

**CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH
SCIENCE COUNCIL**

**REPORT TO THE ANNUAL GENERAL MEETING 2005
OF THE CGIAR FROM
THE STANDING PANEL ON IMPACT ASSESSMENT (SPIA)
OF THE SCIENCE COUNCIL**

SCIENCE COUNCIL SECRETARIAT

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SC STANDING PANEL ON IMPACT ASSESSMENT (SPIA) REPORT TO AGM '05

Executive Summary

This report describes the progress made by SPIA since the last report to the Group at AGM '04, highlighting major activities and impact assessment (IA) studies commissioned by SPIA. This is done against the back-drop of an overall strategy considering the future IA needs of the System as perceived by SPIA and endorsed by the CGIAR, i.e., improving the relevance and quality of IAs; expanding IA coverage; and improving the dissemination and use of IA.

There are two major, recurring-type activities of SPIA: one related to CGIAR performance monitoring (PM); the other to dissemination and communication. With respect to the former, SPIA is contributing to the overall PM of CGIAR centers by (i) developing guidelines and criteria for indicators of center impact and (ii) evaluating center performance in the area of IA. The guidelines have been revised in the light of an internal assessment of the Centers' submissions for 2005. Three key activities are described that target wider dissemination and better communication of CGIAR IA results: (i) development of the CGIAR Impact Website; (ii) production of brief synopses of IA findings and 'think pieces' on advancing IA in the CGIAR; and (iii) organizing an IA focal point workshop in mid 2006 to identify System-level IA needs and opportunities and further develop Systemwide strategic guidelines for IA.

Of the six on-going IA studies commissioned by SPIA, four will have been completed, up to publication stage, by the end of 2005. The *Impact of the CGIAR on poverty alleviation* study coordinated by IFPRI is in the final stages of manuscript revision for book publication expected in early 2006. The *Impact of CGIAR NRM research* study documents NRM research impact through seven case studies of center projects or programs and one systemwide initiative (ASB), main results of which will be presented in a special AGM '05 luncheon session and available in the final report (available at AGM '05). Some follow-up activity will be necessary to finalize the publication of a CABI-book in early 2006. The *Impact and Evaluation of Training in the CGIAR* study report is targeted for completion by early 2006 but the main findings will be presented at AGM'05. The study on *Donor demands for and uses of evidence of research impact*, undertaken to better understand donor views about ex-post IA work is now completed - final report is available on the SC website and available at AGM' 05. Two 'exploratory studies' were initiated in 2005 and reported on this report: The *Impact in Africa - Phase I* study involving a comprehensive collection, synthesis and assessment of evidence on the impacts of new technologies and improved policies as a result of CGIAR and partner research in SSA; and the *Policy-oriented research impacts scoping study*, compiling an inventory of relevant studies, defining terminology and exploring methodological issues involved in documenting the impact of "policy-oriented" research in the CGIAR.

Two follow-up studies are planned for implementation in 2006. The *Policy-oriented research impacts (Phase II)* study will involve a series of case study IAs in cooperation with CGIAR Centers, as well as some focus group meetings, to document more rigorously the impact pathways from CGIAR research to changed policies. The *Research in Africa (Phase II)* study,

building on Phase I results, will systematically identify factors constraining adoption and impact of agricultural innovations in the African context. Two new scoping studies are planned in 2006: the *Impacts of Participatory Research in the CGIAR* and *CGIAR Research Benefit Diffusion & Impacts in South Asia*, both of which are designed to explore what is currently known about impacts in these areas and whether full-scale impact studies would be justified.

1. INTRODUCTION

This report to AGM '05 reflects the continuity of SPIA's work and strategy of operation as the new chair of SPIA starts his term. Two new members will be joining him as of January of 2006. The report represents a joint effort of the new and old chairs of SPIA.

The outgoing Chair of SPIA, Hans Gregersen (USA), formally retired on 30 November 2005. The Science Council has said farewell to Hans and thanked him for his service to the SC at its last meeting in Penang. Hans' replacement is Jim Ryan (Australia), member of SPIA since July 2004. Jim has a distinguished research career, having specialized in studies of the economics of agricultural research and technological change in developing countries, including implications for employment and human nutrition. Jim was head of the Economics Program at the ICRISAT from 1974 to 1983 and its Director General from 1991 to 1997. He has been on the Boards of AVRDC and CIMMYT and has served on numerous review teams. Jim's recent assignments include assessments of the economic impacts of agricultural and policy research, future strategies and priorities for international livestock research, and the prospective challenges and opportunities for agricultural R&D in the semi-arid tropics. The Chair of SPIA serves as an *ex-officio* member of the SC and reports to the SC.

Also retiring this year from SPIA is Hermann Waibel (Germany). A Professor of Agricultural Economics at University of Hannover, Hermann has been a member of SPIA since 2001 and has made many contributions to the standing panel's activities generally and more particularly in providing leadership on some key studies, such as the NRM research impact study. SPIA takes this opportunity to formally thank Dr. Waibel for his very active service on SPIA.

