Minutes of the Thirty-Seventh Meeting of SPIA (SPIA 37) ICARDA Headquarters, Aleppo, Syria 12-13th April 2010

Attendance (Members and Observers):

Derek Byerlee (SPIA Chair), Mywish Maredia (SPIA Member), Ross Conner (SPIA Member), Tim Kelley (SPIA Secretary), James Stevenson (ISPC Secretariat), Meredith Soule (USAID), Marlene Diekmann (GTZ), Andreas Springer-Heinz (Consultant - GTZ), Kamel Shideed (ICARDA), Jeff Sayer (ISPC), Paul Vlek (ISPC), Rudy Rabbinge (ISPC Chair), Manny Lantin (CGIAR Fund Office), Gilles Saint-Martin (CIRAD), Peter Gardiner (ISPC Secretariat)

1. **Opening comments**

DB welcomed members and observers to the meeting and requested everyone to briefly introduce themselves. The chair was particularly pleased to see that several donors were represented.

2. Review of agenda

The proposed agenda for the open session of SPIA 37 had been slightly revised during the preceding two days of closed sessions; item number 4 (SPIA strategy) was discussed after the substantive issues in SPIA's workplan had been tackled (but is reported here in sequence of the original agenda).

3. Minutes of SPIA 36

These were approved with no follow up other than what is on the agenda of the current meeting.

4. New SPIA business model

SPIA has been considering how its own business model might be adjusted to reflect recent developments in the CGIAR. Up to now, SPIA has worked in a partnership mode with the CGIAR centres, with a general 3-step model that can be characterised as follows:

- 1. An initial scoping paper on a particular issue, commissioned and managed by SPIA
- 2. A call to centers for case-studies on the theme, with centres providing most of the funding and SPIA providing oversight and technical support and some small financial support.
- 3. Synthesis of the case-studies in a single report authored or commissioned by SPIA, development of Impact Briefs and oftentimes professional publication (book or journal).

The utility of this approach has been questioned recently given the deficiencies in social science in the centres identified in the recent Social Science Stripe Review, the challenges SPIA has faced in producing good outputs from impact assessments where the centres have taken the lead (see case-studies for the Environmental Impact Assessment study, item 5.1.1 below, in particular), and the lack of resources allocated by centres to these activities.

DB solicited the views of the observers present for a new business model where SPIA is transformed into a more independent body, commissioning primary *ex-post* impact assessments (epIA) on behalf of donors. This will still rely on data and analysis from outside experts in cooperation with the centres. This implies greater use of partnerships with Advanced Research Institutions (ARIs), and an increased, designated budget and human resource base (i.e. two secretariat staff working full-time). The new model will allow SPIA to tackle some of the under-assessed areas of CGIAR activity (such as genetic resources and capacity building) and types of impact that have not been included in past assessments (such as poverty reduction, food security, gender equity, empowerment, biodiversity, other environmental impacts etc).

A further implication of this new business model is that, to date, SPIA has provided only 'good news' to donors by documenting the impacts of CGIAR success stories. In the future, with greater independence from the centres (who have a weak incentive to invest in epIA for research where the results may be positive but have a number of negative externalities), studies may document 'no change' or negative impacts that also result from CGIAR research. There will be a long lag time before the system, and SPIA in particular, is ready to start doing epIA of the proposed mega-programmes, so the centres will remain for the locus of activity for SPIA for the foreseeable future.

There was much support among observers for these proposed changes, with MD noting later in ISPC open session about donor responses to the possible negative results from some future studies that "donors can handle that ... it makes the good news stories even more credible". The project on revisiting the data on the diffusion and impacts of crop germplasm improvement (see 5.2 below) can be considered an example of a transitional SPIA-managed project where part of the funding is ring-fenced for CGIAR centres and part is subject to an open competition among CG centres in partnership with ARIs.

