Call for Expressions of Interest:



Country-level studies of the dynamics of agricultural innovation in Colombia, Nigeria, Egypt and India

Scope of call

CGIAR Standing Panel on Impact Assessment is seeking Expressions of Interest (EoIs) from research teams interested in leading longitudinal research on the adoption and impact of agricultural innovations in Colombia, Nigeria, Egypt and a cluster of states in northern India including Odisha and Bihar. SPIA has identified these four countries as forming phase two of a program (that started with Ethiopia, Uganda, Vietnam and Bangladesh - see Phase 1 call for EoIs) that aims to build a panel in which detailed agricultural modules are integrated in nationally-representative household surveys.

The core research questions that guide this work focus on CGIAR innovations and include:

- What is the reach of improved agricultural innovations in country X? (i.e. what share of households / communities are using new agricultural innovations?)
- How does the adoption of innovations vary over time? Which kinds of households adopt / adopt then disadopt / never adopt these innovations? Is adoption correlated with particular dissemination programs by government / NGOs / private sector?
- When an innovation is shown to have been adopted at a large scale, what are its impacts on individuals, households, markets, the agri-food system writ large, and/or the environment?
- How can new measurement approaches (e.g., remote sensing, DNA fingerprinting, text mining, etc.) be deployed for tracking adoption of innovations at a national scale?

For each country study, we aim to contract over a six-year period (3+3 years, with a mid-term evaluation) starting late 2024 or 2025. Given the nature of the work, we expect the strongest research teams to have excellent local collaboration partners and involve researchers from multiple disciplines, including economics, other quantitative social sciences, and biophysical sciences (e.g., genetics, soil science, health/nutrition). Researchers from CGIAR institutions are **not** eligible to apply with an EoI. We anticipate these being significant research grants of up to \$3 million USD per country over a six-year period, but final budget limits will be announced at the full proposal invitation stage.

Background

Innovations that raise the productivity and/or increase the resilience of food systems are an essential component of development pathways for most countries. <u>CGIAR</u> is a global network of research centers implementing a strategy of "Transforming food, land, and water systems in a climate crisis." At the heart of the strategy is the development and dissemination of innovations that can contribute to such transformations, cutting across the specialized domains of crop and animal agriculture, and the management of natural resources. By focusing on some key geographies for the global agricultural research system we can collect high-quality data on the adoption of innovations at a national policy-relevant scale, and with an eye on the long-term dynamics of change.

The CGIAR Standing Panel on Impact Assessment (SPIA) is an external, impartial panel of experts in impact assessment appointed by, and accountable to, the CGIAR System Council. SPIA is responsible for providing rigorous evidence of the reach and causal impacts of CGIAR research and for providing independent strategic advice to the CGIAR System on efficient and effective impact assessment methods and practices. In May 2023, the CGIAR System Council approved the SPIA workplan for the period 2024 – 2030 in which a central pillar is the scaling up and institutionalization of SPIA's portfolio of country studies. These are studies aiming to quantify the *reach* of the CGIAR system in high-priority countries around the world. To date, SPIA has developed and implemented this approach in four countries: Ethiopia, Uganda, Vietnam and Bangladesh. We refer to this group as *Phase 1* countries. The current call document focuses on expanding this research agenda to four new countries (i.e. *Phase 2*), namely Colombia, Nigeria, Egypt, and a cluster of states in northern India.

Please do not hesitate to contact SPIA with any questions you have about preparing an EoI. Emailing <u>spia@cgiar.org</u> is the best way to reach us – we will get back to you promptly.

Deliverables

- 1. A detailed stock-take excel table that lists CGIAR innovations (see definitions below and guidance document <u>here</u>)
- 2. At least two rounds of nationally representative household panel survey data (over a 6-year period) generating estimates of adoption of CGIAR-related agricultural innovations.
- 3. At least two summary reports (one for each three-year contract) that describe and contextualize the data generated from the survey described in 2.
- 4. An impact evaluation plan (after the third year) derived from pilot research carried out through the grant, or analysis of the data collected in 2 along with other secondary data. The proposed impact evaluation should focus on CGIAR-related agricultural innovations, and it should use rigorous tools for causal inference.
- 5. At the end of year six, at least one research paper that leverages the panel structure of the data and/or additional sources of variation (experimental or quasi-experimental) to estimate the impact of a particular CGIAR-related agricultural innovation.

