





# Cultivating Resilience: Feminization as a Pathway to Climate Adaptation in Cambodia's Agriculture

Sonia Akter

Crawford School of Public Policy, ANU

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## Cambodia: Agricultural Economy & Climate Risk

- In 2021:
  - 21.9% of the national GDP from agriculture
  - 38.85% of the workforce employed in the sector
- 66.3% of employed women in Cambodia work in the agricultural sector.
- Predominantly subsistence farming
- Crop production contributes over half of agricultural GDP
- Ranked 13th (1995–2015) and 12th (2020) on the Global Climate Risk Index
  - Floods and droughts are the most common disasters



## Challenges

#### What We Know:

- Women assume greater agricultural responsibilities as men out-migrate
- Climatic hazards are becoming more frequent and intense across the globe

#### What We Didn't Know

- To what extent are women gaining agency in farm-level decision-making?
  - Is feminization accompanied by greater influence over agricultural decision-making?
- How is climate change adaptation influencing women's roles in agriculture?
  - Are women taking on more responsibilities or authority as part of household adaptation strategies?
- How do climatic hazards drive agricultural feminization?
  - Are women stepping into key agricultural roles due to extreme weather events?

#### **Our Methodology**

- Data: Cambodia Agriculture Survey 2019, 2020 and 2021
  - Scope: over 40,000 nationally representative agricultural households
- Measurements:
  - Feminization:
    - (1) Women's participation in agricultural decision-making;
    - (2) Women's participation in agriculture as family and hired labour
  - Climate change adaptation:
    - (1) Diversifying crop species;
    - (2) Extending portfolio of activities;
    - (3) Producing more food groups
  - Climatic hazards: whether households experienced any climatic hazards





## Agricultural Feminization in Cambodia (2019–2021)

Figure 1 Mean values of agricultural feminization scores in Cambodia 2019–2021.

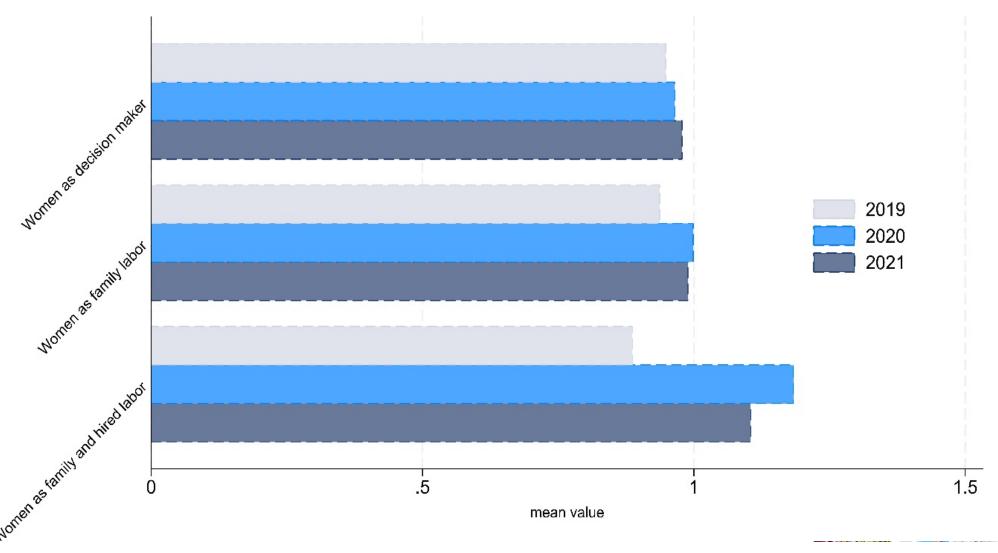
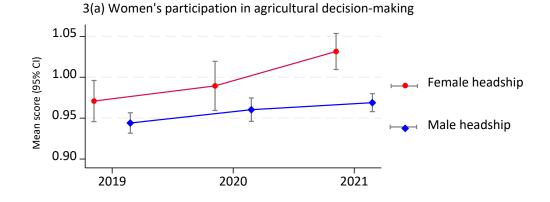
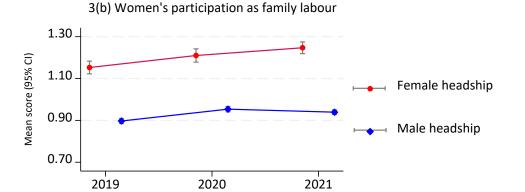
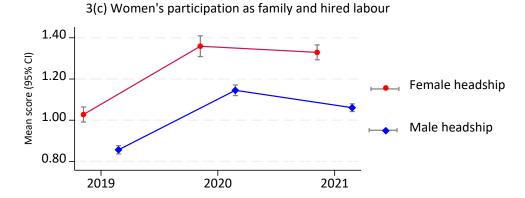


