Agenda Item 12
For Endorsement
Issued: 19 October 2022

New Workplan of CGIAR's Standing Panel on Impact Assessment (SPIA)

Purpose

This document is based on the presentation of the SPIA Chair to the System Council's Standing Committee on Strategic Impact, Monitoring and Evaluation (SIMEC) on October 5, 2022, and resulting discussions.

The document presents the current SPIA workplan, lists a number of new asks coming to SPIA from different stakeholders and presents ideas on how to address these new asks.

Action Requested

SPIA asks System Council for endorsement to develop, by the next System Council meeting, a new workplan and a re-organized model to respond to the new asks.

Document category: Working document of the System Council
There is no restriction on the circulation of this document

Prepared by: SPIA Chair supported by SPIA Secretariat in the Independent Advisory and Evaluation Service (IAES)

Photo: Nguyen Lam Tuan Anh

CGIAR Standing Panel on Impact Assessment

SPIA workplan going forward – what and how

Karen Macours

Chair, Standing Panel on Impact Assessment
Professor, Paris School of Economics & INRAE

Prepared for SC 17 (version Oct 17)

Current SPIA 6-year workplan, 2 business cycles

2019-2021

- Scoping, matching, preparation IA studies
- Design and launch:
  - Accountability studies
  - Learning studies
- Methods and country work

2022-2024

- Research findings from SPIA portfolio
- Insights from methodological development
- Broader use of rigorous methods

2025-2027 and towards 2030?

Objectives of the 6–year workplan

1) Support CGIAR's strong commitment to embed a culture of impact assessment into the System
2) Expand and deepen evidence of impact of CGIAR research investments
3) Improve and institutionalize collection of data on diffusion and use of CGIAR innovations in national data collection systems

Objective 1: Support CGIAR's strong commitment to embed a culture of impact assessment into the System

- Engaged with **One CGIAR Research Strategy,** associated **PRMF, and technical reporting,** providing specific inputs/comments
- Provided **advice to One CGIAR initiatives** on their impact assessment plans
  - through group and individual meetings with the SGD, initiatives teams and the engagement of the IA CoP
- Organized matchmaking to link external IA experts with initiative scientists (incl. workshops in Nairobi July 22, Cali Nov 22)
- SPIA supports **early career social scientists**
  - **series of webinars** to design rigorous IA studies
  - **small grants and fellowship programs** to address new research questions using existing SPIA datasets and working with IA academics
- SPIA engages a **broader IA CoP** through a variety of events. This includes non-IA specialists who use IA results and who make decisions about investing in generating them
- Communication of research findings and learnings to CGIAR System Council, Board, and Senior Leadership Team

All SPIA members involved

Objective 2: Expand and deepen evidence of causal impact of CGIAR research investments

- Focus on system-level impact through support to two distinct types of studies— accountability and learning— with different objectives and associated processes clearly aligned with One CGIAR PRMF

- Study teams built on partnerships between CGIAR researchers and academics

- See annex from SC 15 presentations for overarching lessons and evidence expected from studies in SPIA calls

Photo by: Habibul Haque/WorldFish Bangladesh

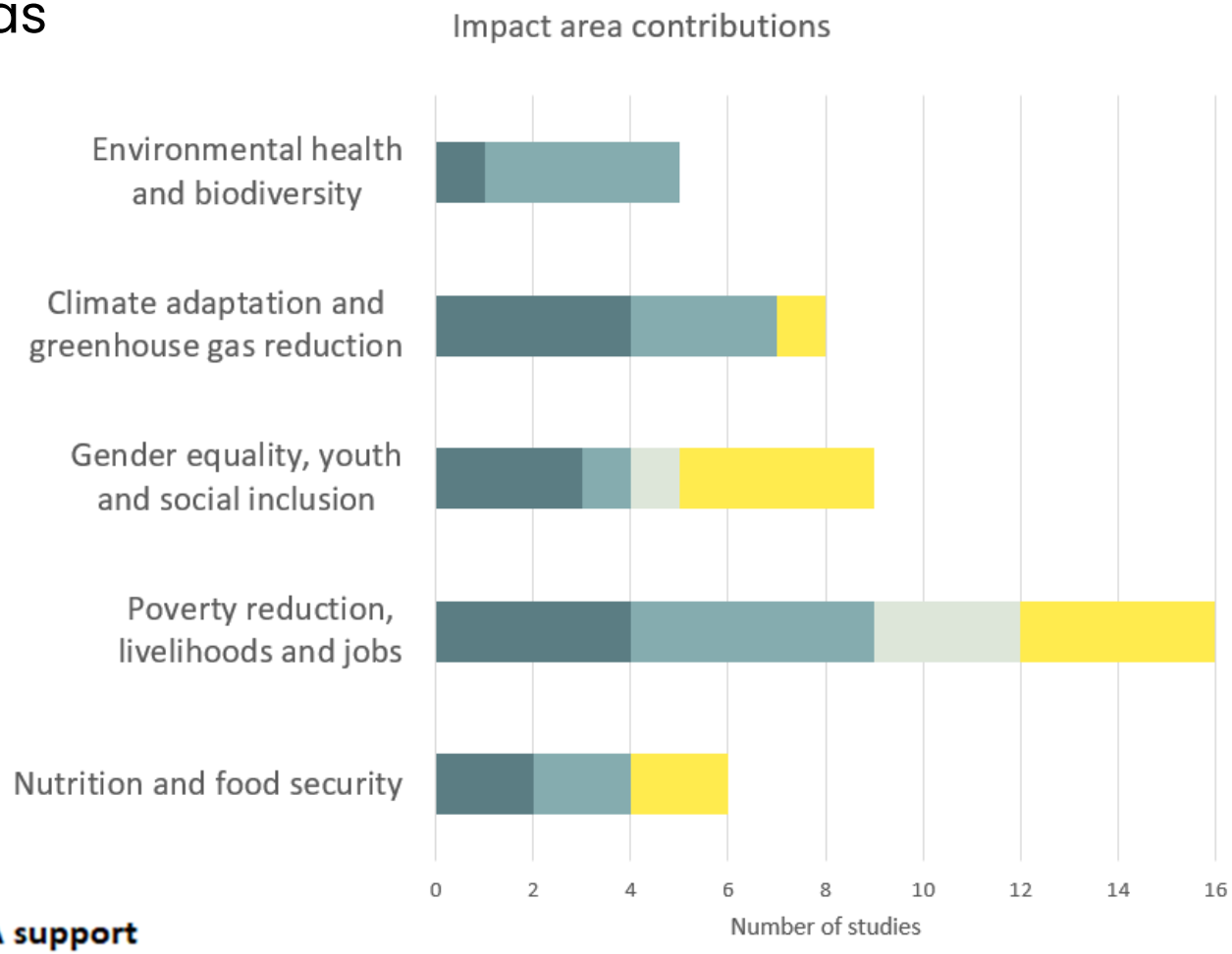
Timeline for evidence and impact areas

Accountability studies:

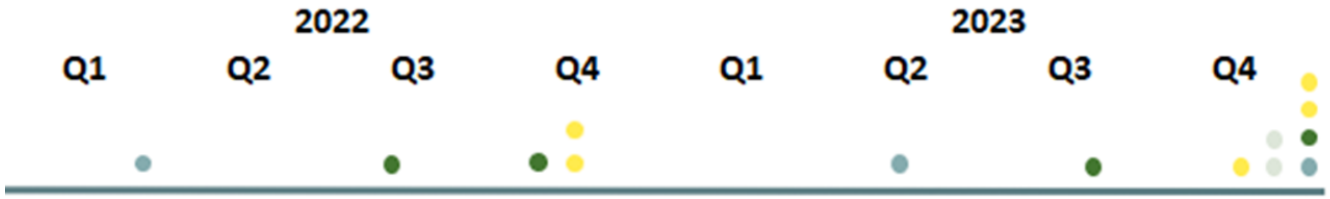
- **Long-Term, Large-Scale impacts**
SPIA panel lead: started by Prof J.V. Meenakshi
- **Environmental impacts**
SPIA panel lead: Prof Kelsey Jack

Learning studies:

- **Adapted Strategies to enhance uptake of CGIAR innovations**
SPIA panel lead: Prof Rachid Laajaj
- **Impacts of Digital Support Tools in Agriculture**
SPIA panel lead: Prof Kyle Emerick



Timeline for independent evidence from studies receiving SPIA support



Note: These graphs do not include pilot studies that are testing different questions to refine the design of full studies

