

8th Meeting of the Independent Science & Partnership Council

10 -11 September 2013
IWMI Headquarters, Colombo, Sri Lanka

END OF MEETING REPORT

(ISPC Secretariat, September 2013)

Agenda Item 1. Opening of the ISPC Meeting

Ken Cassman, the ISPC Chair, welcomed participants to the meeting noting with pleasure the opportunity to be at IWMI in Sri Lanka. He noted that the ISPC was responding to a number of challenges focused on requests from the Fund Council (FC) and the Consortium which he believed had resulted in an exciting agenda for the meeting. He thanked the IWMI Director General (DG) Dr. Jeremy Bird for the support and hospitality shown to the Council in the planning for the meeting and on arrival.

Jeremy Bird, IWMI DG, welcomed participants to IWMI and Sri Lanka and introduced IWMI staff participating in the meeting. Council and Secretariat members and observers were introduced.

Agenda Item 2. IWMI and its contributions to the CRPs

Jeremy Bird opened the agenda item reflecting on two major conferences that had been held on water during the summer (in Tajikistan and Stockholm in this UN Year of Water Cooperation in the face of growing scarcity and water competition that is seen around the world). In Tajikistan the Conference had included subjects such as benefit sharing (not just water *per se*) and the conjunctive use of ground and surface water. The emphasis in Stockholm has been on partnerships (just as the CRP needed uptake partners) and the Sustainable Development Goals (SDGs) which will shape what the international community will be doing. He reported that IWMI was developing its next 5-year strategy with the intent to work on a comprehensive agenda (which included several of the international goals such as universal safe drinking water, food and energy security - where the idea is to double water productivity and waste water treatment). They will be defining partners to assist with this research for development agenda and where IWMI would stand in relation to the IDOs and SLOs. He reported that the Center was undertaking a change management agenda (with some assistance of experiences of WorldFish) to position the Center in the long-term. He noted that the unpredictability of budgets was having an effect on current commitments to partners and that managing transaction costs was a continuous challenge.

Bird then introduced IWMI DDG *Peter McCornick* who identified the IWMI mission as “to improve the management of land and water resources for food, livelihoods and the environment.” IWMI conducts research and research-related activities under 11 main program areas of which 3, namely, *Small-Scale Irrigation/Agricultural Water Management in sub-Saharan Africa*, *Managing Variability*,

and *Business Opportunities for Resource Recovery and Reuse* were highlighted in his presentation. As well as the Colombo Headquarters, IWMI has 9 regional offices serving South, Central and SE Asia and Africa, additional regional representation and the Water, Land and Ecosystems CRP (WLE) has a broad geographical coverage including 8 water basins of global importance including work in Latin America.

He noted that IWMI's adoption of outcome-oriented research, demands extensive consultation in planning and designing context-specific approaches, and brought needs for partnership management where external intermediaries play a significant role in facilitating outcomes. Areas of the agenda in which IWMI had had notable and emerging success included mainstreaming the crisis in water and food through the Comprehensive Assessment, the Challenge Program on Water and Food, and other programs. IWMI had provided agricultural water management solutions to scaling up and sustaining small-scale irrigation technologies and practices in Africa and South Asia. He noted that, in Africa, nearly 300 million of the poor in SSA are in rural areas where livelihoods depend on crops, livestock and fisheries. Land and water management is one of four pillars for priority investment of the Comprehensive Africa Agriculture Development Program (CAADP) aiming to triple the area (to approximately 20 million hectares) under sustainable land management and reliable water control systems. Many countries, including Ethiopia, Ghana, Kenya, Malawi, Mozambique, Nigeria and Tanzania, have prioritized investments in irrigation. Expansion and sustaining irrigation requires good science and innovation, i.e. business models. As with South Asia in the past, small-holder, informal irrigation is expanding within rain-fed landscapes.

Policy successes to which IWMI had contributed included the adoption of policies and guidelines to manage water for adaptation to climate change (in, for example, Nepal and Sri Lanka); implementation of a practical solution at-scale to the agriculture induced groundwater governance crisis in Gujarat, India; increasing Indian Government investments in reforming underperforming large scale public irrigation; adoption of policies, guidelines and practices for the safe use of wastewater in agriculture working with UN agencies and culminating in the joint writing with UNEP in 2013 of the first world water quality assessment.

Technical and analytical work had led to the development of environmental flow requirements for rivers in South Asia. However, a major concern of IWMI was how to move technologies and practices to scale and providing access to water and markets. This concern is in line with major international initiatives including, for instance the Grand Challenge in Securing Water for Food promoted by SIDA and USAID. *Miriam Otoo* of IWMI also described the approach adopted by the Resource, Recovery & Reuse Program applying a business perspective to the recovery of nutrients, water and energy. Technical knowledge for re-use is largely available but remains on the shelf, particularly in low-income countries. Alarming, she suggested that few water projects go to scale, recover costs, or even survives its subsidized pilot stage. RRR is approaching the sanitation-agriculture interface by studying and testing business models with due consideration of safety aspects and cultural perceptions. The RRR research portfolio targets private sector engagement, PPP, investors and business schools. Cross disciplinary teams of economists, business developers, engineers and environmental scientists work closely together to analyze business models, plans and returns on investment. This relatively new program has received significant feedback, with donors ready to invest in the business plans. She noted that there are opportunities to apply the same analytical and business approach to other research portfolios.

McCornick continued that managing variability in the seasonal availability of water (or “unseasonal” due to climate change effects) was important because of the close relationship with agriculture and

overall water systems, and he made the point that unmanaged temporal abundance could also lead to overall scarcity. Research in this area required detailed characterization and mapping of flood and drought risks and hot spots globally and in regions under current and projected future climates; appraisal of diverse water storage “portfolios” of natural and built storage “infrastructure”, and the ecosystem services they provide and introducing these perspectives into river basin development. IWMI had been focusing on underground solutions for conjunctive management of floods and droughts and he discussed the project on Managed Aquifer Recharge (MAR) to stabilize groundwater in the central plains of Thailand. He noted that recharge rates were sufficient if canal water is pre-treated through wetlands. In this successful pilot study, falling ground water level trends could be reversed and year-round rice/sugar production maintained. There was a need to develop strong proof of concept in technical, economic and institutional terms and evaluate opportunities for up- and out-scaling this approach. Regional prospects were being assessed for the eastern Ganga initially.

In discussion, the DG noted that in delivering the mission statement IWMI obviously focused on agricultural water management, but there was a need to engage with the wider water arena to place issues in context and to ensure that their research focus will bring results in relation to alternative and conjunctive uses for the resource.

In response to Council’s concerns that the description of the program seem to be based around technologies rather than the former emphasis on issues of governance, McCornick said that he had provided examples where specific aspects of water policy related to preferred technology would be required (e.g. the use of motorized pump systems where IWMI’s interest was look at issues such as import duty which affected the enabling environment and practices) but that IWMI still worked from trans-boundary down to system level governance. In the recovery program, it was necessary to work with public sector and non-state actors. On gender research he noted that women play a large role in the water agenda, particularly in Africa where, for instance, they influence the growing of high value crops. South Asia was showing a feminization of agriculture which provided future research opportunities.

Other comments focused on IWMI country choice (countries prioritizing investment in Africa and the competition issues with other sectors: e.g. pollution, fertilizer, opportunities for livestock waste). Council members were particularly interested in potential work on recharging aquifers and the DG noted that whilst the concept had been proved in a pilot site in Thailand, an evaluation of the general feasibility of this approach and IWMI’s possible contribution to research would be for discussion of the five-year strategy at the IWMI Board. Certainly, in the case of the Indus aquifer recharge happens more or less naturally from surface canals, but IWMI would like to study this through the flood water of the lower Ganga. The ISPC Chair suggested that a more evident framework for IWMI involvement, particularly in Africa, and the relationship to the work that WLE was conducting in different countries would help illustrate the prioritization. The DG commented that there are many natural resource management issues related to water, such as improving water quality, health and on the demand side for CAADP in Africa, the strategic allocation of resources. The natural resources CRPs had held a meeting and WLE was looking for joint sites with CRP 6 (Forest and Trees). The IRRI DDG also noted the opportunity for closer interaction between CRP 5 and GRISP. The DDG noted that there were demands on IWMI to provide research capacity for livelihood, community management and technologies related to water for other CRPs and it was suggested by the Chair that the degree of services provided by some Centers/CRPs was a matter a future review of the portfolio. In relation to the question of soils, the DDG noted that there was not much work within IWMI but soil salinity work was conducted through the CRP in which CIAT, ICRAF and ICARDA provided soils expertise.

Work on risk and rain fed system connects to the Humidtropics at just two action sides whilst other connections are still being developed.

