



Enabling Gender Responsive Food Security Programming:

Focus on Sustainable Agricultural Mechanization

October 12 – 14, 2022

Developed by Maria Jones
Day 1

Logistics

- 9 am – 12 pm
- Ask questions anytime via chat online or in person
- Presentations by UN Women & UN ESCAP
- Coffee break at 10:30 am (timekeeper)
- Activities
 - In-person groups (5 participants each)
 - Online groups (4 participants each)



Objectives

- **Why** do we need to develop gender-responsive food security programs and agricultural innovations?
- What are **key barriers** women face in adopting agricultural innovations?
- How does gender-responsive agricultural mechanization programming look in practice: **Frameworks and approaches**



Photo credit: Maria Jones

Training Agenda

DAY 1

Session 1: Women's role in agriculture & food security

Session 2: Developing gender-responsive food security programmes

Session 3: Introduction to frameworks for developing gender-responsive innovations

DAY 2

Session 4: Designing mechanization that benefits women and men: Time & labor-saving technologies

Session 5: Gender - sensitive dissemination: Focus on agricultural extension

Session 6: Addressing gender barriers in technology adoption & continued use

DAY 3

Session 7: Understanding impacts of intra-household dynamics in technology adoption and scaling

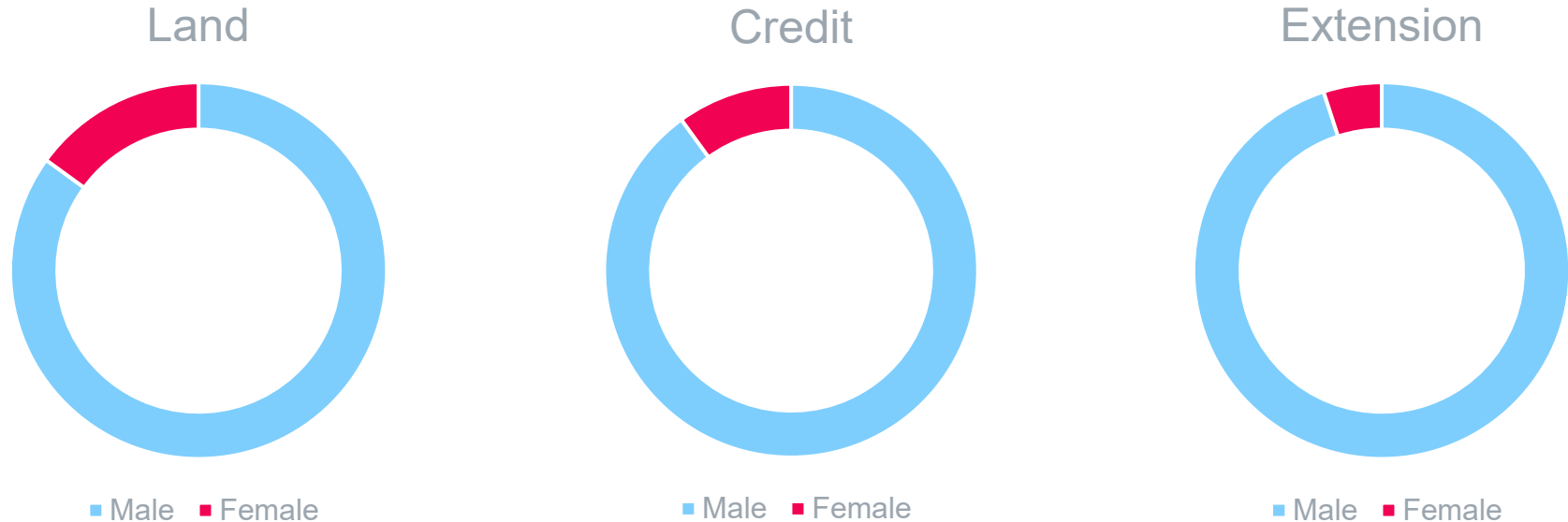
1.