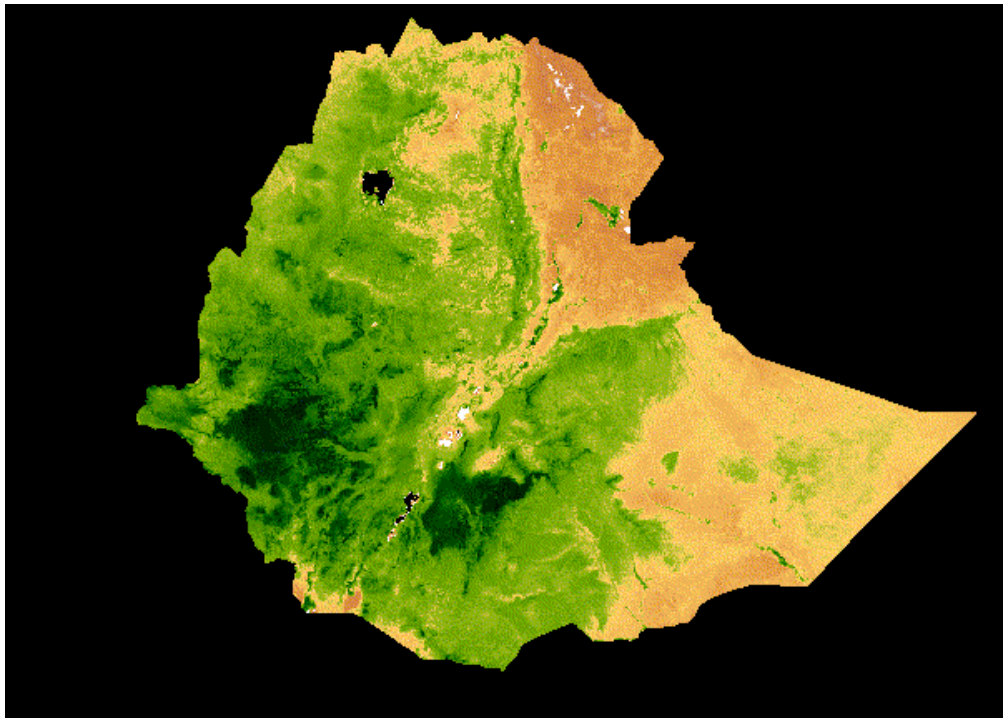
Objective 3: Improve and institutionalize collection of data on diffusion and use of CGIAR innovations in national data systems

- Strategy since 2014 to partner with national statistical agencies and World Bank's LSMS to embed data on CGIAR-related innovations in national representative panel surveys
- Focus on high-priority countries for CGIAR
  - Currently active in **Ethiopia, Uganda, Vietnam** and **Bangladesh**
- Document reach of CGIAR as a system: CGIAR-related technical and policy **innovations**, including
  - Synergies across innovations (~ bundles)
  - Who is reached: by poverty, gender, youth/smallholder status…
- Timeline for upcoming reports/evidence: 2023 & 2024 (See annex from SC 15 ppt)
- Testing different models of institutionalization, integration and partnerships
- Team with early career researchers hosted by CGIAR centers in 4 countries
  - working under guidance of SPIA panel members (Biradavolu, Emerick, Visaria in Asia; Lybbert, Macours in Africa), coordinated by senior researcher with support from secretariat

Cross-cutting: measurement & methodological agenda

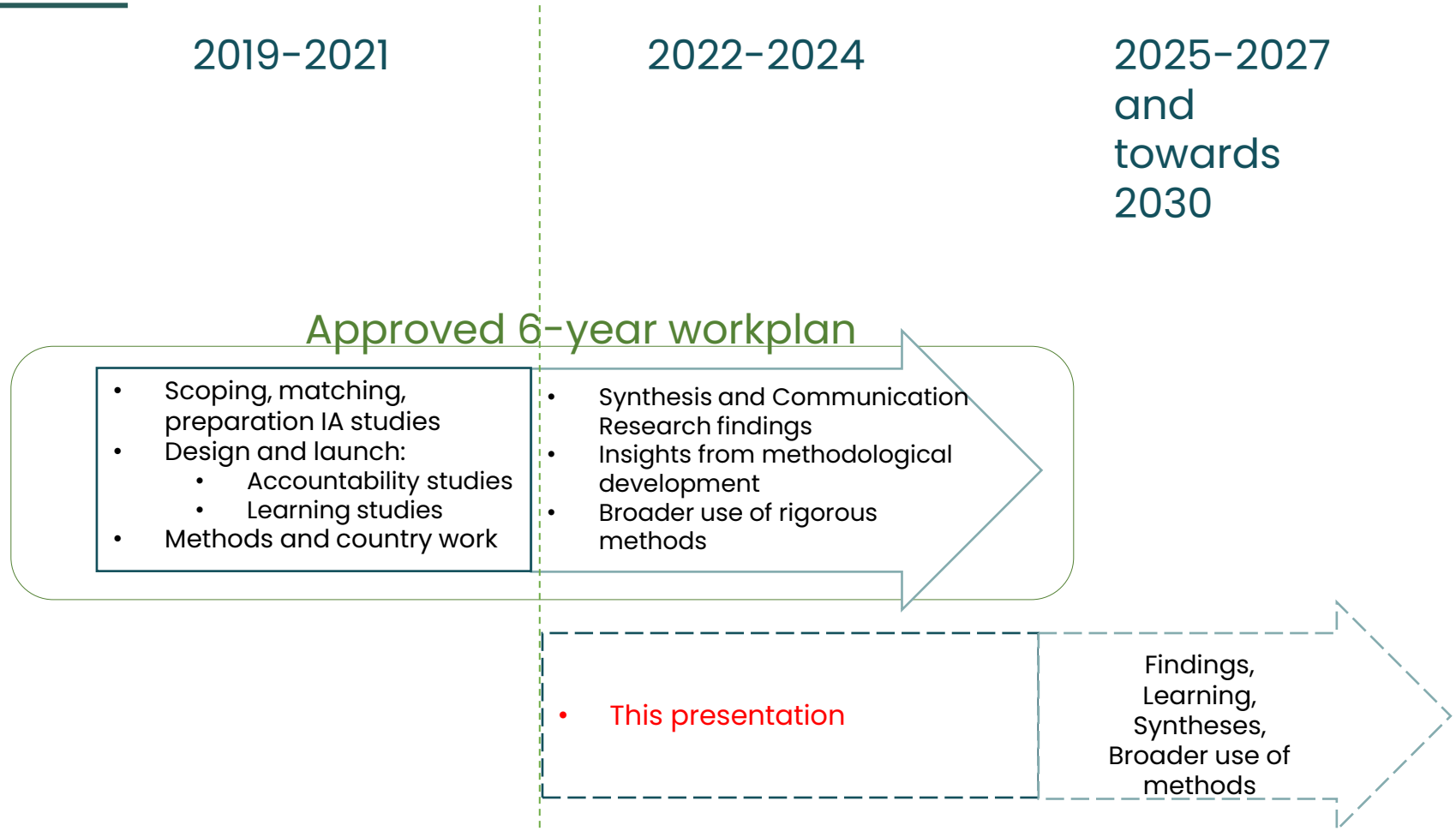
- New technologies provide new opportunities for how we measure adoption of CGIAR-related innovations and associated outcomes
- Methodological experimentation implicit to success of country work – how do we measure what we need to measure?
- DNA fingerprinting of crop varieties for up-to-date at-scale adoption estimates
- Remote sensing for impact evaluation: guideline document forthcoming
- Measurement guidance under development:
  - Policy influence
  - Adoption of complex NRM practices
  - Water management: Community mapping vs remote sensing
  - Livestock management practices and common property resources
  - Heterogeneity in soils

All panel members involved



NDVI animation of Ethiopia (credit: J. Pelletier)

New asks & broadened needs for evidence and advice



Why this discussion now?

