Independent Science and Partnership Council

17 October 2017

End of Meeting notes

16th Meeting of the Independent Science & Partnership Council

18-19 September 2017 - Rabat, Morocco
International Center for Agricultural Research in the Dry Areas (ICARDA)

Item 1: Opening of the ISPC Meeting

i. Welcome and opening, Maggie Gill, Chair ISPC

Main points:

- Maggie Gill, Chair ISPC, opened the meeting and welcomed participants;
- Expressed her thanks to Aly Abousabaa, ICARDA Director General for hosting the meeting.

ii. Welcome, Aly Abousabaa, ICARDA Director General

Main points:

- Welcomed participants to ICARDA and to Rabat;
- Mohamed Badraoui, INRA Director General unable to attend but sent his warm welcome;
- When ICARDA moved out of Aleppo, they implemented a decentralized research system, working with national research centres which allowed them to become rapidly functional again, in a cost-effective manner. The fact that they have the location in Rabat is thanks to ICARDA's long-standing relationship with INRA and the Moroccan government.

Item 2. Updates System entities

i. ISPC developments and follow up since ISPC 15 meeting, Maggie Gill, Chair ISPC [Presentation]

Main points:

- The ISPC has just launched a new website – http://ispc.cgiar.org/
- Update of activities carried out under the five ISPC work streams:
    - Science Dialogue: Every second year a science forum is organized on an SLO related topic. The last one, SF16 was held in 2016 in Addis on the topic of agricultural research for rural prosperity. 11 papers that are currently under review will be published in

Agricultural Systems by end 2017/early 2018. SF18 is being planned on the topic of potential interactions between reducing poverty and improving nutrition and natural resource management, to be held in September 2018 in Cape Town, South Africa. Expressions of interest are welcome from persons willing to join the Steering Committee.

- Quality of science/research: The ISPC is taking the lead in getting a definition of Q4R&D across the System. There is consensus on a frame of reference and an ISPC brief showcases case studies from different CGIAR entities;
- Foresight/horizon scanning: A workshop was held in collaboration with the University of Naples from 7-8 April 2017 on the topic of "Global Agri-food Systems to 2050: Threats and opportunities". A report is available on the ISPC website. A book will be published in 2018 with 18 papers from the workshop;
- Agri-food innovation systems and partnership: The ISPC Secretariat has an ongoing collaboration with CSIRO, undertaking 27 case studies of how agri-food system innovation processes and impact unfold over time.;
- Another aspect of partnerships is a joint ISPC/CGIAR, FAO, WB, IFAD initiative "Focusing Agricultural and Rural Development Research and Investment on Achieving SDGs 1 and 2";
- Standing Panel on Impact Assessment: Doug Gollin is stepping down as SPIA Chair and Karen Macours is taking over as of October 1, 2017. A joint SPIA/PIM Conference of the Impacts of international agricultural research: rigorous evidence for policy was held in Nairobi (6-8 July). The SIAC program has come to an end (30 June 2017) with all planned outputs achieved or exceeded. The final report from the program is available on request. A number of synthesis reports will be published in Q4 2017 (methods) and Q1 2018 (NRM adoption; overall results) following peer-review.

ii. IEA update, Rachel Bedouin, IEA [Presentation]

Main points:

- IEA has drafted a paper on how evaluation will evolve in the near future "Developing a cost-effective utility-focused evaluation system for CGIAR: considerations and proposed elements", that was shared with SIMEC;
- CGIAR evaluation is at a turning point, all CRPs and cross-cutting themes have been evaluated, giving important insights on the implementation of the CGIAR reform. It now needs to adapt and evolve, recognizing the central role of Centers in governance, management and implementation of CGIAR R4D, and moving towards an integrated PMS, where evaluation is a component;
- The lessons learned from the implementation of the CGIAR evaluation policy is firstly that the building block approach that was adopted (System–wide evaluation at the top as a summary of lower level evaluations) is neat but unrealistic, as there was an under-estimate of the time and cost involved and secondly that Centers' research is central to CGIAR performance and needs to be covered in evaluations. To date the CRP evaluations carried out could not evaluate Centers' performance.
- The proposal for a new evaluation system is based on the principle that Center/Program auto-evaluations of research components as well as donor reviews of bilateral projects need to be carried out. In addition there should be a central evaluation function through which CRP/Center/Platform evaluations would be carried out externally and independently, scheduled over 2 program cycles. The system wide evaluation should be carried out every 8 to 10 years;