The Executive Secretary of the FC raised the general question for the CGIAR, and for IWMI's work in particular, that the impact of natural resources management research was often a wider public good (such as ecosystem services, control of zoonoses, etc.) and difficult to attribute to individual programs or Centers. In closing the discussion, the ISPC Chair noted that IWMI should be an important contributor to CGIAR metrics and bench marking of science.

Agenda item 3. CGIAR Program Update

1. Report of the ISPC Chair

Ken Cassman, the Chair of the ISPC, presented an overview of the accomplishments and outputs of ISPC for 2013, focusing on its 4 roles, i.e., independent program review, strategy and trends, independent impact assessment, and mobilizing science and partnership.

Cassman reported that the review and approval of the revised CRP1.1, Drylands, proposal (early 2013) completed a long period of contributing to the review process of the first CRPs. Cassman cited the three white papers on “*Strengthening the SRF through prioritization*”, “*Theories of change and SLO linkages*”, and “*SLO linkages and impact pathways*”, as examples of ISPC's role in providing guidance and frameworks to assist development of the SRF and more strategic/coherent CGIAR research programs. This approach had included holding an ISPC/CRP Leaders workshop on IDO development at CIAT (March 2013), inputs to CRP meetings at Montpellier (June 2013), and presentation of IDO and SLO-linkages paper to the Fund Council strategy day held in New Delhi.

Additional contributions that the ISPC makes to identification of strategy and trends affecting agricultural research by the CGIAR had included a published study on “*Implications of trends in farm size and urbanization on CGIAR research agenda*”. A special issue of the journal *Agriculture, Ecosystems and Environment* is being edited on “*Conservation agriculture for smallholder farmers*”, which includes The Nebraska Declaration on Conservation Agriculture. In addition, a strategic overview of livestock research in the CGIAR was recently completed (a summary of the study was presented later in the meeting). Cassman presented a short summary of ISPC comments on the draft CGIAR Open Access Policy as some of the additional advice provided by the ISPC to the Fund Council.

In terms of impact assessment, Cassman explained that the main focus had been on the design and initiation of the SIAC program (Strengthening Impact Assessment in the CGIAR – see Agenda Item 9). Similarly, in mobilizing science efforts had focused on the development of the scientific program and the logistical arrangements for Science Forum 2013, co-organized with BMZ in Bonn (September 23-25). He noted that this event provides an opportunity for the ISPC to help focus CGIAR understanding of the science and partnerships needed for the accomplishment of SLO3 on human nutrition and health (also discussed under Agenda item 10).

Finally, presenting the future outlook of ISPC in 2014, Cassman informed participants about the ongoing search for a new council chair and member, and the turnover in the secretariat. He noted that the ISPC was developing its Work Plan with effort to be continued in all four of its mandate areas. He discussed the opportunities to improve the process by which Funders, CGIAR Centers and CRPs could provide input to ISPC work plans, noting the Council's independent position to provide a role in

brokering controversial issues, identifying emerging issues, and analyzing and achieving greater impact from CGIAR work. He emphasized the need to harness contributions from emerging-economy countries (China, India, Brazil, Mexico, etc.) in a new era for the CGIAR. Cassman reiterated his conviction that ISPC provides an independent voice on science quality, relevance, and partnerships, as a critical component of the CGIAR as it continues to evolve.

2. Report from Consortium Office

Frank Rijsberman, the Consortium CEO, presented the latest update from the Consortium on the CGIAR reform and the new SRF. The Consortium Office was involved in developing the SRF action plan, and working closely with CRPs on the IDOs through Workshops at CIAT-Cali (March 2013) and Montpellier (June 2013). The draft of the revised SRF will be ready by the end of September, and will be circulated for comments and discussion, before being finalized in the spring of 2014. Rijsberman explained that the Consortium has been considering the alignment between the SRF and the UN Sustainable Development Goals (SDGs), and mapping the CGIAR R&D targets to the SDG global targets. A common set of 10-12 CRP IDOs would constitute a scorecard for the CGIAR portfolio and this might be mapped to the SDGs. As well as higher level targeting, he suggested that the next round of CRPs will allow better linkages between CRPs; a team from IFPRI is currently working on mapping all CRP sites to better define focus areas and to enhance synergies among CRPs.

Regarding the next round of CRPs, Rijsberman explained that the revised CRP guideline document is available for comments and further revision before being finalized in March 2014. Given that the Fund Council has requested a midterm review (MTR) of the progress of the CGIAR transformation, it was suggested that all CRPs, regardless of current end date, be extended to the end of 2015. The favoured option for development and review of the 2nd round of CRP proposals would be to overlap the extension phase and so that all decision making could be completed by the end of 2015 with new CRP contracts initiated in early 2016. The guidelines for the 2nd round of CRPs will be ready for FC approval by April 2014, which should leave about one year and half after that, for the development and review processes for all the CRP pre-proposals (2014) and full proposals (2015). Describing the processes for the review of CRPs, Rijsberman noted that ISPC will be responsible for the independent peer-review, commenting on individual CRPs and the portfolio as a whole; whereas the Consortium Office and the Fund Council will handle the management and funding recommendations.

Rijsberman suggested that new CRPs may be included in the portfolio for the next phase, to address specific topics and needs (e.g. climate smart agriculture, livestock, breeding platforms, etc.). He noted that CGIAR funding has been more stable in 2013 compared to the previous years, and that several donor agencies have recently started making multiyear commitments. He also highlighted the fact that as the CRP process becomes more efficient, some donors are likely to shift funding from bilateral to W1 and W2.

In discussion, ISPC members focused on the SRF and the proposed guidelines for the second phase of CRPs. Council members expressed their overall agreement, in principle, with the process proposed in the guidelines. However areas requiring thought were the degree to which the review of full proposals could be simultaneous or staggered and the idea of costing outcomes. Whilst some recognized the desirability of costing research towards outcomes for planning purposes, concerns were expressed on a possible adoption of a “mechanistic approach” for using outcomes as a performance measure given the inherent uncertainty of research. The Chair agreed that written comments on the guidelines will be sent by the ISPC to the CO subsequent to the Science Forum.

3. Report from the Fund Office

Jonathan Wadsworth, Executive Secretary of the Fund Office presented an overview of funders' perspective on CGIAR progress. He noted that the published version of the SRF is not ideal, and that the on-going work on the action plan with ISPC inputs addressing ToC, IDOs, and SLOs is welcomed by the FC. He also recognized that ISPC reviews of the first round of CRP proposals had been highly valued and often referred to by the FC. However, he pointed out that there was a lot of bundling of existing work in current CRPs, including research which may not be highly relevant. Therefore, the FC expects the second round of CRPs to be more rigorous and donors would like to see more competitive processes, leading to concrete results and impact through clear stewardship of CGIAR outputs (ToC). Wadsworth reported funders' general approval that the system is opening up to outside partners. He recognized the significant achievements by the Consortium Office on evaluation policies and IP/IA principles. But he stated that donors would like to see faster and deeper mainstreaming of gender in the portfolio. Funders intend to adhere to the spending caps of system entities (CO, ISPC, IEA, and FO). Funders want an authoritative, high-level opinion from the MTR, to assess system governance, accountability, costs, effectiveness, forward-looking priorities, reform progress and direction.

Wadsworth provided an overview of the budget and status of CGIAR funds. In August 2013, 71% of projected funding requirement was secure, compared to 51% last year (August 2012). He explained that 12 donors have signed 3-year agreements and one donor possibly for 5-years; but this still represents only 25% of Fund revenue. Wadsworth explained that currently the top five donors contribute 61% of total funds, and that donors choose to provide funds through different combinations of funding windows. For example, 15 funders provide funds through a mixed use of windows, 8 funders opt for Window 3 only, with a bilateral funding channel to Centers, 6 funders opt for W1 only, and 1 funder for W2 only. CRP implementation rate based on total CRP budgets is increasing linearly, but remains highly variable (42-110 %) across CRPs, due essentially to W1/W2 allocations. Wadsworth concluded that whilst there is substantial progress there is still a long way to go for getting W1/W2 on track.

