



# **Promoting inclusive agricultural growth, food security and resilience to climate change**

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**Submission to the Government of Canada's Environment and Climate Change  
Policy Review**

**CARE CANADA**

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## Promoting inclusive agricultural growth, food security and resilience to climate change

*Ending hunger and malnutrition amid a changing climate hinges on our ability to address inequalities in food systems*

Hunger and poverty are not accidents—they are the result of social and economic injustice and inequality at all levels.

The reality of inequality is no truer than for women. Representing half the world's population, women control far less than their fair share of the world's resources. Inequality shapes who has access to food and the resources to grow it and buy it. It governs who eats first and who eats worst. Inequality determines who can adapt to a changing climate.

Smallholder farmers, especially women, must be at the centre of our efforts to ensure the availability of quality food and livelihood opportunities for the world's poorest and most vulnerable people. Appropriate policies and funding mechanisms can help these farmers contribute to climate change adaptation and mitigation, while building more resilient communities around the world.

### Strengthen resilience among smallholder farmers through climate-smart and gender-responsive agriculture<sup>1</sup>

***The Government of Canada should adopt a food systems policy centered on the potential of women smallholder farmers to stimulate economic growth, strengthen community resilience, and promote climate change adaptation and mitigation.***

Smallholder farmers make up 85 percent of the world's farms, employ some two-thirds of people in low- and middle-income countries, and provide almost 80 percent of the world's food.<sup>2</sup> Similarly, more than 90 percent of people engaged in the fish sector work (including fish farming) in small-scale fisheries and two-thirds of poor livestock keepers are women.<sup>3</sup> Small-scale food producers often struggle to grow, catch or buy enough nutritious food because of poor quality soil, small plots of land, depleted fish stocks, water scarcity, unavailability of diverse foods,

**Worldwide, 795 million people are chronically hungry, and 161 million children under five are stunted.**

**Every year we use 1.5 times the planet's resources, exhausting resources faster than the planet can naturally regenerate them.**

**Climate change has reduced global agricultural production one to five percent per decade over the last 30 years, and could reduce it by two percent per decade for the rest of the century.**

**Up to 600 million more people could be at risk of hunger by 2080.**

Source : FAO, "How to Feed the World in 2050." <http://www.fao.org/>

<sup>1</sup> CARE's definition of *agriculture* includes all productive activities, including agriculture, animal husbandry, and fishery and fish farming. By *Climate Smart Agriculture*, CARE understands a smallholder women-sensitive low-input, locally oriented (local and national food systems) and environmentally friendly productive system that promote social and gender equality.

<sup>2</sup> FAO, "The State of Food and Agriculture 2014 » <http://www.fao.org/3/a-i4040e.pdf> (accessed on 15 July 2016). And FAO, "Putting family farmers first to eradicate hunger." <http://www.fao.org/news/story/en/item/260535/icode/> (accessed 15 July 2016).

<sup>3</sup> FAO. "The State of Food and Agriculture 2010-2011: Women in Agriculture." <http://www.fao.org/docrep/013/i2050e/i2050e00.htm> (accessed on July 21, 2016).

or low incomes. Meanwhile, in 2015 agriculture contributed to 39.3 percent of total global emissions.<sup>4</sup> Further evidence suggests that two-thirds of the world's greenhouse gas emission reduction potential through 2030 is located in developing countries.<sup>5</sup> Smallholder farmers – especially women – are critical for stimulating economic growth in the poorest and most vulnerable regions of the world, and as allies in our efforts to reduce greenhouse gas emissions. Sustainable and nutrition-sensitive agricultural systems offer means to simultaneously increase yields, build economic, social and environmental resilience in the face of shocks induced by climate change, conflict and natural disasters, preserve and enhance ecosystems, and address gender inequalities in food systems. As underscored in the [Food Security Policy Group's "Agenda for Food Security and Resilience"](#),<sup>6</sup> agriculture is a key driver of economic growth, especially when focused on women small-scale farmers.

### **Promote innovation through farmer-centred, inclusive and participatory agricultural research and extension programs**

***The Government of Canada should promote more sustainable, productive, profitable, equitable and resilient food systems by putting end-users at the centre of agricultural innovation creation processes, and by working with farmers' organizations as mechanisms for promoting local governance systems' responsiveness to farmers' interests and needs.***

Farmer-led agricultural production and innovation promotes best practices that unite indigenous approaches with modern methods. In order to ensure the accessibility of publicly-provided extension services, as well as their use by smallholders, women must be involved in the co-creation of knowledge and technologies that respond to their specific needs as farmers. Moreover, measures to strengthen the technical and organizational capacity of women's and men's farmer groups can enable them to meaningfully influence policy and scale up innovations.