Increasing number of new asks to SPIA

- Coming to SPIA from SC members, CGIAR leadership, PPU and researchers, CGIAR partners and other stakeholders
    - Some “big” asks → major implications for future workplans
    - Many “small” asks → add to bandwidth constraints

To assure IA evidence post-2024 need start planning

- Long timelines involved with design and implementation of rigorous impact assessment studies
- Ability to dynamically build on country work to document change in reach of CGIAR requires continued investment in teams and partnership

Getting on the same page

Important for SC to be aware of different asks and constraints identified

- “the what” on next slides identified in discussions with various stakeholders (indicated in bottom in red)
- “the how”, leading to ideas for re-organized operational model for SPIA

New asks: the what? Broadened needs for evidence and advice (1)


Photo: G. Smith/CIAT

- By 2030, will need evidence on returns to investment in the One CGIAR portfolio
  - **Country-level studies** documenting **reach** of technical and policy innovations from across the portfolio provides a good base to build such **system-level evidence**
  - In **4 priority countries** where SPIA started country work (Bangladesh, Ethiopia, Uganda, Vietnam)
    - Investment in partnership, team and stocktakes done or in progress
    - Measures built into national representative panel surveys to provide an initial estimation (~ 2022)
    - Data collection rounds in coming years allow to
      - Follow-up on dynamic changes, and to incorporate innovations coming from the new portfolio and/or other investments
      - Provide a "final" estimate by 2030
    - Identification of innovation with high reach allow for design targeted causal IA studies for new RoR calculation based on big wins (see next slide)
  - Expand approach to **additional priority countries** (list to determine based on focus One CGIAR initiatives and input from SC and other stakeholders)
  - Strengthen capacity of local early career researchers and link with universities in Global South

Based on prior discussions with SC members and CGIAR science leaders and researchers, CGIAR partners

New asks: the what? Broadened needs for evidence and advice (2)


Photo: G. Smith/CIAT

- By 2030, will need evidence on **different types of investments** in One CGIAR portfolio
  - Considering shifting landscape of global food crisis
  - Methods development and refinement
    - Impact of policy & systems research and capacity building activities
    - Mixed methods approaches for complex innovations, impact pathways and outcomes (including resilience, climate adaptation, etc.)
    - Global estimates
      - SPIA proposes new ROR calculations for One CGIAR's diversified portfolio, based on rigorous causal estimates for big wins, adapted to uncertainties inherent in innovation system (~ SPIA approach)
    - Cost-effective methods to obtain valid, reliable and up-to-date national-representative data of reach
      - e.g. combining machine learning methods with high quality ground-truth data for adoption resilient or nutrient-enhanced crop varieties

Based on prior discussions with SC members, CGIAR science leaders and researchers, CGIAR partners

New asks: the what? Broadened needs for evidence and advice (3)

Photo: G. Smith/CIAT

- By 2030, will need evidence on causal impacts in **5 impact areas**

→ Design & launch new set of independent IA

  - Work with M&E experts in System to coordinate collection of monitoring data of scaling efforts that can be used as input to design for long-term large-scale impact estimates of potential "big wins" by 2030
    - Prospectively work with scaling partners to know where, when, for whom, why scaling efforts rolled-out
  - Long-term follow-ups on experimental designs to study long-term impact with combination of remote sensing, existing secondary and targeted primary data collection
    - Environmental health and biodiversity synergies and trade-offs
    - Climate adaptation and GHG emissions
    - Nutritional, food security and health gains
  - Gender and social inclusion - differentiated impacts & innovations designed for women and youth

Based on prior discussions with SC members, CGIAR science leaders and researchers, PPU, CGIAR partners

New asks: the what? Broadened needs for evidence and advice (4)

Photo: G. Smith/CIAT

- Inform and advise SC, SB and SLT based on new research findings and impact evidence
- Methodological support to impact assessment of initiatives
  - Follow-up on matchmaking with external experts for studies testing ToC
    - Support PhD students with the right training in impact assessment and interested in CGIAR research questions to bring them closer to CGIAR
    - Peer-review on designs to increase possibilities to leverage external funding
  - Testing and comparing innovation scaling approaches in real-world
  - Engage with GSD, PPU and SC members on IA in initiatives, including on
    - Cross-cutting questions (e.g. evidence on different sustainable intensification approaches)
    - Methods
    - Resources & Prioritization
  - Support use of data generated through country work to test ToC (building on experience of small grants in Ethiopia)
- Support to IA for large bilateral projects
  - With CGIAR
  - Related to CGIAR impact & reach
- Advice on system-level reporting

Based on prior discussions with SC members, CGIAR researchers, leadership, and PPU

New asks: the what? Broadened needs for evidence and advice (5)

Photo: G. Smith/CIAT

- Support strengthening social science for impact in One CGIAR
  - One CGIAR aims to have ambitious impacts at scale across a range of impact areas
  - Will require strong social science research to
    - Help understand real-world constraints to scaling
    - Design & test scaling strategies to address them
  - CGIAR currently faces challenges in recruiting and retaining high quality social scientists
  - At the same time:
    - An increasing number of social scientists and multidisciplinary programs in top advanced research institutes (ARIs) across the world engage in research that speaks directly to the One CGIAR priorities

→ Program to strengthen linkages between ARIs with expertise in applied social sciences and IARCs

→ Through engagement of early career researchers from Global South under different collaborative models

Based on prior discussions with SC members and CGIAR partners

New asks: the how?

Prerequisites for any model

Photo: N. Palmer/The Alliance

Start from existing strengths, which help explain why new asks are coming to SPIA

- SPIA : leading researchers in impact assessment and external to the CGIAR system
  - Guarantees the independence of the advice
  - Contributing with credible and rigorous evidence on CGIAR reach and impacts
- Academic reputation of panel members allows to leverage external networks
  - For matchmaking with wider set of IA experts (and potential to leverage other funding opportunities for IA)
  - Collaborations with World Bank's LSMS team & 50x2030 partners for country work
- Well-connected and with expertise recognized by actors at different levels in the One CGIAR system
  - Needed to identify and respond to needs & for advising the system
  - Needed to assure effective communication of evidence-based lessons and advice to various stakeholders
  - Given complexity of CGIAR, need impact assessment researchers familiar with the system to support the panel and the implementation of the SPIA work plan
  - Links to network of IA focal points in centers
- Based on understanding that impact assessment is social science research, requiring different skills and incentives than M&E

New asks: the how?

Towards a more effective and efficient organization model for SPIA(1)

Photo: N. Palmer/The Alliance

1) SPIAs multiple mandates: advice, scientific evidence generation & methodological development

- In theory : very important synergies
- Currently in practice: bandwidth constraints resulting from SPIAs operational model imply trade-offs
- Re-organization needed to allow SPIA to fulfill its mandate in light of new asks

New asks: the how?

Towards a more effective and efficient organization model for SPIA(2)

Photo: N. Palmer/The Alliance

2) Strains on the current SPIA organizational set-up

- Institutional
  - SPIA's centralized management leading to bottlenecks
  - Hosting agreements with CGIAR centers not allowing for adequate in-country operational support. Constraints on contracting, data collection activities, etc.
  - Fragmentation of SPIA's interactions with CGIAR science leadership limiting ability to build common understanding around impact assessment at leadership level
- Financial
  - Common-pool SPIA funding & workplan doesn't allow reacting to new asks even if within mandate and even when additional funding may be available
    - Missed opportunities
    - Increasing bandwidth constraint as SPIA members and researchers provide advice, outside of current workplan
- HR
  - 7 SPIA panel members in ARI: 180 days/year (less than 1 FTE)
  - Country teams with early career researchers, coordinated by 1 senior researcher
  - 2.7 FTE dedicated support to panel and country teams (but also with asks as IAES staff)

New asks: the how?

Towards a more effective and efficient organization model for SPIA(3)

Photo: N. Palmer/The Alliance

A new mixed organizational model with responsive capabilities

- SPIA: continues as hub for independent impact assessment evidence and advice for One CGIAR system
  - SPIA advice to SC*, global science areas and other system actors
  - Strengthen IA Community of Practice to increase efficiency of IA in the system
  - Centralized decision-making on portfolio and assuring synergies between evidence generation, methodological development and capacity strengthening

- **Decentralize** the operational support and staff to implement under SPIA member direction:
  - Independent evidence generation
  - Methodological development
  - Capacity strengthening

*and dependent on System Council decision, broader CGIAR governance

New asks: the how?

