

22 August 2002

Dear Ian,

I am pleased to enclose the report of the Executive Council's Working Group on the establishment of a CGIAR Science Council (WGSC).

The Executive Council asked the Working Group to prepare a detailed proposal on how the CGIAR Technical Advisory Committee could be transformed into a Science Council. In preparing the report, the Working Group benefited from consultations with key stakeholders, the previous work of the Task Force on Science Council, and the broad experience of the members of our Working Group.

The report calls for the creation of a small independent Science Council that enjoys a mandate wider in scope than the mandate of the current Technical Advisory Committee. The Working Group believes that such a Council would enable the CGIAR to build stronger partnerships with scientific communities worldwide. The report offers several specific recommendations designed to help CGIAR move smoothly towards the appointment of this important advisory body.

On behalf of the members of the Working Group, I would like to thank you and your colleagues in the Executive Council for the opportunity to lend our views on issues of critical importance to CGIAR's future. We hope that you find our recommendations useful, and we would be glad to respond to any questions or comments you might have.

With best wishes and kindest regards,

Yours sincerely,

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Report of the

Executive Council's Working Group on the Establishment of a CGIAR Science Council

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SUMMARY AND RECOMMENDATIONS

The Working Group (WG) envisages the CGIAR Science Council (SC) as a major new institutional innovation for international agricultural science and sustainable development. Although it is being established within the context of the CGIAR System, it should engage with and be relevant to the wider international agricultural and science community.

When the SC takes over from the current Interim SC (iSC) it should have a wider scope and broader mandate. It should enhance and guide the quality and relevance of science across the whole of the CGIAR System. In addition, it should help mobilize and harness the best of international science to meet the goals of the international agricultural research community. It should be well respected, providing leadership and strategic vision to the CGIAR System and beyond, help set standards, and express its views on issues of global importance.

A small SC, made up of a maximum of seven internationally-renowned individuals including the Chair, should meet the needs of the CGIAR and its partners. The SC should carry out much of its work in a virtual mode and through standing and *ad hoc* panels of specialists. The support of a strong and flexible secretariat, headed by an Executive Director, is essential for the Council's success. The Cosponsors should agree to provide the flexibility needed for the recruitment of appropriate individuals to serve as SC Chair and members, and staff of the SC Secretariat.

Recommendations

Recommendation 1: *The responsibilities of the SC as defined by the CGIAR should be expanded to include "helping to mobilize the best global scientific expertise for addressing the goals of the international agricultural research community."*

Recommendation 2: *The WG offers the following mission statement for the CGIAR SC:*

The overall mission of the SC is to enhance and promote the quality, relevance and impact of science in the CGIAR, to advise the Group on strategic scientific issues of

importance to its goals, and to mobilize and harness the best of international science for addressing the goals of the international agricultural research community.

Its specific objectives are to:

- a) ensure that science in the CGIAR is of high quality and is relevant to the development goals of the System;*
- b) provide science policy guidance to the CGIAR on issues of strategic importance;*
- c) provide independent, credible and authoritative advice and opinion on scientific issues relevant to the international agricultural research system;*
- d) develop partnerships with the wider scientific community for the benefit of an international agricultural research agenda.*

Recommendation 3: *The SC should establish a Standing Panel on Strategies and Priorities to facilitate its work in ensuring the relevance of science conducted in the CGIAR System.*

Recommendation 4: *The SC should establish a Standing Panel on Monitoring and Evaluation to facilitate its work in enhancing science quality in the CGIAR. As a matter of priority, the Standing Panel should recommend to the SC new and streamlined evaluation procedures for peer review of research proposals, regular self-assessments by Centers, and Center reviews.*

Recommendation 5: *An external Standing Panel on Impact Assessment (SPIA), reporting to the SC, should continue to be responsible for System-level impact assessment. The Chair of SPIA should be appointed by the SC, in consultation with ExCo, but should not be an SC member. SPIA members should be appointed by the SC, in consultation with the SPIA Chair.*

Recommendation 6: *The SC should establish a Standing Panel on Mobilizing Science to facilitate its work in catalyzing and mobilizing global scientific capacity.*

The main tasks of this Standing Panel should include:

- a) Developing strong links/partnerships with leading scientific organizations world wide, including Academies of Science, universities, research institutions and networks;*
- b) Developing, in collaboration with the Centers, the System Office and external partners, a Roster/Inventory of the most active and committed researchers in agricultural and related sciences. The Council should establish a peer-review based evaluation System to facilitate decisions on inclusion of scientists in the Roster/Inventory;*
- c) Organizing, in collaboration with its partners, a periodic global conference in agricultural sciences to exchange views and experiences, promote linkages and advance the global agricultural research agenda;*

- d) *Facilitating, in collaboration with the Centers, the sharing of experiences and the development of joint initiatives between scientists of the Centers and those of agricultural research institutions in the South.*

Recommendation 7: *The CGIAR should protect the independence of SC's operations and judgment. The annual work plan and budget of SC should be discussed by ExCo/Cosponsors. The System Office should help harmonize the activities of SC with the activities of other units in the CGIAR.*

Recommendation 8: *The SC should be composed of six members and a Chair. It should carry out much of its work through four Standing Panels covering its four principal functional areas. Each Standing Panel should be chaired by an SC member (except for SPIA, as noted in Recommendation 5) and include two additional, external members. The Council should normally hold two short (2-3 day) meetings a year, supplemented with additional meetings held in virtual mode. These structural and organizational arrangements should be reviewed and modified as appropriate after three years.*

Recommendation 9: *The following norms should guide the selection of SC Chair and members:*

- a) *Nominations for the Chair and members of the SC should be open to all individuals and leading scientific organizations world-wide.*
- b) *The ExCo should appoint a search and nomination committee of renowned experts to evaluate the nominations and recommend to it a short list of candidates;*
- c) *The Chair should be appointed for an initial period of three years, which could be extended for up to a total of five years. Members should be appointed for a period of two years and membership could be renewed up to a total of six years.*
- d) *The contracts and appointment conditions of the Chair and Council members should be clearly specified in an agreement to be concluded by the cosponsoring organizations in consultation with the ExCo.*

Recommendation 10: *The following principles should be adopted to ensure that the SC is supported by a strong Secretariat:*

- a) *The SC should have full and unconditional authority in selecting the staff of its Secretariat. An agreement among the Cosponsors should ensure that staff appointment procedures that apply to the SC Secretariat guarantee this.*
- b) *FAO provides an excellent venue as the host of the SC Secretariat. Yet, FAO has legitimate concerns regarding the financial risks it assumes when it employs staff. The CGIAR should make arrangements through a formal agreement among the Cosponsors to eliminate FAO's financial risk from hosting the SC Secretariat.*

- c) The position of the chief operational officer of the new SC should be at the level of a Director. The new person recruited for the post should then have the title Executive Director.*

Recommendation 11: *To ensure a smooth transition from iSC to SC, two members from the current iSC should be invited to join the SC, as members, for one year.*

I. INTRODUCTION: WHY A CGIAR SCIENCE COUNCIL?

The formation of a Science Council (SC) to replace the Technical Advisory Committee (TAC) should be seen as part of the general broadening of the CGIAR System, with its increased emphasis on drawing in outside partners in planning and guiding, as well as carrying out, research. The new SC offers the CGIAR System an opportunity to streamline the provision of scientific advice, while drawing on an ever-broadening range of disciplines and potential partners. The SC allows the CGIAR to reassess the various activities of a science advisory body, reducing emphasis on some while elaborating others.

