



## Impacting Well-being in Rural and Urban Communities

### Background

In India, state interventions are organised sectorally and somewhat unresponsive to rural livelihoods and access to entitlements as shaped by geographical remoteness or social identity. Life on the farm is no longer regarded as a preferred form of employment yet there are few interventions to support youth skills and well-being (Fennell 2013, cv refs; Chadha 2015). At the same time, health interventions, as well as literacy and educational curricula, continue to be designed largely in a top-down manner, based on mainstream notions of well-being.

Our Theory of Change is that innovative agricultural solutions and new technology can be translated using local knowledge, using participatory knowledge exchange and transfer events with local stakeholders (Vira, Rao cv refs). A particular focus on women and youth will stimulate the emergence of entrepreneurs, new champions and guardians. FP6 will adopt a multi-disciplinary, holistic approach to sustainable livelihoods, nutrition and well-being, linked to a social justice approach (see Rao and Ray cv refs).

### Impacting Well-being in Rural and Urban Communities

### Outline of Programme Activities:

Two work streams will (a) analyse the impact of a new Green Revolution, and (b) improve Health and Nutrition literacy for rural communities, using parallel dialogues from (i) Research and (ii) Education (as Knowledge Transfer and Exchange).

- (a1) Household livelihood surveys– primary data on rural communities and the urban informal sector into: income, assets, education health data; agricultural knowledge and youth skills, to provide local knowledge on opportunities/obstacles for the Green Revolution technology;
- (a2) Technology uptake assessment protocols, in partnership with ICRISAT, to analyse adoption of new hybrid semi-arid crops and second generation Green Revolution technologies;
- (a3) Engage youth via mobile phone crowd-sourcing to enhance agricultural productivity.
- (b1) Employ women and youth User Network to assess nutritional knowledge via Primary Health Centres located in sample villages;
- (b2) Gather practitioner-orientated evidence on the best strategies to impact rural communities, drawing on NNEdPro Knowledge-to-Action (K2A) cycle for evidence-based Nutrition policy.
- (b3) UEA collaborators will use open platform data to develop culturally relevant and sensitive curricula for field-level health and literacy workers with Indira Gandhi National OU (IGNOU).

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

UK PDRA's will work either on (a) defining impact of GR or (b) GR impact on health and nutrition; and three PDRA's from India will work with ICRISAT, IIT and CRIKC, traveling across the states of Punjab, Tamil Nadu, Odisha and Gujarat/Rajasthan to during the data collection for the district level surveys. There will be support provided by

Cambridge/UEA academics and partner institutions in the design and roll-out of the research tools: surveys, creation of educational materials and behavioural experimentation; analysis of land classes, crop selection and GR management strategies.

### Engagement with Stakeholders

- Map youth aspirations in two advanced Green Revolution states – Punjab (CRIKC), Tamil Nadu (RTBI, IIT Madras), and two lagging states: Odisha (NCDS, KIIT); Gujarat/Rajasthan (IIT Madras).
- Crowd-sourced rural youth to provide weekly updates on growth of new crop hybrids, water availability, soil status, as well as on well-being with a focus on health and educational facilities.
- Develop NIAB concept of Innovation (demonstration) Farm networks for GR technology transfer at key regional centres.
- Local champions assess household nutrition knowledge, attitudes and practices (KAP) and screening for malnutrition status using STAMP (Screening Tool for Assessment of Malnutrition in Paediatrics) and the Community Childhood Hunger Identification Project (CCHIP) questionnaire.
- State level Medical Hospital Partners PGIMER, (CRIKC Chandigarh, CMC Vellore), already partner our collaborators in Tamil Nadu, IIT, Madras; and KIIT at Bhubaneswar.

### Outcomes, Deliverables and Impact

Local survey outputs will provide gendered norms in rural communities for crop and food choices, opportunities regarding education, skill and employment for young men and women, and the emergence of young champions of sustainable agriculture and GR technologies.	ICRISAT's demonstration farmer days and new Innovation Farm networks will provide a key outreach platform for GR technology uptake, evaluation and bespoke educational materials.	Innovative solutions will enhance youth skills and aspirations, women's entrepreneurship and implementation of interactive nutritional literacy and health interventions.	The TIGR'ESS impact platform for open data will bridge agriculture and human nutrition and contribute to the international Global Open Data for Agriculture and Nutrition (GODAN).
--	---	---	--



#### Cambridge Lead:

Shailaja Fennell, Sumantra Ray: JCo-I Lydia Smith, NIAB; UEA Co-I Nitya Rao; Lara Allen (Centre for Global Equality); NNEdPro, PAU; ICRISAT Hyderabad; IIT Madras; CRIKC Chandigarh; IGNOU; CMC Vellore; Univ. Tamil Nadu; NCDS and KIIT Bhubaneswar; GODAN.

#### HR Career Stage Requirements:

Employment of UK: 2 PDRA; India: 3 PDRA at key Institutions

#### Capacity Building India-UK and UK-India Exchanges:

5 Senior Investigator; 5 PDRA/PhD extended exchanges; local equality workshops, education programmes, entrepreneurial stimuli.