4. Report from the Head of IEA

Rachel Bedouin, Head of the Independent Evaluation Arrangement, presented an update of IEA activities (through Skype). Regarding the evaluation of the CRP on Forests Trees and Agroforestry (FTA), the IEA's first CRP evaluation, she reported that the draft inception report was circulated to primary stakeholders, the visits to Centers and research sites will take place between September and December 2013, and the final report is expected in April 2014. The preliminary findings, conclusions and recommendations of the CRP Governance and Management Review will be shared with primary stakeholders at the end of November through a series of webinars. The final report will be available in late December 2013. Bedouin presented IEA's strategy for supporting CRP evaluation plans, and for building an Evaluation Community of Practice (ECoP). She reported that the first workshop will be organized in Rome in October 2013, with over 40 participants from all CRPs and Centers. An ECoP website was launched in July. IEA has also been working on the finalization of the evaluation standards and annexes and the setting up a quality assurance system, one central element of which being a Quality Assurance Advisory Panel composed of external senior evaluators. IEA has developed its first Rolling Evaluation Workplan (2014-2017). The REWP, which will be submitted to the FC for approval in November, outlines a vision of the contribution of the IEA to the effectiveness and efficiency of the CGIAR; it describes what the IEA aims to achieve in the next four years, and presents the resources needed. The plan includes inter alia IEA evaluation priorities and a schedule for

CRP evaluations and other thematic evaluations, which will be presented to the FC in November. Bedouin explained that the IEA evaluation strategy will provide the basis for the System-Wide Evaluation due in 2017. The IEA work plan will include four CRP evaluations per year in 2014 and 2015 and one CRP evaluation in 2016 (Genebanks CRP), in addition to preparatory studies, thematic syntheses on cross-cutting issues in 2015 and 2016, and a system-wide evaluation in 2017, which will cover all aspects of the CGIAR (objectives, modalities, institutional framework, etc.). An external evaluation of the IEA will also take place in parallel to the system-wide evaluation and will be steered by the Fund Council.

Discussion with participants focused on relationships between the IEA reviews, MTR and the responsibilities of the Audit Unit. Bedouin explained that IEA coordinates with all other units and reviews to avoid overlap and duplication. She also highlighted that in addition to providing accountability, CRP evaluations are expected to provide valuable information and advice on planning and implementation thereby supporting decision-making and lessons for the further development of the CRPs and the Reform in general. The purpose and scope of CRP evaluations will be adjusted according to the stage of implementation of the CRP and emphasis on specific questions will be defined for each evaluation.

Agenda item 4. Intermediate Development Outcomes (IDOs) and prioritization of research within CRPs

i. GRISP

Achim Dobermann, IRRI DDG for Research, gave an update on the restructuring of IRRI and GRiSP and his engagement with the development of the UN sustainable development goals (SDGs). The fundamental challenge for IRRI is in creating accountability and tracking product diffusion. He used the example of Sahbhagi Dhan rice to illustrate the typical process from trait discovery to varietal release and spread in various countries, including through companies. Through this analysis, they have concluded that all products should address end-user needs, which has resulted in completely restructured product pipelines.

Dobermann then presented the *strategic assessment of research priorities in Asia for 2010-13*. For IRRI, it raised critical questions such as ‘does IRRI have the potential for greater impact in rainfed or irrigated environments?’ and ‘does this stem from genetic improvement or enhanced management?’ They approached these questions by evaluating and modeling IRRI’s role in 63 potential technology solutions. One overall result of this analysis is that projected gains in Asian rice production do not exceed yield gaps. Other results from this analysis will require a re-evaluation or course correction in IRRI’s priorities and planned investments, e.g., the impact of IRRI in South Asia is greater in irrigated areas than rainfed areas. In speaking about the applicability of such a strategic assessment framework across the CGIAR, Dobermann noted that this could (a) provide transparency, with the data functioning as a baseline for subsequent assessments (ex-post); (b) be easily modified and tailored to various applications (scenarios, hypotheses); (c) internalize impact culture; (d) assist in discovering critical data gaps; and (e) provide guidance for research funding and priority-setting by making apparent trade-offs in investment choices.

Dobermann then illustrated the links between major GRiSP product outputs, research outcomes and IDOs. GRiSP has defined 9 IDOs and attributed each of these to SLOs. The challenge is then in defining the performance indicators for IDOs – this varies of course depending what IDOs are, how

these should be measured, and raises the concern of whether anyone outside the CGIAR understand them? He also spoke about the *role of CGIAR in contributing to the post-2015 sustainable development agenda*, particularly goal 6 (improve agricultural systems and raise rural prosperity). He concluded by encouraging the CGIAR to not only use the SDG framework, but to take an active part and even become a world leader in monitoring the performance of agriculture in developing countries.

There was a lively discussion on IDOs following the presentation. With respect to the issue about the difficulty in measuring IDOs, Doug Gollin (SPIA Chair) questioned if the problem was definitional or one of attribution. Dobermann considered that there were three concerns: uncertainty with respect to what an IDO is; uncertainty as to whether these are the right IDOs (the ones donors are looking for); and whether the impact indicators they have come up with for IDOs are too broad. Maggie Gill emphasized that the benefit of thinking about impact pathways and crosscutting CRP-IDOs is not just in identification of IDOs but also the guidance it provides. This is key to ensuring that CRPs do not focus only on self-defined indicators that may have negative implications for other CRPs. Hence, this can be thought of as a useful mechanism for initiating discussion about potential or likely trade-offs between CRPs. Another observer agreed that the challenge was in linking the research outcomes to the development outcomes using the theory of change because the gap between these two is large.

Dobermann felt that is crucial for the CGIAR system to integrate more with SDGs, even if it retains the IDO/SLO framework. This integration is particularly helpful in thinking about the elements of SDGs that the system is taking on. It would also make it obvious to outsiders that the CGIAR is targeting the SDGs as part of the global community. It was noted that the revised SRF will address the SDGs framework.

The Chair observed that probably 80% of CGIAR impact could be gauged by a small key subset of indicators, and that for the rest, the relevant indicators are perhaps too complex to quantify. He concluded by suggesting that CRPs focus on measureable (and relevant) indicators and, for the time being, hold off on the more difficult-to-measure indicators (e.g. biodiversity).

ii. Water, Land and Ecosystem CRP

Andrew Noble, Program leader of the Water, Land and Ecosystems (WLE) CRP presented an update on WLE IDOs, some highlights from their work, and thoughts on the SRF, SLOs/IDOs and impact pathways. He proposed that WLE represents a paradigm shift in thinking of agricultural production as a wholly owned subsidiary of the ecosystems and natural capital they are dependent on, and not vice versa. They have defined 5 IDOs that are linked to the SLOs.

WLE views the SLO, IDOs and associated impact pathways as providing a practical framework and structured process to link research strategies to development goals. Emphasis in this CRP is on users, iteration and learning, and accountability. For the latter, he suggested that CRPs should be held accountable for: (i) understanding factors that determine uptake and designing appropriate products; (ii) producing high quality and timely research outputs; (iii) understanding usage and relevance of research; and, (iv) determining the realization of research outcomes. Noble concluded by stating that more research is required to better understand the processes and approaches by which research contributes to positive development outcomes. He noted that unless results could be attributed to research, development outcomes would not be a valid performance instrument.

The Chair opened the discussions by observing that the WLE IDOs were still quite generic and therefore difficult to measure at that level. In responding to Jeff Sayer's comment on the contrast between the WLE CRP and the Challenge Program on Water and Food in terms of scale and what this

entails for bringing about changes, Noble observed that many challenges are context specific which is why they were developing impact pathways for each of these focal regions.

Council noted the need for research on “what works and why it worked” is important, but asked how much of this was included in WLE plan. Noble responded that there was still a critical gap in understanding how people make decisions and how and when behavioural change occurs, and that the CGIAR has (by and large) not been very good at understanding that process. An observer noted that some of the indicators identified by WLE were actually IDOs themselves, and hence developing indicators for those is still the challenge.

In responding to Noble’s comment that CRPs should not be directly held responsible for development outcomes, an observer stated that CRPs can and should be held accountable for partnerships that would lead to the development outcomes. Noble suggested that it would be difficult to realistically quantify the number of policies changed due to CRPs, and another observer added that while being held accountable for partnerships was feasible, accountability for their actions was not. The discussion concluded with an emphasis on the need for CRPs still to make clear the aspects of the impact pathway that go beyond the research outcomes for which they could be held directly accountable.

Agenda item 5. ISPC WorkPlan and Budget

Peter Gardiner, Executive Director of the ISPC presented the outline for the ISPC WP&B for 2014. The intention was to look for feed-back on the proposed activities from the ISCP8 meeting. This would allow the Council to discuss alternative study proposals and finalize the WP&B in time for its presentation to the FC meeting in November, 2013. The overall ISPC budget has been held constant, in line with the request to system units, at around 3.7 million. At the request of donors the articulation of the ISPC/SPIA budget is provided in some detail regarding the new system-financing of the SIAC (Strengthening Impact Assessment in the CGIAR) proposal. He pointed out that depending on the workload expected from the ISPC in program review, now foreseen in the 2nd call of the CRP proposals (see item 3 above), the Council can put more effort into that or other components of its mandate e.g. organizing a Science Forum and new Strategic studies with workshops to discuss key results.

