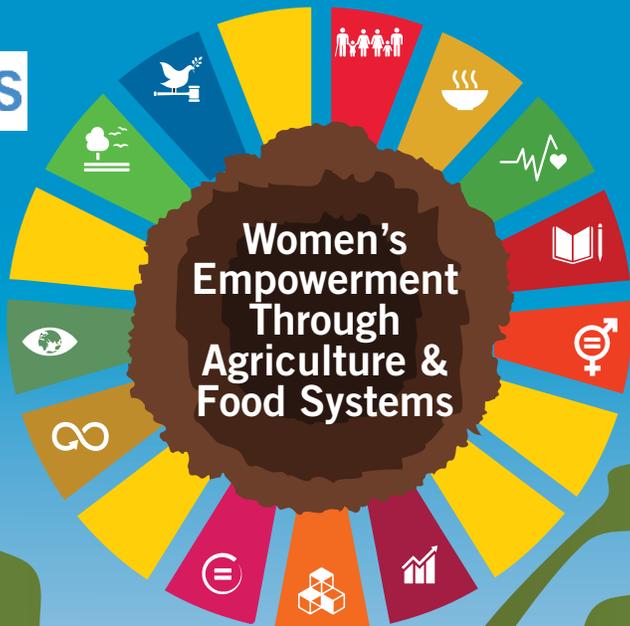
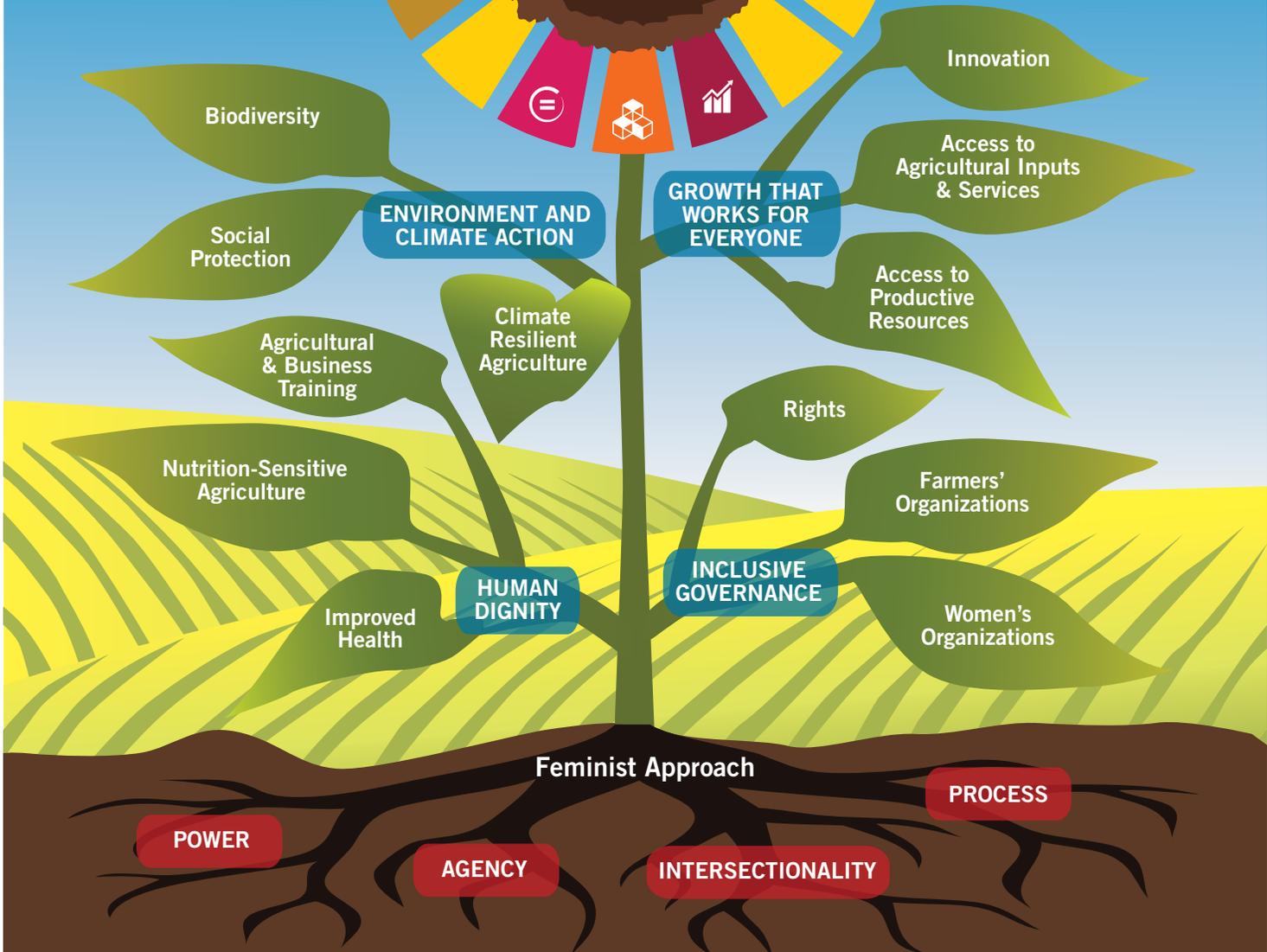


UPROOTING INEQUALITY, NURTURING RIGHTS



Women's Empowerment Through Agriculture & Food Systems



The Food Security Policy Group urges Canada to focus on small-scale farming to achieve gender equality and empowerment of women

Uprooting Inequality, Nurturing Rights

Women's Empowerment through Agriculture and Food Systems

April 2018

A policy brief submitted by the Canadian Food Security Policy Group to Global Affairs Canada to inform the development of implementation strategies for Canada's Feminist International Assistance Policy.