Members of SPIA are chosen for their independence and impact assessment expertise and familiarity with international agricultural research. Two new members have been appointed to replace the out-going members as of January 2006: Mywish Maredia and Flavio Avila. Mywish Maredia (India) is currently Deputy Director of the Bean/Cowpea CRSP and Adjunct Associate Professor, Dept. of Agricultural Economics at Michigan State University. Flavio Avila (Brazil) is the Research and Impact Evaluation Coordinator in the Management and Strategy Secretariat of EMBRAPA. Both have published extensively and are widely recognized as leading authorities in impact assessment of agricultural research.

The person assigned to SPIA from the SC Secretariat continues to be Tim Kelley. In addition, SC Secretariat member Sirkka Immonen has been contributing to SPIA's work; and consultant David Raitzer has been involved in several SPIA initiatives.

The mandate of SPIA remains unchanged, namely to:

- provide CGIAR Members and the SC with independent assessment of the impacts at the System level of past CGIAR outputs;
- provide support to and complement the centres in their *ex-post* impact assessment activities; and
- provide feedback to CGIAR priority setting, and to complement other activities within the SC, by developing links to *ex-ante* assessment and overall planning, monitoring and evaluation functions in the CGIAR.

2. BUILDING ON THE SPIA STRATEGY AND OPERATIONAL PLAN

Last year's report to AGM described SPIA's strategy and operational plan over the next several years. The plan was developed taking into account the original motivation for setting up an impact assessment group at the System level, the experience to-date, and the future needs of the System, as perceived by the SC/SPIA and by the CGIAR members through a study of donor use of impact assessments (see section 4.4). In what follows, we lay out the key challenges ahead for SPIA and provide a summary indication of the SPIA response to the challenges. The details follow in the sections that describe on-going and planned activities.

2.1 Key Challenges

Four areas remain as key challenges for SPIA to address:

1. *Challenge: Improve impact assessment relevance*

The use of *ex-post* assessment for "learning" relevant lessons requires empirical analysis. Pathways from CGIAR innovations to development goals are complex, involve many complementary inputs, and are characterised by long and uncertain lag times. Many years usually pass between production of an innovation and its wide diffusion into the fields of large numbers of farmers, and the external environment and research agenda may shift considerably in the mean time. This creates significant discontinuities between the current agenda and research subject to *ex-post* IA, which strongly affects the relevance of lessons in terms of forward planning. How *ex-post* IA can contribute to "learning" in this context remains to be defined. SPIA is and will be exploring ways in which lessons of relevance to researcher decisions may be derived from analyses of impact. The broader context for application of IA findings needs some clarification for accountability as well.

SPIA Response:

- SPIA has completed a study on *Understanding Donor Demands for Evidence of Impact* (See item 4.4 below).
- SPIA is planning in the future (possibly 2007) to initiate a study to define "Best Bet" Approaches for Learning-oriented Impact Assessment).

2. *Challenge: Expand impact assessment coverage*

Impact assessment in the CGIAR has primarily focused on crop genetic improvement programmes. This is the most easily attributable research area of the CGIAR portfolio, as secondary sources can often be used for adoption data, and productivity benefits are

particularly amenable to plausible quantitative analysis. Research areas such as policy-oriented social-science research and some forms of natural resource management (NRM) research present comparatively more serious attribution challenges. As a result, ex-post IAs of research programmes in these areas have been fewer in number. At the same time, in recent years, areas such as NRM and policy research have become a dominant and growing share of the CGIAR research portfolio. For the CGIAR to remain accountable, ex-post IA will need to focus greater effort upon these expanding research areas.

SPIA Response:

SPIA/SC has completed initiatives to:

- *Understand the Impacts of CGIAR NRM Research (See item 4.2 below).*
- *Assess the impacts of the CGIAR on poverty alleviation (Book manuscript in final stages; this was reported on to the Group last year. See item 4.1 below)*
- *Assess the impacts of CGIAR training activities (with SPME – see item 4.3 below)*

SPIA/SC is in the process of:

- *Assessing CGIAR Policy Research Impacts (On-going – see item 4.6 below)*

SPIA/SC plans in the future to:

- *Assessing the impacts of CGIAR and NARS partner research in Africa (Ongoing – see item 4.5 below)*

SPIA will in the future:

- *Assess CGIAR Agricultural Research Benefit Diffusion and Impacts in South Asia (Planned – see item 5.4 below)*
- *Assess the Impacts of Participatory Research in the CGIAR (See item 5.3 below)*

3. Challenge: Improve the quality of impact assessments

The quality and rigour of impact assessment studies vary substantially across the System. In certain cases, studies have been published without adequate attention to transparency or data quality. Simultaneously, the exceptionally high rates of return reported in the impact literature have led to scepticism regarding the plausibility of such estimates from stakeholders as well as from some members of the scientific community. To address these concerns, minimum standards are needed for impact assessment in the CGIAR, so as to ensure that research contributions are attributed in a plausible manner, and that confidence can be placed in the findings. It is only with such confidence that the accountability function of IA can be reasonably fulfilled.

