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CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

TECHNICAL ADVISORY COMMITTEE

**DRAFT REPORT OF THE
SEVENTIETH MEETING OF THE TECHNICAL ADVISORY COMMITTEE**

TAC SECRETARIAT

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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SEVENTIETH MEETING OF THE TECHNICAL ADVISORY COMMITTEE
TO THE
CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH
(CIAT, Cali, Colombia, 30 July - 4 August 1996)

REPORT OF THE MEETING

SUMMARY

Opening Session

The TAC Chair, Dr. Donald Winkelmann, opened the meeting and welcomed the 10 TAC Members present and a consultant to TAC, Dr. Richard Harwood, the representative of FAO, Dr. Stein Bie, the Chair of the Centre Directors' Committee, Dr. Lukas Brader, the Chair of the Centre Board Chairs' Committee, Dr. Wanda Collins; a number of Centre representatives, and Observers; and staff of the CGIAR and TAC Secretariats. Apologies were received from Dr. Keiji Kainuma, TAC Member, and from UNEP. CIAT's Director General, Dr. Grant Scobie, welcomed participants on behalf of the Centre hosting the meeting.

The report of TAC 69 was adopted without amendments. In adopting the agenda, the TAC Chair confirmed that the open sessions of TAC 70 would conclude at mid-day on Friday 2 August, after which the meeting would be closed.

The Executive Secretary of the CGIAR, Mr. Alexander von der Osten, reported on the events at MTM'96 in Jakarta, and on major developments in the CGIAR since then. He particularly focused his attention on the proposals adopted by the Group for new financing arrangements. TAC discussed the implications of these proposals for its work. While acknowledging the new financing arrangements, TAC recognized the importance of ensuring the continuation of high priority strategic research.

CGIAR Priorities and Strategies and 1998-2000 Medium-Term Resource Allocation Process

The TAC Chair reported on the outcome of MTM'96 with respect to the regional fora, the discussions on TAC's report on CGIAR priorities and strategies, and on the outcome of the Group's discussions of the reports on roots and tubers, policy and management, institution strengthening and service, postharvest research, and soil and water aspects of natural resources management research in the CGIAR. The Chair and the Members present at the meeting provided an overview of the comments made. In general, TAC's work had been received positively and given broad endorsement.

TAC also discussed draft guidelines for the development of 1998-2000 medium-term plans as had been prepared by the CGIAR Secretariat in consultation with the TAC Chair and the TAC Secretariat. Reactions on the draft proposal had also already been received from Centre Directors who were in general favourable to the proposed guidelines. TAC also discussed these draft guidelines and provided a number of comments. These guidelines will be finalized by the CGIAR Secretariat and be sent to Centre Directors and members of the CGIAR as soon as possible.

TAC revisited parts of the analytical framework for the review of CGIAR priorities and strategies, in particular, the general principles for a reclassification of CGIAR activities. The Committee will further consider this theme at TAC 71. The TAC Chair presented additional quantitative analyses on poverty considerations in the review of CGIAR priorities as suggested by the Group at MTM'96. Finally, TAC discussed the nature and timing of interactions between TAC and the centres in the preparation of MTP proposals and to gather the information needed to assess priorities for commodities and sectors. A draft checklist was prepared for the TAC working parties which will visit the centres. This checklist will be finalized by the TAC Secretariat and be provided to the centres and to the members of the working parties.

1997 Research Agenda

The TAC Chair informed the Committee about the outcome of MTM'96 with respect to TAC's recommendations on the 1997 CGIAR research agenda which had been broadly endorsed by the Group. The Group had noted, however, that the funding for 1997 would be somewhat below the level recommended by TAC. While the Group had indicated that, up to a certain level, shortfalls would be met by proportional cuts in the centre budgets, TAC would carefully consider the implications of these funding cuts for CGIAR priorities. A subset of TAC will meet late September to review revised centre proposals.

TAC also considered the responses from CIP, ICRISAT, IITA and ISNAR with respect to questions raised by the Committee at TAC 69. In general, the responses received were considered satisfactory and the centres will be informed about the outcome of the Committee's deliberations. The Committee endorsed several proposals for shifts proposed in May in conjunction with MTM of centre activities from the complementary programme into the agreed research agenda. TAC examined the project portfolio and format of CGIAR Centres that was now being made available through the efforts of the CGIAR Secretariat. Comments were made with respect to the further improvements of this project format and of its role in MTP preparations.

Systemwide Initiatives and Programmes

TAC discussed a number of generic issues with respect to the organization, function and evaluation of Systemwide initiatives and programmes. Particular attention was drawn to take note of the transition phase from an initiative to a programme. The Committee also considered a proposal for a coastal environment initiative submitted by ICLARM.

Future Reviews

TAC considered the progress report on its study on CGIAR priorities for marginal lands research which was presented by the study chair, Dr. Mike Nelson (New Zealand). The Committee discussed the organization of phase two of this study and clarified its scope and expected output. The importance to this review of a related effort on the ecoregional approach to research sponsored by the centres was noted. TAC discussed the progress in the organization and conduct of the IPGRI, ISNAR and ICRISAT external reviews. The timing of the external review of IFPRI was postponed pending the appointment of a panel chair. The Committee discussed the planning of the study of CGIAR commitments in Latin America and sought potential chairs for the external reviews of IFPRI, IRRI, CIFOR and CIMMYT. Finally the Committee discussed the role of internally-commissioned centre reviews in the new external review process.

King Baudouin Award

The Committee considered centre proposals for the King Baudouin Award in the light of the criteria established at TAC 68. Four submissions had been received. TAC selected the winning proposal which will be announced at ICW96. A commentary was prepared on the selected proposal.

Future Meetings

TAC reconfirmed and/or amended dates and venues for the following meetings:

TAC 71:	25-30 November 1996	ILRI, Addis Ababa, Ethiopia
TAC 72:	17-26 March 1997	FAO, Rome, Italy
TAC 73:	14-19 July 1997	ICRISAT, Hyderabad, India
TAC 74:	24-29 November 1997	CIMMYT, Mexico City, Mexico
TAC 75:	24-28 March 1998	FAO, Rome, Italy

Strategic Issues

TAC discussed a number of strategic issues which included: the future role of TAC in the light of deliberations at MTM'96; mechanisms for incorporating other sources of supply, i.e. the other 96%; criteria for assessing marginal lands; TAC's role in various measurement challenges such as degradation and poverty; and identifying the proposed elements of the external environment to the CGIAR and developing a process for monitoring them.

Other Business

The Committee considered the activities of the Impact Assessment and Evaluation Group. Sir Ralph Riley reported on a visit of research sites of the alternatives to slash and burn programme in Sumatra, as well as on his participation in the CABI Board meeting. Sir Ralph also briefed the Committee on a meeting of the Candidate Information Service

(CIS) which took place in Rome in July. Dr. Guido Gryseels reported on his participation as a resource person in the first meeting of the Technical Advisory Committee of the Global Water Partnership in Copenhagen. TAC also considered a report from FAO on the outcome of the Leipzig Conference on Plant Genetic Resources.

