Minutes of the Thirty-Eighth Meeting of SPIA (SPIA 38) IRRI Headquarters, Los Banos, Philippines 8th September 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), Jeff Sayer (ISPC), Ken Fischer (ISPC), Sirkka Immonen (ISPC Secretariat), David Raitzer (IRRI)

1. **Opening comments**

DB welcomed members and observers to the meeting.

2. Review of agenda

The agenda for the meeting was approved without additions or amendments.

3. Minutes of SPIA 37

These were approved. There followed a brief discussion about one item relating to open access for publications managed by journals. DB suggested that SPIA should aim to secure the rights for the SPIA-commissioned studies from the last five years and to the whole Evenson and Gollin (2003) book, which is now out of print with CABI. SC Secretariat agreed to follow-up with CABI and specific journals to assess rights of access to books and relevant journal articles published.

4. SPIA workplan and budget for 2011

Studies for consideration under next year's workplan were discussed individually under items 5 and 6. Budget discussions occurred under closed session.

5. Current workplan

5.1 Diffusion and impact of improved varieties in Africa (DIIVA)

DB gave some background to this study by explaining that the Evenson and Gollin (2003) study had identified that in Sub-Saharan Africa, only 10% of the area devoted to the main CGIAR crops was planted with modern varieties. What has progress been like in the period since 2000 when the Evenson and Gollin data were collected? John Lynam has recently written a report for FAO on the state of plant breeding in Africa, which highlights weak NARSs capacity and so the topic of this study is very timely.

Since SPIA 37, the Project Steering Committee has met twice (virtually) to receive updates from the project coordinator (Tom Walker) and to move forward/take action on several fronts. After a few delays in getting the administrative aspects of the project underway (e.g. the signing of the letters of agreement with centres, in particular) the project has been making steady progress. It was agreed that a mid-term meeting involving the focal points from all the 7 centres involved should be scheduled in January 2011. SPIA and Tom Walker will enquire with ICRISAT, IITA or AfricaRice about possible venues in West Africa.

DB gave an update about the three main components of the study. Component 1 comprises the consolidation of data on varieties, investments and adoption based on expert opinions for 10 crops in 20 countries in Sub-Saharan Africa. This is well underway, and the results should be prepared in time for the mid-term meeting in January. Component 2 comprises national adoption surveys in selected countries to validate expert opinion and gather insight on adoption. DNA fingerprinting for varietal identification (CIMMYT) will be used in this process. The mid-term meeting will give an

opportunity to the focal points to get input to their plans for the surveys from SPIA and from a statistician that will advise the project on sampling and analysis matters.

Component 3 will be a series of competitive grants, where CGIAR centres will partner with ARIs to use innovative methods in the assessment of the impacts of CGIAR crop germplasm improvement on food security and poverty. Eight concept notes were received by 15th August and sent out for review by the PSC and by four external reviewers. All seven centres were involved in this process. Five concept notes have been chosen to proceed to full proposal stage, of which three will finally be funded from the pool of \$750,000 allocated for these studies.

In response to a question from DR regarding what aggregate continent-wide picture that could be built up from a series of individual studies, MM described how SPIA was considering commissioning a separate piece of work similar to Evenson and Gollin study, to tell the overall story on adoption to generate estimates of productivity gains. DB noted that an alternative approach would be to simply make the data available and wait for someone to pick it up and do the analysis (a "Wiki" approach).

DR gave details of parallel studies currently underway at IRRI that are directly related to this topic. There is study commissioned by ACIAR led by John Brennan covering three countries in South-East Asia and based on a simple methodology of going to the NARS and synthesising their existing data. A second, larger project Stress Tolerant Rice for South Asia and Africa (STRASA) features a baseline survey of 2000 households in Eastern India and Bangladesh. Currently this project is focusing on seed production of the new Sub-1 variety (featuring a gene that enables the plant to withstand submergence for up to 17 days). The diffusion of this variety can be tracked via remote sensing as it has a detectable spectral difference that allows it to be distinguished from other varieties.

A third strand of work is the direct complement in South Asia to the DIIVA study in Africa: "Tracking Improved Varieties in South Asia (TRIVSA)". Like DIIVA, this is funded by the Gates Foundation and implemented jointly with ICRISAT, although without an equivalent to the Component 3 of DIIVA. Primary data are being collected primarily on rainfed production systems in Nepal, India, Bangladesh, Sri Lank and Bhutan. The Cereal Systems in South Asia (CSSA) study also features a 2000 household baseline survey. To enable good exchange between the DIIVA and TRIVSA projects, Sushil Pandey will be invited to the DIIVA mid-term meeting in January 2011.

5.2. Environmental Impact Assessment study

TK explained that work began in late 2008 on measurement of economic analysis of environmental impacts with a focus on economic valuation methodologies led by consultant Jeff Bennett but that now comprises four strands of work.