- A cost-effective evaluation system with a purposeful and staggering schedule will increase synergy and complementarity across the System.

iii. SMO update, Peter Gardiner, SMO [Presentation]

Main points:

- SMO is organized around 4 management units – financial and programmatic performance, funder engagement, governance and legal, and has the role of supporting and facilitating the SC and the SMB. The SMB has a new chair - Marco Ferroni;
- SIMEC (Strategic Impact and Monitoring and Evaluation Committee) is an important committee of the SC, it meets monthly and is aimed at supporting system governance. A paper on oversight (including the ToRs of the ISPC) is foreseen to be distributed on 23 October 2017;
- Donor contributions for 2018 are expected to be USD 155 million for W1 and W2 funding. This represents 19% of total portfolio funding, meaning that the level of W1 and W2 funding has diminished. The question is thus if we are in a period of adjustment, moving towards a system of flagship funding, rather than allocation of 'core' resources. For 2018 the worst-case scenario is that there will be a W1 and W2 funding gap of USD 65 million;
- Underlying concerns include the question if the reduction in W1-W2 funding actually reflects concerns by donors that the portfolio is too broad;
- A new approach is necessary in 2018 including a clearer common vision on priorities for CGIAR among SC as a follow-up to the SRF; flexible modes of support; addressing structural issues (late funding, annual vs multi-year); complete description of scientific review and evaluation tasks, assigning and implementing system responsibilities, implementing results based management and risk management frameworks; creating time and clear direction for an effective approach to allocation;
- Concluding message: allocation depends on vision for financing system… and the financing system depends on the vision for "the system".

Main discussion:

- Question: If less than 30% of total funding comes from W1 & 2, why do we need to put so much time into prioritization? Response: there is scope of moving W1 and 2 funding back to half if we can resolve the donors' concerns and this needs to be prepared for;
- Question: There are centrifugal forces in relation to funding; one vision is in defining the portfolio – another force is asking the CGIAR to be comprehensive. Response: country impact level work is missing which would reassure donors; we need to show that impact is being done at country level such as the ISPC impact work in Tanzania and Ethiopia.

Item 3. Presentation: research in the dry areas

i: ICARDA in the New Age of Dry Areas Research: Science-based solutions for thriving, resilient livelihoods in the dry areas, Aly Abousabaa, Director General, ICARDA [Presentation]

ii: Success stories, when research leads to development, Michael Baum, Morocco Platform Director, ICARDA [Presentation]

iii: Continuum between conservation and use of genetic resources at ICARDA. Ahmed Amri, Head of Genetic Resources section, ICARDA [Presentation]

Main points:

- ICARDA staff are now decentralized across five key locations (Rabat, Addis Ababa, Cairo, Jordan and Lebanon), with the institution operating under a new strategy for the decade 2017 – 2026. Despite a significant increase in funding from India, particularly individual state governments, there is a continuing focus on the MENA region – where global challenges (such as climate change and water scarcity come to a head).
- A field-based phenotyping network now operates across the MENA region and beyond, including screening for rust-tolerance in Izmir, Turkey and heat-tolerance in Sudan and Senegal. Short duration is an important trait for varieties of legumes in order to fit in rice rotations, and ICARDA are seeing progress in shortening duration, and farmers are adjusting their practices to incorporate these additional crops.
- The ICARDA genebank has been largely reconstructed between two locations in Morocco and Lebanon, following the exit from Syria. ICARDA continues to fund collection missions – one of the few centers still active in this area – informed by a strategy (Focused Identification of Germplasm Strategy – FIGS).