During the course of the meeting, TAC interacted with Dr. Jose Vicente Mogollon, Minister for the Environment of Colombia, who briefed the Committee on environmental concerns in the country. TAC Members and observers also took the opportunity of their visit to CIAT to become familiar with the facilities and work of the Centre.

RECORD OF THE PROCEEDINGS

Opening Session (Agenda Item 1)

1. The TAC Chair, Dr. Donald Winkelmann, opened the meeting and welcomed the 10 TAC Members present and the Consultant, Dr. Richard Harwood, the representative of FAO, Dr. Stein Bie, the Chair of the Centre Directors' Committee, Dr. Lukas Brader, the Chair of the Centre Board Chairs' Committee, Dr. Wanda Collins, observers, the Executive Secretary of the CGIAR, Mr. Alexander von der Osten, and staff of the CGIAR and TAC Secretariats. The Director General of CIAT, Dr. Grant Scobie, extended a word of welcome to participants on behalf of the Centre which hosted the meeting. Apologies had been received from Dr. Keiji Kainuma, a TAC Member, and from Dr. Carlos Zurberti, the representative of UNEP.

2. The report of TAC 69 was adopted without amendments. Matters arising from TAC 69 referred to the discussion on the 1997 Programme and Budget Proposals of ISNAR, ICRISAT and CIAT which would be dealt with under Item 2. The provisional agenda for TAC 70 was adopted with the addition of several items under other business.

3. Mr. Alexander von der Osten, Executive Secretary of the CGIAR, reported on the developments in the CGIAR since MTM'96. At the Jakarta meeting, the first signs of changes and improvement in partnership were visible. Coherence and unity among members helped to manage the funding issues and the reformed financing arrangements, although not yet perfect, were showing promise. At the beginning of MTM'96, there was a shortfall of approximately US\$ 20 million to support the 1996 agenda which was approved at US\$ 300 million. The System level gap for the Research Agenda was unevenly distributed among centres and a portion of the World Bank's matching contribution was in jeopardy due to this shortfall. To close the funding gap and secure the World Bank's matching contribution, two measures were used. First, reclassification of programmes currently outside the agreed agenda through a process of consultation among Centre Directors, TAC, the Finance Committee, and the CGIAR Secretariat. This process brought US\$ 15 million into the agreed agenda for 1996, assuring the World Bank's matching funds in full. Second, during the course of MTM'96, members mobilized US\$ 5 million for centres facing the most severe shortfall.

4. The new financing arrangements would allow centres to adopt flexible planning, provide incentives to expand the agreed agenda, and streamline the decision-making processes. The World Bank support would shift from potential gap filling to reinforcing membership support. All these measures are intended to remove the remaining impediments under the current financing arrangements yet increase transparency and accountability of the CGIAR Research Agenda. The letter from the Chairman of the CGIAR of 28 June 1996, distributed to the Group and TAC Members, further elaborated on the new financing mechanisms.

5. Under the modified financing arrangements, the World Bank will continue to support 15% of the total Research Agenda, but a large part (12%-13%) will be allocated to centres across the five major CGIAR undertakings. The remaining 2%-3% would go

towards a competitive grant scheme and a reserve fund. The World Bank's disbursement will be in two equal tranches, the second one being subject to review by the Finance Committee at the MTM. To facilitate the change, 1997 is considered as a transitional year. TAC's role in certifying the programme content of the centre financing plans was emphasized.

6. On the 1997 Research Agenda, MTM'96 endorsed a budget of US\$ 300 million and the outlook as at August 1996 had not changed. This is a notional target, not an envelope. The establishment of the project portfolio and centres' project matrix was appreciated. The Group also endorsed the initiation of the 1998-2000 CGIAR priorities and strategies recognizing that the document was a milestone in the effort to move towards a more consultative and transparent process.

7. The future of TAC in bringing coherence to the System and TAC's prominent position as the System's source of independent, strategic guidance was reaffirmed. TAC was urged to emphasize its strategic responsibilities, and to delegate its less strategic duties to others functioning under TAC's guidance.

8. In the context of the global research system, and in preparation for a Global Forum, the Group endorsed proposals from a preparatory meeting held in Jakarta for the Global Forum on the NARS-CGIAR Partnership Initiatives, NGOs and Private Sector Committees.

9. As part of the preparations for ICW'96, the tasks ahead include a NARS consultation in August in Rome and a meeting in September in Tashkent to expound on discussions regarding Eastern Europe and the former Soviet Union with the view to developing modalities for cooperation.

10. ICW'96 would be held from 28 October to 2 November 1996 in Washington D.C. It will feature the celebration of the 25th anniversary of the CGIAR. The other components of ICW will be the Centres Forum, Global Forum and the CGIAR Business Meeting.

11. The System Review will be conducted during 1997. The review is to be commissioned during ICW'96. The Oversight Committee has been requested to assist with arrangements. The review would be forward-looking, focusing on CGIAR and global contacts, and conducted by a small but high-level panel.

12. Mr. von der Osten concluded that MTM'96 was a success. It confirmed that the CGIAR is open, partnership has been strengthened, and ownership of the System reassured.

13. The TAC Chair then opened the floor for discussion. Various issues such as membership of CGIAR from the south, funding arrangements, priorities and strategies, the future role of TAC - including certification of financing plans by TAC - were discussed.

14. It was reported that there are 16 members of the CGIAR from the south with relative contribution ranging between 1% and 2%, which has helped to prevent funds from sliding. Whereas it was accepted that constraints exist while the new financing arrangement is being introduced, attention has been drawn to the funding shortfall crisis. It was further noted that the present funding arrangements favour the short-term horizon as opposed to the past when the emphasis was towards enhancing upstream and long-term research. It was also observed that although the funding crisis affects only some centres, the old ones are suffering most, resulting in under-utilization of capacity.

15. The role of TAC in maintaining coherence in the System remains crucial as TAC should be the cushion of congruency. Besides, recognizing that the System exists because there are relative priorities becomes imperative in the priority-setting process. At this juncture, FAO, as a cosponsor, reaffirmed its support to the CGIAR System and went further to reiterate that the role of TAC is more critical than ever. If TAC's role were diminished, it would affect the integrity of the System.

CGIAR Priorities and Strategies and 1998-2000 Resource Allocation Process (Agenda Item 2)

16. The item was introduced by the TAC Chair who recalled the reactions of the Group at MTM'96 to TAC's draft report on CGIAR priorities and strategies. This supplemented the information already provided to TAC by the Executive Secretary of the CGIAR in the opening session (see Agenda Item 1). In general, the Group had reacted favourably to TAC's draft report, but had asked TAC to reconsider its recommendations with respect to a reduction of support to strengthening national programmes. According to the Group, there should not be a reduction in the CGIAR's work in this area nor should there be a reduction in policy research. The Group had also reacted very favourably to TAC's strategic studies and had found them timely, of high quality and useful. The TAC Chair presented the results of some additional quantitative analyses undertaken by the Secretariat that looked at the effects of reduced economic growth, of different Gini coefficients, and of correlations between Gini coefficients and growth rates. There appeared to be little impact of these changing parameters on the overall outcome of the analysis.