SPIA Response:

SPIA has:

- *Developed impact Indicators for CG Performance Monitoring in the area of impact assessment (See item 3.1 below)*

SPIA is in the process of:

- *Developing with the centres strategic guidelines for impact assessment in the CGIAR (Ongoing – see item 3.2 below)*

4. Challenge: Improve dissemination and the use of results.

Far too frequently, *ex post* IAs are not reaching intended audiences in a readily accessible or useful format. Dissemination is often not adequately pursued, as studies have not been easily

accessible in electronic format, or paper copies have not been sent to key decision-makers. Brief summaries of impact studies that may attract more attention from busy stakeholders and members of the public have only rarely been produced. Only with wider and more effective dissemination can the full value of the studies produced be realized. SPIA is attempting to make *ex-post* IA in the CGIAR more demand-driven. The Panel is not only focusing on limited questions related to rigorous methods for particular areas of research, but is also addressing the larger questions of purpose and user demands, through increased interaction with key stakeholders.

SPIA Response:

SPIA has:

- *Developed with centre input a CGIAR Systemwide impact website (ongoing – see item 3.2 below)*
- *Developed and will continue to develop impact briefs and impact notes (Ongoing – see item 3.2 below)*

When considering the Panel's experiences to date, it seems that SPIA's primary comparative advantage lies in its independence, transparency and objectivity within the broader context of an independent Science Council. Accordingly, as SPIA matures, it must preserve and enhance these qualities, so that meaningful guidance can be provided to IA in the System. To do so is not simply a matter of organization. It is also a function of the credibility and relevance behind SPIA's findings and conclusions. Establishing this relevance and credibility cannot come from academic rigour alone, but must also stem from a solid and comprehensive understanding of stakeholder needs, to allow SPIA to guide assessments in such a way that they fully satisfy key stakeholder requirements.

In the next section, SPIA's on-going and recurring activities, listed above, are described. The following two sections provide an update/progress report on SPIA's impact studies: recently/soon-to-be completed as well as ongoing ones (Section 4); and new studies for implementation in 2006 and 2007 (Section 5).

3. CURRENT STATUS OF ON-GOING (RECURRING) ACTIVITIES

3.1 SPIA's role in the CGIAR Performance Measurement (PM) System

Background

Late in 2004, SPIA was requested to prepare some guidelines on indicators of centre impact that, through the overall SC effort, would be monitored on a yearly basis. SPIA presented the Working Group on the CGIAR PM System activity with a proposed approach for developing appropriate indicators and, subsequently, operationalized that approach. The performance indicator for impacts in 2005 focused on centres' capacity to measure the impacts of their previous research in two dimensions:

- A. Defining what steps were taken to establish a comprehensive set of impact assessment results across research areas, i.e., performance in terms of developing and implementing an impact assessment process and culture (3A Indicator); and;

- B. Submitting the two best impact studies done in the period 2002-2004 that documented the difference that the centre has made in the lives of poor people (3B Indicator).

Progress in 2005

The Center narratives and IA case studies submitted for PM indicator 3A and 3B in 2005 were of variable consistency as well as quality. They revealed a range of difficulties in attempting to evaluate diverse impact assessment activities without a set of guidelines and criteria on which ratings would be based. Many of the responses for 3A included various general statements that do not clearly relate to specific IA-related activities or outcomes. For effective and consistent rating of responses to be possible, the questions posed need to be specific and elicit objective information that can be validated and for which ideal expectations are clear. The SC/SPIA decided to revise the 3A and 3B impact indicators and establish draft criteria and indicator weightings for rating performance. The draft criteria and indicators were circulated among all Centers for comments and were revised on the basis of preliminary feedback. The revised guidelines and framework will serve as a basis for rating performance on impact in 2006.

Next Steps

SPIA, supported by consultants will carry out in 2006 the first full scale application of the guidelines and criteria for judging centers' performance in the area of impact assessment. The current guidelines and criteria for 3a and 3b impact PM indicators will be discussed with Centre DDGs at a special meeting during AGM '05 and possibly revised in the light of those discussions prior to finalizing for implementation in 2006.

3.2 Dissemination and Communication: Website, 'Briefs', & IA Focal Point Meeting and Strategic Guidelines

CGIAR Centres have produced a wealth of studies documenting the impact that their research has had on enhancing global food security and alleviating poverty. Yet, there remains a tremendous opportunity to improve dissemination to external audiences through a more diversified set of communications tools. At AGM '03, CGIAR Members clearly articulated the need to spread this information more widely within the System and beyond.

a) Development of the CGIAR Impact Website

Background

SPIA, with the collaboration of all the centres, has developed a website for ex-post impact assessment (IA) in the CGIAR, as many stakeholders have expressed a need to establish an effective mechanism to disseminate IA studies, promote "best practices" in IA, and foster dialogue among IA practitioners, both within the CGIAR and throughout the larger research and development communities. As a main focal point for System impact assessment activities, this site will not only improve inter-Centre communication, but will also allow for dissemination to new audiences outside of the traditional CGIAR arena. All centres have affirmed a strong need for a System level website to disseminate the products of their impact assessment efforts to broader audiences, and to help build an IA 'community of practice' in the System.