Main discussion:
Following these presentations, rather than proceeding to a plenary discussion, the participants proceeded on a tour of the ICARDA facilities, giving them an opportunity to interact directly with scientists. The tour comprised four stations:

- a crop physiology precision-phenotyping platform which can simulate any environment (day length, temperature, humidity, drought etc) in order to monitor transpiration rates of the plants at very high frequency;
- the quality laboratory, to test samples for the breeding programs across a range of quality characteristics for which data are needed;
- the entomology group working on integrated pest management solutions;
- the ICARDA genebank

Item 4: Implementing the QoR4D Frame of Reference

i: Results of System Consultation on Implementation of QoR4D, Preet Lidder, ISPC Secretariat [Presentation]

Main points:

- The ISPC is facilitating System-wide agreement on the nature and assessment of quality of research for development (QoR4D), and a working group on QoR4D was established in 2016 under ISPC chairmanship.
- A consultative process involving representatives from entities across the System led to a consensus that QoR4D in the CGIAR context should be viewed as an integrated whole of four key elements: relevance, scientific credibility, legitimacy and effectiveness that could be the basis for a common frame of reference.

- A draft brief highlighting case studies from different CGIAR entities which provides a brief overview of key considerations and suggested approaches for designing, implementing, assessing and managing QoR4D at each level was available to participants.
- The ISPC suggests 'standards' which could be used by the Centers and CRPs as a guide to identifying indicators specific to the different scales of implementation.
- From an ISPC perspective, the four elements of QoR4D help it to better fulfil its role by providing advice (through its works streams) that takes all four elements of 'quality' explicitly into account.

ii: Implementation of QoR4D Frame of Reference, Oscar Ortiz, CIP [Presentation]

Main points:

- The frame of reference should not be a single assessment mechanism to compare or rank, but a learning mechanism to improve.
- While scientific credibility and legitimacy criteria are non-negotiable, relevance and effectiveness are more subjective, shared with more partners, and need judicious application.
- Impact assessment using robust methods is needed but costly.
- Draft indicators at the Center level could include for example Center work plans and progress review against Centers' strategic plans (and to CRPs and SRF) for relevance; number of non ISO publications with potential relevance for use for scientific credibility; policies at the participating Centers and CRPs for legitimacy; and, outcome stories for effectiveness.

Main discussion:

- The metrics trap should be avoided; especially when metrics become targets and lose their value.
- While quality control checks are very important, some thought needs to be given to mechanisms to stimulate excellent research and to reward researchers. In the same vein, low quality activities/poor science should be stopped.
- The frame of reference should minimize transaction costs and avoid unnecessary burden on scientists. There is a risk of assessing too much.
- Funding is a critical aspect for management of Centers and CRPs; overhead costs are down from 15% to 12% for CRPs

Main ISPC follow-up:

- Finalize and publish the ISPC brief with case studies from the different CGIAR entities.
- Monitoring at System level – whether the ISPC will have a role in that depends on ISPC Terms of Reference which are currently under discussion.
- The WG will meet at least once more to take stock of lessons learnt during the process.
- Some members of the WG are keen to write a review article for Global Food Security on assessing quality of research.

Item 5. Strategic foresight

i: Major findings from the workshop on global trends and drivers of food systems, *Prabhu Pingali, ISPC* – [Presentation]

Main points:

- The workshop provided a synthesis of the findings of recent foresight exercises. What differentiates this initiative –and forthcoming ISPC foresight activities- from other exercises is the sharp focus on developing country agricultural systems and on the future prospects for the rural poor.
- The overarching question is: *How food and agriculture research and policy should re-orient itself to address the global challenges?*
- There is a "perfect storm" of global threats related to rising urbanization, global migration and changing demographic structure of rural populations; changing diets and rapid rise in over-nutrition and epidemic of non-communicable diseases; global environmental and sustainability challenges, including climate shocks and extreme events, environmental degradation and biodiversity loss; trade integration and declining competitiveness of developing country agriculture.
- The thematic agenda for the future includes the following topics: i) Rural prosperity in the 21st century; ii) Food systems for better health; iii) Climate resilient food and agriculture systems; iv) Sustainable intensification of smallholder systems; v) evolving organization of the R&D system.
- Next steps include the publication of a book on "*Global agri-food systems into 2050: threats and opportunities"* (in 2018); a workshop with CGIAR foresight specialists and partners; work on scenarios analysis and link with research prioritization in the CGIAR.