17. At the request of the TAC Chair, Dr. Henzell introduced the discussion on classification of CGIAR activities. Dr. Henzell presented the basic concept underlying the current activity classification and how they related to CGIAR objectives, outputs, impact, user adaptation and adoption, inputs and resources. There was a need to make some improvements in the current activity classification as already pointed out in TAC's draft report on CGIAR priorities and strategies. Further inputs were required, however, from the centres and outside experts before TAC could make recommendations on a new activity classification scheme. The German representative informed TAC that the German Government would be willing to provide expertise to help TAC in a reclassification exercise. The TAC Chair expressed his gratitude for this generous offer and voiced the hope that a workshop could be organized in due course to discuss the theme.

18. Mr. Ravi Tadvalkar from the CGIAR Secretariat subsequently introduced the draft guidelines for the preparation of the 1998-2000 medium-term plans. An early draft of these guidelines had already been shared with Centre Directors who had provided valuable comments. In its discussion, TAC Members particularly emphasized important aspects with respect to the programme review criteria. It was noted that the CGIAR activities had to be research oriented, to be international public goods, and to be important for the CGIAR goals of poverty alleviation and natural resources management for sustainable food security. There was a need for centre proposals to be consistent with CGIAR priorities and with the project portfolio guidelines. The draft guidelines were discussed in detail by a working group which was chaired by Dr. Henzell. A number of comments were made on the draft which were incorporated, and a draft was subsequently finalized for distribution to Centre Directors and members of the Group.

19. In order to facilitate the preparation of medium-term proposals as well as of the subsequent discussions with TAC, it was reaffirmed that there should be a close interaction between TAC and the centres during the preparation of these proposals. A working party, consisting of two TAC Members and a staff member from each of the Secretariats, would visit each centre to become familiar with the draft MTP proposal prior to its submission to TAC. The objectives would be twofold: to assess changes in science and in alternative sources of supply and to ensure that proposals included discussions of these themes and selected others, e.g., gender-oriented technologies, in the planning documents.

20. Dr. Guido Gryseels of the TAC Secretariat introduced a draft paper entitled *A Briefing Note for Preliminary Interactions with Centres on the 1998-2000 Programme Plans*. This note would serve as an addendum to the guidelines and provided information on the objectives of a visit by the working party, the organization of centre interaction and a checklist for the centre proposals on how TAC Members were to compile information on parameters important for finalizing TAC's recommendations on priorities. The Committee provided comments on the draft as prepared by the Secretariat which was subsequently finalized. The Secretariat was asked to contact Centre Directors with respect to the timing of visits and it was agreed that the schedule for these visits should be drawn up as soon as possible by the TAC Secretariat in close collaboration with the CGIAR Secretariat and the Centre Directors.

21. In closing the discussion, the TAC Chair expressed his gratitude to the Secretariats and noted that the theme of priority setting will also be on the agenda of TAC 71.

The 1997 CGIAR Research Agenda (Agenda Item 3)

22. The discussion was introduced by the TAC Chair who recalled that at TAC 69 in March 1996, the Committee had made recommendations on centre programmes requiring 1997 funding of US\$ 312 million. For a number of centre programmes, TAC's recommendation was conditional upon receipt of additional information with respect to a number of issues it had raised.

23. CIP had been requested to provide information on the generic issues of the proposed Systemwide Programme on Sustainable Mountain Agriculture Development (SPSMAD), on how they related to activities convened by the participating centres, and why the costs could not be absorbed by centre budgets. ICRISAT was asked for a workplan on the Systemwide Rice/Wheat Programme and on the Systemwide Initiative for Desert Margins. IITA was requested to provide a comprehensive proposal covering the work of the three consortia and of the Systemwide Programme for the Humid and Subhumid Tropics of Sub-Saharan Africa. Finally, ISNAR was asked to provide a more developed programmatic rationale for the proposed regionalisation thrust.

24. All of these centres had responded to the issues raised by TAC. Their responses were reviewed by a working group of TAC Members chaired by Dr. Ted Henzell. Dr. Henzell reported that the working group had found all responses to be satisfactory and that the Committee's concerns had been adequately met. In the ensuing discussion, members of the Committee supported this view. In his concluding comments, the TAC Chair, therefore, summarized the recommendation of the working group to consider the responses from CIP, IITA and ISNAR as adequate and not requiring further follow up.

25. ICRISAT had also submitted a new proposal for a Systemwide Programme on Desert Margins. In discussing this proposal, TAC made the following comments:

- TAC was satisfied with the progress report on the activities and workplan for 1996 and 1997.
- TAC will look at a proposal for the Systemwide programme for desert margins in the context of the medium-term plans in March 1997.
- The funds requested for 1997 amount to US\$ 5 million but at this stage TAC is not in a position to make any recommendation with respect to the programme and budget requested given the implications for the years beyond. The Committee therefore requests that ICRISAT submit a proposal on how the 1997 programme and budget can be cut to a minimum as a "holding package" for the programme, i.e., what is the minimum required to initiate the programme during 1997.
- TAC noted an anomaly in that the Committee has recommended funding for the "initiative" which is defined as the start-up or design phase of an activity. Once this design stage is completed, funds are no longer allocated to the initiative and subsequent activities become a "programme" which has to be funded from the centres' core resources. Within this concept, the US\$ 500,000 for coordination of the DMI should have been included as part of the programme costs. Now that the initiative has been completed and has developed into a programme, TAC will no longer endorse separate supplementary funds to cover the costs of initiating the work.

26. The TAC Chair informed TAC Members that at MTM'96 the Group had endorsed the substance of TAC's recommendations on 1997 programmes and budgets.

Some concern had been expressed about the implications of these recommendations for allocation of resources by activity which appeared to be contradictory to TAC's stance on CGIAR priorities. However, these deviations were entirely due to the new procedures being followed in estimating resource allocation by activity and were related to mechanical factors rather than changes in spirit. The CGIAR Chair had also recommended that the TAC Chair urgently consider acceleration of the transfer of activities previously considered as non-agenda items into the agreed research agenda. The TAC Chair, together with the TAC Members present at MTM'96, had therefore considered for transfer non-agenda items in the portfolios of IITA, IPGRI, CIAT, CIMMYT, IFPRI and ICRISAT. The sub-committee of TAC had made recommendations for transfers totalling US\$ 16 million. These transfers would be valid for both 1996 and 1997.

27. The TAC Chair also briefed the members on new financing arrangements in the CGIAR, whereby the entrepreneurial spirit of Centre Directors would be encouraged in order to enhance fund raising. The CGIAR Chair had requested TAC to review the financing plans of each of the centres and to study the implications of funding availability for CGIAR priorities and strategies. As it was practically not feasible to organize a TAC meeting during the month of September as requested by the CGIAR Chair, the TAC Members endorsed a proposal by the TAC Chair to delegate this responsibility to a sub-committee of TAC that would be composed of the chairs of the three standing committees. This sub-committee would meet with the TAC Chair and staff of the TAC and CGIAR Secretariats in Rome on 22-24 September. Recommendations from this meeting would subsequently be submitted to the Finance Committee of the Group.

28. Mr. Ravi Tadvalkar of the CGIAR Secretariat painted a general picture of the new project format, introduced a synthesis document prepared by the CGIAR Secretariat, and provided an overview of all of the centres' projects.