The Working Group (WG) owes a debt of gratitude to TAC, the ISC and its Secretariat. Many of our suggestions and recommendations build on current practice and accumulated wisdom applied to the changing needs of the CGIAR. The WG hopes that the transformation it is proposing here will indeed better link the CGIAR with the global scientific community, and help to elevate the profile of science advice within and outside the CGIAR. These changes should not be viewed in isolation—they are part of a reform effort in the CGIAR which has four prongs (including introduction of “challenge programs”, streamlining decision-making, and establishing a CGIAR System Office). These changes are geared towards enhancing the System’s impact, improving its efficiency and elevating the System’s stature and influence globally. The new SC is expected to reinforce these other dimensions of reform.

The SC will continue the strong tradition of independent technical advice that has existed in the CGIAR since its inception. The founders of the CGIAR established a TAC consisting of “distinguished international experts” to advise the Group on a variety of matters. Down the years, TAC has taken a lead role in defining the CGIAR System’s overall directions, evaluation of CGIAR Centers and programs, and analyzed dozens of key substantive issues and provided advice on them to the CGIAR. The independence of TAC and its members (who served in their personal capacities) reinforced the System’s apolitical character, and the stature of the members elevated its scientific credibility. Externally, the CGIAR governance model (with an independent technical advisory committee), has been emulated by international undertakings such as the Global Environment Facility and the Global Water Partnership.

Specifically, the WG understands that in creating a SC, the CGIAR hopes to reach the following objectives:

1. To help elevate the global status of the CGIAR, by nurturing a premier development-oriented science and technology entity that can provide intellectual guidance to the CGIAR community, add value to the science

emanating from the Centers, and influence the global international agricultural and natural resource management agenda.

2. To sharpen the focus of the CGIAR's scientific advisory body, in part by releasing it from financial and management concerns and concentrating its attention on the quality of science across the CGIAR System, and its specific relevance to the goals of international development.
3. To help mobilize the global scientific community around the mission and goals of the CGIAR and establish a focal point for an international network (or networks) of eminent scientists committed to science and technology as a means to promote growth and combat hunger, poverty and environmental degradation.

We took the above three objectives as the starting point of our deliberations, but revisit them in our report, highlighting or questioning some of the underlying assumptions that are implied. In addition, based on our consultations, we added a fourth objective:

4. To provide the CGIAR with a scientific advisory body able to speak clearly on globally important science policy issues of the day, influencing the CGIAR Centers, CGIAR members, CGIAR stakeholders and the broader scientific and international development communities.

The WG expects that its proposals will indeed better link the CGIAR with the global scientific community, and help to elevate the profile of science advice within and outside the CGIAR. The proposed changes in the science advisory mechanism are directed at enhancing the System's impact, improving its efficiency, and enhancing the System's stature and influence globally.

II. MISSION AND OBJECTIVES

The primary responsibilities of the Council as defined by the CGIAR are as follows:

- a) serve as guardian of the relevance and quality of science in the CGIAR, and
- b) advise the CGIAR on strategic scientific issues relevant to the Group's goals and mission.

The WG understands the intention of the CGIAR in ascribing "guardianship" and "advisory" roles to the SC. However, we see the need for the SC to be broader in scope and pro-active in its operations, because:

1. The CGIAR Centers operate through partnerships with many stakeholders from developing and developed countries which would benefit from analysis by a respected, authoritative body as envisaged by the new SC;
2. While the CGIAR supports only a small part (about 4 percent) of the public investments in international agricultural and natural resources research, it is necessary to study the 100 percent in order to identify where the CGIAR can have the greatest impact through its limited investment;
3. There is a vacuum for an authoritative, independent scientific body in the area of international agricultural and natural research;
4. A widely respected Council that can express an independent opinion on controversial issues would protect the neutrality of the CGIAR (and help shield it from political pressures);
5. A SC with a narrow scope (i.e., focused on CGIAR Centers and programs only) would not attract the eminent scientists that are targeted;
6. As a corollary, the CGIAR's "elevating the game" agenda would be best served by having a SC that takes a global view and is composed of eminent scientists.

In this context, we urge that "ensuring" scientific relevance and "enhancing" science quality should represent the core of the SC's mandate. These two concepts are critical to understanding and further clarifying the role of the SC, and so it is necessary to define them precisely and point to their implications.

Science is **relevant** to development goals when it can provide answers within a reasonable timeframe to technological problems related to social (e.g. poverty), environmental (e.g. loss of biodiversity etc.) and related issues. Relevance also requires excellent verifiable research, employing appropriate methods and tools. Research output must be acceptable to target users, and readily transferable for their use.

The **quality** of science (or of scientific research) can be determined by high quality peer review using internationally accepted standards. This involves an assessment of how efficiently scientific research has used state of the art knowledge, research methods and processes to reach conclusions. The quality of research products is also a key parameter in assessing the overall quality of science. Thus, quality and relevance are closely connected. One without the other does not contribute to development.

The responsibility of the SC to ensure both quality and relevance will position it to articulate issues and offer assessments more generally, both within and beyond the ambit of the CGIAR System. For instance, dispassionate analysis and assessments by a respected and independent group of internationally acknowledged experts will provide CGIAR Centers, donors, and others interested, with a “way forward” on issues (such as biotechnology, natural resources, ownership of intellectual property, and ethics) that are today charged with emotion and non-scientific partisanship. The SC will arguably need to be active on such fronts.

By venturing forward on such issues, the SC will not only provide a service to the CGIAR, but to the larger international agricultural and natural resources research communities. This approach is consistent with our belief that the role and remit of the SC, while being most tightly focused on the CGIAR, must encompass a broad sweep of researchers. A wider audience is appropriate, given the increasing necessity for the CGIAR Centers to work through an array of research and development partnerships. Our advice, therefore, is that the Council, while providing specific advice to the CGIAR on operational matters relating to scientific strategy and quality, should take a global view in its analysis and observations on broad science strategy and priority questions. On this basis, we make our first two recommendations.

Recommendation 1: *The responsibilities of the SC as defined by the CGIAR should be expanded to include “helping to mobilize the best global scientific expertise for addressing the goals of the international agricultural research community.”*

Recommendation 2: *The WG offers the following mission statement for the CGIAR SC:*

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Its specific objectives are to:

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- d) develop partnerships with the wider scientific community for the benefit of an international agricultural research agenda.*

III. FUNCTIONS

A high-profile and credible council that can influence decisions and opinions, will need power and authority. In our view, the potential sources of *influence* for a science and technology entity in the CGIAR include:

- authority to recommend:
 - distribution of resources to alternative uses;
 - acceptance or rejection of program proposals for funding;
 - action to improve the scientific performance of research institutes;
 - research priorities at the global and regional level;
 - science policy in specific areas (e.g., biotechnology/genetic engineering);
- quality of its outputs/advice;
- stature/credibility of its Chair and members;
- visibility and transparency of its operations.