Towards a more effective and efficient organization model for SPIA(4)

Photo: N. Palmer/The Alliance

A mixed organizational model could include

- Subcontracts to SPIA panel members' home institution or partner organizations (centers or ARI, including in Global South) for well-identified parts of SPIA workplan
  - To decentralize and localize support functions, staff and decision-making
  - With direct oversight by a SPIA panel member
  - With mechanisms for coordination among all panel members

  => Assuring capacity to maintain SPIAs key role in advancing new IA methods through demonstration of Proof-of-Concept (as was done with Ethiopia report)

- **New funding model: mix of pooled and bilateral funding**
  - Under full cost-recovery principle
  - Allowing for rapid decision-making

  For activities that are **within SPIA mandate**

- With governance structures to mitigate risks

Discussion

SPIA asks SC

- for endorsement to develop, by next SC, a new workplan and a re-organized model to respond to new asks

Thank you

www.linkedin.com/company/iaes-cgiar/

@cgiarspia

www.iaes.cgiar.org/spia

Independent Advisory and Evaluation Service

CGIAR Standing Panel on Impact Assessment

Annex: slides on SPIA pipeline from SC 15 ppt

SPIA pipeline – upcoming evidence and way forward in One CGIAR

Karen Macours
Chair, Standing Panel on Impact Assessment
Professor, Paris School of Economics & INRAE

9 March, 2022

Photo Credit: C de Bode CGIAR

Introducing SPIA and its mandate

Photo: G. Smith/CIAT

- CGIAR Standing Panel on Impact Assessment are Independent experts with mandate to
  - Expand and deepen evidence of impact of CGIAR research investments
  - Support CGIAR's strong commitment to embed a culture of impact assessment into the System
- Supported by SPIA Secretariat (hosted at IAES) and the national data systems team (at different CGIAR centers)
- Works with a wide network of collaborators
  - IA Focal Points in centers/CRPs
  - CGIAR researchers and research managers
  - IA researchers inside and outside CGIAR who implement studies

Standing Panel on Impact Assessment: **Who we are?**

Karen Macours
SPIA Chair
Paris School of Economics & INRAE

Kyle Emerick
Panel member
Tufts University

Sujata Visaria
Panel member
Hong Kong University of Science and Technology

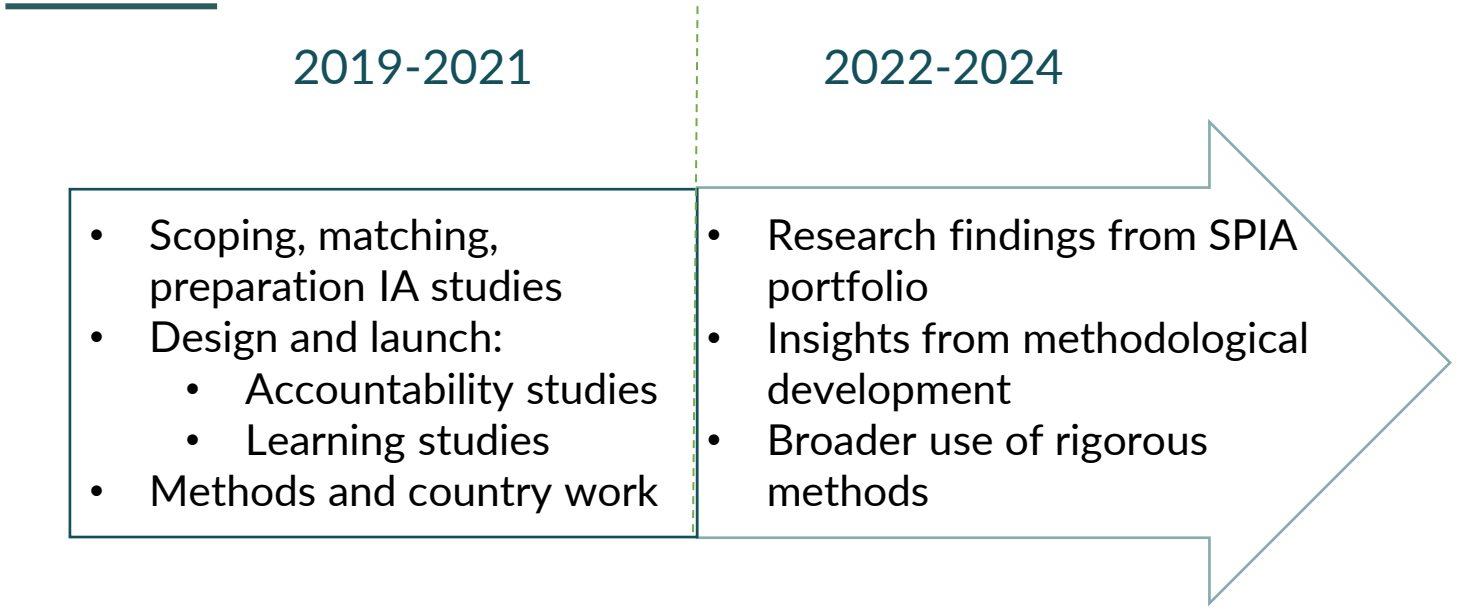
Kelsey Jack
Special Initiative member
University of California Santa Barbara

Rachid Laajaj
Special Initiative member
University of Los Andes, Bogota

Travis Lybbert
Special Initiative member
University of California Davis

Monica Biradavolu
Special Initiative member
American University & QualAnalytics

Current SPIA 6-year workplan, 2 business cycles



Objectives of the 6 –year workplan

1) Support CGIAR's strong commitment to embed a culture of impact assessment into the System
2) Expand and deepen evidence of impact of CGIAR research investments
3) Improve and institutionalize collection of data on diffusion and use of CGIAR innovations in national data collection systems

Objective 3: Improve and institutionalize collection of data on diffusion and use of CGIAR innovations in national data systems

- Strategy since 2014 to partner with national statistical agencies (and World Bank)
  - Primary goal: Embed CGIAR data needs into well-institutionalized surveys
  - Secondary goal: Empirically test new data collection approaches and provide guidance for researchers to use them
- Focus on high-priority countries for CGIAR
  - First in **Ethiopia** and **Uganda**
  - **Vietnam** (operational) and **Bangladesh** (starting mid-2022) added under current phase of SPIA's workplan
- National representative data allows to document reach of CGIAR-related innovations and policy influences, including
  - Synergies across innovations (~ bundles)
  - Who is being reached: inclusion by gender, but also youth, smallholder status, poor, …
- Testing different models of institutionalization, integration and partnerships
- Young virtual team led by senior researcher James Stevenson & SPIA Chair

Ethiopia

SPIA panel lead: Prof Karen Macours

- Ethiopian Socioeconomic Survey wave 4 (2018/19) completed with several data collection innovations embedded by Central Statistical Agency (CSA)
- Provided data for SPIA's 2020 report *"Shining a Brighter Light: Comprehensive Evidence on Adoption and Diffusion of CGIAR-related Innovations in Ethiopia"*
  - Evidence of large adoption across science domains (4 to 11 million household)
  - But also very skewed distribution – many innovations with low adoption
- 24,233 downloads of the 2018/19 dataset (as of Feb 23, 2022)

Pipeline:

- Causal impact studies for selected innovations (DSM, small mechanization)
- June 2022: IFAD conference session featuring best papers from small grants call using the wave 4 data
- Mid-2023: wave 5 (2021/22) data will be released, with follow-up report from SPIA on dynamics of adoption (with COVID, civil conflict in Ethiopia in the interim)

Universe of all CGIAR research in Ethiopia

- Natural resource management
- Animal agriculture
- Crop germplasm

- **90** interviews with CGIAR scientists, EIAR colleagues, government officials
- Review of published and grey literature, official statistics, NGO projects

52 innovations identified being at least at pilot stage: documented in the stock-take

+ **26** claims of policy influence (from CRP OICRs)

30 with information suggesting having been disseminated at scale

30 candidate innovations with "observable features" for either household or community survey

18 integrated into ESS 3/ESS 4 and the focus of the 2020 report

3 the focus of other nationally-representative studies

9 candidates for inclusion in future survey waves

Uganda

SPIA panel lead: Prof Travis Lybbert

- Partnership with Ugandan Bureau of Statistics (UBoS) and National Agricultural Research Organization (NARO)
  - Uganda National Panel Survey (UNPS) and Annual Agricultural Survey (AAS) being integrated together for first time in 2021/22 (part of 50x2030)
  - Integration of targeted measures in National Service Delivery Survey (NSDS) and Uganda Demographic and Health Survey (UDHS)

Pipeline:

