Food Security, Rural Development and Gender section:
Interdisciplinary Dialogue - Gender in Research and Practice
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UNIVERSITÄT BONN
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Gender in transition landscapes: a comparative study in developing countries

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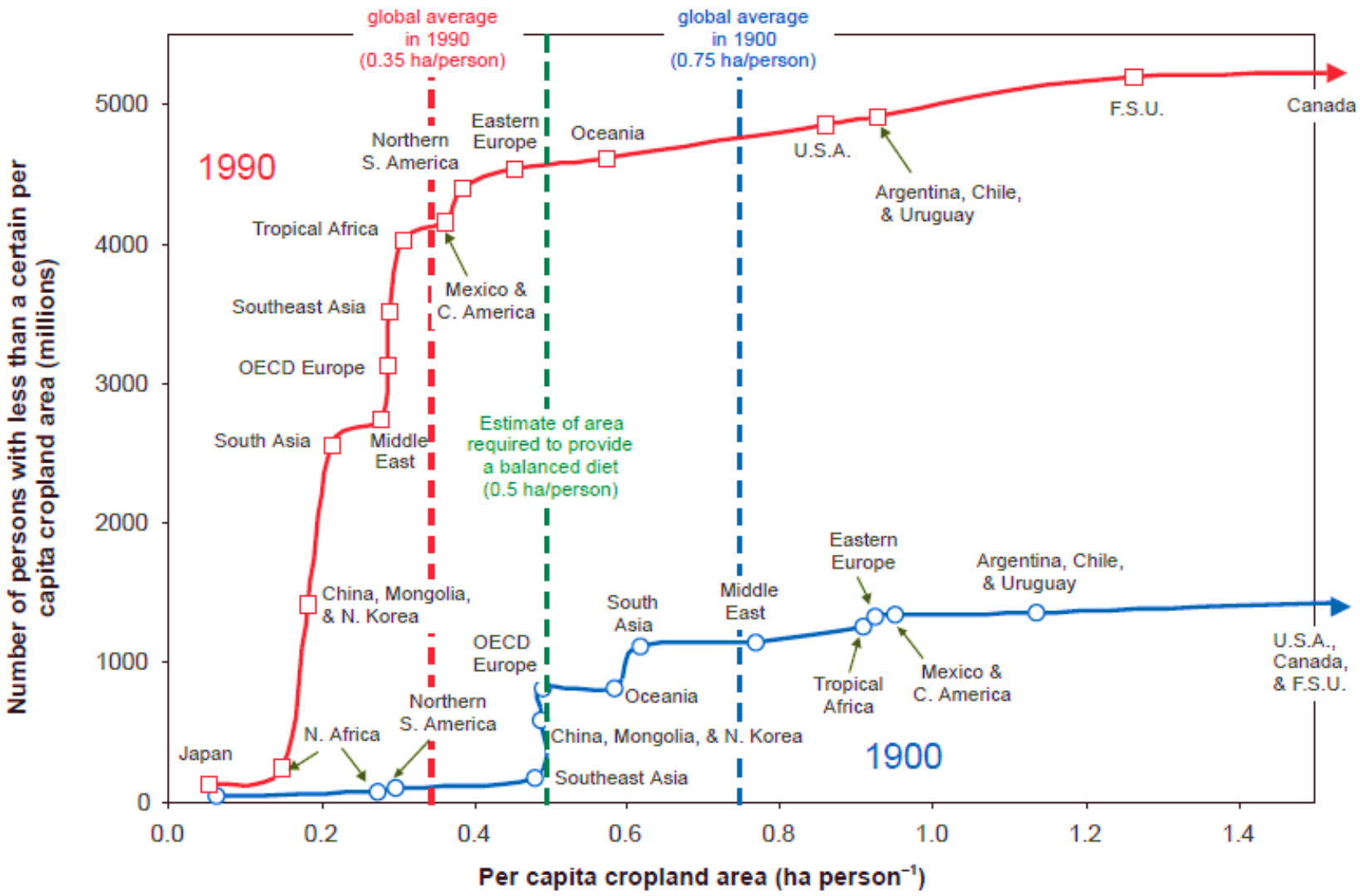
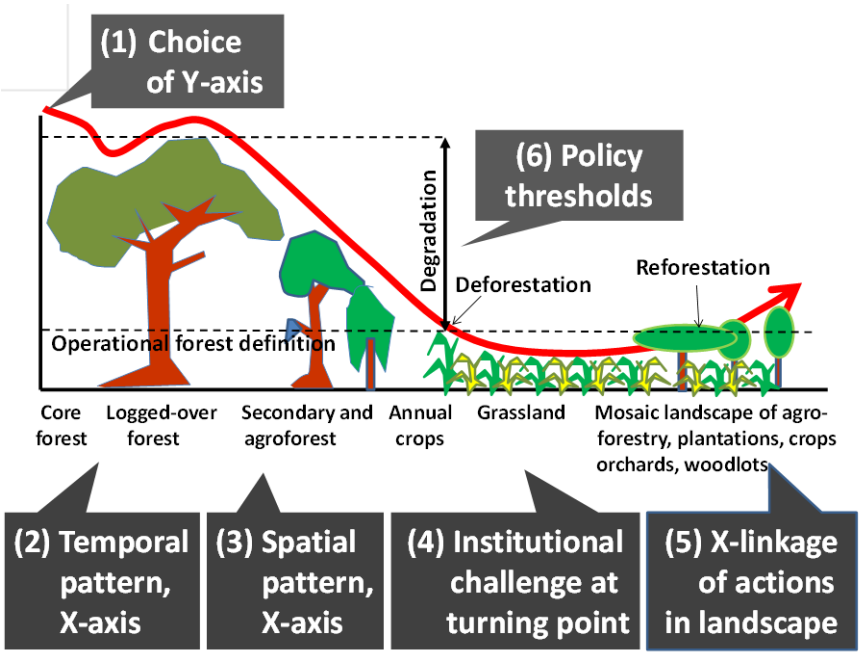
Per capita of crop land area in 1900 and 1990