In the WP&B plan, the definition of impact assessment activities are well advanced (as per SIAC and would be described under agenda item 9). Other activities are provided as drafts. Under the Council’s work on Strategy and Trends, a follow-up workshop to discuss the outcomes of the current biotechnology study is planned for 2014. In addition, the Council could choose one or more strategic studies from a list of alternatives; the ISPC is becoming more systematic in its process of choosing topics for studies considering also who else is working on these areas. He illustrated the long list of potential study topics that have been generated drawing from the ISPC’s earlier CRP assessments and comments from stakeholders, among other mechanisms. Regarding Mobilizing Science, follow-up activities to share and disseminate the outcomes of SF13 on nutrition and health had been scheduled for 2014, supporting the development of activities towards SLO3. Canvassing topics for a new science forum in 2015 would also need to begin in a manner similar to the iterative choice of strategic topics. Under this mandate area, a partnership study of boundary organizations and SLO-specific linkages is being considered. It would focus on partners who would help the CGIAR to deliver the SLOs.

Gardiner emphasized that the ISPC will need to remain flexible in the balance of its activities under a capped budget depending on what will be requested from the Council in 2014 regarding program

review. The foreseen CRP concept note assessment will give the ISPC an important opportunity to review the entire portfolio of CGIAR research across the CRPs (and it is also possible that new strategic issues may arise from this assessment). In its internal approach for workplan topics for 2014, the ISPC would also consider a smaller or larger effort; from desk studies to more comprehensive studies that involve engagement with CRPs and workshops, for instance. This would help maintain flexibility with respect to FC decisions on the 2nd phase CRP review process and other issues.

The presentation was taken as an item for information and introduction to Agenda item 6.

Agenda item 6. Strategy & Trends: topics under consideration

Presentation 1: “Development corridors and the implication for CGIAR research

Jeff Sayer, ISPC member, highlighted the emerging trend of growth corridors as a major, cross-cutting strategic issue for the CGIAR. They have been identified as a priority as part of development planning in documents from a number of multilateral fora (UNGA, Davos, NEPAD etc) as a way of focusing foreign direct investment (FDI), particularly in Sub-Saharan Africa. Of the many constraints to agricultural development, lack of access to markets and inputs is the most significant in a number of regions. New infrastructure can open up new options, which in turn impacts on the demand for research. As a counterpoint to the dynamism in the private sector, there is an equally vital sector of NGOs that query the development contribution of these large-scale schemes – one person’s foreign direct investment is another person’s land grab.

Sayer presented a recently published map consolidating the public information on current major road-building, pipeline and railway projects in Africa and how they relate to specific farming systems. Whilst growth corridors are rapidly increasing in number, embraced by governments and private sector interests (e.g. for mining as well as for agriculture) yet an initial assessment shows that there are very few published analytical studies on the impact of corridors on agricultural development, and there is no mention of them in the documentation of the CGIAR Research Programs. The topic is proposed as something suitable for an ISPC study because it builds on the work carried out in 2012/13 under the farm size and urbanization study. Those commissioned papers looked at the major demographic changes over the coming decades and how spatial shifts in population, production and consumption impact on the CGIAR’s mission.

As an initial proposition, Sayer put forward the hypothesis that these corridors present examples of discontinuous “transformational” change in social and agricultural systems. One possible implication of this is that, within the CGIAR, the pendulum has swung too far in the direction of a downstream focus. Where the conditions are right, private sector investment will come in to previously remote places and radically transform them. The main contribution of the CGIAR in those circumstances could be to ensure that it has a “well-stocked shelf” of technologies ready to facilitate pro-poor agricultural outcomes. In this context, a carefully nuanced approach to marginal areas or hinterlands should consider the potential for a growth corridor to be developed, what the likely implications for agriculture are in that region, and for CGIAR research and development activities in particular.

There was wide agreement that this was a strategically important question with many cross-linkages to topics that are central to the reform of the CGIAR – collaboration with new partners, the choice of action sites in CRPs, etc. Kwesi Atta Krah expressed the view that the CGIAR needs a link into the CAADP, which could then provide advice back out to the system – this coordination function being

somewhat analogous with the coordination across centres for approaching donors. Achim Dobermann asked whether the CGIAR should try and take part in some of these development schemes in order to work from the inside to try and ensure good outcomes for poor people. Others wondered what type of development these corridors bring, recognising that there is considerable heterogeneity – a new road linking oil and gas exploration or new mines to the nearest port has a different set of objectives to a government-management integrated development plan centered around a new road. There is the potential for agriculture to rapidly become much less significant in the livelihoods of people living in the areas affected. An ISPC study will aim to ensure that the CRPs give attention to this issue and assess the implications for their operations. An early step in 2014 will be to convene a meeting of the CRPs most directly relevant for this issue.

Presentation 2: “IT issues for the CGIAR”

In his presentation, *Doug Gollin*, member of the ISPC and Chair of SPIA framed the central questions around the rapid development of Information and Communication Technology that are of significance to the CGIAR. The central questions include: How have the developments in ICT altered the landscape for CGIAR research?; How will advances over the next twenty to thirty years continue to change the CGIAR’s functions, tools, and constraints?; Can the new ICT tools allow CGIAR researchers to carry out their existing portfolio more effectively?; Does the CGIAR require different ICT capabilities than it currently has?; and, Should the CGIAR’s portfolio change and how, given the ways in which ICT is changing the world? He discussed three aspects of ICT development with relevance to agriculture and potentially to agricultural research: i) ICT as an input to research allows collection and dealing with “big data”, and integrating data and recording in real time; ii) ICT can be used for supporting supply chains and marketing, for instance in establishing traceability and for facilitating trade and marketing; and iii) ICT facilitates changes in farm management practices, for instance by providing precision agriculture tools.

Several CRP/Center observers felt that the Centers were already well advanced in capturing the new opportunities provided by ICTs and adjusting their operations. ICT applications have been adopted in research and, for instance, IRRI has a mobile development laboratory. ICTs are used not only for dissemination of results and extension but also for collecting data and information. Thus a strategic study on these topics was not seen as adding much value. The question might be how far the CGIAR should get into the ICT development. There would be scope for having an inventory of what is going on in different Centers, tracking the quality of some of these initiatives, and analysing such information in the context of what else should be going on. There are examples of specific donors funding innovative work on, for example, of the real quality of inputs that farmers purchase. One issue are how the CGIAR-relevant databases are put together, their quality and reliability and access to them. An inventory of data capture and reliability would be interesting. Data issues, for instance supply and demand information, are important also for priority setting and future planning.

Presentation 3: “Public/Private sector interfaces in meeting development objectives

ISPC Council member *Marcio de Miranda Santos* introduced the concept note with a short presentation on public and private interactions, as an important component of the overall partnership framework in the CRPs. He proposed that the basic questions to be addressed by the study could be: i)

Has the CGIAR (Centers in particular) been seen as a relevant source of potential innovations and is it offering a healthy environment to be able to attract private investments? ii) Is the CGIAR comfortable enough with the idea that public goods might be part of private business models? iii) Is it clear that the managing of intellectual property is important but not enough for a successful and well sustained interaction with R&D private sector partners? He presented a brief description of main categories of PPP, which could be applied to either collaborative research or scaling-up of technologies. These categories include accelerated diffusion (e.g. for techniques that make results available to people and organizations quickly and broadly), licensing, personnel exchange, cooperative research and development agreement (CRADA) or Memorandum of Agreement (MOA), contracting as a formal agreement to further the purposes of technology transfer, usually involving the transfer of funds or payments, consortia/alliances, start-ups for technologies generated in the public sector that become the basis for a new company, where no licensing agreement is involved, and user facility/technical assistance.

Agricultural systems are becoming very complex, even in less-developed countries, creating an environment where the participation of private agents becomes indispensable. The challenge is then to provide ways and means for the CGIAR to engage more effectively in interactions with the private sector (in all its forms) to enhance the overall delivery of public goods or to avoid competition in research strategies and to undermine opportunities for the poor. De Miranda Santos highlighted a multitude of reasons and advantages for public-private collaboration. He observed that many technology transfer arrangements that appear to fail in the first attempt are actually successes because of what is learned and applied in future collaborations. There is a trend to go for less personnel exchanges, user facility and technical assistance and in some degree to consortia and alliances, as opposed to a trend on more of accelerated diffusion, licensing, CRADA and MOA. This also reflects a trend within public institutions towards more formalized “partnering” mechanisms among them and with private partners. He concluded that innovative partnering results from the combination of categories at a given time or over time (e.g. CRADA usually precedes a licensing agreement; start-ups combined with leaves of absences are common).

