

# Mechanization for scaling from a gender perspective



Photo credit: N. Kawarazuka

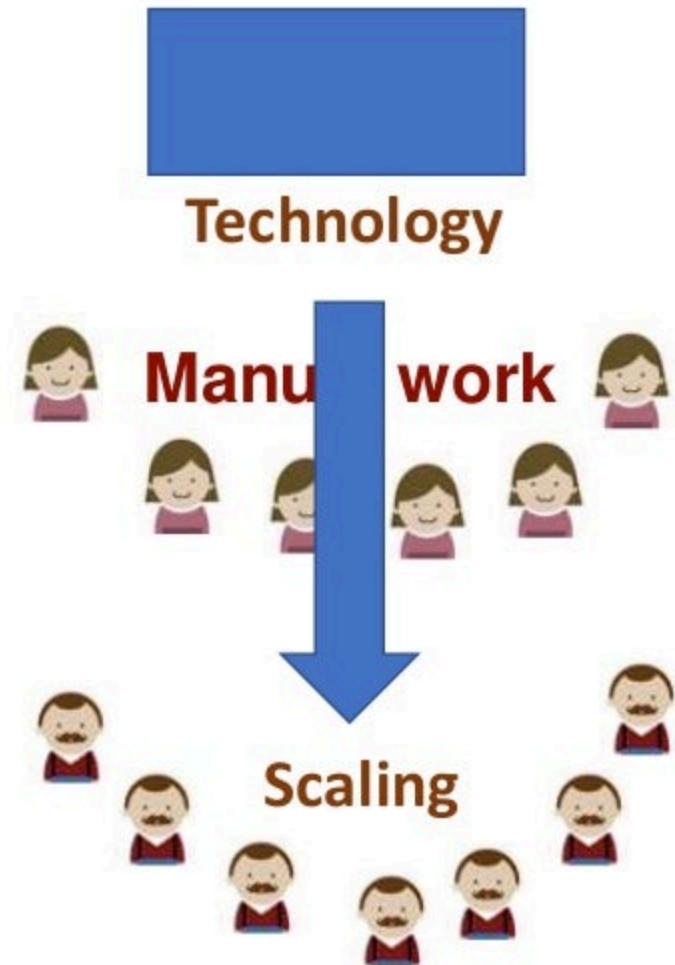
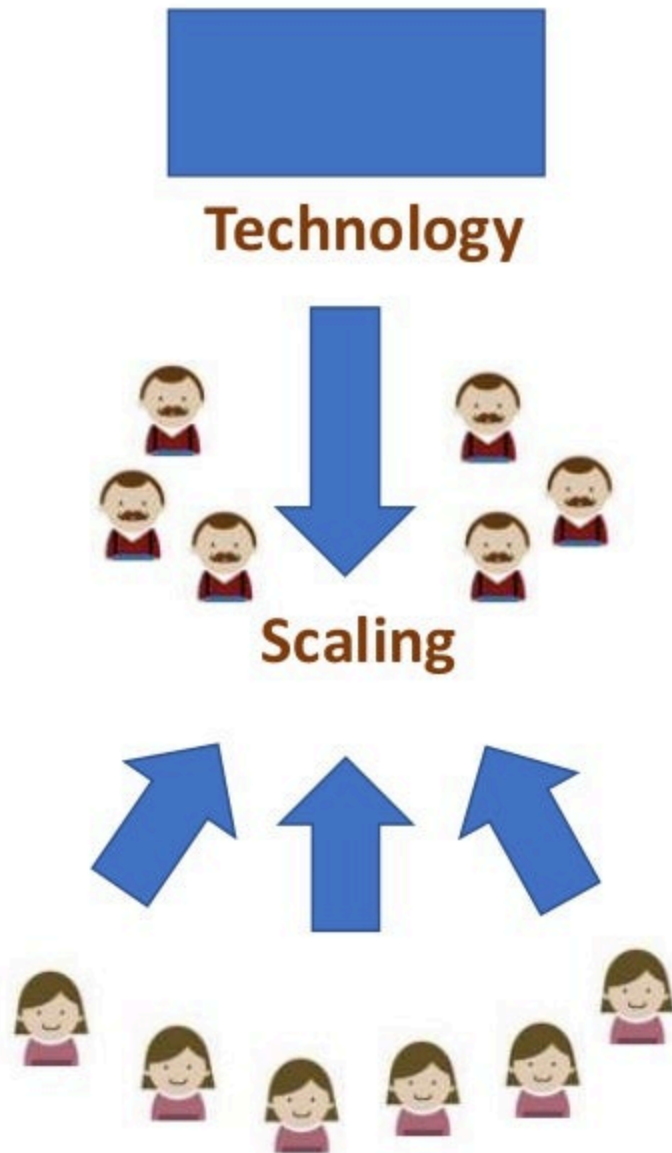
**Nozomi Kawarazuka, Gordon Prain, Lora Forsythe, Sarah Mayanja, Netsayi Mudege, Claudia Babini, Vivian Polar.**