The CGIAR Impact Website (<http://impact.cgiar.org>) is now fully functional, and the website's functions have been refined over the past couple of months. The search interface and calendar functions have been improved. Yet, there are still some sections that need to be further populated with material from the centres. The present version of the site embodies a searchable dynamic bibliography of ex-post impact assessment and adoption studies, a dynamic link manager, a dynamic calendar of events, a methods section, and a dynamic function for storing and disseminating public relations briefs

The number of monthly site visits (hits) has risen from 210 (3,200) in September 2004 to 1,800 (10,000) in September 2005. Given the restricted visibility of the site within the CGIAR website until late August, this is encouraging. The CGIAR Secretariat has recently added a link to the site ("Impacts of CGIAR Research") on the main CGIAR homepage, and it is anticipated that this will substantially increase traffic.

Current Status

The CGIAR Impact website utilises forms for the management of frequently updated data, so no technical knowledge of HTML is necessary to enter and update most content. This means that the primary tasks for 2006 relate to data entry, rather than to site development. The array of Centre studies and information included should be further expanded and refined. Centre staff need to be informed about how data can be entered and updated in the site, and appropriate incentives and modalities for data entry need to be established. A staff member in the SC Secretariat office will assist in liaising with CGIAR centre staff to foster data entry and to facilitate the production of impact 'briefs' — short synopses of IA findings that are easily understandable and attractive to external audiences.

b) Impact 'Briefs'

As part of the expanded communication program, SPIA intends to produce on a regular basis "Impact Briefs" and "thought" pieces on advancing impact assessment in the CGIAR. The impact briefs, short synopses of key IA findings, will be concise (one or two pages in length) and attractive to external audiences and made easily accessible through the CGIAR Impact website. Translations into French and Spanish will also be produced. SC/SPIA has worked with the CGIAR Secretariat editorial team in producing briefs for two studies:

- (a) Benefit-Cost Meta-analysis of CGIAR Investment To-date (*"Research Benefits Found to Heavily Outweigh Costs"*)
- (b) Donor Demand for and Uses of Research Impact (*"How important are ex post impact assessment results for donor decisions?"*)

SPIA thanks the CG Secretariat for lending editorial and publication support for this activity.

c) Impact Assessment Focal Point Meeting and Strategic Guidelines Development

The last SPIA sponsored IA focal point meeting (attended by all 16 centers, experts and key donor representatives) was held in Rome in 2000 and deemed highly successful in identifying System-level IA needs and opportunities. The meeting was an ideal forum for familiarizing all involved with current IA work of the centres and sharing experiences and expectations. Recently, there have been calls, particularly from the CGIAR IA Focal Points,

to have another such meeting, and perhaps on a regular basis. Part of the purpose for the meeting is to move ahead on the IA Strategic Guidelines for the CGIAR, something which the group in 2000 recommended be developed over time, as more impact assessments were completed in the System. With the NRM IA initiative completed (see Final report and item 4.2 below), it is an opportune time to move ahead to finalize the Guidelines, parts of which already have been developed. Also, many of the centre IA focal points are relatively new to the CGIAR and seek opportunities to share experiences and learn from one another. SPIA believes that having such a meeting in mid/late 2006 is opportune, particularly since the two SPIA members will be new to the System. SPIA has agreed to facilitate the planning and organization with a Centre, yet to be identified. A specific programme agenda will be developed in due course.

4. CURRENT STATUS OF ON-GOING IMPACT STUDIES

4.1 Impact of the CGIAR on Poverty Alleviation

Background

This long-term impact study, led by IFPRI, is directly related to accounting for CGIAR investments in terms of the main CGIAR goal: sustainable poverty alleviation. It focuses on the pathways between agricultural research and poverty alleviation. The second phase of this project consists of 7 case studies involving a range of countries, different CGIAR centres and types of CGIAR research. As the project nears completion in 2005, the focus has been on an outreach strategy that emphasized presentations at a number of different fora, rather than relying on a single major “end of project workshop.” Presentations have been made to a range of academic conferences, CGIAR Centres, and donor organizations. Lessons from the study are being internalized in the work of IFPRI and other centres. The final output from this study will be a peer-reviewed book comprising the complete set of case studies and synthesis. This is in addition to an IFPRI Food Policy Report and Food Policy Statement that was produced earlier.

The two SPIA-commissioned external peer reviews were completed and submitted to IFPRI’s publications review committee (PRC) - along with two other internally commissioned external peer reviews - to the project study team for consideration in revising and updating the book manuscript. The authors and editors of the manuscript have responded to all four reviews and submitted a revised document to the PRC in early September. The current document and the authors’ detailed responses to the reviewers’ criticisms are now under review by SPIA. An evaluation will follow shortly, which will be submitted to the editors and authors and to the IFPRI PRC. Publication is planned for early 2006.

