

**MULTI-FUNDER INITIATIVE**

## Canadian International Food Security Research Fund (CIFSRF)

### Reducing barriers to millet production and consumption in India

Engineers from Canada and India have developed low-cost machines that farming communities, entrepreneurs, and food producers can easily use to separate the outer husk from the millet seed, a laborious and time-consuming job done by hand by women. The innovation will increase local production and opportunities to use these micronutrient-rich grains in healthy food products.

### Combating the twin burden of undernutrition and overnutrition

India is the world's largest producer of millet, a traditional staple that is rapidly becoming a "health food" of choice for the urban middle class. The government is also promoting millets under its National Food Security Act as key to combatting undernutrition, particularly in rural areas.

Two CIFSRF-supported solutions are putting into practice practical innovations to increase millet consumption and farmer incomes by making it easier to process, sell, and consume millets. One is new post-harvest processing equipment that reduces the dehulling time by 70-90%, freeing up women for other agricultural and entrepreneurial activities. The machines have other advantages: higher quality grain with less bran loss, ease in separating grains, and ability to dehull multiple types of small millets. Nine units are currently operating in multiple sites.

Experts also worked with local communities, especially women self-help groups, to develop 40 new ready-to-eat, millet-based snack foods, baked goods, and other products.

### Supporting the entire supply chain

The research team is taking a supply chain approach to ensure a long-term future for small millet production and consumption in India. This includes a new business incubator to support the commercial development of food products, through services such as training and marketing plans.

Support will also be provided to equipment manufacturers to ensure they have the capacity and capabilities to provide

dehullers and other processing equipment that meet the requirements of villages, small- and medium-sized enterprises (SMEs), and other companies in India.

New business models will help governments and companies expand millet production and distribution across India and throughout Asia and Africa where small millet production remains a key crop for smallholder farmers.

### Expected results

- Provide business support to 200 millet processing entrepreneurs and 10 SMEs to create a critical mass of companies able to sustain and grow new dehulling services
- At least five of these ventures will set up mills to provide dehulling services
- Use mass media to market appealing, ready-to-eat small millet products to over 120,000 consumers
- Develop a proven business model for increasing the availability of dehulling equipment and adoption of small millet products in India
- Inform policymakers on best practices and policies for increasing the availability and consumption of small millets

### LEAD RESEARCHERS

Muniappan Karthikeyan, DHAN Foundation, India  
Vijaya, Raghavan, McGill University, Canada

**Country:** India

**Funding:** CA\$1.5 million

**Duration:** December 2015 to February 2018

The **Canadian International Food Security Research Fund (CIFSRF)** is a program of Canada's International Development Research Centre (IDRC) undertaken with the financial support of the Government of Canada provided through Global Affairs Canada (GAC).



### International Development Research Centre

PO Box 8500 Ottawa ON Canada K1G 3H9  
Phone +1 613 236 6163 • Fax +1 613 236 7293  
cifsrf@idrc.ca • www.idrc.ca/cifsrf