

Gender Transformation in Climate-Smart Agriculture: A Framework for Action



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**Climate Change,
Agriculture and
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What is gender transformation in agriculture?

- Empowerment, at the individual level challenges power relations, formal and informal rules and practices that constrain opportunities,
 - includes increased control over assets, resources, and knowledge.
 - Individual women, through increased agency, increase their bargaining power in both public and personal lives (Sen 1997; Batliwala 1994; Moser 2017).
- Gender transformation is large scale structural changes that result from individual empowerment of women in gender and social power relations, and which usher in full economic and political participation (Moser 2017; Kabeer 2008)



What is CSA?

- Lipper et al, 2014: an approach to address climate impacts on agriculture, in three main areas of food security, adaptation and mitigation
- It addresses synergies and trade-offs among these to promote sustainable agricultural production, increased incomes, food and nutrition security, resilience to climate change; and reduced emissions from agriculture.
- Multiple strategies / approaches: development of technologies and practices, climate change models and scenarios, information technologies, insurance, value chains, and the strengthening of institutional and political enabling environments.



Women's empowerment and gender transformation in the context of climate change and agriculture

Pillars	
Recognition & agency Distribution of resources Opportunities Decision making	<p>Galiè, A., Jiggins, J., Struik, P. C., Grando, S., & Ceccarelli, S. (2017). “Women’s empowerment through seed improvement and seed governance: Evidence from participatory barley breeding in pre-war Syria.” <i>NJAS - Wageningen Journal of Life Sciences</i>, 81, 1–8.</p> <p>Van Eerdewijk, et al. 2017. <i>A Conceptual Model of Women and Girls’ Empowerment</i>. Edited by KIT. Amsterdam: Royal Tropical Institute (KIT).</p>
Institutional structures	<p>Cole, S.M., Kantor, P., Sarapura, S., Rajaratnam, S. (2014). Gender-transformative approaches to address inequalities in food, nutrition and economic outcomes in aquatic agricultural systems (AAS-2014-42). Penang, Malaysia.</p> <p>Kantor, P., Morgan, M., & Choudhury, A. (2015). Amplifying Outcomes by Addressing Inequality: The Role of Gender-transformative Approaches in Agricultural Research for Development. <i>Gender, Technology and Development</i>, 19(3), 292–319.</p>
Access to and control of resources	<p>Van Eerdewijk et al, 2017 Cole et al, 2014</p>
Women as actors / collective action	<p>Kantor et al, 2017 Cole et al, 2014 Van Eerdewijk et al, 2017</p>
Technology	<p>Huyer, S. (2016), “Closing the Gender Gap in Agriculture.” <i>Gender, Technology and Development</i> (20) 2; Kantor et al, 2017.</p>



Where does technology fit into this?

- Need for a conceptual approach to a gender-transformative approach to technology
- Relates to the CGIAR IDOs – Gender-equitable control of and access to productive resources; and technologies to reduce women’s labour burden
- Women adopt and use it less than men for a range of reasons:
 - profitability, suitability, planning and research processes overlook women’s activities and preferences (Ragosa, 2012)
 - lack of resources to buy or implement technology; lack of access to information or training through extension, ICT, or other means; and education level (Jost et al 2016; Huyer 2016; Cohen et al 2016)
 - infrastructure, land ownership, education and the number of extension visits (Tanellari et al 2014)
 - lack of technology available for women’s activities (Carr & Hartl 2010; van Koppen 2012; Murray et al 2016)



What is gender-transformative technology?