Source: Ramankutty et al. (2002)

Introduction: Land use transition



Diversity of stakes hypothesis: Appreciation of tree cover and its associated ecosystem services varies according to ***gender*** and ***ecological knowledge***

Introduction: stereotyping

Males	Females
• More rational, active and aggressively market-oriented • Agentic goals (i.e., self-assertive, self-expansion, urge to master, risk takers) (Sources: Eagly & Steffen, 1984)	• Timid, shy and risk averse, conservative, and conservation-oriented • Communal goals (i.e., self-less, desire to be at one, less prone to competition)

… *it can* ***ignore or undermine the key interactions of socio-ecological systems*** *affecting the* ***processes of land-use change*** *and* ***ecosystem services provision***.

Research questions

(1) Gender (productive) roles – Who does what? Do men and women agree on who performs specific roles?

(2) Land use preference: what land use types are preferred in the future including the factors affecting their preferences? and

(3) What insights on **water-energy-food nexus challenge and gender** can we derive?

Land use transitions

Study area	Time interval	Annual change (%)	% change of study area	Uniform change
Jambi Province, (Sumatra), Indonesia	(1) 1988-1993	47.00	1.80	2.00
	(2) 1993-2010	23.00	**2.33**	2.00
Lantapan, Bukidnon, Philippines	(1) 1990-2002	28.02	2.33	3.34
	(2) 2002-2007	28.76	**5.75**	3.34
Son La district, Phu Yen Province, Vietnam	(1) 2000-2005	47.38	9.48	12.42
	(2) 2005-2010	76.85	**15.37**	12.42

African cases: Malawi, Uganda, and Cameroon (experiencing active transition)

WEF Nexus: Ethiopia (bioenergy)

Farm/land use characteristics

	Indonesia		Philippines		Vietnam	
	Females (n = 196)	Males (n = 200)	Females (n = 151)	Males (n = 152)	Females (n = 151)	Males (n = 151)
Current land-use (%):						
1) Annual crop/ monoculture	**33**	**41**	**70**	**71**	**88**	**90**
2) Tree-based / agroforestry	**60**	**56**	**30**	**29**	**4**	**5**
Land use change?						
YES	**38**	**38**	**45**	**44**	**46**	**55**
NO	**62**	**62**	**55**	**56**	**54**	**45**

	Cameroon		Malawi		Uganda	
	Females (n = 252)	Males (n = 309)	Females (n = 147)	Males (n = 160)	Females (n = 161)	Males (n = 150)
Current land-use practices (%):						
1) Annual crop/ monoculture	**74/10**	**44/28**	**82**	**86**	**65/34**	**67/32**
Land use change?						
YES	**17**	**18**	**6**	**6**	**44**	**86**
NO	**82**	**81**	**93**	**93**	**56**	**64**

Who does what?/ Do men and women agree with gender (productive) roles?