ii: Global trends - A synthesis based on recent key foresight exercises, Fabiana Scapolo, EU Commission [via WebEx] – [Presentation]

Main points:

- The objective of this paper is to summarise and analyse recent foresights on food and agriculture, and establishing a database on foresight studies for the analysis of key drivers and trends with implications for food security, poverty and environmental sustainability.
- A tree-step methodology is followed for establishing a foresight database, analyzing megatrends and identifying the gaps for future research.
- While some of the key drivers considered in food system analyses fully reflect the megatrends, other drivers seem to be less explored in food system analyses in the context of sustainability, food and nutrition security and resource preservation.
- An in-depth analysis of these gaps may bring forward new areas of research for reducing poverty, improving food and nutrition security and improving natural resources and ecosystem services.

iii: Quantitative Foresight Modeling to Inform the CGIAR Research Portfolio, Keith Wiebe, IFPRI Global Future – [Presentation]

Main points:

- Key findings of the modeling exercise are: 1) Population and income growth will drive growth in demand; 2) Food and nutrition security are projected to improve; 3) Climate change will slow this progress; 4) Markets and trade will help mitigate climate change impacts; 5) Agricultural R&D will

play a critical but changing role; 6) Different strategies involve different synergies and tradeoffs; 7) Complementary investments also needed in other sectors.
- Next steps include the publication of Global Food Security special issue; improving the work on nutrition, health and land use; exploring changing demand, limits of sustainable intensification, pests and diseases, climate variability, links to wider economy; continued dialog with CGIAR and other partners.
- Some of the questions to consider are: Who does what? When should it be done? What will it cost? Who will pay? How to maintain capacity while being responsive to demand? How to link to ex-post impact assessment? What information is needed, by whom, and when?

iv: Discussant, Philip Thornton, CCAFS

Main points:
- Highlighted 5 key points: 1) Farmers of the future – who, where, how, numbers of smallholders, farm sizes; 2) Technology as the elephant in the room; 3) Where does innovation in agriculture come from; 4) Transformation is needed; and 5) What we could be doing.
- Strong support for participatory scenario processes: CCAFS conducted several exercises with engagement of a wide range of stakeholders, leading to policy outcomes in some cases.
- We could harness the power of better foresight around things such as: Future structure of production; Game-changing / disruptive technologies & innovations; Power (and limitations) of markets; Institutions, governance and the private sector.
- There are few limits on the kind of tools that can be used including narratives, quantitative and/or qualitative, "mixed methods".

Main discussion:
- What novel improvements does the Impact model bring to scenario analysis compared to previous works conducted by IFPRI?
- Relevance of most drivers of change and global trends to the new ICARDA strategy.
- The analysis of comparative advantage is one of eth key challenges to agricultural research; but there are no models available for that.
- There is need to learn lessons from previous global foresight initiatives, such as the ecosystem assessment; but the future needs new types of thinking and technologies.

Main ISPC follow-up:
- Next steps of ISPC-coordinated foresight should be participatory and focus on scenario analysis; a variety of tools can be used for that.

Item 6: Prioritization

i : How does agricultural transformation affect CGIAR comparative advantage?, Achim Dobermann, Rothamsted Research [Presentation]

Main points:
- Need to focus less on detailed planning and more on what CG should do, what the brand is
- Principles that must be in place for an org to be successful
- Give some space for blue sky research before worrying about its practical use

- Rothamsted has no social science, they access it through partnerships
- Think about alternative funding sources for AgTech and ways of working

ii: Global public goods provision from AR4D spending in the private, public and philanthropic domain: what does it mean for CGIAR comparative advantage?, C. Leigh Anderson, Evans School of Public Policy & Governance, University of Washington [Presentation]

Main points:

- Funding trends are worrisome in terms of inequality—less from poor countries which are the ones most dependent on agriculture
- Model looks at funding across sources (public, private, philanthropic). Looks to find optimal allocation across crops
- Getting data on private sector is hard. Available data shows that private spends on expected crops.
- Public and philanthropic spend on some of the same crops as private which is interpreted as sub-optimal allocation.

iii: Discussant, Ren Wang, FAO

Main points:

- CG needed to work more with FAO. CG could present findings at FAO technical meetings. What he has heard so far reinforced impression
- Foresight – for qualitative, to what extent were multiple stakeholder views considered? GFRA? FAO member countries? (Albino said they considered GFAR)
- FAO donors are interested in a wide range of things that do not always match up with our priorities

iv: Discussant, Patrick Webb, ISPC

Main points:

- Middle income countries are spending more on agricultural R&D than what is aimed at low income countries—true for most development spending. But may be ok since most poor live in middle income countries. Most increase in hunger is in conflict and failing countries.
- Agricultural research needs to be forward looking and future demand driven since it is growing fast in middle income countries and that is where diet change is happening.
- Need to better engage with donor community. Can we apply the 4 elements of QoR4D to donor funding? Can we have a better conversation?

- Unable to explain compellingly what the value of global investment across integrated systemic research is. Value of brand is based on what you can do.

Main discussion:

- CGIAR is providing science that no one else is providing, although the atmosphere is hard to do good science in.
- Science opportunities differ dramatically across crops
- Is there an IPG argument for CG involvement in middle income? Or are those people the responsibility of those countries?

- CG in middle income countries – has been on radar for a while. Should be part of a science universe so maybe the science can progress faster.

Item 7: Agri-food system innovation and partnership

i: What have we learned from recent innovation workshops that is useful for guiding the development of CGIAR innovation/partnership strategies?, Nighisty Ghezae, ISPC - Jeroen Dijkman, ISPC Secretariat [Presentation]

Main points:

- Achieving the SDGs requires changes in agricultural production and in the institutions and values that shape the nature and expectations of agri-food systems.
- ISPC is facilitating a System-wide dialogue based on the analysis of a broad range of case studies on how agri-food system innovation processes and impact unfold over time. This brings in new framings, perspectives, analysis and evidence on innovation and partnership to move beyond a focus on systems optimization and incremental changes as a result of by existing organizational capabilities, enduring routines, practices and policies, and patterns of public investments.
- A wider transformational change narrative will allow research organizations to find their proper place in the transformational change process, help set more realistic expectations, and contribute to new courses of action aligned to global development ambitions.

ii: Discussant, John McDermott, A4NH

Main points:

- CGIAR system (including ISPC) is struggling to assess new research and its assessment criteria for flagships seems to be biased against new research. Different criteria for assessment compared to more mature research are needed. Relative to that there is potential to speed up innovative research that should be explored.
- Partnerships for innovation require either a competent lead organization or a good facilitator. For the CGIAR sometimes we need to bring in competent partners for new research areas. Also the transition between early proof-of-concept or piloting of research requires different skills and an evolution of the R&D partners. The relevant groups are trying solutions for the transition from research proof / piloting to scaling but more systematic efforts on this are needed.
- Ownership by national staff in the Ministries key to making sure research finding were adopted by government and national producer and marketing actors.

iii: Discussant, Jennifer Long, USAID

Main points:

- USAID recognizes the importance of strong partnerships from upstream science to adaptation research - to ensure the outputs of research are both relevant in the local context and developed with efficiency. USAID has recently release the Global Food Security Research Strategy in which we describe the range of partnerships we seek to implement our new strategy.