Process

EoIs are welcomed following the steps in the timeline outlined in the box.

SPIA will evaluate the submissions and invite interested researchers to join more detailed discussions about potential full proposals. Criteria for evaluation of EoIs (and eventually the full proposals) include the following:

- expertise of the proposed team (considering country, thematic, and methodological expertise)
- research and public-good track record of researchers in the proposed team
- demonstrated record of publications in high-quality journals
- synergies with existing work
- evidence of motivation
- proposed methods and approaches, within the framework described in this call

Any full proposals that are eventually requested and received will then be subjected to rigorous external peer-review. While EoIs for all Phase 2 countries will be due on 31 January 2024, invitations and deadlines for full proposals will be staggered over several months. Successful contracts will be for an initial three-year period starting in 2025, renewable for a further three years subject to satisfactory performance as determined by the SPIA Chair and Panel in a mid-term evaluation towards the end of the first three-year cycle.

Format

EoIs are to be submitted using our web form which will have fields as follows: description of key individual(s); country, or set of countries, the application is for (EoIs can address more than one country study); specific role sought (full study, advisory, operational, other); comparative advantage; proposed methods and approaches; innovation ideas about data collection and/or methodology. The EoIs will be short (less than 1,000 words) and standardized in format.

Phase 2 EoI timeline – Key dates

ASAP: Register for a webinar here

By 5 Jan 2024: Submit questions for us to address in the webinar

9 Jan: Webinar with Travis Lybbert and James Stevenson (9am EST / 2pm London / 5pm Nairobi / 7:30pm Delhi)

15 Jan: Eol application portal goes live

31 Jan: Deadline for EoI submission

Feb-May: Clarifying discussions between SPIA and EoI researchers

June-July: Invitations will go out to prepare full proposals

Sept-Oct: Full proposals due

Oct-Nov: SPIA review of proposals and decisions

Dec 2024 - Jan 2025: Contracting

Contracts to begin ASAP after 1 Jan 2025

Webinar for applicant Q&A

SPIA Senior Research Fellow James Stevenson and SPIA Chair Travis Lybbert will be hosting a webinar on Tuesday 9 Jan 2024. We will give a short presentation and answer any questions that prospective EoI applicants may have. <u>Please submit questions</u> in advance here. The website for this Call will be updated with additional clarifications and FAQs to reflect this virtual discussion.

What is a SPIA country-level study?

In the period 2015 – 2022, SPIA developed and refined a set of common research activities that form SPIA's country study approach, and that together result in comprehensive evidence of the reach of CGIAR innovations at the country level. This set of research activities is outlined in Table 1 below. For Colombia, Nigeria, Egypt and India, the first step is to develop a "stocktake" of innovations. The methodology for doing this is described in guidelines <u>here</u>. The process involves collecting secondary data about CGIAR research activities at a national level, looking back over the previous two decades, then prioritizing specific innovations in terms of the indicative evidence that they have been adopted at large scale. Once populated, the stocktake provides the basis for transparent decision-making about data collection priorities for the country.

Our first such study was for Ethiopia (Kosmowski et al, 2020) and provides a model for other reports over the coming years. Such a report is a core deliverable at the end of each three-year contract cycle. However, if invited to prepare a full proposal, research teams will be asked to articulate their priority country-specific research questions and show how these are complementary to the objective of documenting the reach of CGIAR research in the country. Thus, there is considerable flexibility to deliver additional evidence outside the confines of the core country study report.

