

Contributions to end global hunger

By the Canadian International
Food Security Research Fund
2009–2018: In brief



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This brief contains key messages and content from the publication [*Contributions to end global hunger: A synthesis of the Canadian International Food Security Research Fund \(CIFSRF\) 2009–2018.*](#)

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Overview

In the wake of the 2007 global food crisis the Government of Canada, through the International Development Research Centre (IDRC) and Global Affairs Canada, established the Canadian International Food Security Research Fund (CIFSRF) with the intention of generating practical innovations to improve the lives of the poor and food insecure.

CIFSRF's mission was to combine expertise from Canada and the Global South to conduct applied, collaborative, and results-oriented research to benefit smallholder farmers, particularly women.

With this in mind, CIFSRF was founded with three objectives:

- To increase food security in developing countries by funding applied research in agricultural development and nutrition;

- To build partnerships between Canadian and Southern organizations, researchers, private and public sectors, and civil society to address food security;
- To use research results to inform food security policies and programs.

A fourth objective was added during Phase 2:

- To identify innovations and scale up the most promising research results.

Over nine years, 39 projects involving 20 Canadian and 40 Southern organizations carried out research in 24 Southern countries and in Canada. CIFSRF's research partners took a unique approach to their projects by aiming to sustainably address all factors that contribute to poverty and food insecurity. Although this "systems approach" seems like common sense, it is rarely common practice.

Broadly, this report answers two questions:



1) What did we achieve?

2) How were those results achieved?

1.7 million farmers have tested food security innovations (of them 713,905 women)

\$124 million invested in 24 countries



The solutions developed with funding from CIFSRF between 2009 and 2018 have reached up to 78 million people. CIFSRF’s innovations have resulted in many people consuming better, healthier food and farmers benefiting from improved income and productivity, reduced drudgery, and strengthened capacity. In many instances, women farmers have attained greater autonomy, including enhanced control over resources and fuller participation in decision-making. CIFSRF’s work has also provided governments and development agencies with evidence needed to develop effective policies and programs.

This brief—a summary of CIFSRF’s larger synthesis report—presents the “best practices” that emerged over the life of the program. The following pages also provide summaries of work in key thematic areas, snapshots of representative projects, quantitative outcomes of projects, examples of CIFSRF’s influence over policy, and a brief glimpse at the road that lies ahead.

Millions of people worldwide are living healthier, more prosperous lives thanks to research supported by CIFSRF. By sharing the program’s results and lessons learned, we hope to facilitate opportunities to reach millions more. The complete set of findings and publications from each CIFSRF project can be found in the IDRC Digital Library’s [CIFSRF collection](#), or by visiting the project pages on the [CIFSRF website](#).



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A farmer tends to his fish pond in Cambodia, where smallscale aquaculture combined with homestead vegetable gardens is increasing and diversifying diets for low-income households.

Informing policy with CIFSRF research evidence: 2009–2018

CIFSRF's third objective was to use research results to inform food security policies and programs. Projects achieved this by regularly sharing information with government agencies; raising awareness of new innovations; seeking regulators' approval of technical innovations; suggesting new or amended laws to confer rights and responsibilities; conferring with ministries on adjusted priorities or additional programs; and promoting use of government procurement as a means to scale up innovations.

At a glance:

- CIFSRF results informed 29 food security policies, plans, or programs in 10 countries (5 in Africa, 2 in Latin America, and 3 in Asia)
- 97% of projects engaged with policymakers and influencers (27 in Canada and 38 in developing countries)
- Policymakers mentioned results of 90% of projects (23 in Canada and 35 in developing countries)
- 72 policy briefs were developed
- Partners and staff organized 49 knowledge-sharing events targeting policymakers

Africa



Latin America



Asia



What we achieved

Sustainably Increasing Agricultural Productivity

A critical goal for CIFSRF was to address food insecure people's needs by increasing their access to a range of foodstuffs, enhancing the stability of the food supply, and increasing yields and quality of crops. Our challenge was to achieve this in economically and environmentally sustainable ways.