- USAID investment in the CGIAR is a recognition of the power of science, technology and innovation, and through the construction of research portfolios - we can manage high risk/high potential impact opportunities with lower risk/nearer term benefits from research.
- Incredible amount of policy research that is being carried out across the CG system - that has bearing on the biophysical research agenda. Awareness of this broad body of work and capacity across the system should be part of the partnerships discussion - in addition to external partnership linkages.
- Critical for every program to rethink and review partnerships to ensure they are constructed to leverage opportunities - including opportunities with national programs and regional centers of excellence that have much greater capacity than in the past.
- In the countries where USAID works, researchers need to be more entrepreneurial to reach out to the network of actors throughout the Agricultural Innovation System to help mobilize the partnerships needed to increase the chances that relevant, high impact innovations can get into the right delivery pathways.

iv: Discussant, Roberto Aparicicio Martin, EU Commission

Main points:

- The linkage between foresight and partnership is an important one – The future of agriculture will also shape the type of partnerships the CGIAR needs to engage in.
- Subsidiarity and comparative advantage need to be the underlying principles in any type of partnership.
- Performance measures of research organizations need to be aligned better to the role they play in the transformation process.

Item 8: SPIA: Discussion on the outcomes of the SPIA/PIM conference held in Nairobi from 6-8 July 2017

I: SPIA updates since ISPC-15, SIAC final report, and reflections on end-of-SIAC conference, Doug Gollin, SPIA Chair [Presentation]

Main points:

- SIAC ended June 30, 2017, and the conference in Nairobi (jointly organized with PIM) presented findings and reflected on implications for CGIAR research / policy
- Potential SIAC Phase 2: discussions held with CGIAR science leaders in Montpellier (June 2017), and discussions with donors ongoing
- New results from SIAC Phase 1 work
    - Low adoption levels of on-farm NRM practices (conservation agriculture & agroforestry – multiple countries).
    - Policy-oriented research outcomes database – no shortage of outcomes linked to CGIAR activities, but very few carefully assessed for impacts
    - Results from six impact studies spanning crop varieties (global, drought-tolerant rice, lentils, high-iron beans); NRM policy and practice (forest co-management, agroforestry); and, livestock (forages) presented. Underlines how there are multiple pathways to impact, and multiple outcomes are possible.

- Need to reflect on results from NRM adoption studies for NRM research in the CGIAR – what it means for theory of change as well as impact assessments

Main discussion:

On the SPIA-PIM conference:

- Presentations repeatedly emphasized heterogeneity of impacts and the challenges of measuring impacts, when working in rain-fed systems; and the implications therein for research.
- Many studies still focus on crop improvement research; results represent small pieces of work. A general sense that CGIAR is having rather modest impacts, but a discussion on role of agricultural research and rural transformation might provide a fuller picture.
- Conference attracted an interesting mix of social scientists and non-economists (political ethnography, philosophy of science, biophysical scientists and geneticists) as well as CGIAR and non-CGIAR experts.
- PIM event with CGIAR social scientists: a lot of concerns (similar to those identified in the Barrett STRIPE review) about quality of work, adequacy of numbers, capacity and skillets aired. As PIM work progresses, might get a better handle on whether these are simply perceptions or the reality.

General:

- Need to recognize that farm households are complex actors – outcome measures such as yield for a single crop or farm technology is too limited a view of such complexity. This also has implications for the data one collects in on-farm trials and the importance of engaging social scientists early on.
- The importance of learning about failures and learning from failures, and lessons for SPIA from SIAC portfolio. Many of the SIAC studies were not setup to understand the *how* and *why* (of failure) questions, and this points to the need for methods that are more qualitative, descriptive in nature.
- Need for close collaboration between natural and social scientists.
- LSMS datasets are seen as gold standard – there are no parallel datasets in the developing world to conduct *ex post* IA work. Hence, there is a need to communicate the importance of such datasets to donors as well as simultaneously consider how to build long-term, stratified panels.
- Widespread (audience) agreement that further discussion on results from NRM-related SIAC work is needed – for instance, whether the focus so far has been on too linear a pathway.
- Need to recognize the learning agenda from IAs – not limited to public relations. With the reforms, a clear demand for IAs to feed into the System-wide learning process, but funding structures drive short-term, project-based activities and does not allow credible IAs.

Main ISPC follow-up:

- Workshop on adoption / impact of NRM research: Jan-Feb 2018
- SIAC synthesis reports – peer reviewed and published: Nov-Dec 2017, early 2018