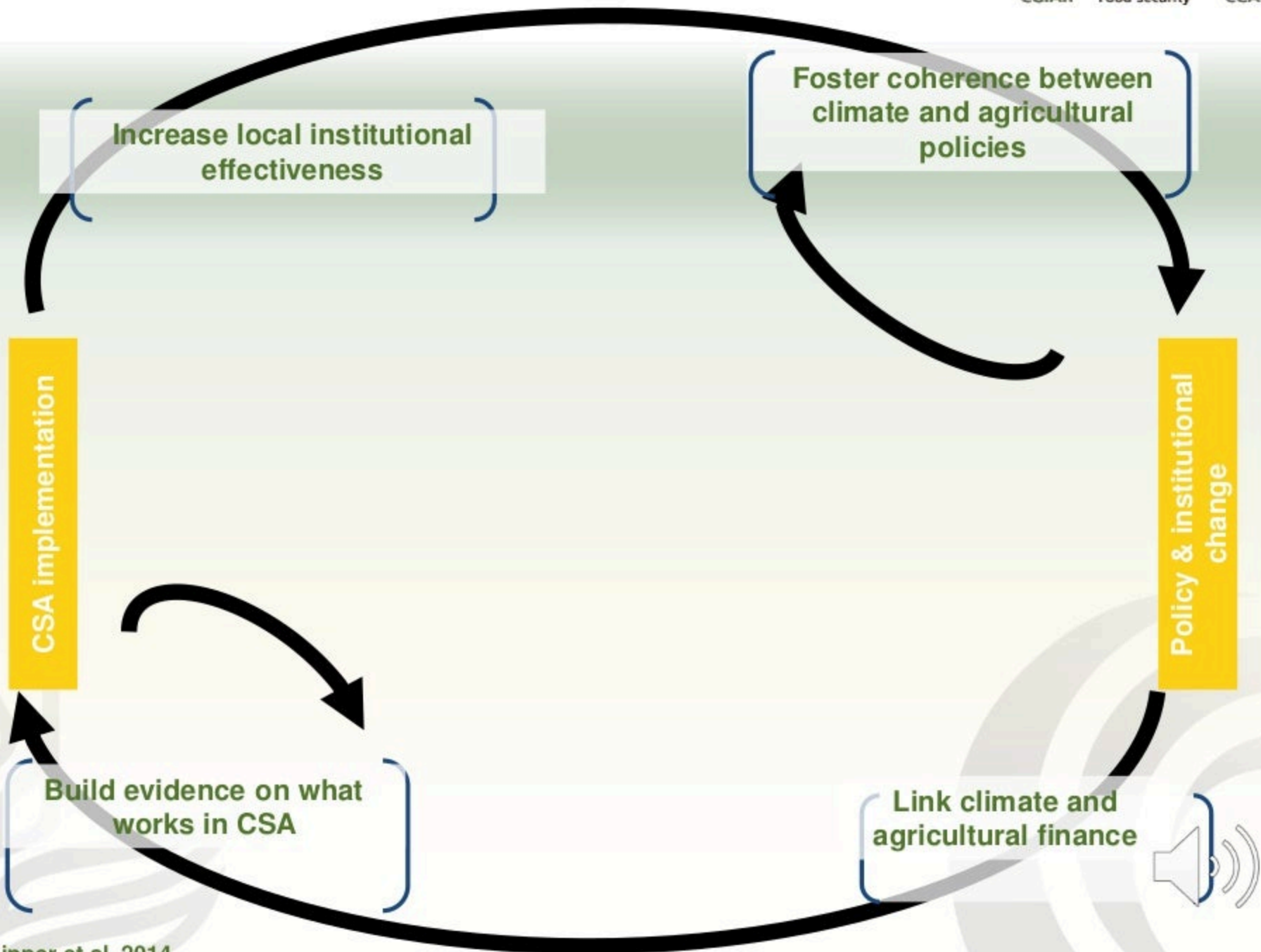
- Technology design and implementation needs to build and respond to women's knowledge, priorities and perspectives
 - Laser land levelling (Aryal et al 2015)
 - Rice drum seeders (Khan et al 2016)
- Women's knowledge and innovative capacity make important contributions to climate-resilient agriculture
 - Better fodder for animals to increase milk production, larger pots for washing rice (Shaw & Kristjanson 2013)
 - Honduras eco-stoves and improved agroforestry management systems (Hottle, 2015)
- Enables women to develop new opportunities
- Reduced labor burdens lead to freedom to choose new activities (Alkire et al. 2013)



