

# Closing the gender gap in farming under climate change



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**Climate Change,  
Agriculture and  
Food Security**



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# Outline



1. The gender gap in six key agriculture-related resources (land, labor, credit, information, extension, and technology)
2. Technology for agriculture under climate change: Gender gaps and opportunities
3. Access to and use of climate information by women and men
4. Gender-transformative technologies for climate change: What do women need?



## Women's economic dependency in developing regions

Women's access to own cash income is much lower than men's

In sub-Saharan Africa,



Many women are excluded from economic decision-making within their own households



1 in 3 women has no say about major household purchases

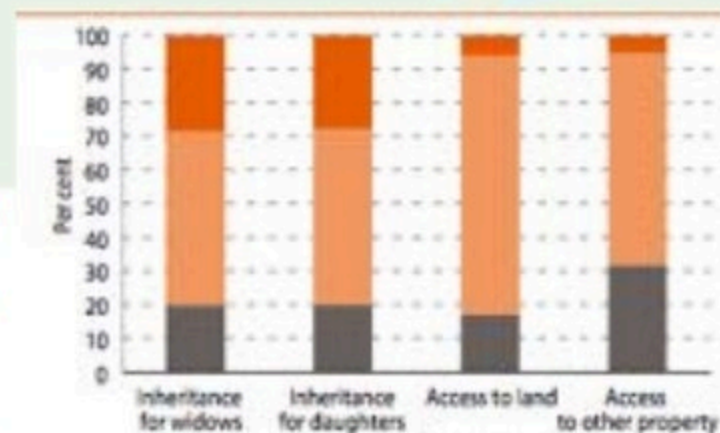
Existing statutory and customary laws restrict women's access to assets

Proportion of developing countries where:

- Law does not guarantee the same inheritance rights
- Law guarantees the same rights, but discriminatory practices against women exist
- Law guarantees the same rights for women and men



- Law does not guarantee the same rights
- Law guarantees the same rights, but discriminatory practices against women
- Law guarantees the same rights





# Technology: gender gaps and opportunities



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# Technology and Labor-productivity Constraints amongst Women Smallholders in Malawi, Murray et al 2016

**Table 3.** Irrigation Methods Used by Women Smallholders in Malawi in the Dry Season (Nkhamenya and Kabudula Areas)

Marital Status	Do Not Use Irrigation Methods (Dry Season)	Use Irrigation Methods (Dry Season)	Number of Respondents
Married	792 54.36%	665 45.64%	1,457
Single	81 61.36%	51 38.64%	132
Total	873	716	1,589

Source: Authors' own.

Note: Dry season is between April and October.