The ISPC sees an opportunity for a strategic study to create an understanding of the articulation of the several interfaces between public and private sectors - including offers for seed-based technology work from private sector partners, with the New Alliance Partner Forum, and work on IP etc. and for the outcomes of the study to help structure CGIAR/PS support to development, building into strategic scenarios and game plans.

Discussion with participants focused on the strategic importance and relevance of the PPP topic proposed. Several participants welcomed the study and discussed several issues related to IP, licensing models, and exclusivity rights often requested by private sector partners. Overall, there was a strong endorsement of the study, and a recommendation to build on the past experiences of PPP in the Centers to develop a practical modus operandi, for analysing possibilities of building joint ventures with the private sector.

4. Comments from observers

Yusuf Abubakar, Fund Council member, was invited to provide his perspective on the role and outputs of the ISPC. He commended the ISPC for its guidance to the FC in its decision-making and the series of white papers which helped lay out a structure for the Consortium’s development of the SRF. However he noted, speaking personally, and as a contributor to the on-going Science Panel for Africa

that the issues raised by development corridors, were exactly those requiring analysis so as to be able to capitalize on opportunities and possible advantages in a timely way. Clearly developing a science agenda for Africa required consideration of mega-trends, theories of change and the distillation of key guiding questions to target and prioritize the continents research efforts. The sort of question that the SPA asked was how science might support: evolution of farming types and absorption of labour; the different roles of agriculture in development; attracting investment; gathering of data and evidence to support better policy-making; strengthening capacity development at different levels; and enhancing impact within innovation systems. He noted that the Panel would deliver an issues paper to the African Union by the end of this year. Next year (2014) will be the year of African Agriculture. There will also be a modified CAADP framework for the next decade. He hoped that the CGIAR could continue to move into Africa on this basis to remove the obstacles to impact through agricultural research. Understanding the implications for research and through the instigation of new development corridors, trade and associated issues would be central he suggested, and hoped that as well as the study by the ISPC they could be incorporated into the SRF and into CRP thinking and plans.

The ISPC Chair, thanked Dr. Abubakar for his intervention and was pleased that study of the development corridors concept was considered important and timely.

5. Statement from the Chair on future process review of ISPC studies

The Chair noted that the evolution of the ISPC's process for selection of ISPC studies has been discussed extensively by the ISPC and that the 3 strategic issues raised under this Agenda item were part of this consideration of emerging issues and trends. He noted that the ISPC considered its contribution to CGIAR foresight to be in the identification of emerging trends, in treating scientific bottlenecks of disagreements, in addressing issues common to a large number of CRPs (i.e. cross CRP issues such as the CGIAR livestock agenda dealt with elsewhere in this meeting) and in providing assistance to the Consortium in development and updating of the SRF and future strategic direction. The Council often took its stance from its own views gathered in the review of proposals and other CGIAR interactions, and would make selection a transparent process through the development and sharing of concept notes. He hoped that the various components of the CGIAR would continue to provide suggestions and input into this selection process as issues that arose from their own meetings and considerations. He asked observers to ISPC meetings to take this message back to the CRPs and Consortium office in particular. The same considerations would apply to the selection of the topic for a future Science Forum as the last e-mail consultation (leading to the selection of nutrition and health) had proved valuable.

As far as the WP&B for 2014 is concerned, he noted that this meeting had proved fairly clear guidance on the selection of two strategic topics (development corridors and for assessing the future interface between the CGIAR and the private sector) and for further deliberations on how the CGIAR would treat routes to poverty and SLO1. Beyond that, the ISPC through SPIA had a large agenda in impact assessment on behalf of the system, and there was some uncertainty as to the extent of the work that the ISPC might be required to do in Independent Program and Review (c.f. Agenda item 3). He suggested that the ISPC would therefore present a flexible workplan which be able to focus on fewer strategic issues if there was to be a large load in review in 2014 or to balance emphases accordingly if the review function was pushed back into 2015.

Jonathan Wadsworth welcomed the topics that the ISPC had been selecting to-date (noting the valuable study on farm-size and urbanization for instance and the white papers) and he thought that the FC would be pleased to get an early opportunity to contribute to this process. He agreed that a product pipeline approach might be useful, but perhaps that there was value in picking a smaller number of things so that the outputs could be stewarded through the system to enhance the effectiveness of the valuable work done.

The ISPC Chair agreed with the suggestion, noting that discussion time needed to be carved out for discussion between the ISPC and the FC. A small start would be made at the FC meeting in Nairobi but perhaps more could be done ex ante.

Agenda item 7. Update on current studies (foresight and review):

i. Livestock (cross-CRP analysis)

The cross-CRP analysis of livestock-related research was intended to focus on three areas of importance: (i) the emerging issues related to livestock production and feed of relevance to agricultural development where the CGIAR has comparative advantage to engage in research; (ii) the apparent gaps in the CGIAR's research plans (relative to ensuring that the outputs of other CRPs can lead to relevant development outcomes) as reflected by the CRP proposals; and (iii) partnership opportunities including synergy across CRPs in livestock research.

Brian Perry, leader of the team that prepared the cross-CRP analysis on livestock research, presented the key findings and conclusions of the team's analysis by Skype. He highlighted the contrast in framing livestock research issues, namely the growing demand for livestock products and the importance of livestock for economic growth and poverty reduction on one hand and the negative environmental and human health-related issues caused by animal agriculture particularly as it intensifies.

Some key issues highlighted in the report included: There is plenty of feed research but it is fragmented, and interactions between different production systems (through linkages between system and crop CRPs) and trade-offs between different uses, for instance, need to be better addressed; The value chain approach in CRP3.7 improves outcome orientation and considering global issues and cross-cutting issues in specific contexts but there is need to expand the analysis in a wider global context; The integration of value chain approaches with other farm activities on one hand and the environmental issues on the other hand needs strengthening through the system CRPs. Joint research between CRPs should be incentivized through funding. Functioning seed systems are crucial for crops used for animal feed. There are several specific livestock-related policy issues that deserve attention; such as on environmental externalities, transaction costs, rapidly shifting policy objectives and trade-offs resulting from the multifaceted nature of livestock. Some gaps identified by the team included protein feeds, indigenous poultry, beef, small ruminant intensification, post-harvest options and animal health services, and new institutional models including private sector engagement. The CGIAR would benefit from a strategic framework for livestock research to guide prioritization of topics and ensuring adequate coverage, for building on the CRPs' comparative advantage and forging linkages between them.

Jimmy Smith, DG of ILRI, responded briefly, also by Skype. He commended the study for highlighting what else could be done in an overall livestock portfolio and also where the emphasis could be. He noted that ILRI's emphasis was determined by funds that were available for CRPs. The full scope of work can be considered when the next CRP phase is developed.

The ISPC expressed its appreciation of the report acknowledging the potentially very large scope of the issues related to livestock. The CRP-mechanism has allowed a broad reach in livestock, but has also led to fragmentation of the agenda and the challenge is to make the whole larger than the sum of the parts. The CGIAR indeed needs a framework for its research overall which the ILRI strategy could contribute to only in part. Maggie Gill highlighted the importance of looking across CRPs when nearly all CRPs are thinking of livestock dimensions in planning their research - feed research being one such very important dimension. It is also clear that the system CRPs are in good place to synthesize feed research done in the commodity CRPs. There was agreement that a more coherent policy agenda would also be needed. There is need for pragmatism in approaching cross-cutting topics that involve the majority of CRPs because, as the study pointed out, the transactions in multiple cross-linkages can be large. The Secretariat explained that fish had been excluded to limit the scope of the Panel's study to issues particularly relevant for livestock. As further justification to the proposal to address indigenous poultry, Dr. Perry explained that the products add value commanding a much higher price than commercial poultry products and had the potential of connecting people at the bottom of the value chain.

Additional comments were made on the following issues: Importance of pastoralism as a predominant livestock system in most of Africa; Need to link to considerable feed research outside the CGIAR; More emphasis on environmental aspects and health services as the value chain approach encompasses large scale commercialization; the multiplicity of issues when research focus is on small-holders and intensification; The livestock-crop-soil conservation nexus; Role and capacity of ILRI in spreading itself across all CRPs to respond to collaboration opportunities.

