Science Council Commentary on the Sixth External Programme and Management Review of IRRI

The Report of the Sixth External Programme and Management Review of IRRI was discussed at the Science Council's Inaugural meeting at ICARDA, Aleppo, Syria in the presence of the Panel Chair, Dr. Richard Flavell, the Chair of IRRI's Board of Trustees, Dr. Keijiro Otsuka and Director General of IRRI, Dr. Ron Cantrell. The Science Council (SC) thanks the Panel Chair and members for a forward-looking report, which offers a very readable and clear overview and assessment of IRRI's research activities and management, and an analytical review of the strategic changes needed for IRRI to maintain and enhance its regional and global relevance in the future. The SC commends IRRI for this very favourable report which gives credit to the Centre and its staff for strong commitment to its mission and goals.

The Report of the 6th EPMR makes seven recommendations with respect to programme and three on management. The Report contains a number of suggestions embedded in its analysis of IRRI's programmes and management. The SC endorses all ten recommendations. The SC is pleased to note that IRRI agrees with all of them and intends to implement them directly or after further consideration during the process of the forthcoming exercise on strategic planning. The following commentary was prepared with inputs from the CGIAR Secretariat.

Response to 5th EPMR

The Panel notes that IRRI has responded fully to the six programme recommendations. It notes, in particular, the high quality and completeness of IRRI's IPR awareness and policy. The implementation and activity of INGER have improved in recent years, but funding remains unsure for this very important germplasm exchange activity. IRRI has addressed or shows ongoing response to the five management recommendations. Several current recommendations address some of the same issues with respect to the IRRI Board.

Strategic Planning

The SC agrees with Panel suggestion that IRRI must establish a basis for weighing its comparative advantage and opportunities for impact in light of a rapidly changing marketplace for rice research, the changing private sector presence, advancing NARS capacity, and rapidly advancing science. Not all of the areas of excellence in IRRI's past and present research will be appropriate nor sufficient to carry the Centre forward, either toward effective scientific contribution or to attract new donor investment.

The Panel presents a vision for IRRI for genomics and related research areas, which is formulated in Recommendation 1 and elaborated in the concluding chapter on IRRI's future. The Centre is encouraged to serve the globally important rice crop as well as to stimulate global rice research and utilize the rice genome as a platform for scientific extension to other CGIAR crops through its genomics research. It can thus contribute well beyond rice and have an impact on other crops, and more broadly, on other CGIAR goals. The SC supports this vision.

The SC suggests that a parallel potential exists for broad impact in natural resources management and should be included in the strategic plan. The rapidly evolving nexus of competition for land, water and labour, and the decreasing share of environmental loading available to agriculture, especially in rice ecosystems, all underscore the potential for the breakthroughs in rice production technologies as described through the IRRI/CIMMYT ricewheat project.

IRRI's Research Programmes

The Panel has used the Medium-Term plans as its framework for analysing the evolution of IRRI's research agenda in four programmes. A major emphasis is on germplasm, genomics and breeding, which at IRRI are major themes in nearly all its programmes. IRRI is now strategically well positioned and active in the international research arena, which is demonstrated by its leadership role in the International Rice Functional Genomics Consortium. The SC acknowledges the importance of advances in rice genomics to the CGIAR System and notes the many important synergies with research in other crop species. The SC is also pleased to hear that the Centre's recently revised policy regarding IPR is excellent and its relations with the private sector appropriate.

IRRI makes a convincing argument for maintenance research and improved production practices in the changing favourable rice environments. The SC is pleased to learn of the emerging evidence of research results and impact also in the fragile areas, where the previous EPMR did not see much progress. The SC agrees that in light of low-demonstrated potential for improving rice yields in the upland rice (UR) areas, this research should be devolved to others with comparative advantage in research and development for these areas. The potential of these areas for crop diversification falls more appropriately with the NARS who have comparative advantage with research into alternative crops. Research in the rainfed areas should focus on rainfed lowland rice (RLR), particularly in areas of demonstrated potential, and where conversion to non-flooded rice seems to have significant potential. IRRI's toposequence research, and its support of the Consortium for Unfavourable Rice Environments are commendable.

The Panel's analysis would have benefited from a more balanced assessment of the different research areas, including research on pests, diseases and weeds, the latter particularly in relation to changes in water management in rice systems. Both the issues surrounding water and the relationships to soil and weed management are highly important in future research for international public goods for rice systems.