Systemwide Initiatives and Programme (Agenda Item 4)

29. The TAC Chair requested Dr. Ted Henzell, Chair of the Standing Committee on Systemwide Activities to introduce this agenda item. Dr. Henzell began by stating that the terminology had evolved considerably over time, and that at TAC 66 a note was prepared to help clarify the use of the terms "Systemwide", "initiative" and "programme". "Systemwide" was defined as referring to research involving more than one centre or research-related activities on a regional or global basis, or some combination thereof. It was recognized that such activities would generally involve organizations outside the CGIAR, for example, partnership with NARS for the implementation of the ecoregional approach. "Initiative" was defined as the start-up or design phase of an activity, and "programme" as work that was under way.

30. It was recalled that in line with the recommendations presented in the expansion report in 1990, TAC proposed that, in future, the CGIAR System should undertake two separate but related research activities: global - concentrating on strategic research on an agreed selection of commodities and subjects, and ecoregional - covering strategic and applied research on natural resources conservation and management, production systems

and "location specific" aspects of commodity improvement. While it was felt at MTM'92 that the Group had a long way to go before reaching an agreement on some of the issues, "the ecoregional concept was overwhelmingly endorsed, with both TAC and CGIAR Centres being encouraged to move from concepts to operations".

31. The Committee was informed that there were three sets of issues with respect to Systemwide activities which needed to be noted and discussed. These were: *the revised guidelines for funding; the review process; and the new Systemwide activities.*

32. *The revised guidelines:* There had been some inconsistency in deciding which Systemwide activities costs should be recommended for separate funding and which should be met from centre budgets. At TAC 69, the Committee identified four purposes for such specific allocation: (i) to assist with the design costs of new Systemwide programmes; (ii) to help defray the organising costs of convening centres in carrying out Systemwide programmes; (iii) to meet the cost of technical infrastructure that is provided more cost-effectively by Systemwide action rather than by each centre making its own separate arrangements; and (iv) to provide short-term initial support, while introducing new areas of research and research approaches to the System. The question was for how long the support should continue?

33. *The review process:* TAC had proposed the idea of having a Standing Committee on Systemwide Activities to look at the implementation of the ecoregional approach in the context of the review undertaken by the Centre Directors, and for strengthening research. The Standing Committee would comprise of TAC members, Centre Directors, NARS and experts on multi-institutional programmes. The role of the Standing Committee would be: to record the experience of the design phase to produce guidance for new ones; and to assess what value was coming out and report to the Group as a formal exercise in 1998/99. The proposal was endorsed at the MTM'96.

34. Dr. Henzell informed TAC that the Centre Directors had hired Mike Collinson as a consultant to review the experience with respect to the implementation of the ecoregional approach. Based on electronic exchanges of views of those involved in preparing for a workshop on the ecoregional approach organized by the Centre Directors in August 1996, it transpired that many people still find it difficult to understand and operationalise the ecoregional concept. Implementation has been impeded by uncertainty as to whether the concept is a new way of carrying out the existing research agenda or a new research agenda with new money. A preliminary assessment is that the concept of the ecoregional approach is being supported by many people, but there are some difficulties with implementation.

35. *New Systemwide activities:* The issue of new Systemwide activities was discussed at MTM'96. TAC had proposed that not too many more Systemwide ecoregional initiatives should be encouraged until the Committee came to grips with what was going on and until the Committee found out more about future needs for strengthening research. It might be worth looking at new areas of opportunities which have been overlooked, and whether these should be done and how they need to be discussed by TAC.

36. In the ensuing discussion queries were made about: the extent to which funds be earmarked for activities under the Systemwide programmes, and what criteria should be used to say yes or no; what were the compelling reasons for new Systemwide ecoregional initiatives prior to completing the proposed review before 1999? It was felt that TAC would take it on a case by case basis, although it would be unlikely that there will be new Systemwide ecoregional initiatives for the agricultural sector, but new initiatives could be expected in the forestry and fisheries sectors. The main criteria seemed to be the extent of value added and the synergies from operating in a Systemwide mode, and that Systemwide initiatives could be supported for up to two years, but after some time TAC could take a look at the complexity and recommend entertaining another design phase with special justification, but with perhaps a total limit of US\$ 1 million for the design phases.

37. It was queried as to why Centres should come together for such little money. If members did not give high priority to Systemwide activities, then it is going to be difficult. It was pointed out that one or two donors would always be interested in designing new activities, but for organising or coordinating, meeting the cost of technical infrastructure, and seeding new research, these would not happen unless funding were made available. It was suggested that there was a need for a separate mechanism for funding design activities and a separate one for the other three.

Future Reviews (Agenda Item 5)

38. Sir Ralph Riley, Chair of TAC's Standing Committee for External Reviews, reported on: (a) the preparation for the external reviews of centres: ICRISAT, IPGRI, ISNAR, IFPRI, IRRI, CIMMYT, CIFOR; (b) stripe study of cereals; (c) ASARECA-SPAAR study of the CGIAR technology development and delivery systems in eastern and central Africa; (d) study of CGIAR commitments in Latin America and the Caribbean; and (e) study of the CGIAR research priorities for marginal lands.

39. TAC also discussed ICLARM's progress report on developing a Systemwide Initiative for Coastal Environments. The Committee recalled its comments made at TAC 69 and the tentative allocation of US\$ 50,000 for the organization of a workshop. TAC encourages ICLARM to go ahead and finalize the proposal so that the design phase could be completed.

External reviews of centres

40. The Fourth External Review of ICRISAT was being chaired by Dr. Ronnie Coffman (USA), Associate Dean for Research, Cornell University. The initial phase of the Review will be conducted in September 1996 to coincide with ICRISAT's Board meeting in Hyderabad, followed by field visits to locations in West Africa. The main phase of the Review will be conducted in December 1996. Sir Ralph informed the Committee that the Director General of ICRISAT had requested that the operating costs of the review be pared down and the savings be used to support programme activities. This was because funds being used for the External Review were competing against funds that could be used for programme activities because of the funding shortfall in 1996.

While noting that funds allocated for external reviews were under the direct control of centre management, TAC considered that certain standards must be met and such support is not fungible.

41. The Fourth External Review of IPGRI was being chaired by Dr. Calvin Qualset (USA), Director, Genetic Resources Conservation Programme, University of California, Davis. The initial phase of the Review will be conducted in September 1996 to coincide with the Board meeting in Cotonou, Benin, followed by a visit to IPGRI's Headquarters in Rome. The main phase will be conducted in February 1997, which will be preceded by visits to INIBAP, Montpellier, and to locations in Latin America and Asia.

42. The Third External Review of ISNAR was being chaired by Dr. Samuel Paul (India), Chairman, Public Affairs Centre, Bangalore. The initial phase of the Review will be conducted in September 1996 to coincide with the internal programme review at ISNAR. The main phase will be conducted in December 1996, which will be preceded by visits to Asia and the WANA region.

43. The Chair of the IFPRI Review remained to be determined. At TAC 68, the Committee proposed that the next External Reviews of IRRI, CIMMYT and CIFOR be conducted during 1997. The Committee sought potential chairs for the External Reviews of IFPRI, IRRI, CIFOR and CIMMYT. The exact timing of these Reviews were under discussion with the Centre concerned. Sir Ralph informed the Committee that the Director General of CIMMYT had requested that the Review be delayed until 1998 or later because the Review in 1997 would coincide with several major changes that were under way or proposed. TAC did not consider that to be a convincing argument to delay the Review.