It was concluded that these types of studies can potentially help the second round of CRP proposals and looking at the portfolio as a whole and the essential linkages – not just within the CGIAR's own capabilities but also through other partnership options. It was suggested that a similarly important topic in the series of cross-CRP oversight analyses would be water and soil and it might yield rather similar overarching conclusions. In closing, the ISPC Chair thanked Dr. Perry for the informative analysis and encouraged the observers to send feed-back and comments in writing. The ISPC would publish the report along with its own commentary and recommendations in the autumn.

ii. Review of biotechnology need in the CGIAR

Takuji Sasaki, ISPC member, presented an update on the progress of the ISPC strategic study of biotechnology research in the CGIAR. The study is being conducted by a panel of four scientists, chaired by Peter Langridge, University of Adelaide. The other panel members are Jack A. Bobo, United States Department of State, Takeshi Itoh, Japan National Institute of Agrobiological Sciences and Jonathan Jones, The Sainsbury Laboratory. In addition to this core team of four, expertise will be sought on specific areas, such as livestock biotechnology and phenotyping. A group of focal points from Centers/CRPs has also been set up for their engagement in the study design and implementation.

Sasaki stated that the study had commenced in May 2013 through an electronic consultation among CGIAR scientists and managers, members of the ISPC and its Secretariat, the Consortium office and

the study panel to discuss the focus and key questions for the study. Currently, an inventory of the current pipeline of deliverable technologies and knowledge products from the Centers/CRPs was being conducted. Information, perceptions from broader stakeholders and practitioners (~35) would be collected through interviews in September 2013. A writing workshop was being organized in October 2013 to discuss the draft reports. The final report was envisaged to be ready by the end of the year followed by a stakeholder workshop in early 2014.

Several issues regarding the overall scope and focus of the study were raised. There was consensus that the study should not be just another review of biotechnologies (there was enough literature already available), but rather focus on the policy and institutional issues, in particular regulation. In addition, it was suggested that the study should take into account other emerging technologies such as zinc finger nucleases and oligonucleotide directed mutagenesis that were also being used to generate novel genetic products along with associated regulatory mechanisms.

There was a discussion regarding awareness-raising and communication issues. The Consortium CEO agreed that while the latter were highly relevant issues, the study panel should not focus on them. He proposed that the study address topics such as the most appropriate investments for the CGIAR - for example, should each Center have its own bioinformatics center vs a shared service, outsourcing genomic services, how to strengthening phenotyping capacities, etc. Observers also advised that the study should keep its focus on the areas where CGIAR has a comparative advantage, for example the germplasm and genetic diversity available to the system and its components.

The ISPC agreed with the suggestions noting that most of these comments were being dealt with in the study.

iii. Metrics

Jeff Sayer outlined how the ISPC has been developing a strategic study on metrics and benchmarking for monitoring, management, evaluation and impact assessment in the CGIAR. Having collected material relating to the large number of parallel initiatives in this area, the ISPC have developed a four-phase approach to this study: i) inventory of indicators (within CGIAR and from outside); ii) identify gaps in metrics and indicators for CRP- and System-level IDOs; iii) identify best opportunities for CGIAR or other partners to fill such gaps; iv) strengthen the community of practice working in this area with regards the science that underpins metrics.

There are a number of important strategic issues to consider with regards to the origin of specific metrics (whose should the CGIAR adopt?) and the appropriate scale and categorisation of metrics to cover the most important pathways through which CGIAR research impacts on economic, social and ecological systems. A four-member panel of Ken Giller (lead – WUR, Netherlands), Nancy Mock (Tulane University, USA), Simon Bell (Open University, UK) and R. Hijmans (UC Davis, USA) was convened in June and will have a face-to-face meeting at the end of September. A workshop is being planned for 9th – 11th December 2013, with a final report due in the first quarter of 2014. Sayer emphasised that the study will not present new indicators but suggest how the Consortium might best take this issue forward.

Council comments focused on the concept of “sentinel sites” as a source of data for research, questioning how well these could also meet the accountability (monitoring, management, etc.) needs of the CGIAR – ideally sentinel sites should not be where there are a lot of CRPs working together as these are unusual places that may not generate insights that are generalizable. The Chair noted that

there are emerging tools (that the CGIAR may not be using) for deciding where the most relevant sites are for monitoring and benchmarking within the largest possible extrapolation domain. The Consortium CEO welcomed this study and clarified the expected scope of metrics from his perspective. Development outcomes should be expected over a period of 9 – 12 years but there are a number of different indicators to measure progress on the way and those which should be annually reported. Rijsberman recognised that this is a complicated issue but feels it is essential for the CGIAR to lay out such a framework.

James Stevenson noted that a useful contribution of the “inventory” part of the study would be to document where long-term panel datasets have been institutionalized in the CGIAR, although the Chair raised a cautionary note about the potential for “big data” input to prioritization, as a very serious effort is needed to determine the quality of the underlying data. The Consortium CEO noted that the Consortium has stepped away from the idea of holding large datasets – instead, they will define and push for the adoption of data standards.

Agenda item 8. Discussion of the dimensions of “Science Quality”

This session started with a presentation by *Ken Cassman*, the ISPC chair, on the ISPC criteria for evaluating science quality. He first introduced the framework used by the Science Council (pre-ISPC) for the evaluation of science quality. This framework included criteria such as quality of research staff, quality of infrastructure and facilities, processes in place to assure quality such as internal peer review, commissioned external reviews, mentoring, and quality of outputs and achievements (research output and impact). He also described the indicators used for evaluating research quality (outputs). Finally, Cassman proposed a new framework for evaluating CGIAR science quality, which is expected to score high both on impact on IDOs and SLOs and science quality per se.

Rachel Bedouin, Head of IEA, presented (through Skype) the perspectives from the IEA on evaluating the quality of science. She first referred to the CGIAR Evaluation Policy, which recognizes the characteristics of AR4D in the CGIAR, including long duration and complex lines of causality, the potential to contribute to more than one SLO, in terms of poverty, nutrition, environment and overall economic development. They similarly noted the critical importance of partnerships and new models of partnership both for research and for achievement of development results utilizing research outputs, and the comparative advantage of the CGIAR in research. She noted that all research is inherently a creative, risky and unpredictable activity, and hence, the need to recognize the importance of learning from ‘failure’ and adjusting as well as documenting. Bedouin discussed the previous criteria provided by the Science Council for the evaluation of science quality, and highlighted some of the challenges posed by these criteria, including the fact that quality was generally assessed in summary terms and often jointly with relevance. She also described the 6 principal questions being used in the evaluation of the CRP on Forests, trees and agroforestry (FTA), i.e., i) how coherent and relevant are FTA objectives? ii) what is the comparative advantage of FTA? iii) is FTA research of high quality? iv) is FTA likely to deliver its intended results? v) are FTA cross-cutting activities relevant and effective? vi) are FTA institutional arrangements effective and efficient? The methods and tools used for evaluating quality of science included online surveys, interviews, and project analysis. In conclusion, Bedouin stressed the need for a systematic and consistent assessment of science quality in CRP evaluation and the need to disaggregate quality of science into its different dimensions (qualitative and quantitative indicators), using a set of tools and methods not a single indicator.

The general discussion focused on the relevant criteria for evaluating the quality of science, and the importance of using track record and publication citation indices in the evaluation of science quality in the CRPs. The Chair stressed the need to look at both potential impact and quality of science for ex-ante evaluation of CRP proposals. The Consortium CEO noted that the evaluation of CRP pre-proposals may not include science quality criteria, but focus more on the strategic level and the track record. Track record in this instance could principally be derived from the CRPs annual reports and publications.

Agenda item 9. Report of the Standing Panel on Impact Assessment (SPIA)

Doug Gollin, Chair of the Standing Panel on Impact Assessment, provided an update on the major activities of SPIA. With the submission of the final technical and financial report to BMGF at the end of August, the *Diffusion and Impact of Improved Varieties in Africa* (DIIVA) project is now officially completed. An immense amount of data related to crop varietal output, adoption, and change covering 20 crops, 30 countries, and over 1150 cultivars in farmers' fields is now publicly available at the ASTI/DIIVA website (www.asti.cgiar.org/diiva). Gollin presented a sample of the type of information emerging from this 3-year study, e.g., related to changes since 1998 in the strength of NARS crop germplasm improvement programs for different crops and different countries, varietal release rates and turnover of varieties and specific information about extent of adoption of improved varieties for all crops and all countries. Several project publications are nearing completion - green cover reports and briefs are in development and a 20 chapter book covering the whole project will be published by CABI with full-text open access at publication date (expected May, 2014).

