

Minutes of the Fortieth Meeting of SPIA (SPIA 40)
El Sueno Hotel, Puebla, Mexico
12th and 13th September 2011

Attendance:

Derek Byerlee (SPIA Chair), Mywish Maredia (SPIA Member), Bhavani Shankar (SPIA Member), Tim Kelley (SPIA Secretary), James Stevenson (ISPC Secretariat - On Skype)

1. Opening comments

DB welcomed members to the meeting. The meeting was held in closed session (i.e. without observers).

2. Review of agenda

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

3. Minutes of SPIA 39

These were approved, with two items outstanding as follows. The issue of resourcing of *ex-post* impact assessment (hereafter epIA) within the portfolio CGIAR Research Programs (hereafter CRPs). SPIA is concerned that epIA is somewhat overlooked within the CRPs and it was agreed that we need to check with the Consortium Office about funding epIA through an allocation from the CRPs. A related point that has arisen since SPIA 39 is that scientists at one CG center have written to SPIA to highlight the potential challenge they may have in securing resources for impact assessment now that the Performance Measurement System (PMS), which had indicators relating to the quantity and quality of impact assessments carried out, has been withdrawn.

Action: Derek Byerlee to follow-up with Consortium CEO Lloyd LePage during the ISPC meetings to alert him to these issues.

The second item outstanding from SPIA 39 is the need to write a concept note for the Bill and Melinda Gates Foundation on updating the meta-analysis of impacts from CGIAR research. This is now an urgent item. SPIA also needs to find the right mechanism for dispersing funds. Decisions on this are minuted under agenda item 5.2.

Action: DB to develop and circulate a first draft for that concept note.

4. On-going studies

4.1 Environmental Impact Assessment study

This study was completed in early 2011 and the focus for the past few months has been on peer-reviewing the final report, responding to referees queries, and on developing communications pieces on the results. Bhavani Shankar, who was not a SPIA member at the time of the study, has been acting as referee to the two external reviewers appointed for the SPIA paper on crop germplasm improvement impacts on agricultural expansion / land-saving. BS confirmed that the response to the reviewers was sufficient for the purposes of being published as the final part of the EIA peer-reviewed green cover report. The whole report has been sent to Green Ink who are copy-editing and type-setting, with a print run of 300 copies to be delivered in time for the CGIAR Science Forum in Beijing in October. This will be the final printed green cover report that SPIA produces – from now on, all reports will be posted to the <http://impact.cgiar.org> website, and circulated on a distribution list of donors and stakeholders.

It was agreed that we should now proceed and produce four impact briefs from this study based on the following source material:

- A synthesis of the case-studies by Jeff Bennett
- The SPIA-authored paper on land-use change
- Mitch Renkow's review paper
- The foreword by SPIA to the whole report (a summary statement of SPIA's opinion about the process and implications for the future)

Action: ISPC Secretariat commission Green Ink to produce the four briefs

In terms of other dissemination efforts from the report, it was agreed that SPIA would produce the following journal articles:

Land-use change chapter – All SPIA members + Nelson Villoria (Purdue University) as authors, and targeting the Proceedings of the National Academy of Sciences special issue from the CGIAR Science Forum. Nelson Villoria is likely to want to publish the GTAP modelling findings as a separate, more technical paper for an economics journal. It was agreed that the material in the paper on oil crops simulations (soy bean in Brazil; oil palm in Indonesia) was also publishable, but as a second priority.

Jeff Bennett synthesis – TK sent around a draft of the text for a journal article. SPIA members are to provide comments to Jeff and to Tim. The case-studies are referenced in the paper but have not been peer-reviewed so these should be included as working papers on the website. Agreement that Agroecosystems and Environment or Agricultural Systems could be suitable journals.

Action: TK to request last version from all the case-study authors and post them on the website. SPIA to send comments to TK on the synthesis paper. JS to follow-up with Chris Deane on the abstract for PNAS submission and the likely timeline.

Two sessions in the forthcoming CGIAR Science Forum draw on SPIA's experience from the EIA study. A session on metrics, convened by Ken Cassman, will focus on the science required to develop rigorous monitoring and evaluation systems for the relationship between agricultural practices and the environment. Another session, convened by Derek Byerlee, is to be based around issues related to the SPIA paper on land-use change, asking whether intensification of agriculture can save the forests.

4.2 Advancing Ex-Post Impact Assessment of Social Impacts of CGIAR Research

It was too early in the set-up phase for each of the four case-studies to gauge how things are progressing. The four case-studies: CIMMYT (Improved maize; Zambia and Malawi), IRRI (Modern varietal replacement; Bangladesh, India, Indonesia, and the Philippines), WorldFish (Integrated aquaculture; Bangladesh) and IFPRI (Combined, multi-crop study; Ethiopia), all run till June 2013.