Best Practices

CIFSRF's experience highlights key factors for success:

- **Continuing to provide reliable new technical and social innovations through scientific research and testing them with farmers and other stakeholders.** Local actors need the capacity to improve their soil and water management, develop more resilient farming systems, grow crops suited for their local environment, and acquire greater access to services;

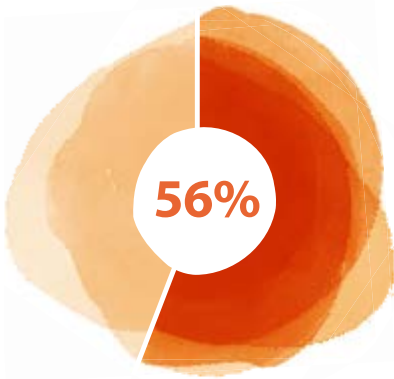


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- **Ensuring that viable markets can absorb enhanced yields.** This may require consumer outreach, investing in infrastructure, developing commercialization strategies and working with partners to strengthen (or create) local markets and value chains;
- **Engaging policymakers early on and throughout research activities to sustain gains in productivity.** Engagement can help build policymakers' understanding of the complexities of agricultural innovation.
- **Recognizing the ongoing investments required to sustain productivity gains among smallholders.** Support mechanisms and extension services—including expert advice, participation in trials, access to seeds and other inputs—are vital to sustaining increased productivity;



Results



of Phase 2 projects focused on increased agricultural productivity

- Most projects reached similar proportions of men and women farmers, but women were a higher proportion of trainees in post-harvest processing techniques. In Nepal, for example, **72%** of farmers trained in sustainable agriculture practices were women
- More than **1 million** people, mainly smallholders, benefited from increased productivity
- Yields significantly increased with improved varieties and practices. Homestead gardeners in Cambodia, for example, produced **66%** more fruit, **53%** more large fish, **18%** more eggs, and **11%** more poultry than non-participating households
- Viable land for cultivation was expanded. The total area used for indigenous vegetable production, for example, rose by **161%** in Benin and **768%** in Nigeria



Koto Alima of the peri-urban co-op Soudomse shows her freshly harvested indigenous vegetable crop, Parakou, Benin.

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Spotlight story

Extending pulse yields while protecting soils in Ethiopia

Research that built on a 20-year partnership between the University of Saskatchewan and Hawassa University generated several successful innovations to increase pulse production, including improved pulse varieties, double cropping with pulses, and improved processing techniques and farming practices. Phase 2 research saw yields increase from 2 to 2.5 tons/hectare for chickpeas and from 1.2 to 1.5 tons/hectare for haricot beans. Partnerships with government bodies responsible for health, agriculture, and gender played a key role in reaching over 51,000 farmers.

Smallholders received seed and were trained to cultivate improved bean and chickpea varieties through the government extension system and existing farmer groups. Extension agents collaborated with farmer groups and model farmers to share improved cultivation techniques and varieties, while other participants received post-harvest handling training to ensure seed quality.

Soil-nourishing chickpeas were introduced as a double crop to help mitigate the risk of crop failure, thereby stabilizing incomes. Adopting chickpeas enabled farmers in southern Ethiopia, where fertile land is limited, to cultivate land that would have otherwise been left idle after growing cereals.

A survey conducted by the International Crops Research Institute of the Semi-arid Tropics found incomes of participating farmers in two rural districts increased by an average of CA\$164/year. The Regional Pulse Innovation Platform was established to sustain productivity gains and link stakeholders to national platforms.

What we achieved

Integrating nutrition outcomes into agricultural development

A key focus for CIFSRF was ensuring that increased food production led to nutritional improvements. The links between agriculture and nutritional outcomes are complex, with social, economic and gender dimensions all playing a role. CIFSRF projects examined a range of factors such as cooking, storage and hygiene practices within the household, and paid special attention to the crucial influence of women's status on nutritional outcomes. CIFSRF's challenge was to identify which interventions worked and which didn't, and to bring successful models to scale in economically and environmentally sustainable ways.