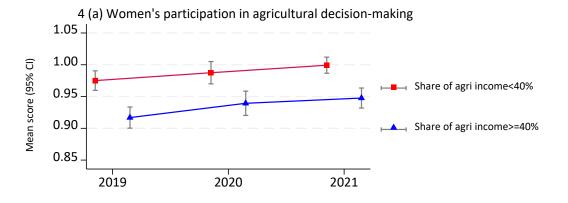
Figure 3: Agricultural Feminization and Household Headship

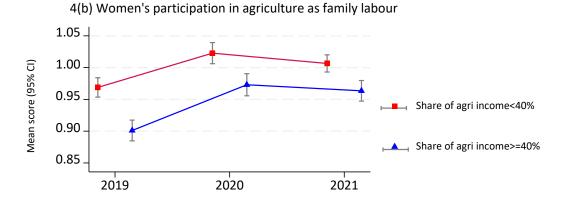
Figure 4: Agricultural Feminization and Share of Agricultural Income

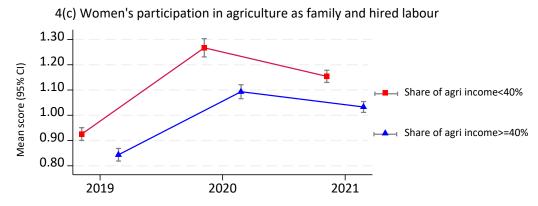












Source: Authors' calculation using Cambodia Inter-Censal Agriculture Survey 2019 and Cambodia Agriculture Survey 2020, 2021

## Agricultural Feminization & Climate Change Adaptation

- Diversification is an effective adaptation strategy to climate change.
- Households can diversify by
  - 1. Growing more crop species
  - 2. Producing more food groups
  - 3. Diversifying livelihoods
  - Agricultural feminization was higher in households doing at least one of the three strategies compared to households that were less diversified.
- Reasons
  - Diversification requires more labour.
  - Women have a comparative advantage in diversifying livelihoods
    - Greater flexibility to engage in home-based income activities
    - Can combine income generation with caregiving roles
    - More likely to take up small-scale ventures like vegetable gardening, handicraft making, food processing or homebased services



Photo source: https://www.oneearth.org/projects/improving-rural-cambodian-lives-through-organic-gardening/



Photo source: https://www.actionaid.org.uk/blog/2021/03/05/turning-tide

# **Agricultural Feminization & Climatic Hazards**

ayonline.com/world/asia/flooding





- Climatic hazards adversely affected household welfare
  - Reduced reliance on agricultural income
  - Reduced commercialization
  - Reduced savings
  - Increased borrowing
- Women's participation in agriculture as labourers and decision-makers was higher in climatic hazardaffected households
- Households with a greater degree of feminization were more food secure in the face of climatic shocks
- Drivers
  - Climate shocks foster solidarity and gender equality
  - Facing climate crises, households often experience increased solidarity, with women gaining greater decision-making power and more equitable roles.



## **Key Findings**

- 1. Cambodia's agriculture is becoming feminized.
  - Women are assuming larger roles in agricultural labour and decision-making, reflecting a clear upward trend.
- 2. Climate change adaptation strategies, in particular diversification, are reshaping gender roles.
- 3. Climate shocks are adversely affecting household welfare.
- 4. Climatic shocks have led to greater female involvement in farming and household decision-making.





#### **Policy Recommendations**

- ☐ Promote gender-responsive agricultural policies
  - Ensure all agricultural and climate policies in Cambodia recognize and support the roles, needs, and contributions of women.
- ☐ Advance gender inclusion in climate-vulnerable areas
  - Prioritize women's participation and leadership in regions most exposed to climate risks.
- Support women through climate-smart extension services
  - Develop extension programs that empower women to lead in crop diversification and climate adaptation efforts.





#### **THANK YOU!**

For more information, please contact Sonia.akter@anu.edu.au