In order to keep track of progress, liaison points with SPIA were assigned, namely: Mywish for IRRI; Bhavani for CIMMYT and Derek for WorldFish. SPIA is now considering a mid-term workshop of all four projects which would help focus our minds and engage the case-study leaders on the expected deliverables and might also help get some cross-fertilization of ideas going. This might also productively involve people from the DIIVA Objective 3 projects (see agenda item 4.3) on particular aspects of methodology e.g. instrumental variables, computable general equilibrium modeling.

There is a meeting in Nairobi on 26th September for the IFPRI-managed study in Ethiopia and SPIA should be involved in some way. The big issue with that study is how they are planning to estimate productivity shifts – these need to be built “from the bottom up” based on data on varietal adoption etc. The other technical issue relates to the CGE modeling and some discrepancies in the expectations of what that can realistically achieve.

Action: Derek, Xinshen Diao, Doug Gollin to meet (by phone and face-to-face in Washington DC) for an afternoon to further discuss.

JS circulated a 1-page concept note for a paper to supplement the case-studies and provide SPIA’s overview of how this study has evolved. There was agreement on the need for this, but in addition, particular concern about nutrition issues and poverty and how these are being developed in the CGIAR. Nutrition is a System-level outcome (SLO) for the CGIAR now and some kind of paper on nutrition is also required outlining what is reasonable and measurable for impact assessment from agricultural research.

Actions: SPIA to move forward on a scoping paper for the poverty study, with JS to develop the concept note to an annotated outline as a first step. BS to develop a 2-page concept note for IA issues for the CGIAR on nutrition measurement before the next SPIA meeting in March.

4.3 Diffusion and Impact of Improved Varieties in Africa (DIIVA)

Progress with this study is generally good. SPIA has received the analysis of the 1998 dataset from Tom Walker on the varietal output and strength of the national agricultural research systems (NARS). The concerns we have had regarding progress at ICRISAT and CIMMYT have improved a little but we need to ensure that all centers deliver on their commitments – an analysis with significant gaps is of much less value than a complete picture. A financial and technical report is due to go to the Gates Foundation by the end of September. It was agreed that some unspent resources can go to pay for Bamako meeting (unscheduled – took place in January 2011) and the banana in Uganda proposal from Bioversity which is now ready to proceed.

Mywish Maredia has drafted a concept note for a rate of return analysis to complement the adoption estimates generated study concept note, which is to now become a proposal to go to the Gates Foundation by the end of September. It will start as soon as the Objective 1 data are all in. There was some discussion about possible consultants to lead it – it is clear that we need strong leadership to see it all through.

Action: DB to send note to Bioversity to confirm that we’ll spend the unspent resources on the banana proposal. SPIA members to send comments to MM on the rate of return concept note.

It was noted that the challenges of doing this kind of analysis are similar to that of the ACIAR meta-analysis of IRRI research. Essentially, the methods are traditional but GIS could allow the analyst to

get greater disaggregation in genotype by environment (GxE) interactions, for example. The issue of possible route to improving the level of rigor in this kind of analysis was discussed and raises the question of whether SPIA accepts and endorses the ACIAR findings on IRRI. One constraint for the rate of return analysis is that in some cases we only have modern varietal adoption for the 1998 side, not later. It was agreed that the team carrying out the study should draw on the likes of Tom Walker and an agronomist with plenty of field experience in Africa. Julian Alston was also mentioned as the kind of person who could provide an insight into the current state of the art in this area.

Action: DB to talk with Stan Wood about the mechanisms for improving the level of rigor in the proposed work. MM's outline to be adjusted to reflect an attempt to move the methodological frontier somewhat. SPIA to provide comments on the papers from Tom Walker – especially the one relating to the 1998 dataset – to TK to compile, by 23rd Sept.

4.4 Legume improvement impact study

The discussion of this study proceeded case-study by case-study.

Cowpea in Nigeria: We know we have a DIIVA estimate of 38% adoption for all modern varieties, from Arega Alene, based on expert opinion. There was some discussion about the possibility of sampling the same farmers as the LSMS team, and some enthusiasm for pursuing this option as far as possible. *Action: JS to follow up with Alberto Zezza in the first instance, and possibly for DB to contact Prabhu to see whether the Gates Foundation has leverage with LSMS team. DB to write to IITA to inform them officially of the intention for the study, and an informal approach to Paula Bramel during the ISPC meetings.*

