

Advancing Impact Assessment of International Agricultural Research – Synthesis Report

MAY 2007



SCIENCE COUNCIL

CGIAR

Advancing Impact Assessment of International Agricultural Research – Synthesis Report

Meeting of CGIAR Center Impact Assessment Focal Points and
the Standing Panel on Impact Assessment of the CGIAR
Science Council held at the World Agroforestry Center (WAC),
Nairobi Kenya, 5-7 October 2006

MAY 2007



The Science Council of the CGIAR encourages fair use of this material provided proper citation is made. Correct citation: CGIAR Science Council (2007) *Advancing Impact Assessment of International Agricultural Research – Synthesis Report*. Rome, Italy: Science Council Secretariat.

CONTENTS

Foreword	v
Program Agenda for the Meeting	vii
Summary of Session Content and Outcomes	1
Session 1 - Welcome	1
Session 2 – Introduction	1
Session 3 – Presentations by Impact Assessment Focal Points	2
Organization and Management of IA	2
Conflicting demands on practitioners of impact assessment	3
Value/necessity of baseline surveys for epIA.....	4
Learning about the influence of research in policy circles	4
CGIAR Impact Website	4
Session 4 – Performance Measurement Indicators (PMI) 3a and 3b	4
Competitive nature of the exercise	5
Status of ex-ante studies or outcome mapping in PM exercise	5
Precluding potential for innovation	5
Specific process issues	5
Session 5 – Strategic Guidelines on <i>ex-post</i> Impact Assessment	6
Session 6 – Policy Oriented Research Impact Assessment	7
Session 7 – Break-out groups.....	7
Session 8 – Impact Assessment for Accountability vs. Learning.....	8
Session 9 – Reporting Back by Break-out Groups.....	9
PM Exercise 3a and 3b Group	9
Strategic Guidelines Group	10
Policy-oriented research IA Group.....	10
Session 10 – Non-economic Impacts.....	11
Session 11 – Impact in Sub-Saharan Africa.....	12
Session 12 – Mixed Session	13
ACIAR-CIE training and capacity-building impact assessment framework	13
Outcome Mapping.....	14
Discussion on future collaboration, scaling up, institutionalization of IA, data sharing and new panel data.....	14
Closing thoughts from Prabhu Pingali	15
Matters Arising from the Meeting & Summing-Up Session.....	16
Closing	17

ANNEXES

A	List of participants.....	18
B	Updating the SPIA strategy.....	19
C	Outline of a possible matrix model for linking CGIAR program outputs with CGIAR goals.....	28
D	Impact pathway model.....	31

FOREWORD

The meeting on '*Advancing Impact Assessment of International Agricultural Research*' was jointly planned and organized by the impact assessment focal points (IAFPs) of the international centers and the Challenge Programs, and the Standing Panel on Impact Assessment (SPIA) after all expressed a felt need to meet to discuss a range of issues. The primary rationale was to share experiences over the past six years since the previous such meeting, which was held in Rome in 2000 (ref: TAC Secretariat, 2001). Since that time most of the IAFPs are new to the system and the membership of SPIA has changed. There also has been a renewed focus on impact assessment by the donor community and a change in the external environment, with the introduction of the performance measurement system. These developments reinforce the continuing need for accountability on the part of the centers and SPIA, the need to revalidate their respective roles and responsibilities in ensuring it, and formulate appropriate strategies and tactics accordingly. SPIA has a number of ongoing studies and is planning some new initiatives, where the centers are pivotal. The meeting provides a forum to jointly monitor and design these.

SPIA is grateful to the Center and CP IAFPs for the constructive way in which they contributed to the development of the program and their willing and active participation in the meeting as Chairs, presenters and/or commentators. Special thanks are due to Dennis Garrity, Director General and Jan Laarman, Deputy Director General for Programs of WAC, for agreeing to host the meeting at the Center. Giving effect to this was their colleague Frank Place of WAC who bore the major responsibility as local organizer for the logistical and other arrangements and we are especially grateful to him. He was ably assisted by Tim Kelley and James Stevenson of the CGIAR SC Secretariat.

This Synthesis Report has been largely prepared by James Stevenson and Tim Kelley, with input from participants. While it does not include any written papers, most PowerPoint presentations will be made available through the CGIAR Impact Website (<http://impact.cgiar.org/>) or from Tim Kelley (timothy.kelley@fao.org). This 'synthesis report' endeavors to capture the essence of the discussions and, where relevant, the consensus that emerged.

Jim Ryan
Chairman of SPIA

PROGRAM AGENDA FOR THE MEETING

THURSDAY 5 TH OCTOBER	
8.30	1) Welcome Jim Ryan (SPIA/SC Chair) and Jan Laarman (DDG ICRAF)
8.35	2) Introduction Jim Ryan SPIA strategy and update PROGRAM outline – suggestions for revisions Frank Place (ICRAF IA focal point) Welcome and logistics
9.00	3) Presentations by Center focal points Chair: Patti Kristjanson WorldFish – Diemuth PemsI IWMI – R. Maria Saleth IRRI – Debbie Templeton
10.00	Chair: Kamel Shideed ILRI – Patti Kristjanson IITA – Steffen Abele IFPRI – Jock Anderson ICRISAT – Jupiter Ndjeunga
11.00	Coffee
11.15	Chair: Debbie Templeton ICRAF – Frank Place ICARDA – Kamel Shideed CIP – Graham Thiele
12.15	Chair: Graham Thiele CIMMYT – Roberto La Rovere CIFOR – David Raitzer Africa Rice Center – Aliou Diagne
13.00	Lunch
14.00	Chair: Roberto La Rovere Sub-Saharan Africa CP – Adrienne Martin Harvest Plus CP – J. Meenakshi Generation CP – Carmen de Vicente
14.45	Updating the CGIAR impact website - Demonstration by James Stevenson
15.00	4) Performance Measurement Impact Indicators 3a and 3b Chair: Tim Kelley Presentation: Jim Ryan
16.15	Coffee
16.30	5) Strategic guidelines for conducting ex-post IA Chair: Jock Anderson Presentation: Mywish Maredia, Roberto La Rovere
18.00	Close of formal PROGRAM Reception at ICRAF – Cocktails and Hors d’oeuvres Transfer back to hotel

FRIDAY 6 TH OCTOBER	
8.30	6) Policy-oriented research impact assessment Chair: Bruce Gardner Presentations: David Raitzer, Jim Ryan, Nick Hooton
10.00	7) Break-out into 3 groups for discussion on items 4, 5 and 6 (inc. coffee break at 11.00)
12.00	8) IA for Accountability and Learning Chair: Meredith Soule Panel discussion: David Raitzer (CIFOR), John Dixon (CIMMYT), Debbie Templeton (IRRI), Frank Place (ICRAF)
13.00	Lunch
14.00	9) Reporting back by break-out groups Chair: Jim Ryan
15.00	10) Measurement of non-economic impacts Chair: Prabhu Pingali Presentations: Maria Saleth, Flavio Avila, James Stevenson
16.30	11) Africa Impact Study Chair: David Raitzer Presentation: Mywish Maredia
17.00	Free time for matters arising
18.00	Close
SATURDAY 7 TH OCTOBER	
8.30- 12.30	12) Mixed session
8.30	a) ACIAR-CIE training and capacity-building impact assessment framework Chair: Michael Flint Presentation: Jeff Davis (ACIAR)
9:15	b) Outcome Mapping Chair: R. Maria Saleth Presentation: Patti Kristjanson (ILRI)
10:00	c) Discussion on future collaboration, scaling up, institutionalization of IA, data sharing and new panel data Chair: Aliou Diagne Presentation: Frank Place (ICRAF)
11:00	Coffee
11:15	Jim Ryan leads an open session on matters arising Dissemination strategies for findings from this meeting
12:30	Meeting adjourns

SUMMARY OF SESSION CONTENT AND OUTCOMES

SESSION 1 - WELCOME

Jim Ryan, SPIA Chair and Jan Laarman, Deputy Director General for Programs of the World Agroforestry Center opened the meeting with an official welcome to the 38 participants, most of whom are either within the CGIAR system or are major stakeholders or partners (Annex A). The draft Program for the meeting was outlined and suggestions for changes were invited. No changes were suggested. It was indicated that a synthesis report of the meeting could be prepared if participants thought that was desirable, and most agreed it was.

SESSION 2 – INTRODUCTION

Jim Ryan provided an overview of the rationale for the meeting which is focused on the following objectives:

- Exchanging experiences on IA methodologies and studies among centers and SPIA.
- Drawing lessons and progress “best practices”.
- Getting input from impact assessment focal points (IAFPs) on design and conduct of planned SPIA initiatives.
- Re-examining the SPIA strategy.
- Defining future Center/SPIA relations.
- Planning improved communications on impacts.

The growing importance of ex-post impact assessment (epIA) in the System, the early mandate and work of SPIA (or IAEG, its predecessor) and some recently completed initiatives (several in collaboration with the Centers) were briefly described. A list of issues meriting some attention at this meeting – at least in SPIA’s view – was identified. These are topics on which SPIA wished to get feedback from the Centers, which included issues that the Centers had identified earlier.

- Finding the balance between the accountability and learning functions of epIA, i.e. the challenge of being able to effectively use the former to also inform the latter given the long lag times involved in epIA?
- What should be the relationship between SPIA and the IAFPs? Should SPIA “guide” centers into gaps in IA coverage? How can SPIA retain its independence and also maintain or enhance its professional relationship with the Centers?
- What are the relative payoffs to added resources given to centers for epIA, versus to SPIA, i.e. the issue of System-level public goods from epIA (generated by SPIA) vs. Center-level?
- What is the best way forward on non-economic impact indicators?
- How can we use economic and non-economic IA indicators in *ex ante* impact assessment and priority setting at Center and system levels?
- Revising the SPIA strategy in the current context (see Annex B – update note and SPIA strategy defined in May 2004).

In discussion, the issue of the independence of SPIA and its professional relationship with the CG centers and challenge Programs was raised. It was agreed that the performance measurement exercise (see Session 4) had changed the dynamic of the relationship somewhat, but that it was still strong. An observer noted the importance to SPIA of

strengthening their relationship with the research evaluation community outside of the CG system.

The objectives of the meeting were agreed to by all participants.