The Food Security Policy Group is a coalition of 28 Canadian international development and civil society organizations seeking to promote policies and actions that protect and enhance food security in developing countries. Our recommendations are based on decades of working in these sectors with partners in developing countries.

Canada's new Feminist International Assistance Policy (FIAP) is well-targeted and ambitious. Empowering women and girls is widely considered to be the most impactful strategy for reducing poverty around the world.

Recent decades have seen great progress in reducing global poverty. However, there are growing gaps in equality. Many women, especially in rural areas, have been left behind. With 79% of women in the poorest countries depending on farming for their livelihoods, it is clear that agriculture is a vital pathway to achieving women's empowerment and equality. Without this central role for agriculture and food systems, Canada will struggle to meet the FIAP's goals. Therefore, appropriate investments in agriculture and food security should be the next step for exercising Canadian leadership in the global arena.

A feminist approach to agriculture can transform rural lives

A feminist approach to agriculture seeks to address the root causes of structural and systemic inequalities and to transform power structures within households, communities and nations.

This feminist approach rests on four foundational principles:

- a. Recognizing and challenging unequal relationships of *power*;
- b. Enabling *agency* so that people, especially women and girls, can take decisions and actions that determine their own future;
- c. Understanding *intersectionality*, a recognition that multiple aspects of identity, such as class, socio-economic status, race, ethnic group and sexual orientation, compound vulnerability;
- d. Following *process*. A feminist approach concerns itself not just with the end result, but with thoughtful inclusive processes.

Not all agricultural models can be said to be feminist. Agriculture is feminist when it takes all parts of the system into account. Patriarchal systems, laws, policies, and norms can devastate the agency of women. Hence, the approach in advancing Canada's feminist international

assistance policy, including through agriculture and food systems, must challenge these unjust systems and norms.

Furthermore, it must look to bottom-up solutions emerging from local expertise and a deep understanding of local contexts. Feminist agriculture strengthens women's rights and agency, ensures women have control over resources and productive assets, supports women's knowledge and experience, and focuses on the systemic impacts of agriculture. This goes beyond yields to include nutrition, health, marketing, and environmental and social sustainability.

Agriculture is key to meeting the goals of the FIAP

Gender equality and the empowerment of women and girls

Women are agents of change. Strengthening their agency is fundamental to achieving Canada's policy goals.

Systemic approaches to women's and girls' empowerment that address power imbalances are critical for real change. This will help ensure that economic growth or increases in income do not inadvertently result in gender-based discrimination, exclusion or violence. It is thus key to understand gender norms, especially in agriculture and food security, and the changes necessary to enable women to thrive alongside men in the business of farming.

Agriculture is critical to achieving and sustaining gender equality and requires long-term systemic change--and a commitment to long-term programming and resourcing. Women perform a wide range of roles in rural households: they are the family caregivers, providers of key inputs (water, fuel), and they are farmers, food producers and sellers. Their trade is largely localized and focused on food and nutrition security. They have roles all along the agricultural value chain.

Women have critical farming knowledge, relationships and practical skills, and they play a vital role as stewards of natural resources and assets for climate adaptation and resilience (e.g. farmers' seed, nutritious plant varieties). But gender discrimination, including the heavy burden of unpaid work, such as household care responsibilities, creates a massive barrier to seizing new opportunities. Women's empowerment will significantly enhance their value and opportunities, and impact them as well as their families and communities.

Human dignity

Women farmers and practitioners have intimate and sophisticated knowledge of ecosystems, but are rarely seen as equal partners in agricultural research, training and extension service. Enabling women farmers, and their organizations, to take a lead role in on-farm agricultural research and capacity-building allows them to shape agriculture according to their own solutions, experience and needs. Women-led research in on-farm plant breeding and selection, women's cooperative approaches to preserve community lands, seeds and waters, and leadership in agricultural entrepreneurship, can enhance their dignity by strengthening the options and opportunities for empowerment and development. This can translate into alternatives to migration and poorly remunerated labour for women and youth.

Health and nutrition is a key area where women are directly affected, and can offer their own solutions. Increasing agricultural biodiversity, diversifying production for home consumption, improving food processing techniques, encouraging community food marketing, and providing nutrition education and school nutrition programs will further contribute to positive nutrition outcomes for women and girls.

Feminist approaches to agriculture take into account the complex interactions between agriculture and food systems, and women and girls' health. Women are over-represented among poor farmers and farm workers in developing countries and thus are particularly exposed to health risks, such as poisoning from pesticides, or the physically repetitive nature of farm work. Women-led solutions are grounded in their needs, and have positive impacts on food systems and health (e.g. agroecological approaches that reduce the use of synthetic inputs while maintaining productivity, restore ecosystem functions such as soil health, pollination and water purification, and enhance human nutrition).

Moreover, ensuring that time and labour-saving innovations and context-appropriate technologies are accessible to women and girls on the farm can help address health risks. These innovations should focus beyond yields to include entire food systems and processes. For instance, fuel-efficient cook stoves that vastly improve indoor air quality can also free up time for women to engage in other productive activities and contribute to their human dignity.