Women's role in agriculture & food security



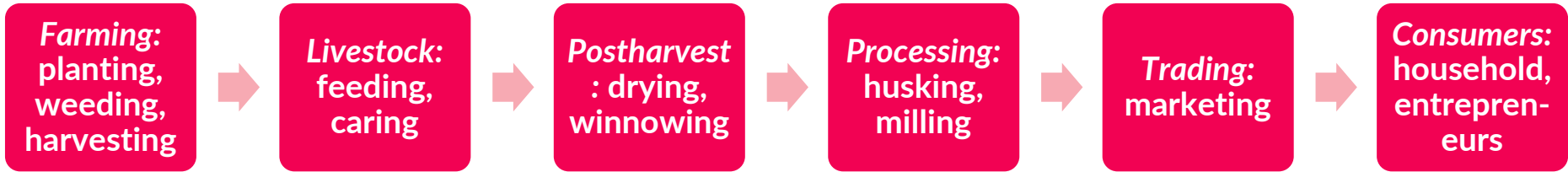
Women account for greater than 50% of the agricultural labor force on average in Asia, and form 60 - 80% of smallholder farmers globally.

Women account for 60 – 80% of smallholder farmers, yet -



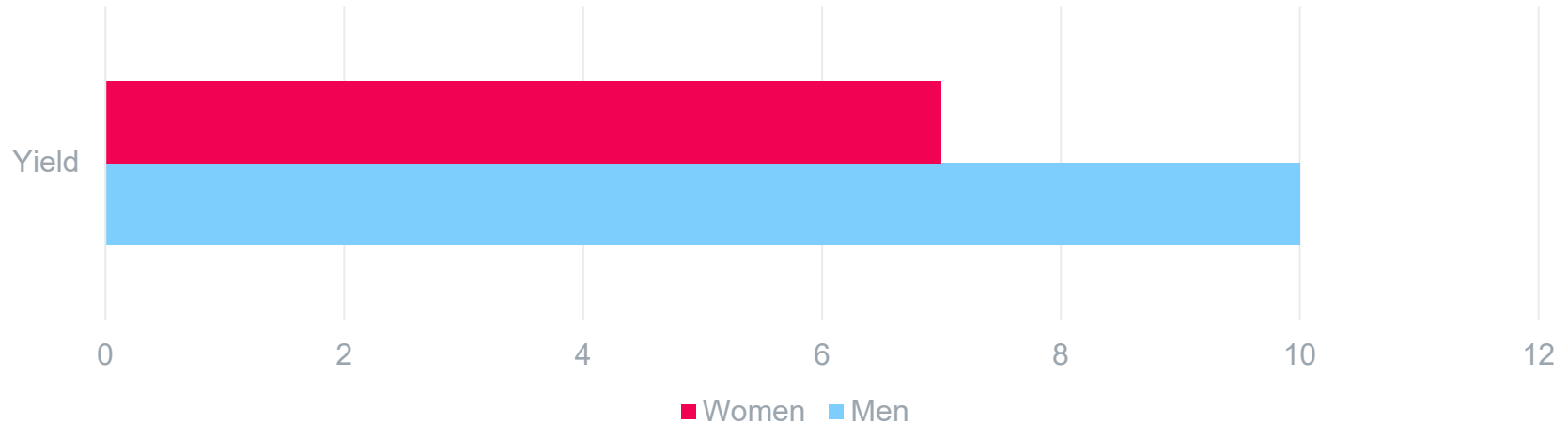
Only 15% of landholders are women, they receive less than 10% of credit and 5% of extension services.

Rural women are the backbone of agricultural economies



Women farmers play a fundamental role in all stages of the food production cycle and yet have unequal access to resources and agricultural innovation.