SESSION 3 – PRESENTATIONS BY IMPACT ASSESSMENT FOCAL POINTS

Presentations were given by impact assessment focal points (IAFPs) from 13 of the 15 CGIAR centers and each of the four Challenge Programs (individual PowerPoint presentations can be accessed at <http://impact.cgiar.org/>). Each IAFP gave a 10-minute presentation as a quick overview of recently completed and on-going IA activities at each Center/challenge PROGRAM, followed by an outline of future IA activities. Discussion sessions were held jointly, following presentations from three or four IAFP's at a time and chaired by a different IAFP. The issues raised and addressed in each discussion session can be grouped under four themes.

Organization and Management of IA

a) Institutional arrangements for impact assessment

The IAFP concept – should only one person have this responsibility at each Center, or spread the responsibility more broadly?

Arguments *for* having a single IAFP at a Center were:

- Greater focus, depth and specialization on IA issues when there is a resident expert in IA at the Center
- Helps with communication with SPIA and among centers

Arguments *against* having a single IAFP at a Center were:

- More people working on IA across the Center facilitates spread of a genuine impact culture
- All 'impact related work' dumped on the IAFP, leaving that person with little time for research, which impairs methodological progress and the professional development of the IAFP

No consensus seemed to emerge on the issue.

b) Externally vs. Internally conducted epIAs – which is preferable?

Arguments *for* having Center staff carry out epIAs were:

- They know the story better; they know where the data are, and its shortcomings and strengths.
- The learning function of epIA is better served because the IA practitioner remains in the Center, and can promote the findings in-house.
- Objectivity/credibility might be enhanced by publishing in peer-reviewed journals.

Arguments *against* internal staff carrying out epIA were:

- External consultants have a fresh perspective, and are a-priori unbiased and objective.
- The auditing role played by external practitioners is necessary for credibility.

The consensus view that seemed to emerge was that neither completely internal nor completely external is ideal, for reasons alluded to above. A combined external – internal

epIA would appear to have the greatest advantages (ref: 3b impact indicator Q. 7); and that external only is probably preferred to internal only.

c) Where should the impact assessment work be located within the Center?

This varies across the Centers, in some cases the IAFPs are part of the DG's office, but more often they are within the research programs themselves, usually within the social science division. Some participants expressed the view that keeping it close to the DG's office risks turning IA into a PR unit, and deprives the IAFP of opportunities to do research, and may undermine the credibility of the epIA itself due to pressures to demonstrate impact. Others felt that being in the DG's office could compromise the ability of the IAFP to enlist the cooperation of scientists, so important in tracking impacts and institutionalizing IA. Some preferred to be in the DG's office, where the accountability begins and ends. It depends very much on the predilections of the DGs and the personalities involved. No consensus emerged on this point.

d) How can IA be institutionalized, and better inculcated within the centers?

Several centers have attempted to build IA into the MTP process by embedding the IA work into projects, via a project template (e.g. ex-ante IA, baseline surveys, constraint analysis, early adoption studies). Others combine ex-ante IA (eaIA) with epIA after a suitable interval and find that synergies and learning can occur in this way. There appears to be no consensus about definitions of eaIA versus epIA. Some argue that the latter is any assessment conducted after the completion of the research projects/programs which are the subject of the IA study, even if that involves a predominance of projected impacts in the analysis. Others prefer to define epIA as when the estimated impacts are predominantly based upon actual (ex post) adoption, influence, etc. with a few years of projections added. This should be clarified in the SPIA strategic guidelines document. More attention is required on how to prioritize the choice of candidate topics for the conduct of epIAs. One Center reports that other programs are encouraged to jointly finance IAs as a means of both marshalling resources and fostering institutionalization.

Conflicting demands on practitioners of impact assessment

The following balances were noted as challenges to practitioners of epIA:

- The need to generate international public goods (IPGs) and the need to demonstrate attribution to research – the difficulty of documenting impact from true IPGs was acknowledged, and this remains a formidable challenge—but the accountability imperative cannot be ignored.
- Methodological pluralism vs a set of best practices.

Conclusion – This latter tension was addressed with reference to a focal point presentation (Harvest +) that featured the concept of degrees of proof, and that matching methods to contexts was an important part of best practice. Techniques such as outcome mapping, problem and solution trees were being trialed by some centers and others could benefit from their experience.

A related point concerned the generally inadequate resources available for conducting epIA, which typically must be funded with core resources but in some cases from project funds. However, this usually focuses on outcomes or early adoption studies at best. DGs and donors must recognize the importance of allocating funds for epIA as often they can only be

effectively done long after a specially funded project is completed. Recently, GTZ had provided resources for undertaking an epIA of an earlier funded piece of research at WorldFish. There was considerable discussion about the value and desirability of conducting joint IAs and training programs and the possibility of shared IAFP appointments among centers as a means of economizing on resources, which are limited for IA.

Value/necessity of baseline surveys for epIA

Some argued the necessity of having baseline surveys against which later surveys could be used to document the impact of the research, i.e. for a before-and-after comparison, to complement a with-and-without comparison. Here experimental evaluation methodologies can be especially valuable. Others questioned how essential this was, both from a methodological perspective and from an efficiency point of view given the highly uncertain nature of research and inability to predict success. No consensus emerged on this.

Learning about the influence of research in policy circles

Discussion on the use of qualitative methods in assessing influence focused on:

- Embedding scientists into political arenas to gather data on how research is used in policy processes;
- IFPRI's ongoing work of gathering retrospective narratives highlighting research use;
- Opportunities for more heavy-duty impact research from these "softer" case-studies.

These issues were flagged for consideration by the policy-oriented research break-out group.

Few of the presentations focused in any detail on impacts on poverty and how centers had explicitly measured (or were planning to measure) the impact of research on poverty. One Center reported on a study which found that the overall net present value (using an economic surplus approach) provided a reasonable estimation of the benefits to the poor, although this was specific for a particular crop (potato). The issue of how priorities were being set by IAFPs for epIA activity was not addressed in the presentations.

CGIAR Impact Website

Instruction sheets on how to upload documents to the CGIAR Impact website (<http://impact.cgiar.org>) were circulated to focal points, including details of user names and passwords. A content management system (found at <http://www.fao.org/eims/secretariat/cgiar/default.asp>) has been set up by SPIA to enable focal points to do this quickly and easily, in the hope that the site remains an up-to-date resource for researchers. A demonstration of how to use the system was given by James Stevenson and questions were invited. The initial upload, to be done by focal points, is to a secure site that is then accessed by SPIA, who check over the data entry before approving it to appear on-line.

SESSION 4 – PERFORMANCE MEASUREMENT INDICATORS (PMI) 3A AND 3B

After some introductory remarks by the Chair Tim Kelley explaining the current development of the Performance Measurement (PM) system in the CGIAR, and its use by both donors and the Centers, Jim Ryan provided an overview of the 3a and 3b impact indicators – the criteria, indicators and weights currently used, highlighted some key

observations from this year's exercise, and outlined potential improvements in the process for next year's exercise. The four major themes emerging from the presentation and discussion following were:

Competitive nature of the exercise

Does the PM exercise provide a strong disincentive for cooperation among centers? A SPIA member responded that there need not be competition – if three centers collaborate on a study, then that study will be available for submission by all three centers. Alternatively, it was suggested that an indicator for joint studies could be added. The majority seemed to be satisfied with the clarification on the status of joint studies.

Status of ex-ante studies or outcome mapping in PM exercise

Why are ex-ante impact assessments not included? A number of observers responded by saying that ex-ante and ex-post studies are not comparable and should remain separate. It was argued that the benefits of a good ex-ante study would come through ultimately in the quality of the ex-post work, so there would be double counting of the benefit of the ex-ante study if explicit criteria were included on them. Another participant was concerned that there was a bias against the use of outcome mapping under the PM exercise. Similar to the case of ex-ante impact assessment, however, outcome mapping is not sufficient for documenting impact, but is a necessary or complementary one, the benefits of which will be reflected in the scores given to ex-post assessments that use outcome mapping as a starting point. The majority seemed content with the assertion that ex-ante IA, outcome mapping, and ex-post IA are complements, rather than substitutes but that reconsideration by SPIA of explicit inclusion of ex ante IA in the 3a PMI might be worthwhile.

Precluding potential for innovation

By defining epIA so tightly under the PM exercise, is not SPIA in fact leaving little room for innovation? Is there room for loosening categories to accommodate learning? What about work on innovation systems that allow us to get a better idea of processes? Are the PM criteria too restrictive? While SPIA acknowledged that all of these activities have merit and value in themselves, some limits on epIA have to be set to keep the PM exercise tractable. Furthermore, this relates to an observation that epIA needed to be defined more clearly (see Session 9). Also, some of these activities could be considered research outputs, and listed in the MTP, e.g. understanding impact processes.

Specific process issues

A number of specific suggestions were made regarding the PM exercise process:

- Consider age, size and orientation of centers explicitly in the 3a criteria. In particular, recognition of the differences among Center portfolios, in order to level the playing field, because of a perceived disadvantage to the policy centers, whose tasks of attribution, in particular, are more difficult. SPIA agreed to revisit this and consider an explicit adjustment. However, it is not obvious which indicators need an adjustment factor in them, nor is it obvious how to measure the size of the Center.
- Status of the Challenge Programs under the PM impact criteria – are they too young for epIA to be feasible? Should they have their own system? The current understanding is

that the PM criteria will apply to the Challenge Programs but that some adjustments will have to be made, e.g. on Impact Indicators, and SPIA could look at that.

- Centers that got low marks under 3b should be able to re-submit epIAs in the following two years, rather than allowing scores to stand for three years (i.e. 2006 scores stand until the PM exercise in 2009). The SPIA chair indicated that while there is sympathy for this view, the process of peer-reviewing the submissions was expensive and time consuming and it may not be feasible to do this again next year and why should only those who received the lowest scores have an opportunity to resubmit? In principle, all centers with scores <10 should have an opportunity and here again cost becomes an issue.
- Goal displacement associated with the criteria – there are too many of them (17 sub-indicators), and one needs to spread oneself too thinly in trying to cover every base. The issue of potentially reducing the number of indicators was flagged for the break-out group to address.

SESSION 5 – STRATEGIC GUIDELINES ON EX-POST IMPACT ASSESSMENT

Mywish Maredia gave a presentation that detailed the history of the development of this initiative. A document describing appropriate IA Strategic Guidelines for the CGIAR is something which the group in the 2000 SPIA/IAFP meeting recommended be developed over time, as more and different kinds of impact assessments were completed in the System. With the NRMR IA initiative and POR scoping study completed, it seemed an opportune time to move ahead to finalize the Guidelines, parts of which already have been developed. A potential structure for the document was outlined, and two possible organizational tools for creating the impact pathways that are implicit to all epIAs were demonstrated: a cascading series of matrices, and a large flow diagram. Roberto La Rovere gave a presentation on CIMMYT's efforts to produce a field guidelines document targeted mostly at biological scientists within the commodity centers of the CGIAR, to ensure that they are familiar with the data and other requirements for epIA. This document will build on a strong CIMMYT tradition of producing authoritative manuals. The two presenters suggested that these documents were complementary and operating at different levels: the audience for the strategic guidelines are IA professionals and practitioners; the audience for CIMMYT's guide are biological scientists and fieldworkers.