The funding modalities of the CGIAR System (sovereignty of donors, autonomy of the Centers, and bilateral funding relations between donors and Centers) will limit the SC's authority to allocate funds directly as there are no "System Funds" *per se*. Nevertheless, we believe that the SC has a key role in highlighting research areas that are not being adequately addressed, for possible action by the research establishment (donors and research providers). SC's judgments on program imbalance should have significant influence on Centers and CGIAR members. Achieving this linkage is not simple, particularly in a period where funding for CGIAR Centers and programs is increasingly targeted and collective decision-making by donors is less directly linked to resource allocation at the System level.

Fundamentally, the WG believes the principal source of authority for the Council would be the quality of its analysis, outputs and advice. While the high stature of the Chair and members would provide the Council with an *a priori* credibility, this would need to be confirmed through the Council's actual performance. A clear indication that credibility (in the eyes of stakeholders) has been "earned" would be donors, Centers and other stakeholders seeking the Council's advice and heeding its recommendations. If the connection between the Council's guidance and CGIAR programs is tenuous, SC members may become frustrated, sensing little impact on the direction of CGIAR research. If a serious "disconnect" were to occur, the CGIAR would need to reexamine mechanisms, including those that relate to financing the research agenda, that could strengthen the strategic coherence of the overall program.

The CGIAR can foster the credibility of the SC through its composition and mandate. An outstanding Chair and members will provide a foundation for credibility, while effectiveness will require non-trivial analytic and advisory responsibilities (as described in the recommended Mission Statement). Both will be

enhanced if the Council's independence and transparency of operations are enhanced, and it is provided with a top-caliber, independent support mechanism, including a structure supported by expert panels.

For these reasons, the SC should have four key functions:

1. Ensuring the relevance of science;
2. Enhancing the quality of science;
3. Assessing the impact of CGIAR research;
4. Helping to mobilize global scientific expertise.

Ensuring the Relevance of Science

This role of the SC has two dimensions: global, and CGIAR-specific. We noted earlier that the SC should play a global role, serving the entire international agricultural research community, by analyzing trends, needs, gaps, and priorities for research geared towards both national and international development goals. This work will need to be done in conjunction with (or taking into account) similar analyses conducted at the regional level by regional forums for agricultural research. These global and regional perspectives are essential for placing the work of the CGIAR in the context of a strategic and coherent whole.

The second aspect of relevance (CGIAR-specific) relates to analysis of priorities for the CGIAR and analysis of the relevance of Challenge Programs (CPs) and Center programs from a scientific perspective. Here the analysis moves beyond determining priorities and into reviewing and proposing research strategies. The SC must be prepared to judge the appropriateness of both priorities and strategies, with the objective of strengthening the CGIAR System's strategic coherence. The SC's guidance to CGIAR members and stakeholders thus provides a definitive compass for the global R&D effort of the CGIAR.

The portfolio of tools for these activities should include:

- periodic study of CGIAR priorities and strategies;
- qualitative analysis of the relevance of CGIAR programs (CPs and Center programs);
- taking full account of regional priority setting exercises that have been initiated under GFAR/TAC auspices;
- structured dialogues with relevant stakeholders and representatives of target groups;
- examination of Centers' strategic plans and advice on cross-System coherence.

Among the many processes that could feed into the SC's analyses and deliberations are those from regional forums. The results of strategic exercises undertaken at the regional level should be shared with the SC, as should outcomes of other initiatives

focused on specific problems or research approaches. With its small membership, SC members should not be individually assigned regional responsibilities (as is the case for other specific research initiatives on crops, livestock, natural resources). Each member of the SC will need to draw on the outcomes of global, regional and other strategic activities that should be considered in articulating and advancing the overall CGIAR and global research agendas for agriculture and natural resources.

It is not possible for SC members to encompass the full range of disciplines that may be needed to address all relevant issues. Hence, a key task for the SC will be to marshal expert advice and use it in ways that reconcile competing needs, objectives and approaches, so that the best outcomes may be achieved.

We consider that this can be done most efficiently by establishing a *standing panel* (see section IV) of the SC that focuses specifically on the SC function of ensuring relevance. We consider that this approach of supplementing the work of the SC with standing panels including external experts will enable the SC to expand its capacities in a flexible manner. By greater reliance on external experts as members of standing panels, the SC will be able to put more emphasis on broader, integrative aspects of the Council's work and not become directly associated with any very specific initiative or topic. SC members will be engaged with the substance when the outputs of the standing panel are brought to the SC.

Recommendation 3: *The SC should establish a Standing Panel on Strategies and Priorities to facilitate its work in ensuring the relevance of science conducted in the CGIAR System.*

Enhancing the Quality of Science

To remain credible and competitive globally, science in the CGIAR System has to be of high quality. At the Centers, boards of trustees have the responsibility to uphold scientific quality. At the System level, the SC has been assigned the responsibility to safeguard the quality of science—through appropriate peer review mechanisms. A rapidly expanding body of knowledge and related research techniques offer great opportunities and also poses challenges for the Centers. Innovative mechanisms to maintain science quality and benefit from a wide range of contributing disciplines should go hand in hand.

There are two ways that the SC will be influential:

1. peer review of proposals for research (*ex-ante* assessment of quality);
2. external and self-assessment of Centers, their activities and cross-cutting research themes (*ex-post* assessment of quality).

A variety of evaluation procedures should therefore be carried out as part of a quality assurance and performance evaluation system in the CGIAR, the results of which should be transparent and widely available. These include the following:

Peer reviews of proposals for research: These will be conducted through international peer-review according to established best practice. This will include reviews of Challenge Programs. The SC will therefore have to devise cost-effective ways of reviewing CP proposals, building on the experience gained by iSC.

Self-Assessment Exercises and Center Reviews: We envisage much wider use of self-assessment in reviewing and enhancing the quality of science in the CG System. One option would be to build a two step process:

- self-assessment by each Center of its own outputs, measured against a set of common indicators developed by the SC; and
- an external evaluation based on the self-assessment.

The second step would be directed by the SC, and could include visits to the Centers. We have examined alternative review models based on self-assessment using common indicators, such as the Research Assessment Exercise in the UK and the Agricultural Research Performance Assessment Model from Brazil (see Annex 1). A new system of criteria and indicators will need to be developed for the CGIAR by the SC in order to implement an evaluation process similar to the examples shown in Annex 1.

Having a quality assessment system that applies equally to all institutions (and brings an element of comparability across institutions) will help further integrate the CGIAR System and reinforce the CGIAR's current reform effort. Refining these methodologies, over time, should lead to establishing benchmark tools for the whole of the CGIAR System. Assessments based on quantitative indicators (conducted every 1-3 years) could be coupled with a more condensed external program and management review that covers broader strategic and management concerns (e.g., once every three years, conducted by a panel of three persons over a single two-week visit to the Center).

