Standing Panel on Impact Assessment

Doug Gollin, ISPC 12

FAO, Rome, 16 Sept 2015

CGIAR | Independent Science and Partnership Council

SPIA

Doug Gollin
Chair

Bob Herdt
Member

JV Meenakshi
Member

Erwin Bulte
Activity leader

Karen Macours
Activity leader

Secretariat staff (L to R): James Stevenson, Lakshmi Krishnan, Ira Vater, Tim Kelley
Not shown: Nuri Niyazi, Sarah Elven (consultants)

SPIA: Methods of engagement

Less than 3 FTEs of staff time and small contributions from academic members

Most work has been commissioned via competitive calls (a change from previous years)

- But with extensive intellectual oversight and engagement
- External review, inception workshops, frequent engagement

Strengthening Impact Assessment in the CGIAR: Overview

1) Adoption Methods	Crops: DNA fingerprinting	NRM: Drones, remote sensing, crowd sourcing	Private sector survey firms	Guidance as a system-wide public good
2) Adoption Filling gaps	Crops: S and SE Asia	NRM: Surveys of key technologies	Policy-oriented research claims	New partnerships for data (inc. LSMS-ISA)
3) Impact studies	Nutrition studies	Widely-adopted technologies	RCTs	Under-evaluated areas of research
4) Capacity-building	Quality rating system	University-CGIAR capacity-building	Workshops / conferences	Website

Impact assessment as input to system learning / prioritization

- SIAC portfolio was chosen to try and broaden and deepen impact assessment coverage and develop and test new methods

- Most activities are going to be on-going through end 2016 / mid-2017

- SPIA commit to give an interim report in Jan 2016 to try and influence CRP full proposals

- Full synthesis report on SIAC program: not until late-2017

Balance of conflicting impact assessment imperatives

- Greater rigour
- Improved coverage across research areas
- Learning (What works, where and why) vs Documenting and quantifying “successes”
- Transparency / open competition
- New partnerships – bringing in external expertise
- Building for the future

See handout for list of all current contracts under SIAC program…

SIAC ACT.	TITLE	LEAD ORGANISATION	AFFILIATED INSTITUTIONS	CONTRACT DATES		COMMENTS
				start	end	
OBJ.1/2	SIAC Obj 1 & 2 - Phase 1	MSU	none	01/03/13	20/01/15	7 month no cost extension requested
OBJ.1/2	SIAC Obj 1 & 2 - Phase 2	MSU	none	30/01/15	30/06/16	ongoing
ACT 4.2	New Partnerships	VIRGINIA TECH	CIP, CIFOR	16/01/14	01/02/16	ongoing
ACT 4.2	Strengthening IA	ICRISAT	Univ. Illinois	23/12/2014	30/09/16	ongoing
ACT 3.2	Drought tolerant maize	CIMMYT	UC Davis, IITA	16/01/2014	06/05/14	project finalised
ACT 3.2	Rainwater harvesting Niger	TUFTS	ICRISAT, CRS	20/03/14	01/02/16	delayed by one year (initially 01/02/15)
ACT 3.2	Integrated Soil Mng Kenya	PSE	IPA	17/01/14	20/03/15	finalised
ACT 3.0	Short duration rice Sierra Leone	IPA	none	28/08/14	31/12/16	delayed by one year (initially 31/12/15)
ACT 3.0	Dairy hubs Tanzania	ILRI	Emory Univ., SUA	19/09/14	31/07/16	ongoing
ACT 3.0	Crop diversification SSA	CIMMYT	Univ Goettingen Univ Geneva	15/10/14	31/07/16	ongoing
ACT 3.0	High iron beans Rwanda	CIAT	Virginia Tech	03/12/14	14/12/16	ongoing
ACT 3.0	Irrigated Horticulture Senegal	COLUMBIA	GWU	01/05/15	31/01/17	ongoing
ACT 3.2	Yield improvement Mexico	QFD	none	15/01/14	30/11/16	ongoing
ACT 3.2	Rice production Bangladesh	BERKELEY	IRRI	01/05/15	31/03/17	ongoing
ACT 3.2	Using Social Networks Nepal	YALE	ICIMOD,J-PAL, IPA	01/05/15	31/12/16	ongoing
Act 3.1	Cassava impact in Nigeria	IITA	none	01/06/15	30/06/17	ongoing
Act 3.1	Potato impact in China	CIP	Virginia Tech	01/06/15	31/12/16	ongoing
Act 3.1	CG res.imp.on pov.reduction	IFPRI	WorldBank	01/08/15	31/01/17	contract signature stage
Act 3.1	MV impact on health/nutrition	UC San Diego	GWU	01/07/15	31/12/16	ongoing
Act 3.1	Lentil varieties Bangladesh	ICARDA	Virginia Tech	01/07/15	31/12/16	ongoing
Act 3.3	Gender mainstreaming	TANGO	IFPRI	01/10/15	31/07/16	contract under negotiation
Act 3.3	Tilapia Philippines/Bangladesh	WorldFish	NARS Philippines/ Bangladesh	01/07/15	31/12/16	ongoing