Stripe study of cereals

44. It was recalled that the Committee had deferred the stripe study of cereals as some of the earlier concerns for the study were no longer relevant. TAC agreed to take an integrated view of the need and the scope of the proposed study after the completion of the External Reviews of IRRI and CIMMYT scheduled to be conducted during 1997.

ASARECA-SPAAR study of the CGIAR technology development and delivery systems in eastern and central Africa

45. Professor Mukiibi, Chairman of the Committee of Directors of ASARECA had informed TAC that ASARECA and SPAAR had planned to undertake this study in the last quarter of 1996. Professor Mukiibi had requested that a desk study be carried out by the TAC Secretariat on the programmes and projects undertaken by CGIAR Centres in the region over the past decade. The desk study should include levels of spending by the different CGIAR centres in ten countries in the region, numbers of full-time and part-time staff, previous studies undertaken on the activities of the CGIAR centres in the region as part of wider studies including external reviews, stripe reviews, strategic studies, mid-term plans and impact assessments. While the Standing Committee and TAC welcomed the proposed study, the Committee decided that the external reviews and strategic studies planned by TAC left insufficient resources to permit the TAC Secretariat to undertake the

requested desk study at this time. If, however, a consultant were to be hired by ASARECA-SPAAR, then the TAC Secretariat would be available to guide the consultant regarding the sources of information.

Study of CGIAR commitments in Latin America and the Caribbean

46. At TAC 69, the Committee requested the Standing Committee to put forward a study proposal for discussion at TAC 70. In introducing the study proposal, Sir Ralph pointed out that TAC had to decide on the scope of the study based on the three options highlighted: (I) a focus on assessing institutional organisational efficiency of CGIAR activities similar to the study of the CGIAR commitments in West Africa; (ii) a focus on assessing research strategies and impact; (iii) a focus on assessing operational strategies including relationships among CGIAR institutions working in the region, and opportunities for increasing complementarities on regional agricultural research between CGIAR centres and governmental, non-governmental and private sector institutions. The Standing Committee considered all the three options to be equally important and proposed that they be incorporated in the revised terms of reference which were endorsed by the Committee, together with the proposed timing, as follows.

47. The focus of the study would be on joint work by the CGIAR centres and programmatic and organisational coherence. The study will:

- (a) characterise current CGIAR activities in the region, including CGIAR facilities and personnel through a desk study;
- (b) assess alternative research strategies for future CGIAR activities in the region, including opportunities for increasing complementarities on regional agricultural research between CGIAR centres and governmental and non-governmental sectors and the private sector;
- (c) identify and propose cost-efficient options for organising and operating future CGIAR activities in the region.

48. The study will be carried out in three phases by a 4 to 5 member external panel supported by the TAC Secretariat, and in consultation with the CGIAR centres active in the region.

Phase 1 (March-July 1997):

Preparatory phase including desk study and consolidated proposal by panel chair to TAC 73.

Phase 2 (August-November 1997):

Analysis and regional visits and preliminary report to TAC 74.

Phase 3 (December-March 1998):

Report writing, consultation with main stakeholders, and submission of final report to TAC 75.

Study of the CGIAR research priorities for marginal lands

49. It was recalled that at TAC 68 the Committee discussed a preliminary draft proposal for the marginal lands study which was subsequently revised and endorsed at TAC 69 and provided the provisional terms of reference. The study panel composed of five persons was being chaired by Mike Nelson from New Zealand. The study was being conducted in two phases: a preparatory phase up to July 1996, and a main phase from August to October 1996.

50. The aim of the preparatory phase was to gather information to define, more precisely, the scope of the main phase of the study and the analysis that should be undertaken. The preparatory work had been completed as planned by the panel chair and Dr. Hans Gregersen, a panel member, in collaboration with the TAC Secretariat staff and consultants. Sir Ralph stated that a report on the preparatory phase, including a framework for the main phase of the study, was ready for discussion by the Committee at TAC 70. Immediately after TAC 70, the work for the main phase will be conducted by the full panel supported by the TAC Secretariat staff and consultants. The panel will meet in Rome in October 1996 to prepare a draft report for discussion at TAC 71.

51. The TAC Chair thanked Sir Ralph and the Standing Committee for their report, and requested Dr. Michael Nelson to introduce the report of the preparatory phase I of the marginal lands study. Dr. Nelson began his introduction by recalling that TAC favoured allocating resources such that the balance between high and low potential environments emerged from the concern with poverty alleviation and resources conservation, rather than being introduced *a priori*. Thus, it was recognised that - in keeping with the adjustments introduced through the Lucerne Declaration - the concern with marginal lands was in the context of: (a) increasing production; (b) improving natural resources management and environmental protection; all in the framework of (c) alleviating poverty.

52. The basic premise of the study therefore was that CGIAR research had multiple goals for change in the use of marginal lands for crops, livestock and forestry and that trade-offs were inevitable. The focus of the study was not whether funds should be allocated from existing research which benefits both types of land, to directly target the specific needs of marginal lands and the rural population who depend on them; rather, it was to explore the issues and options which should be addressed in reaching a decision on directions of change in the research agenda - total amount of resources required and their allocation being a logical next step.

53. In spite of the difficulties in defining terms used to characterise the actual or potential productivity of lands, the point of departure was taken as specification of the geographical area of marginal lands, and some of their biophysical and socioeconomic characteristics relative to non-marginal lands and land in low or zero intensity of use.

From this overview of orders of magnitude of the area, rural population and production potential, the phase I effort had examined the issues arising in explicitly focusing part of the CGIAR's 12 activity categories on the achievement of some combination of production intensification or expansion, poverty alleviation and natural resources management from marginal lands.

54. From the review of issues, the report concluded with a proposal for phase II which will explore the options open to the CGIAR in reorienting or refining its research agenda for marginal lands with an explicit multi-objective focus. The intent was to provide a rough quantitative framework and qualitative judgements expected to help TAC in an iterative process towards establishment of priorities for addressing the marginal lands question.

55. Dr. Nelson illustrated the nature and extent of the challenge faced by the CGIAR in addressing the three objectives of food production, poverty alleviation and natural resources management using a figure with three broad land types: non-marginal lands with high present use value; marginal lands with low present use value; and lands at low or zero intensity of use, some of which presented an unused potential for agriculture or forestry production. For each land type one may speculate that there are those with a high potential for expansion of production based on research, and those with a low potential to show a production response to research. Thus, there was a six-quadrant matrix which may be addressed by research. Of these, two quadrants consisting of lands with low present use value but either high or low potential for expansion of production based on research, would comprise lands defined as marginal. The general question was, what type of research may be expected to provide benefits from the priority marginal lands based on available scientific knowledge and past experience in converting low production areas to high production? In addition, there was the expectation of new research findings which may open up the possibility of moving lands from the low response quadrant to the high one.