Two other long-term initiatives are nearing completion. SPIA's *poverty impact study* is in the final stages with first drafts of the final reports of three poverty-focused competitively commissioned studies (led by CIMMYT, WorldFish and IRRI) now completed and external reviews either underway or completed. A fourth case study final report, by IFPRI, is expected in December. A poverty impacts workshop is being planned for February 2014 to review results across these and other studies and to explore the potential for undertaking further studies in the light of the methodological constraints of linking research results to poverty related outcomes. Gollin also reported on the progress in winding up the *legume research impacts study*. SPIA has hired a consultant to produce a synthesis report which will present a cross-cutting picture of the major documented outcomes from CGIAR legumes research over the past two decades. Key elements of the report include two chickpea adoption studies in India (AP with ICRISAT; MP with NCAP) commissioned by SPIA; cowpea improvements in Nigeria (with IITA, SPIA and World Bank LSMS-ISA); pigeonpea improvement in East Africa (with ICRISAT) and lessons from varietal identification protocol field tested by SPIA; beans improvement in Eastern & Southern Africa, especially in Uganda and Rwanda (with CIAT through the DIIVA study) and lentils improvement in Western and South Asia (with ICARDA). A final report is expected by the end of October. Gollin also briefly presented some preliminary results on a field experiment designed to understand yield returns of two new (upland) *rice varieties in Sierra Leone* (undertaken by Tavneet Suri of the IPA), part of a larger study of agricultural productivity interventions.

Since January 2013, the lion's share of SPIA's attention has been devoted to a program of work entitled *strengthening impact assessment in the CGIAR* (SIAC). This 3-year initiative – supported in part from BMGF, Window 1 funds, ISPC/SPIA core and IFAD (in process) – responds to donor demand for a strong program of impact assessment to support the reformed CGIAR. The program aims at providing a broader coverage of research impacts (beyond crop improvement) and a wider

range of impact measures. To improve the quality of impact assessments in the CGIAR, a major expansion of the evidence base is required, including data collection across the full range of CGIAR research types. The goal is to build up an inventory of independent, rigorous and transparent analyses of the impacts of the CGIAR.

Gollin outlined SPIA's progress under each of the four objectives of the SIAC program. Under *Objective 1, experimenting with new methods for estimating adoption of improved technologies*, Michigan State University (MSU) as the lead implementing agency, has started planning or is now implementing activities in Ghana (for cassava varietal identification), Zambia (for beans) and Uganda (for maize). At the same time MSU has issued a call for proposals for experimenting with different methods (remote sensing, cell phone applications) for tracking NRM-related technology adoption. Under *Objective 2, institutionalizing the collection of adoption data*, MSU is now starting to plan a series of data collection activities with NARS and CGIAR scientists in specific countries in South and Southeast Asia – an effort similar to the recently completed DIIVA project. Under *Objective 3, assessing the full range of impacts from different types of CGIAR research*, SPIA is examining different sets of studies (and is issuing calls for proposals on): (a) health and nutrition impacts of CGIAR research – led by SPIA associate Erwin Bulte; (b) under-evaluated areas of CGIAR research; (c) studies to assess short-term impacts using experimental and quasi experimental methods – led by SPIA associate Karen Macours; and, (d) measuring impacts over the long term for CGIAR related interventions adopted on a large scale. *Objective 4*, also in the early stages, focuses on ways and means of *strengthening the community of practice of IA in the CGIAR* through small grants, training activities, international conferences, website development and initiating quality ratings for IA studies done in the CGIAR.

In the discussion there were a number of queries about the DIIVA study and other studies coming to completion. Some of the issues included: the use of dry matter vs fresh weight production in comparison across crops (DIIVA), factors qualifying the research intensity comparisons (DIIVA), lessons learnt from comparisons between expert opinion and household survey estimates of adoption (DIIVA/Legumes impact), the importance of considering several years vs only one year of yield data (NERICA experiment), whether impacts of improved varieties also include a management component (DIIVA/Poverty impacts) – ideally, they should not - whether the CRPs should be encouraged to use randomized control trials (RCTs) in their impact assessments - in some cases very useful, but has serious external validity problems so better for examining adoption-related issues. A particular concern raised by the ISPC Chair related to the lack of credibility (or perception of lack of credibility) when Centers or CRPs conduct their own impact assessments (Legume impact). Some felt strongly that *ex post* IAs should only be done by external bodies, but others argued the economists at the Centers can and do conduct credible studies – and Centers have to be involved in IAs, simply by virtue of the data requirements. Also, there remains scope for Centers to commission these IAs to external consultants or to have internally commissioned studies externally peer reviewed. In any event, SPIA would not have the resources or capacity to undertake *ex post* IAs for the Centers and CRPs.

With respect to the current work on SIAC, there was strong support for SPIA to use longitudinal studies to track changes over time both on-farm and off-farm, including migration (e.g., developments in agriculture enabling family members to leave the farm and migrate to the cities), but it was noted these are very hard to measure. A query was made about the impact the CGIAR has had from capacity building activities; an earlier ISPC/SPIA study had spent considerable time examining this issue and ultimately concluded it was not possible to measure those. In response to a question about where on the long and complex impact pathway the SIAC program will focus, Gollin indicated that anything

from adoption/influence to the ultimate impacts on SLOs would be considered. In some cases, SPIA will be examining a single link in the chain. Several observers were pleased to see studies planned examining the links between agriculture and health and nutrition, although funding is available to support only one or two studies. A point was raised about other types of impacts being measured beyond yield, such as freeing up women's time, increased resilience of farm families. These are difficult but not impossible to measure. In response to a question about returns on investment, Gollin agreed that there was still a demand for 'classic', cost-benefit analyses examining the returns to investment in agricultural research. He explained that SPIA has not abandoned providing that kind of evidence, rather that the priority for the coming three years is to focus on the underlying evidence base on which an aggregate assessment can be made.

An important point was raised about what constitutes a 'research-led innovation', what is innovation and what is the CGIAR component in those? Finally, an urgent plea was made by the Executive Secretary of the FO for new large scale impact studies, since we continue to rely on the Evenson and Gollin data even now, 10 years on. He encouraged SPIA to consider what types of impact assessments are possible to get fairly soon, without having to wait three or four years. Gollin indicated that the DIIVA synthesis report and the upcoming total factor productivity (TFP) study by Keith Fuglie will help meet that purpose.

In the final part of the presentation, Rachel Bedouin, Head of IEA, talked briefly via skype about the roles of, and potential interaction between, SPIA and the IEA. Dialogue is just beginning, but it is clear that collaboration in planning with SPIA on the IEA rolling workplan is highly desirable. Bedouin noted that the Evaluation policy document points to valuable support that SPIA could offer the IEA in reviewing and validating IAs conducted by CRPs themselves and in providing evidence (or otherwise) of ex post IA in CRP and other system evaluations conducted by the IEA. However, there is clearly a gap in coverage of IAs. Gollin and SPIA members highlighted that this is an on-going conversation, but that SPIA is committed to trying to provide useful input into IEA evaluations. The form that it will take depends on what SPIA can realistically do given demands coming from other sources. Initially, some of gaps could be filled with desk studies, until such a time when the IA review process (SIAC Objective 4.5) and rating system is up and running and effectively used by the Centers and CRPs. This will take time and there will be likely significant gaps for the foreseeable future. A final comment was made by an observer about giving attention to 'failures', arguing that most research could be considered as 'failure', i.e., no useful intervention emerges from it, and thus a focus on failures could result in a considerable waste of effort.

Agenda item 10. The Science Forum 2013: "Human Nutrition and Health Outcomes, targets for agricultural research"

Maggie Gill, ISPC member and Chair of the 2013 Science Forum 2013, presented an update on the 2013 Science Forum on "*Nutrition and health outcomes: targets for agricultural research*" that would be held from the 23 – 25 September 2013, at the Gustav-Stresemann Institute, Bonn, Germany, and co-hosted by the German Federal Ministry BMZ. She explained that this Forum was not just another conference, Key scientists and leaders in the field were invited to give credibility in relation to expectations and outcomes but the intention was to reach out to early- and mid-career scientists, especially those outside the CGIAR. The objective of the Forum is to identify and use recent evidence across a range of disciplines relating to nutrition-sensitive agricultural research. This would help identify priority research needs and new scientific approaches and facilitate new and stronger

partnerships, through which the agricultural community can add most value to the delivery of nutrition and health outcomes. The intent of the Forum is to stimulate provocative and productive dialogue, hence the aim has been for an approximately 50:50 speaker:discussion time.

For the main program and to facilitate broad participation, the number of plenary sessions had been limited to 5 (including 5 keynote presentations + 9 respondents, case studies, etc.) on the following topics: Evidence, current and required; Gender and nutrition; Evaluation; Regional perspectives; and, Way Forward. Ten breakout sessions, being coordinated by leading experts in the field, would delve into various aspects of the central theme: Under-nutrition; Non-communicable diseases; Diet diversification; Food safety; Policy and institutional approaches; Science, technology and partnerships; Facilitating research uptake; Value chains; Impact of farm size and urbanization; and, Economic implications.

She further stated that a session at the Forum was specifically targeted at early career scientists (ECSs) and 21 of the 65 applicants had been selected to participate. Each of them would be allocated a mentor, i.e. someone who would introduce them to some of the “big names” during the meeting and generally chaperone them as appropriate. There would also be an opportunity after the Forum for ECSs to submit a proposal to facilitate some partnerships they may have become interested in forming.