Best Practices

CIFSRF's experience highlights key factors for success:

- Adopting an intentional focus on nutrition within agricultural interventions to improve nutritional outcomes;
- **Recognizing that nutrition education is vital to linking agricultural development to nutritional outcomes.** By using government health extension services; reaching care providers in preschools; staging food fairs; recipe demonstrations and other promotional



events; and developing radio and social media campaigns, researchers can prompt essential behavior changes and collect information on causes of malnutrition and micronutrient deficiencies;

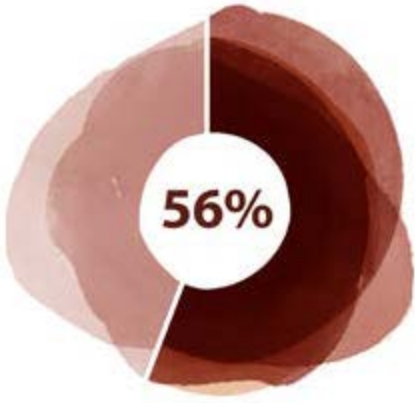
- **Engaging with policymakers and the private sector, especially when applying value-added food fortification pathways.**

Researchers should collaborate closely with local businesses that will form the backbone of new supply and value chains, and with authorities responsible for food safety;

- **Considering gender roles in designing nutrition-sensitive agricultural interventions and learning about how best to leverage them.** A gender expert or focal point alongside gender capacity development trainings, can ensure that all interventions are gender- and nutrition-sensitive.



Results



of Phase 2 projects focused specifically on nutrition-sensitive pathways, leading to changed behaviours and diets and to the scaling-up of production and consumption of nutritious foods

- Consumers are accessing more nutritious foods. In India, double-fortified salt reached **50 million** consumers, while in Tanzania, vitamin A-fortified oil reached **500,000** consumers
- Education improved nutrition in countries such as Ethiopia, where over **45,000** individuals (including village-level health workers and mothers of under-tuos) received education on pulse-containing foods



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Unrefined sunflower oil fortified with vitamin A is sold in a rural market in Babati, Tanzania, in order to reach women and children experiencing high vitamin A deficiency.

Spotlight story

Scaling up nutrient-rich potato production through rural entrepreneurship

In Colombia, partners McGill University and Universidad Nacional de Colombia developed three new yellow potato varieties that are twice as resistant to late blight disease and contain 19% more iron and 17% more zinc than local varieties. This provided a sustainable means of combating micronutrient deficiencies using a local staple food. Phase 2 of the program, increased production and marketing of potato products through rural entrepreneurs and local value chains. As of March 2018, the new varieties accounted for 16% of the total cultivated area of yellow potatoes, with improved potato varieties available to 6.5 million Colombians.

Support for farmer groups and community initiatives produced multiple benefits. Among the 160 families participating in the Shagras para la Vida program (promoting the recovery of traditional foods and healthy eating and nutrition habits) households classified as food secure increased from 19% to 59%, while the proportion with adequate diet diversity increased from 17% to 52%.

A national awareness campaign, La papa tiene lo suyo, promoted more nutritious potatoes at the national level.

What we achieved

Enhancing smallholder incomes for resilience and food security

Food security depends on more than the availability of food. Food must also be accessible in local markets, and families need enough income to buy what they cannot produce. Rising incomes typically lead to more diverse (and potentially more nutritious) diets. CIFSRF's challenge was to integrate income-related issues into its programming, and to increase women's income and control over household spending.



Best Practices

CIFSRF's experience highlights key factors for success:

- **Ensuring that income-generating activities are relevant, accessible, and well supported.** Leveraging the skills and experiences of farmers, and involving private sector or civil society partners are often crucial to boosting incomes;
- **Recognizing that policy influence is instrumental and essential when income gains depended on innovation.** Regulatory changes, hygiene and food handling improvements, and procurement considerations are among the areas where relevant agencies should be involved;

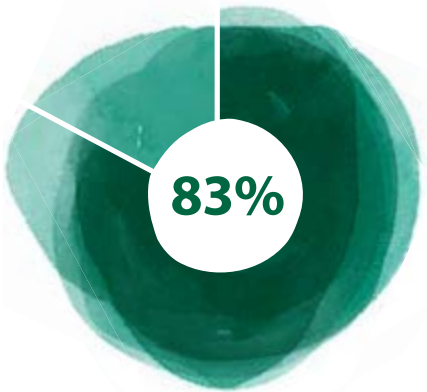


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- **Acknowledging that even modest gains in income contribute to households' adaptive capacity** by increasing family spending on nutrition, health, and education, particularly by female heads of households;
- **Remembering that not all business gains are monetary.** Increased pride and prestige from selling more nutritious products is one factor that can improve producers' standings within households and identify them as champions for their communities;
- **Understanding that sustaining gains depends to some extent on the continued functioning of public and private services.** Smallholders need access to information, capital, and technical advice to regularly improve their operations.



