



Rural transformation, empowerment, and agricultural linkages in Nepal

Kalyani Raghunathan, Kenda Cunningham, Agnes
Quisumbing and Cheryl Doss

Seeds of Change Conference

April 2-6, 2019

Canberra, Australia

Motivation

- Nepal is experiencing rapid transformation, including high rates of outmigration in search of work (~7.5% of the population is based abroad)
- More than 95% of the time, the migrant is male
- This has implications both for the migrant and for the members of the family who are left behind
- BUT we don't know a lot about
 - Household power dynamics among the women left behind in intergenerationally extended households, and
 - what this balance of power means for household-level investment behaviour.
- Particularly important in a low-income, subsistence farming structure where responsibilities are traditionally shared among all adult household members.

Research questions

We use data from Nepal to answer three research questions:



What are the factors associated with empowerment of women in the household? In particular, to what extent and in what ways does household composition affect empowerment among these women?



How is relative empowerment among these women associated with food security and agriculture-related household investments?



Knowing about empowerment dynamics, what can we learn that could improve ag-nutrition programming?

Data

- Cross-sectional annual monitoring survey from Suaahara II, an at-scale integrated nutrition intervention
- The data was collected from June to September 2017 among a representative sample of households with a child under five years.
- The **primary respondents were mothers of children <5 years of age** from the selected households.
- The secondary respondents included:
 - primary **male** household decision makers;
 - **grandmothers** of child <5y residing in the household (almost exclusively mothers-in-law).
- The final survey sample included **3624 households**.

Data (continued)

- What's unique about this data? Several empowerment-related modules were administered to both the woman and the grandmother
 - “Agency-related”: Self-efficacy; attitudes regarding gender-based violence; freedom of movement; time use
 - “Resource-related”: decision-making in household productive activities, access to related information, asset ownership and group participation
- We focus on those types of HHs where the mother and grandmother are both present

	Household type (N=3624)	Number	
	Respondent woman only	978	
HH Type I	Respondent woman and grandmother	890	} N=1608
	Respondent woman and man	1038	
HH Type II	Respondent woman, man and grandmother	718	

Methods

- **Part I:** investigate the association of mother and grandmother's empowerment in each domain with HH characteristics, including the type of HH (I/II)
- **Part II:** investigate how empowerment is related to household level investments
 - In each domain, construct grandmother-mother empowerment gap variables as follows:

$$empgap_{gm} = \begin{cases} \frac{empscore_g - empcore_m}{empcore_g} & \text{if } empcore_g \neq 0 \\ 0 & \text{if } empcore_g = empcore_m = 0 \\ -empcore_m & \text{otherwise.} \end{cases}$$

