

Importance of exchange visits in collaborative research

Progress Report

Exchange Visit, November 3-17, 2019

1. Brief background and objectives of the exchange visit

Professor Nitya Rao, from the University of East Anglia (UEA) hosted the two-week exchange visit for the TIGR²ESS researchers from PRADAN, Mr Shuvajit Chakraborty and Dr Nivedita Narain. PRADAN is involved with Flagship Project (FP) 1 and FP6, on sustainable food systems. The research agenda broadly focuses on health and food systems in cultural contexts, and seeks to find ways to address these challenges. An overarching aim is to identify and share the broader issues arising from one of the poorest most malnourished part of the globe, characterised also by deprivation and deep gender discrimination.

The research design and preliminary testing was completed during February/March 2019, and a first round of data collection began from April 2019. We planned for the first round of data through focus group discussions to be complete by the mid-October. It is in this context that we set the following four-fold objectives of this exchange visit:

- a. A preliminary analysis of the site profile and first round of focus group discussions, with men and women stratified across age, across five research objectives.
- b. Identification of specific research questions emerging from the contexts, in consonance with the FP6 objectives
- c. Design of semi-structured interviews (and other methods to be identified) to explore these research questions
- d. To build new linkages, and deepen existing linkages, with relevant researchers.

2. Pre-exchange visit preparation

We conducted a data management workshop in two phases: September 14-21 and October 29-November 2. This was attended by the core team in the field, Ms Astha Upadhyay, Mr Shuvajit Chakraborty and Dr Nivedita Narain (from PRADAN) and Dr. Shreya Sinha, Post Doc with Cambridge University. Dr. Sinha and Dr. Narain have written a blog about this workshop and its impacts beyond preparation for the Exchange Visit (<https://tigr2ess.globalfood.cam.ac.uk/news/co-creating-research>).

The workshop enabled us to put together a protocol for data management. This involved assessing all data from the FGDs, setting procedures for it to be translated, transcribed and ready for analysis. We also set and initiated protocols for backchecks, ascertaining quality of data and preliminary analysis, archiving, indexing and coding.

In addition, TIGR²ESS aims to carry out research that has a practical application. As well as a chance to plan our research activities, the workshop also presented us with the opportunity to develop a plan for translating our research into real-world change. PRADAN is part of a recent Global Research Translation Award secured by TIGR²ESS collaborator UEA to accelerate the impact of research findings from the TIGR²ESS programme. As part of this grant, UEA and PRADAN are collaborating with Gram Vaani, a non-governmental organisation using digital technologies, especially mobile-based community radio, to tackle important development issues. Kalinga Institute of Social Sciences

is also partner in this grant. During the workshop, PRADAN and GramVaani teams came together for half a day: Together with Gram Vaani we have put together a plan to create both pre-recorded podcasts as well as more interactive audio shows with local and external experts on important issues that emerge from our research. The Lahanti Club, a rural youth club in Chakai whose formation was facilitated by PRADAN, will work with members of the Santhal community in Chakai to produce these resources. PRADAN will also establish a creative hub where illustrated books and pamphlets alongside traditional performing arts will be used to build awareness of issues of food production, health and nutrition.

The GRTA inception workshop was subsequently held during October 29-November 2. It was organised by the four partner organisations and also involved an external facing workshop with relevant stakeholders (from government, NGOs, research, bilateral and multilateral institutions etc.). A part of the exchange visits also focussed on further developing the ideas for the translation of TIGR²ESS research through the GRTA.

We provide an overview of the exchange visit below, in four sections (activities, outputs, outcomes and contribution to the GROW goals).

3. Overview of activities during the exchange visit

We present a summary of our activities across each of the four objectives.