The Gender Yield Gap

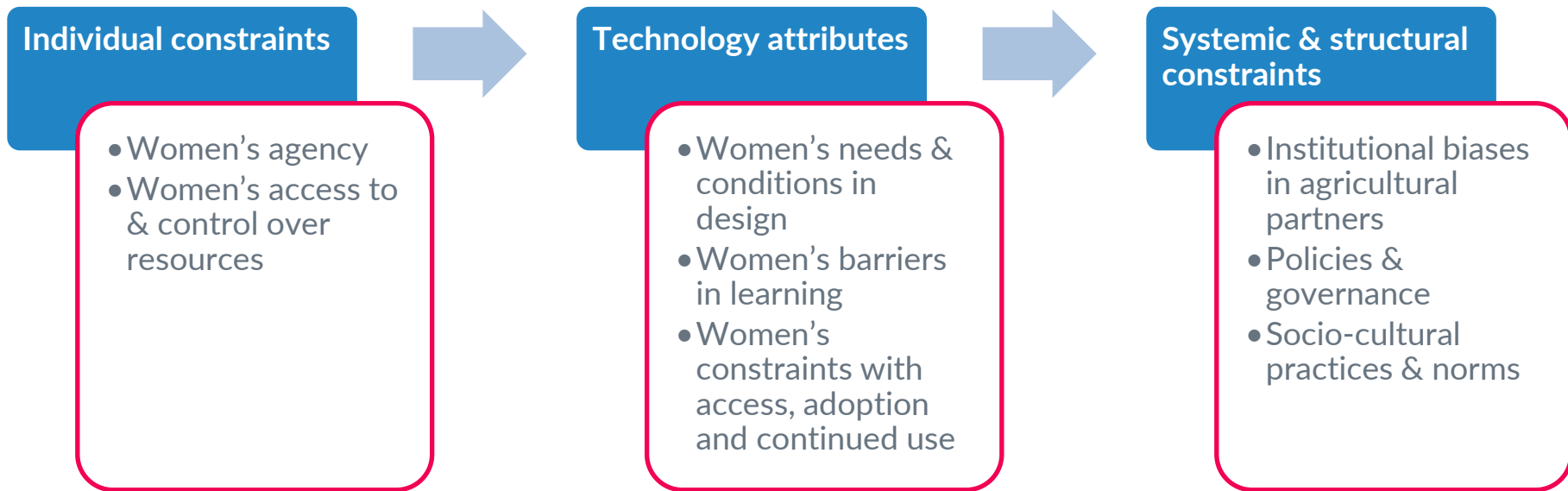


If women had the same access to productive resources as men, they could increase yields on their farms by 20 to 30%, which would immediately lift 100-150 million people out of hunger.

Agricultural innovation as a productive resource

- Agricultural innovations, technologies and mechanization help increase farm productivity, reduce poverty, increase food security and adapt to climate change.
- **However, agricultural innovation programs are primarily directed at middle-income male farmers.**
- **Moreover, technologies are not designed considering women farmers and low-income farmers' needs and conditions.**
- Critically thinking of the impact of agricultural innovations is very important to ensure that **both men and women will benefit**, and neither will be harmed.

What is preventing women farmers from accessing productive resources?



Sources and Adapted from: UN FSS (2021) Review of Evidence on gender equality. Farnworth et al. (2022) Cathy Rozel Farnworth, Tahseen Jafry, Siddiqur Rahman & Lone B. Badstue (2020) Leaving no one behind: how women seize control of wheat-maize technologies in Bangladesh, Canadian Journal of Development Studies. Polar, V., Babini, C., Flores, P., Velasco, C. (2017) Technology is not gender neutral: Factors that influence the potential adoption of agricultural technology by men and women. International Potato Center. La Paz - Bolivia. 41 pp.



Imagine that you are a smallholder farmer in rural China

Discuss with your groups on what your day looks like from morning when you wake up to night when you go to sleep. What are you doing at home, on the farm, in the community or marketplace?