The Lipper framework for climate-smart agriculture



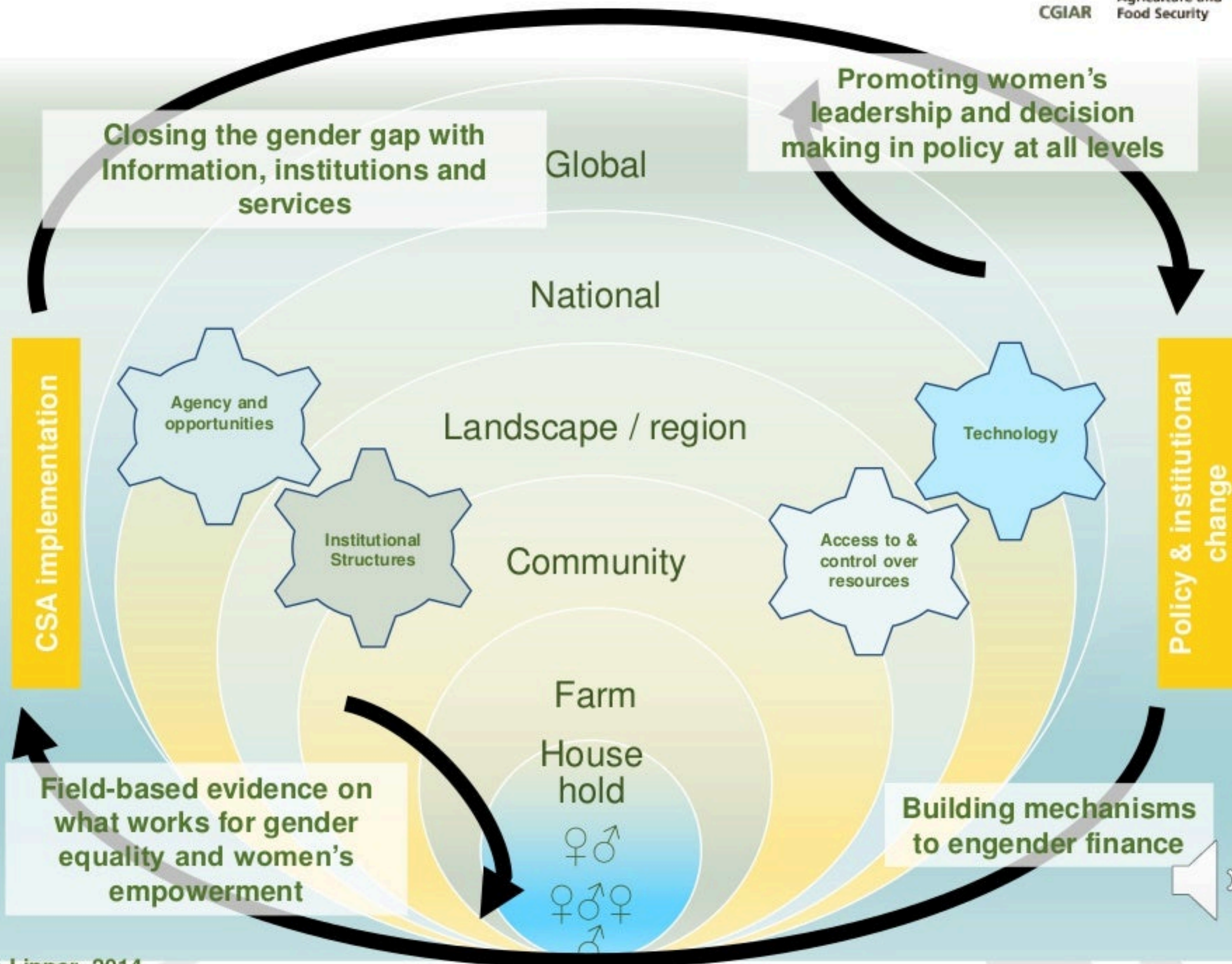
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Gender Equality and Women's Empowerment in CSA



