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THE CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH  
TECHNICAL ADVISORY COMMITTEE

REPORT OF THE  
FIFTY-FIRST MEETING OF THE TECHNICAL ADVISORY COMMITTEE

TAC SECRETARIAT  
FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

June 1990

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FIFTY-FIRST MEETING OF THE TECHNICAL ADVISORY COMMITTEE  
TO THE  
CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH  
(Rome, Italy, 12 - 18 March 1990)

REPORT OF THE MEETING

A. SUMMARY

1. Main Highlights and Recommendations

1.1. CIP External Reviews

The External Reviews of CIP were considered by TAC in the presence of the Panel Chairmen, the Chairman of the Board of Trustees of CIP, the Director General of CIP and other representatives of the Board and senior management. TAC noted that the main phase of the reviews had been delayed at the request of the Board and management to enable the centre to prepare a change plan based on recommendations arising from a self study organized by the Director General. The change plan had been made available to the review panels.

The Review Panels found that CIP had good research programmes, excellent facilities and high quality staff. CIP was commended for its decentralization policy, its research networks and contracts. While its institutional impact was impressive, the economic impact of CIP-bred material had been limited. Among the major recommendations were to strengthen CIP's global efforts in germplasm collection and conservation, to reorganize the management structure, to strengthen the Board's role in policy formulation and oversight, to reduce the number of research thrusts and departments, to prepare a strategic plan and to institute an internal mechanism for continuous assessment of CIP's research impact in collaboration with NARS.

TAC prepared its commentary on the reports for consideration by the CGIAR, and indicated its wish to see how the panels' recommendations would be reflected in CIP's strategic plan.

1.2. IITA External Reviews

TAC considered the reports of IITA's EPR and EMR Panels in the presence of the respective Panel Chairmen, the Chairman of IITA's Board

of Trustees, and senior management. TAC noted that IITA's Board and management had responded speedily and thoughtfully to the contents of the reports.

Both Panels had found that IITA had made significant progress in strategic and programme planning, and in defining a sharper focus, developing clearer direction and greater decentralization of its programmes. They had been impressed by the positive manner in which IITA had successfully confronted some major management and organizational challenges. The major recommendations included some on research organization and management, scientific quality, crop protection research and genetic resources. IITA's Board and management had responded positively to most of them. However, TAC noted that a few of the panels' recommendations, for example on crop management research, scientific quality and impact assessment, had given rise to some controversy, and also there were some aspects of IITA's future strategy that would benefit from further amplification.

As usual, TAC prepared its commentary on the reports for consideration by the CGIAR at its Mid-Term Meeting in May 1990.

## 2. Progress on Other Items

### 2.1. Report from the CGIAR Secretariat

The report from the CGIAR Secretariat noted that:

- (i) a funding gap of US\$ 35 million was expected for the 1990 budget;
- (ii) the funding level for 1990 was still estimated to be around US\$ 240 million;
- (iii) the 1991 funding requirements for essential programmes were estimated at US\$ 296 million;
- (iv) a paper by Ms. Eriko Tokudo of the CGIAR Secretariat had been circulated to explain some principles and guidelines for the future operations of the stabilization mechanism;
- (v) the report of the Resource Allocation Process Review Committee was scheduled to be put before the Group at ICW 1990; and
- (vi) the outcome of a joint project between the CGIAR Secretariat and the Centres on the maintenance of highest financial standards would be presented to the donors at a future date.

The report also noted that:

- (i) the CGIAR Secretariat was intending to work closely with the Public Awareness Committee to extend the funding base of the CGIAR System;

- (ii) the paper by Mr. Woolston on "Information Management in the CGIAR System" had been completed and circulated recently;
- (iii) comments were invited on Dr. Selcuk Ozgediz's draft paper entitled: "Overview of Management in the CGIAR System" before it was presented to the Group;
- (iv) the three-member panel for the Candidate Information System had been established;
- (v) there was a strong demand from the donors to undertake an impact study; and
- (vi) a World Bank staff member was currently undertaking a study on intellectual property rights.