Chickpea and/or Pigeonpea in India: Dave Hoisington is willing to co-finance a study using ICRISAT's budget. We will have objective 1 TRIVSA data for all these states but the adoption data might be quite preliminary – we will only have objective 2 survey data for chickpea in four or five regions in Maharashtra. We should have TRIVSA Objective 1 results from ICRISAT in November. If the adoption data is good, we should then focus on profiling adopters. It was unclear whether the DIIVA objective 2 surveys enable us to profile the adopters for other countries. *Action: TK to send an email to deepen the conversation with Partha, and to provide input to an objective 2 survey to enable us to profile the adopters. SPIA to request access to the Objective 1 data ASAP from ICRISAT.*

Pigeonpea in East Africa: It was agreed that it will be hard to assemble a story from disparate parts, but that we should try and assemble the best available evidence in countries such as Tanzania, Kenya, Malawi and Mozambique. The estimate of total modern variety adoption for Tanzanian districts is 33% from the study by Solomon Asfaw, formerly of ICRISAT and now with FAO. *Action: JS to meet with Asfaw to discuss methodology, availability of baseline data, survey teams.*

Beans: We have the DIIVA objectives 2 and 3 studies for Rwanda and Uganda. We are also interested in Latin America, and we should continue to try and get some input from CIAT on this.

Action: DB to try and Skype with Robert Andrade to get more information and consider a plan for pulling in the bean impact data into the final report.

Mywish Maredia updated SPIA on progress with the Pulse CRSP study for USAID. Seed sales data will be used in Latin America, but Mexico and Colombia are not covered. This will be adoption and impact estimates and it should be possible to sort out CGIAR impacts from the wider pool. However, the main purpose of that study is to allow the Pulse CRSP to report to USAID on its impacts.

It was agreed that Rob Tripp's terms of reference for these case-studies should be written on a case-by-case basis, rather than assigning him an over-arching task. This will help in ensuring his input is targeted to the most appropriate places, in SPIA's judgement. Tim Dalton and Ben Groome were both mentioned as possible candidates for economists to work with Rob and the centers on specific cases.

4.5 Germplasm collection, conservation, characterisation and evaluation (GCCCE)

The initial report to SPIA from Jonathan Robinson has succeeded in securing interest from the CG centers and has narrowed down our options for case-studies to the following:

- Cooperation 88 potato in China – CIP
- Cassava in Thailand – CIAT
- Ug99 wheat – CIMMYT

There is a need to now really focus on these cases – it was agreed that a quick, focused effort to get the best job possible done on this by the end of 2011 or early 2012 would be in SPIA's interest. Robinson would have had to establish the link between the genebank, pedigree information, and to develop the counterfactual but that SPIA would now move to recruit an economist to the study to work alongside him.

The Ug99 wheat case is very high-profile. Dubin and Brennan did a whole analysis of global wheat rusts for the "Millions Fed" exercise and might be able to provide useful input to this. The cooperation 88 case is pretty clear and SPIA feels most uncertainty about the cassava case. There are many questions, from both the genebank side and the impact side, about connecting the impact pathway together. The impacts observable from adoption are also not obviously linked to a particular trait that we can value.

Action: SPIA to recruit an economist to work with Jonathan Robinson on second visits to centers to finalize the data required for each case-study. 2 or 3 days per centre for the second round of visits should be sufficient. SPIA should now check the ex-ante assessment for these cases and communicate our concerns about the cassava case to Jonathan. DB to contact Brennan about Ug99.

4.6 Randomised Control Trials

SPIA is now broadly happy with the content of notes developed by Tim Kelley summarizing SPIA's position on this issue, and we should now proceed to develop a 4-page Impact Brief.

Action: SPIA to look through TK's note carefully to ensure we are all happy with the technical content. Once we have developed a draft of the impact brief, we should then send it to Michael Carter to comment.

5. New activities

5.1 Cross-cutting "stripe" impact assessment

There was little time for discussing the potential topics for this in 2013, but broad agreement that the theme should be either irrigation management or livestock. Other suggestions are welcome in the interim, and SPIA should solicit input from donors on this issue.

5.2 Updating global, system level, impact assessment studies

The objective is, within the next 18-24 months or so, to come out with a new global study that updates previous over-arching or meta-analysis studies for the CGIAR. The other related issue is how to institutionalize impact assessment in the CRP structure. SPIA is concerned that impact assessment could fade from the agenda until the CRPs become more mature, so there is a need to provide some incentives to centers to keep going in the interim.

SPIA has had strong signals from the Gates Foundation that they're willing to fund a significant effort in both of these regards, now they have agreed their own new strategy for the agricultural portfolio. Global estimates to date have been based mainly on germplasm improvement. Africa is now quite well covered by DIIVA, and parts of SE Asia (ACIAR) and S Asia (TRIVSA) are also well covered to provide input to such a global updating. Latin America and MENA not going to be well-covered without additional investments by SPIA. SPIA need to go crop by crop to find where the main crop x region combination gaps are. We are looking to have studies that are new – certainly post-2003. From that, SPIA will develop a concept note.