Thematic or "stripe" reviews: These have been valuable additions to the CGIAR's evaluation portfolio (e.g., the recent review of plant breeding methodologies) and have served as useful input to strategic planning.

Recommendation 4: *The SC should establish a Standing Panel on Monitoring and Evaluation to facilitate its work in enhancing science quality in the CGIAR. As a matter of priority, the Standing Panel should recommend to the SC new and streamlined evaluation procedures for peer review of research proposals, regular self-assessments by Centers, and Center reviews.*

Assessing the Impacts of Research

Impact assessment requires an approach that reflects its highly specialized operational nature. Even so, impact assessment clearly bears on the science advisory role of the SC in important respects. Thus, we believe that the CGIAR made the

right move by closely linking the activities of the former Impact Assessment and Evaluation Group (IAEG - now called the Standing Panel on Impact Assessment, SPIA) with those of TAC.

We examined several models for linking impact assessment activities within the SC's organization and structure. For example, impact assessment has clear links to monitoring and evaluation and must be related to those efforts. Alternatively, *ex-ante* impact assessment (social, economic, environmental) provides crucial information and guidance to the SC's work in the areas of priority setting and strategic planning.

We propose that the current practice of having a Standing Panel on Impact Assessment (SPIA) should be continued. The Chair of the panel should be appointed by the SC, in consultation with ExCo. Its members should be appointed by the SC, in consultation with the Chair of SPIA. The Chair of SPIA will need to maintain close contact with the SC, and in particular with its Standing Panels on Priorities and Strategies and Monitoring and Evaluation, but should not be a member of the SC. This arrangement will reflect the more stand-alone, arms-length nature of the impact assessment activity.

Recommendation 5: *An external Standing Panel on Impact Assessment (SPIA), reporting to the SC, should continue to be responsible for System-level impact assessment. The Chair of SPIA should be appointed by the SC, in consultation with ExCo, but should not be an SC member. SPIA members should be appointed by the SC, in consultation with the SPIA Chair.*

Catalyzing and Mobilizing Global Science and Technology Expertise

A distinguishing characteristic of the SC would be the manner in which it helps to mobilize global, development-oriented science and technology expertise, and establish links with other scientific bodies such as the national and international academies of science.

The SC should pursue this responsibility in partnership with leading scientific organizations worldwide. Special consideration should be given to engaging competent agricultural research institutions in the South, to foster collaborative programs and exchanges of successful experiences. Regional and inter-regional cooperation in agricultural research and training based on networking among centers of excellence to address specific development-oriented research problems has substantial benefits to developing countries. The new SC and the Centers should play a critical role in fostering such collaboration.

Overall, we see the SC's efforts to mobilize scientific expertise as supporting and complementing those of the Centers, CPs and the System Office. Most prominent among the SC's efforts will be the engagement of scientific and research talent on standing and *ad hoc* panels. The SC could also add to the independence and

visibility of Center Commissioned External Reviews (CCERs) by drawing on its extensive scientific contacts and networks in nominating individuals to serve on such reviews.

By helping to engage a greater number of leading scientists in the work of the CGIAR, the SC can contribute to developing a cadre of researchers who can serve the System's needs in other ways. The System Office and Centers may benefit from SC experience in identifying individuals to serve in connection with Center or CP governance or other activities. The reverse may also be true—the SC may identify talent useful in its work through its on-going collaboration with the Centers, the CPs and the System Office. Thus we see opportunities for the various components of the CGIAR working together in ways that draw on global scientific, research and analytical expertise.

Recommendation 6: *The SC should establish a Standing Panel on Mobilizing Science to facilitate its work in catalyzing and mobilizing global scientific capacity.*

The main tasks of this Standing Panel should include:

- a) Developing strong links/partnerships with leading scientific organizations worldwide, including Academies of Science, universities, research institutions and networks;*
- b) Developing, in collaboration with the Centers, the System Office and external partners, a Roster/Inventory of the most active and committed researchers in agricultural and related sciences. The Council should establish a peer-review based evaluation System to facilitate decisions on inclusion of scientists in the Roster/Inventory;*
- c) Organizing, in collaboration with its partners, a periodic global conference in agricultural sciences to exchange views and experiences, promote linkages and advance the global agricultural research agenda;*
- d) Facilitating, in collaboration with the Centers, the sharing of experiences and the development of joint initiatives between scientists of the Centers and those of agricultural research institutions in the South.*

Alignment of SC Functions with Those of Other CGIAR Bodies

The WG does not see a conflict between the proposed roles of the SC and those of other CGIAR bodies. Strictly speaking, SC is an advisory--not a decision-making--body. The main decision-making bodies in the System are the CGIAR (as a Group and through its ExCo) on System matters, and the boards of individual Centers on Center matters. However, the CGIAR is heavily dependent on SC's advice for its decisions on science and many policy matters. When some subjects under the SC's portfolio are also included in the portfolios of other units (e.g., ExCo), this reflects different roles being played by System units at different stages of decision making.

More specifically, of the four main functions of the SC proposed above (ensuring the relevance of science, enhancing the quality of science, assessing the impact of CGIAR research, and mobilizing the global scientific community) the second and third fall predominantly under the SC's domain and no other actors carry out duplicate activities at the System level. In these cases alignment issues relate mainly to synchronizing the calendar of SC activities with those of the CGIAR and the Centers (such as the timing of external reviews of Centers or CPs).

With respect to the relevance of science, the SC has a lead role in articulating the research agenda and strategy at the System level. We expect the SC to play a key role in developing priorities and strategies for research, analyzing trends, identifying needs, gaps and opportunities, both at the global level and for the CGIAR. In carrying out these tasks, the SC should consider and integrate studies conducted by partners (e.g., regional forums, research institutions, academies and councils, etc.). SC's analysis would thus be a key input to CGIAR decision making—but other components of the System may also contribute. Strategic and operational plans (at the System and Center level) should be prepared by actors accountable for their implementation, maintaining an active dialogue with the SC and drawing on its analytic inputs.

We suggest that SC should develop an annual work plan, in close consultation with CBC/CDC, clearly stating the nature and substance of its planned activities. This should provide a clear signal to other partners in the System of the intended course of work for the SC, helping to minimize ambiguity or unintended overlap. It is important to recognize, however, that in some instances unforeseen needs may arise where the SC believes it must initiate new efforts. In such instances, the SC should coordinate with the System Office to inform other parts of the CGIAR System or its outside partners.

We also suggest that the SC discuss its work plan (and budget) each year with ExCo/ Cosponsors. It is important to underscore the independence of the SC in this regard. Generally, the activities planned by the SC will be welcomed by the ExCo/Cosponsors. Nevertheless, it is possible that scientific issues will arise where the course of work of the SC could be seen as controversial or politically sensitive. We wish to emphasize that the independence of scientific advice in the CGIAR should be respected by all parties in such instances.

Recommendation 7: *The CGIAR should protect the independence of SC's operations and judgment. The annual work plan and budget of SC should be discussed by ExCo/Cosponsors. The System Office should help harmonize the activities of SC with the activities of other units in the CGIAR.*

IV. STRUCTURE AND ORGANIZATION

The effectiveness of the SC to carry out its functions, and for it to be recognized as an indispensable component of the CGIAR System, depends to a great extent on the quality and credibility of individuals that constitute it.