- Scoping studies from two sets of authors (Djurfeldt et al 2008 and Bennett 2008).
- Six case-studies were commissioned by SPIA and launched at a project meeting in July 2009. In June 2010, a workshop in Istanbul brought the authors of these case-studies together in an aim to bring them to a close.
- Review paper by Mitch Renkow (a draft of which has been received and peer-reviewed, and SPIA is awaiting a final version) which aims to provide a framework for the assessment of a range of environmental effects, both good and bad, that result from agricultural research.
- Paper by SPIA and Purdue University on the impacts of CGIAR research in terms of land-use changes probably the single biggest potential impact for the CGIAR.

These will be brought together by lead consultant Jeff Bennett in a synthesis paper, to be completed by the end of 2010. SPIA has found it challenging coordinating the 6 case-studies. Recognising that the methods and concepts are new to the respective CGIAR scientists which has meant that the work has been technically demanding, nonetheless the results are somewhat below expectations in terms of their scale and depth. However, two of the cases (ICAR/CIMMYT on zero-tillage technologies in the rice-wheat systems of the Indo-Gangetic Plains; and IWMI on changes in sluice-gate management in the Mekong Delta) could end up reporting results that are quite large scale.

DB noted that two of the studies featured estimate saved water, and yet the authors have not really got into the hydrological intricacies of the final fate of water. For example, if supplemental irrigation leads to less water being applied to a field, is this water that would otherwise be lost to a saline sink or evaporated or would it have merely re-charged the aquifer? This matters, as only water that would otherwise be lost to a saline sink or evaporation can legitimately be described as "saved". DR notes that the default assumption is that about only 25% of potential savings are actually savings that would otherwise be lost to productive use.

DR noted that it is challenging to estimate the counterfactual area effects from technical change going all the way through to averted deforestation (i.e. net of substitution from other crops). However, the GTAP-AEZ model, which is the main tool used in the consultancy that SPIA has with Purdue University, aims to achieve this. Jeff Sayer was excited by his involvement in this work (he attended the Istanbul workshop earlier this year) and saw it as a sign that the ISPC is starting to grapple more meaningfully with a new strategic issue – the need for low carbon, low phosphate agriculture and the implications from that for CGIAR goals.

5.3. Randomized Control Treatment (RCT) study

MM explained that SPIA is organising a discussion on estimating treatment effects of agricultural research at the University of California, Berkeley on Saturday 2nd October. A paper by Alain de Janvry and colleagues at Berkeley will be presented, with discussants to follow, giving feedback on the main ideas in the paper and possible ways forward for SPIA. The focus of this discussion will be on the scope and potential applications of RCTs in epIA.

Since SPIA 37, MM has drafted a new section on estimating treatment effects for the Strategic Guidelines on Ex-Post Impact Assessment of Agricultural Research. A final version will be drafted once the main findings from the Berkeley discussion have been absorbed. DR noted that the Strategic Guidelines should remain and be kept updated, but that there was a real need to make them more widely read as they set a minimum standard for ex-post impact assessment for the CGIAR system. There was broad agreement with idea of converting the guidelines from a pdf to html format, and that there should ideally be a Wiki approach to authorship with SPIA playing the role of referee and quality control. ACTION:Julian Alston was commissioned to briefly review the Strategic Guidance, and his feedback will inform how SPIA moves forward on this issue in 2011.

5.4. Genetic resources impact assessment study

DB explained that SPIA had not looked at this area before but that we are doing so now in order to maintain as comprehensive as possible coverage of the main areas of CGIAR research-related activity. A draft of a paper by Smale and Hansen has been received by SPIA, and is now under review, which features a scheme of different approaches to valuing genetic resources and a comprehensive literature review. Based on our reading of this report, SPIA had decided that the only practical way of moving forward on ex-post impact assessment in this area is to focus on direct use

values, thus side-stepping some intractable problems relating to economic valuation; for example, TK outlined his opinion that it was not feasible to estimate the Total Economic Value of genebanks.

DR cautioned that there is currently a big gap at the moment in terms of impact estimates for major varieties in Asia. The Smale and Hanson paper had a number of gaps that need to be addressed, and some key empirical work done earlier by Robinson (2000, 2001) that needs to be brought into this review. SPIA will synthesize its comments from the members and provide feedback to Smale.

Genebanks likely speed up the process of plant breeding but there have been waves of activity in germplasm evaluation for specific traits going back to the 1970s. KF described how scientists were engaged in evaluating the germplasm from their own perspective at IRRI and CIMMYT in 1970s. With new technologies, they had better prospects to get the favourable genes from their working populations. SI suggested that any prospective study should not be too historical as the science was moving quickly but that looking at the use of genebank materials was a useful direction. DB wondered whether we might be left with findings that are largely redundant, and there were questions, (from TK and from MM) about whether donors really see this area of investment in the same light as research or whether it is an overhead activity that we need to just accept.

5.5. Communication and Networking

5.5.1 Website – update on new design and implementation

JS presented the new design for the <u>http://impact.cgiar.org</u> website. DR urged SPIA to think about how to resource the maintenance of the site – it needs to be kept up to date in order for it to be used and for the information presented to be reliable. MS suggested that the site should be flexible to adapt to changes in the CGIAR, to be reorganised once the Strategic Results Framework and Mega-Programmes are finalised. However, DB noted that we will not be doing ex-post impact assessment of the Mega-Programmes for a number of years.