Country X: Main tasks	Year O	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	2024	2025	2026	2027	2028	2029	2030
		Contract period 1			Contract period 2		
Sub-contractor identification / contracting / hiring							
Stocktaking							
Policy consultation events (to prioritize research questions / get feedback)							
Measurement pilots							
Survey integration							
Analysis							
Reporting							

Table 1. Tasks and timeline for Phase 2 SPIA country studies

"Stocktaking" is a systematic inquiry into the scope of CGIAR research activity over the preceding 20+ years, with the goal of finding a longlist of CGIAR-related innovations that have been disseminated in the country and claims that the CGIAR system has influenced policy in the country. There is a particular focus on identifying those innovations that are expected to have reached a sufficiently large scale of potential beneficiaries to be worthy of further investigation through field data collection. Such an approach requires in-person engagement in-country and can be carried out largely by early-career researchers with the appropriate support and guidance of senior, experienced researchers for advice on methodology, but also for the convening power and connections to open doors at a high level (in government, within the community of research funders, CGIAR leadership, etc).

"Survey integration" refers to the incorporation of a range of data collection protocols into national -representative longitudinal surveys with the objective of rigorously measuring adoption of CGIAR -related innovations¹. A variety of measurement approaches have been used. Sampling plant material allows for DNA fingerprinting of the varieties of the main crops of interest and is central to this effort, as are the incorporation of appropriate measurement tools for livestock-related innovations, natural resource management and policy/institutional innovations. By incorporating all major CGIAR -related innovations into a nationally representative survey – either an existing suitable survey (first best) or, if not feasible, an independent survey – we can obtain a unique system-level picture of the reach of CGIAR.

SPIA will provide some well-tested protocols for implementing parts of this overall effort that can help lower the learning costs for research teams where parts of this overall agenda are new or daunting. For a number of innovations, novel or best practice data measurement approaches may first need to be validated before being scaled. This provides scope for both measurement-focused pilots (to study the feasibility of these approaches) and/or measurement experiments that look to study the impact of measurement error on parameter estimates. National Agricultural Research Systems (NARS) are critical partners, particularly in relation to CGIAR innovations in crop germplasm – notably in supporting the assembly of reference material for genotyping.

One or more independent academic institution(s) with a clear public goods mission will be in the lead in each country, with responsibility for coordinating inputs from other organizations in a partnership. While there is a minimum set of activities that is expected of each research team, the contracts will be tailored to address specific research questions in each country including both measurement experiments (e.g. Beaman and Dillon, 2012) and studies addressing causal impact questions. We consider each country study a foundation for rigorous research on many facets of agricultural innovation and development.

Country study support team

•

A core country study support team, directly supervised by the SPIA Chair and employed through CGIAR center hosting arrangements will provide core technical support to the consortia, including:

- Liaise with CGIAR leadership and funders
 - Including scientists in target countries, but also those helping track down those who were involved with CGIAR research work in the target country, but have since moved on
- Liaise with core implementing partners and vendors (including LSMS, genotyping services)
- Define core methodologies with standard protocols including but not limited to:
 - Stocktaking methodology
 - Plant / animal tissue collection protocols for farm surveys
 - Reference library collection
 - Provide ongoing advice and technical backstopping to research teams as needed
- Assist in interpretation of output e.g., bioinformatics analytical capacity
- Assist in dynamic decision-making about follow-up research and related measurement experiments
- Organize synthesis across countries / themes to promote use of evidence
- Organize synthesis of methodological lessons learned, with the objective of developing guidance for wider audiences on methods and tools

The team responsible for these functions and representing SPIA's interests includes a Principal Scientist with overall managerial responsibility for the work program; and advisors for scientific backstopping to the consortia on cross-cutting but specialized methodological issues such as bioinformatics, and common data collection tools and methods; and a lead for CGIAR-facing communications.

¹ <u>Kosmowski et al (2020) Ethiopia country study</u> clarifies how the CGIAR-related innovation included in the country work are identified. "An innovation must have used input from research conducted by teams that included CGIAR scientists. An innovation must also be novel to its user s. Finally, for our purposes, an innovation must have a distinctive, observable feature that makes it measurable in a survey." Given the objective is to measure the reach of CGIAR on the ground (i.e. with farmers, communities, consumers, etc.) innovations whose end users are other researchers are not considered, which is an important distinction with the coverage of innovations in the CGIAR results dashboards.