- a. A preliminary analysis of the site profile and first round of focus group discussions, with men and women stratified across age, across 5 themes: We analysed a subset of the 32 FGDs, across the following five themes: (i) seasonality of hunger, production, consumption, illness, linkages with markets and the public ration system etc; (ii) production relations, viz., labour, credit, land ownership and technology/practices; (iii) natural resources and ecological considerations; (iv) health and well-being and (v) migration. This enabled us to characterise the area and identify the key issues in this malnourished region, characterised also by deprivation and deep gender discrimination.
- b. Identification of specific research questions emerging from the contexts, in consonance with the FP6 objectives: We discussed the analysis from (a) above, identified how these broad issues related with relevant literature. We put together a preliminary list of readings and went through these to frame the issues around seasonal hunger, sustainable food systems over the life course of men and women, land tenure, migration and the role of food preferences as a driver of enhancing nutritional status. We also identified possible resources within UEA (research projects, specific researchers and interested students) that we could tap into/access to inform these research questions, as also the gaps we had identified (see point d below).
- c. Design methods to explore these research questions: We outlined the questions /gaps and possible appropriate methods for the next round of data collection.
- d. Build new linkages, and deepen existing linkages, with relevant researchers:
Professor Nitya Rao organised meetings with specific researchers relevant for TIGR²ESS FP1, FP6 and the GRTA. She also introduced us to students at the Masters level in UEA, those who had shown interest in working in the field and assisting with research and its translation. We made new connections with the partners in the **GRTA** at the UEA, and designed the project and its stakeholder management. See examples below.
 - We had already been trained on stakeholder negotiations (during the inception workshop on October 29) by Sarah Bailey of Cambridge and Dr Asher Minns at UEA. We had a follow up meeting with Dr Asher Minns and his team, to deepen and develop strategies for impacting stakeholders.

- We had two meetings with Dr Christine Cornea of the School for Media and Film Studies and her team. We have planned a detailed participatory photo and videography workshop in Chakai with her.
- We met with Dr Jean McNeal, a renowned creative writer at the UEA, and discussed her work around organising write shops, engaging young men and women to articulate their knowledge in a participatory way, etc.

Professor Rao also organised meetings with researchers from FP5 in UEA, with a view to bolster the research agenda related to markets, something we had not yet addressed in the first round of data collection. Dr Tomas Harrington, Associate Professor of Digitalisation & Operations Management at the Business School introduced the current research in FP5 on Farmer Producer Organisations and markets.

She also organised a meeting with Professor Abhimanyu Sarkar and Professor Anne Edwards, at the John Innes Centre. One of the gaps from the research project was the need for protein –from farm to plate. The work with grass pea provided a possibility as a climate resilient pulse.

We spent a day at Cambridge University meeting the TIGR²ESS management team (Mr Jonathan Doole and Ms. Marla), Professor Howard Griffiths, Professor Bhaskar Vira, Dr Robert Doubleday and Ms Katie Cohen at CSAP, and Dr Lydia Smith at NIAB. We updated them about our research, administrative problems faced and further plans. They updated us about their work and introduced us to relevant and potential resources. For instance, Professor Howard Griffiths introduced us to his colleague in Plant Sciences, Dr Joanna who is working on the release of micronutrients from pearl millet (Harvest +) in Gambia and Ethiopia. We too have introduced the Harvest + pearl millets in Chakai and discussed possible future tie-ups. Another example of potential future work is with Dr Lydia Smith’s research around bioavailability of nutrients from millets –can we link with it to study local processes of cooking and their impact on the bio availability of micro nutrients. Professor Bhaskar Vira introduced us to possible resources in the form of Cambridge students who could undertake to specific assignments to assist with our research, through CAMVOL. We also explored whether new questions emerging regarding uncultivated foods, and possibilities for his doctoral student to undertake her field research in Chakai.

4. Outputs

The *outputs* of the exchange are summarised below:

- a. Usable data sets around production relations, land governance, seasonality, migration and nutrition and well-being. We have 4 resource maps, 32 FGDs as well as key respondent interviews.
- b. Identification of gaps in data that need to be explored in stage 2, on return to India.

Specific gaps in data include de jure and de facto land ownership mapping, further details of seasonality, and secondary data across rainfall, social welfare/protection schemes and all the other indicators and data collected for the Block. In addition, specific data needs to be collected relating to the research questions below.