Growth that works for everyone

Growth in the agricultural sector is a key pathway to support women in rural development. Policies designed to spur growth, however, must be targeted to women's needs and interests, and ensure that rural economies and markets work for women, as they are often the main agricultural entrepreneurs in the family. Growth strategies should provide opportunities for rural women who face overt and systemic discrimination in access to productive resources, such as land, and in achieving financial inclusion. Women benefit most from economic development policies that prioritize short-chain and local markets, create opportunities for women to add value, and prioritize collective marketing to increase women's market power. Development policies should also take measures to curb the kinds of trade and investment policies that disenfranchise women, and create unfair barriers for their empowerment and prosperity.

Innovation in agriculture is key to economic growth. Policies to promote innovation, whether technological or social, must put women's knowledge, practical needs and strategic interests at the centre. Innovations coming from smallholder farmers' and women's organizations include a diverse range of sectors and approaches: participatory on-farm breeding and crop improvement, collective marketing and entrepreneurship, water and ecosystem conservation, local governance of land and territories, etc. A feminist approach ensures innovative processes are controlled by the people they seek to benefit.

Environment and climate action

Farming is on the frontline of climate change, especially for women, indigenous peoples and local communities living in the most climate-vulnerable areas, and biodiversity hotspots. From climate justice and human rights perspectives, Canada must prioritize these groups, particularly women, and strengthen funding and support to work that bolsters their resilience and adaptation to climate change.

Environment policy must affirm women's specialized and intimate knowledge of ecosystems, and their sustainable agriculture practices, such as biodiversity conservation and agro-ecological practices, that are highly effective strategies for climate resilience. These will promote adaptation (for example through agroforestry, watershed management and permanent soil cover), and contribute to mitigation, through soil carbon sequestration.

Social protection and risk mitigation approaches, such as crop and livestock insurance, as well as food processing and improved storage can reduce vulnerability to climate shocks and empower farmers, especially women, to take the risks that lead to innovation.

Other examples include renewable energy technologies (solar and wind-powered pumps) used to irrigate farmlands and provide water for household use. These technologies can help alleviate women's household burdens while also providing adaptation and mitigation benefits.

Women must be full participants wherever climate responses and solutions are determined, including in leadership positions.

Inclusive governance

The key to inclusive governance is organizing. When people, especially women, come together to dialogue, articulate a common vision or goal and then work together to realize their objectives, the results can be powerful. Canada should support farmers' and women's rural organizations, including co-operatives, to amplify their voice and enhance their capacity to influence decisions at local, national and international levels. Strengthening women's rights and women's leadership will lead to more inclusive food systems and societies.

Ensuring the space to organize cultivates powerful advocates who contribute to systemic change and help remove systemic barriers. Durable transformative change, through agricultural laws and policies requires engaging in advocacy work by local organizers, who are part of larger movements. Canada should support innovative and inclusive governance structures at community, regional and national levels that will enhance the voices of women, youth and other marginalized groups in decision-making.

Innovation will enable social, environmental and economic progress

Canada's feminist approach to international assistance can utilize the best ideas in agriculture and food systems, from Canada and around the world, to adapt and scale-up interventions that enhance benefits for women and meet the challenges of the 2030 Agenda.

Social innovation often comes from women and youth, and involves creative ways of working together to solve problems. This can be transformative over the long term, for example, by developing direct relationships between producers and consumers, or through collective marketing. Small initiatives often have a big impact, and have tremendous potential for spreading successful practices in agriculture and food systems, and strengthening the place of women and youth in their communities.

Smallholder farmers and women are also at the forefront of innovation in ecological agriculture that enhances biodiversity, water, and soils, and builds food system resilience while improving food and nutrition security, climate resilience, and sustainable livelihoods. Rising donor interest, coupled with demonstrated innovation, means that agroecological approaches and practices hold great potential to address multiple development goals right across the system, touching 14 of the 17 SDGs. Canada could work with donors, research centres, farmers' organizations and civil society organizations to encourage deeper research into the promise of ecological agriculture.

Canadian leadership is critical

Global Affairs Canada, Canadian civil society organizations, and partners around the world have taken a bold and laudable step in developing a Feminist International Assistance Policy. Canada now can lead the way, by making agriculture and food security a key pathway to delivering lasting results towards its feminist international assistance goals. Canada has an opportunity to make a historic contribution towards its international assistance priorities within a feminist frame. Using research, innovation and scaling up successful approaches that empower women can help Canada build on proven experiences and results.

As a respected leader in strengthening gender equality, and with a strong record as a generous donor to food security and agriculture, Canada can be a champion in ensuring that the millions of women and girls that are currently left behind achieve their potential as agents of change.

But new resources are needed to achieve new goals. This requires an increase in the overall budget for international assistance, as well as new and additional investments in agriculture and food systems. To be truly transformative, Canada's aid should be responsive to locally identified needs, flexible, help cover core costs, and support organizing and advocacy.

With the G7 gathering in Charlevoix in 2018, the world is looking to Canada to lead the way and make a signature contribution to development. New investments in a feminist approach to agriculture will contribute to the core action area of Canada's Feminist International Assistance Policy, as well as to its key action areas. In doing so, they will also put Canada on a path to being a global leader in achieving the 2030 Agenda.