Selection for reviewing progress since April 2015

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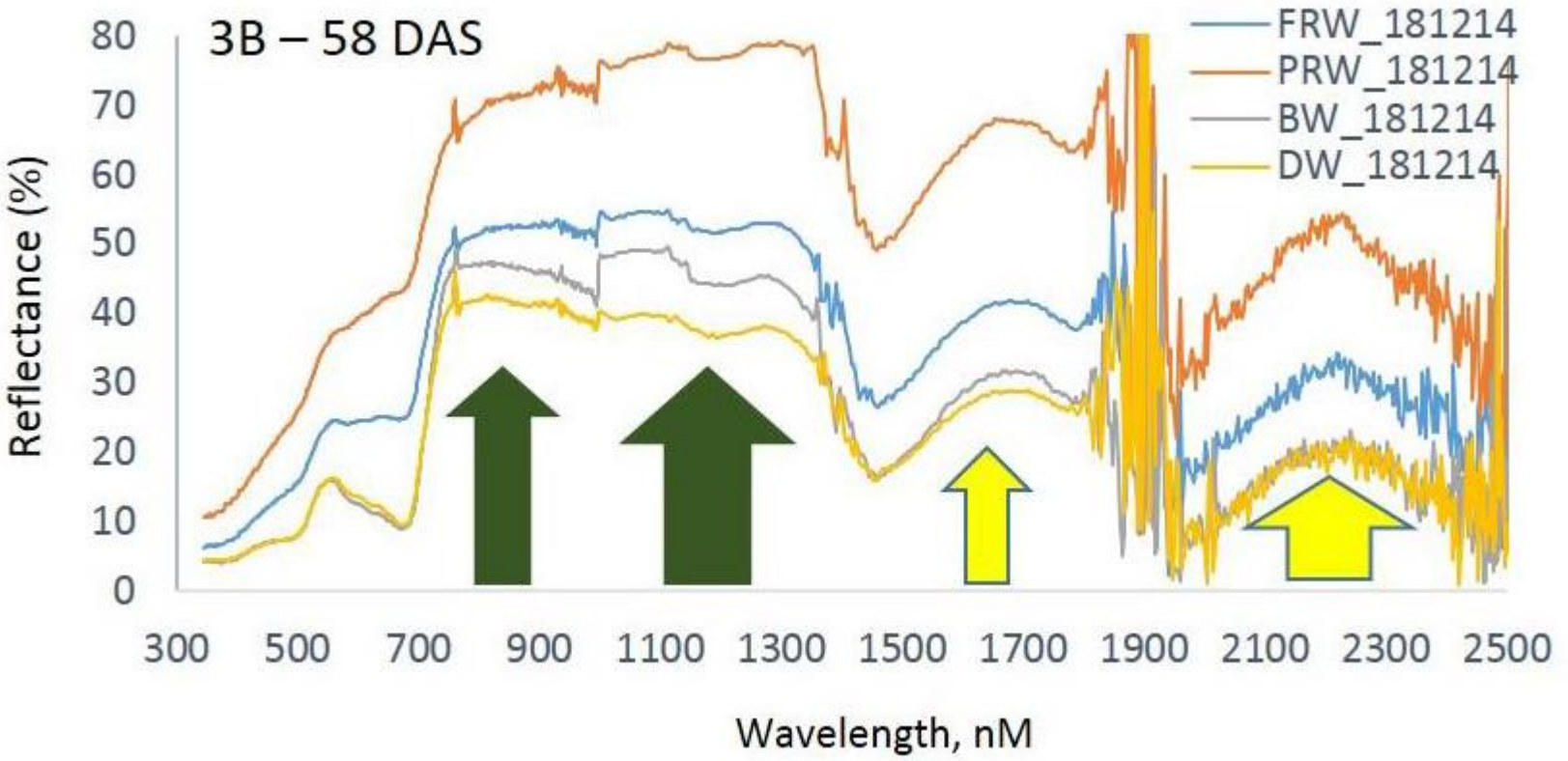
Activity 1.2: Innovations in NRM adoption data collection