Results



of CIFSRF Phase 2 projects saw appreciable income gains (mainly for low-income producers, more than half of them women)

- Most income gains were from crop or fish sales resulting from increased production that was sold into existing markets. Incomes of fish farming families in Bolivia more than doubled; incomes from indigenous vegetable cultivation in Nigeria tripled during the peak season
- Food processing and the creation of value-added products (for example, fish skins used for tanning in Bolivia) boosted incomes for vendors, processors, and small-scale manufacturers and suppliers
- Projects achieved income gains by reducing crop and livestock losses from disease or spoilage. In Tanzania, for example, mango fruit drop was reduced by **40%**



Lidia Gonzales filleting baby paiche for sale. Mercado Central Market (the Urban Fisherman's Market), Riberalta, Bolivia.

© IDRC / Barry

Spotlight story

Boosting incomes and nutrition by reviving indigenous vegetables in West Africa

A partnership between universities in Canada, Benin, and Nigeria tested more efficient growing methods and worked with a range of producers, processors, and marketing partners to develop new techniques and value chains to make indigenous African vegetables (African eggplant, fluted pumpkin, and others) more widely available. Improved irrigation, quality-controlled seed, and targeted microdoses of fertilizer generated production increases of 161% in Benin and nearly 800% in Nigeria. In all, 338,000 smallholder farmers (over half of them women) and more than 28,400 vegetable marketers benefited. Revenues increased nearly 120% in Nigeria and over 90% in Benin over the project's 36 months.

Preserved and packaged vegetables created spin-off opportunities for food processors, suppliers, and vendors. The team developed low-cost sun dryers and charcoal-powered ovens to dry and store leaves. Frozen vegetable products were created and are being marketed through more than 600 distribution points. Favourable microcredit loans encouraged participation by small producers and processors.

How we achieved it

Strengthening gender equality in agriculture and food security

Given women's important role in agriculture, family well-being, and implementing solutions to food and nutrition insecurity, CIFSRF's approach to gender inequality went beyond targeting women as beneficiaries. Instead, the challenge was to address barriers embedded in underlying gender and social norms that keep both men and women from fully participating in and benefiting from agriculture.



Best Practices

CIFSRF's experience highlights key factors for success:

- **Using a layered combination of strategies to achieve more gender-transformative results.** Strategies including saving women's time, improving their access to resources, and enabling men to better appreciate women's contributions can help reduce gender power imbalances and diminish technical and material barriers facing women;

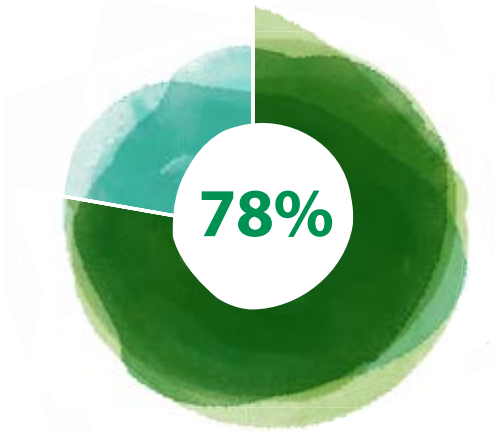


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- **Dedicating gender expertise and “ring-fenced” funding to enable more transformative outcomes.** Including gender considerations at the early stages of project design allows experts to influence gender-responsive strategies throughout project implementation;
- **Unpacking assumptions about gender and articulating a theory of change on women’s empowerment.** Having a theory of change that reflects a more granular understanding of local conditions and power relations will more likely result in projects offering innovations that address gender-based barriers rather than reinforcing status quo social relations;
- **Addressing gender constraints more effectively using interdisciplinary and qualitative (rather than biophysical) research.** Addressing intersecting inequalities, such as how ethnicity or class interact with gender divisions, will better equip projects to match their innovations to their specific social context.