In the discussion, there was concern that there might be multiple manuals in circulation within the CGIAR, as CIP and ACIAR are working on manuals as well. Could this be viewed negatively as a lack of coordination and integration by donors and others outside the system? A donor representative said that she thought the endeavors were positive – that they met different needs and represented public goods.

Concerns were also expressed by observers regarding the complexity of the matrices (Annex C) and the flow diagrams (Annex D). It was felt that careful guidance was needed so that practitioners did not feel that they had to cover every impact for each step. Another observer urged SPIA to think about the system for how all the impacts add up, stating that donors would want to reduce the findings of any given epIA to just one or two numbers, and that the document's main role is to show how to get this kind of result. The issue of double counting was also raised.

A number of issues were flagged for the break-out group, but there was broad support for both the SPIA and the CIMMYT and CIP initiatives as being complementary.

SESSION 6 – POLICY ORIENTED RESEARCH IMPACT ASSESSMENT

David Raitzer and Jim Ryan provided the background and rationale for this study, and elaborated on the main findings of a recently completed ‘scoping study’. The overall conclusions from the scoping study indicated that, while good examples of effective diffusion and influence of CGIAR research on national and international policies exist, a more extensive and credible set of studies documenting influence and impact further down the impact pathway is both desirable and feasible.

Jim Ryan described plans for a second phase to this initiative which involves case studies in cooperation with CGIAR Centers. Four main options for selecting Center-led case studies were presented. This was followed by a brief description of a joint initiative of ILRI and CIP on outcome mapping (influencing dairy policy in Kenya and influencing urban agricultural policy in Uganda), both using a demand-led approach (‘episode tracking’), to map behavioral changes in key policy actors. The Chair Bruce Gardner, who had been an external reviewer for SPIA on the this year’s PM exercise, started the discussion by indicating how positive he was about the quality of studies he evaluated this year, particularly with respect to attempting to document the impact of CGIAR POR.

The rest of the discussion focused primarily on the advantages and disadvantages of each of the four options presented as a basis for selecting case studies, as well as other points of concern/interest:

- Missing key POR impacts such as IPM research by IRRI that led to fundamental changes in IPM policy in Philippines and Vietnam; both for historical (original researcher gone) and for cultural reasons (claiming credit for oneself), this story would not likely be proposed by a center, yet it could be one of the biggest payoffs in CGIAR POR.
- The role of effective policy implementation, not just changing policy.
- Scope for impact of CGIAR POR on property rights.
- An ACIAR study of the impact of POR supported by the Center was mentioned by Jeff Davis as perhaps useful to the proposed PORIA study.

It was agreed to take up the discussion of the four different options for selecting case studies in the break-out group.

SESSION 7 – BREAK-OUT GROUPS

Participants divided up according to their own interest in one of three break-out groups on the following topics: PM indicators 3a and 3b; Strategic IA Guidelines; and Policy-Oriented Research. Each group nominated a chair and a rapporteur and proceeded to discuss the relevant issues for the next two hours. Groups reported back in a plenary in Session 9.

SESSION 8 – IMPACT ASSESSMENT FOR ACCOUNTABILITY VS. LEARNING

A panel of four impact assessment focal points (Debbie Templeton, Frank Place, John Dixon, and David Raitzer) were invited to present a brief statement on this topic:

- Debbie Templeton gave an overview of the key issues, followed by a description of the relative merits of having internal and/or external people carrying out epIA that drew on her experience at IRRI, and then discussed the implications of this decision for learning within the Center.
- Frank Place emphasized that the term “accountability” encompasses much more than internal rate of return (IRR) or net present value (NPV) studies, and stated that learning requires cross-Center collaboration.
- John Dixon focused on the end uses of epIA and how the dichotomy between learning and accountability is not helpful. There is rather a spectrum of different kinds of epIA, and a key challenge is to define the principles that help us to know when we need a mix, but that the relationships with other stakeholders is central to understanding this issue.
- David Raitzer emphasized that, as identified in the SPIA donor demands study, there is strong demand for epIAs that use poverty metrics. He proposed that distinguishing between formative and summative evaluation would be more useful than accountability vs. learning.

Following these opening thoughts, participants within the broader group raised a number of other issues:

- A donor representative reported that impact assessments had to have “numbers” for accountability purposes and otherwise they were not taken seriously by managers.
- It was recognized that it is possible for a rigorous epIA to attract a good mark under indicators 3a and 3b, even if the scale of the impact is low or even zero, or even conceivably if the project had a net negative impact.
- While the CGIAR needs to be primarily accountable to donors, in many cases it is desirable to show NARS what we are doing so that they will invest and get involved in our work. The information needs for this process might be different.
- Is there a relationship between better studies and better lesson-learning, or is there something else that we need to do throughout the organization?
- Are there sufficient cases of lessons being learnt from epIAs?
- There appeared to be a trend of epIAs moving closer to monitoring and evaluation, and less of IA research pushing the methodological frontiers. There is a legitimate role for epIA research and historically the CGIAR centers have been pioneers in IA research.

Some of these issues and arguments reinforce the value of having SPIA. One participant suggested that SPIA can push the methodological frontier and can ensure that IAFPs are still leaders in high quality IAs across the range of Center activities. SPIA can play a role in protecting the system in general from the longer term concerns raised.

In conclusion, SPIA emphasized its view about the primacy of the accountability function of epIA but is looking for ways to advance the learning element as well. It will consider all these contributions when developing its new strategies. In particular, SPIA is soon to initiate a study to assess how information from epIA studies can be most effectively used in research planning (project proposal was circulated to IAFPs prior to the meeting). Several centers have expressed an interest in this initiative.

SESSION 9 – REPORTING BACK BY BREAK-OUT GROUPS

PM Exercise 3a and 3b Group

The group addressed questions under five themes:

1. Status of *ex-ante* IA

It is well recognized that *ex-ante* IAs are important but mixing *ex ante* and *ex post* IAs would make comparisons/ranking across centers difficult. To address this issue the following suggestions were made:

- *Ex ante* IAs could be added as an additional element under the Indicator 'Potential to Perform' in the PMI exercise.
- *Ex post* IAs and *ex ante* IAs could be done on alternative years or as two separate PMIs
- *Ex ante* IAs could be considered as a research output and included under the output PMIs and in the MTP

The group consensus is that the latter appears to be the most feasible at this stage. It was also noted that the status and requirements of the Challenge Programs needs further discussion and thought. Finally, it was agreed that a clearer definition of *ex post* is needed.

2. Joint Center studies in PM

The group felt that joint studies would be beneficial at the System and Center levels if all Centers who are part of the study can claim credit. The issue of apportioning recognition according to the Center's contribution was discussed. It was concluded that this would not be a serious problem as each author Center would know that these studies could potentially be credited to their PMIs and so would most likely feel obliged to do their fair share of the work. As such it is proposed that all 'author' Centers would be given equal credit.

3. Adjustment according to size, age and orientation of Centers

The size and age of the Center does not always reflect size or age of a particular research area. Equally, the size of Center does not reflect the size of the IA work. The question was raised whether or not research orientation affects the quality of IA and, if so, should the PM be adjusted to account for this. A suggestion was that adjustment criteria could be the share of budget in IA compared with total research budget.

4. Should those who did badly in last years 3B be given the chance to resubmit?

It was concluded that the cost of the resubmit would preclude this from happening.

On a related point, the question of whether a Center's should submit its best two *ex post* IAs - or if they should be chosen randomly - was discussed. It was decided that because a center's budget is at stake then it should be up to the Center to decide what they will be judged on.

5. Other issues flagged by the group:

- Many focal points did not know that the 3a and 3b scoring could (actually do) affect funding decisions.
- The guidelines have benefited from early feedback from the Centers and are reasonably clear and detailed for the most part, however, there are still some areas which are not detailed (or clear) enough for the respondents to understand what is required of them.
- SPIA needs to think how the guidelines could be better designed so that no prior knowledge is required to be able to assess the criteria.
- It was felt that the 1000 word limit is too low.

Strategic Guidelines Group

1. Content issues

Could it be changed / opened up. For example, rather than “Strategic guidelines for conducting ex-post impact assessment in the CGIAR”, can we take out CGIAR and just refer to International Agricultural Research? The rationale for this suggestion is that it might encourage wider use of the document. No consensus was reached on this issue as it was reiterated that the primary audience is the CG, and so the issue was flagged for further thought in future.

It was felt that it was not appropriate to have a chapter titled “impact pathways”, in order to avoid confusion over different uses of the term (i.e. as a tool; theory of change, etc). In general, there was a feeling that the structure of the strategic guidelines document needs to be revised and that this should be done by a consultant, circulated to focal points again for their feedback, and then further revised based on this input.

2. Relationship with other similar documents

The group considered whether there is any overlap or redundancy between work from SPIA on this issue and work done by the centers. Particular reference was made to a document under development by CIMMYT. The group discussed how the centers may develop specific operational documents (i.e. a field guide or manual) and that SPIA could thereafter develop an umbrella document, in a sequential co-evolutionary manner. The group decided that there were clear complementarities between the Center work and SPIA’s document, and that a co-evolution of both with extensive cross-referencing would be the best approach. One possibility mentioned was an impact guidelines series, with the SPIA Strategic Guidelines document as the first in a series. The group agreed on the value added of some easy-to-use guidelines that compile the abundant and complex literature.

3. Proposals for moving forward

The group agreed that a consultant is needed to carry out work on strategic guidelines otherwise there is a risk of the work not being completed. Focal points should be invited to collaborate in the development of the strategic guidelines as the consultant progresses, and this can be done on a self selection basis – those that are motivated and able to participate in the process are welcome. The operational documents (methods and tools) under development by some centers may be developed according to need. By having the strategic document(s) and the Center operational documents, the diversity of research approaches to implement impact strategies is taken into account. SPIA should act in a backstopping capacity and function as a clearing house for these documents. Publication of the Center documents can be done through the Center websites, with a link from/to the SPIA website.