5. Ongoing studies and activities

5.1 Environmental Impacts

DB outlined how this study now has three streams of work within it:

- Set of six case-studies on the impacts of specific technologies
- A framework paper by consultant Mitch Renkow (MR)
- A SPIA-authored paper on the impacts of research-led agricultural productivity increases on land-use change

5.1.1 Case-studies

DB briefly presented the 6 new case-studies that SPIA have commissioned. Five of these are managed by CG centres (CIAT, CIP, ICARDA, IWMI, World Agroforestry), and the sixth is managed by the Indian Council of Agricultural Research (ICAR). This cohort of studies offered the opportunity for using the environmental economics approach of choice modelling to value non-market benefits and costs of agricultural research, for the first time in the CGIAR. However, DB was candid in his assessment that SPIA was disappointed with the slow progress and the quality of this work thus far. Turnover of staff has been an important factor for at least three studies, but there is also concern about the level of commitment of the centres – only 2 (CIAT and CIP) have delivered progress reports to date. SPIA is organising a workshop $1^{st} - 3^{rd}$ June in Istanbul, to hear presentations from all case-study leaders and to attempt to integrate the case-studies into the wider framework provided by the two papers (by MR and by SPIA). Jeff Sayer and Rudy Rabbinge both noted that the case-studies were always likely to be inherently limited, even if implemented very well, as they only address the marginal impacts of externalities of specific technologies. The more significant challenge is to look at larger scales and consider modelling of the overall performance of an environmental system or at trade-offs across the range of impacts generated by the CGIAR research portfolio.

5.1.2 Paper by Mitch Renkow

DB explained how the paper by MR, synthesising evidence to date on studies from across the CGIAR and looking towards a framework for the future, offers us the opportunity to think about how we should tackle these issues in future. Jeff Sayer noted that it would be highly desirable for the CGIAR to attempt to implement a series of sentinel sites collecting multiple attribute measurements, as suggested under the Social Science Review, which could read across ecological and poverty data.

Resourcing such an endeavour would be the major challenge, but one that is likely to pay off, not only in terms of impact assessment, but also insights for the basic sciences.

5.1.3 Paper by SPIA on research-led productivity gains and land-use

Regarding the SPIA-authored paper on land-use change, DB noted that land area expansion for agriculture is still important. SPIA has taken on the challenge of looking at the dynamics of land-use change separately from the broader terms of reference for Mitch Renkow's paper, as it is a big task to examine the relationship between agricultural productivity increases and the demand for land, as determining whether there are incentives to save land, or encourage further expansion, including deforestation. DB noted that it is estimated that 5 million hectares of land are being brought into production (not including plantation forestry and pastures) each year – not an insignificant amount. Rudy Rabbinge noted that intensification on existing land is still responsible for 80% of the 7-fold increase in agricultural production over recent decades. Paul Vlek cautioned that extensification should not be thought of as a planned process – it is an encroachment process, so unlike intensification, it is unplanned. SPIA will present an outline of the paper in a presentation in the Istanbul workshop, aiming to then have a finished paper to present at the next SPIA meeting in September.

5.2 Crop Germplasm Improvement Revisited

DB explained that, over the last decade, CG centres had not coordinated their resources sufficiently to maintain good system-wide datasets on dissemination, adoption and impact of improved varieties. Thus the need for the 3-year \$3m proposal submitted to the Gates Foundation by Bioversity on behalf of SPIA and seven centres that was approved in November 2009. TK clarified, following concerns from some donors at the Fund Council meeting in February, that none of the Gates Foundation funding is being used for SPIA's support on this project. In order to maintain independence and oversight, all SPIA-related expenses for this project are being sourced from the SPIA/ISPC budget for 2010.

DB outlined the three components of the project: (i) Data on varieties, investments and adoption based on expert opinions; (ii) National adoption surveys in selected countries to validate expert opinion and gather insights about adoption; and, (iii) Competitive grants for methods and impacts on food security and poverty, innovative methods. The focus of the latter will be to broaden the range of impacts included in the analysis when compared to past studies. SPIA is pushing here for a global update, hoping all centres will update their data in this area. ML asked how this approach differed from that of the 1998 Evenson and Gollin study. DB replied that there were many similarities but SPIA is ensuring that there is much more standardisation on the databases across the studies, and that there will be a publicly-accessible database (candidates for this include websites of AASTI, Bioversity, or ISPC) once complete. DB also noted that the Gates Foundation only intends to fund this for a limited number of years. The ISPC could make a recommendation that adoption and impact assessments of crop improvement become systematized. Also, objective 2 was not there in the study by Evenson and Gollin, and there is a much better base for objective 3 (e.g. better datasets and models) than there was in 2000.