If you are a woman, take the role of a male farmers

If you are a man, take the role of a female farmer

Discussion Questions

- Who is performing most of the activities?
- Which activities are the most physically demanding?
- Which activities take up a lot of time during the day?
- Who decides which family members perform each activity?
- Other interesting things you noticed?

Gender barriers & determinants of adoption



Access to **land**
ownership/ tenure



Access to **credit**



Access to **inputs**



Access to
extension services



Access to **markets**



Access to **labor**



Literacy barriers



Time & labor
burden



Household decision
making

Gender barriers & determinants of adoption



Access to **land**
ownership/ tenure

- Legal structures often restrict women's ownership of land – officially or unofficially
- Access to land & land tenure affect decisions to invest in and adopt technologies
- Women's plots are smaller, less fertile and get less attention

Gender barriers & determinants of adoption



Access to credit

- Lack of credit makes it harder for women to access technology or buy inputs like fertilizers or better seeds
- Traditional lending requires collateral which is usually land deeds
- Informal lending has very high interest rates
- Challenge in providing appropriate, timely and sustainable credit

Gender barriers & determinants of adoption



Access to inputs
& complimentary
technologies

- Improved seeds or fertilizer requires access to credit
- Needs access to extension (information) for proper use
- Local and timely availability
- Constraints with accessing complimentary or necessary inputs/assets to use technology

Gender barriers & determinants of adoption



Access to labor

- Gendered division of labor within the household and the farm
- Access to household or hired labor
 - Male out-migration with increased wage rates
 - Not prioritized by service providers
 - Socio-cultural norms in contacting service providers

Gender barriers & determinants of adoption



Access to
extension
services

- Limited access to extension services prevents women from learning about new technologies
- Formal trainings require male permission, time, convenient location, and land ownership
- Literacy levels can affect willingness to attend training
- Social norms can prevent interactions with male extension officers

Gender barriers & determinants of adoption



Access to markets

- Limited ability to travel to better markets
- Lack of market information on prices and crops
- Vulnerability due to lower literacy / socio-cultural contexts
- Digital barriers

Gender barriers & determinants of adoption



Literacy barriers

- Determines farmers' ability to understand and manage unfamiliar technology
- Constrains ability to properly use or benefit from technology
- Literacy and numeracy barriers

Gender barriers & determinants of adoption



Time & labor
burden

- Different roles and responsibilities in the house / farm and community
- Responsible for feeding the family and care giving for children and the elderly
- Awareness of shift in gender roles after acquiring technology - need to ensure that women's time & labor burdens do *not* increase with new technologies!

Gender barriers & determinants of adoption



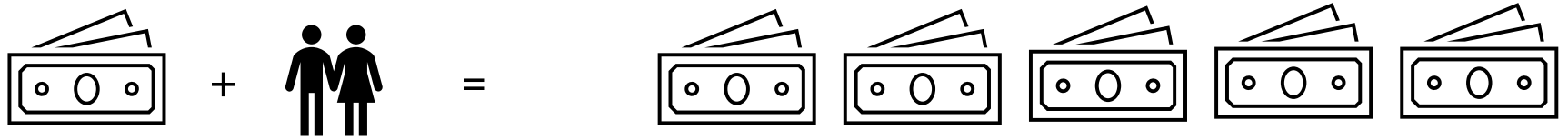
Household
decision making

- Multiple decision makers on:
 - **Application:** Who uses the technology and how it is used
 - **Benefits:** Who benefits from the technology (outputs and profits)

2b.

Developing gender-
responsive food security
programmes

Investing in gender equality in agriculture



Investing in gender equality in agriculture brought a **\$5 return for every \$1** invested, compared to a \$2 return for every \$1 invested in agriculture programs that ignored gender equality (CARE 2022)

Developing gender-responsive food security programmes

1. Develop a gender strategy
2. Decide how gender will be integrated
3. Get leadership buy-in
4. Develop a gender budget
5. Build staff capacity
6. Careful Implementation
7. Measure impact

Promoting gender equality and women's empowerment in food systems will not just lead to better food security and nutrition at the household level, but also result in resilient and sustainable food systems overall.