### **Promote efficient food systems that reduce post-harvest losses**

***The Government of Canada should support time-saving and value-adding post-harvest systems and technologies for women farmers.***

Approximately one third of all food produced globally – including plant, animal and fishery products – is lost during production, post-harvest processing and distribution, or wasted at the consumer level. These losses amount to \$1 trillion annually.<sup>7</sup> In low-income countries, food loss results from wide-ranging managerial and technical limitations in harvesting techniques, storage, transportation, processing, cooling facilities, infrastructure, packaging and marketing systems.<sup>8</sup> Recognizing that women are mainly responsible for food processing and preparation in low-income countries,

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<sup>4</sup> FAO. "FAO Stat." <http://faostat3.fao.org/faostat-gateway/go/to/home/> (accessed on July 21, 2016).

<sup>5</sup> Ackerman, Frank. "Financing the Climate Mitigation and Adaptation Measures in Developing Countries." *G-24 Discussion Paper Series*, No. 57 (2009) [http://unctad.org/en/Docs/gdsmdpg2420094\\_en.pdf](http://unctad.org/en/Docs/gdsmdpg2420094_en.pdf) (accessed on 15 July 2016).

<sup>6</sup> Food Security Policy Group. "Agenda for Food Security and Resilience." [http://www.ccic.ca/files/en/working\\_groups/food\\_security\\_and\\_resilience\\_07.pdf](http://www.ccic.ca/files/en/working_groups/food_security_and_resilience_07.pdf) (accessed on 15 July 2016).

<sup>7</sup> FAO. "Global Initiative on Food Loss and Waste Reduction." <http://www.fao.org/3/a-i4068e.pdf> (accessed on 21 July 2016).

<sup>8</sup> *Ibid.*

appropriate systems and technologies are critical for reducing postharvest losses, decreasing women's burden and enabling profitable food systems.

### **Promote alternative energy options for rural and urban women**

*The Government of Canada should support initiatives that promote women-led social enterprises involved in the production and sale of safe, sustainable and affordable fuel energy units.*

Women in Asia and sub-Saharan Africa are responsible for almost 90 percent of food preparation in the household.<sup>9</sup> For many, this includes significant time collecting and burning inefficient fuels. Ensuring women's improved access to fuel-efficient stoves, including improved firewood and charcoal stoves, solar stoves, and bio-gas stoves, can help women spend more time on productive activities, while reducing greenhouse gas emissions.

### **Conclusion**

Within the interrelated challenges of hunger, climate change, and poverty resides an opportunity for international assistance interventions to yield multiple development outcomes, while fostering innovation, equity and better governance within rural communities. By supporting more sustainable, productive, profitable, equitable and resilient food systems, the Government of Canada can help communities build resilience and adapt to climate change, while simultaneously mitigating their greenhouse gas emissions. These benefits can be extended by working with farmer-led organizations and value chains, to ensure more inclusive innovation and application of agricultural best practices. A gender-responsive approach is needed in order to help position women as equal players in agricultural development and climate change initiatives, and powerful contributors to the wellbeing of their farms, families and communities. Towards this end, women must have access to the information and resources that will enable them to make choices and engage in markets on equal footing, as well as access to post-harvest systems and technologies that enable them to make more efficient use of their plant, animal and fish products, and of their time. Further, women's access to and income generation through more fuel efficient stoves can contribute towards climate change mitigation targets, while fostering women's economic empowerment.

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<sup>9</sup> WHO. "Progress on Sanitation and Drinking-Water." [http://whqlibdoc.who.int/publications/2010/9789241563956\\_eng\\_full\\_text.pdf?ua=1#sthash.t7Pu2hji.dpuf](http://whqlibdoc.who.int/publications/2010/9789241563956_eng_full_text.pdf?ua=1#sthash.t7Pu2hji.dpuf) (accessed on 15 July 2016).

### **CARE's "SuPER"**

**approach** encourages investments in agriculture that promote:

**Sustainable** agricultural systems grounded in healthy ecosystems, stable, accountable and enduring institutions and sustainable financing;

**Productive**, (including profitable, and nutrition-sensitive) intensification interventions that are 'climate smart' and increase returns on investment for farmers;

**Equitable** outcomes in smallholder agriculture by enabling access to equal rights, opportunities, resources and rewards, taking into account the needs and constraints of women farmers, and supporting access to affordable nutritious food for all;

and that help individuals, families, communities and systems become

**Resilient** i.e. able to withstand and bounce back from environmental and economic shocks and stresses, including those exacerbated by climate change.

Source : CARE International. FAO, "The SuPER approach to smallholder agriculture." <http://careclimatechange.org/our-work/super/>