Conceptual framework

Gender roles framework
(Razavi and Miller 1995)

'who does what' for all **productive**, reproductive, and community tasks? – female vs. male respondents

Assumption:
The wider the gap, the higher the disagreement between men and women.

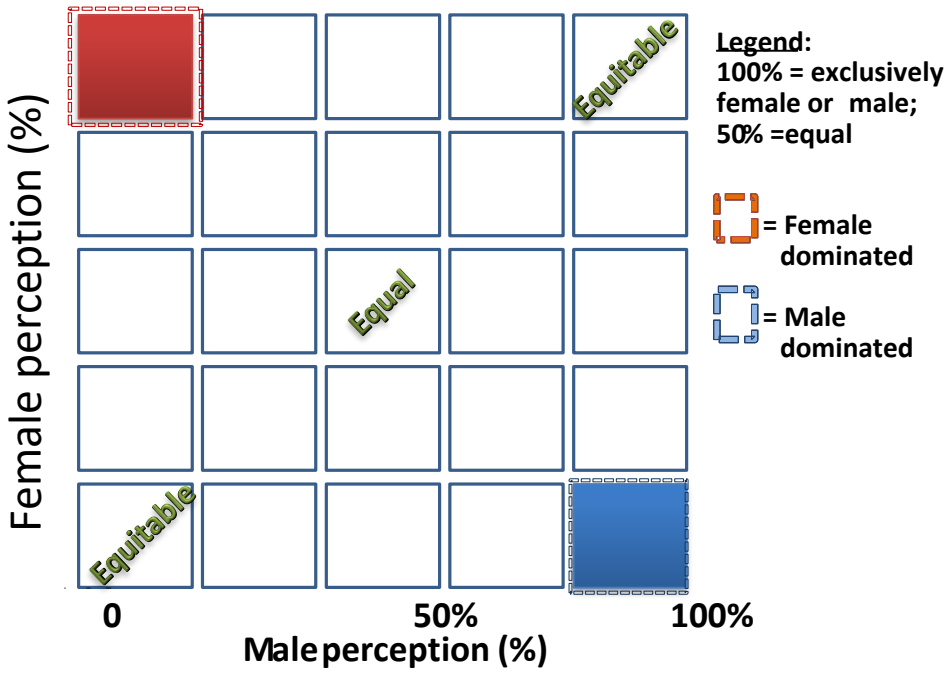
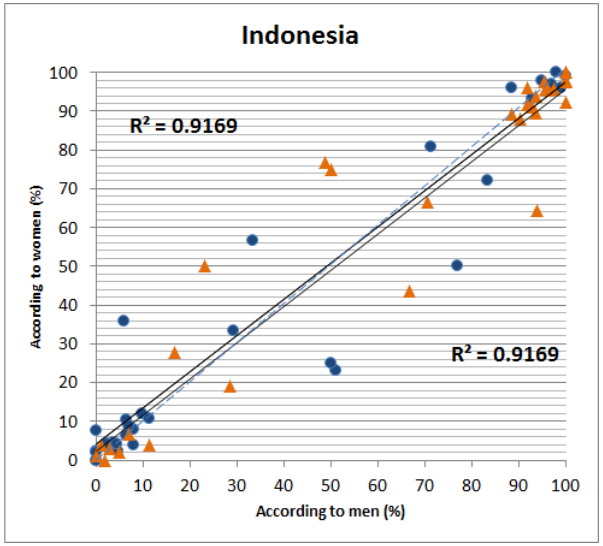


Figure 1. Graphical representation of gender equality on roles/activities according to men and women's perception.

