

**MULTI-FUNDER INITIATIVE**

## Canadian International Food Security Research Fund (CIFS RF)

### Scaling up manufacture of double fortified salt to fight anaemia in India

Adding iodine to salt has been one of the world's most successful public health campaigns, reaching 5 billion people globally and 800 million people in India daily. A 20-year effort by Canadian researchers has come up with a cost-effective way to fortify salt with both iron and iodine—a feat that has long eluded food scientists. Building on extensive pilot testing and impact assessments, work has begun to bring double fortified salt (DFS) to over 15 million people in one of India's poorest and most food-insecure regions.

### Innovation improves women's mental skills and energy levels

Severe iodine and iron deficiencies compromise the health and cognitive skills of women and the mental status of their newborns in many developing countries. In India's state of Uttar Pradesh, a staggering 70% of women between ages 15 and 49 are anaemic, and 56% in India as a whole. Iron folic acid supplementation programs exist, but they have limited reach and compliance.

The DFS technology developed by Canadian researchers has many advantages. It remains stable in hot and humid climates, is indistinguishable in taste, colour, and smell from regular salt, and can be easily manufactured in existing processing facilities. Studies found it reduced anemia by 66%, provided 30-50% of the daily recommended intake of iron, significantly improved cognitive skills and energy levels among women, and had broad consumer acceptance in 13 countries, including India, Sri Lanka, and Bangladesh.

### Improving the health of 15 million people

Indian regulators recently approved DFS. JVS Foods Pvt. Ltd, an Indian manufacturer of ready-to-eat health foods, has signed on to produce the encapsulated iron premix for producers who already iodize salt.

The team will test different models to rollout DFS through the public distribution system, reaching more than 15 million rural poor in 10 districts of Uttar Pradesh predominately engaged in agriculture. Tata Trust, a philanthropic institution in India, will evaluate the results of this rollout, providing the evidence decision-makers need to make DFS available to hundreds of millions across India.

### Expected results

- A cost-effective solution to anemia benefiting millions of women of child bearing age
- A sustainable model that combines health benefits and market opportunities to transfer DFS to local salt producers for distribution through public and private sector channels
- Regular and sustained intake of iodine and iron for a target of 15 million people in Uttar Pradesh

### LEAD RESEARCHERS

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**Country:** India

**Funding:** CA\$1.4 million

**Duration:** November 2015 to February 2018

The **Canadian International Food Security Research Fund (CIFS RF)** 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).



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