These initiatives would deliver the best results:

 GENDER EQUALITY AND THE EMPOWERMENT OF WOMEN AND GIRLS			
GOAL & HOW TO ACHIEVE IT	VALUE FOR INVESTMENT <i>(CDN\$ unless noted)</i>	\$1 MILLION COULD	SDGs
<ul style="list-style-type: none"> Promote greater gender equality and better recognition of women as farmers in their own right. Strengthen the agency of women farmers through systemic approaches that include understanding gender norms, addressing power imbalances, and eradicating gender-based violence, so they can better benefit from investment in agriculture, participate fully in household decision-making, and be recognized and treated as full and equal members of society. 	<p>\$13,000 can empower a women's group in rural Nepal to address gender inequality and economic and social empowerment through a rights-based approach. Now women feel empowered, express themselves with more confidence and can speak against abuses or human rights related issues in their communities. Also, for the first time in 2017, four Dalit women ran for municipal office, and two were elected.¹</p> <p>When women control household income, a child's likelihood of survival increases by 20%.²</p>	<p>Empower 2,250 women to identify their own human rights needs and convince the local government authority to collaborate and invest with them in their projects. (SDG 16.7)</p>	<p>5 gender equality</p> <p>10 reduced inequalities</p> <p>8 economic growth</p> <p>16 strong institutions</p>

Strong Women's Organizations = Strong Communities

Five thousand marginalized women have gained a strong voice and new power through village-level women's groups in India.

For 15 years, Inter Pares has been working with the Deccan Development Society (DDS), a grassroots organization working with women's groups in 75 villages in Telangana, India. The 5,000 women-farmer members (most of them from the Dalit or "untouchable" caste) are organized into women's groups, called *sanghams*, and practice biodiversity-based agriculture emphasizing the cultivation of traditional millet crops. Through Women-Led Agroecology, the women grow these nutritious staple grains, as well as pulses, vegetables, fruit, medicinal plants, and "uncultivated plants." They not only preserve, but enhance biodiversity. This innovative agroecological production system has been twinned with a sophisticated public education and marketing strategy to build demand for local ecological foods in urban centres, as well as processing and distribution networks to link urban consumers to nutritious local foods. This field-to-plate approach has been hugely successful, with demand outpacing production.



The sanghams allow the women to have more power and influence at the village level. The women work together to come up with cropping plans. The sanghams have led to the decrease in domestic violence in the communities, and provided more power to women when mobilized to influence government policy.

It is thanks to the sanghams that women gained access to land to cultivate. It is also thanks to the sanghams that they were given a licence by the government of India to establish the first ever community radio in India (Sangham Radio), helping to give voice to the voiceless.

By organizing into women's groups, these women have overcome multiple barriers of marginalization and, today, are a source of inspiration.

 ENVIRONMENT AND CLIMATE ACTION			
GOAL & HOW TO ACHIEVE IT	VALUE FOR INVESTMENT <i>(CDN\$ unless noted)</i>	\$1 MILLION COULD	SDGs
Promote climate-resilient agriculture			
<ul style="list-style-type: none"> • Ensure women are full participants wherever climate responses and solutions are determined, included in leadership positions. • Promote sustainable and profitable agriculture for small-scale farmers, esp. women, including agroecology, conservation agriculture, livestock production, agroforestry, watershed management, soil & water conservation. • Promote investments, targeting women, in climate resilient rural infrastructure, irrigation systems, sustainable energy supply, post-harvest storage, veterinary and slaughterhouse capacity, education, digital knowledge exchange and extension platforms, improved financial services, opportunities for farmers to add value to their products, and inclusive markets, including women-owned agricultural co-operatives and organizations. 	<p>US\$233/farmer can enable smallholder farmers in Zimbabwe to adopt conservation agriculture—improving production, soil health, food security and climate resilience.³</p> <p>SMS messaging to improve access to market information has a cost-benefit ratio between 1:4 and 1:8, and costs just US\$3.98 per person.⁴</p>	<p>Strengthen resilience of 3,300 farmers to climate-related hazards (SDG 13.1)</p> <p>Increase incomes of 195,000 small-scale food producers through better market access (SDG 2.3)</p>	<p>2 no hunger</p> <p>5 gender equality</p> <p>12 consumption & production</p> <p>13 climate action</p>

Support social protection

<ul style="list-style-type: none"> • Promote social protection programs to reduce vulnerability to climate shocks and empower farmers, especially women, to take innovation risks. Tools for these programs include cash transfers, crop & livestock insurance. • Promote the development and delivery of regionally tailored gender-responsive climate information services. This includes different kinds of information and different channels for accessing information. • Link humanitarian responses to long-term agricultural development by investing in disaster risk reduction, such as small-scale infrastructure, disaster management committees, and protection of livelihoods and productive assets including livestock and seeds. Ensure full participation of women in planning & delivery of DRR (Disaster Risk Reduction) programs. 	<p>Investing in agricultural-related disaster risk reduction in northeastern Sudan has a cost-benefit ratio of 1:61 for farming terraces, 1:2.4 for earth embankments constructed to capture water from a seasonal river, and 1:1800 for pump-irrigated communal vegetable gardens.⁵</p> <p>Every dollar spent on livestock recovery in response to flooding in Assam, India generated \$96 worth of community economic benefits.⁶</p>		<p>13 climate action</p> <p>8 economic growth</p> <p>2 no hunger</p> <p>5 gender equality</p>
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Improve biodiversity