4.2 NRM Research *Ex-post* Impact Assessment

Background

In 2003, the CGIAR Director asked SPIA/iSC to initiate a set of activities that would give donors a better idea of the impacts of their past investments in natural resources management (NRM) research in the CGIAR. While centres have undertaken a number of evaluations of NRM research activities, not many have gone beyond a description of outputs and analysis of adoption. The initiative, therefore, is SPIA’s response to concerns regarding

the dearth of conclusive documented evidence that NRM research is contributing to mission level impacts on a wide scale (World Bank/OED Meta-analysis of the CGIAR). To generate evidence of NRM research impact, SPIA commissioned impact case studies to five Centres selected on the basis of the quality of proposals submitted. Two more centres volunteered cases for inclusion in the overall exercise; and SPIA agreed to include them, if they meet the same quality criteria that have been and are being used for the five cases initially selected.

The seven case studies (and lead authors) are:

- CIMMYT (Vijay Laxmi Pandey and Olaf Erenstein): The Case of Zero Tillage Technology in India
- CIAT (Nancy Johnson and Tim Dalton): Integrating Germplasm, Natural Resource, and Institutional Innovations to Enhance Impact: Cassava-Based Cropping Systems Research in Asia.
- CIFOR case study (Mike Spilsbury): Criteria & Indicators for Sustainable Forest Management
- ICARDA (Kamel Shideed and Veronique Alary): NRM Technologies in Crop-Livestock Production Systems in Arid and Semi-Arid Areas of Morocco and Tunisia
- World Agroforestry (Olu Ajayi and Frank Place): Fertilizer Trees, Their Development, Socio-Economic and Ecological Impacts in Southern Africa
- IWMI (Meredith Giordano): Assessing the outcomes of IWMI's research and interventions on Irrigation Management Transfer
- WorldFish (Madan Dey and Patrick Kambewa): Development and Dissemination of Integrated Aquaculture–Agriculture Technologies in Malawi

SPIA is overseeing the cases much in the same way that it carried out its oversight function in the impact of CGI study. In the NRM impact study, SPIA member, Dr. Hermann Waibel has been the lead SPIA member in terms of oversight and interaction with the centres, working closely with case study leaders, the Secretariat and the other SPIA members.

A second major focus of the overall study is developing improved methods for assessing NRM research by the centres. Lack of methods is believed to be at least partly responsible for the dearth of documented evidence of impact from NRM research. A senior consultant for SPIA, David Zilberman of the University of California at Berkeley, is providing critical guidance on both the methods aspect of the study and centre case studies themselves. Earlier, the CDC Task Force on iNRM had been invited to prepare a paper describing the Centres' perspective on appropriate approaches to and methodologies for *ex-post* assessment of the impacts of NRM research done by the Centres. The Task Force engaged two consultants, Sam Fujisaka and Douglas White who prepared a paper, entitled "*Ex-post* methods to measure NRM research impacts".

A third component of this study is an assessment of the impacts associated with the Alternatives to Slash and Burn (ASB) programme, one of the longest running Systemwide programs of the CGIAR. To ensure effectiveness and efficiency in the use of CGIAR funds, the impact assessment component of this evaluation and impact assessment review was carried out jointly with SPME as a traditional SC external programme evaluation. The ASB review was completed in September 2005 and the specific impact-related results are

presented in the accompanying SPIA green-cover report “Ex-post impact assessment of NRM research”.

A synthesis of the seven case studies and highlights of two case study results will be presented at AGM '05 during a special luncheon session organized by SPIA and sponsored by USAID. In addition, the Final Report from the Initiative is available on the document table at AGM05. It provides details on all elements of the initiative.

4.3 Training Evaluation and Impact Assessment

Background

Training is one of the main parts of the capacity strengthening activities of the CGIAR. It has been twenty years since there has been a systemwide assessment of the impacts of such activities. This study is being done jointly with SPME, since its purpose also is to evaluate approaches to training and their relative merits, both in terms of effectiveness and efficiency. The objective here is to provide guidance for future training activities. The training study is expected to provide impact information for investors and information that will guide the CGIAR and the Centres in setting relative priorities regarding training focus, identifying effective strategies for CGIAR training activities at the System level, and enhancing coordination of training as part of other capacity strengthening activities.

The training study methodology includes a) compilation and analysis of Centre data on training for 1993-2004, b) questionnaire surveys targeted at Centre training officers, Centre researchers, ex-trainees and current Centre partners; c) interviews of staff in selected Centres during visits; d) interviews of NARS staff during visits to selected countries and e) in-depth case studies in countries visited.

Progress since AGM '04

The Centre training officer and researcher questionnaire surveys were completed at the end of 2004. The ex-trainee and partner questionnaire surveys were being completed by at the end of September 2005. Responses were received from 38 training officers, 330 researchers, 371 ex-trainees and 167 partners. A consultant working at the SC Secretariat completed compilation and analysis of the survey results and Centre training data for the report.

The countries that were visited for NARS interviews and case studies included: Thailand and Vietnam in Asia; Kenya, Cameroon and Malawi in Africa; and Bolivia and Ecuador in Latin-America. All visits were conducted in May-July, except Malawi, which was visited in October. Panel members visited IRRI, IITA, ICRAF, ILRI, CIP and CIAT. Research assistants were employed in each county to help trace trainees and partners for improving the survey results, and to assist in preparing background information, organising visits and interviews, recording data and following-up on case studies.