56. It was pointed out that the introduction of poverty and natural resources management into the equation required disaggregation of the six-quadrant matrix for the purpose of defining the scope of the study. The first four quadrants were disaggregated according to present use under irrigated or rainfed conditions. Irrigated lands were excluded from the study, as were rainfed lands with high present use value, with the caveat that the CGIAR must be concerned with maintenance research to preclude these lands becoming marginal. Further, research on aspects of preserving biodiversity, watershed protection, erosion control and fertility maintenance or enhancement in transforming lands that are under low or zero intensity of use to more intensive agriculture or forestry, would not be dealt with except where they were at risk of degrading. Dr. Nelson finished his presentation by describing some of the main areas that were believed to prescribe the scope of phase II (main phase) as follows:

- In view of the contradictions and overlaps in the meaning attached to marginal, fragile, vulnerable, low potential lands, agreement on definitions will be important.

- There should be agreement that the distinction between existing marginal lands which are responsive to research on agricultural production (and associated institutional constraints to technology transfer) and those lands which are not responsive to research - at least production research - is a relevant operational concept for decision on marginal lands research priorities.
- The dynamics of potential transfer of lands from non-marginal status into marginal lands status should not be ignored during phase II. However, treatment of this aspect is expected to be strictly qualitative.
- The opportunities, constraints and trade-offs from research on marginal lands addressing the three aspects of CGIAR goals - production, poverty alleviation and natural resources management - will be developed further during phase II.
- The policy and institutional aspects related to progress on any of the three aspects for marginal lands research are complex and therefore likely to require more attention to socioeconomic aspects than for change on non-marginal lands. Also demonstrating the attribution of results to research on marginal lands will be far more difficult than in the case of non-marginal lands.

57. In the ensuing discussion, there was general agreement with the approach proposed. It was pointed out that the proposed conceptual framework, not available at the time of the TAC study on natural resources management, was sound. It was suggested that the marginal lands study should take into account all types of vegetation, as this was not fully treated in the natural resources management study.

58. There was considerable discussion on whether the CGIAR had multiple objectives or a single objective function. It was argued that the CGIAR had a single ultimate objective which was poverty alleviation, but that there were several intermediate outputs and outcomes from research on productivity enhancement (leading to increased production and factor productivity) and sustainable natural resources management that were necessary to support the single ultimate, overall objective. When it came to defining or analysing research priorities, there were trade-offs involved at the level of the intermediate outputs and outcomes, and that in the area relating to the relationship between production and the environment, the aim was to minimise the trade-off. Further, there were likely to be differences in the approach to research and significant variation in emphasis across different areas of research activities depending on the types of land and development opportunities being addressed.

59. It was suggested that farmers strategies for managing marginal lands needed to be better understood so that the different types of research conducted were well matched to the different types of problems encountered by the farmers. It was also important to examine the extent to which the emerging technologies can assist farmers to better manage marginal lands and how their participation in the adoption process could be improved. Dr. Nelson stated that he agreed with all the suggestions that had been made and that they will be taken into account during the phase II stage of the study.

King Baudouin Award 1996 (Agenda Item 6)

60. TAC considered four submissions for the King Baudouin International Agricultural Research Award for 1966 using the criteria, namely: (a) direct or indirect, actual or potential impact on resource-poor farmers and low-income people; (b) direct or indirect, actual or potential impact on sustainable production systems; (c) innovation in science; and (d) partners and collaboration.

61. TAC selected the submission made by ICRISAT as the winner of the 1996 Award and prepared the following commentary on the work for presentation at ICW'96:

TAC COMMENTARY ON KING BAUDOUIN AWARD 1996

Improving the Unimprovable - Succeeding with Pearl Millet

Background

62. Pearl millet (*Pennisetum glaucum L.*) is a cereal grown for grain, stover, and green fodder on about 27 million hectares of dryland, primarily in Asia and Africa. People who live in such environments are among the poorest anywhere. For them pearl millet is the only cereal that reliably provides grain and fodder under rainfed conditions, on shallow or sandy soils with low fertility and water holding capacity, and in hot, dry environments. In the driest portions, pearl millet is the staple food grain, while in the less arid portions it is fed to bullocks, milk animals and poultry.

63. Both open-pollinated and hybrid cultivars of pearl millet are widely grown, with hybrids widely used in India, Australia, and the Americas. Initially, the inherent genetic variability of open-pollinated cultivars, improved by farmers and through natural selection, made the crop tolerant to diseases, albeit at low yields. With the availability of cytoplasmic male-sterile lines in the mid-sixties, a succession of hybrids was released. Given their higher yields, by the early seventies they were grown widely throughout India, and today they account for about 35% of the pearl millet area in Asia. The genetically uniform plants provided by hybrid seeds, however, rendered pearl millet crops vulnerable to diseases. In Africa, where hybrids were not sown, neither diseases, nor higher yields, were experienced by farmers.

64. Diseases are the most important biotic constraints of pearl millet. The worst, especially for hybrids, is a systemic disease called downey mildew (*Sclerospora graminicola*), caused by a highly variable, persistent and rapidly spreading pathogen that can reduce yields by more than 40%. Two other biotic constraints are panicle diseases called ergot (*Claviceps fusiformis*) and smut (*Tolyposporium penicillariae*). The major abiotic constraints are drought, heat, and low soil fertility.

Achievements

65. The initial focus of ICRISAT's pearl millet breeding in Asia was to produce breeding and final materials with high grain yield and resistance to downy mildew. While this is still the focus in Africa, in Asia a shift towards strategic research to broaden the genetic base of pearl millet is taking place, featuring broader utilization of germplasm, breeding methodology, and biotechnology.

66. Interdisciplinary efforts and partnership with NARS has characterized ICRISAT's research. It is now expanding to include a greater sharing of roles with networks, NGOs, and farmer groups, including farmer-managed trials to understand their preferences. ICRISAT's nomination for the Award reports on 20 years of research on pearl millet production, which are summarized below as achievements in overcoming identified biotic and abiotic constraints.

Biotic constraints

67. In the early days research on downey mildew focused on the introduction into India of genetic materials from west and central Africa, the primary centre of diversity for pearl millet. First open pollinated cultivars and then single-cross hybrids derived from those materials increased yields and kept mildew down, but did not eliminate it. In the process significant scientific advances were made, including i) identification of recovery and complete resistance; ii) a method to select for resistance from the residual variability present in susceptible cultivars; iii) the development of topcross pollinators and hybrids, broadening their genetic base; and iv) the identification of a systemic fungicide, metalaxyl, to control the disease for short periods.

68. More exciting developments have come about, however, from recent advances in molecular mapping, allowing the demonstration that i) many genes scattered throughout the genome contribute to downy mildew resistance; ii) the genes are pathogen-strain specific, and relatively few of them account for most of the resistance to a given race. These findings open the door to the improvement of the durability of hybrids, based on a better knowledge of the geographic distribution of pathogenic variation, and of the inheritance of virulence. Hybrids with enough of both heterogeneity for resistance and uniformity for agronomic characters are possible means of achieving the durable resistance previously available only from open-pollinated cultivars. First field evaluations of such hybrids will begin this year.

69. For ergot and smut, research was initiated in 1976, with emphasis on control through host plant resistance. Main achievements to date are i) the development of screening techniques; ii) the breeding of resistant cultivars, and iii) the development of male-sterile lines, providing reasonable yield and resistance to both ergot and smut.