Policy-oriented research IA Group

The group addressed issues and questions under three themes: strategic issues, case study selection and the role of SPIA.

1. Strategic issues for the study

- where should the focus be – influence on policy change or impact per se?
- should a demand- or supply- led approach (tracking backward or forward) be used?
- how deeply should we pursue understanding of attribution / influence / contribution?

It was agreed that the pathway to both policy change and impact were extremely complex and that assessing the role of research was extremely difficult and it is unlikely to be able to pin that down. It was recognized that policy processes were important and that to improve the way centers implement policy research in order to have impact is important – but probably not the main objective of the current exercise and should be something that centers focus on. It was agreed that a combination of approaches was important. The term ‘scissors approach’ was used to indicate a combination of demand- and supply-led approaches and that this might be preferred. It was considered that rather than trying to deal with the complexity it would be more important to choose cases where the pathway was less complex.

It was agreed that some common methodology should be established and used to ensure comparison between studies. It was noted that impacts from policy change occur some time after the policy change so it would be important to select cases where there had been time for change to lead to impact. There was disagreement on the importance of the counterfactual and it was agreed this was difficult to deal with – no conclusion was reached on that issue.

2. *How to select case-studies*

- What should be the criteria for selection?
- Should the cases be Center-specific or cross-Center?

A discussion characterized the impact pathway as:

Research → dissemination/uptake → influence → policy change → impact

It was agreed that a small number of cases should be selected and that criteria for selection should include:

- Cases where the end-point has been reached – i.e. demonstrable impact achieved.
- Cherry picked–cases where significant impact could be shown.
- Cases where impact pathways were reasonably direct (so limited complexity) and that it was reasonably straight forward to demonstrate that Center research contributed.
- Cases from a cross section centers that represent the scope of the CGIAR, i.e. choose centers with a commodity, policy and natural resources orientation.

IAFPs should make suggestions for cases.

3. *Purpose of the study and role / value of SPIA*

In this study, lesson learning is less important than demonstrating impact. An ACIAR study used a few cases where the cost-benefits of ACIAR research had been evaluated and summed benefits. The outcome of the study did not evaluate all policy projects but summing the benefits identified in the few studies carried out indicated that benefits of POR outweighed the costs 3 to 1. This had a huge effect in terms of leveraging additional investments in funding POR – this should be the intended outcome of the CG study. SPIA can contribute by providing support in methodology so that a cross-cutting analysis can be shown. SPIA brings credibility to process by introducing peer review and independence.

SESSION 10 – NON-ECONOMIC IMPACTS

Maria Saleth gave a presentation on a qualitative framework that IWMI uses to examine institutional innovation in water management. Flavio Avila gave an overview of

EMBRAPA's multidimensional system of impact assessment, giving details on the framework, indicators, and the scoring and weighting procedures. James Stevenson gave a presentation on a study in the Philippines that used six indicators of performance at the farm-level and described how some of the challenges in processing information from more than one criterion can be tackled. The Chair commented on his own experience of carrying out large-scale impact studies involving working with interdisciplinary teams. He urged everyone to consider non-pecuniary impacts (there was consensus on the idea that "non-economic" was not the correct way to refer to impacts that are not measured in monetary metrics) as being a major research area in its own right.

In the discussion the following points were made:

- CGIAR has commitments under the Millennium Development Goals and that in the future we may be held accountable to the ecological and other goals that they have agreed to.
- The case for non-monetary indicators is particularly strong where the impacts are large scale and globally agreed to be important, but very difficult to value in economic terms – an example would be the "hectares of rainforest conserved".
- Cautionary notes came from an observer who agreed that non-monetary indicators sometimes have better information value than monetary indicators but that it was not also obvious how to use all the information.
- Caution was urged regarding the potential for double counting in these methods.

SESSION 11 – IMPACT IN SUB-SAHARAN AFRICA

Mywish Maredia presented the findings from a SPIA commissioned scoping study report summarizing the impact assessment literature on CGIAR research in Sub-Saharan Africa. David Raitzer, as Chair of the session and co-author of the report, provided additional commentary. The study found reports documenting approximately 11 million hectares (about 10% of the cropped area) planted with varieties derived from CG improved germplasm in SSA. Outside of adoption of improved varieties and biological control measures, there was very little documented impact of adoption of other technologies or POR. The study also showed that for every US\$1 invested in CGIAR work in SSA in the period 1966-2004, NARS invested approximately US\$1.12 to ensure the benefits were realized. The ratio of the present value of CGIAR-NARS costs to the present value of the documented benefits is conservatively estimated at approximately 1:1. However, the benefits used in this calculation are derived from investments that represent only 5% of the total CGIAR-NARS investment to-date in SSA. What of the other 95%? Three major issues were raised in the discussion which followed:

a) Lack of impact or lack of documentation?

A donor representative thought the findings were surprising and thought that the success stories of sorghum, peanuts, cowpeas, cassava would provide a more optimistic picture than that presented in the study. Is there an opportunity for a multi-Center study looking at outcomes (adoption) and impact on a number of crops which could be useful for future planning? Another observer noted a mismatch between investment in germplasm improvement and the documented benefits. The mismatch is the same for the NARS – even the NARS seem to be investing in germplasm improvement without getting benefits.

b) Methodological issues

An observer was concerned about the effects of compounding over 35 years. In a CSIRO study that went back to 1920, the benefit stream from a biological control prickly pear project in 1930 swamped everything else. Another observer wanted to know how convincing the aggregate figures really are. In particular, on the cost side, what about the rural infrastructure investments? The Chair clarified that each of the individual studies had benefits attributable to research, rather than to any other investment. One observer urged SPIA not to do a similar study in any other region and shared the concerns with other participants regarding the costs included. For example, what are the assumptions regarding national expenditures on extension? Extension costs should be included and this could double NARS costs immediately. In addition, he noted that some people believe specific biological pests may have been inadvertently imported by inexperienced researchers. Given that a biological control PROGRAM provided by far the greatest benefits in SSA, a careful review of the counterfactual might further reduce the benefit stream.

c) Adoption studies

The figure of approximately 10% of total cropped area in SSA sown to HYVs was queried. *Is it possible to make a comparison with the Green Revolution in Asia at a similar time interval after inception of the research to see how SSA investments fare?* Poorer infrastructure helps to rationalize why performance in Africa is much worse than in the Asian Green Revolution. But do we not need to understand constraints to adoption better? The Chair replied that there is fairly extensive documented evidence of adoption and a large number of adoption studies out there. There have been literature reviews of adoption, but no systematic analysis of constraints across the literature. Is this a legitimate area for SPME or should centers undertake more early and late adoption studies in order to both learn of constraints and position themselves for more concerted IA efforts in SSA in future? No consensus emerged.

SESSION 12 – MIXED SESSION

ACIAR-CIE training and capacity-building impact assessment framework

Jeff Davis presented the results of a recently completed impact assessment of two case studies on ACIAR-funded training programs (pigeonpea breeding training in India; GIS training for water management project in Vietnam) which developed and applied a novel framework for measuring impact in a quantitative fashion. Until now, only qualitative assessments of capacity building had been undertaken. The first quantitative study was undertaken by John Brennan and Katherine Quade in 2004. They developed an analytical framework for valuing rust resistance capacity building in India and Pakistan. This work was ranked as plausible by Raitzer and Lindner in their review of the returns to ACIAR's bilateral program (IAS 35).

The ACIAR/JD view is fairly strong: if you cannot put an educated welfare economics based number on something then it is zero! The analytical framework identifies the pathways through which investment in capacity building can produce benefits. Application of the framework requires detailed assessment of the contribution of the capacity building to the impact via interviews with cross-checking, triangulation and validation. Finally, tools for estimating the impacts and benefits were selected from both market and non-market valuation economic methodology. Recognizing that this is a major step forward in attempting to assess impact of one of the most difficult areas of investment, the discussion

focused on a few key areas, namely, the critical importance of handling the counterfactual appropriately, attribution, and the trend away from government funding of training given the perceived large relative share of benefits appropriated by the individual. SPIA or the centers may want to consider using this approach in selected case studies of training as a follow up to the recently completed strategic evaluation of CGIAR training and learning activities that was chaired by Elliott Stern.

Outcome Mapping

Patti Kristjanson made a short presentation on ILRI's work with outcome mapping. Although not *ex-post* IA *per se*, outcome mapping is a planning, monitoring and evaluation tool. At ILRI it has been used to assess behavior change as an indicator of progress towards outcomes and impact. It promotes a view that the contribution of a particular organization to change is more important than attribution of specific impacts. 'Boundary partners' are identified and, with them, progress markers defined during the project cycle, and outcomes are mapped thereafter. Five ILRI outcome mapping exercises were described.

The topic generated some good discussion related to donor expectations – are outcomes sufficient to satisfy donor demands for accountability? Several of the donor representatives present emphasized the critical importance of impact and sustainable impacts, including hard numbers, and not process-type information for accountability purposes. How many poor are affected, and by how much? Several other IAFPs agreed with the impact imperative, moving beyond outcomes. Outcome mapping seems to be more about processes, which is relevant, but insufficient by itself for impact purposes.

There was a suggestion that SPIA might want to organize a workshop on this topic to discuss various tools of M&E, different approaches and how these relate to epIA. With respect to downplaying attribution in favor of contribution, some felt strongly that this was not viable – donors seem to want to know how important CGIAR centers' roles are in the impact.

Discussion on future collaboration, scaling up, institutionalization of IA, data sharing and new panel data

Frank Place focused on two of the session's five topics: issues related to the 'science of scaling up' and panel data sets. Institutionalization of IA had already received some attention at the meeting and future collaboration and data sharing could be dealt with in the context of discussions of the two topics he wished to focus on. Scaling up is not IA *per se*. It is research that aims to understand the output to outcome to impact processes i.e. to help understand whether lack of wider impact stems mainly from the lack of good innovations (broadly defined) or poor output to impact processes. CIAT-TSBF, ILRI, CIMMYT, ICRISAT, CIP and ICIPE have held meetings this year to discuss scaling up issues. The discussion about scaling up and research on understanding the arrows (links between outputs and outcomes and impacts) focused on adoption constraint analysis – hadn't many previous studies examined this? Frank Place clarified that the new research focuses on adoption constraints at the 'meso-level', rather than the plot or village level.

Another initiative, in which several centers are involved, with ICRISAT taking the lead, is the SMART (Socioeconomic Mobility, Agriculture and Rural Transformation) CP proposal –

to initiate long-term panel data collection across a selected number of sites in rural India and Africa. Some questions were raised regarding the specific purpose and niche this source of data and analyses would occupy given the range of other similar panel level databases that currently exist (World Bank, NCAER).