The Panel made two recommendations on the way IRRI's four research programmes should be reorganised. It recommends that the status of the programmes on favourable and fragile environments (Programmes 2 and 3) should be elevated to make them "flagship programmes" including, in the research consortia, the major delivery channels of IRRI's research results to the NARS and farmers. IRRI's Programme 1 on genetic resources and functional genomics hosting the core resource and knowledge related to rice germplasm should achieve even greater visibility and linkages to the scientific community in the relevant strategic and basic biological research, drawing its purpose from the goals of the ecoregionally defined Programmes 2 and 3. The Panel recommends that to increase the value of social sciences research for IRRI, the overall social sciences capacity should be increased and the research related to *ex ante* and *ex post* evaluation of research organised in some other way than keeping it in the currently loosely-defined Programme 4.

While the SC agrees that research should be optimally organised for securing relevance and effectiveness, it notes IRRI's reservation about how to restructure its four programmes to

accomplish that goal. It fully agrees with IRRI's concerns that social science should not be rendered solely to a service function, which could hinder IRRI's chances of attracting top quality social scientists. The SC would have liked to see a more thorough evaluation of IRRI's past social science research in fully analyzing the database of village and farm-level studies.

The increased donor attention in Africa and the advantage that IRRI itself perceives it has in the lowland rice systems in Sub-Saharan Africa have led to IRRI establishing a breeder post in the region. The SC shares the Panel's concern that IRRI should carefully evaluate the cost-effectiveness of its direct presence in Africa. The SC urges that IRRI and WARDA should enhance their relationship to the benefit of both Centres' programmes, clarifying how they both can leverage each other's capabilities and potential outputs for Africa.

Challenge Programmes

The EPMR Report reflects both concern and optimism regarding Challenge Programmes (CPs) as they affect IRRI and the CGIAR in general. It claims that Centres and Centre Boards in particular, have had little chance to influence the CP process, which has an impact on funding and implementation of the already agreed upon Centre agendas thereby undermining the primary responsibility of Boards. The SC is, however, pleased to note that IRRI's leading role in all three ongoing CPs is commended. The SC agrees with IRRI that it is essential to get the implementation of these large multi-partner programmes "right" in order to capitalise on the concept intended to bring synergy gains and visibility.

Management and Governance

The SC finds the EPMR's assessment of the changing role of CGIAR Boards very topical and broadly applicable in the CGIAR. An appropriate skill mix in Boards is essential given their changing responsibilities and increased liability in oversight, particularly in finances, demanded by donors. It is essential that Boards be adequately informed in matters related to strategic planning and finances.

The SC supports the recommendation that Board members be carefully chosen for expertise and willingness to be actively engaged in Centre planning and affairs. Board evaluation procedures must be strengthened. Board training is essential. It is felt by many, as reflected in comments made by observers at the SC meeting, that while a Board member term of three years permits change on the basis of performance, a process for term renewal for a second term, based also on performance, is highly desirable to permit the accumulation of experience required for high quality input into Centre affairs.

The SC notes the lack of Board involvement in strategic planning and visioning, not only in regard to the Center's core programs but also with respect to the CPs. It endorses the Panel's assessment of the importance of integrating the top-down and bottom-up scenarios in vision-building and holding the Director General responsible for good two-way communication in order to have everybody's ownership of a common vision.

The SC commends IRRI for having maintained excellent financial health. The EPMR Panel, however, does not predict guaranteed grown in IRRI's resource base and states that the gradual shift from unrestricted to restricted funding combined with shifts of funds to CPs poses a serious challenge to the Centre. The SC feels that a well-articulated strategic vision

and an attractive implementation programme may have potential to muster a larger resource base.

The SC agrees with the Panel suggestion that IRRI should make better use of CCERs both in research and management topics to facilitate Board oversight for efficiency and effectiveness.

IRRI/CIMMYT Alliance

During the implementation of the EPMR, it emerged that the Rockefeller Foundation was facilitating a process to consider a range of options for a greater and more formal alliance between IRRI and CIMMYT, with relationships across the CGIAR. The SC realises that the Panel was not in a position to address this matter in the EPRM Report at this early stage of discussion. However, the SC notes that the Panel urges IRRI and other Centres to consider the economies of scale that could be gained through access to state-of-the art high-throughput genomics facility, whether it be shared among Centres or whether the analyses be outsourced to some advanced laboratory. The SC recommends that any change in formal Centre partnership be done with full anticipation of the ongoing evolution of priorities and priority clusters within the CGIAR.