The guidance from the CGIAR on the make-up of the SC was as follows:

- up to eight individuals plus the Chair;
- eminent scientists in disciplines relevant to the work of the CGIAR;
- strong science policy and development experience;
- diversity in forms of science and understanding of research management;
- as a principal *modus operandi* mobilizing global science and technology expertise from both industrialized and developing countries, and the public and the private sectors and civil society organizations.

Further guidance is provided on the profile of the SC in the Interim Executive Council's *Integrated Proposal*, as agreed to by the CGIAR:

- The Chair would serve for a term of (maximum) five years;
- Members would serve for two-year terms, renewable up to a total of six years;
- Selection of the Chair and members would be through an open, global nomination process.

The future SC would differ from TAC in terms of its composition and selection process in three ways: (a) it will be smaller; (b) it will work with or through panels and networks of experts; (c) its members will be identified through a more open, transparent, global selection process.

In discussing the structure and organization of the SC, we considered a number of developments that have taken place in the world of science and in the CGIAR. One of these is the expanded group of research disciplines that contribute to the work of research institutes such as the CGIAR Centers. At one time, CGIAR Centers could recruit and maintain a research staff that comprised most of the key disciplines and capacities that would be needed for their research programs. For most research institutes, this is no longer the case. Instead, they actively participate in learning networks and seek collaboration with research partners who are better positioned to address specific problems. In a similar vein, in our view, the science advisory body of the CGIAR can no longer encompass all the disciplines that are germane to the Centers' research programs. Thus, we welcomed the guidance provided by the CGIAR, which envisioned a smaller body that would carry out its work in new and innovative ways.

Several principles guided our deliberations on how the SC should be organized: 1) the SC should be able to provide the CGIAR System and the wider international

agricultural research community with sound advice and guidance on the full range of technical and policy issues they face; 2) the SC should be structured to be efficient and flexible, taking advantage of diverse sources of expertise in a timely and nimble fashion; and, 3) the structure of the SC should reflect its mission and operational requirements. These principles were considered in conjunction with the responsibilities of the SC in the areas of science relevance, science quality and science mobilization to generate the following proposals on size, structure and organization.

Size

We propose that the CGIAR SC should have six members and a Chair, for a total membership of seven. The proposed size of the SC is slightly smaller than that suggested by the CGIAR, but it is important to consider the suggested use of Standing and *ad hoc* Panels (see below) that extend beyond the Council's members to draw in additional, specialized expertise. Thus, in our view, smaller does not mean more limited in capacity.

A small SC will have the following advantages: 1) A small SC reinforces the concept that specialized analysis and advice will be drawn from a broader range of experts outside the CGIAR System; 2) Members of a small SC will need to work in a cooperative, cross-disciplinary fashion; 3) Each member should have greater opportunity to lead in a specific work area, and hence become better known to the CGIAR community; and, 4) A smaller group size increases the applicability of new communication tools and business practices, such as virtual meetings and video/audio conferences.

Profile of Members

A smaller body will also have a bearing on the profiles of the members. Each member will need to embody a number of desirable criteria as suggested by the CGIAR, but each member would not necessarily fulfill all of the categories. We believe that experience as a research manager, having to make judgments on competing priorities and objectives, would be an especially important characteristic of SC members. Beyond this, members should come from diverse disciplinary backgrounds (biological, physical and social sciences, economics, etc.), have a range of experience, especially relating to agricultural and natural resources research for international development, and embody other, diverse attributes reflecting the operational needs and global nature of the SC.

Standing Panels

We propose that four Standing Panels support the work of the SC in each of its four principal functional areas: 1) priorities and strategies (SPPS); 2) guarding quality of science, i.e., monitoring and evaluation (SPME); 3) impact assessment (SPIA); and, 4) helping to mobilizing global scientific capacity (SPMS). Each Standing Panel would be Chaired by an SC member (except for SPIA, as explained) and include two additional, external members. These three Standing Panel Chairs would be selected by the SC Chair from among the SC members, on the basis of their interest and expertise. External members of the Panel would be appointed by the SC in order to bring highly specialized knowledge and skills to the Standing Panel's mission area. The two external members of each panel would not be SC members, and would not be expected to follow or engage in the broader range of SC activity outside the specific remit of their panel. They would not be expected to attend all SC meetings. Moreover, the small size of the Standing Panels would allow even greater use of virtual interaction. In considering the number, it is important to recognize that the Standing Panels envisioned effectively increase the range of expertise contributing to SC's deliberations and decisions.

Ad hoc Panels

Beyond the SC's on-going tasks, it will occasionally need to marshal specialized expertise in order to address specific problems or issues. In such cases, it should convene *ad hoc* panels that function in a highly focused, time-limited manner. SC members not chairing standing panels could convene such *ad hoc* panels.

Ad hoc panels hold a number of advantages. They offer the opportunity to draw in leading experts in precisely the technical or policy issues where the CGIAR most needs them. Also, they open the CGIAR to contributions from scientists and other experts who might not be able to make the time commitment required of an SC or Standing Panel member. *Ad hoc* panels would help draw a greater number of people, from a broader range of disciplines and expertise, into the work of the CGIAR.

Regarding the chairing of such panels, we believe that in most cases, an outside expert would be best cast in this role. In rare instances, however, the SC might consider that one of its members could chair an *ad hoc* panel on a particular issue.

Other Roles

Three of the six regular members of the SC will be called upon to chair standing panels. This leaves three members who can operate at large with respect to the three standing panels. The WG considers it advantageous that some of the SC

members retain a greater degree a flexibility and leeway, allowing them to assume leadership on a variety of activities. For example, one SC member may need to take the lead in overseeing and planning SC processes associated with the Challenge Programs, in conjunction with the SC Secretariat. Another member could, if appropriate, play a special role in organizing the work of the SC in important areas, such as science policy. Other needs may arise over time where the SC will require concentrated efforts of one or more of its members.

Time requirements

The WG recognizes that a small SC raises a number of practical issues. For example, will a smaller group entail more work per individual member? In our view, this would not be the case. First, the use of Standing and *ad hoc* panels draws in specialized expertise to address areas that were in the past frequently addressed by TAC/iSC members themselves. Second, such panels can operate at times other than those of the SC meetings, allowing SC members to consider a panel's findings prior to their own meetings. These considerations suggest that meetings of the SC would be shorter than those of TAC/iSC. In addition, use of electronic communication and virtual meetings would further reduce the time required for the SC's meetings.

Recommendation 8: *The SC should be composed of six members and a Chair. It should carry out much of its work through four Standing Panels covering its four principal functional areas. Each Standing Panel should be chaired by an SC member (except for SPIA, as noted in Recommendation 5) and include two additional, external members. The Council should normally hold two short (2-3 day) meetings a year, supplemented with additional meetings held in virtual mode. These structural and organizational arrangements should be reviewed and modified as appropriate after three years.*

V. SELECTION PROCESS

Nominations

Nominations for Chair and members of the SC should be encouraged from leading scientific organizations worldwide, including, in particular, academies of science, national research councils, universities, Centers of excellence, and professional societies. However, sources of nominations should not be restricted to particular groups of institutions. Donors also have sources of information on individuals who could meet the requirements. Using an open, web-based approach would allow the net to be cast widely.