With respect to institutionalization of IA a number of points were raised in the discussion:

- Institutionalization of IA starts at the project proposal stage with baselines and continues through to *ex-ante* IA right through M & E and to epIA. But even with existing baselines and datasets, complementary surveys ex-post are typically needed to answer more specific questions that have arisen.
- Institutionalization refers not just to CGIAR centers but must embrace the NARS too.
- Utilization of IA results is a critical component.
- An ILAC Brief is soon to be published describing the process of institutionalizing IA, including a project template.
- The specific place of IA in the centers (DG office or part of social science team), and in particular the role and responsibility of the IAFP – this seems to depend on the scope of social science research in the Center portfolio, but it's essential to specify responsibilities and not isolate the IAFP and turn them into 'evaluators'.
- IA is not just for accountability purposes, or else methodology developments are unlikely to occur; needs to be embedded in research Programs. There is a danger in IAFPs becoming accountants in the context of the PM exercise.
- epIA is only one component of IA culture and cannot presume to play all roles.

With respect to SPIA's role, is it a similar situation to previous discussions as to whether SPIA are auditors/evaluators or peers? It appears that SPIA has to play different roles, depending on the situation. For the PM exercise, SPIA clearly assumes the auditor role to ensure credibility and integrity for the System; for joint initiatives (NRMIA study, PORIA study, this meeting) SPIA is regarded more as a peer.

Closing thoughts from Prabhu Pingali

In view of his long association with the CGIAR and in particular with IAEG and SPIA, Jim Ryan invited Prabhu to give the meeting the benefit of his observations before he departed on Friday.

Prabhu Pingali has been outside the CGIAR now for four years but has watched developments and kept abreast of IA in the CGIAR via his connection with SPIA as an Associate Member. He noted a number of concerns and areas where increasing attention may be needed:

- need more publications of IA work in peer reviewed journals (as previously); too much emphasis presently on IA research that is M&E oriented (accountability only), pressure on DGs to produce ('cooking') good results. More meetings of the type held in San Jose in 2002 are needed, emphasizing research-focused IA.
- too much of the IA work at centers falls on the IAFPs, and them only; why aren't more senior social scientists at this meeting? Indicative of something?
- Non-market impacts are very important; SPIA should encourage the Centers to do more research on this.

- NARS and other partners are conspicuously absent here – and we wouldn't have impact without them. Consider the Gates Foundation and their enormous investment – what are we doing with them?

Matters Arising from the Meeting & Summing-Up Session

Jim Ryan chaired this final session. He initiated discussion on six specific issues arising from the meeting.

1. There is a need for a more explicit poverty focus in ePIAs, which was not mentioned in the Center presentations, or indeed in other discussions. This is of concern in view of the pre-eminence of poverty alleviation in the goals of the CGIAR.

A participant had asked whether there is a role for SPIA in improving the agriculture module in the design of large international panel surveys. If agriculture continues to come out poorly in poverty metrics, then it will lose out in relative terms to investment in education, health etc. The Chair responded saying that SPIA/SC does aim to influence inter-sectoral priorities within the World Bank. People in the Bank have spent a lot of time on how to measure poverty. Other participants followed up, reporting that there is a coordinated effort to get better questions in the Living Standards Measurement Survey (LSMS), but that as things stand, the LSMS is mostly focused on getting good consumption and/or income data to accurately measure poverty, rather than looking at issues relating to causes of poverty.

An observer wanted to know what external researchers are doing in this area, and how can this group help them? There is a whole range of poverty indicators – how much depth to go into? Different indicators are used for different things and can be appropriate in different contexts. It was noted that there is a lot of pressure under the MDGs to make indicators affordable in different contexts and a donor representative stated that USAID has a framework for linking agricultural research/outputs to the MDGs. In order to achieve food security, a number of intermediate things have to be achieved, and it was reported that IWMI have developed indicators at these intermediate levels. Some concerns were similarly raised regarding a lack of focus in IA work on equity / distributional impacts. It was agreed centers would share their experiences with the use of various poverty indicators in IA.

2. What is the desirable role of the IAFPs?

A historical narrative on the creation of the role of IAFPs was given by the secretary of SPIA, but it was acknowledged that this now warrants a new look. It is certainly easier for SPIA to have a single focal point at centers/CP, and some suggested that there is no real alternative. Others reinforced the view that there is a need for a specialist, but whose proper role is to lead and guide IA rather than become isolated and attempt to be responsible for all of the center's IA activities. This could reduce the prospects for true institutionalization which requires IA to be everyone's business.

An observer urged IA to be viewed as part of a larger research program. How do we find out if we are doing a good job as impact assessment scientists? It is important to keep it as a research topic. However, in some contexts there may be some benefit for IAFPs in sitting (metaphorically) "close to the DG's office" and that it depends on the nature of the impact. However, the point was made that all the discussion in the meeting rests too much on the assumption that there is impact and that the CGIAR can magnify its impacts if it draws more on relationships with relevant partners.

3. Communications within CGIAR and outside need to be improved

A regular newsletter, quarterly or semi-annually, was suggested to keep IAFPs informed of developments across the system. It is not clear to what extent the CGIAR Impact website is used for this purpose already, perhaps not widely and ways to enhance the links between Center and SPIA web sites should be explored. There were calls for more peer / horizontal exchange and the specific suggestion that future meetings might work better if we were to break-up into parallel sessions to enable information sharing. It was suggested that donors are interested in funding IA work and that SPIA can play a role in directing donors to centers for this. However, one participant said that she was struggling to get funding for new innovative methods.

Clarification – SPIA does not solicit funding for itself, and thus is not competitive with the centers. There is a new funding formula for the SC – with core and non-core donors. SPIA, however, may sometimes be in a position to facilitate and catalyze interested donors in the work that IAFPs do.

There was agreement on the desirability of producing a Synthesis Report of the meeting.

4. Status of Challenge Programs under 3a and 3b

It was noted that the Challenge Programs faced difficulties in demonstrating *ex-post* impact, and SPIA agreed to think about how they will be incorporated into the PM exercise, duly recognizing their young age and different governance structure.

5. Recommendation on SPIA studies

The recommendations from the break-out groups on both the POR IA and the Strategic Guidelines were gratefully received, and SPIA will use the consensus recommendations (reported in session 9a, 9b and 9c) in their planning over the coming months.

6. SPIA Strategy

There was support for the SPIA role of helping to ensure quality control of IA and catalyzing the evolution of methodologies. The possibility of conducting joint conferences with professional bodies like the IAAE was endorsed and SPIA was encouraged to explore how to involve NARS more in its work in future. *Ex ante* IA was seen as a legitimate component of the work of SPIA, although it was recognized epIA was the primary concern.

Closing

Jim Ryan thanked all the participants for traveling such distances, and thanked the organizers of the meeting – particularly Frank Place and the staff at the World Agroforestry Center – for hosting what SPIA considers to have been a very productive and useful meeting. The meeting was adjourned.

ANNEX A: LIST OF PARTICIPANTS

ADVANCING IMPACT ASSESSMENT OF INTERNATIONAL AGRICULTURAL RESEARCH

WORLD AGROFORESTRY CENTER, NAIROBI KENYA, 5-7TH OCTOBER 2006

Participant Name	Affiliation	Email Address
Adrienne Martin	CP on Sub-Saharan Africa	a.m.martin@greenwich.ac.uk
Aliou Diagne	WARDA	a.diagne@cgiar.org
Bruce Gardner	University of Maryland	bgardner@arec.umd.edu
Carmen de Vicente	Generation CP	c.devicente@cgiar.org
Dannie Romney	ILRI	d.romney@cgiar.org
David Amudavi	ICIPE	damudavi@icipe.org
David Raitzer	CIFOR	d.raitzer@cgiar.org
Debbie Templeton	IRRI	d.templeton@cgiar.org
Diemuth Pems	WorldFish	d.pems@cgiar.org
Eldad Tukahirwa	ASARECA	e.tukahirwa@asareca.org
Flavio Avila	SPIA member	Flavio.avila@embrapa.br
Frank Place	ICRAF	f.place@cgiar.org
Graham Thiele	CIP	g.thiele@cgiar.org
Ibrahima Sakho	CIDA	ibrahima.sakho@international.gc.ca
J. Meenakshi	HarvestPlus	j.meenakshi@cgiar.org
James Stevenson	SPIA secretariat	james.stevenson@fao.org
Jan Low	CIP - SSA	j.low@cgiar.org
Jeff Davis	ACIAR	davis@aciarc.gov.au
Jim Ryan	SPIA Chair	ryanjim@bigpond.net.au
Jock Anderson	IFPRI	j.anderson@cgiar.org
John Dixon	CIMMYT	j.dixon@cgiar.org
Jupiter Ndjeunga	ICRISAT	n.jupiter@cgiar.org
Kamel Shideed	ICARDA	k.shideed@cgiar.org
Leonard Oruko	ASARECA	l.oruko@asareca.org
Meredith Soule	USAID	MSoule@usaid.gov
Michael Flint	Research Into Use PROGRAM funded by DfID	mf@mflint.co.uk
Mike Spilsbury	UNEP	Michael.Spilsbury@unep.org
Mywish Maredia	SPIA member	maredia@msu.edu
Nick Hooton	ILRI	n.hooton@cgiar.org
Pamela George	CP on Water and Food	p.george@cgiar.org
Patti Kristjanson	ILRI	p.kristjanson@cgiar.org
Prabhu Pingali	FAO/ SPIA	prabhu.pingali@fao.org
R. Maria Saleth	IWMI	r.saleth@cgiar.org
Roberto La Rovere	CIMMYT	r.larovere@cgiar.org
Sirkka Immonen	SPME	sirkka.immonen@fao.org
Steffen Abele	IITA	s.abele@cgiar.org
Stephen Biggs	University of East Anglia (UK)	biggs.s@gmail.com
Tim Kelley	SPIA secretary	timothy.kelley@fao.org

ANNEX B: UPDATING THE SPIA STRATEGY
NOTES FOR SPIA CHAIR OPENING REMARKS AT IAFPM, 5-7 OCTOBER, 2006

In the SPIA Report to the SC at its Inaugural Meeting at ICARDA in May 2004, a draft SPIA strategy and operational plan (appended herewith) was presented to the SC with a request for input and endorsement. SPIA has used this SC-endorsed strategy and operational workplan as a basis for guiding its PROGRAM of activities during the past 2+ years. A number of key initiatives defined under the two main objectives (accountability and priority setting/M & E) have been completed or currently underway:

Completed initiatives:

- Impact of the CGIAR on Poverty Alleviation (IFPRI-coordinated Study)
- Impact Assessment of CGIAR NRM Research
- Evaluation and Impact Assessment of the CGIAR's Training Activities
- Follow-up Study of the Impacts of the CGIAR in Africa (Phase I)
- Understanding Donor Demands for Evidence of Impact
- Policy-oriented Research Impact Assessment (POR IA) Scoping Study

On-going (or planned for 2007) initiatives:

- POR IA (Main Study)
- Impact Assessment of Participatory Research Approaches
- Strategic Guidelines for Impact Assessment in the CGIAR
- CGIAR Ag Research Benefit Diffusion & Impacts in South Asia
- Dissemination and Communication Strategy
 - (a) CGIAR Impact Website
 - (b) Improved Communication of Results
- Defining "Best Bet" Approaches for Learning-oriented IA (2007)

At its recent meeting in Cali (SPIA 30), SPIA members decided to revisit the current strategy and operational plan given a number of important changes that have taken place in the external and internal environments of the CGIAR, and SPIA in particular. These include:

1. the completion of a number of key impact studies (listed above) and how these may (or may not) have contributed to fulfilling SPIA's current mandate;
2. the recently introduced Performance Measurement system into the CGIAR with the specific requirements for Center impact assessment activities (3a and 3b indicators);
3. the oft-repeated demand from donors and other stakeholders for measuring non-economic impacts (environmental, social) of CGIAR research;
4. new SPIA membership bringing in new perspectives and new strengths;
5. the changing capacity for conducting IA at the centers;
6. interest among centers in closer integration of ex-post/ex-ante IA and priority setting processes more generally

These were the major reasons why a serious re-consideration of SPIA's future mandate and strategy is deemed warranted at this time. In addition to the six developments listed above SPIA members identified two other key elements that will help shape SPIA's future. These are: (a) the nature and extent of demand from donors for a system level IA operation; and, (b) the need for a 'clearing house', or some other mechanism independent of centers for enhancing the quality (or 'quality control') of ex-post impact assessment in the CGIAR. At this point it was considered opportune to seek input from the Center IA Focal Points as to what SPIA should (and should not) do over the next five years, considering the future needs of centers and the System.

**Extract from the Report of the Science Council's Standing Panel on Impact Assessment (SPIA)
to the SC at the Inaugural Meeting of the Science Council,
ICARDA, Aleppo, Syria, 12-15 May 2004**

SPIA is maturing and has been branching out into impact assessment in areas other than the traditional germplasm improvement heartland of the CGIAR. A number of these areas are proving to be a real challenge methodologically. Yet they have to be addressed as best possible. We are both learning from and working with the centers in meeting the challenges. This report reflects some of the areas that are most difficult and what SPIA is doing to address the challenges.

SPIA members would appreciate input from SC members and CGIAR members on any of the various on-going and proposed studies. Comments on the SPIA strategy and operational plan would also be particularly welcome. Are there, for example, any additional areas of CGIAR research or issues related to impact assessment which SPIA needs to address? Additional suggestions for projects are welcome.

1 Towards a Spia Strategy and Operational Plan: SPIA/IAEG Experience To-Date in Relation to Future Needs

1.1. Background and Context

The organizational history of SPIA now dates back almost a decade, with the formulation of a Task Force on Impact Assessment which, in turn, developed the terms of reference for the Impact Assessment and Evaluation Group (IAEG). At that time, the need for a Systemwide impact assessment entity was strikingly clear, as donor fatigue was setting in and funding was declining in real terms. According to the background document for the workshop held by the Task Force on Impact Assessment,¹ “the need for more information on the impact of CGIAR activities ... stems from donor requests for public awareness material in support of their resource mobilization efforts.”² The need for independence, objectivity and credibility of the new entity was stressed by the Task Force and by the donors.

Clearly, *ex-post* impact assessment (epIA) was primarily for meeting accountability needs, with a secondary emphasis on strategic feedback for priority-setting processes.³ The IAEG's role was thus to guide, improve, expand and synthesize Center epIA efforts to more comprehensively demonstrate the efficacy of CGIAR research, since IA coverage varied much among Centers and research topics.⁴

In so doing, it was recognized by the task force that:

A balance is needed between a greater effort in impact assessment and a greater effort in profiling of user needs and interpretation and packaging of material for marketing.

The functions to be implemented at the System level include the interpreting and packaging of existing

¹ The Task Force on Impact Assessment, commissioned at the request of the Public Awareness and Resource Mobilisation Committee, made the recommendations that resulted in the IAEG's establishment.

² CGIAR Task Force on Impact Assessment, 1995. Report of the Task Force on Impact Assessment. Washington, DC: CGIAR Secretariat.

³ Ozgediz, S. (1995) “Strengthening Evaluation in the CGIAR: Needs and Options”, 10 March 1995 Draft.

⁴ IAEG's purview was strictly *ex-post* impact assessment, and not research evaluation in the broadest sense. See Appendix I for the definition and elaboration of the different types of evaluation.

impact studies, integrating data bases to support impact assessment throughout the CGIAR; stimulate the development of impact methodologies, particularly in the areas of sustainability, institutional development and policy research; assure quality control of impact assessments and their packaged products; and, develop and standardize methods and procedures for using the results from impact assessments for meeting accountability and priority setting requirements.

The IAEG initially focused primarily on production of syntheses and large scale studies at the System level. Accordingly, IAEG initiated a synthesis and review of Center IA studies (Cooksy 1997a; 1997b), investigated factors affecting the adoption of CGIAR innovations through case studies at eight Centers (Seechrest et al. 1999), involved eight Centers in a comprehensive analysis of the impacts of breeding research (Evenson and Gollin 2003), supported a literature review of the linkage between agricultural research and poverty (Kerr and Kolavalli 1999) and seven case studies of the poverty impacts of CGIAR research (on-going), produced two reports on the environmental impacts of CGIAR technologies (Nelson and Maredia 2000; Maredia and Pingali 2001), evaluated the System's research on integrated pest management (Waibel 2000). Activities outside of synthesis and the production of new studies included two workshops on IA methods and relevance (IAEG Secretariat 1997; TAC Secretariat 2001), a review of the milestones in CGIAR IA over time (Pingali 2001) and an early effort to package findings in a concise and attractive manner in 1998.

Several areas identified by the Task Force have not, as yet, received enough attention. "Profiling of user needs", for example, has only recently been broached through systematic efforts, although the two workshops and the international conference on IA in Costa Rica did attempt to interact with donors and elicit their needs. There has not been sufficient activity on repackaging and disseminating existing findings, apart from the "Impacts 1998" brochures. Some of the other areas that now require more attention include: developing/refining methods for "hard to measure" areas of impact, e.g. for policy research; establishing Systemwide impact databases; exercising more "quality control" on impact studies; and attempting to feed IA results into priority-setting procedures.

In the past few years there have been increasing calls for "learning" from *ex-post* impact assessment, while the original accountability role of IA receives less emphasis in many quarters. SPIA believes and wishes to emphasize that the accountability function of SPIA must be preserved at all costs. At the same time it is looking for opportunities to add value through learning from these studies. The challenge is to preserve accountability and still emphasize feedback, and operational learning to improve the implementation of future research efforts. One

⁵ CGIAR Science Council Secretariat, 2003. Report to the Annual General Meeting of the CGIAR from The Standing Panel on Impact Assessment (SPIA) of the Science Council. Rome, Italy: FAO.

⁶ Note, this list appears comparably shorter than that of the IAEG, because most IAEG studies were still in progress at the time of transition to SPIA. Therefore, most of the outputs in the previous list had a significant SPIA contribution and occupied the time and efforts of SPIA members after the merger and indeed right up through 2003.

⁷ iSC 2003. Changing Monitoring and Evaluation in the CGIAR. Document prepared for the CGIAR Annual General Meeting at Nairobi, Kenya 30 October – 1 November, 2003. SDR/iSC: IAR/03/04.1.

⁸ Ekboir, J. 2003. Why impact analysis should not be used for research evaluation and what the alternatives are. *Agricultural Systems*. 78(2): 166-184.

⁹ Mackay, R. and D. Horton. 2003. Expanding the use of impact assessment and evaluation in agricultural research and development. *Agricultural Systems*. 78(2): 143-165.

particularly distinct outcome of this shift was embodied in the integration of the IAEG into TAC, so as to "...improve synergies with the System's forward planning and its monitoring and evaluation functions."⁵ The name was also changed to the Standing Panel on Impact Assessment (SPIA).

Evidence of these synergies remains less than clear. Activities *initiated* after the merger⁶ thus far have maintained a primary focus of the SPIA on the production of IA studies and exchange of information (Training Study, an International Conference on IA, Benefit-Cost Meta-Analysis, and the NRM Research IA study), but there is little evidence thus far of the specific use of SPIA's findings by the TAC/iSC standing committees, SCOER and SCOPAS (now the standing panel on monitoring and evaluation—SPME, and the standing panel on priorities and strategies—SPPS). Nor has SPIA relied on the work of the other two standing committees in any substantive fashion. However, several major joint activities with SCOER have been initiated (the training study, the ASB evaluation and assessment, and development jointly with SCOER/SPME of the SC proposal for revising the overall evaluation and assessment system for the CGIAR).⁷

There are conceptual issues in the use of *ex-post* assessment for "learning" that require further thought and clarification. It is widely recognized that pathways from CGIAR innovations to development goals are complex, involve many complementary inputs, and are characterized by long and uncertain lag times.⁸ Many years usually pass between production of an innovation and wide diffusion into the fields of large numbers of farmers, and the external environment and research agenda may shift considerably in the mean time. Furthermore, these lags are unpredictable. This creates significant discontinuities between the current agenda and research subject to *ex-post* IA, which strongly affects the relevance of any "lessons," particularly in terms of forward planning. How *ex-post* impact assessment can contribute to "learning" in this context remains to be defined.

One way in which *ex-post* impact assessments clearly could be useful in adaptive management and institutional learning is if they focus more on the lessons from failure from the results of research projects and programs to have impact, or to have the projected or planned impacts developed during project or program planning. SPIA is exploring ways in which lessons from adoption and research use failures could be more centrally addressed in its activities.