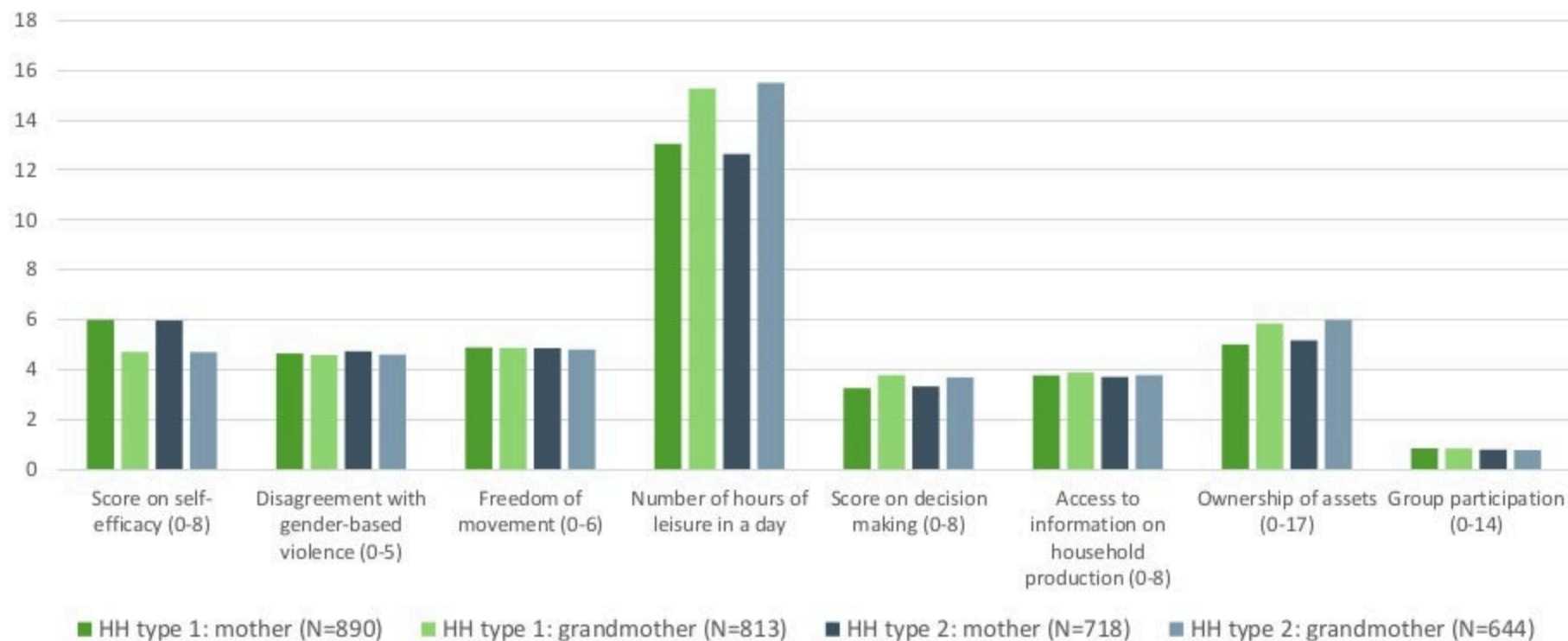
- aggregate these gaps into one composite score using equal weights for each domain, and also divide them into two groups (agency and resource related)
- Look at the associations of the empowerment gap & level measures with investment variables

Our outcomes: food security and agriculture variables

- Household Food Insecurity Access Score (HFIAS) - ranges from 0-27, with a higher score indicating greater food insecurity
- HH has chickens (0/1)
- HH has homestead garden (0/1)
- Total number of crops grown
- HH sells any crop (0/1)
- Proportion of crops grown that are sold