Selection Criteria

The selection of the SC Chair is crucial to the CGIAR. The challenge is perhaps greatest in choosing the first one. But given the importance of the position for the whole System, critical attention should be given to selection and recruitment every time the position is to be filled.

The WG suggests the selection criteria shown in Annex 4. The ability to influence key constituencies (scientific, donors, Centers, national research organizations and other partners, etc.) must be emphasized. This brings up the issue of how much the SC Chair must grasp the intricacies of the CGIAR, versus how much emphasis should be given to fresh perspectives. A key criterion that sets the Chair apart is that of communication skills. The SC Chair must be someone proficient at all kinds of public speaking, as he or she will be the science ambassador for the System in many instances. The Chair must be comfortable speaking out on complex issues in all kinds of forums.

Short-listing

As noted above, the Chair and Members of the SC should be appointed through an open, transparent and global selection process. Checks and balances in the selection process have to be observed, with greater emphasis on science. The WG suggests less emphasis on specific disciplinary skills or representational criteria, but more on research management experience, knowledge of evaluation and strategic planning approaches, or other aspects of SC's operation. However, this does not imply that disciplinary diversity is unimportant and should not be considered.

We understand that the SC Chair and members would be appointed by the CGIAR, upon recommendation by the ExCo. Traditionally the Cosponsors have served as a

Search and Selection Committee. However, we consider that this task should be conducted instead by an external Search Committee of renowned experts (for both Chair and members) who should recommend a short list of names to the ExCo. This would ensure the independence of the search and nomination effort from the CGIAR and relieve the Cosponsors of this intensive activity. The appointment would then be made by the CGIAR based on recommendation from ExCo.

Appointments

In our view both the Chair and members of the SC should be contracted by the same organization. The Chair should be appointed for an initial period of three years and can be extended for up to a total of five years. Members of the SC should be appointed for a period of two years and can be renewed up to six years without further extension. The conditions of appointment for Council Members, and for the Chair in particular, should be both attractive and flexible enough to ensure the recruitment of prominent and experienced persons. Furthermore, these employment conditions, as well as those governing the recruitment of the staff of the SC Secretariat, should be clearly specified by an agreement between the four cosponsoring organizations in close consultation with the ExCo.

Requiring full-time service could greatly reduce the number of strong candidates for the position of SC Chair. Allowing the Chair to maintain some connection to academia (or wherever his/her “home institution” is) could be a real advantage in terms of gaining credibility and visibility for the SC. It is also important to recognize that different leadership styles could mean a different approach to the full-time/part-time issue. For example, a part-time Chair might see the advantage of a more prominent role for the Executive Secretary or Director of the SC Secretariat than has sometimes been the case.

Recommendation 9: *The following norms should guide the selection of SC Chair and members:*

- a) *Nominations for the Chair and members of the SC should be open to all individuals and leading scientific organizations world-wide.*
- b) *The ExCo should appoint a search and nomination committee of renowned experts to evaluate the nominations and recommend to it a short list of candidates;*
- c) *The Chair should be appointed for an initial period of three years, which could be extended for up to a total of five years. Members should be appointed for a period of two years and membership could be renewed up to a total of six years.*
- d) *The contracts and appointment conditions of the Chair and Council members should be clearly specified in an agreement to be concluded by the cosponsoring organizations in consultation with the ExCo.*

VI. SECRETARIAT

The CGIAR decisions at AGM01 provide the following guidance to the WG on issues related to the TAC/iSC Secretariat:

CGIAR AGM 2001 Decision:

The SC and its Secretariat should have its operational costs covered by the Cosponsors and should be hosted by FAO. An agreement among cosponsors covering the terms of FAO's hosting of the SC Secretariat should be prepared and formalized. This agreement should cover, among others, an institutional arrangement permitting greater latitude to the SC in recruitment of staff and provision of services to SC members while satisfying any legal obligations of FAO as host organization.

We have interacted with FAO management and with the senior staff of iSC to ascertain their views about the Secretariat needs of the new SC. On the basis of these interactions, we make the following observations:

- a) FAO provides an excellent venue as the host of the SC Secretariat, especially in view of the technical expertise that can be mobilized in support of SC activities.
- b) FAO has legitimate concerns regarding the financial risks it assumes when it offers employment to individuals. A formal agreement with the FAO should alleviate these concerns. The CGIAR should make arrangements to eliminate FAO's financial risk from hosting the SC Secretariat.
- c) The SC should have full and unconditional authority in selecting the staff of the SC Secretariat. The agreement among the Cosponsors should ensure that staff appointment procedures that apply to the SC Secretariat guarantee this.

In addition to the administrative arrangements for the hosting of the SC Secretariat, we discussed the staffing needs of the new SC and make the following observations:

- a) The new SC requires the services of a strong Secretariat that should include high-level professional staff with excellent scientific background, writing skills and extensive experience in program management.
- b) The new SC should examine its staffing needs in the light of its work program and introduce the necessary changes in the composition of the Secretariat.
- c) The role of the Executive Secretary in guiding and managing the Secretariat is critical. He/She should have outstanding managerial skills and organizational ability. In order to attract and retain such an individual and in view of the additional responsibilities of the SC, we consider that the position of the chief operational officer of the new SC should be at the level

of a Director. The new person recruited for the post should then have the title Executive Director.

- d) The Executive Director should be working under the direction of the SC Chair. He/she should be responsible for the administration of the Secretariat and for the execution of the Council's decisions. He/She should establish a close working relationship with the SC Chair and members, the CGIAR Director and heads of the components of the System Office.

Recommendation 10: *The following principles should be adopted to ensure that the SC is supported by a strong Secretariat:*

- a) *The SC should have full and unconditional authority in selecting the staff of its Secretariat. An agreement among the Cosponsors should ensure that staff appointment procedures that apply to the SC Secretariat guarantee this.*
- b) *FAO provides an excellent venue as the host of the SC Secretariat. Yet, FAO has legitimate concerns regarding the financial risks it assumes when it employs staff. The CGIAR should make arrangements through a formal agreement among the Cosponsors to eliminate FAO's financial risk from hosting the SC Secretariat.*
- c) *The position of the chief operational officer of the new SC should be at the level of a Director. The new person recruited for the post should then have the title Executive Director.*

VII. TRANSITION ARRANGEMENTS

The iSC is operating as a transitional science advisory body for the CGIAR. Its composition, mode of operations, and work program reflect essentially a continuation of TAC. Transition questions relate mainly to the SC's composition during a transition period and continuity of ongoing programs.

We recommended earlier that the SC be initially constituted by 6 new members and a new Chair. While the new SC would initiate some new activities, several activities would be carryovers from TAC/iSC. Thus, there is a need to have a portion of the current iSC continue to work with the new SC over an initial transition period. Such an overlap would also be important from the standpoint of institutional memory in the short term, and could be phased out rapidly as the new SC takes shape and develops its mode of operation.