<ul style="list-style-type: none"> • Affirm women's specialized knowledge of ecosystems, and support women's cooperative approaches to preserve community lands, seeds and waters. • Support participatory research by women and youth farmers, and community seed banks that preserve agricultural biodiversity on farm. • Promote the healthy functioning of ecosystems, especially through biodiversity conservation and conservation of crop varieties. 	<p>\$141/person can enable smallholder farmers in Honduras to practice participatory plant research in community-based teams, resulting in diversified plant genetic resources and new climate-resilient plant varieties.⁷</p> <p>\$350/household supports farmer-led crop, varietal, and agroforestry conservation and diversification over 3 years. It enables farmer knowledge and farmer-developed seed varieties that can significantly enhance seed security, increasing climate resilience and food and nutrition security.⁸</p>	<p>Increase by 7,100 the number of innovators in agriculture working on genetic diversity (SDG 9.5, SDG 2.5)</p> <p>Scale-out farmer-led solutions to enhance community seed security across 75 communities.</p>	<p>15 life on land</p> <p>2 no hunger</p> <p>5 gender equality</p> <p>13 climate action</p>
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Climate-Resilient Agriculture

2,500 families in poor regions of Bolivia have tripled their incomes by growing and marketing oregano internationally.

This project started as a way to integrate rural families from five disadvantaged departments in Bolivia into sustainable value chains. Over 15 years, the project introduced oregano cultivation; strengthened cooperatives and consolidated the marketing of oregano in international markets; and supported political bodies and strategic actors to develop the agri-food value chains.

Today, more than 2,500 families produce high quality oregano. This new agri-industry has allowed them to triple their incomes. Every year, these farmers are proud to see 650 MT of their product cross the border to reach several markets in South America and even Europe.

The ability of oregano to adapt to climatic variations was the main reason it was chosen. New in the Bolivian agricultural sector at the beginning of the project, oregano is a crop that is resistant to drought and intense rains. It is a profitable product even on small plots of land and, ultimately, it is an easy crop for women to adopt without adding to their workload.

A renewed approach to Farmer's Field Schools (FFS) has made it possible to share and adopt best agricultural practices that respect the environment and manage farms organically. Targeting farmers, the FFS has incorporated gender equality concepts and practices, which has boosted women's participation in training to more than 50%. Today, 86% of women say they are proud to actively participate in decision-making within the family business.

Focusing on inclusive economic growth, the project increased awareness amongst and equipped cooperatives to promote women's participation. As an outcome, 94% of the organizations have implemented measures that favour gender equality. In addition, a women's leadership program has strengthened the entrepreneurial management skills of women farmers.



 GROWTH THAT WORKS FOR EVERYONE			
GOAL & HOW TO ACHIEVE IT	VALUE FOR INVESTMENT <i>(CDN\$ unless noted)</i>	\$1 MILLION COULD	SDGs
Enable agricultural innovation			
<ul style="list-style-type: none"> • Provide long-term support to co-innovation, including participatory agricultural research on climate-resilient practices, involving women in the co-creation of knowledge that responds to their needs. • Design and implement agricultural extension systems that preferentially involve women, including use of novel information and communication technology. • Provide in-field training that focuses on clean sustainable solutions to real problems farmers are facing, and promote sharing of best practices between diverse groups including women and indigenous peoples • Invest in capacity of Southern researchers to solve Southern problems. 	<p>Every dollar spent on agricultural research and development generates US\$34 in economic benefits.⁹</p> <p>\$1/farmer can support a participatory radio campaign that builds farming knowledge and strengthens market connections.¹⁰</p> <p>US\$81/farmer can provide a five-day training in water-smart agriculture for one community in Malawi.¹¹</p>	<p>Generate \$34 million in economic benefits (SDG 8.1)</p> <p>Enable one million farmers to adopt improved farming practices (SDG 4.4)</p> <p>Train 9,400 farmers in resilient agriculture to increase production and maintain ecosystems (SDG 2.4)</p>	<p>9 innovation & infrastructure</p> <p>4 education</p> <p>13 climate action</p> <p>5 gender equality</p> <p>8 economic growth</p> <p>2 no hunger</p>
Empower women to better access agricultural inputs & services			
<ul style="list-style-type: none"> • Improve women's access to services, including finance, knowledge, technology and markets. • Enable women, through collective marketing, to participate in value chains that reach both local and more distant markets • Support home-based food production by women as an alternative to gendered barriers, such as mobility and traditional gender roles. 	<p>\$200/woman can empower women and increase nutritional diversity for families and communities.¹²</p>	<p>Empower approximately 5000 women and increase nutritional diversity of 35,000 people, including 25,000 children (SDG 2.2, 5.1)</p>	<p>5 gender equality</p> <p>8 economic growth</p> <p>2 no hunger</p> <p>10 reduced inequalities</p>

Empower women to better access productive resources

- Improve women and adolescent girls' access to productive resources, including land, water, inputs, livestock and labour.

For every rupee spent on irrigation in India, there is a return of 1.36.¹³

With the same access to resources, women could increase yields on their farms by 20-30%, resulting in 100-150 million more people achieving food security.¹⁴

- 5 gender equality
- 8 economic growth
- 2 no hunger
- 10 reduced inequalities

Enhancing Economic Opportunities and Women's Voice

A World Vision Canada project in Kenya is enabling women to diversify their livelihoods and achieve economic empowerment.