RESULTS

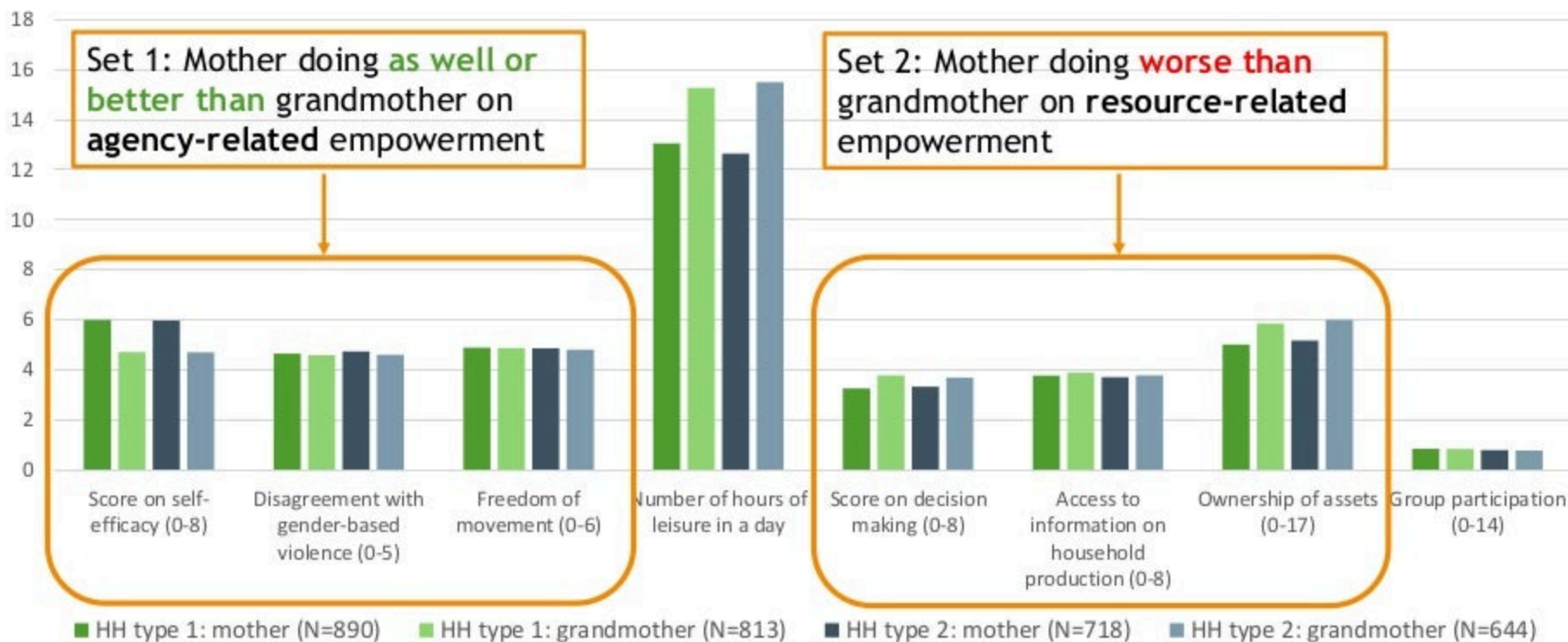
Results I: Women's empowerment by HH type



Note: HH type 1 is mother and grandmother only (no man), HH type 2 has mother, grandmother and an adult male

Results I: Women's empowerment by HH type

Not much difference by HH type; but differences between mother and grandmother



Note: HH type 1 is mother and grandmother only (no man), HH type 2 has mother, grandmother and an adult male

Results I: Other correlates of empowerment

What other characteristics matter?

▪ Agro-ecological zone