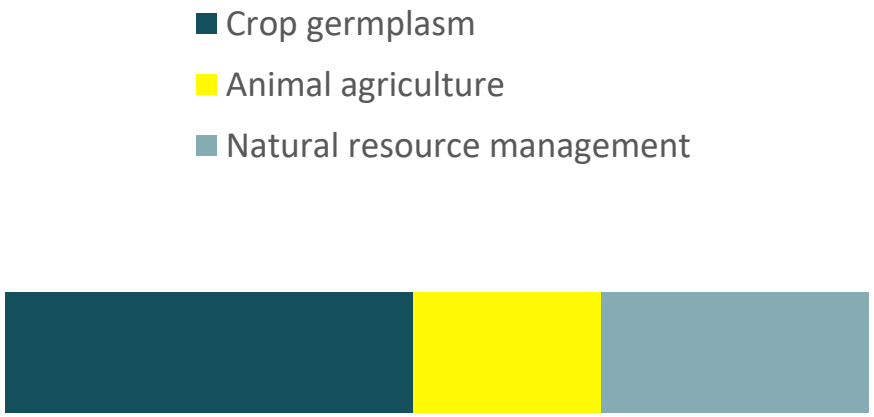
- 2023: Synthesis report on innovations and policy influence claims
  - Features DNA fingerprinting of plant samples of six crops:

    beans, sweet potato, cassava, banana, maize, groundnuts
  - Improved measurement of plant & livestock health– resistance and mitigation measures
  - Links to study on seed system functioning for beans & maize (CIAT & UC Davis)
  - Causal impact study building on biofortified crop monitoring data (with CIP&HarvestPlus)
  - Community-level measures of trees-on-farms, innovation platforms, food-safety, mechanization
  - Detailed study of selected policy influence claims

    Qualitative research being led by SPIA Member Dr. Monica Biradavolu

Universe of CGIAR-related research in **Uganda**

- Interviews with CGIAR scientists, NARO colleagues, government officials
- Review of published and grey literature, official statistics, NGO projects
- Consultation workshop (October 2019) to identify priorities



55 innovations identified being at least at pilot stage: documented in the stock-take

29 innovations included in 2021/22 UNPS/AAS integrated survey and/or 2021 NSDS survey

14 policy influence claims identified

Vietnam

SPIA panel leads: Prof Sujata Visaria and Dr Monica Biradavolu

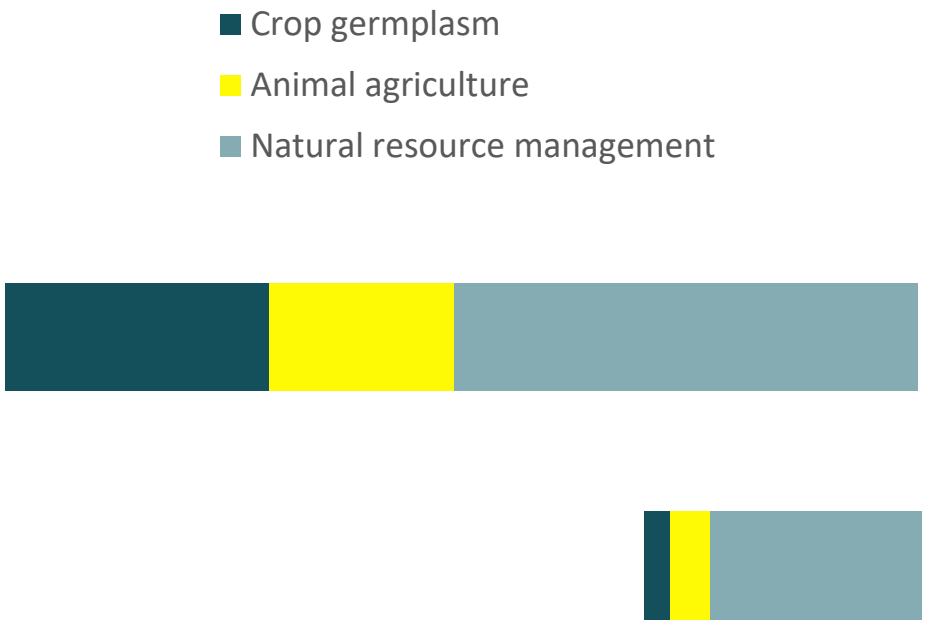
Bilateral partnership between SPIA and Vietnam General Statistical Organization (GSO) signed Dec 2021

Pipeline:

- Mid-2023: First report on three innovations (VHLSS), and data quality assessment / strategy
  - Initial phase (2022) focuses on innovations in rice-systems embedded in widely-used Vietnam Household Living Standards Survey (VHLSS):
    - Adoption of sustainable intensification principles (AWD and 1M5R)
    - Use of recommendations coming from the Climate Smart Maps and Adaptation Plans (CS-Maps)
    - Rice varietal adoption (using DNA fingerprinting)
- End 2024: Synthesis report
  - 2nd round of VHLSS data with wider range of innovations (TBC)
  - Study of influence of “climate smart maps” in provinces
  - Measurement innovations for studying adoption of complex NRM practices
  - Impact study on GIFT tilapia roll-out (TBC)

Universe of CGIAR-related research in **Vietnam** (2000-2021)

Preliminary



Animal agriculture includes aquaculture & food safety
NRM includes digital tools and mechanization

- 30+ interviews with CGIAR scientists and national partners
- Review of published and grey literature, official statistics, government decrees

27 policy influence claims

69 innovations identified in the stock-take

21 with information suggesting they may be adopted at scale

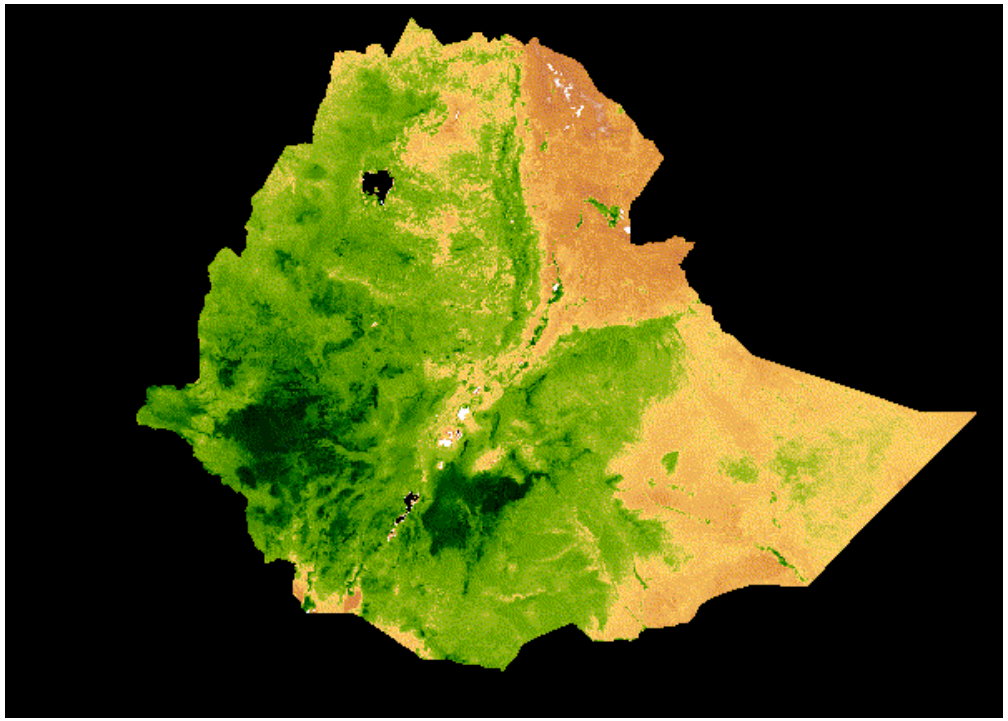
Bangladesh

SPIA panel lead: Prof Kyle Emerick

- Currently recruiting for two positions – one junior, one post-doc – to start mid-2022 (hosted at IRRI in Dhaka)
- Methodology will broadly follow the template of the other countries
  - To be combined with causal IA studies on selected innovations/policy influences
- Expected focus on climate change adaptation, women's empowerment, nutrition, aquaculture, rice, lentils, …

Cross-cutting: Measurement agenda

- New technologies provide new opportunities for how we measure adoption of CGIAR-related innovations and associated outcomes
- Methodological experimentation implicit to success of country work – how do we measure what we need to measure?
- DNA fingerprinting of crop varieties: technical guidance published 2020; field guidance for economists / social scientists coming in mid-2022
- Remote sensing for impact evaluation: guideline document expected mid-2022
- Measurement guidance under development:
  - Policy influence
  - Adoption of complex NRM practices
  - Community mapping vs remote sensing
  - Heterogeneity in soils