The three-year Governance, Ecosystems and Livelihoods (GEL) project was aimed at improving community resilience in four African countries, including Kenya, where it was implemented in a semi-arid area called Mukogodo. Through a participatory assessment process, the Mukogodo GEL project decided to focus on diversification of livelihood opportunities, strengthened governance and environmental management, and women and community empowerment to reduce vulnerability to climate shocks and stresses.

The GAC-funded project built strong partnerships with government, organized community groups, and partnered with private sector actors to achieve its goals.

Through the GEL project, 15 women's groups have diversified from the traditional livestock rearing to include beekeeping. They formed the Laikipia Association of Beekeepers and are successfully marketing processed honey. Other women's groups are now producing various high value crops/vegetables for home consumption and for sale after being trained on the Bakaard water harvesting technology and micro-irrigation. Another women's group manufactures shower gels and soap products for sale in different urban centres. Poultry, which was originally regarded as a mere bird, is now being kept by almost a quarter of the targeted population. Poultry products are being used both as food and as a source of income. Twala Cultural Centre, run by 7 women groups and which was supported by the project, has empowered women to run their own businesses confidently.

The GEL project has also addressed environmental degradation and enhanced women's participation in community decision making. The final evaluation found that almost 90% of women were actively participating in community decision-making processes which was attributed to project interventions.



 INCLUSIVE GOVERNANCE			
GOAL & HOW TO ACHIEVE IT	VALUE FOR INVESTMENT <i>(CDN\$ unless noted)</i>	\$1 MILLION COULD	SDGs
Farmers' and women's organizations			
<ul style="list-style-type: none"> • Support farmer co-operatives as a vehicle for women's social empowerment, encouraging confidence, leadership, and confronting gender injustice and inequality. • Support rural women's organizations that amplify women's voices, including to speak into decisions at local, national and international levels. • Strengthen farmer-led organizations to represent the interests of agricultural workers, especially for women farm workers. Support their efforts to engage government on agricultural policies, and to improve their ability to innovate, negotiate, and market collectively. 	<p>\$150 can enable a woman in rural Ethiopia to join a small cooperative and receive support to grow a farm business, interact with markets, boost income, take on leadership opportunities, and, ultimately, improve her standing in her household and community.¹⁵</p> <p>An investment of \$520,000 to women-led farmer organizations in India can empower more than 5,000 Dalit women to reclaim degraded lands and turn them into productive, drought tolerant and nutritious farming systems, while also improving processing and marketing opportunities.¹⁶</p>	<p>Empower 6,700 women through women's cooperatives (SDG 5.5)</p> <p>Combat desertification, and provide more secure livelihoods for 10,000 families (SDG 15.3)</p>	<p>5 gender equality</p> <p>10 reduced inequalities</p> <p>16 strong institutions</p> <p>8 economic growth</p> <p>15 life on land</p>
Human rights			
<ul style="list-style-type: none"> • Improve rights to land, seed and water for small-scale farmers, especially women, which are recognized both legally and socially. 	<p>US\$405/household in Laos provides education on land tenure rights and the processes needed for vulnerable women to gain legal access to land, as well as supports small-scale farmers in organic agriculture practices.¹⁷</p> <p>Ensuring equal rights to land for women can result in significant increases in cereal production.¹⁸</p>	<p>Improve access to agricultural land and support organic agriculture for 1900 women (SDG 5.1, 2.4)</p>	<p>5 gender equality</p> <p>2 no hunger</p>

Empowering Women in Agriculture through Innovation and Good Governance

Canada could most effectively achieve development goals by investing in programs that support rural women's organizations and smallholder farmers and their organizations.

Canada's Feminist International Assistance Policy recognizes good governance as one action area, and highlights the role of innovation to reduce poverty and empower women.

In 2012, Canada and other G8 countries sought to increase investment in food security by inviting private sector companies to partner with developing country governments to achieve food security goals. In addition to new sources of funds, this governance model was expected to harness private innovation to solve the stubborn challenge of hunger and poverty.

This effort, called the New Alliance for Food Security and Nutrition (NAFSN), followed the L'Aquila Food Security Initiative (2009) which rallied governments to invest public funds in food security. Canada worked closely with Senegal on NAFSN implementation.

In 2015, the Canadian Food Security Policy Group (FSPG) commissioned an independent researcher to conduct a detailed in-country evaluation of NAFSN's impacts in Senegal.

The report found that NAFSN was not effective in reducing poverty or improving food security for smallholder farmers in Senegal. Nor was it effective in consulting with women or providing benefits to them. The only available NAFSN data shows that women could access only 18% of the services offered, and women only occupied 24% of NAFSN-created jobs.¹⁹

Other research conducted by the Food Security Policy Group (some highlighted elsewhere in this brief) documents many examples where support for women's organizations and smallholder farmer's organizations has effectively harnessed social innovation to overcome poverty, social exclusion and environmental degradation. Similarly, governance models that include people living in poverty and their organizations have been highly effective in bringing about transformative change.