Results



of CIFSFR projects increased women’s access to knowledge, skills, and resources

- **33%** of projects actively empowered women by increasing their voice and leadership, recognizing their value, providing more control over resources and decisions, and increasing their participation in organizations
- All projects implemented gender strategies; **426** researchers participated in gender training
- **42%** of farmers involved in testing innovations were women
- **45%** of farmers who received technical training were women
- Women made up **37%** of the researchers involved in CIFSFR
- Women made up **58%** of the graduate students involved in CIFSFR
- Women’s incomes were increased, their nutrition was improved, and their work drudgery was reduced



Nadia Assouma buys indigenous vegetable amaranth from the women vegetable marketers, Arzeke Urban Market, Parakou, Benin.

© IDRC / Barry

Spotlight story

Empowering women through homestead production

In rural Cambodia, the Scaling Up Homestead Food Production project worked with small farmers to increase home gardening production and diversify diets through small-scale fish-farming and poultry-raising. Through these interventions, household incomes and food security increased. Among women, the increase in animal protein targeted common micronutrient deficiencies by increasing iron and retinol-binding protein levels in the blood — both crucial indicators of maternal health.

The research team also adapted the gender-transformative Nurturing Connections curriculum for local use. Men and women examined widely held beliefs and practices that diminish women, such as barring them from community meetings or serving them the scraps from family meals. Women who contributed to household food production also played a larger role in other household decisions: by the project's end, 79% of women were primary decision makers on major household spending, and women were

making 90% of decisions around farming. The project's explicit recognition of women as farmers and knowledge holders, along with their role in generating new income, increased women's recognition within the household and the community. This strengthened women's influence on decisions related to food production, which positively influenced which foods were consumed in the home. Some changes in gender roles—such as fathers helping with cooking and animal care, and grandfathers with child-minding—allowed women time for other activities such as breastfeeding and even provided some personal time.

How we achieved it

Scaling up food security innovations

CIFSRF's scaling up objectives and understandings build on IDRC's long-standing involvement in participatory research and institutional capacity-building through research for development. The challenge was to test scaling-up methods and to scale-up innovations that showed promise for sustainably increasing food production, raising farmers' incomes, and improving nutrition.



Best Practices

CIFSRF's experience highlights key factors for success:

- **Starting with an innovation that responds to the needs of people, is grounded in scientific evidence, and is robust under various conditions.** Close collaboration with end-users increases the likelihood that innovations will meet local needs and be adopted;
- **Identifying the most appropriate strategy/pathway for scaling up that works in “the real world”.** Multiple pathways – some market-based, others requiring policy interventions or public investment – may be effective, depending upon the objectives;

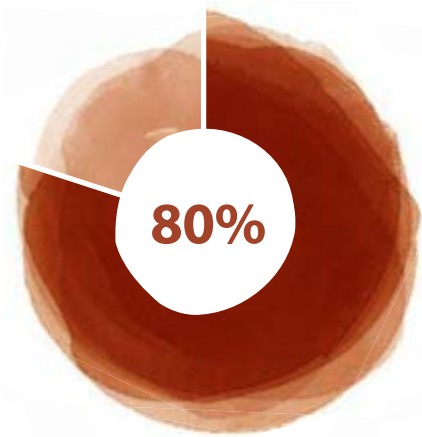


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- **Involving the right partners** who are connected to informal and formal networks and interested in both business and social impacts;
- **Reading the context, identifying constraints, and preparing to seize opportunities.** Timing and chance play critical roles. Teams must have the capacity to respond to the environment and adapt to changing situations;
- **Building leadership and commitment for the long run.** It is crucial to identify and support people – graduate students, scientists, producers, policy- makers and others—who can champion innovations after the project ends;
- **Consider scaling-up pathway and conditions from the design of the research.**



Results



of projects funded under CIFSRF are successfully scaling up their innovations

- **78 million** end-users have been reached through CIFSRF, including **50 million** people in India who now use iron- and iodine-fortified salt, and 6.5 million Colombians with access to new, more nutritional potatoes
- **18 million** radio listeners received new knowledge on best practices to grow and consume indigenous vegetables In Benin and Nigeria
- **29** food security policies, plans, or programs were developed in 10 countries
- **36** innovations were developed and tested for scaling up



A Listening Club in the village of Liulahumba listening to radio programs, interviews with other farmers, stories and facts about soybeans. Njombe, Tanzania.