Abiotic constraints

70. ICRISAT's research on drought tolerance began by developing a basic understanding of the effects of drought on the crop and on the nature of tolerance for different stress patterns. It has progressed through several stages, including i) the

assessment of the effects of the timing and severity of stress; ii) quantification of drought tolerance; iii) the identification of threshing percentage as an indicator of drought tolerance/susceptibility; and iv) the identification of criteria for terminal drought tolerance.

71. Drought tolerance research has focused on breeding attributes of landraces into improved materials. Given the narrow genetic variability within landraces, however, success was initially limited, with one exception: the Iniadi landrace. In addition to conferring earliness together with high yields, Iniadi shows good combining ability in crosses with a wide range of genetically diverse material.

72. Given the low availability of fertilizers, in the Sahel ICRISAT is working with IFDC to assess the severity of the lack of soil nutrients. Complementarily, it is searching for ways to enrich poor soils with biomass provided by crop residues and animal dung, as part of a cooperative venture with ILRI on maximizing the usefulness of animals and animal products to improve productivity. Agroforestry alternatives are also being developed in collaboration with ICRAF, using trees and shrubs to reduce wind erosion and provide plant residues to enrich the soil.

Impact

73. Looking at India as a whole, at least half of all hybrids marketed by the private sector in India (in numbers and volume) are produced on two male-sterile lines originating from ICRISAT. ICRISAT economists have conservatively estimated that the annual returns to pearl millet farmers from cultivated varieties developed by the Centre and its partners amount to US\$ 54 million. This is about 12 times the annual cost of its pearl millet research. For the near future:

- an Iniadi cultivar (GB 8735) is expected to be sown on 100.000 ha + in Chad;
- although a high degree of control of downy mildew has thus far proved impossible, scientific advances now make it possible;
- numerous seed samples of ergot-resistant and of smut-resistant lines have been supplied to scientists in four continents for resistance breeding.

74. By any standard the research leading to the development of hybrids resistant to downy mildew and to ergot and smut diseases represents an exciting accomplishment. This is so when considered only in terms of the sustainability of production systems and potential impact on the resource-poor farmers and low-income people in the dry tropics. Beyond that, the effort has value because of its scientific findings and the collaboration achieved with advanced institutions and national research programmes.

75. The Technical Advisory Committee warmly commends ICRISAT and its collaborators for the work which led to this Award.

Future Meetings (Agenda Item 7)

76. TAC reconfirmed and/or amended dates and venues for the following meetings:

TAC 71:	25-28 November 1996	ILRI, Addis Ababa, Ethiopia
TAC 72:	17-26 March 1997	FAO, Rome, Italy
TAC 73:	14-19 July 1997	ICRISAT, Hyderabad, India
TAC 74:	24-29 November 1997	CIMMYT, Mexico City, Mexico
TAC 75:	24-28 March 1998	FAO, Rome, Italy

Strategic Issues (Agenda Item 8)

Future Role of TAC

77. The future role of TAC in the light of deliberations at MTM'96 was discussed. TAC expressed apprehension that detachment of resource allocation from priority setting was impractical and would accelerate loss of coherence which the System strives to defend. With regard to the delegation of its strategic duties to other bodies, it was not clear which organs of the System would perform such functions. TAC was also concerned as to whether the new financing arrangements would continue to favour long-term and upstream research. It was clear that the financing arrangements are likely to lead to loss of scientific expertise. The Committee resolved that a letter be sent from the TAC Chair to the CGIAR Chair echoing its concern for the consequences of the changing role of TAC.

Mechanisms for Incorporating Other Sources of Supply

78. At TAC 67 in July 1995, the Committee explored opportunities for expanding collaboration with advanced research institutes. Meanwhile, as the MTP 1998-2000 process develops, the extent to which these linkages by Centres in their activities are made will be carefully considered. It was pointed out that development assistance agencies such as CIRAD have an inventory of what the other 96% does and that some of this might be relevant to the CGIAR. In Germany, the Agricultural Documentation Centre is also available. It was noted that, for some of the 96%, the relationship is one featuring complementarities. Accordingly, CGIAR Centres should always consider others as potential complements as well as potential substitutes.

79. Whereas the public sector remains the larger supplier, another question which poses a challenge is how information can be obtained on the 96%. Studies from FAO indicated that very little is being done by the private sector in the developing countries and that it may be expedient to conduct selected case studies of NARS/NARIS on what they are capable of doing. It was concluded that the systematically collected information on the 96% would be useful; it is easier to see complementarity than substitution; science is changing so quickly that today's situation does not tell us about tomorrow's relationships; and that all partners should explore new ways of doing things.

Criteria for Assessing Marginal Lands

80. Discussion on this topic started with the role the CGIAR should play in maintenance research and what criteria ought to be used in justifying maintenance research. Whereas sometimes strategic research is considered as maintenance as well, the application of new technology in maintenance research may be important. Focusing on the CGIAR research priorities for marginal lands, TAC recognized Dr. Mike Nelson, who had been appointed to chair the marginal lands study. Dr. Nelson explained the concept of the four quadrants to delineate various types of land. In this approach, quadrants I and II are the favoured lands while quadrants III and IV are marginal lands. However, most people when talking about marginal lands refer to quadrant IV. In quadrant III, there are sufficient areas, especially in Africa and Asia which warrant the CGIAR work. He also pointed out that in quadrants III and IV, conservation is important.

81. The discussion then continued on whether some of the territories that fall under Quadrant III are there due to constraints such as diseases or should marginal lands be looked at in terms of predictability and reliability or biological adaptation. Similarly, should TAC consider the economic issues with respect to shifts from quadrant III to I or III to I? Also, whether the carrying capacity of these lands is more important than their biophysical parameters. Nonetheless, the whole point of strategic research is to shift the line between I and II, and this is an area where biogeophysical aspects come in.

Measurements of Degradation

82. Linked with the responsibility for protecting the environment, TAC's thrust hinges on where it should start to measure degradation. Questions such as the effect of degradation on various products, the inter-relationships, trends of degradation, interactions of degradation. Yet one should be careful not to only look at indicators in isolation. Do we now have the means to measure degradation? TAC recalled that at the March 1995 meeting in Lima, TAC Members had postulated that measurement of degradation is not yet possible. Whereas there are specific examples of degradation, these measurements are not designed for economic purposes. Even where measurements exist, inconsistency prevails.

83. Questions such as: is there a typology for degradation?; is it possible to relate degradation to technical option or productivity?; can the cost of gauging degradation be estimated?; were posed. At this juncture, TAC recognized Dr. Dick Harwood who elaborated on the processes of land degradation.

84. It was concluded that TAC needs to identify a few key themes worthy of follow up during the MTP process, as this is a fertile area for inter-centre activity.