(Bryan, Ringler, Lefore 2022)

Develop a gender strategy

- Merely taking women into account is not enough to ensure gender equality in adoption of agricultural technologies. (Doss 2001)
- To expand the benefits of agricultural innovation to more people, we need to consider **gender-specific needs and implications**
 - Throughout the project cycle from design to scale
 - Throughout the agricultural cycle, from land-preparation and cultivation to post-harvest and processing



Photo credit: Maria Jones

Develop a gender strategy

Principles & Pathways

- Determine specific principles or pathways to mainstream gender into program or agency's operations
- *E.g., Commitment to integrate gender equality into all areas of agency's work*

Action Areas

- Determine key areas for program intervention through gender analysis
- *E.g., Climate change programs that consider the experiences, social positions and differing access to resources of marginalized people*

Set a target

- How many women or men will be reached?
- *E.g. 30% of all training participants will be women*

Develop a gender strategy

Ownership

- Create structures of responsibility and ownership across the agency or program
- *E.g. M & E officer, Gender specialist, Program manager; Country offices*

Resources

- Determine what resources are needed
- *E.g. Build staff capacity to mainstream gender*

Collaborate

- Who are key partners required?
- *E.g. Enlist technical assistance from UN Women!*

Decide how gender will be integrated

Gender-focused programs

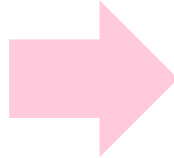
- Programs that specifically target women
- E.g., Increasing adoption of better grain storage among women's farmer groups

Gender-integrated programs

- Programs that target men and women, and are intentionally integrating gendered needs & constraints
- E.g., Farmer engagement with providing grain drying service. Ensuring women farmers also can access grain drying services

Leadership buy in & gender budget

- Agency leadership buy-in
- In-country stakeholders and implementer buy-in
- Ensures commitment & support when challenges occur during implementation



Leadership buy in should lead to prioritizing gender budget.

Gender budget to invest in-

- Programs
- Staff capacity

E.g., 10% of program budget dedicated for gender-mainstreaming activities

Build staff capacity

- **Get gender expertise in teams**
 - Agriculture is male dominated field!
 - Get gender specialists or people who have gender mainstreaming expertise along with other skills such as program management
- **Ensure diversity at different levels of staff**
 - Women in leadership
 - Multi-disciplinary teams to break silos
- **Invest in building staff capacity**
 - Provide country specific technical assistance and training



Photo credit: Maria Jones

Implement & measure impact

- Support implementers
- Enable feedback cycles – is the strategy working?
- **Set targets:** How many women or men will be reached?
 - *E.g. 30% of all training participants will be women*
- **Go beyond sex-disaggregated data**
 - Use data to measure and improve the impact of interventions for women and girls
- Invest in **evidence-based research** to see if policies are having intended impacts



Photo credit: Maria Jones

3.

Introduction to frameworks for
developing gender-
responsive innovations

Reach, Benefit, Empower Framework

REACH

Are we intentionally including women in program activities?