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Spotlight story

Massava project: Scaling up fortified oil through local markets in Tanzania

A partnership between Sokoine University of Agriculture and the University of Waterloo addressed widespread vitamin A deficiency by demonstrating that inexpensive crude sunflower oil could be fortified with retinol and retain vitamin A under local conditions. Researchers worked with three local small and medium-sized enterprises (SMEs) which produced the fortified oil, and with more than 300 retailers who distributed the product. The oil was initially sold in 1-litre bottles, and more than 500,000 discount vouchers were distributed to low-income households to encourage sales.

Service delivery mechanisms were changed when it became clear that low-income households could only afford to purchase

smaller quantities of oil, and that discount vouchers did not always reach the family member making the purchase. Larger oil containers, from which retailers could sell smaller amounts, were subsequently introduced. A discount system was also reoriented towards retailers. As a result, 142,000 litres of fortified oil were sold through a network of 319 retailers.

Oil sales was also supported by communication campaigns aiming to raise consumer awareness of the fortified product's health benefits. Producers are still struggling, however, with obstacles such as competition from cheaper oils.

How we achieved it

Building collaborative research partnerships

Partnerships played a crucial role in building on strengths and creating new opportunities and resources to address food security and nutrition. For CIFS RF, a critical goal was to help partners increase their capacities to generate, disseminate, and scale up research by enhancing team and organizational skills, leveraging new funding, and training graduate students.



Best Practices

CIFS RF's experience highlights key factors for success:

- **Developing a common vision between partners and stakeholders to address a shared challenge.** Face-to-face inception workshops and joint technical reporting are important means of discussing findings and sharing analysis;
- **Having at least one strong leader per organization.** Existing leaders (such as principal investigators) and new leaders identified by project coordinators can play key roles in facilitating dialogue and developing networks;

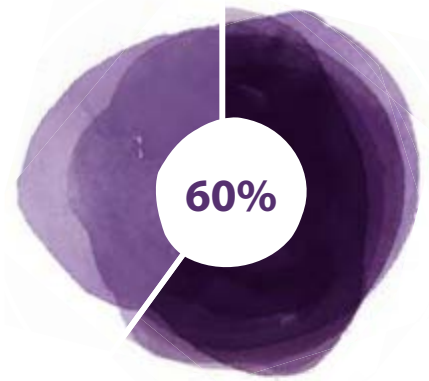


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- **Allowing and expecting flexibility within partnerships so that teams can make the necessary changes throughout the project's lifecycle.** Accommodating no-cost time extensions and second phases, for example, empowers teams to build on prior work;
- **Supporting equity between partners through openness and transparency.** This includes sharing budgets, providing access to information, and establishing agreements on intellectual property, patents, and co-authorship of publications;
- **Factoring in the necessary time and space to build partnerships.** Especially for complex international partnerships, building trust and understanding, and clarifying goals, roles, and responsibilities, requires time and patience.



Results



Funding was distributed **60:40** between Southern and Canadian organizations

- **167** organizations were involved in CIFSRF projects from 2009 to 2018
- Partners included NGOs (**49**), universities (**44**), government bodies (**39**), private sector firms (**31**), and others (**4**)
- **20 of 39** projects leveraged an additional **CA\$40.4 million** in research funding
- **406** graduate students (**58% women**) were involved in CIFSRF research projects
- Projects produced **471** peer-reviewed articles, **375** theses, **87** books or chapters, and **72** policy briefs



Small fish are a great source of micronutrients and are being introduced into the diets of farming families. Prey Veng Province, Cambodia.

© IDRC / Bartray

Spotlight story

A winning partnership for scaling double-fortified salt throughout India

For decades, billions of people have consumed iodine-fortified salt to counter the threat of stunted physical and mental growth. Since more than half of India's women and preschool children suffer from anemia, it follows that fortifying salt with iron would also improve public health.

A stable and cost-effective salt fortified with both iodine and iron built (double fortified salt – DFS)—indistinguishable from regular salt—was developed at the University of Toronto.

The St. John's Research Institute in Bangalore tested the salt for stability and efficacy. JVS Foods Pvt. Ltd., an Indian company that pioneered the production of micronutrient-fortified foods for public feeding programs,

produced the premix in local mills. A social market research firm, Barometer Research, tested consumer acceptance and marketing. Tata Trusts, an Indian philanthropy group, contributed CA\$600,000 and worked with the state of Uttar Pradesh to distribute the salt in 10 districts. This initial rollout was followed by public distribution in Uttar Pradesh and Madhya Pradesh states.