The preliminary findings and recommendations from the draft report were presented to the Science Council at SC4. The main findings and conclusions of the study will be presented at AGM'05 in the Stakeholder meeting under Agenda Item 5: Strengthening Research for Development Capacities. The final report will be submitted to the Science Council in January 2006.

4.4 Donor Demands and Uses for Evidence of Research Impact: Case of the CGIAR

Background

SPIA is developing a set of strategic guidelines for IA studies in the CGIAR—a need which has long been recognized by CGIAR impact assessment practitioners. Since these guidelines need to be authoritative and help improve IA relevance, they must incorporate the needs of key users, rather than reflect the output of one or two experts working in isolation. The purpose of this study, therefore, is to better understand donor views about the major uses of and demand for ex-post IA work carried out by the CGIAR.

The study was undertaken to answer the following questions.

1. To what degree does *ex-post* impact assessment (epIA) actually inform perceptions of past research impacts and where research impact will be in the future, as compared with other sources of information?
2. What influence does epIA have in donor investment decisions, compared with other factors?
3. What kinds of epIA studies are actually read?
4. How do epIA findings filter into different types of decisions regarding the agricultural development sector and international agricultural research?
5. What kinds of epIA results regarding which topics can donors actually use most effectively?

The final report for this project with all details is available on the Science Council website and is available on the document desk here at AGM' 05.

4.5 CGIAR and NARS Research in Africa: Evidence of Impact to date

Background

While the impacts of agricultural research done by the CGIAR and its partners in Asia and Latin America have been relatively well documented (e.g., Evenson and Gollin, 2003), clear evidence of impact of CGIAR work in Africa is inadequate. This is not because of lack of research investment. Currently four CGIAR centres, ICRAF, ILRI, WARDA and IITA and one affiliated centre, ICIPE have their headquarters in Africa. The other 11 Centres also have activities in SSA and in total there are some 56 offices of CGIAR Centres throughout the region. It is estimated that the CGIAR has allocated almost 40% of its research and capacity strengthening resources to this region. With such high levels of investment, the need for clear evidence of what research investments had positive impacts and which did not is particularly strong. The major output from this study will be a rigorous and comprehensive collection, synthesis and assessment of the available evidence on the impacts of new technologies and improved policies as a result of CGIAR and partner agricultural research in sub-Saharan Africa.

Activities

Phase one of the study includes the following sequential activities:

1. To build a systematic and comprehensive inventory of all the available ex-post impact assessments of agricultural research done by the CGIAR and its NARS partners in Africa.
2. To critically review this collection of impact studies and document information/data pertaining to the methodology used, impact indicators, adoption rates, internal rates of return, household income effects, gender implications, assessment of policy and other factors contributing to impacts, etc.
3. To analyze the data/information with the goal of providing a more complete understanding of the impacts of agricultural research in Africa (i.e., types of research and the environments where impacts have been greatest and least, how do benefits compare with research costs/investments by the CGIAR, what are the factors contributing and/or limiting the impacts of research, etc.).

Recent Progress

The first phase of this study has commenced and involves a rigorous and comprehensive collection, synthesis and assessment of the available evidence on the impacts of new technologies and improved policies as a result of CGIAR and partner agricultural research in sub-Saharan Africa. The second phase will then focus on development of an explanatory typology for adoption and impact potential in the African context.

A preliminary bibliography of all assessments of the impacts of CGIAR research efforts in Africa was compiled and circulated to the IARCs for additions; and Centres augmented the list. Subsequently, the study team (consisting of Mywish Maredea and David Raitzer) reviewed the final African bibliography, and has identified a subset of studies for in-depth review. The review framework has been developed, and the authors are in the process of using it to appraise the identified set of studies. It is expected that the document resulting from the critical review and analysis will be available as a “green cover” publication in early 2006.

The second phase of this study would focus on development of an explanatory typology for adoption and impact potential in the African context.

4.6 Towards a Broader Assessment of CGIAR Policy-Oriented Research Impacts

Background

Policy-oriented social science research comprises a growing share of the research portfolio of the Consultative Group on International Agricultural Research (CGIAR), yet it may be the area of CG System activities with the least compiled evidence of impact. Policy relevant research may have a large impact on sectoral and macro policy decisions made in developing countries affecting agriculture, the poor and the environment. It could also have a very potent indirect effect on the adoption and subsequent impact of other biological technologies. Impact assessment of policy-oriented research has been a significant program at the International Food Policy Research Institute (IFPRI) for a number of years. IFPRI has conducted a series of case studies, and has prepared or commissioned a number of methods papers and syntheses of their experiences with impact assessment.

Phase I of this study consists of a scoping study to identify and document the extent of policy oriented research in the CGIAR, not only in IFPRI, but also in all the other centres. The study responds to an explicit request by donors at AGM '03 to document the impact of policy-relevant research in the CGIAR. The scope of work and major planned activities are found in the appendix.