Final reports from two pilots we funded from 2013 call

1) IRRI: Hyperspectral signature analysis: a proof of concept for tracking adoption of crop management practices – Gazipur, Bangladesh



Activity 1.2: Innovations in NRM adoption data collection

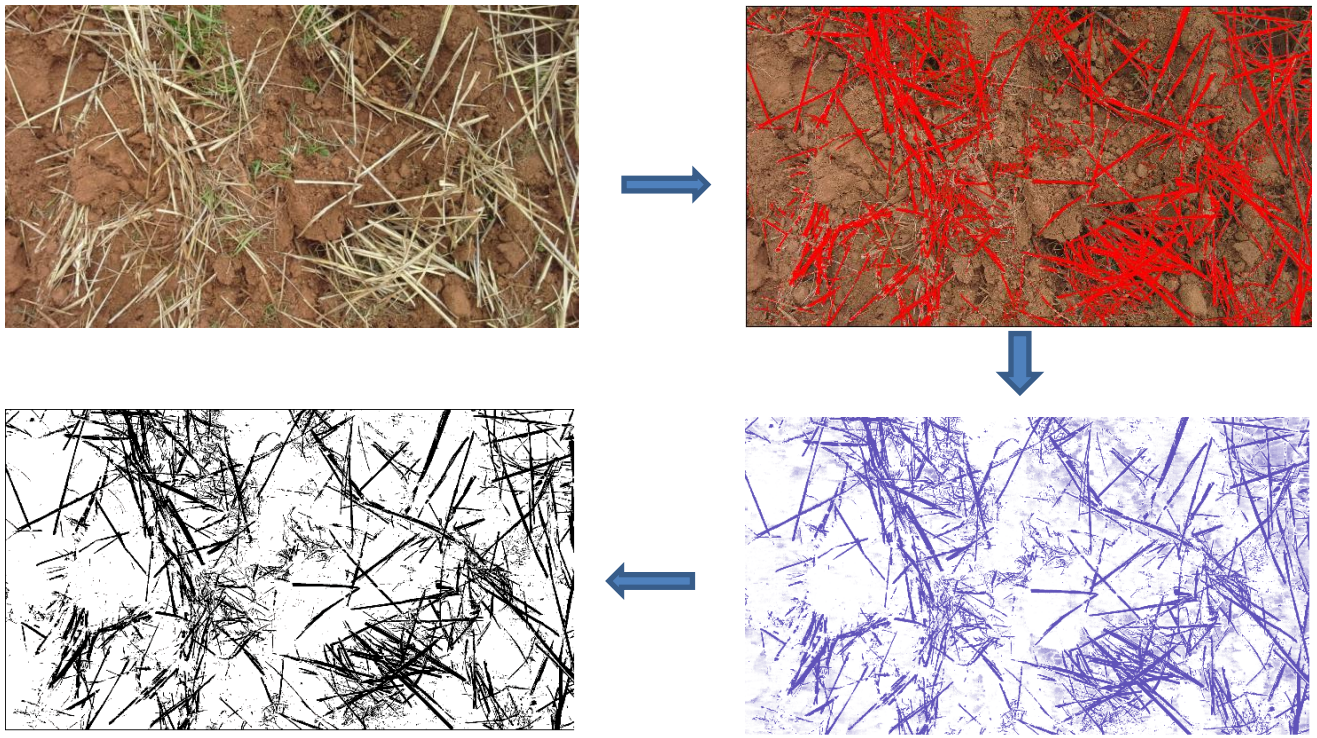
2) CIMMYT: *Innovative use of mobile phone based applications in tracking adoption of NRM technologies in Karnal, India*