To ensure mass distribution and to reach those most likely to suffer malnutrition, Canadian researchers licensed the intellectual property behind DFS to JVS Foods on a no-cost basis for sale to Indian salt producers. The result? As of mid-2018, some 50 million Indians in three states were consuming salt fortified with both iron and iodine.

The road ahead

Availability, access, use, and stability. These four key pillars were the focus of CIFSRF's approach to global food security, and as a result up to 78 million smallholder farmers and consumers in the Global South have benefited from evidence-based food security innovations that were generated between 2009 and 2018. These wide-ranging innovations included scientific breakthroughs and technological advancements in food production, post-harvest losses, and livestock vaccines, in addition to improved agricultural practices, techniques, products, and tools.

We learned from CIFSRF that for food security innovations to be timely, relevant, and useful, they must respond to the needs of people

and be informed by researchers, development practitioners, and policymakers who consistently work with and learn from farmers and community members. Achieving impact at scale requires research for development partnerships to deploy multidisciplinary and multi-sectoral teams, and to prioritize a holistic approach that recognizes food security issues' complexity.

CIFSRF has also helped to leverage much larger investments for agricultural research. Two projects on livestock vaccines led to the launch of a six-year, CA\$57 million livestock vaccine research initiative co-funded by Global Affairs Canada, the Bill and Melinda Gates Foundation, and IDRC (2016–2022). CIFSRF's structure was also replicated as the model for a nine-year, CA\$35 million research program on food and nutrition security in



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East and Southern Africa co-funded by IDRC and the Australian Centre for International Agricultural Research (2013–2022).

Despite commitments to ending all forms of hunger and malnutrition by 2030 and concerted efforts over the last decade, the number of people affected by food insecurity has increased for the first time in almost 10 years. In 2017, 821 million people were considered food insecure compared to 777 million just two years before. That is 821 million too many.

Addressing food insecurity and promoting inclusive development remain key priorities for the international community. However, complex and competing influences such as climate change and

conflicts require researchers to constantly adapt. Malnutrition, for example, presents contrasting challenges: globally, while nearly 25% of children suffer from stunted growth from malnutrition, almost 2 billion adults were overweight in 2017.

As former UN secretary-general Kofi Annan stated, “Despite the rapid growth in the services sector, agriculture still accounts for more than a third of Africa’s GDP. Africa is urbanizing rapidly, but agriculture still employs two-thirds of the workforce. Evidence has shown that growth in agriculture is up to 11 times more effective in reducing poverty than growth in any other sector. If we want to end poverty and hunger in Africa by 2030, agriculture needs to be right at the heart of the strategy.”

Despite agriculture's overwhelming importance, however, millions of women and youth have no or little access to technology, markets, and productive resources on which they can build. More must be done to improve understanding of how different models can impact the capacity of youth and women to engage in and benefit from agriculture in the Global South's different agro-ecological and social contexts.

Women are increasingly claiming their space in agriculture, with their voices being heard now more than ever. They make up over 50% of the agricultural labour force in East Asia and sub-Saharan Africa, and 20% in Latin America. Today we are able to identify hotspots of hunger and gender inequality and can target interventions to ensure that women and men benefit equally from research for development. To address the gender dimensions of agriculture in the future, we must:

- Move away from simply identifying women's contributions to agriculture, and focus on how food and agricultural systems can collectively contribute to women's empowerment;

- Envision a future of gender-transformative food systems anchored in a broader understanding of complex family interactions that shape gender relations;
- Address the structural impediments to gender equality.

Investments in research for development are still required in the years ahead. Research must consider the impacts of new social dynamics generated by globalization, urbanization, migration, and conflict. We must continue to promote research that connects women's groups, youth, experts, markets, and policymakers to generate lasting solutions to food and nutrition security. Building on CIFSRF's lessons, we must inform the next generation of research so it contributes to the more inclusive and resilient food systems that will be necessary to ensure the world can feed 9 billion people by 2030.

For more information, please consult the full report: <http://hdl.handle.net/10625/57282>

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