## 2.2. Assessment of the Non-Associated Centres

TAC considered desk studies prepared by TAC and CGIAR Secretariats staff, together with reports of TAC panels on the subject matter areas and institutions represented by of the non-associated centres. Each panel had had at least two TAC Members, two or more external experts and resource persons. The panels had been given a set of issues to address, ranging from the identification of possible future CGIAR activities in the subject matter areas under review, to modes of operation and institutional options in an expanded CGIAR. They had also been requested to indicate whether TAC had all the information needed to make its recommendations to the CGIAR on the non-associated centres. The panels had concluded that TAC did not require additional information and had made recommendations on institutional options.

TAC considered the proposed options and held some over for further discussion at TAC 52 in June. The issue of CGIAR support to vegetables and AVRDC was among those held over. TAC's final recommendations on the non-associated centres would then be prepared for consideration by the Group at ICW 1990.

There was full consensus in TAC on the institutional options for CGIAR support to forestry and agroforestry. TAC therefore decided to make preliminary recommendations on forestry and agroforestry to the CGIAR Mid-Term meeting in May 1990.

## 2.3. CGIAR Priorities and Strategies

Dr. C.T. de Wit informed TAC that many comments had been received on the Part I - Interim Report on a Possible Expansion of the CGIAR and that they would be summarized for consideration by TAC in June. TAC noted that consultations about the Interim Report were in progress with groups of NARS in different regions. The Standing Committee for Priorities and Strategies had developed an annotated outline for the new CGIAR priorities and strategies paper, and was seeking socio-economic and natural resource data for the priority setting exercise. TAC would use the FAO agro-ecological zone approach, with defined geographic

boundaries, for setting priorities among commodities and research categories. Information on the location and consumption patterns of the poor and on the status of NARS would be obtained with the assistance of IFPRI and ISNAR respectively. A number of different models were being used by TAC in priority setting. A revised statement of the mission and goals of the CGIAR had also been prepared and distributed to TAC Members for comments.

## 2.4. Resource Allocation Process

### (a) Review of the Resource Allocation Process

Dr. James R. McWilliam presented a progress report on the deliberations of the ad hoc committee appointed to review the resource allocation process. The committee had found good support among Centres, donors and TAC Members for the new process. The process allowed Centres to plan their programmes and budgets over a longer period, facilitated consideration by TAC of a Centre's total programme, and revealed overlaps among Centres. Problems had been experienced with the use of the terms "essential" and "desirable" to categorize Centre activities. The process had not adequately addressed the scale of Centre activities. Further, it did not facilitate matching the demand for funds by Centres with the supply of funds by donors. The ad hoc committee was expected to present its final report at TAC 52.

### (b) Standing Committee for Resource Allocation

Dr. Dudal reported that TAC had been represented on the ad hoc committee appointed by the CGIAR Chairman to deal with the expected funding shortfall of US\$ 35 million in 1990. The ad hoc committee had decided to adopt a "mechanistic" approach, freezing all Centre budgets at the 1989 level and allocating the balance, of approximately US\$ 2 million, to the five Centres which were entering the new process in 1990.

The Standing Committee for Resource Allocation had considered the issue of capital budgeting, and had suggested that in future major capital items could be handled separately from the normal operational budget requests. TAC noted that the Standing Committee had reviewed a provisional annual budget manual developed by the CGIAR Secretariat for the 1991 budget requests. The manual was intended to make it more open and easier to understand and compare Centre budgets. The CGIAR Secretariat was also in the process of assessing cost efficiency at the Centres to enhance comparability among Centres with respect to the cost of doing research.

## 2.5. Future Reviews

Progress on the preparation for and implementation of future external reviews was outlined. TAC noted that the main phases of ICRISAT and IFPRI External Reviews would take place during 1990 as scheduled. Reviews scheduled for 1991 were those of IBPGR, ISNAR and

ILCA, and the short lists of names for panel chairmen and members for the joint EPR/EMR for IBPGR and ISNAR were approved. Reviews scheduled for 1992 were those of ILRAD and IRRI.

The Standing Committee for External Reviews reported on its activities. These included proposals for panel briefing and debriefing and joint planning of reviews with the CGIAR Secretariat, and consistency of criteria for the selection of panel chairmen and members. On the latter, TAC agreed that exceptions to the general rule should be permitted where there was no conflict of interest.