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Key research on gender-transformative CSA



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- Kristjanson, Patricia, Elizabeth Bryan, Quinn Bernier, Jennifer Twyman, Ruth Meinzen-Dick, Caitlin Kieran, Claudia Ringler, Christine Jost, and Cheryl Doss. 2017. “Addressing Gender in Agricultural Research for Development in the Face of a Changing Climate: Where Are We and Where Should We Be Going?” *International Journal of Agricultural Sustainability* 15 (5).
- Jost, Christine, Florence Kyazze, Jesse Naab, Sharmind Neelormi, James Kinyangi, Robert Zougmore, Pramod Aggarwal, et al. 2016. “Understanding Gender Dimensions of Agriculture and Climate Change in Smallholder Farming Communities.” *Climate and Development* 8 (2): 1–12.
- Special issue on Gender, Agriculture and Climate Change, in *Gender, Technology and Development* (20) 2, 2016
- Twyman, J, M Green, Q Bernier, P Kristjanson, S Russo, A Tall, E Ampaire, et al. 2014. “Adaptation Actions in Africa: Evidence That Gender Matters.” Copenhagen, Denmark: CGIAR Climate Change, Agriculture and Food Security Programme.



1. Building the evidence on gender-transformative CSA

- There is a gender gap in agriculture as it relates to climate change
- Men and women are exposed to different climate shocks and experience different impacts
- Lower levels of access to resources and information and less stable land tenure access, restricting their ability to act on and implement climate adaptation practices in agriculture
- Largely neglected by agriculture and climate information service providers, and when they do have access to information, have less capacity to implement it



1. Building the evidence on gender-transformative CSA - Knowledge gaps

- Need better understanding of household and village labour roles in relation to CSA technologies and practices, so that they decrease women's labour loads and become more attractive to women
- the role of participatory approaches in understanding differences among women and traditionally under-represented groups and building capacity of researchers and development implementers to do so
- What is the role of women's organizations and collective action in providing a platform for empowerment in relation to CSA; and
- CSA approaches that take into account indigenous knowledge, technology and practices of women across a broad range of socio-economic, environmental and cultural contexts.



2. Institutions and services for gender-transformative CSA



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- Enhancing adaptive capacity through access to assets, including information.
- Wide range of institutions, from climate-specific (e.g. access to heat-tolerant crop varieties) to much broader approaches, such as social protection, health and nutrition.
- Women tend to interact with informal, local-level and family or social based networks, while men have greater access to formalized institutions such as governments, extension, and international NGOs (Perez et al, 2015; Cramer et al, 2016).
- Women are not well-served by agro- and climate information services (Tall et al, 2014; Partey et al, 2018)
- What is the role of information and knowledge? How can institutions and services meet the needs of women better?



3. Promoting women's participation in decision making and policy

- Gender is not well integrated into climate change policy at national or global levels (Hemmati and Rohr, 2009; UNDP 2015; Gumucio and Rueda, 2015; Pham et al, 2016)
- Many gaps in representation at local and community levels as well
- Questions: how can policy take into account gender aspects of climate change and agriculture, and how can women influence climate policy formulation (Gumucio and Rueda, 2017)?
- How to work with local level organizations to increase women's leadership, both women-focused and mainstream (Mello and Schmink, 2017) ?



4. Engendering climate finance mechanisms

- Little attention to gender in climate finance at global and local levels (Schatalek, 2014 ; Wong, 2016)
- Lack of access to finance is one of the major barriers to women's adaptation to climate change in agriculture (Owombo et al 2014).
- Constraints of financial literacy, collateral, land ownership, education, household decision making
- Need for more gender impact assessment of climate finance access models
- Index insurance is one option where women do participate (Clarke and Kumar, 2016; Bageant and Barrett 2016),
- What is the role of collective finance organizations at the village / sub-national level (ILRI, 2017), Women's Banks?



Thank you



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