## Outline of my presentation

1. Introduction: gender, technology and scaling
2. Stories of how gender matters in mechanization
3. A case study in Son La Vietnam
4. Implications: scaling for whom to what?

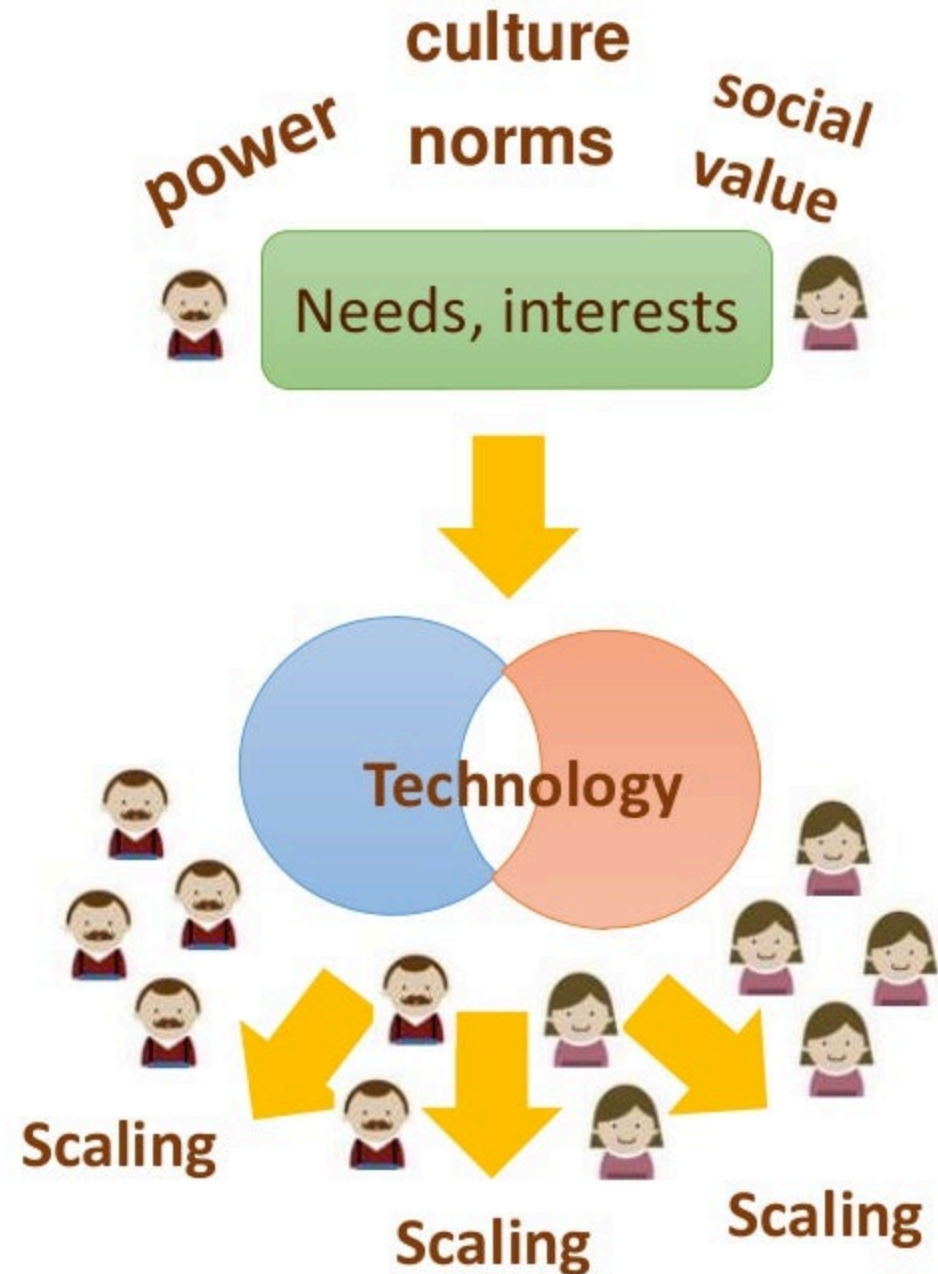


# 1. Gender, technology and scaling



# 1. Gender, technology and scaling

How can we reach to women, as well as men?



## 2. Stories: how gender matters in machines

Case 1: Machines were made by male mechanics.  
Adjustment was needed to make it suitable for women



**Before**



**After**



**Before**



**After**

Case 2: Decisions were made by men. Women's needs were not recognized (in the household, community, at the project levels)