## 2.6. Other Business

TAC received brief reports on the following items:

- (a) Progress Report of the TAC/Centre Directors Working Group on Plant Genetic Resources;
- (b) The King Baudouin Award;
- (c) Proposal for a Study of Needs and Priorities for Research to Support Animal Agricultural Development in Developing Countries;
- (d) The World Bank Conference on Irrigation and Drainage Research;
- (e) The CGIAR Committee on Sustainability;
- (f) Capital Budgetting in the CGIAR;
- (g) Use of the Expressions "Upstream" and "Downstream" Research;
- (h) Commission on the Application of Science to Agriculture, Forestry and Aquaculture (CASAFA).

## 2.7. Future Meetings

TAC confirmed the dates and venues for TAC 52 and 53 and agreed on tentative dates and venues for TAC 54 to 58 as follows:

- TAC 52: 11 to 17 June 1990, IITA, Ibadan, Nigeria
- TAC 53: 22 to 27 October 1990, Washington DC, USA
- TAC 54: 9 to 17 March 1991, ICARDA, Aleppo, Syria
- TAC 55: 24 to 30 June 1991, FAO, Rome
- TAC 56: 21 to 27 October 1991, Washington DC, USA
- TAC 57: March 1992, FAO, Rome
- TAC 58: June 1992, ISNAR, The Hague, Netherlands.



B. RECORD OF THE PROCEEDINGS

1. The Fifty-First Meeting of the Technical Advisory Committee (TAC) to the Consultative Group on International Agricultural Research (CGIAR) was held from 12 to 18 March 1990 at FAO headquarters, Rome. Dr. Alex F. McCalla was in the chair.

2. The meeting was attended by 17 TAC Members, by representatives of two of the Co-Sponsors (FAO and UNDP), by observers representing members and institutions of the CGIAR, and by members of the CGIAR and TAC Secretariats. A number of other participants attended open sessions of the meeting (Annex I).

3. A joint session was held with Centre Board Chairmen and Centre Directors, who were meeting concurrently, to discuss items of mutual interest on the TAC agenda.

Opening Session (Agenda Item 1)

(a) Opening Remarks

4. Dr. McCalla declared the 51st Meeting of TAC officially open and expressed TAC's pleasure at holding the meeting at FAO. He conveyed TAC's thanks to the Director General of FAO for the support and continued services provided by the Organization. He noted that between 6 and 10 March most of the TAC Members and more than 20 consultants and resource persons had been in Rome to participate in meetings of the TAC panels appointed to make preliminary assessments of the non-associated centres. Institutional options for CGIAR support to forestry and agroforestry had also been considered.

5. The meeting was informed that TAC had met in closed session on 12 and 13 March to review procedural matters relating to TAC 51 and to consider desk studies on the non-associated centres prepared by the TAC and CGIAR Secretariats. It had also considered the outcome of the TAC panels' meetings.

6. Dr. McCalla then welcomed and congratulated Mr. Philippe J. Mahler of FAO, who had recently been appointed Special Adviser to the Director General/Assistant Director General for Environment and Sustainable Development and designated as the FAO Co-Sponsor representative. He recalled Mr. Mahler's long association with the CGIAR as TAC Executive Secretary from 1976 to 1982. TAC was looking forward to close and fruitful cooperation with him in his new and important position.

7. Mr. Mahler in turn thanked Dr. McCalla for his kind words and expressed his personal pleasure in coming back to the CGIAR family. He paid tribute to the three former TAC Chairmen namely, the late Sir John Crawford, Dr. Ralph Cummings and Professor Guy Camus, for whom he had had the pleasure and challenge to work. He was looking forward to having the same close and productive relationship with Dr. McCalla.

8. On behalf of the FAO Director General, Mr. Edouard Saouma, Mr. Mahler welcomed TAC Members, especially the new ones, the

representatives of the other Co-Sponsors and observers. He stressed that it was always a pleasure for FAO to host TAC meetings, not only because of the importance which FAO attached to the CGIAR System and to the work of TAC in particular, but also because it provided a useful opportunity for interactions between TAC and FAO's technical divisions. He was pleased to note that a number of FAO staff had been involved in the TAC panels' discussions on the non-associated centres and on forestry.