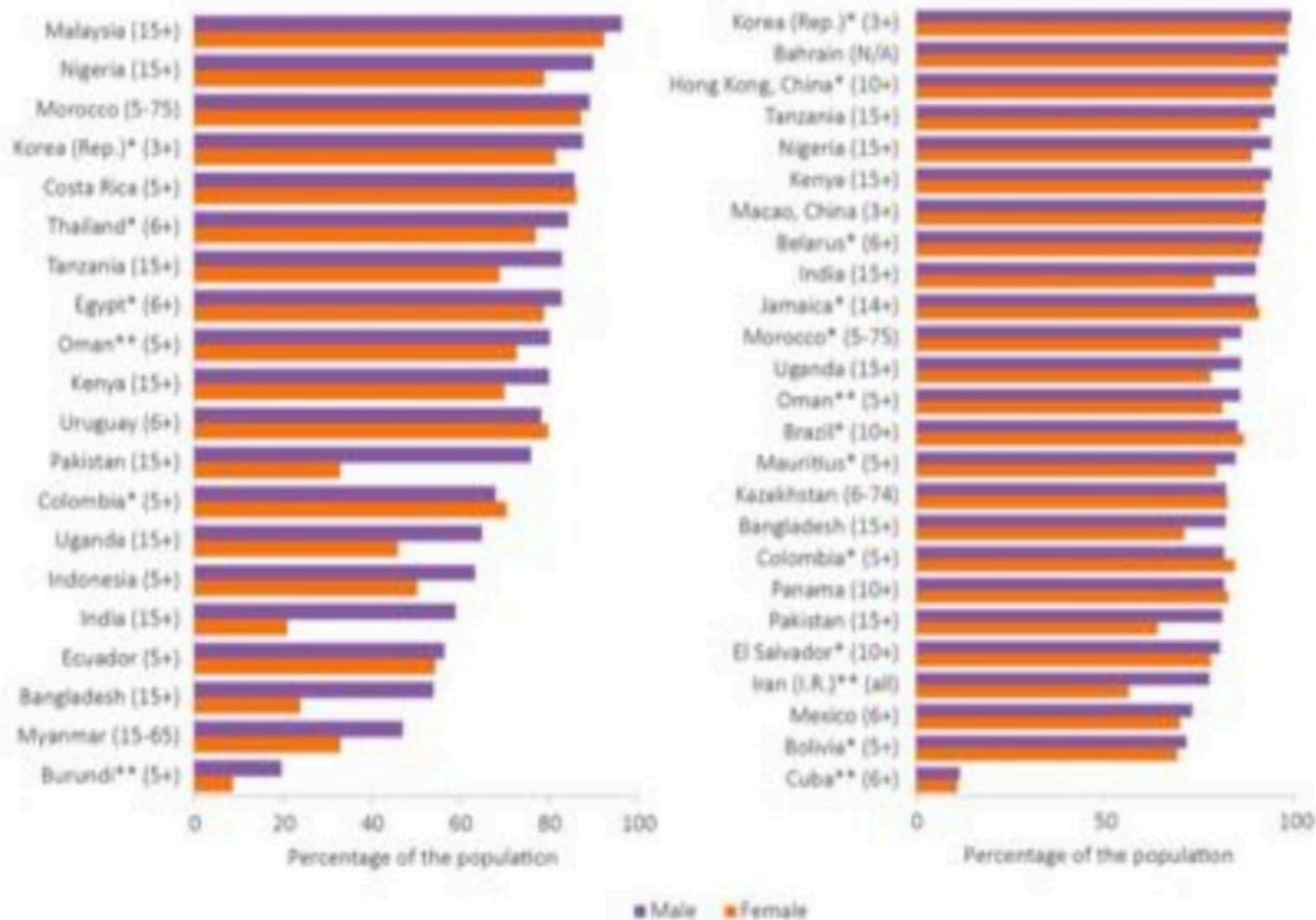




- The majority of women smallholders are using very basic labor-intensive agricultural hand tools for onerous tasks, such as weeding, planting, harvesting, and food processing.
- They have minimal access to alternative energy sources (i.e., draught animals or mechanized farm equipment), so they remain largely dependent on human labor for transport, cultivation, and agri-processing.

# Gender differences: Access to information

Chart 5.10: Individuals who own a mobile-cellular telephone (left) and using a mobile-cellular telephone (right), broken down by gender, 2015 or latest available year





# Access to and use of climate information



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# Gender-transformative technology approaches :

## 1) Participatory technology development



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## 2) Improving livelihoods and reducing emissions



Source: ProLinnova, 2008



### 3) Training and capacity building of women farmers: Rice farming in Vietnam

Table 16. Women's perceptions on their social position in the family (n=92)

Item	Count	%
Women's social position in the family increases when she does farming after training as compared with before		
Increased	69	75
Not increased	23	25
Total	92	100
Husband, children and other family members increase their respect to wife when wife does farming and obtain high rice productivity and income as compared with before		
Increased	77	84
Not increased	15	16
Total	92	100
Change in wife's confidence when discussing with male family members, husband about farming technologies as compared with before		
Increased	80	87
Not increased	12	13
Total	92	100
Family members as husband, children and other members listen to wife when wife talks about farming as compared with before		
Increased	79	86
Not increased	13	14
Total	92	100

## 4) Working through women's organizations: Solar-powered irrigation in Nepal



- Managed by the local women's committee
- Crop production tripled
- Labour load greatly reduced
- Market production increased



# Conclusions: Towards gender-transformative technologies for climate action

- Design needs to be informed by needs assessments that distinguish women's and men's needs and priorities and access to resources
- Have women been consulted in choice and implementation of technologies and practices, and are they involved in design? Are they appropriate to women's interests, resources and demands?
- Extension and climate information services need to serve both women and men
- Women's capacity as farmers and innovators needs to be recognized and supported
- Access to energy and agricultural tools in rural areas can directly increase agricultural productivity for women smallholder farmers
- Monitoring and assessment indicators need to measure gender and social change and benefits



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**Thank you**