*Smoke reducing gari fryers in Nigeria. Gari is popular food made from processed cassava. Credit: Adekola Felix Adegoke*

<http://www.rtb.cgiar.org/blog/2018/03/06/agricultural-mechanization-far-women-farmers-benefit/>

## Case 3: Machines as symbol of masculine power Manual work as symbol of femininity/powerlessness



*Symbolized male power with mechanization in Vietnam. Credit: Nguyen Thi Van Anh (ISDS)*

### 3. A Recent Case Study on gender and mechanization in Dien Bien, Vietnam



Inviting farmers as co-researchers. Farmers present their key findings in the village event. Photo credit: n.kawarazuka

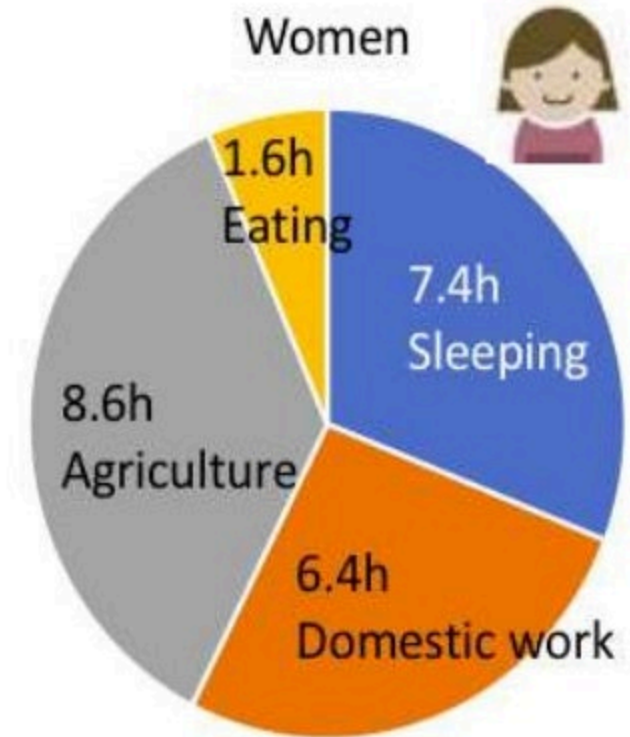
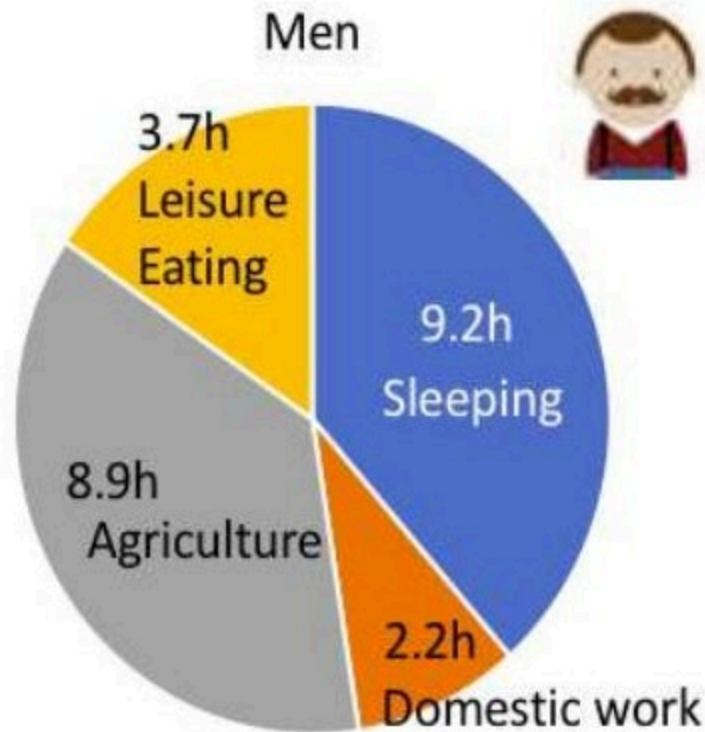