We propose that two members from the current iSC should be asked to participate in SC activities for one year. These two iSC members should be selected with a view towards understanding, on the part of the new members, the present challenges faced by the CGIAR and the SC and ensuring continuity. The process of identifying which members of the iSC should be invited to join the SC should benefit from consultations with the Cosponsors and other stakeholders to be carried out by the Search Committee to be established by the ExCo.

The search and appointment process for the Chair and members of the SC is expected to take a few months. The WG suggests that the CGIAR consider an extension of the terms of the current iSC members for at least 4 months.

Recommendation 11: *To ensure a smooth transition from iSC to SC, two members from the current iSC should be invited to join the SC, as members, for one year.*

VIII. CONCLUDING REMARKS

Sustainable development and poverty reduction are the ultimate objectives of the CGIAR system, and relevant, high-quality agricultural research is the instrument through which the CGIAR helps the global development partnership move towards those goals. The quality and relevance of research that the CGIAR system supports and undertakes are therefore critically important. So too, is its capacity to provide others with both leadership and partnership. These principles guided the Working Group as it explored the most appropriate structure, role, and responsibilities of an effective Science Council.

The report of the Working Group articulates these guiding principles for establishing a Science Council that seeks the highest possible level of quality and relevance in agricultural research. It has done so by articulating methods to both focus and broaden the Science Council mandate within the CGIAR system and the global arena. The Science Council's more extensive 'global' mandate will ensure its emergence as a key source of development-oriented agricultural research, providing guidance for the CGIAR community as well as enhancing the level of intellectual productivity on the global scene. The broader and more international dimension of the Science Council will supply the CGIAR with the faculty and ability to mobilize the global scientific establishment around the mission and goals of the CGIAR, thereby filling an important niche within the international agricultural research community.

We have taken into account both past experience and contemporary developments as we looked to the future. We have tried to be both visionary and pragmatic. The new Science Council therefore aims to draw upon the TAC tradition of intellectual independence, objectivity and integrity of scientific research while broadening the scope of scientific advice and adding vital and previously missing international connections to the CGIAR committee.

We are confident that the model we have proposed will be internationally respected, that it will sustain impeccable scientific standards within the CGIAR system, and that its influence will be extensive. We are honored to have been engaged in this phase of the process enabling the CGIAR to position itself to meet the challenges of the 21st century.

ANNEX 1

Examples of Alternative Review Models

Research Assessment Exercise (RAE), UK. This is a system of quality assurance for science used in the UK. It enables the higher education funding bodies to distribute public funds to research selectively on the basis of quality of research conducted in colleges and universities. It provides quality ratings for research across all disciplines. Panels use a standard scale to award a rating for each submission. Outcomes are published. The assessments are based on research papers (each researcher submits 4 papers published over the last five years), external income raised for research, memberships in learned groups, editorship of peer-reviewed journals. The main mechanism is a self assessment document completed by each department submitting to the RAE. All similar departments submit to the same so-called Unit of Assessment which are independent panels to assess the submissions. There are no appeals of score given.

Agricultural Research Performance Assessment Model (Embrapa, Brazil). This is a well-tested rigorous performance measurement and assessment system initially developed in 1966. Outputs of each research institute are defined and measured in terms of 28 output variables covering: (a) scientific production (e.g., articles published in refereed journals), (b) production of technical publications (e.g., technical circulars, research bulletins), (c) development of technologies, products and processes (e.g., plant varieties, agro-ecologic zoning), and (d) diffusion of technologies and "image" (e.g., training, seminars, videos, exhibits). The input side is covered through three factors: personnel, operational costs, capital expenditures. Output and input indices are computed for each variable and for each institute. The output variables are reduced to a single output measure per institute through a System of weighting. The model enables comparisons of output and efficiency across institutes and over time for the same institute. The assessment model is also connected organically to a generalized performance assessment System for projects and for research staff.

ANNEX 2

Overview of SC Activities

The WG considers that SC's activities are of three kinds: (1) recurring activities (those the SC is mandated to carry out on a continuing basis); (2) demand-driven activities (those the SC would carry out at the request of the CGIAR or ExCo or other stakeholders); and (3) *ad hoc* activities (activities that the SC initiates in response to needs or opportunities it perceives). In terms of the audience (clients) for SC's services, they fall into three groups:

1. services directly related to the CGIAR System;
2. services to the International Agricultural Research System;
3. services to policy makers and the general public globally.

Examples of SC activities falling under these headings (recognizing some overlaps) include the following:

SC Activities by Client Group

CGIAR	International Agricultural Research System	Policy Makers and the General Public
1. Active participation in priority setting and strategic planning for the CGIAR System.	1. Periodic assessments of global and regional trends, scientific challenges and research opportunities.	1. Independent, unbiased, merit-based and peer-reviewed reports on issues of global concern.
2. Analysis/critique of the Center's strategic plans and priorities.	2. Partnerships with leading scientific organizations;	2. Short authoritative and timely statements on current issues of interest to the general public.
3. Advice on science policy and broad strategic questions.	Mobilization of global S&T expertise; Inventory/ directory of experts.	
4. Periodic external review of activities/outputs and assessment of quality and relevance of science in each Center .		
5. System level impact assessment through external expert panels.		
6. Scientific advice on challenge program proposals; Effective and efficient peer review System for challenge programs.		

ANNEX 3

Draft Rules of Procedure for the CGIAR SC

Preamble

1. The Consultative Group on International Agricultural Research (CGIAR), at its 2001 Annual General Meeting (AGM) in Washington, D.C., decided to transform its Technical Advisory Committee (TAC) into an international Science Council (SC) to ensure that the quality and relevance of science practiced in the System meets world-class scientific standards and elevates the status of the CGIAR in the global scene.
2. The SC is an independent scientific advisory body of the CGIAR System, with full autonomy and authority to undertake the functions listed below.
3. The Chair and Members of the SC will serve in their personal capacity and not as representatives of governments or organizations.

Responsibilities

4. The primary responsibilities of the SC shall be as follows:
 - a) serve to ensure the relevance and enhance the quality of science in the CGIAR;
 - b) advise the CGIAR on strategic scientific issues relevant to the group's goal and mission;
 - c) help to mobilize and harness global science and technology expertise for influencing and benefiting international agricultural research agendas;
 - d) speak out to broad audiences on globally important science policy issues.
5. Specifically, the activities of the SC shall be as follows:
 - a) constitute panels of world-class experts for peer review/evaluation of the Centers' activities and the Challenge Programs and for conducting specific studies;
 - b) conduct periodic assessments of global and regional trends, scientific challenges and research opportunities and prepare the planning context at the System level;
 - c) provide a critical review of System-level strategic plans and the CGIAR project portfolio;
 - d) review Challenge Program proposals; mount peer review mechanisms, as necessary for review of the proposals;

- e) coordinate the CGIAR's science monitoring and evaluation (including oversight of the peer-review and other quality assurance mechanisms used by the Centers);
- f) coordinate System-level impact assessment activities;
- g) undertake independent and authoritative policy-oriented studies on issues of global concern to international agricultural development;
- h) issue short and timely statements on research and policy issues of interest to the general public;
- i) maintain, in partnership with leading Scientific organizations, a global inventory/directory of world-class experts in agricultural sciences and related areas.