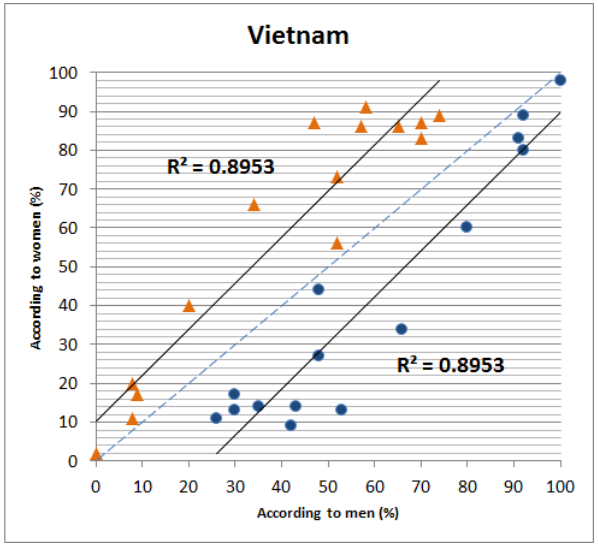
List of tasks/activities

I. Productive role	I. Reproductive role	I. Community role
Applying herbicides/pesticides	Caring for children	Attending community activities
Buying farm inputs	Cleaning the home	Attending school meetings
Clearing land	Collecting fuel-wood	Cleaning public spaces
Farm finances	Fetching water	Participating in meetings (e.g.
Feeding livestock	Household finances	new farm technology)
Fertiliser application	Preparing meals	Village tree planting
Harvesting crops	Washing clothes	
Harvesting tree		
Maintaining farm records		
Planting crops		
Planting trees		
Producing tree seedlings		
Pruning trees		
Rubber tapping		
Selling (non-rice) crops		
Selling agroforestry products		
Selling rice		
Transporting crops		
Watering/irrigation		
Weeding		

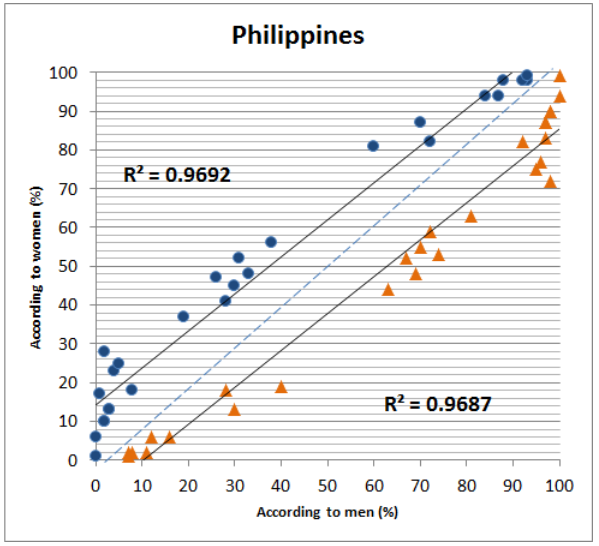
Roles (SEA)



Men and women perceived differentiated roles more clearly and in agreement

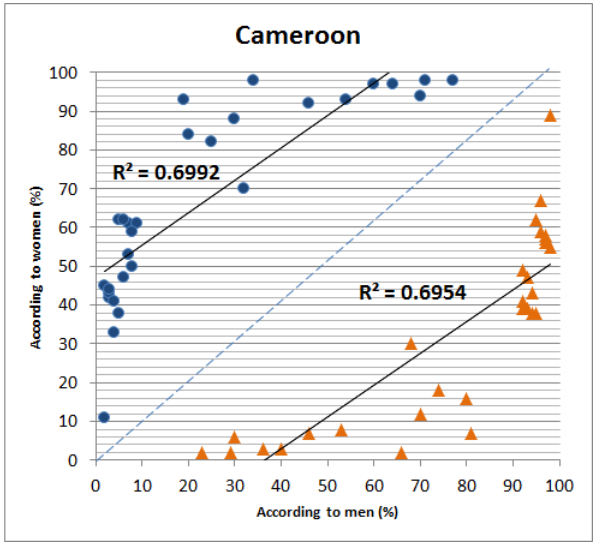


Men perceived more participation of women in almost all activities; Medium disagreement

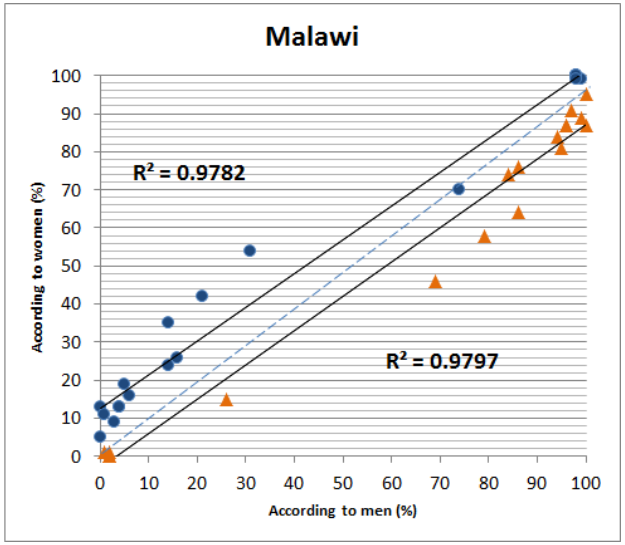


Women perceived more responsibility of men in productive roles and they perceived more responsibility of women in financial and admin activities; medium disagreement