ML was keen for the results to somehow feed into the development of Mega Programmes, as part of the reorganisation of CGIAR research funding. DB clarified that we should have results for objective 1 in late 2010 or early 2011. There was some concern expressed (by MD and MS) about the independence of the assessment given that the funding from Gates and ACIAR is direct and that there had been a request from Greg Traxler and Prabhu Pingali that they be considered peer assessors in this project. DB responded that SPIA have been quite open and objective on this and

there is no interference. Greg Traxler did come to the Project Initiation Meeting in Addis Ababa but TK noted that he is not on project steering committee so there is an independence firewall when it comes to management of the project. Gilles Saint-Martin also thought that there was no conflict of interest with Gates coming in and funding this work because they have not been the ones funding the research over the last 20 or 30 years (which is the subject of the analysis).

5.3 SPIA paper on the use of Randomized Control Trials in epIA

MM explained the origins of this paper as being about the perceived need for SPIA to increase the rigour of its methods in epIA. SPIA had drafted a paper on experimental designs, a tool widely and increasingly used in development economics for assessing the short-term outcomes from alternative interventions. The key question for SPIA is whether these can be used *ex-post* of widespread adoption, to fit with SPIA's mandate?

There was considerable discussion related to the value and practicability of using experimental methods in epIA. Further refinement of the paper would continue—as a number of issues still require resolution or better elaboration. In the meantime, SPIA decided to focus on revising the document Strategic Guidelines on *Ex-Post* Impact Assessment. This would have the advantage of enabling SPIA to focus in on the key issues and put the costs and benefits of RCTs in the context of competing alternative approaches, e.g. the "rough and ready" approach of using expert opinion to estimate average yield benefits to farmers; using non-experimental econometric methods to control for selection bias in farm-level surveys.

5.4 Synthesis of Measured CGIAR Impacts 2001-09

DB noted the key findings from a paper, co-authored by MR and DB, which builds on the results of the Independent External Review of the CGIAR in 2008. The largest impacts from the CGIAR are for crop germplasm improvement but there are significant gaps in the literature since 2000. There has been recent progress in Africa (e.g. maize in West Africa and beans in East Africa). However, there are still too few studies and not of sufficient scale, and too often with a focus on internal rates of return estimates and too few studies documenting impacts on poverty, gender and environment. In response to a question from Paul Vlek, TK outlined how it is SPIA's belief that low levels of adoption of NRM technologies is the main reason for a lack of documented impact in that area, rather than problems in the analysis (e.g. attribution, counterfactuals etc). The paper is now forthcoming in Food Policy, and a pre-Galley proof will be posted on the SPIA website.

5.5 Communication and Dissemination

5.5.1 Peer-reviewed journal articles

Special Issue of World Development on Impacts of Policy-Oriented Research: Following substantive reviews by two external reviewers (contracted by SPIA), revised versions of six of the seven case studies and the introduction/synthesis were submitted to the editors of World Development. Last year WD had given the green light to proceed with a formal external review of nine papers submitted for a special issue on 'measuring impacts of policy-oriented research'.

An abridged version of the Maredia and Raitzer report of the SPIA-commissioned Impact of CGIAR research in Sub-Saharan Africa meta-analysis was recently published in Agricultural Economics (volume 41 (2010): 81-100). A pre-galley proof of this paper will be made available on the SPIA website.

5.5.2 CGIAR Impact Website

The CGIAR Impact website (http://impact.cgiar.org) has long required a significant overhaul and update. SPIA member RC carried out a thorough review from the perspective of an 'outsider' looking at impact information in the CGIAR. This information was provided to a prospective consultant Tony Murray, Rua Design who developed a proposal for re-designing the site. The proposal was considered by SPIA in closed session and accepted with some suggestions for minor changes. A mock-up of a redesigned home-page from Tony's proposal was put up on screen and observers were invited to comment. Useful suggestions regarding the search functions; functionality of a map of CG centres with links to their respective pages for impact assessment; translations of specific components; typeface; and the prominent role for Impact Briefs, were all gratefully received. SPIA will solicit further feedback, especially from donors (considered to be the primary audience for the website content) on a Beta version of the site (likely in late June 2010).

