



## Defining a Second Green Revolution for India

### Background

India represents a paradox. Despite significant economic growth over the past few decades, rates of malnutrition remain amongst the highest in the world and a majority of adult women are anaemic (Rao and Swaminathan, 2016; Vira, Fennell, cv refs). Recent years have witnessed an agrarian crisis in capital investment, water resource management and research/extension services,

aggravated by climate change. Men are migrating in large numbers to urban areas and farm labour is increasingly feminised, yet women lack access to farming resources and services. Priorities for any second Green Revolution (GR) need to be established by recognising the existing realities, and legacy (both positive and negative) from the first GR.

### Defining a Second Green Revolution for India

### Outline of Programme Activities:

- Deliberative workshops will identify sets of GR priorities for sustainable cropping and marketing;
- Facilitated Dialogues (Year 1) will be replicated across diverse agro-ecological regions, specifically irrigated and non-irrigated, northern plains vs south of the Deccan plateau;
- Workshop participants will interview diverse stakeholders (government officials, agrarian research institutions, civil society actors/NGOs and those representing farming communities);
- Facilitators will develop joint outputs representing different GR perspectives; subsequent policy workshops in India and Cambridge, with CSaP hosting Policy Fellows from India;
- Ongoing research will define the requirements for a new GR and informing work of the other FPs.



### Practical Description of Research and Allocation of Responsibilities to Staff in UK and India

The FP1 postdocs will contribute to data gathering, cluster analysis and 'research agenda setting' in both India and the UK. Building on pre-existing networks of policy makers in India, UK, European Commission and multilateral agencies, the CSaP Policy Workshops in the UK and in India will bring together key decision makers in research policy to help inform and shape the broader research agenda needed to address the fundamental challenge of

providing sustainable food systems. The successful CSaP Policy Fellowships programme will be adapted to provide an opportunity for senior Policy Makers from India to visit the project's UK-based researchers. CSaP has strong connections with relevant UK Government Departments (for example with Fellows in DFID, Defra and the Food Standards Agency) and with the Commonwealth Secretariat.

### Engagement with Stakeholders

- The M.S Swaminathan Research Foundation (MSSRF) focuses on sustainable agricultural systems. It has carried out field-level interventions and research in Scheduled Tribe dominant areas in the southern states of Kerala and Tamil Nadu, as well as Odisha in Eastern India.
- CSIR-NISTADS researches and informs key contemporary and emerging issues and processes of social, scientific, and technological change.
- Other organisations include the Indian Agricultural Research Institute (IARI), New Delhi; Indian Council of Agricultural Research; ICRISAT, Hyderabad; civil society networks such as MAKAAM (Mahila Kisan Adhikar Manch) or the Forum for Women Farmers' Rights; PRADAN (Professional Assistance for Development Action), an NGO working on livelihood issues in central and eastern India.

### Outcomes, Deliverables and Impact

Set the 'second green revolution' policy agenda, framed by demographic change in rural communities and feminisation of smallholder systems for industry, civil servants and politicians.	Identify trade-offs in land use for managing rain-fed, small- and large-scale farming systems and climate-smart crop varieties that improve nutrition and offer sustainable use of water resources.	Outputs from reviews, dialogues and Q-Method analysis will develop regional and ecologically specific Green Revolution Action Plans, outlining shared visions be taken forward for the future.	Listening to grassroots societal and economic issues will inform policy to stimulate local economy, improve people's nutrition and sustainability of their farming systems, and feed in to FP5 and 6.
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**Cambridge Lead:**  
B. Vira; Co-I: R. Doubleday, S. Fennell; UEA Co-I: N. Rao; ICRISAT, MSSRF and CSIR-NISTADS; NGO PRADAN

**HR Career Stage Requirements:**  
Employment in UK: 1 PDRA; India: 2 PDRA at key Institutions

**Capacity Building India-UK and UK-India Exchanges:**  
3 Senior Investigator; 6 PDRA/PhD extended visits; Pre- and Post FP workshops.