9. As is customary at TAC meetings hosted by FAO, Mr. Mahler briefly outlined recent major developments at FAO that might be of interest to TAC. Starting with the 25th FAO Conference in November 1989, he recalled that some 150 FAO member countries had been represented at the Conference by their Ministers of Agriculture or by high-level officers from the Ministries of Agriculture and Foreign Affairs. The Conference had reviewed the state of food and agriculture in the world and had expressed considerable concern about the extremely low level of stocks of major food commodities, including some of those supported by the CGIAR. The need for considerable production increases had been highlighted. The Conference had identified nine priority areas for increased emphasis by FAO: policy advice to individual member governments; environment and sustainable development; biotechnology; role of women in development; crop weather monitoring; crop protection; agricultural data bases; aquaculture; and tropical forestry.

10. TAC was informed that the Conference had approved a code of conduct designed to curb abuse and improve the management and use of pesticides. The Conference had agreed to adopt the "pic clause" - the principle of prior informed consent - with respect to the distribution and use of pesticides that had been restricted or banned in the country of origin or in other former importing countries.

11. The Conference had also approved the holding of an International Conference on Nutrition in late 1992 at FAO headquarters, to be organized jointly by FAO and WHO. FAO had been asked to convene the Conference. Useful interaction with TAC was foreseen during preparation for the Conference.

12. Mr. Mahler noted the discussion and agreement reached at the FAO Conference regarding the interpretation of some of the articles of the International Undertaking on Plant Genetic Resources. The Conference had endorsed the concept of "farmer rights" in addition to that of "plant breeders' rights", in recognition of farmers' past, present and future contribution in conserving, improving and making available plant genetic resources.

13. Mr. Mahler informed TAC about the second UN Conference on Environment and Development, to be held in Brazil in June 1992. He recalled that FAO had been closely associated with the 1972 Stockholm Conference on Environment, at which the idea of establishing IBPGR had first been mooted. The 1992 Conference was expected to develop a major international convention on biodiversity. Climate change would also be a major topic for discussion at the Conference. He enquired whether the issue of climate change was on the TAC and CGIAR Centres' research agenda.

14. Considerable progress had been achieved in developing a new relationship between FAO and IBPGR. Two memoranda of understanding were

being established and broad consensus had been reached on the major issues involved. One of the memoranda was for the short term. It would cover the period during which IBPGR would continue to be administratively serviced by FAO, and would describe the administrative support FAO would provide. The second memorandum of understanding was both for the short and the longer term, and would cover programme cooperation and joint programming.

15. Mr. Mahler then turned to the proposed expansion of the CGIAR. He stressed that this was not the occasion or place for FAO to take a position on the issues under consideration. However, based on his previous involvement in priority reviews in the CGIAR, he considered the task before TAC to be particularly complex. He commended the Committee for its systematic and comprehensive approach, but cautioned that not all important problems needed a research solution. Even those production constraints which were amenable to research did not necessarily have to be dealt with at the international level and by the CGIAR. He realized that the final outcome would depend on TAC's collective judgement and wisdom.

16. While recognizing that developing countries could benefit from additional international research efforts, Mr. Mahler expressed some of the concerns of FAO. These were: that expansion would lead to increased costs, particularly in the overheads of TAC and its Secretariat; that the dispersion of effort might be counter-productive; and that resources earmarked for strengthening NARS might be diverted to support international research. Reference was made to the discussion at ICW 1989 concerning SPAAR.

17. Finally, Mr. Mahler confirmed the strong support of FAO for the activities of TAC. He expressed FAO's satisfaction with the outcome of the review of the TAC Secretariat, particularly the positive assessment of the work and contribution of the TAC Secretariat to the operations of TAC. He informed the meeting that FAO had already implemented the main recommendations of the review. Mr. Mahler was pleased with the increasing cooperation between TAC and FAO's technical divisions, and encouraged TAC to continue to tap the expertise and experience available in FAO.