The broader context for application of IA findings needs some clarification, both for accountability and for "learning." It is widely recognized that *ex-post* impact assessments are very useful to donors for resource mobilization, but little effort has been given to discerning precisely what kinds of findings are of most use and for what purposes, although, again, the attempt was made to elicit this type of information both at the 2000 SPIA workshop in Rome and the international conference on IA in Costa Rica in 2002. The broader evaluation community has established a body of literature on evaluation use, and has distilled patterns between different types of information and different types of use for different decision processes.⁹ In theory, all of SPIA's efforts should be "utilization focused," and the dearth of information available on user needs may pose a key constraint to improving their satisfaction. At the same time, it is not clear if key audiences have a clear and coherent set of conceptualized demands for impact information. (See below two proposals on how the SPIA hopes to address the issue of understanding better the information needs of users.)

1.2. System-level Needs and Objectives for Ex-post IA

Over time, it has become evident that there are some priority needs for epIA in the CG System. These lead to a specific set of objectives that are relevant for SPIA at this time.

1.2.1 System-level Needs

Based on input from Members, discussion within the SC and deliberations within SPIA, it was concluded that the original priority actions identified by the earlier impact assessment Task Force are still relevant and that the following four major needs exist related to *ex-post* impact assessment at the System-level:

1. There is need to further define and refine the key demands for impact information. At the present time, there are no operational guidelines for what specific information is required for what purposes by different stakeholders. This need applies at the center as well as member/donor levels. Further interaction and debate are needed among centers in terms of impact assessment methods and outputs.
2. There is a continuing need to assess the impacts associated with other types of research and related activities not yet looked at by Centers and SPIA, such as NRM research, participatory research, policy research, training, other capacity strengthening activities. The focus of such impact assessment should be on the impacts related to sustainable poverty alleviation. In addition, better dissemination of results of impact assessments is called for.
3. There is continuing need to refine impact assessment methods, particularly for areas of research for which there are no well defined methods, such as policy and NRM research, and methods development to permit, where feasible, a more rigorous treatment in demonstrating causality between agricultural research and alleviating hunger and poverty, and ensuring food security for the poor.
4. There is a need to more effectively feed *ex-post* impact assessment information into forward planning activities in the System, and into its monitoring and evaluation of ongoing science and programs. At the same time there is a need to make sure that ongoing monitoring and evaluation results are utilized more effectively in *ex-post* impact assessment activities and that centers plan in their current, ongoing work for the data needs for *ex-post* impact assessment, i.e. there is a need to develop an impact culture and awareness in the centers so that institutional learning and change can take place through a process of adaptive management.

1.2.2 Implied Priority SPIA Objectives

The above needs lead to a fundamental set of exIA priority objectives for SPIA over the next couple of years:

- a. To develop IAs for accountability purposes, SPIA needs to consider the following priority objectives:
 - justifying past investments, providing evidence on the nature, distribution and magnitude of impacts on CGIAR goals; and
 - providing credible information for investors to use as background in deciding on new investments in similar type enterprises.
- b. To provide the greatest possible contribution to institutional improvement through change based on learning from the past.
 - Strategic feedback: answering questions such as “what type of investments has achieved what type of impacts, where and how?”;
 - Examining the potential for “learning” from *ex-post* IA (beyond strategic validation) vs. adoption/constraint analyses; and
 - Providing insights on how evidence from the past best can serve to support institutional change in the future and what the limitations are in relying on the past as evidence for the future.

1.3. Strategic Issues Related to Meeting the Needs and Objectives

Given the above needs and priority objectives, SPIA has identified a set of strategic issues or challenges that need to be addressed and then a set of operating modalities (projects) to resolve the issues and address the challenges.

1.3.1 Strategic Issues and Challenges Focused on Meeting the Accountability Objective

There are at least five strategic issues or challenges that are being addressed by SPIA related to the accountability objective. They include:

1. Filling gaps in *ex-post* IA coverage at the System level (NRM and policy research and training activities are some examples);
2. Understanding what it is that donors/investors really want as evidence of impact from past investments;
3. Understanding the tradeoffs between breadth or scope vs. depth of impact coverage;
4. Assessing the distributional impacts of investments (e.g. dealing with NGO critiques of the Green Revolution). This includes several sub-issues:
 - regional impacts in relation to international public goods (IPGs) production;
 - impacts among various income, social and other groups of people; and
5. Deciding on how far down the impact pathway SPIA needs to go for different types of research in order to develop a realistic assessment of impacts.

1.3.2 Strategic Issues and Challenges Focused on Meeting the Learning Objective

SPIA is concerned with a second objective, namely, providing information that can help the CGIAR and its centers learn about the successes and failures of past investments and use such learning in fostering change in the System. The ongoing training evaluation and assessment project is a good example of a study that deals with both the accountability and learning objectives of SPIA, and it is partly for this reason that the study is being undertaken as a joint activity of SPME and SPIA. However, the time has perhaps come to make this objective more explicit and visible externally and to formalize to a greater extent the strategic elements that SPIA needs to embrace to make sure that it optimizes its contributions to learning and change in the CGIAR system and in partner NARS. In this regard there are several key strategic issues that SPIA intends to address in dealing with the learning objective. These include:

1. Strategic feedback: identifying broad lessons – are there concrete examples of institutional “learning” from large scale *ex-post* IA (e.g. the CGI study); and what are the best means for ensuring lessons emerge from SPIA exIA activities focused primarily on the accountability objective?
2. Operational feedback: understanding potential contributions and limitations, e.g.
 - What kind of information is of use to researchers and Center management?
 - How to make information more effectively utilized by centers and outsiders?
 - Effect of lag times on relevance of lessons for the future?
 - Extent to which truly novel lessons can be extrapolated?
 - Kind of lessons researchers are willing to learn?
 - Potential for complementing the CGIAR inter-Center initiative on ILAC.
3. Improving impact assessment methods and strategic guidelines for carrying out impact assessments and communicating their results for better learning about dimensions of accountability (e.g. related to such areas as NRM and policy research) and for institutional learning and associated change.

1.4. Developing an Operational Plan to Address the Strategic Issues and Meet the Challenges

The challenge for SPIA is now to move towards resolving the strategic issues mentioned above. In this regard, a set of operating modalities (projects) have been designed and will be implemented over the next couple of years. SPIA has a set of ongoing and new pipeline projects (described in the document “Proposed new initiatives for SPIA in 2004-2005”) that also move towards meeting the objectives and implementing the strategies outlined in Sections 1.2 and 1.3 above. These are summarized below. Each addresses one or more elements of the accountability or learning objective—and some address both.

1.4.1 Accountability Related Initiative

In terms of the Accountability objective and the five associated strategic elements in Section 1.3.1, the following initiatives are being undertaken:

- Impact of the CGIAR on Poverty Alleviation (IFPRI-coordinated Study)
- Expanded and Improved Impact Assessment of CGIAR NRM Research
- Evaluation and Impact Assessment of the CGIAR’s Training Activities
- Social Science and Policy Stripe Review and Policy Impact Assessments
- Follow-up Study of the Impacts of the CGIAR in Africa (Phase I)
- Impact Assessment of Participatory Research Approaches
- Impacts of Farming Systems Research (Exploratory Study) (proposed)
- Improved Understanding of Perceived (but Undocumented) Impacts
- CGIAR Ag Research Benefit Diffusion & Impacts in South Asia (Phase I)
- CGIAR Ag Research Benefit Diffusion & Impacts in LAC (proposed)

1.4.2 Initiatives Related to the Learning and Change Objective

In terms of the learning and institutional change objective, most of the above accountability focused initiatives can contribute if they are carefully designed to also provide information relevant for institutional learning in addition to their main aim. In addition, the following initiatives are specifically focused on the learning objective, which relates both to development of methods of assessment and analysis and to improved communications of impact assessment information:

- Dissemination and Communication Strategy
 - a. CGIAR Impact Website
 - b. Improved Communication of Results
- Strategic Guidelines for Impact Assessment in the CGIAR
- Defining “Best Bet” Approaches for Learning-oriented Impact Assessment
- Understanding Donor Demands for Evidence of Impact

1.5. Into the Future

Since the time of its inception, when the IAEG initiated a major assessment of the CGIAR crop germplasm improvement and adoption study, SPIA has evolved into an entity exploring a wide range of issues related to impact assessment as well as a wide range of activities undertaken by the CGIAR. Many of these studies are pioneering ones in the sense that the methods have not been well developed for assessing the type of research being addressed. Such is the case, for example, for NRM research and policy research. New and improved methods are called for, and SPIA is spending an increasing amount of effort addressing methodological questions.

Similarly, SPIA (and previously IAEG) did not get involved much with the Centers, other than in terms of data collection and support in its studies. Over the past years, there has been an emerging partnership evolving with the CGIAR centers, always keeping in mind the need for SPIA to maintain its objectivity and credibility in producing its various outputs in an

independent manner. This new role for SPIA, working with the centers, both in terms of improving methods of epIA and in terms of providing additional information and insights for institutional learning and change within the centers, is likely to take on more importance in the future. At the same time, SPIA as a part of the Science Council intends to move ahead aggressively with its role as a guardian of the relevance of the CGIAR and its science as indicated through the impacts it has on sustainable poverty alleviation and food security.

2 Mandate, Composition and Meetings of SPIA

The mandate of the Standing Panel on Impact Assessment (SPIA) under the new Science Council remains unchanged, namely to:

- provide CGIAR Members with timely, objective and credible information on the impacts at the System level of past CGIAR outputs in terms of the CGIAR goals;
- provide support to and complement the centers in their *ex-post* impact assessment activities; (this includes facilitating inter-Center impact assessment efforts and providing a forum for exchange of experience from impact studies); and
- provide feedback to CGIAR priority setting, and create synergies by developing links to *ex-ante* assessment and overall planning, monitoring and evaluation functions in the CGIAR.

APPENDIX: Additional background questions and issues for discussion

1. Are the original priority actions identified by the Task Force still relevant?:

- interpreting and packaging of existing impact studies;
- integrating data bases to support impact assessment throughout the CGIAR;
- stimulate the development of impact methodologies, particularly in the areas of sustainability, institutional development and policy research;
- assure quality control of impact assessments and their packaged products; and
- develop and standardize methods and procedures for using the results from impact assessments for meeting accountability and priority setting requirements.