 HUMAN DIGNITY			
HOW TO ACHIEVE IT	VALUE FOR INVESTMENT <i>(CDN\$ unless noted)</i>	\$1 MILLION COULD	SDGs
Agricultural & Business Training			
<ul style="list-style-type: none"> • Support young farmers, especially women and girls, through business-oriented training programs & farmer field schools, to make farming a viable and desirable profession • Enable women-led research in on-farm plant breeding and selection • Support women in commercial edible insect production and assist in developing value chains and markets. 	<p>\$163/person enables adolescents, across five countries in Africa, to access training in numeracy/literacy, life skills and entrepreneurship. In addition, \$165/per beneficiary provides start-up funds, mentorship and other supports, predominantly in the agricultural value chain, to rural adolescents.²⁰</p>	<p>Increase long-term opportunities for 6,000 youth (SDG 4.4, SDG 8.6)</p>	<p>4 education 8 economic growth 5 gender equality</p>

Improved health

- Promote affordable and safe fuel-efficient energy sources for women, which also reduce deforestation. This could include fuel-efficient stoves, solar stoves, and biogas digesters.
- Promote safety and efficiency when using agrochemicals on small-scale farms, including reducing usage wherever possible, and supporting farmers to transition to agroecological production.
- Promote appropriate post-harvest handling practices of produce (eg drying and storage) to minimize contamination and spread of disease-causing agents.
- Improve nutritional outcomes for women and children through small-scale, home-based vegetable and poultry production, for two-fold return: improved nutritional outcomes and women's economic empowerment.

Disseminating improved household cooking stoves in Uganda has a cost-benefit ratio of 1:13 for fuel savings only, or 1:25 for all benefits (fuel saving, cooking time, health, soil fertility, emissions).²¹

On average, women invest 90% of their income in their families, compared to 30-40% for men.²²

3 health & wellbeing
15 life on land
5 gender equality
11 sustainable communities

Make nutrition central to small-scale farming

- Promote nutrition-sensitive agriculture, including through diversifying production for home consumption (including animal products), biofortifying selected crops, improving food processing techniques, and encouraging community food marketing.
- Empower women to improve their access to and control over agricultural resources, technologies and education opportunities to reduce workloads—for better family nutrition.

US\$300/household in Bangladesh provides long-term diversified vegetable, fruit and poultry production for women and their families; comprehensive nutrition education; and improved status for women in their households.²³

\$265/household in Ethiopia can introduce nutritious legumes into crop rotations and diets, helping to reduce food insecurity and stunting.²⁴

Improve nutrition for 2,600 families (SDG 2.2, 5.1)

Improve diet diversity, nutritional status of children and women in 3,800 households (SDG 2.2)

2 no hunger
3 health & wellbeing
5 gender equality

Backyard Poultry in Afghanistan

In remote areas of Afghanistan, getting home-based agricultural resources into the hands of women is improving nutrition and health for whole communities.

Aga Khan Foundation Canada (AKFC) and its local partners in Afghanistan have reached farmers in remote areas through Farmer Field Schools and Participatory Technology Development, providing them with the knowledge and basic resources to meet their household needs, as well as meet market demands for diverse food sources, including fruits, nuts, vegetables, eggs, milk and meat, while also granting economic opportunity to traditionally-excluded populations. Increasing backyard agricultural practices breaks down gendered barriers, such as mobility, and traditional gender roles, so that the entire family can contribute to improving their socioeconomic status, health and wellbeing.



Ms Nigar from Askanz Village, Badakhshan is just one of 768 women who has experienced exponential benefit from AKFC's backyard poultry initiative. In 2016, she received 25 layer chickens and 2 turkeys, coupled with training on poultry care, health and feeding. Since then she has expanded her poultry stock 10-fold, allowing her to generate a consistent income from selling eggs and hens while also consistently providing quality protein and essential nutrients to her children. With the additional household income, Ms. Nigar and her husband chose to build their family a new home, where they now live comfortably together.

Many women also now have the means to grow vegetables off-season due to AKFC's support for greenhouse technologies and in-home gardening, each of which have low start-up costs and allow families to meet their needs throughout harsh winter months. Together these efforts have helped substantially increase food consumption scores across Badakhshan Province from 58% to 81% since 2014.

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- ¹ The cost is based on World Accord's work with Women for Peace and Democracy. This NGO brings together the Dalit and the most marginalized women farmers in small groups. They also provide training in domestic violence prevention, and promote awareness of women's issues and women's rights.
 - ² FAO (2009) *Bridging the Gap: FAO's programme for gender equality in agriculture and rural development*. Rome: Food and Agriculture Organization of the United Nations
 - ³ The cost per farmer for conservation agriculture is based on a review of Canadian Foodgrains Bank programming in Zimbabwe. Conservation agriculture is comprised of three principles: minimal soil disturbance through reduced or no tillage; permanent organic soil cover using mulches; and diversified crop rotations and associations (inter-cropping) with legumes.
 - ⁴ Hoddinott, J.; Rosegrant, M. and Torero, M. "Investments to Reduce Hunger and Undernutrition," in *Copenhagen Consensus*, edited by B. Lomborg. The cost-benefit ratio is based on an analysis across a number of countries and scenarios. It is expected that costs will fall even further as the technology continues to develop while benefits to smallholder farmers will continue to increase.
 - ⁵ International Federation of Red Cross and Red Crescent Societies (2012) *Disaster risk reduction: a global advocacy guide*. International Federation of Red Cross and Red Crescent Societies. 1-52. Analysis conducted by the International Federation of Red Cross and Red Crescent Societies between 2008 and 2010.
 - ⁶ Economists at Large (2014) A Benefit-cost analysis of WSPA Dhemaii Intervention in Assam, India. A report for the Protection of Animals, prepared by Economists at Large, Melbourne, Australia.
 - ⁷ The cost of participatory plant research is based on the work of La Fundación para la Investigación Participativa con Agricultores de Honduras (FIPAH). FIPAH provides technical training and financial support to help on-farm scientists enhance crop yield, market value, taste and nutritional value, as well as traits critical in responding to climate change. FIPAH is a partner of both USC Canada and SUCO.
 - ⁸ The cost for farm diversification per household is based on an analysis of USC Canada's Seeds of Survival program in Honduras, Nicaragua and Guatemala. This program supports farmer-led participatory research to scale-up-and-out agroecology with special focus on crop diversity. Using a highly grassroots and participatory approach, farmer research committees are generating solutions that blend local traditional knowledge with new practices by working collaboratively with dedicated field technicians and facilitators. The work in Honduras is directed by the Foundation for Participatory Research with Honduran Farmers (Fundación para la Investigación Participativa con Agricultores de Honduras, FIPAH), and is supported with funding from Global Affairs Canada.
 - ⁹ Rosegrant, M.W.; Magalhaes, E.; Valmonte-Santos, R.A. and Mason-D'Croz, D. (2014). "Benefits and Costs of the Food Security and Nutrition Targets for the Post-2015 Development Agenda." *Food Security and Nutrition Assessment Paper*. Copenhagen Consensus Center. CBA based on the benefits of an extra \$88 billion in agricultural research and development over the next 15 years, which would eliminate hunger for 79 million people and avoid malnourishment for five million children.