Recent Progress (current status)

Work on the scoping study started in August. A TOR and plan of action were prepared and SPIA is in the process of interacting with two experts in this area, Dr. Ammar Siamwala (Thailand) and Dr. Carol Weiss (USA). A preliminary inventory of CGIAR impact assessments of policy-oriented research has been compiled and circulated to Centres for additions. Nine Centres have responded and augmented this bibliography.

In addition, a preliminary typology for characterising the impact assessments identified has been developed, and applied to the identified studies. Complementing this typology is a preliminary classification of CGIAR policy-oriented research, which will be used to analyze the current policy-oriented portfolio.

The inventory has identified relatively few *ex post* impact assessments that have been developed for policy-oriented research in the CGIAR. Most of the studies that have been identified do not go beyond measures of uptake or influence, and the few studies that investigate social or economic benefits focus on country-specific research and technical assistance. It is the intention that the scoping study be completed by the end of 2005 and that the main study will commence in early 2006.

5. NEW STUDIES PLANNED FOR 2006-2007

At the last two SPIA and SC meetings, SPIA members deliberated at length what new initiatives to consider from the growing list generated both internally and externally. As in the previous workplan and budget, SPIA plans to focus on one major assessment each year (the policy-oriented research impact study in 2006) in addition to several other smaller, desk-type studies, and one or two scoping papers to bring new major topics into the pipeline for future years. At this time, SPIA is planning to initiate six studies in 2006 and 2007, two of which are second phases of studies currently underway.

5.1 CGIAR Policy-oriented Research Impacts/Influence (main study)

The scoping study described above under Section 4.6 will (depending on the outcome) lay out the scope and details of the proposed main study activity (panel composition and draft TORs) and present a revised budget for 2006 and 2007. This study is likely to involve a series of cases study impact assessments in cooperation with CGIAR Centres and some focal group meetings with policy makers and other selected users of policy research, as well as some other means to document more rigorously the impact pathways and to the extent possible the impacts of policy oriented research in the CGIAR. Details will emerge from the scoping study.

5.2 CGIAR & NARS Research in Africa: Development of an Explanatory Typology for Adoption and Impact Potential (Phase II)

The collated information from the Phase I of this study (see Section 4.5) is likely to reveal significant heterogeneity in documented impact efficacy for different types of research undertakings. To follow-up on revealed patterns, the second phase of this project will attempt to derive a systematic typology that explains these patterns. This will be accomplished via content analysis of the extensive empirical body of literature which the agricultural research community has generated regarding factors affecting the adoption of agricultural innovations in different African settings. The prevalence of different observed constraints for different types of research outputs will be quantified and related to characteristics of the adoption environment, the research process, the research output, and the dissemination means. The result will be a systematic review and synthesis of the factors constraining adoption and impact of agricultural innovations in the African context.

5.3 Impacts of Participatory Research in the CGIAR (scoping study)

Participatory approaches are often asserted as effective means for fostering relevance in agricultural development efforts, including from research. Yet, the application of participatory methods may also impart costs, such as increased field presence, and identified preferences may be especially localized. As a result, the appropriate domains for the application of participatory approaches remain unclear in the context of international public goods oriented research. Yet, participatory research is widely used by the CGIAR and its partners. This scoping study will assess whether it would be worthwhile and justified for SPIA to conduct an in-depth assessment of the impacts of participatory research in the CGIAR. It will review the wealth of literature that has been produced in and outside the system on participatory research pros and cons and it will formulate a set of recommendations on whether SPIA should proceed with this activity.

If the scoping study finds that further empirical assessment of PR impacts is justified, then the study will on a preliminary basis sort out a number of methodological issues to be resolved in order to be able to move ahead with such a study, either in 2007 or 2008, depending on availability of resources. Note: this study was proposed in the previous SPIA Workplan but deferred due to time and budget constraints.

5.4 CGIAR Research Benefit Diffusion & Impacts in South Asia (Phase I desk study)

South Asia is the region of the world containing the greatest number of poor people. Despite status as the epicentre of the Green Revolution (GR), it continues to be a region with high levels of malnutrition and hunger. Clearly agricultural research has had highly successful productivity effects in the region, but poverty persists to a degree uncharacteristic of any other region that benefited strongly from the GR. This study would analyse the poverty-alleviating impacts on different target groups of CGIAR technologies in this context, and would improve understanding of the opportunities for, and impediments to, agricultural technology enhancement as a strategy for poverty alleviation. There is a great deal of material on the impacts of the CGIAR and agricultural research in South Asia available through the centres and done by others. There is a widespread intuitive belief that the

CGIAR has had a significant impact in some areas and for some types of agricultural activity. There is good justification for undertaking this study, since it would enhance understanding of who benefits, who loses, and under what conditions and what this may mean for CGIAR research design. The results could feed into *ex ante* impact assessment used as a basis for selection of research thrusts in the CGIAR.

Phase I is exploratory and will be a desk study that would define the key knowledge gaps to be addressed in a more in-depth assessment. Both this study and one planned for a later date for Latin America and the Caribbean are similar in purpose to the Africa study described earlier and relate to accounting for CGIAR investments in particular regions, both to the donors who fund the research and to regional members and clients in the regions.