Women in the terai are distinctly less empowered than women in the hills (significantly so in 5/8 domains)

Women in the mountains are less empowered on freedom of movement and leisure, but more in asset ownership compared to terai women

▪ Caste

Brahmin women more empowered than non-Brahmin women on freedom of movement, decision-making and access to information aspects

▪ Other demographics

Maternal age and education positively associated with their own empowerment

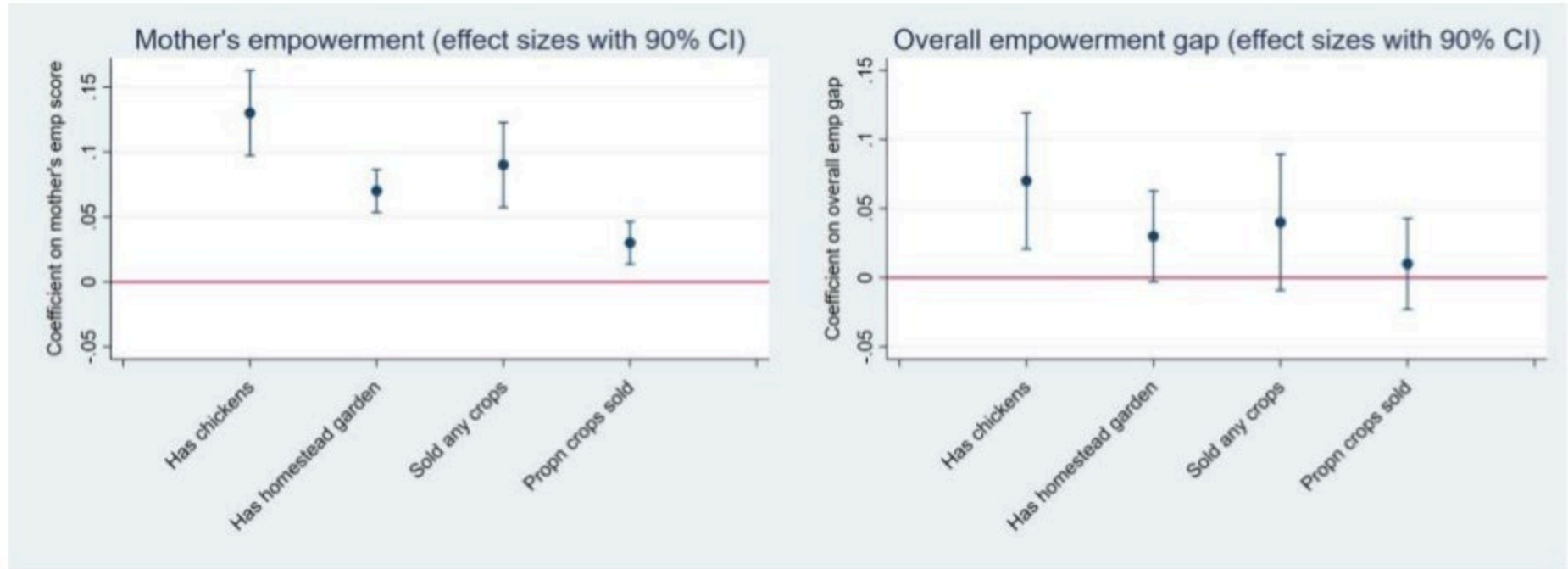
But grandmothers' age is *negatively* associated with their own resource-related empowerment scores