We have impacts documented up to 1998 (with the Evenson and Gollin book) so we are now focusing on the marginal gain since 1998. Marginal and aggregate figures would be useful to have. Some of the rice adoption and impact will be missing, and we expect maize and wheat to be the biggest gaps. We are unsure about how well sorghum and millet will be covered from the TRIVSA data. It was agreed that we should develop ideas based on two separate windows for funding of new studies.

- Window 1: Focus on commissioned crop germplasm improvement studies, purposively selected by SPIA to fill gaps in the global picture, with co-financing from centers.
- Window 2: No crop germplasm improvement, with a competitive call for proposals. Proposals should be methodologically innovative impact assessments that address the four system-level objectives (SLOs – i.e. on poverty, food security, nutrition, natural resources) of the CGIAR. The agricultural research that is the subject of the analysis can be on anything other than crop germplasm improvement.

Action: MM to develop a table of crop x region combination gaps this week.

Action: DB develops first draft and following a round of input from members, SPIA sends concept note to the Gates Foundation by 3rd October.

6. Communication and Outreach

6.1 Website

SPIA focused on two issues: How to keep the website updated in the post-PMS era (the PMS having previously provided SPIA with an annual supply of impact studies to review)? How to ensure that the donors have the information they need in a timely manner?

It was agreed that SPIA should develop a newsletter to go out to key stakeholders electronically two or three times a year (whenever there is sufficient news to warrant it). This should be a lighter communications piece for a wider audience than the activities update.

Action: JS to develop, with Green Ink or Tony Murray, an electronic newsletter to draw people into the website.

6.2 International Association of Agricultural Economists meeting, Brazil, 2012

Dates for the impact workshop immediately prior to these meetings have been fixed for 17th and 18th August 2012. TK has written to impact assessment focal points (IAFPs): Bekele Shiferaw, David Raitzer, Guy Hareau and Eli Gotor are all interested and will, in addition to SPIA, constitute the steering committee. The plan is for a ½ day only on the first day for a business meeting with the Center IA focal points to talk about institutionalizing impact assessment in the CRPs, with people free to talk in confidence about how things are going with getting impact assessment embedded in their centers / CRPs. Day 2 (18th August) will be with externals and be about methods and innovations for epIA of agricultural research. There will be a competitive call for papers with some travel grants available for those accepted.

There was some discussion about possible speakers, such as Jeff Alwang, Tavneet Suri. It was suggested that we explicitly invite Chris Barrett to invite some of his students to submit papers. There will be 3 invited speakers and up to 9 papers selected from the competitive call.

BS confirmed that both he and his co-editor Colin Poulton are keen on publishing a special issue of the journal *Food Policy* based on the papers presented, noting that there is a need to balance a SPIA initiative with requirements of a wider readership. However, a special issue focusing just on agricultural research is still of interest to *Food Policy's* readers. One constraint from the *Food Policy* side is that we would ideally have the papers in advance of the meeting so that it can be launched at the IAAE meeting. It was agreed that we would put in a procedure so that there is a light-touch peer review prior to the conference, then people present 2nd drafts at the conference. There would then be an opportunity for edits before 3rd drafts go for full *Food Policy* peer-review. SPIA would need to allocate some budget to pay for peer-reviews.

Action: SPIA need to develop criteria for selecting papers and circulate a call with explicit timescale for receiving initial concept notes, then full first drafts before the meeting.

7 SPIA strategy, and workplan and budget for 2012/13

Our strategy has changed a little since we drafted the original text earlier in 2011, following the experience of the legume study, in the sense that we still need to collaborate with the centers. We need to tone down some of the language on independence from centers.

Action: JS to re-word the strategy document.

The priority for the rest of 2011 is for the Secretariat to ensure that we spend the existing allocation effectively. DB expressed the opinion that the budget negotiations within the ISPC are going to become more difficult. There will always be the potential for going outside for special grants.

SPIA needs to be completely transparent with the ISPC on the need to do the meta-analysis on behalf of the system. It is possible that individual donors want to fund the new global study alongside / instead of Gates Foundation and we should think through how to offer them the opportunity to take part.

8. SPIA succession planning

Mywish's term is coming to end - stepping down in December and DB thanked her profusely for the many years of dedicated effort in which she has played a key role in many of SPIA's most important outputs. Doug Gollin is joining SPIA as a new member from 1st January 2012.

DB is stepping down as SPIA chair at the end of June 2012, and the current thinking is that the top candidate (from SPIA's point of view) would be made Chair, but this is yet to be agreed with Ken Cassman.

Action: DB and TK to follow up with KC and PG respectively about the decision and process.

9. Other business

None

ENDS