Test of Interactive voice response system (IVRS) **vs.**
Expert opinion estimates vs. Data from 2013 baseline survey from CCAFS vs. Single purpose survey visit

89% response rate to IVRS calls (from among group of farmers already registered by CIMMYT)

IVRS estimate for % area under zero-tillage:	17.2%
Expert opinion estimate for zero-tillage:	15.9%
CCAFS baseline survey:	4.5%
Single purpose survey visit:	9.6%

No clear "benchmark" method, but suggests upwards bias from IVRS



Drone image data digitisation

Data experiment comparing drone-based estimation to data from:

1) HH survey with transect-based estimation across plots (reference)
2) Respondent estimation in same survey
3) Expert opinion from focus groups
4) Satellite imagery

Activity 2.1: Filling gaps in germplasm improvement adoption data

- DIIVA (Diffusion and Impact of Improved Varieties in Africa) and TRIVSA (Tracking Improved Varieties in South Asia) projects estimated adoption at country level
- Crop-country combinations (CCCs) – many important CCCs in South-East and East Asia not included to date, so priority for SIAC
- Michigan State University working with the relevant mandated CGIAR centers for specific crops

Status as of end August 2015:

- Some Centers have made significant progress in completing data collection.
- Two centers have completed the data collection for 100% of their CCCs, and are now in the phase of data collation and compilation
- CIP now working to April 2016 for final datasets; ICRISAT unknown status

Activity 2.3: Tracking policy-oriented research outcomes

Consultancy (Mitch Renkow) to institutionalize tracking of policy-oriented research (POR) outcomes from CGIAR research

Aims to identify intermediate outcomes of CGIAR research that bear on macro level policies and practices ***plausibly*** linked to Center outputs

Phase 1 (completed July – Dec2014) : Information collected from CGIAR PMS exercise to assemble 93 CGIAR POR outcomes

Phase 2 (ongoing May – Oct 2015): Verification with Centers of Phase 1 inventory + compilation of 2010-2014 POR outcomes

Phase 3 (foreseen in 2016): SPIA will initiate more selective and in-depth external validation process of POR outcome claims

Activity 2.1: Filling gaps in germplasm improvement adoption data

Center	Total mandated CCCs	Data collection in mandated CCCs		
		Completed	To be completed	Percentage completed
CIMMYT	40	40	0	100%
CIAT	10	10	0	100%
IRRI	21	17	4	81%
ICRISAT	15	4	11	27%
CIP	41	12	29	29%
MSU	3	2	1	67%
Total	130	85	45	65%

Activity 3.1: Impacts of widely-adopted technologies

"… studies that seek to measure the impacts of widely-adopted CGIAR research related innovations… 'research successes' that, due to their already widespread diffusion, lend empirical support to the global (or regional) public goods argument for CGIAR research."

Rigorously assessing long-term and/or large-scale impacts is a big challenge; however, donor demand for these assessments remains strong

September 2014: SPIA issued a two-stage call for proposals

July 2015: Inception workshop for selected proposals – at IFPRI

Widely-adopted technologies call – Funded proposals	Proponents
Adoption and Diffusion of **Cooperation 88** Potato Variety in China: Spatial Variability of Productivity Gains and Cost Savings and Value Chain Development	CIP Virginia Tech Yunnan Normal Univ.
Using **Global** Agricultural, Health & Demographic Datasets to Identify Impacts of CGIAR's Modern Seed Varieties Since the 1960s	UC San Diego George Washington University
A Systematic and **Global** Assessment of the Impact of CGIAR Technologies on Poverty	IFPRI World Bank
Assessing the impacts of improved **cassava** varieties on poverty reduction in Nigeria	IITA
Estimating improved **tilapia adoption** using DNA fingerprinting: Philippines and Bangladesh	WorldFish
Influence of IFPRI's research results on intra-household decision-making and **gender** roles on field programs of large NGOs	TANGO
Adoption of improved **lentil varieties** in Bangladesh	ICARDA Virginia Tech