1.1. Of those that still are relevant, how successful has SPIA been?

1.2. Of those that have not been dealt with, what has been the key constraint? Is it reasonable to expect success?

1.3. What is missing from this list?

2. How can SPIA create incentives for expanded coverage of research impact in the System?

2.1. When can it be claimed that lack of demonstrated impact equals lack of impact?

2.2. How can assessors be pushed towards the largest, rather than the easiest to assess impacts?

2.3. How can the extent to which total impacts or sources of impact have been captured in *ex-post* IA be validated?

2.4. Are there some (valuable) areas of research for which we can never expect impact to be credibly attributed?

3. Has SPIA provided any concrete input to SPME (or previously to SCOER) or to SPPS (previously SCOPAS)? Vice-versa?

3.1. If so, in what form? If not, why not?

3.2. How could SPIA create such “synergies”?

- 4. What potential is there for “learning” from *ex-post* impact assessment?**
 - 4.1. How do lag times affect the relevance of lessons?
 - 4.2. How does the dynamic nature of the external scientific environment affect the relevance of findings in the context of lag times?
 - 4.3. How far can truly novel “lessons” be extrapolated?
 - 4.4. Are there any concrete examples of “learning” from *ex-post* IA?
 - 4.5. What kind of feedback is reasonable to expect from *ex-post* IA?
 - 4.6. What kinds of decisions should IA expect to inform – operational, structural, or strategic?
 - 4.7. Should “learning” or “accountability” be the primary focus of *ex-post* impact assessment? What can better satisfy the purpose of lower priority?
- 5. Should SPIA invest in efforts to better understand impact assessment use and user demands?**
 - 5.1. Do we have a clear understanding of what different donors require in terms of accountability, credibility and public awareness?
 - 5.2. Is there need for clarifying the forms of evaluation appropriate to different decision processes, particularly with regard to the role of ePIA?
 - 5.3. Can it be assumed that there is a continuing demand for demonstrating large-scale (IPG-type) impacts on poverty (including distributional analysis) from a variety of CGIAR research?
- 6. What is the proper “supportive” role for SPIA?**
 - 6.1. How can SPIA foster truly novel methods for difficult to assess research areas?
 - 6.2. Does SPIA have comparative advantage in dissemination of IA findings?
 - 6.3. How can “cross fertilization” among IA practitioners be improved?
- 7. What is the proper operating modality for SPIA?**
 - 7.1. How can it be better ensured that SPIA suggestions are incorporated by practitioners?
 - 7.2. How can SPIA provide faster feedback?
 - 7.3. Is it important that SPIA remain independent? If so, what is the best justification for the retention of SPIA’s independence?

ANNEX C: OUTLINE OF A POSSIBLE MATRIX MODEL FOR LINKING CGIAR PROGRAM OUTPUTS WITH CGIAR GOALS

The model is a series of 3 matrices.

Matrix 1 relates outputs to immediate goals where immediate goals, such that “the achievements of these goals can be directly attributed to research efforts by CGIAR”.

MATRIX 1 – READ ACROSS THE ROWS

INPUT	(1) OUTPUTS	(2) Immediate Goals									
CGIAR expd. As % of total (2004)	CGIAR Program Outputs	<u>Increase yields</u>	<u>Improve nutritional quality</u>	<u>Reduce production cost</u>	<u>Diversify income source</u>	<u>Conserve resources</u>	<u>Improve resource quality</u>	<u>Reduce price</u>	<u>Develop human resources</u>	<u>Increase efficiency of markets</u>	<u>Increase access to markets</u>
17%	Germplasm improvement	X	X	X							
12%	Germplasm collection				X	X					
35%	Sustainable production			X	X	X	X				
16%	Policy			X	X	X		X	X	X	X
20%	Enhancing NARS								X		

Matrix 2 relates immediate goals to potential effects and outcomes where “research efforts by CGIAR may be one of the several factors contributing to the realization of these effects/outcomes. These outcomes may not be mutually exclusive (i.e. there may be cause and effect relationship between these effects/outcomes as well).” Clicking on the blue hyperlinked titles for each column takes you to a different matrix 3.

MATRIX 2 – READ DOWN THE COLUMNS

	(3) IMMEDIATE GOALS (Causal factors)									
<u>Potential Effects/Outcomes</u>	<u>Increase yields</u>	<u>Improve nutritional quality</u>	<u>Reduce production cost</u>	<u>Diversify income</u>	<u>Conserve resources</u>	<u>Improve resource quality</u>	<u>Reduce price</u>	<u>Develop human resources</u>	<u>Improve efficiency of markets</u>	<u>Increase access to different types of markets</u>
Increase production (productivity)	X					X			X	X
Increase income	X		X			X		X	X	X
Reduce risk				X	X	X			X	X
Improve caloric and nutritional intake	X	X					X			
Improve NARS capacity								X		
Reduce land use	X					X				
Reduce damage to natural resources					X	X			X	
Increase risk	X									
Decrease income							X			
Increase land use	X									
Increase other resource use	X									
Increase damage to natural resources	X									
Reduce diversity in caloric and nutritional intake	X	X					X			

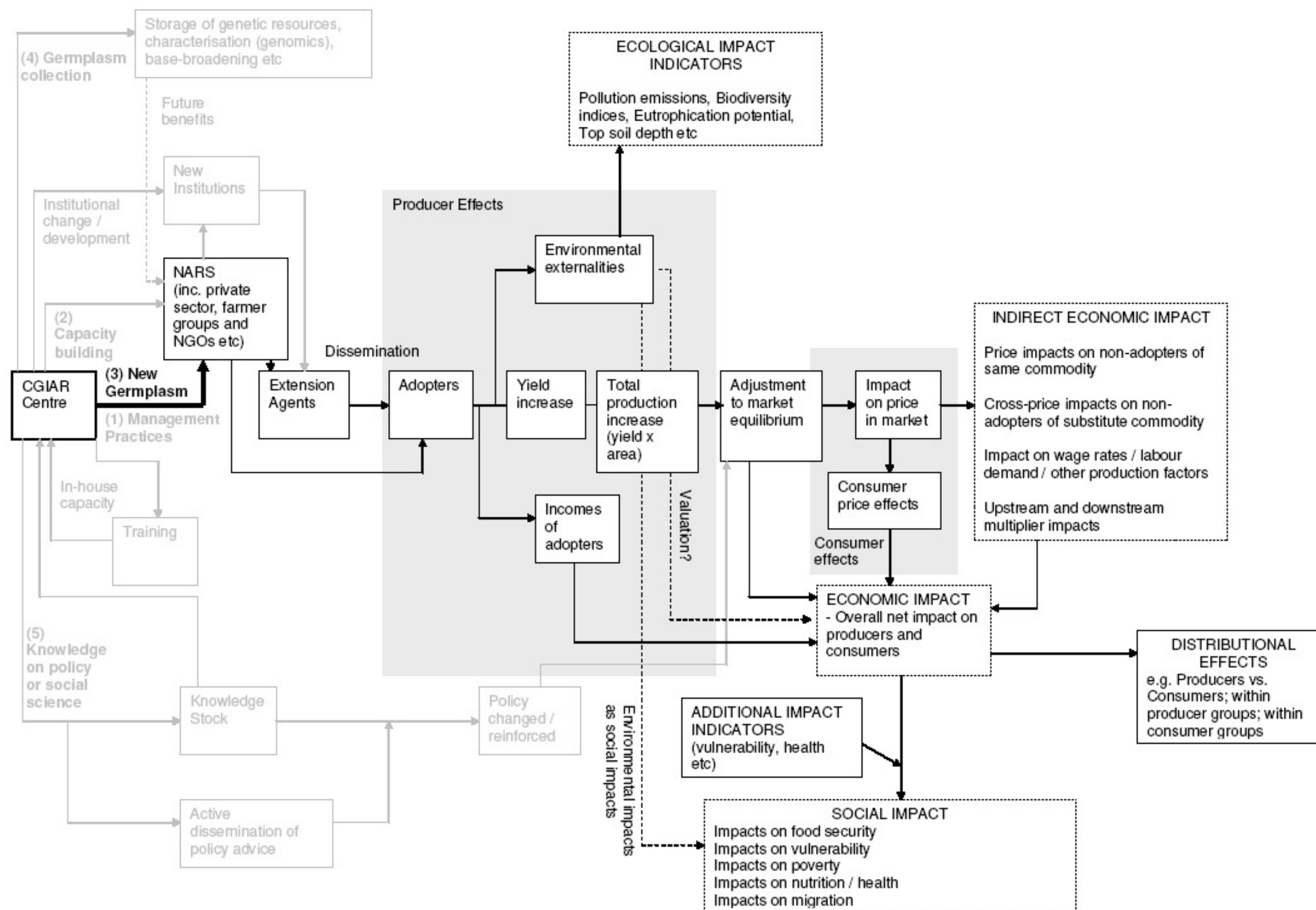
Matrix 3 is an expansion of each column in matrix 2, to cover impacts on each of the 3 specific CGIAR goals as well as suggestions for indicators. There are 10 versions of matrix 3 and the example given below is for the “increased yield” intermediate goal.

MATRIX 3 – READ ACROSS ROWS.

Potential Effects of Increased yields	Impacts on CGIAR goals (Positive or Negative)			How impacts have been or can be measured? (Examples)
	Food Security	Poverty	Environment	
Increase production (productivity)	+	+		Monetary value, economic surplus, TFP, gain in employment
Increase income	+	+		Monetary value, welfare effects, distribution of benefits
Improve caloric and nutritional intake	+			Deaths prevented, increased longevity, improved human capital (labor productivity), reduction in health care costs (monetary value)
Reduce land use			+	Ha of land saved (deforestation prevented); value of carbon sequestration, biodiversity conserved (number of species, etc.)
Increase risk		-		Number of people affected, reduction in income over a long-term horizon
Increase land use			-	Ha of land brought into cultivation (deforestation); value of carbon sequestration, loss of biodiversity
Increase other natural resource use			-	quantity of resource use changed, economic value of increased resource use, effect on land and labor productivity
Increase damage to natural resources			-	Economic value of reduced quality of natural resources, effect on land and labor productivity, changes in bio-physical environmental indices (e.g. biodiversity conserved, soil/water quality, etc.)
Reduce diversity in caloric and nutritional intake	-			increased mortality due to chronic diseases attributed to poor diets, monetary value of increase health care costs

ANNEX D: IMPACT PATHWAY MODEL

Impact pathway for a yield-increasing germplasm improvement – Example for consultation at the Impact Assessment Focal Point Meeting, Nairobi 5-7th October 2006.





CGIAR

Science Council Secretariat
A Unit of the CGIAR System Office
c/o FAO
Viale delle Terme di Caracalla
00153 Rome, Italy

t +39 06 57056782
f +39 06 57053298
e sc-secretariat@fao.org

www.sciencecouncil.cgiar.org