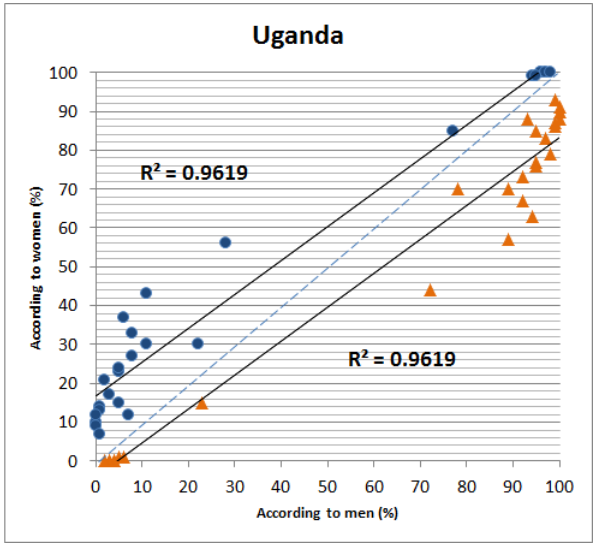
Roles (Africa)



Men and women perceived gender roles with highly significant disagreement

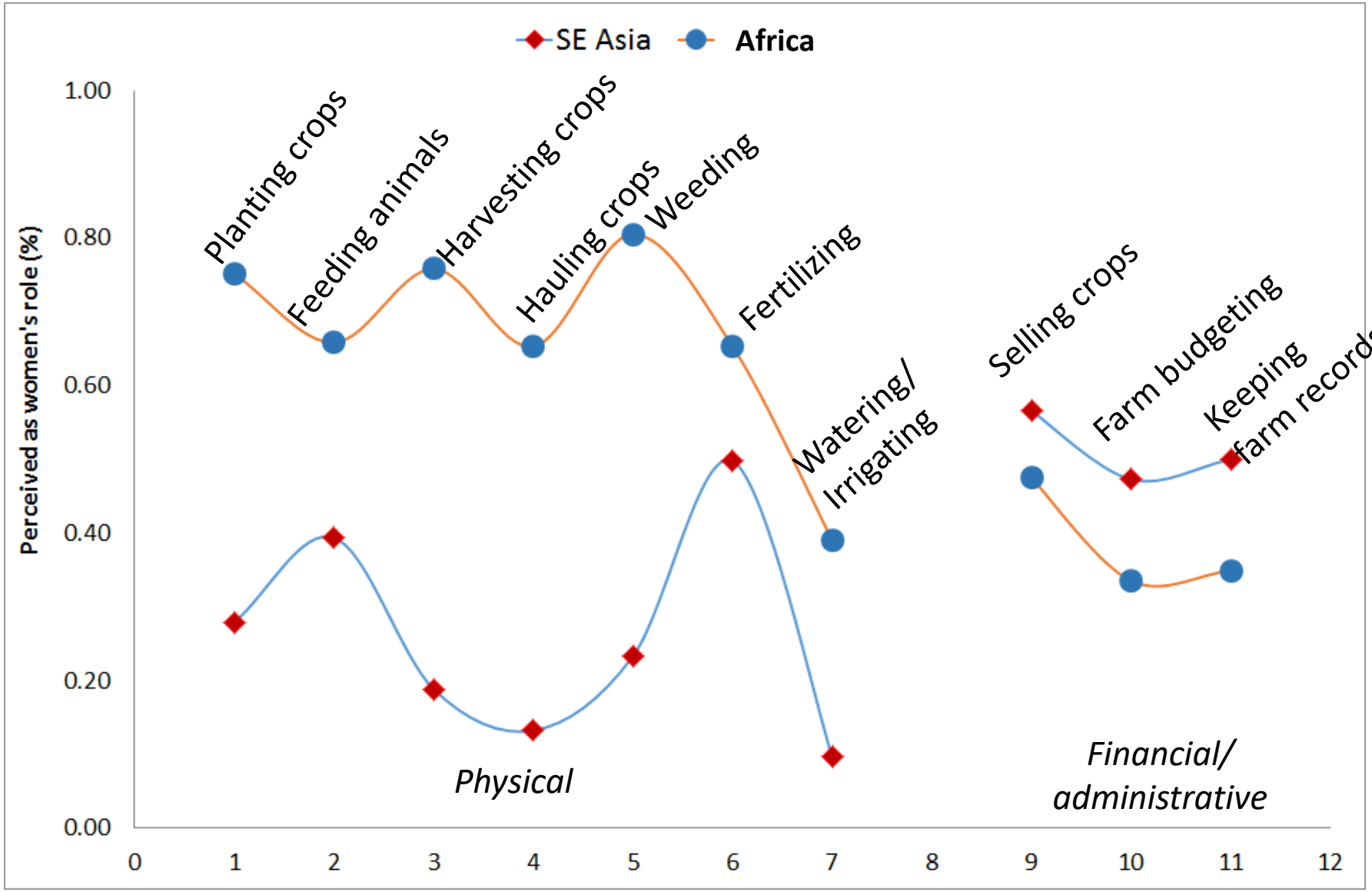


Quite similar with Uganda with clear gender differentiated roles



Higher disagreement between men and women as compared to Malawi

Productive role trends by region



Ethiopian case study: WEF nexus challenge

- World Bank data (2013/2014)

HH gender	Farm type		
	Crop only	Livestock only	Both
Male-headed household (n = 2,642)	8.0% (211)	6.7% (179)	85.2% (2,252)
Female-headed household (n = 874)	18.9% (165)	11.0% (97)	70.0% (612)