- c. A preliminary articulation of a set of research questions to explore in stage 2, on return to India. We have identified five sets of research questions viz: seasonal hunger and malnutrition; sustainable food systems across the life course of males and females; land tenure and its implications for production and food systems; factors influencing market decisions and current production arrangements; and migration and its implications for sustainable food systems.

d. Model interviews and templates for semi-structured interviews to explore themes related to land governance and production relations underlying agriculture, nutrition and well-being and migration.

e. Identification of relevant literature that may inform the exploration of the emerging specific research questions

f. We have also recently received a GRTA grant on food sustainability (associated with the Tigress Project) with Professor Rao and have developed a plan for its implementation during January-March, 2020 including content for sustainable food systems, workshops run by the UEA School for Media studies to develop local reporters and build capacity for film development, and initial interest in collaborating to spread grass pea in Chakai, a protein deficit zone in India.

5. Key outcomes of the exchange

The exchange visit helped to move from Stage 1 to Stage 2 of the research project. Stage 1 consisted was a broad scoping of issues arising from the field through systematic FGDs and key respondent interviews.

The outputs of the Exchange have enables transition to stage 2. This would involve piloting the semi structured interviews and surveys and setting up research protocols around the research questions that are identified. Stage 2 would subsequently also involve data collection, transcription and translation; and subsequent preparation for analysis.

Finally, the exchange visit has helped to cement and strengthen the connection between research outcomes and its social impact. We have not only planned the GRTA, but also linked with various resources in the University beyond TIGR²ESS and tried to see if there is a possibility for them to strengthen TIGR²ESS and also link with social impact initiatives.

3.3 How the exchange visit meets the goals for the GCRF Grow call

This exchange visit meets the GROW goals as follows:

a. Capacity strengthening in the UK and India (e.g. UK PhD student trained in new technique)

It builds capacities of both sets of partner researchers in new techniques related to collecting nutrition and calorie –consumption and time use data, in qualitative techniques (designing in-depth semi structured interviews), and in data analysis and management (qualitative protocols). It strengthens capacities in India and the UK: to identify relevant research questions from the context, rather than to go with research questions designed ab initio. Finally, it prepares the Indian side to identify and *access* relevant contemporary literature.

b. Equitable partnerships (e.g. explain how each team members contribute to the exchange)

Mr Shuvajit Chakraborty is involved in design of the methods and collection of the data, and he is also closely associated with the site, having lived and worked there for over 8 years. Thus, his insights in the analysis and interpretation of the FGD data and design of the interviews and other methods are invaluable. He will pilot and roll out the semi structured interviews and survey after the exchange visit.

Dr Nivedita Narain is involved in the overall conceptualisation of the research objectives and design, design of all the methods and in ensuring data quality.

She will lead the writing of the results from the FGDs. She will provide oversight to the entire process and particularly to the semi structured interviews, including setting the design of data and its collection and analysis in place. She will be closely involved with the identification of the research question and the literature review and background work to inform the research questions.

c. Interdisciplinarity (e.g. plants science PI exchange to support supply chain work)

The exchange visit enabled the team to work closely with Prof Nitya Rao and her associates around areas of food policy, nutrition well-being and health. It will also provide opportunities to learn about Professor Rao's current research in nutrition and to incorporate and learn from those methods. We have also linked with Dr Tomas Harrington of FP5 and built a possible research agenda around FPOs. At the same time Dr Narain and Mr Chakraborty could bring years of practitioner experience on development issues to the conversations for future research collaboration. Dr Narain also contributed through her considerable experience of management and social science research.

d. Global networks (e.g. PI exchange to build new links with a global millet network)

The GRTA award an outcome, linking with global networks.

Possibilities for linking with the John Innes Centre at UEA are a second example, especially as it may include Indian Universities and the research institutes in FP1/FP6 like MSSRF.

e. Addressing relevant challenges (e.g. gender equality, health in rural communities)

The exchange visit being collaborative, between PRADAN in the field and various university actors, has a unique ability we believe to bring high end research and deep community practice together.