BENEFIT

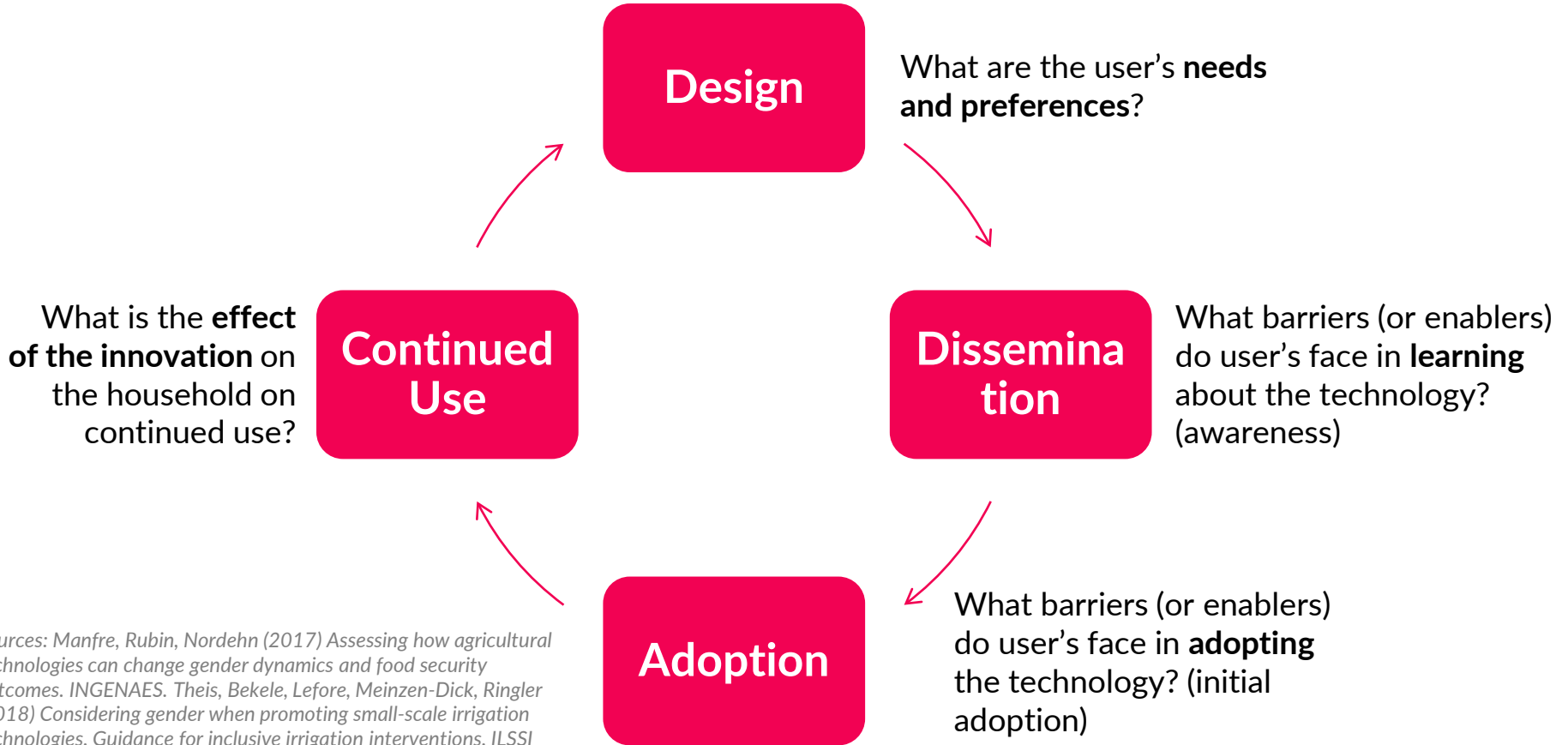
Do our programs increase women farmers' access to inputs, finance and extension services, digital services and technology?

EMPOWER

Are we strengthening their ability to make strategic life choices and to put those choices into action?

To expand the **benefits of mechanization** to more people both women and men, consideration of gendered needs and implications is required

Stages of Innovation to Scaling



Sources: Manfre, Rubin, Nordehn (2017) Assessing how agricultural technologies can change gender dynamics and food security outcomes. INGENAES. Theis, Bekele, Lefore, Meinzen-Dick, Ringler (2018) Considering gender when promoting small-scale irrigation technologies. Guidance for inclusive irrigation interventions. ILSSI

Activity sheet

This is only an indicative activity intended to get you to think and discuss. This is not the actual gender strategy development process



Thanks!

Any questions?

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