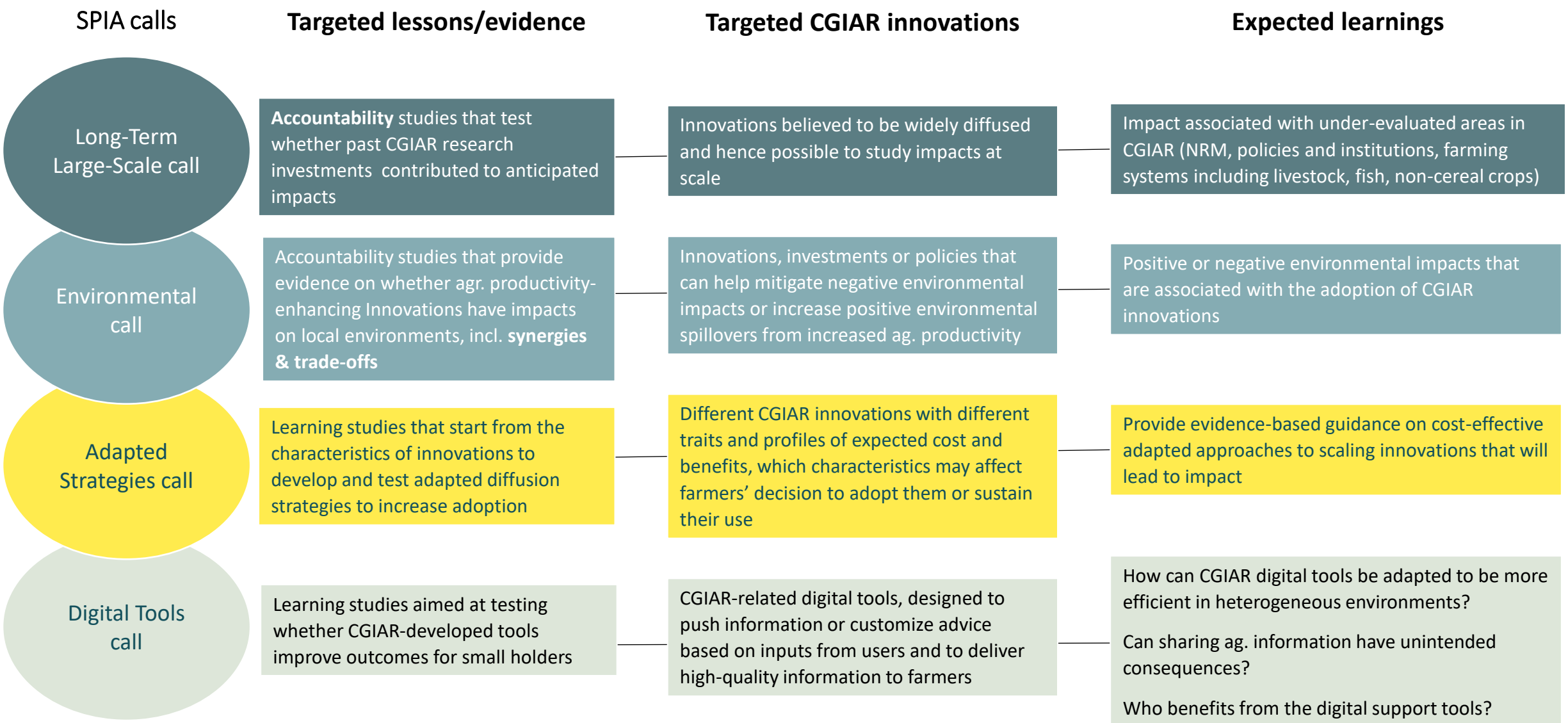
NDVI animation of Ethiopia (Johanne Pelletier)

Objective 2: Expand and deepen evidence of causal impact of CGIAR research investments

- Focus on system-level impact through support to two distinct types of studies— accountability and learning—with different objectives and associated processes clearly aligned with One CGIAR PRMF:
  - Four calls for proposals launched : Long-Term, Large-Scale impacts (2019), environmental synergies and trade-offs (2019), Adapted strategies to enhance uptake of CGIAR innovations (2020) and agricultural digital tools (2021)
  - 131 expressions of interest submitted by CGIAR centers and partners that became 25 full research proposals. 16 proposals were funded
  - Four proposals supported through a pilot phase to document the dissemination of the CGIAR innovations aiming to improve the research design.
- Study teams built on partnerships between CGIAR researchers and academics

Photo by: Habibul Haque/WorldFish Bangladesh

Overarching lessons and evidence expected from studies in SPIA calls



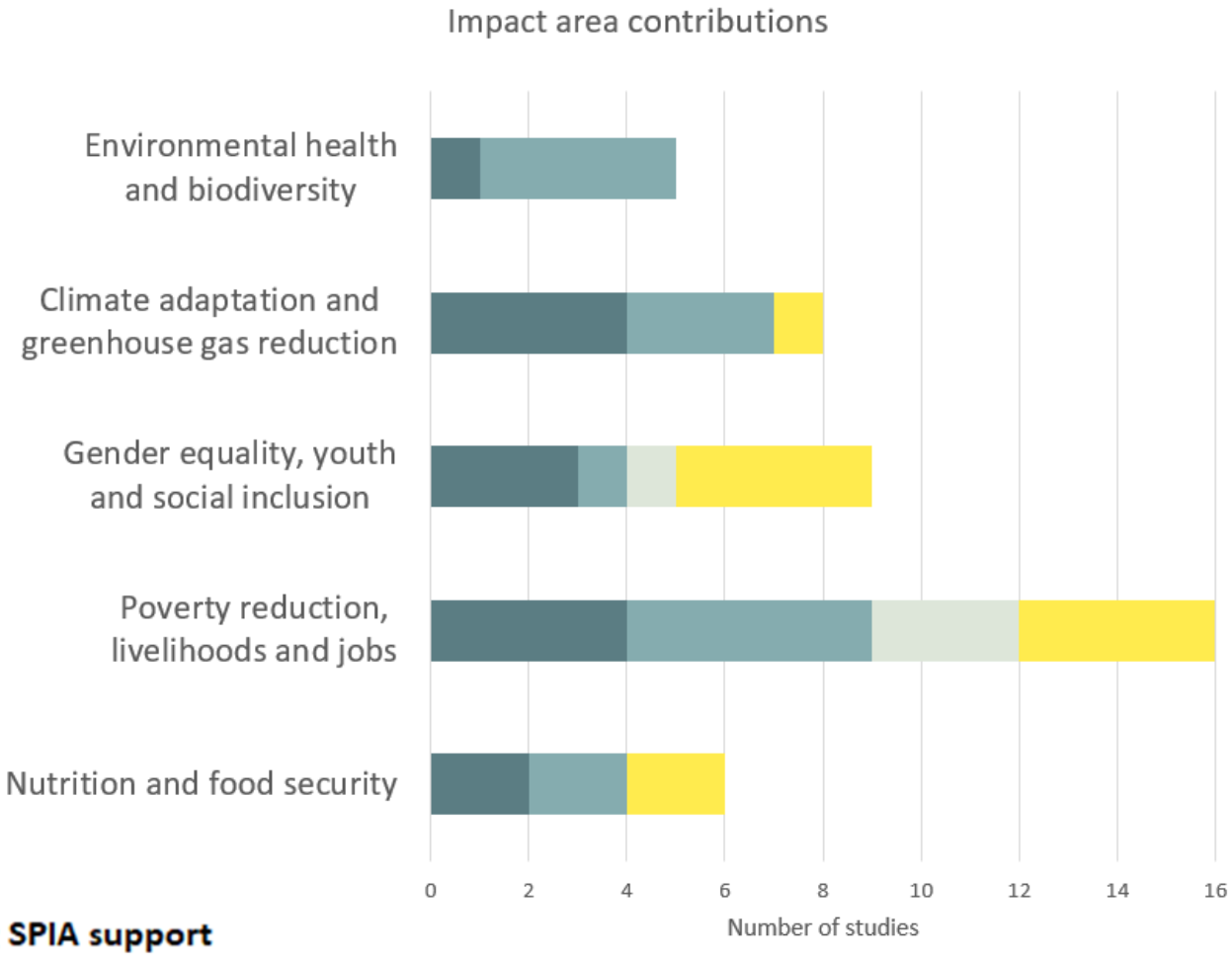
Timeline for evidence and impact areas

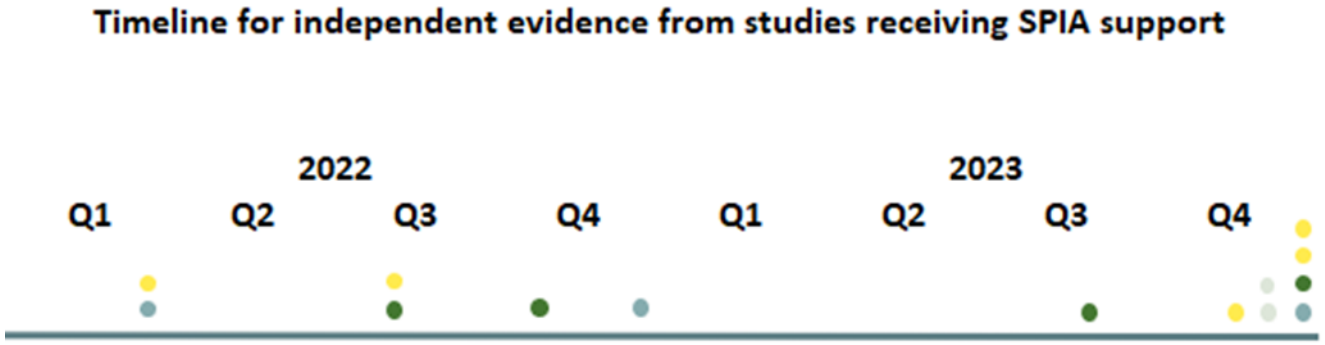
Accountability studies:

- **Long-Term, Large-Scale impacts**
SPIA panel lead: started by Prof J.V. Meenakshi
- **Environmental impacts**
SPIA panel lead: Prof Kelsey Jack

Learning studies:

- **Adapted Strategies to enhance uptake of CGIAR innovations**
SPIA panel lead: Prof Rachid Laajaj
- **Impacts of Digital Support Tools in Agriculture**
SPIA panel lead: Prof Kyle Emerick





Note: These graphs do not include pilot studies that are testing different questions to refine the design of full studies

Long-Term Large-Scale call

Innovation that CGIAR research contributed to	Expected impacts	Research questions
CGIAR research on collective action/ property rights informed a large-scale initiative of land restoration in India	Ecological & socio-economic impacts of land restoration	Has restoration caused positive/negative externalities? Who benefitted from land restoration? (by gender/ethnicity)
Stress tolerant Rice Varieties in Bangladesh	Enhanced yield resilience to improve food security and reduce poverty	Has adoption of STRV increased resilience of the poor to climate change shocks? Has adoption of STRV increased productivity, income, employment and food security ?
Index based livestock insurance (IBLI) in Kenya & Ethiopia	Sustained adoption and impacts on herd management and welfare	What has been the dynamics of adoption and dis-adoption of IBLI? Has the early IBLI coverage resulted in herd management and household welfare impacts?
Blast resistant wheat varieties in Bangladesh	Productivity and profitability impacts. Reverting decline of wheat cropping land	Do blast resistant varieties improve wheat yield and profitability? Does adoption change cropping patterns? Is there differentiated demand for improved seed?

Environmental call

Innovation that CGIAR research contributed to	Expected impacts	Research questions
Happy seeder, a second-generation conservation agriculture in India	Reduction in residue burning Reduction in air pollution Improved health impacts	Does the adoption of happy seeders reduce residue-burning rates? Would this imply reduction in CO, NO and CH gases? Does adoption result in health benefits through reduced pollution?
Index based livestock insurance (IBLI) in Kenya	Enhanced pastoralist resilience may exacerbate stocking rates and generate negative rangeland health effects	Are there unintended environmental effects of IBLI? How to measure rangeland health effects at scale? Is the scaling of IBLI exacerbating stocking rates and generating negative rangeland health effects?
Agricultural intensification (improved seeds, ISFM, seed treatment) in sorghum and millet systems in Mali	Does agricultural intensification lead to land sparing or to cropland expansion with negative effects on tree coverage?	Does intensification of sorghum and millet systems result in crop substitution (replacing cotton) or induces further deforestation? Do changes in productivity affect food availability and household income?

Note: These tables do not include pilot studies that are testing different questions to refine the design of full accountability studies

Adapted Strategies call

Innovation that CGIAR research contributed to	Challenges that may limit a widespread adoption of innovation	How ToC is being tested (research questions)
Machine harvestable chickpeas (MHC) varieties in India	Traditional varieties not suitable for harvester Lack of harvesters with adequate blades Field preparation for MHC is different Yield comparison with old varieties unknown	Can partial subsidy to book harvesters enhance their use? Can extension help to better-manage MHC varieties? Does varietal comparison enhance adoption?
East Africa livestock vaccine (ECV) in Kenya	Vaccines only economically viable when large number of cattle vaccinated simultaneously Vaccine administration expensive and require a certified vaccinator, unaffordable for individuals	How improved access to ECV affects vaccination rates? Does presence of check-offs system increase effect of access on vaccination rates? Effect on cattle investment, milk consumption & sales and profits?
Adapted motorized paddy weeder (AMW) in Uganda	Demand for AMW maybe limited due to failures in other input markets (fertilizer) If women primary labor provider, intra-household frictions may limit demand	Will adoption of weeder be higher if high quality fertilizer is also available? What are the options to effectively disseminate AMW minimizing the effect of the intra-household frictions?
Small-scale mechanization (SSM) in Ethiopia	Small mechanization is scarce and investing in this business may be risky High cost of traditional mechanization is unaffordable for small farmers	To what extent are supply and demand complementary or substitutable in scaling SSM? What set of affordable interventions are impactful in enhancing take up of SSM?
Sustainable Rainwater Harvesting (RWH) (demi-lunes) in Niger	RWH requires high constructions costs, intensive technical information a long-time frame to realize benefits Disadoption possible if benefits not in year 1	Can adoption of RWH be sustained overtime? Do training and cash transfers enhance adoption of RWH? Does adoption of demi-lunes improve soil quality?

Note: These tables do not include pilot studies that are testing different questions to refine the design of full learning studies

Digital Tools call

Innovation that CGIAR research contributed to	Key hypothesis in the ToC to be tested	Research questions
Picture based advisory (PBA) digital extension in India & Kenya	Picture submitted by farmers would increase the amount of information used by experts to provide preventive & curative advice Tailored advice would increase farmer knowledge on crop management Increasing farmer ownership of PBA will encourage adoption of both preventive and curative practices	Does tailored advice have an added effect due to increasing personalization? Is there heterogeneity in returns to tailored advice across age, gender, smart phone access, digital literacy?
Interactive voice response (Tugere Muhinzi) for improving market linkages of smallholders in Rwanda	Facilitate the linkage between farmers and buyers of produce by promoting sustained engagement Better market access would encourage shifting to high-value crops and adoption of irrigation, leading to positive effect on farm profits/welfare	Does the use of Tugere Muhinzi improves market intermediation? Is market intermediation complementary to a subsidy in irrigation technologies in cultivation of high value crops?
Group-based ICT extension support system in Peru	Shortage of extension services and remoteness of target areas create opportunities for ICT to deliver knowledge of modern ag. techniques Engage local focal points owning smart phones and having good linkages with community. Incentives (financial and social reward) to keep focal points engaged	Are community-based ICT models cost-effective in delivering inclusive ag extension in areas with limited access to smartphones? What kind of incentives are needed and how they should be awarded?

Note: These tables do not include pilot studies that are testing different questions to refine the design of full learning studies

Objective 1: Support CGIAR's strong commitment to embed a culture of impact assessment into the System

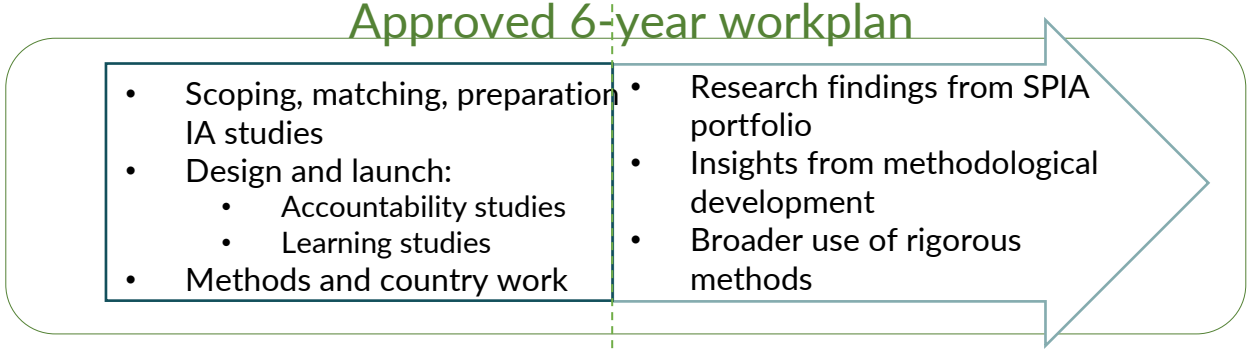
- SPIA engaged with **One CGIAR Research Strategy** and associated **PRMF** providing specific inputs/comments, some that were incorporated
- SPIA provided advice to One CGIAR initiatives on rigorous methods and approaches for their impact assessment plans, through group and individual meetings with the SGD, initiatives teams and the engagement of the IA CoP
- SPIA supports **early career social scientists** through a **series of webinars** to design rigorous IA studies and through **small grants and fellowship programs** to address new research questions using existing SPIA datasets and working with IA academics
- SPIA engages a **broader IA CoP** through a variety of events. This includes non-IA specialists who use IA results and who make decisions about investing in generating them