- ¹⁰ The cost per farmer for a participatory radio campaign is based on analysis of Farm Radio International's interactive rural radio strategies in sub-Saharan Africa. The \$1/farmer is a fraction of the cost of more traditional face-to-face agricultural extension models which can cost between \$6 and \$10 per farmer.
- ¹¹ The cost for training on water-smart agriculture is based on CARE USA programming in Malawi through the SALL Foundation. Water-smart agriculture training supports smallholder farmers with soil and water management to increase agricultural productivity and conservation of natural resources.
- ¹² The cost based on Aga Khan Foundation Canada project in Afghanistan to improve nutrition and women's economic empowerment through a backyard poultry initiative.
- ¹³ Wiggins, S.; Farrington, J.; Henley, G.; Grist, N. & Locke, A. (2013) *Agricultural development policy: a contemporary agenda* (Background paper for GIZ). London: Overseas Development Institute. Based on estimates of sector returns in rupee per rupee public spending between 1970-1993. Similar analyses for China, Vietnam, Thailand and Uganda show similar trends highlighting the benefits of public spending for agricultural research, education and rural infrastructure.
- ¹⁴ FAO (2011) *Women in Agriculture: Closing the Gender Gap for Development*. Rome: Food and Agriculture Organization of the United Nations.
- ¹⁵ The cost of empowering women in Ethiopia is based on an Oxfam Canada project that enables women in rural Ethiopia to join a small cooperative, and receive training, inputs and new technology to grow a small business around a range of commodities for which women traditionally control production and processing. This can significantly boost a woman's income (on average by 20 percent), as well as open up space for her to engage with markets and take on leadership roles – and this can in turn translate into increased decision-making power for her in the community and her household.
- ¹⁶ The cost is based on Inter Pares' work with the Deccan Development Society. Women farmers from the mostly Dalit caste come together in village organizations and, using their own indigenous knowledge, have established ecologically diverse and climate- and market-resilient farming systems.
- ¹⁷ The cost of human rights education and support in sustainable agricultural practices for women is based on Mennonite Central Committee programming in Laos.
- ¹⁸ OECD (2012) *Do Discriminatory Social Institutions Matter for Food Security? At Issue*. Paris: OECD Development Centre. The study found that between 1980 and 2009, cereal yields rose by 60% in countries where women have equal rights to land, compared to only 6% in countries where women have few rights to land. Even when other reasons for yield increase were examined, the relationship between women's access to land and yields held.
- ¹⁹ Food Security Policy Group. 2017. *A critical look at the New Alliance for Food Security and Nutrition (NAFSN) in Senegal*. www.ccic.ca/working_groups/food_e.php
- ²⁰ The cost of a comprehensive program to improve livelihoods for youth is based on a \$40 million investment by The MasterCard Foundation in Save the Children's Youth in Action (YiA) youth livelihoods program that will result in 40,000 youth across five African countries receiving both educational and vocational training plus life skills and financial skills.

- ²¹ Habermehl, H. (2007) *Economic evaluation of the improved household cooking stove dissemination programme in Uganda*. On behalf of GTZ, Household Energy Programme. Based on an evaluation of the Energy Advisory Project, implemented by the German Agency for Technical Cooperation, in Uganda. A total of 211,220 Rocket Lorena stoves were disseminated from 2005 to 2006.
- ²² UN Foundation (2012) *Why Invest in Adolescent Girls*.
- ²³ The cost of an integrated nutrition project is based on the estimated cost of delivering Helen Keller International's Enhanced Homestead Food Production (EHFP) program in Bangladesh over at least a three-year period. Costs per household will vary according to context, including available human resources, extension systems, water infrastructure, and access to suppliers (all these need to be part of a long-term investment strategy). In Africa, costs are considerably higher because these support structures are weaker and need strengthening.
- ²⁴ The cost is based on a project partnership between Hawassa University and University of Saskatchewan in Southern Ethiopia with \$4 million in funding from the International Development Research Centre (IDRC) and the Canadian government, through the Canadian International Food Security Research Fund (CIFSRF). Between 2010 and 2014, it helped reduce household food insecurity from 60 percent to approximately 45 percent, and stunting in children from 42 percent to 29 percent in that region.