- Actors-Resources-Dynamics-Interaction approach – how do they view WEF nexus?

Male groups

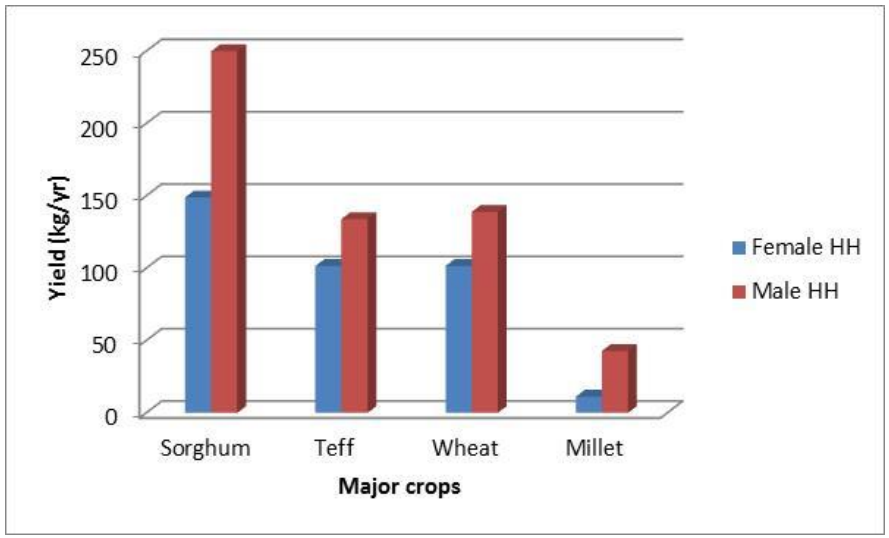
Female groups

Food production

- Land transition :Northern part

Land use patterns in the five villages from 1965 to 2007 (unit: ha).

	1965		1994		2007	
	Area	Percent	Area	Percent	Area	Percent
Arable land	10,723	39	13,028	48	12,769	47
Bare land	1177	4	442	2	440	2
Grass land	1469	5	1326	5	1299	5
Built-up area	282	1	487	2	531	2
Shrub land	7607	28	11,351	42	11,487	42
Bush land	5059	19	414	2	493	2
Forest land	977	4	192	1	198	1
Water body	21	0	77	0	100	0



Characteristic:

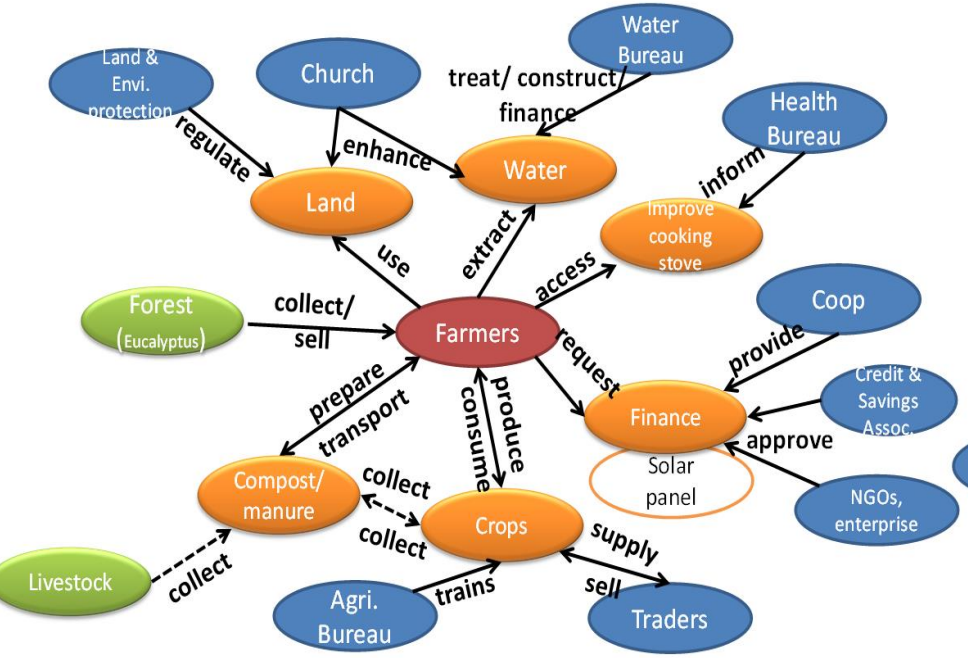
- Population growth
- Fragmented land
- Smaller farm plots
- Insecure ownership

(source: Teka et al. 2013)

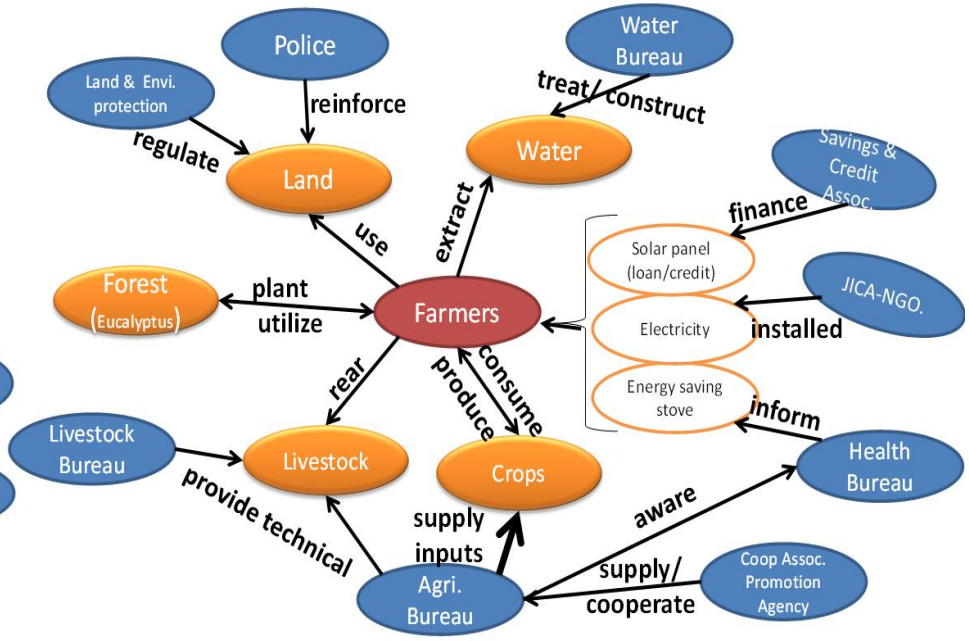
- Reduced crop production
- Increased livestocks
- Poor soil fertility

WEF conceptual (mental) models:

How do they view WEF nexus?