Results II: Correlates of food security and agriculture outcomes

- Correlation of the food security and agriculture outcome variables with empowerment gap and levels variables
 - Overall empowerment gap, all 8 domains
 - Empowerment gap for agency- and resource-related empowerment separately
- The graphs to follow show the **effect sizes** for the **mother's empowerment** and **relative empowerment** variables for each model
- **Controls:** HH type, ecological zone, caste, HH size, HH wealth, land ownership, male years of education, negative and positive shocks, age and education of the grandmother and mother and several HH demographic variables

Results II.A: Using the overall relative empowerment gap

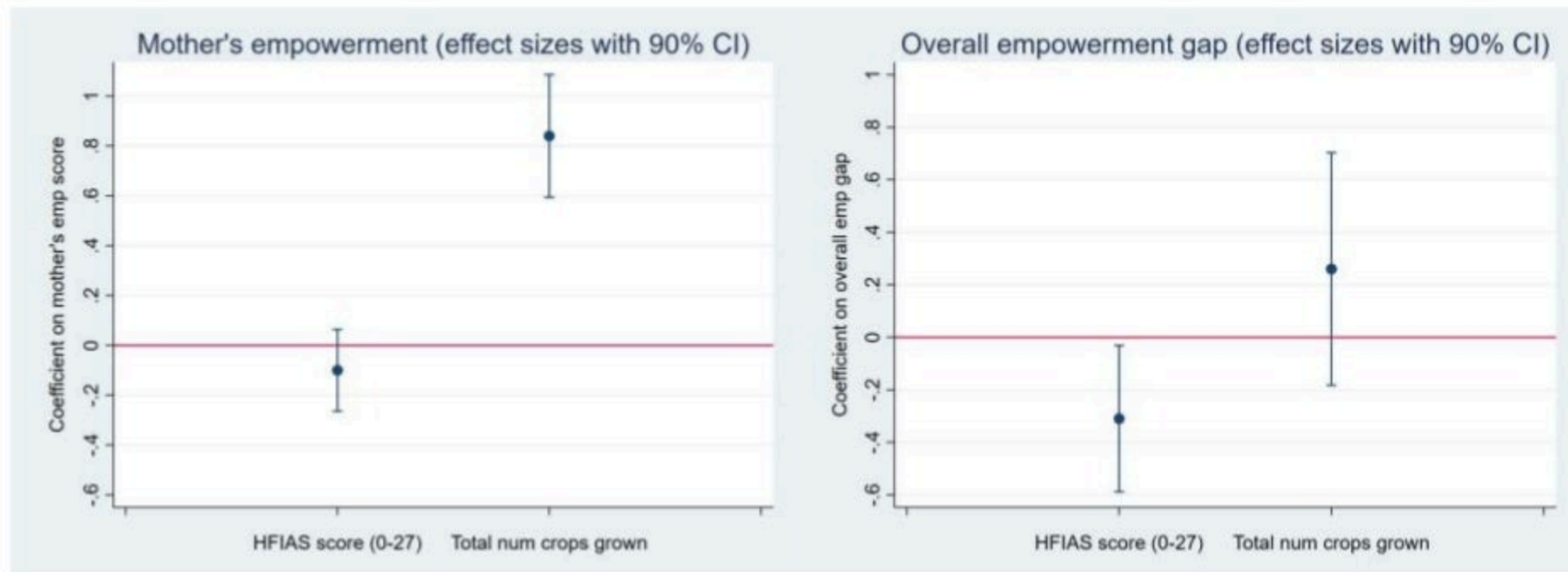
Outcomes ranging from 0-1



- Mother's empowerment matters for all outcomes, and significantly so!
- Even after we control for the level of mother's empowerment, larger relative empowerment for the grandmother is positively associated with some outcomes

Results II.A: Using the overall relative empowerment gap

Continuous outcomes



- The level of mother's empowerment does not matter for food security, but is very important for the total number of crops grown
- Larger relative empowerment for the grandmother is positively associated with improved HH food security

Results II.B: Grouped relative empowerment gaps

Effect sizes on the empowerment gap variables

	HH HFIAS score (0-27)	HH has chickens	HH has homestead garden	Total number of crops grown	HH sold any crops (1/0)	Propn of crops sold
	(1)	(2)	(3)	(4)	(5)	(6)
	b/se	b/se	b/se	b/se	b/se	b/se
Agency-related empowerment gap	-0.18 (0.15)	0.01 (0.03)	-0.00 (0.02)	0.69*** (0.19)	0.08*** (0.02)	0.02** (0.01)
Resource-related empowerment gap	-0.18 (0.13)	0.08*** (0.02)	0.04*** (0.01)	-0.31 (0.21)	-0.03 (0.02)	-0.01 (0.01)
Mother's agency-related emp score	0.08 (0.07)	-0.01 (0.01)	0.02 (0.01)	0.25** (0.10)	0.04** (0.01)	0.01* (0.01)
Mother's resource-related emp score	-0.31** (0.14)	0.26*** (0.03)	0.10*** (0.02)	0.99*** (0.23)	0.10*** (0.02)	0.03** (0.01)

We are in a migration session...so what about household structure?

- Surprisingly, having a man at home doesn't really seem to change many of the measured food security and agriculture outcomes measured
- In fact, having a man at home is *negatively associated* with the total number of crops.
 - Greater specialization? Focus on large staple/cash crops? Shift towards livestock production? Diversification into ag business? Need to investigate!
- Overall, the balance of power between the women in the HH seems more important than the presence of the man!

Conclusion and further work

- Women's empowerment is important (continue focusing efforts on mothers)...
- ...but don't neglect the grandmother. She could be a hidden ally!

Next steps:

- Look at empowerment among adolescent girls as well
- Investigate cropping patterns and time use across HH type
- Look also at how other 'axes of oppression', like caste, matter
- Dig deeper into the program components to see which pieces of the intervention are being improved and why

We would like to acknowledge all CGIAR Research Programs and Centers for supporting the participation of their gender scientists to the *Seeds of Change* conference.



RESEARCH
PROGRAM ON
Policies,
Institutions,
and Markets



Collaborative
Platform for
Gender Research



Photo: Neil Palmer/IWMI



Australian Government

Department of Foreign Affairs and Trade



Global Affairs
Canada

Affaires mondiales
Canada



Irish Aid

Government of Ireland
Rialtas na hÉireann



Government of the Netherlands



USAID

FROM THE AMERICAN PEOPLE