5.5.3 Impact Briefs

DB explained that SPIA has identified a number of candidates for new impact briefs based on the submissions from the CGIAR centres as part of the Performance Management System. These candidate papers will be reviewed in more detail by SPIA with the goal of adding around four new briefs to the set of 25 that have been published to date. There was a suggestion from MS and MD that the current 4-page format be amended to include a single paragraph in a box prominently at the start, as an Executive Summary for busy policy-makers. SPIA will adopt this suggestion and will consider a three-tier structure for the Impact Briefs on the website:

- Level 1: Series of 1 paragraph summaries click through to...
- Level 2: 4-page briefs as PDFs click through to...
- Level 3: Original scientific articles as PDFs

5.5.4 Outreach links

DB listed all the relevant peer groups in other organisations that SPIA has had some contact with, or monitored the development of, over the last 12 months:

- 3IE: The International Initiative on Impact Evaluation
- CLEAR: The Regional Centres for Learning on Evaluation and Results Initiative
- AADAPT: Agricultural Adaptations. Involves 11 countries across Africa, Latin America and Asia and is an initiative on impact evaluations for agriculture, organised by the World Bank.
- CIRAD: Coopération Internationale en la Recherche Agronomique pour la Developemente. Director of new impact assessment unit, Gilles Saint-Martin, present at the meeting. SPIA invited to participate in a workshop in October / November 2010 in Montpellier

There has been some debate about SPIA's relationship with the network of Impact Assessment Focal Points (IAFPs) in the CGIAR centres. In the past, SPIA has organised biannual meetings of this group, and this coming October, SPIA has organized a panel for the European Evaluation Association featuring three IAFPs reporting on CGIAR epIA work. DB explained that SPIA is considering hosting a meeting in 2011, but opening the invitations up to make it more like a conference, with participants from ARIs specifically invited to present on different topics, alongside presentations by CG IAFPs.

5.6 PMS

TK outlined how SPIA approaches the assessment of studies submitted under the PMS for indicators of "impact culture" of the centres, using a combination of self-evaluation, external peer review of a single study submitted by each centre, and SPIA's own assessments. SPIA places an emphasis on

large-scale impacts, which are International Public Good (IPG) in nature and gives higher points to studies that go further towards CGIAR goals. TK explained that SPIA is in the process of finalising the scores for 2009 and brief feedback from SPIA will be available for IAFPs should they wish to receive it. DB noted that this should be the last such time that SPIA, and the ISPC more broadly, undertakes assessment for the PMS – a task that naturally fits within the Consortium's mandate under the new arrangements.

6 New Studies

6.1 Germplasm Collection, Conservation, Characterisation and Evaluation (GCCCE) impact scoping study

One area of CGIAR research and related activities that many recognize as being under-assessed with respect to impacts is 'germplasm collection, conservation, characterization and evaluation' (GCCCE), or "Sustaining Biodiversity for Current and Future Generations" as it is referred to under the five broad System Priorities. About 12% of the total CGIAR investment during the last three years has been allocated to this item. Despite this significant investment, there appear to be few studies of impact assessment to document the benefits derived.

DB explained that a scoping study is envisaged to compile the documented evidence of impacts in terms of CGIAR goals from GCCCE related activities. The study would focus on estimating the value of the stored material using concepts like existence values, inter-generational equity and the like, as well as their contemporary value as sources of genetic material for breeding and biotechnology. SPIA will be commissioning Melinda Smale (lead consultant) to coordinate a team to work on this issue in second half of 2010, including the System-wide programme on genetic resources, Bioversity, ILRI (and perhaps the Global Crop Diversity Trust). The plan is for workshop in November convening a small group of experts to examine the extent to which there is unexploited potential for future good impact assessment in this area. This might open the door to more SPIA-affiliated activities, or it may conclude that it should not be a priority for new studies.

MS asked whether the Global Crop Diversity Trust (GCDT) carried out any relevant studies as it was being established. TK replied that if there were any, they were unlikely to be *ex-post*. Gilles Saint-Martin wondered whether this workshop and scoping study was limited to the topic of impact assessment for GCCCE, or might it also focus on developing a vision for future work in GCCCE for the CGIAR. Although it has been one of the main comparative advantages of the CGIAR, it might no longer be the case. DB explained that the ToRs for this study will leave this possibility open. ML emphasised the importance of this issue, given the feedback from the recent GCARD meeting in Montpellier that Mega Programme number 8 (on GCCCE) is now dropped from the current set.