APPENDIX

Towards a Broader Assessment of CGIAR Policy-Oriented Research Impacts: Scope of Work and Activities

Scope of Work

Policy research is a comprehensive term, which includes theoretical or methodological research appearing in scholarly literature to applied empirical activities resulting in suggested specific courses of action directly disseminated to executive, legislative and regulatory bodies, investors and development agencies. The reference to “policy” does not define the sector or discipline of research, as this classification is based on the pathway to impact. Thus, there may be both biophysical and social science research in the CGIAR that has an influence on and results in policy responses. Hence, one of the first components of this scoping activity is to devise a taxonomy for this research category.

It is presently not possible to determine whether the limited evidence of impact from CGIAR policy-oriented social and other scientific research is due to measurement difficulties or lack of impact *per se*, as estimation of the impacts of policy research poses unique problems of attribution and quantification. With policy outcomes, there is often no objective indicator of innovation source, and there are usually many simultaneous and complementary sources of information, influence and advocacy behind policy shifts.

Further complicating attribution is the fact that relevant policy innovations from research with global-public-goods characteristics are rarely directly adoptable by target policymakers. Rather, these innovations diffuse through adaptation and refinement by policy analysts into the policy recommendations of other think tanks and organisations, which then help to inform the decisions of policymakers. Adoption at each of these stages in such a context is far from a linear, binary decision, as use may range from symbolic or selective to strategic. Indeed, given the number of intermediate adoption and adaptation steps, in many cases “influence” may be considered a more appropriate term than “impact.”

Counterfactual issues are also complicated in impact assessment in this area, as it is difficult if not impossible to conduct socioeconomic experiments in the policy sciences. Additionally, often research simply reinforces the wisdom of current policy settings with no evident changes in

policies necessarily resulting. Assessing the economic impacts of such confirmatory research is especially difficult to discern, document and assess.

However, such methodological difficulties do not reduce the need for impact to be demonstrated as the result of policy-oriented research, as the CGIAR and its stakeholders demand evidence of impact from their growing level of investment in this arena. This is particularly the case if the potential high positive complementarities between policy and biologically oriented research are taken into consideration (i.e. a sectoral policy shift may increase significantly the impact of CG biological technology, and a major macro policy shift may impede the viability of some agricultural sub-sectors).

Activities

As a result, progress towards a credible set of impact assessment methods for policy-oriented research is very much needed. Relevant approaches may depend significantly on more qualitative methods for attribution and the establishment of counterfactuals. It may also only be possible to assess outcomes, influences, responses and likely impact pathways, stopping short of translating these into actual impacts on the poor, the food insecure and the environment. As a consequence, generating credible results at the level of CGIAR goals will be a key challenge. The following five activities are planned in the SPIA study in two phases:

I. Exploratory Phase

1. *Review the conceptual literature* on the role of scientific information in the process of political policymaking with particular emphasis on agriculture and natural resources. This analysis will set the bounds for expectations of measurable impact as well as define the context for attribution of specific sources of information among other influences on policy outcomes.
2. *Devise a taxonomy* to distinguish between the different forms of CGIAR policy-oriented research and their logical impact pathways, and compile data on project profiles and associated investment trends in these various types of policy-oriented social and other science research in the system.
3. *Compile a catalogue* of ex-post impact assessment (epIA) studies of policy-oriented research (social and other sciences) conducted or underway in the international agricultural research centres (IARCs) of the CGIAR, review the methods employed and compare them with best practices, the results obtained, and the extent to which impact pathways were identified in the project documents.
4. *Assemble and synthesize documented evidence* of outcomes, influences, policy responses and resulting impacts on the poor, the food insecure and the environment, from policy-oriented CGIAR research. Compare and contrast these with the CGIAR's investments in various categories of policy-oriented research described in Activity 2.

II. Analytical Phase

5. *A small workshop* to discuss with a panel of recognised experts:
 - the taxonomy of policy-oriented research categories identified under Activity 2;
 - the methods, lessons and principles identified in Activity 3;
 - the methodological constraints to the attribution of mission-level impacts from the influence of research on policies;
 - impact pathways for policy-oriented research.

Results from this discussion would lead to recommendations on future impact assessment activities in this area, including the value and desirability of:

- a. conducting case-studies to further articulate, document and measure impacts;
- b. involving centre staff and national/international clients in focus group discussions to elicit anecdotal, historical retrospective and other information on impacts;
- c. training of centre and NARS staff in methodologies for impact assessment.

If the exploratory phase concludes that case studies of impact via policy-oriented research are necessary and feasible, the workshop would also be used to identify specific potential cases for further empirical analysis.

6. Appropriate follow-up activities such as the conduct case-studies of the largest perceived policy research impacts at the most policy-oriented IARCs, should there be a consensus on the value and desirability of this from the workshop. Alternatively other approaches might be tried, such as focus groups involving national and international policy makers, retrospective narratives involving key informants, etc.