Composition

6. The SC shall be composed as follows:
 - a) Chairperson of outstanding leadership quality and internationally recognized eminence
 - b) Six Members of recognized excellence and expertise in science and policy
 - c) For the first year of the operation of the SC, two members of the interim SC should participate as members.

Organization

7. To facilitate its work, the SC shall appoint the following standing panels: a) Standing Panel on Strategies and Priorities, b) Standing Panel on Monitoring and Evaluation, c) Standing Panel on Mobilizing Science, and d) Standing Panel on Impact Assessment.
8. Each of the four panels shall have two members and a Chair. The first three panels shall be Chaired by 3 members of the SC. The Standing Panel on Impact Assessment shall have 3 external members, including a Chair.
9. The SC may convene *ad hoc* panels for highly focused functions. Such panels will be convened to address specific issues and will be dissolved upon the completion of their tasks.

Appointments

10. The Chair and Members of the SC shall be appointed through an open, transparent and global selection process based on a clearly defined selection criteria.
11. Nominations for the Chair and Members of the SC can be made by individuals and leading scientific organizations world-wide, including in particular, Academies of Science, National Research councils, Universities, Centers of

Excellence and professional Societies. An open, web-based approach as well as a targeted search process should be adopted for receiving nominations.

12. The CGIAR Executive Council shall appoint a Search Committee of renowned experts to evaluate the nominations received and recommend to it a list of candidates. The appointment of the Chair and Members of the SC shall be made by the CGIAR on the basis of the recommendations of the Executive Council.
13. The Chair of the SC shall be appointed for a period of three years and can be extended up to a total term of five years.
14. Members of the SC shall be appointed for a period of 2 years and can be renewed up to six years without further extension.

The Chair

15. The Chair shall manage SC's work with the help of the SC Secretariat, including
 - a) Planning SC's meetings, developing the agenda, and organizing the participation of members, resource persons, etc.;
 - b) Chairing the meetings, encouraging participation by members and interaction with observers
 - c) Effectively and efficiently guiding the Council to decisions.
16. The Chair shall convey effectively to appropriate stakeholder audiences the independent advice and judgments of the SC on strategic issues, research priorities, and the quality of the scientific programs, including Challenge Programs, supported by the CGIAR.
17. The Chair shall maintain a close working relationship with the CGIAR Chair.

The Secretariat

18. The work of the SC shall be supported by a Secretariat, headed by an Executive Director.
19. The Secretariat must include high-level professional staff with strong scientific backgrounds and excellent writing, communication and project management skills.
20. The Secretariat shall be hosted by the FAO on the basis of a formal agreement among the co-sponsoring organizations.
21. The selection of the staff of the Secretariat shall be made by the SC.
22. The formalities of appointment of Secretariat staff shall be made in accordance with the agreement between the cosponsoring organizations specifying the recruitment of staff and provision of services to SC Members.

The Executive Director

23. The Executive Director shall report to the SC Chair and maintain close working relationship with the SC members, CGIAR Director, and other components of the System Office.
24. The Executive Director shall be responsible for leading the Secretariat and for the execution of the Council's decisions.
25. The Executive Director shall help build strong synergies between CGIAR and FAO.

Meetings

26. The Council shall meet in regular session at least twice a year and as frequently as necessary in regular mode or through virtual mode.
27. The venue and dates of the meeting of the SC shall be determined by the SC Chair after consultation with Members of the Council.
28. The agenda for the regular meeting shall be worked out by the Chair in close collaboration with the Executive Director and distributed to Members at least one month prior to the meeting.
29. Four members of the SC and the Chair shall constitute a quorum (in the first year, the quorum shall be five members plus the Chair). In the event that the SC Chair is not able to Chair the meeting, he/she shall designate a member to act on his behalf.
30. The Executive Director of the SC shall serve as Secretary of the SC meetings and shall be responsible for drafting the minutes of the meeting and sending them to council members within two weeks for comments and final approval by the Chair.
31. The standing panels shall meet as necessary, either in regular or virtual mode.
32. The meetings of the SC and those of its standing panels shall be open to CGIAR members as observers. However, the SC Chair/panel chair has the right to close a session if the Council/panel needs to discuss an issue in camera. The Council shall develop specific rules for observers' participation in virtual meetings.

ANNEX 4

Suggested Criteria for the Selection of a CGIAR Science Council Chair

Scientific expertise and experience

- Eminence in a field of biological, physical or social science
- International recognition of research achievements
- Experience with a cross-disciplinary approach to scientific research
- A good understanding of policy dimensions in development, including relationships between developing and developed countries and institutions therein
- Broad knowledge of agriculture (crops and livestock), natural resource management, fisheries and forestry in the context of sustainable development, poverty reduction, and the global environment
- An understanding of the CGIAR System

Leadership and management attributes

- A visionary leader, with global perspective and outstanding communication skills
- The ability to think strategically and analyze complex issues
- Management experience, particularly in directing high level scientific talent and setting priorities
- Capacity to lead the SC and provide guidance to its secretariat

ANNEX 5

Composition and Itinerary of the WGSC

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The WGSC held its first meeting on May 17-18, 2002 at FAO (Rome). Representatives of the CGIAR Secretariat provided briefings on the CGIAR System, Technical Advisory Committee, pillars of the CGIAR reform program, the CGIAR decision on the establishment of a Science Council, and the highlights of the report of the Task Force on Science Council. The WG sought clarification on some aspects of its terms of reference, and proceeded to discuss key issues pertinent to its tasks.

While in Rome, the WG visited with the Assistant Directors General (ADGs) and other officials of the following departments of FAO: Sustainable Development, Agriculture, Forestry, Fisheries, Economic and Social, and Technical Cooperation. Separate meetings were also held with the Chair and a member of the iSC, and with the staff of the iSC Secretariat.

The Chair also spent some time in Washington (July 22-23) for the preparation of the second draft of the Working Group's report. He then made a second visit to FAO on July 30 and had further discussions with officials of the SDD and the iSC Secretariat.

The Working Group held a second and last face-to-face meeting in London on Aug. 1-2. It discussed the remaining issues and prepared the third draft of the report.

ANNEX 6

Glossary of Acronyms

AGM	Annual General Meeting
CBC	Committee of Center Board Chairs
CCER	Center Commissioned External Review
CDC	Center Directors Committee
CP	Challenge Program
ExCo	Executive Council
FAO	Food and Agriculture Organization
IAEG	Impact Assessment and Evaluation Group
iSC	Interim Science Council
SC	Science Council
SPIA	Standing Panel on Impact Assessment
SPME	Standing Panel on Monitoring and Evaluation
SPPS	Standing Panel on Priorities and Strategies
TAC	Technical Advisory Committee
WGSC	Working Group on Science Council