DR urged SPIA to ensure that the site remain a CGIAR impact site and not a SPIA site, by keeping IA material from across the CGIAR prominent on it. The search function for the database is also an important feature for CG scientists and academics, and not just for epIA, but also impact evaluation, adoption surveys etc. There is also the issue of quality control, and the review process for content needs to be highlighted prominently on the site. JS received useful additional feedback on the website design ideas from Meredith Soule immediately following the SPIA meeting. ACTION: JS to feedback these comments to Tony Murray, the consultant, in finalising the design and content of the new website.

5.5.2 European Evaluation Society conference in Prague (6-8 October 2010)

RC outlined the SPIA session at the EES conference featuring presentations from three CGIAR centres – Bioversity, ICARDA and CIMMYT. The goal of the session is to highlight differences in approach across the system and clarify concepts such as ex-post impact assessment as distinct from impact evaluation.

5.6. Other

The Policy-Oriented Research Impact Assessment (PORIA) project that SPIA led up to 2008 has been published as a special section of the World Development journal in October 2010, featuring one paper from SPIA and six centre-led case-studies.

The Performance Management System impact indicator results for 2009 and 2010 combined have turned up three good case studies to be written as Impact Briefs and published on

<u>http://impact.cgiar.org</u>. The centres in question are IITA (Maize breeding in Africa), World Agroforestry (Fertilizer trees in East Africa), and CIP (Million hectares of CIP potatoes). ACTION: JS and TK to finalise the publication of these three impact briefs, with secretariat colleagues, centre focal points and Green Ink, and post the pdfs on the new website.

6. Newly launched / planned studies

6.1. Impact of CGIAR research on poverty, food security and gender

6.1.1 Poverty and food security: The goal of this study is to assess how technical change in agriculture may have differential effects on different indicators of well being, including poverty levels, hunger and food security, and nutrition. A short note describing the rationale and SPIA's intent in moving forward on this high priority impact assessment activity was shared several months ago with IFPRI and USAID, and USAID responded with a grant of \$500,000 USD to IFPRI which is to fund impact assessments on this issue and to be managed jointly by SPIA and IFPRI.

SPIA has commissioned two consultants (Alain de Janvry and Betty Sadoulet) to take stock of current approaches and outline future options. Their paper is due in October 2010. The next step will be to host (in collaboration with IFPRI) a small brainstorming workshop on 'new approaches to documenting agricultural research – poverty-hunger impact linkages' on 3-4 December at IFPRI HQ in Washington D.C. A number of experts on poverty, food security and nutrition in relation to agricultural research and development will be invited to attend, as well as a number of impact assessment focal points from the centres. From these two activities – the paper and the workshop - SPIA expects to plan future work in this area of impact assessment for 2011 and find productive uses for spending the USAID grant, possibly in combination with the legume stripe review (see 6.2 below) or DIIVA (5.1 above). By January or February 2011, SPIA should be able to identify some specific studies.

MS raised the question of whether SPIA should fund staff time for the forthcoming poverty casestudies in order to foster greater commitment from the centres. DR suggested that a levy of 1.5% go on all bilateral and core grants is an appropriate benchmark for funding impact assessment research in the centres.

6.1.2 Gender: On behalf of SPIA, panel member Ross Conner is also undertaking a preliminary investigation of significant issues related to and good examples of gender equity epIAs. He has done an initial review of gender impacts from CG technologies and will be collecting contributions from all impact assessment focal points and gender leads at all the centres.

6.2. Stripe Impact Assessment: legume research in the CGIAR

Early in 2011, SPIA will commission an external team to assess the cumulative impacts of legume improvement research across the system to better understand and document impacts of CGIAR research on pigeonpea, chickpea, lentil, lathryus, common bean, soybean, faba bean, groundnuts and cowpea in terms of their economic, social and environmental impacts in specific regions of the world. In order to make a fast start to this initiative, SPIA decided to commission a scoping study to take place in the period October – December 2010. It was agreed to approach Robert Tripp to undertake this review (Action: DB to approach Rob Tripp and TK/JS to write TORs and ltr of appt)

An issue that remains unresolved is the incentives for collaboration on the part of the centre, given the new business model for SPIA. DR, a centre impact assessment focal point, said that he could understand the sense of frustration that SPIA felt at the quality of the centre contributions in the recent years. He explained this by saying that there is a much higher burden on the social sciences in recent years.

. However, TK countered that, from a DG's perspective, wouldn't they have a big incentive to provide as much relevant impact information as possible to ensure that the centre is seen in a good light versus other centres? MS noted that incentives might be different in different centres and that the model needs flexibility. DR also noted that legumes will be a commodity MegaProgram (MP) and SPIA needs to think carefully whether this study would privilege the legumes MP over other MPs.

7. Other Business

None

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