18. Dr. McCalla thanked Mr. Mahler for his statement and informed him that TAC had considered the issue of climate change briefly and had referred it to its Standing Committee for Priorities and Strategies. While climate change might not be an appropriate research area for the CGIAR, it certainly would provide the context for setting CGIAR priorities and strategies. He stated that TAC would follow with interest the preparations for the 1992 Global Conferences on Environment and Development, and on Nutrition. He assured Mr. Mahler that TAC shared his concerns about the implications of a possible expansion of the CGIAR. TAC would take these into account when making its recommendations to the CGIAR. However, TAC also saw some exciting opportunities for greater interaction and involvement by CGIAR Centres in the areas of natural resources, environment and sustainability. The inclusion of forestry in the CGIAR's mandate would open new avenues for dealing with land use problems. TAC realized that simple congruence was not a sufficient justification for CGIAR support. Finally, Dr. McCalla stated that TAC was very pleased with FAO's prompt and positive response to the recommendations of the TAC Secretariat Review Panel. He also appreciated the collaborative attitude of FAO staff who served as resource persons to TAC.

19. The TAC Chairman then welcomed TAC Members formally to the meeting and introduced the five new Members, namely Drs. Gerardo Budowski, Hans M. Gregersen, Mitsuma Matsui, Eugenia Muchnik de Rubinstein and Salleh Mohd Nor. He also welcomed the representatives of the Co-Sponsors, observers from donor agencies and from Centres, resource persons, and CGIAR and TAC Secretariats staff. He reminded the observers that they were welcome to participate actively in the discussions during the open sessions. A list of participants is provided in Annex I.

(b) Adoption of TAC 50 Report

20. The TAC 50 report was adopted without amendments.

(c) Matters arising from TAC 50

21. The Chairman of the Standing Committee for External Reviews said that in its report to TAC 50 the Standing Committee had intended to include a suggestion that, in all future EPRs, biographical sketches of panel members should be included as an annex. TAC approved the proposal.

(d) Adoption of the Agenda

22. The provisional agenda for TAC 51 was adopted (Annex II). The Chairman announced the membership of ad hoc working groups for the CIP and IITA External Reviews. He also announced changes in the composition of Standing Committees (see Annex IV).

Report from the CGIAR Secretariat - (Agenda Item 2)

23. Mr. Alexander von der Osten, Executive Secretary, CGIAR, reported to TAC 1/ on twelve subjects, six of which were related to resources.

- Resource-Related Issues

(i) The 1990 Budget

24. A funding shortfall of US\$ 35 million was expected for the 1990 budget. This resulted from the difference between the total of US\$ 275 million (growth of 17% over 1989) approved by TAC, and the planned contributions of donors of US\$ 240 million (growth of 6%-8% over 1989). The shortfall was not due to poor donor performance. It was due to large budget approvals that occurred during the process of the medium-term programme review by TAC based on the submissions made by the 13 Centres.

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1/ Joint Session with Centre Board Chairmen and Centre Directors

25. The System did not have a mechanism for adjusting Centre budgets to the availability of funds. At ICW 1989, the CGIAR Chairman had established a special committee, composed of representatives of donors, Centre Directors, TAC, and TAC and CGIAR Secretariats, to try to match demand with supply and to find a solution to what was felt to be a short-term problem. Several options had been proposed, among them the use of a so-called "mechanistic" solution, namely that of freezing Centres' budgets at the 1989 level and distributing the balance (of approximately US\$ 2 million) to the five Centres, namely CIMMYT, ICRISAT, ICARDA, IRRI and WARDA, which had submitted their medium-term plans in 1989.

26. For future resource allocation exercises, TAC was called upon to reassess its approach to priority-setting and to establish a set of clear, and easy-to-follow criteria for resource allocation across Centres. The Centres were requested to adopt a positive attitude and to work towards increasing the total supply of funds to the System.

#### (ii) The 1990 Funding Situation

27. The funding level for 1990 had not changed since ICW 1989, and the total was still estimated to be around US\$ 240 million. The CGIAR Secretariat would continue to monitor the situation and would report regularly on new developments. The main uncertainties were the level of contribution of two donors, Japan and Italy, and the exchange rates at the time these contributions would become available.

