdot A)$ ;  $GPI = 1 - (HGPI \cdot IGPI)$





## Empowerment indices by project participation

	Pooled			Men			Women		
	Non-project	Project	Sig	Non-project	Project	Sig	Non-project	Project	Sig
<b>Empowerment score</b>	0.736	0.748		0.785	0.787		0.693	0.712	
<b>Empowered (%)</b>	0.496	0.548	*	0.639	0.665		0.372	0.439	*
<b>Empowerment index</b>	0.805	0.824		0.868	0.875		0.751	0.776	





# Empowerment indices by GTSTIBS adoption

	Pooled			Men			Women		
	Non-adopters	Adopters	Sig	Non-adopters	Adopters	Sig	Non-adopters	Adopters	Sig
<b>Empowerment score</b>	0.709	0.796	***	0.759	0.814	***	0.677	0.764	***
<b>Empowered (%)</b>	0.423	0.674	***	0.566	0.735	***	0.335	0.573	***
<b>Empowerment index</b>	0.771	0.883	***	0.837	0.906	***	0.730	0.844	***





# Acknowledgements