Activity 3.3: Impacts of under-evaluated areas of research

Call for EoIs published on 11th June 2015, for studies on impacts of research related to:

> *"Irrigation & water management; livestock; agroforestry; biodiversity; policy and social science; and natural resource management (NRM)"*

Deadline: 7th August 2015

- 26 EoIs received
- Evaluated by 5 reviewers
- 10 EoIs selected for full proposals

Invitations to submit full proposals sent: 9th Sept 2015

- Deadline: 18th October 2015
- Studies to run for 12 – 18 months

Activity 3.3: Impacts of under-evaluated areas of research

Two scoping studies to inform priorities:

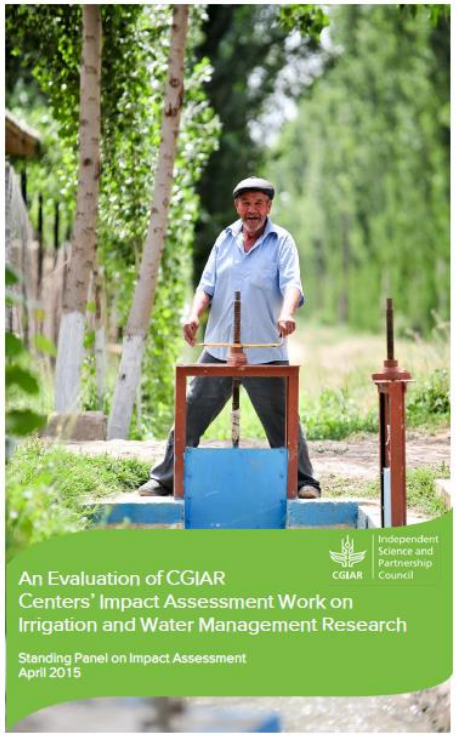
- Doug Merrey on **irrigation and water management research** impacts: Available on: http://impact.cgiar.org

- Sam Jutze and Karl Rich on **livestock research**

Draft for consultation and comment if interested

Both highlight areas where there are gaps in evidence base on impacts from research investments

Also, SPIA participated in JCU Cairns workshop in June 2015 on **effectiveness of landscape approaches** – forthcoming CIFOR systematic review



Under-evaluated areas: Long-list - Part 1	Proponents	Partners
Adoption and impact of Alternate Wetting and Drying (AWD) water management for irrigated rice in the Philippines	North Carolina State University	IRRI UPLB PhilRice NIA
Impacts of rainwater harvesting techniques in Niger	Tufts University	Concern, CRS Sahel Group Niger Ministry of Environment
Ex-post impact of index-based livestock insurance in Southern Ethiopia	Cornell	ILRI University of Sydney Sophia University
Impacts of small-scale irrigation on dietary patterns and child nutrition: Natural experiment based on groundwater depth	IFPRI	N/A
Uptake and impact of conservation agriculture in Malawi	CIMMYT	KIT, WUR FAO Malawi

Under-evaluated areas: Long-list - Part 2	Proponents	Partners
Forest co-management in Guinea: Multi-scale, multi-output ex-post impact analysis	Virginia Tech	CIFOR
Adoption and impact of Brachiaria grass forage cultivars in Colombia	CIAT	MSU CORPOICA Univ. de los Andes
Ex-post impact assessment of soil management research in cassava systems in SE Asia	CIAT	University of Minnesota SFRI, Katsetsart Univ.
Can the use of agrobiodiversity sustainably improve the well-being of local communities while mitigating environmental externalities?	Bioversity	IFAD Univ. Naples NARC St Pauls Univ PROINPA
Socioeconomic and land health impacts of agroforestry in Kenya	ICRAF	Vi Agroforestry