#### (iii) The 1991 Requirements

28. The funds required for essential programmes in 1991 were estimated at US\$ 296 million (7% more than in 1990), including 5% for inflation and 2% real programme growth. This requested growth, plus the 1990 shortfall, would lead to an estimated shortfall of about US\$ 50 million if there were to be no corresponding growth in donor contributions. Mr. von der Osten stressed that the shortfall was not due to poor donor performance. In fact the total supply of funds had continued to increase and the funding of the non-associated centres had grown rapidly over the past few years, with budget growth rates higher than those of the CGIAR Centres. There had also been a lot of donor interest in areas such as environment and resource management, sustainability, forestry and agroforestry. Donors were coming forward with increased funding in these areas. It was pointed out that donors continued to remain highly interested in the institutional characteristics of the CGIAR System. Their confidence must be reinforced by the System.

29. Reference was made to the paper by Mr. Ravi Tadvalkar on "Funding of International Agriculture Research: Trends and Prospects", which had been distributed by the CGIAR Secretariat. The paper provided an analysis of the potential for funding by groups of donors. The CGIAR Secretariat hoped to work with the Centre Directors' Committee on Public Awareness to raise the level of collaboration with existing and new donors.

30. Projected funding for 1991 was expected to be 5-7% higher, enough to cover inflation but not the US\$ 50 million shortfall. There was a

need to come together to decide on how the gap was to be closed. It was suggested that the topic be put on the TAC agenda for June, and that the proposals generated at the June meeting be jointly discussed in time for decision making at ICW 1990.

(iv) The Stabilization Fund

31. A discussion paper by Ms. Eriko Tokuda of the CGIAR Secretariat had been circulated recently. The purpose of the paper was to present issues, stimulate thinking and prepare for later decision making. The paper had been written on the premises that the stabilization mechanism was a useful tool to have, given the financial characteristics of the CGIAR System, and that to prove useful and sustainable, the mechanism had to be managed, which called for clear principles and guidelines. Sustainability implies a two-way flow of resources, and a true co-ownership of the fund between the CGIAR Secretariat and the Centres. Mr. von der Osten stated that early responses were required to the discussion paper, in order to come to an agreement at the envisaged joint meeting in October.

(v) The Resource Allocation Process

32. Mr. von der Osten recalled that the Resource Allocation Process Review Committee had met once in 1989 and once in 1990. He noted that an oral progress report would be given by the Panel Chairman, Dr. James R. McWilliam, and the written report was now scheduled to be put before the Group at ICW 1990.

(vi) Accountability in the CGIAR System

33. Mr. von der Osten stated that donors were interested in maintaining the highest financial standards and accountability in the CGIAR System. The CGIAR Secretariat and the Centres would also like to maintain and reinforce these standards. A joint project with this aim in view had been initiated last summer, the outcome of which would be presented to donors. Good progress had been made on the project: the accounting survey had been completed and the auditing survey had been commissioned.

- Non Resource-Related Issues

(i) Public Awareness

34. Mr. von der Osten noted that the CGIAR System undersold itself and that donors were underinformed on the impact of the research conducted by the System. The nature of CGIAR's products was not sufficiently known. The CGIAR Secretariat would in future be putting more effort into extending the funding base of the CGIAR System, and expected to work closely with the Public Awareness Committee of the CGIAR, which had formulated a commendable client focus approach for tailoring information to the particular needs of the donor.

(ii) Information Management in the CGIAR System

35. A report by Dr. John Woolston on information management in the CGIAR System had been submitted and was being circulated for comments. The CGIAR Secretariat was not intending at present to take any centralized follow-up action.

(iii) Overview of Management in the CGIAR Centres

36. A document entitled "Overview of Management in the CGIAR Centres", by Dr. Selcuk Ozgediz, had been circulated for comments. Mr. von der Osten apologized for the late circulation of the document and stressed the need to respond rapidly in order for comments to be taken into account before the document was forwarded to the Group, preferably at its forthcoming Mid-Term Meeting in The Hague. The document would be prepared as an authored paper. The views expressed would thus be those of the author and would not necessarily represent the position of the CGIAR Secretariat. It was considered that this approach would make the paper more critical and interesting to read.

(iv) Candidate Information System (CIS)

37. This central service was expected to be very useful to decision-makers, particularly the Co-Sponsors, TAC and Boards. Additional information from as many sources as possible was now needed to provide a relevant pool of candidates. The CIS panel had been established with three members, namely Drs. J. Dillon, M.H. Arnold and A. Sawadogo. It was expected to meet some time in April 1990.