# What are labor-saving technologies available for men and women?



Photo credit: farmers

# Women sleep 2 hours less and work 4 hours more than men



This study was conducted in 2017 in the same village. Reference: ICRAF-the Gender SRA, 2018. Understanding opportunities and challenges in agricultural development through the gender lens: A case study in a H'mong community in Dien Bien. A report submitted to ACIAR. Online available from: <https://genderinagr.files.wordpress.com/2018/04/a-joint-report-gender-final.pdf>

## Sweet potato production: women's manual work

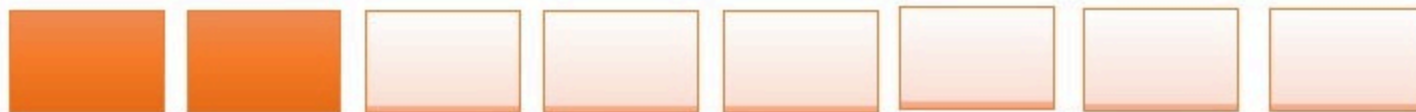


In contrast to rice, mechanization for roots and tubers do not happen in many parts of Southeast Asia.

Photo credit N.Kawarazuka  
Dien Bien, Vietnam 2018



# Gender gaps in agricultural mechanization



Spraying    Grass cutting

**Men help domestic work when it is mechanized**



### 3. Implications for Scaling for whom to what?

- Scaling for whom? Without considering women's needs, scaling cannot be achieved.
- Let's move beyond productivity and production at a macro level towards social impacts
- Pink colored machines may be a innovative solution
- More images of women using machines are needed

### Gender-responsive mechanization Checklists for project leaders



A resource for scientists and research teams

#### Gender in Agricultural Mechanization: KEY GUIDING QUESTIONS

Mechanization refers to the agricultural process of replacing manual labor with a range of diverse activities with machinery. Labor-saving machines are increasingly available in markets that are affordable for all. To identify ways of expanding the benefits of mechanization to more people, a careful consideration of gendered needs and gender inequalities is needed throughout the project cycle, from design to impact assessment, and throughout the agricultural cycle, from seed preparation and sowing to post-harvest and processing. Although joint gender needs have already been identified, what to do, without thinking about the

impact of mechanization on men and women is very important to ensure that both men and women will benefit and women will be trained. GENNOVATE research has shown that the best outcomes of mechanization tend to be for wealthier rather than the poorer farmers and those who own their own assets. However, research also shows that women have strong interest in mechanization as a way to improve their own circumstances. Without careful consideration of gender relations existing in the community between men and women, mechanization could contribute to re-instituting existing

gender-related inequalities. At the same time, women from labor-saving technologies can benefit from mechanization. Also, credit access to other development initiatives, for example, the ones that are made available to women can be used for other related activities such as other agricultural activities for income generation or household consumption. National policy leaders can also contribute to improved health outcomes. The following sections describe case studies of gender practices in mechanization as well as steps to starting some positive and negative outcomes.

# Thank you!



Photo credit: N. Kawarazuka



RESEARCH  
PROGRAM ON  
Roots, Tubers  
and Bananas



UNIVERSITY  
of  
GREENWICH | Natural  
Resources  
Institute



This study was funded by CGIAR Research program of roots, tubers and bananas and ACIAR (AGR/2017/008).