Female groups



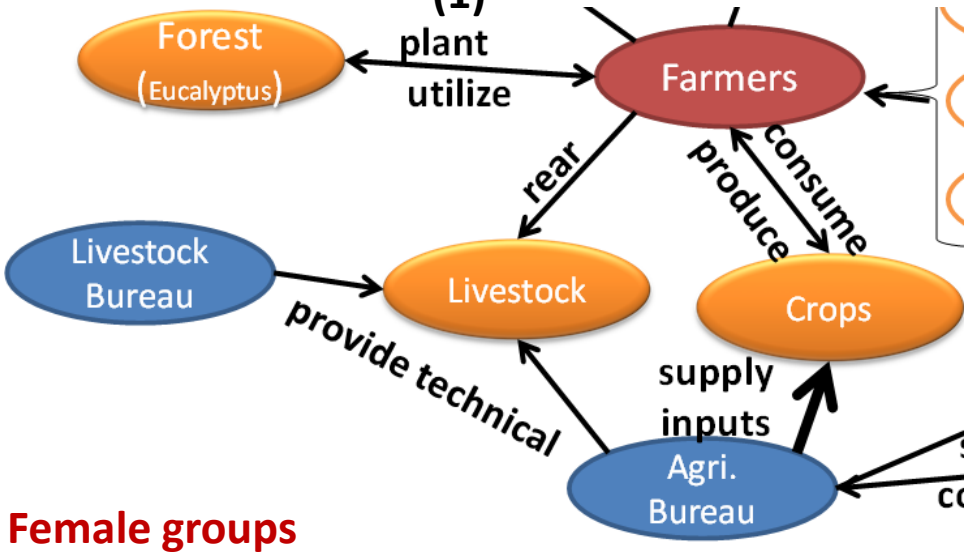
Male groups

Resource

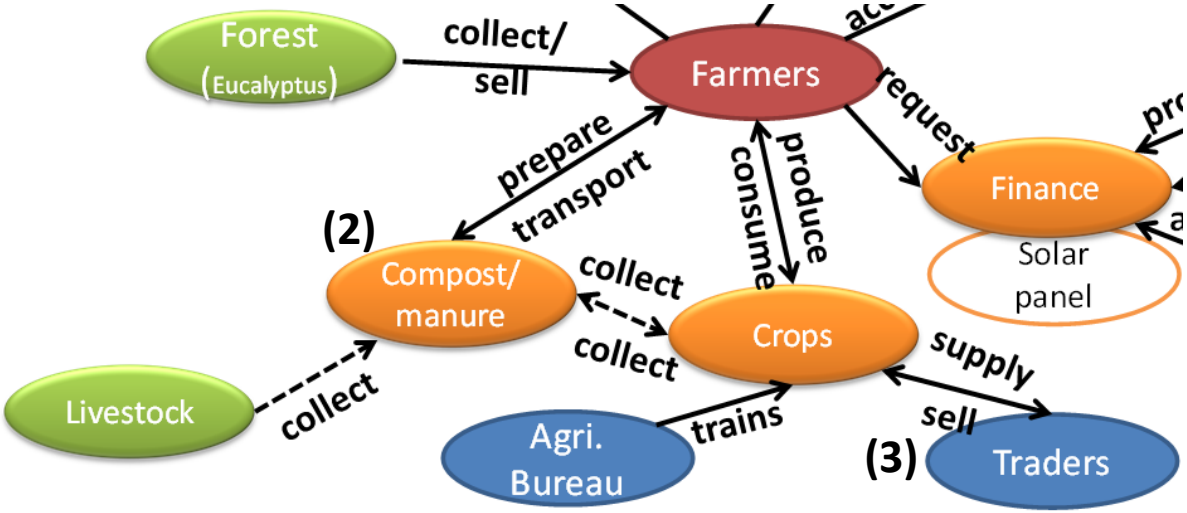
Actor/s

Analysis

Male groups



Female groups



(1) Gender-specific productive roles (customs?) => labor availability

(2) End products/resource => Labor and food availability

(3) Access to external actors (i.e., traders) depending on the resource => access to finance/ human/ physical capitals

(4) Decisions to utilize the end resource (e.g., cow dung)

Take home message

- **Stereotype**: **Farming** as a productive role is primarily ***men's responsibility while*** **financial** roles are performed by women
- **Empirical evidence**: Farming roles depend on cultural context and nature of activities

- Women are always involved in productive roles (both in lower and upper value chains)
- Gender differences are not straightforward
- If gender equality/equity is deemed important, inter-sectionality with other factors must be considered.
- Land -> transitioning-> agriculture-based -> more productive roles for women

Thank you for your attention

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