Gill then gave a quick overview of the Science Forum 2013 website (<http://scienceforum13.org>) as well as the book of abstracts that would be distributed at registration to all participants. In addition to the 80 speakers/panelists/Chairs on the program, 190 registered participants are expected in Bonn plus 21 ECSs and 15 from the ISPC. The intent has been to achieve equitable representation of all our stakeholder groups including CGIAR, donors, NGOs and private sector.

She went on to inform the meeting that the ISPC was planning on conducting an auto-evaluation of the Science Forum but with external assistance on evaluation and quality assurance. The objectives of this evaluation are to investigate the worth of the Forum for its participants, and to identify the influence and impacts of the Fora as a mechanism to enhance partnerships and CGIAR’s visibility. The evaluation methods include, but are not limited to, an online survey, on site interviews at the Forum, post-Science Forum follow-up interviews, impact of the previous Science Fora citations, etc. The feedback would then be analyzed and used to improve the focus, implementation and logistics of the future Science Fora and other ISPC-led meetings.

Post Forum follow-up actions would comprise publishing a summary and a brief of some of the key lessons, commissioned papers in a special issue of a high impact factor journal, and a workshop in mid-2014 to review the scientific papers as well as gaps and implications for the CGIAR.

Marlene Diekmann, on behalf of GIZ, provided an update on the social events taking place during the upcoming Science Forum. On Monday (September 23) there would be the conference dinner at the Museum Koenig featuring a BMZ sponsored exhibition of Peter Menzel’s photos of families from around the world with their weekly food consumption to emphasize the inequalities of distribution. On Tuesday (September 24), there would be a reception by the City of Bonn, including a speech by the Mayor. Student reporters and volunteers would be assisting with various duties during the 3 day event – a ‘Nutrition Student Network’ has also been created on Facebook. Finally, two press conferences were planned, in German and English, on the second day of the Forum. She looked forward to welcoming the Forum participants to Bonn.

Agenda item 11. Work Plan & Budget next steps

It was considered that the Chair had summarized the next steps for the development of the ISPC WP&B 2014 (Agenda item 6.5). He encouraged written comments on the topics so far described from observers or program colleagues to reach the ISPC by the end of September. The Executive Secretary of the FO suggested that a Work Plan of a few key studies was better than overloading the agenda and would allow the ISPC flexibility in responding to FC demands, but there was no further discussion of the Work Plan at this time.

Agenda item 12. AOB – including statements from observers

The Executive Secretary of the FO, on behalf of the FC, thanked the outgoing ISPC Chair for all his contributions to the CGIAR and the work of the Council. He noted that they would instigate a dialogue at the next FC meeting and reported that the process had been started for research selection of a new ISPC Chair. He drew attention to the work and leadership of the Chair.

The ISPC Executive Director advised that there would be turn over in the Council and the Secretariat moving into 2014. He noted that Sirkka Immonen will be leaving the Secretariat at the end of September 2013 (having joined the previous TAC Secretariat in 1999 and having worked with TAC and Science Council and the ISPC). He said that her intellectual and collegial contributions will be missed, but as she was moving a sister CGIAR institute (the IEA hosted at FAO) he hoped that her substantial contributions and institutional memory will still be available to the CGIAR.

He noted that Council Member Rashid Hassan was stepping down having been an inaugural member of the ISPC. He thanked Hassan for his many disciplinary and regional perspectives that he had brought to the deliberations of the Council and in the formulation of its outputs, particularly for his contributions to the Study of farm size and urbanization.

Gardiner further noted that Ken Cassman, the ISPC Chair, will be stepping down at his own request after three years, and should be credited with raising the public perception of the Council as a valuable contributor to FC decision making and source of independent advice on strategic issues to the Consortium. The volume and quality of outputs spoke to the energy of the Chair. The Council would reserve its farewells as the Council would meet together again at the Science Forum and the Chair would continue duties to the end of the year, including attending the FC meeting in Kenya in November.

There being no other business, the ISPC Chair, for his part, noted how much he had enjoyed working with the Council and encouraging each of the systems components to help play their part in the overall CGIAR team. He too believed that the role of the ISPC had been clarified and its value demonstrated over the last three year period. He again thanked Jeremy Bird, the IWMI DG, and his colleagues for their excellent meeting arrangements.

The IWMI DG noted that this has been a valuable networking experience for IWMI and the new staff to understand the ways of doing business. He had valued the ISPC work on the IDOs and thought that the guidance document for new proposal development will be of great assistance to IWMI, the WLE CRP and the CGIAR at large.

There being no further business the Chair closed the meeting.

Final agenda



Independent Science
and Partnership
Council

18 September 2013

Final Agenda

8th Meeting of the Independent Science Partnership Council

9-11 September 2013

International Water Management Institute

(IWMI)

IWMI Headquarters, Colombo, Sri Lanka
127, Sunil Mawatha, Pelawatte, Battaramulla, Sri Lanka

Sunday 8th September

Arrival of ISPC members (all ISPC Members requested to arrive by lunchtime)

ISPC closed dinner (19:00 hours tbc)

Monday 9th September

09:00	ISPC Closed Session on strategic issues
18:00	End of the closed session
18:30	Transfer of ISPC Members to Colombo
20:00 Hotel)	Welcome cocktail for all participants hosted by IWMI (Hilton

Tuesday 10th September

- 08:30
- 1. Opening of the ISPC Meeting**
- ii. i. Welcome and opening from ISPC Chair: Ken Cassman
Welcome and opening from the IWMI DG: Jeremy Bird
- 09:00
- 2. IWMI and its contributions to the CRPs**
- Jeremy Bird (IWMI DG)
- 10:00
- Discussion
- 10:30
- Coffee break*
- 11:00
- 3. CGIAR Program Update**
- i. Ken Cassman (ISPC Chair): “*The ISPC and its outputs*”
ii. Frank Rijsbermann (Consortium CEO): “*Preparing for a second round of CRPs*”
iii. Rachel Bedouin (Head of IEA): “*Proposed IEA Four year Rolling WorkPlan*”(by Skype)
- 12:30
- Lunch*
- iv. Jonathan Wadsworth (Executive Secretary Fund Office):
“*Funders’ perspective on CGIAR progress*”
- 14:00
- 4. Intermediate Development Outcomes (IDOs) and prioritization of research within CRPs**
- i. GRISP (Achim Dobermann)
ii. Water, Land and Ecosystem CRPs (Andrew Noble, Leader, WLE)
iii. Discussion
- 5. ISPC’s WorkPlan & Budget**
(statement and draft outline)
- 6. Review of future Strategy & Trends: Statements on approach/topics under consideration**
- i. Presentation 1: Development corridors and the implication for CGIAR research (Jeff Sayer)

- ii. Presentation 2: IT issues for the CGIAR (Doug Gollin)
- iii. Presentation 3: Public/private sector interfaces in meeting development objectives (Marcio de Miranda Santos)
- iv. Comments from observers (led by Yusuf Abubakar, FC Member)
- v. Statement from the Chair on future process for review of ISPC studies

18:00

Adjourn

19:30

Reception for all participants hosted by the ISPC (Hilton Hotel)

Wednesday 11th September

08:30

7. Update on Current studies (foresight and review):

- i. Livestock (cross CRP analysis)
 - (Brian Perry, study chair, by Skype)
 - Discussion
- ii. Review of biotechnology needs in the new CGIAR (Takuji Sasaki)

10:30

Coffee break

- iii. Metrics (Jeff Sayer)

11:30

8. Discussion of the dimensions of “Science Quality”

- i. Presentation based on ISPC approach to science quality criteria (Ken Cassman)
- ii. IEA guidelines on research quality (Rachel Bedouin, by Skype)
- iii. Discussion of the criteria for assessment of Science Quality

13:00

Lunch

14:00

9. Impact Assessment: SPIA/SIAC Program report

- i. Update on SPIA studies in 2013
- ii. The future of SIAC – including core studies
- iii. Discussion
- iv. Sharing perspectives on impact assessments (SPIA and the IEA)

15:30

Coffee break

16:00

10. The Science Forum 2013: “Human Nutrition and Health Outcomes, targets for agricultural research”

- i. Update on Program and expectations
- ii. Evaluation
- iii. Anticipating meeting outputs

16:45 **11. WorkPlan & Budget next steps**

17:05 **12. AOB – including statements from observers**

17:15 **Close of the Meeting**

ISPC Members free to depart

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ISPC 8th Meeting

IWMI, Colombo, Sri Lanka
From 10th to 11th September
2013

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