Photo by ICARDA 2019 Tesfaye Getachew Mengistu

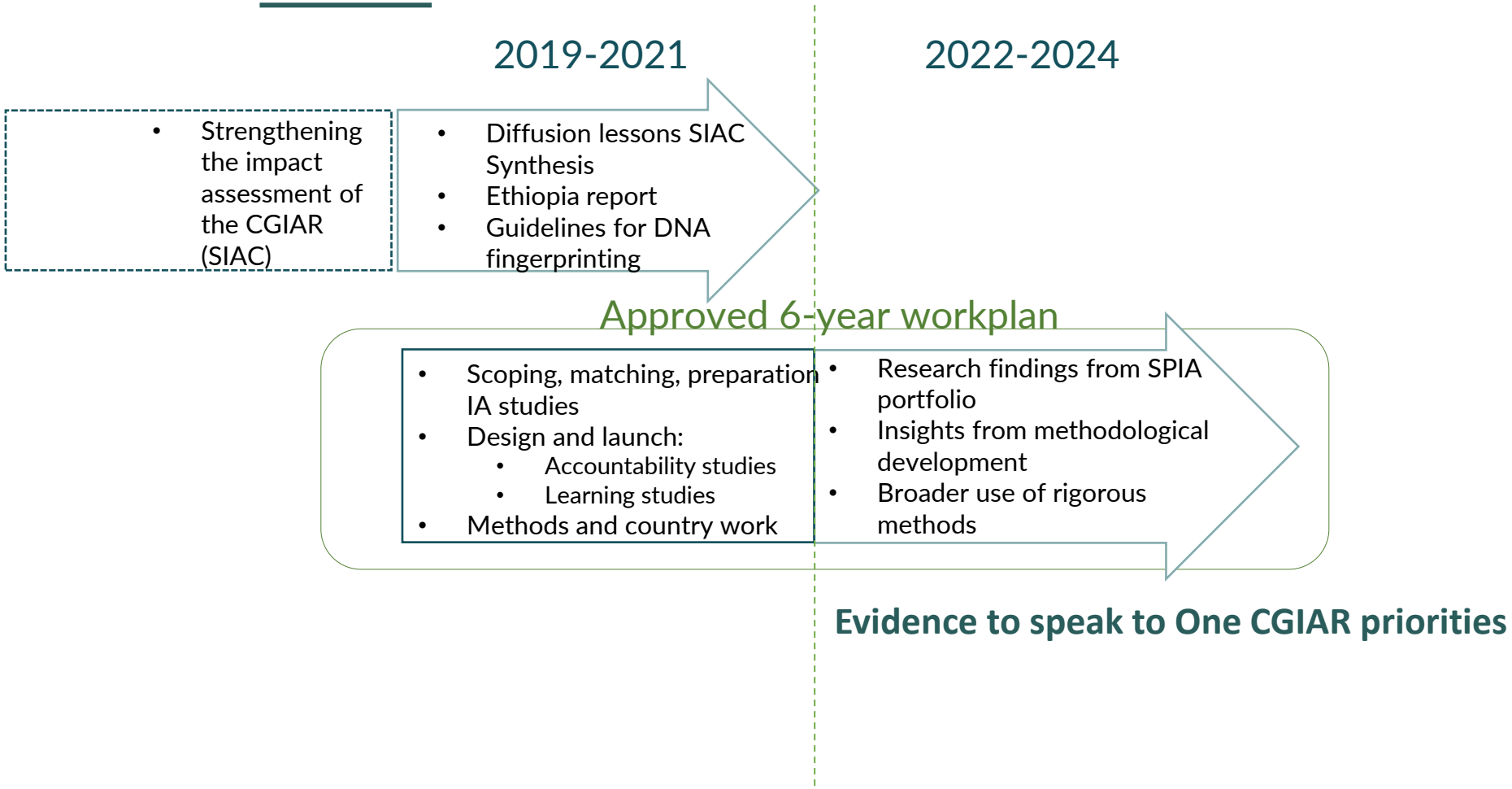
6-year workplan, 2 business cycles

2019-2021

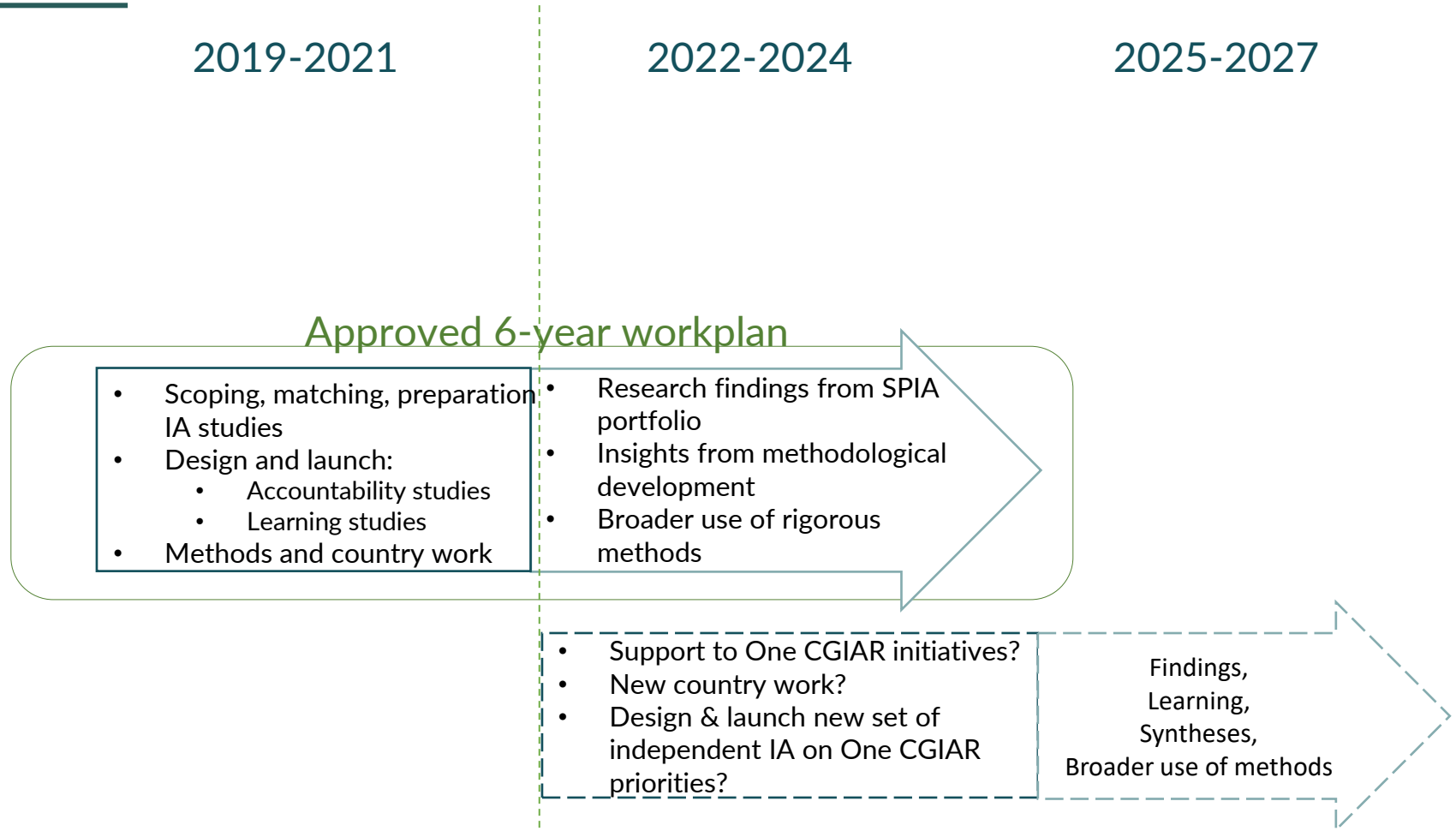
2022-2024



6-year workplan, 2 business cycles



But if there are new asks



Continuity over business cycles