Dimensions of the External Environment

85. Elements of the external environment to the CGIAR and the development of a process to monitor them were discussed. It was observed by several members that development of the national programmes is an aspect which is constantly changing. The

CGIAR should monitor carefully its partners in developing countries. However, the trends indicate that developing countries no longer invest as much in agricultural research due to economic hardships. Also, new scenarios arising from new trade agreements will be important. It was pointed out that science does not advance in a linear pattern. Whereas the extent to which science is changing is crucial, developments in fields such as engineering, influence agriculture immensely. As much as changing economic patterns may lead to structural adjustments, varying profiles in labour, agricultural inputs, industrial developments, urbanization, and markets are bound to influence the global agricultural research agenda. The CGIAR, therefore, needs to monitor developments in, for example, intellectual property rights, and how it might affect the Group's interest. The trends also show that investment in agriculture in the north is declining at a time when NARS as partners are interested in industrial crops. Similarly, opportunities offered by biotechnology will call for closer collaboration with private sector, particularly where avenues in shifts in postharvest technology exist. In some quarters, there is growing concern for the conservation of biodiversity as a reservoir for future germplasm improvement. It was also noted that numerous agencies are engaged in projections such as the FAO 2010 and the IFPRI 2020 vision and these are worth monitoring.

86. Finally, the TAC Chair called upon Dr. Wanda Collins, Chair, CBC, who is associated with the activities of ESDAR, to brief members. After presenting the information on ESDAR, Dr. Collins agreed to send TAC Members a draft document featuring the global agricultural research system.

87. The TAC Chair apprised Members on the ongoing efforts to address gender analysis and in this connection referred to a paper circulated from Dr. Feldstein. TAC Members and observers were encouraged to respond to Dr. Feldstein's guidelines for gender analysis.

Other Business (Agenda Item 9)

CABI International

88. On behalf of TAC, Sir Ralph Riley attended a CABI meeting held in London in July 1996. He informed Members that CABI consists of 40 member nations and that this meeting was convened to discuss strategic plans on how CABI can continue to serve its constituents in the future. Members were informed that CABI derives its income from publication and contract research. It operates BIONET from which international member nations gain by having access to identification services. TAC is an information provider.

Candidate Information System

89. Sir Ralph Riley attended the Candidate Information System (CIS) panel meeting in Rome in July 1996. Dr. John Dillon chairs the panel which is made up of Sir Ralph Riley and Dr. Martin Piñero, with Ms. Frona Hall from the CGIAR Secretariat serving as Secretary of the Panel. The objective of the CIS is to remove subjective judgement from whatever names are processed for reviews. CIS evaluates the profiles of potential candidates who can serve on reviews, Boards, and as consultants with the CGIAR

System. Recently, approximately 80% of persons used in TAC-commissioned reviews have been assessed through CIS.

Sumatra

90. After MTM'96 at Jakarta, ICRAF and CIFOR organized a three-day field trip to Sumatra. The objective was to assess the progress on alternatives to slash and burn. Sir Ralph Riley participated in this tour and obtained a broad exposure to the role played by CIFOR's work in natural forest in relation to ecology and biodiversity. Elsewhere on the same trip, Sir Ralph looked at ICRAF's work on clear fell jungle rubber as well as growing food crops. He felt that this was a fascinating impression of the way agriculture interacts with forestry.

Impact Assessment and Evaluation

91. The TAC Chair reported on his activities with the Impact Assessment and Evaluation Group (IAEG). These interactions trace back to 1995. Recently, both Drs. Winkelmann and Gryseels attended a meeting in The Hague which brought together various groups. At the end of August, Dr. Winkelmann was to attend a meeting in Australia to continue consultation with Jim Peacock, Chair of the IAEG, and Tim Healy. The latter has visited the TAC Secretariat in the course of the year and the working relationship between TAC and the IAEG is expected to intensify in the future.

The New Review Model

92. The role of TAC in the new review model and in particular in Internally Commissioned External Reviews (ICER) was discussed briefly. Sir Ralph Riley introduced a broad outline which provided a framework for future direction. It was agreed that this issue should be followed up at TAC 71 when the Standing Committee on External Reviews will provide additional material.

Global Water Partnership

93. Dr. Guido Gryseels of the TAC Secretariat briefed the Committee on his participation as resource person in the first meeting of the Technical Advisory Committee of the Global Water Partnership. This meeting took place in Copenhagen on 11-12 June 1996. The Global Water Partnership (GWP) has three components: the Consultative Group, the Technical Advisory Committee (TAC), and the Secretariat hosted by the Swedish International Development Cooperation Agency (SIDA). The GWP is very much built on the experiences of the CGIAR. The TAC is chaired by Dr. Torkil Jonch-Clausen and has ten members. Dr. Guido Gryseels had been asked to provide a brief on the operating procedures of the TAC of the CGIAR so that the TAC of the GWP could learn from these experiences. Some documentation was circulated to illustrate the work of the GWP and its organization. In the ensuing discussion, TAC Members reiterated the importance of water in CGIAR priorities and urged close collaboration between the CGIAR and the GWP.

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AGENDA

1. Opening Session
2. CGIAR Priorities and Strategies and 1998-2000 Medium-Term Resource Allocation Process
3. 1997 Research Agenda
4. Systemwide Initiatives and Programmes
5. Future Reviews
6. King Baudouin Award
7. • Future Meetings
8. Strategic Issues
9. Other Business

LIST OF DOCUMENTS

Item	Document	Number/Source
1	Draft Report of the 69th Meeting of the Technical Advisory Committee	SDR/TAC:IAR/96/11
	TAC Chair's presentations to MTM 96: - on Priorities and Strategies Process - on Priorities and Strategies Paper - on Regional Fora	TAC Chair
	CGIAR MTM Meeting 1996 Preliminary End-of-Meeting Report and Report of Parallel Sessions 1 to 5	CGIAR Secretariat
	Some Aspects of Discussion Highlights on TAC Documents at MTM'96 Jakarta, Indonesia	Notes by TAC Exec.Secretary
2	Guidelines for the Development of the 1998-2000 Plans	SDR/TAC:IAR/96/13 Add.1
3	1997 CGIAR Research - Project Details (distributed directly by CGIAR Secretariat)	MTM/96/10A
	Transfers of Non-Agenda Funding at MTM 96	CGIAR Secretariat
4	Revised Proposal for Systemwide Initiative on Coastal Environments	ICLARM
	Systemwide Programme for Desert Margins (Proposal and Workplans)	ICRISAT
5	Study of CGIAR Regional Commitments in Latin America and the Caribbean - A Draft Proposal	SDR/TAC:IAR/96/12
	Future Reviews - Progress Report	SDR/TAC:IAR/96/16
	Study of CGIAR Research Priorities for Marginal Lands - Progress Report	SDR/TAC:IAR/96/17
	Improving the Quality and Consistency of the CGIAR's External Centre Reviews	ICW/95/11
8	Research on Germplasm Collection and Conservation: A Preliminary Examination of the Major Problems, the State of Knowledge, and the Present Levels of Research Effort	SDR/TAC:IAR/96/14

8 A Preliminary Examination of Global Environmental Research -
Sources of Funding, Categories of Research, and Research
Organizations

SDR/TAC:IAR/96/15

9 Impact Assessment and Evaluation Group (IAEG) - Report to
the CGIAR

MTM/96/12

FAO Fourth International Technical Conference on
Plant Genetic Resources:

- Report of the International Technical Conference on Plant Genetic Resources
- Leipzig Declaration (Annex 1)
- Global Plan of Action (Annex 2)
- Report on the State of the World's Plant Genetic Resources

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