6.2 Poverty Impacts of CGIAR Research

DB explained that SPIA's work over the next few years is expected to concentrate on deepening the assessments of impact of CGIAR research (i.e., going beyond economic and even environmental impact measurements) to examine issues arguably closest to the heart of CGIAR goals – social impact indicators, both positive and negative. Rarely have these been measured in explicit or rigorous ways. Some studies have been undertaken, e.g. the IFPRI poverty studies, but few of these were conducted at a macro-level sufficient to provide comprehensive estimates of poverty related impacts from CGIAR research investments.

SPIA is planning a brainstorming workshop on this issue for October 2010, likely to be held in the North-East of the United States, where there is a cluster of the best international researchers (at

Cornell, IFPRI, World Bank as well as UC Berkeley) working on the links between agricultural productivity and poverty reduction. DB outlined three major groups of tools:

- Micro-level analysis with HH data sets
- Spatial maps of poverty at sub-national level
- Macro-level analysis with CGE models

There has been a significant step forward in the availability of data across these models, and it is likely that SPIA will want to try and link the three approaches for analysis of major CGIAR interventions. The intention is then, in 2011, to link with the work on Crop Germplasm Improvement (in Africa and globally – as outlined in 5.2 above).

DB shared preliminary results from the paper by Martin and Ivanic at the World Bank, which shows that the ex-ante impact on poverty is strongest for productivity gains in rice, and weakest but still positive for livestock. Paul Vlek wondered whether there is a clear rationale in the CGIAR strategy for fighting poverty, and why rice comes out so well. Poverty is affected by so many other things. DB acknowledged that the danger is that the temptation of the macro modellers will be to only look at this with a commodity lens. MS also cautioned about the relatively ad-hoc nature of a lot of the analysis of poverty, given the arbitrary choice of poverty line (\$1 or 1.25 or \$2) significantly affecting the results. Is depth of poverty not important? Otherwise, this could provide a perverse incentive to focus on those who are just below the poverty line, rather than the poorest people. DB noted that concepts such as vulnerability and empowerment, while crucial to a full-formed view of what poverty means, currently stand outside this analysis.

Jeff Sayer wondered whether palm oil impacts might actually be better than rice. DB replied that recent IRRI/APAARI results for SE Asia put rice first, with oil palm close behind in terms of economic impacts. This prompted Paul Vlek to ask "Poverty alleviation at what cost?" Andreas Springer-Heinz urged SPIA to examine closely the mechanisms through which poverty reduction occurs. It is fine to have the big picture aggregate numbers from macro models, but one needs an understanding of causal processes to ensure learning for other cases. Paul Vlek noted that 10 -15 years ago, when the research that is now ready for epIA was being carried out, poverty was not so strongly on the agenda. SPIA should be careful to not hold scientists to account by today's standards for research that was carried out in a different climate, with different objectives.

The next step is for SPIA to draft a short note on these issues by mid-May, for circulation to a few key experts to solicit their interest in the workshop later in the year.

7. Other Business

DB invited GM to present a brief overview of CIRAD's model for evaluation of outcomes and impacts. This is essentially a new area of activity for CIRAD, not compulsory but largely established (by Gilles Saint-Martin) to understand what works and how to do things better. He expressed a desire to forge closer relations with SPIA in the future. CIRAD will be hosting an IA meeting in June and requested someone from SPIA to attend.

DB thanked the group for a very stimulating and productive meeting and adjourned the session.

ENDS

Annex – Agenda for Open Session of 37th SPIA meeting

- 1. Welcome by SPIA Chair
- 2. Approval of Meeting Agenda
- 3. SPIA 36 Meeting Minutes follow-up
- 4. SPIA strategy and new business model revised
- 5. On-going studies / activities
 - 5.1. Updating Adoption and impact CGI in Sub Saharan Afrcia (Gates funded)
 - 5.2. Environmental Impact Assessment study
 - 5.3. Feasibility of Utilising Randomized Control Trials in IA
 - 5.4. PMS impact indicator 2010
 - 5.5. Re-vamping the CGIAR Impact Website
 - 5.6. Other (PORIA case studies publication; Renkow & Byerlee CG impact paper)
- 6. New studies/initiatives
 - 6.1. Genetic resources and biodiversity IA study
 - 6.2. Impact of CGIAR research on poverty, food security and gender
- 7. Other Activities:
 - 7.1. IAFP-SPIA meeting in 2011
 - 7.2 Relations with Partners in Development Evaluation and Assessment
 - Centers for Learning on Evaluation and Results (CLEAR) initiative
 - 3IE, NONIE, etc.

8. Other Business