(v) Impact Study

38. The demand from donors for more information on impact was strong and there was a need to act. The questions were how, who, at what cost and how best to work together? The CGIAR Secretariat did not regard itself as the natural leader for this study, but it had decided to stimulate action and centralize effort through a collaborative project. The CGIAR Secretariat had already discussed the project internally and with selected external experts, and was now identifying the issues the study should address. A proposal would be sent out to the major stakeholders by the CGIAR Secretariat for comments, before matters moved any further.

(vi) Intellectual Property Rights

39. A World Bank staff member was presently undertaking a study on intellectual property rights, with the focus on seeds and plant materials and how these affected the interests of the developing countries and the CGIAR System. The study would examine current laws and regulations, and future developments and changes. Because the relevance of the study to the CGIAR was high, Mr. von der Osten stated that it would be appropriate for TAC and the Centres to make an input. The CGIAR Secretariat would be pleased to forward any suggestions.

40. Mr. von der Osten's presentation was followed by an open discussion. The Chairman of Centre Directors, Dr. D. Winkelmann, asked for clarification on budget shortfalls, and expressed his hope that TAC would develop a conceptual basis for handling the 1991 shortfall as soon as possible so that a mechanistic approach could be avoided. The TAC Chairman responded by pointing out that Centre Directors should be involved in developing a long-term solution to the issue of shortfalls. He said that if the Resource Allocation Process Review Committee did not provide a better mechanism for tackling shortfalls, then TAC and Centre Directors would need to come together before ICW 1990 to develop one.

Assessment of the Non-Associated Centres - (Agenda Item 3)

41. TAC discussed the assessment of the non-associated centres during closed sessions, except for a brief report by the TAC Chairman and the presentation by Dr. Arnold of a paper entitled "Activities and Modes of Operation in the CGIAR System" to a joint session of TAC with Centre Directors and Centre Board Chairmen. Dr. McCalla described for the benefit of Centre Directors, Board Chairmen and observers the process and criteria used by TAC for assessment of the non-associated centres.

42. He recalled that TAC Panels had been organized for the following subject matter areas:

- (i) Banana and Plantain
- (ii) Crop Protection
- (iii) Fisheries
- (iv) Forestry
- (v) Natural Resources (including agroforestry)
- (vi) Livestock Diseases in sub-Saharan Africa
- (vii) Vegetables

43. All panels except for the one on vegetables had met in Rome during the period 6-10 March 1990. Another panel dealing with NARS/IARCs Interface had also been organized. It had met earlier and its proposals had been incorporated in the document "Activities and Modes of Operation in the CGIAR System". Each panel had two or more TAC Members, two or more external experts and resource persons. In all, more than 60 people had been involved in the TAC panels' discussions.

44. The TAC panels had reviewed desk studies prepared by the TAC and CGIAR Secretariats on the basis of the following background documents: a Draft Statement of the Mission and Goals of the CGIAR; Activities and Modes of Operation in the CGIAR System; A Possible Expansion of the CGIAR: Part I - Interim Report; TAC Fact Finding Mission Reports to the Non-Associated Centres; and Guidelines for TAC Panels Appointed to Make Provisional Assessments of Non-Associated Centres. The guidelines had listed eight questions to be addressed by the TAC panels. In addition, the TAC panels had had access, where available, to the latest annual reports, strategic plans, medium-term plans and external reviews of the relevant CGIAR and non-associated centres. The Desk Study on Forestry had been prepared by members of the TAC Forestry Panel.

45. Each desk study assessed the future role of the CGIAR in the subject matter area(s) under consideration. It reviewed current and planned CGIAR and non-associated centres' activities, and highlighted the complementarities, duplications and gaps. Similar activities in



national, regional and other international institutions were outlined. The desk studies also looked at the mandates, governance and modes of operation of the non-associated centres involved in the subject matter area(s) under review to determine whether or not they conformed to those considered acceptable for CGIAR Centres. Finally, some preliminary conclusions were reached and tentative institutional options were recommended.

46. The panels had been requested to correct any errors of fact or interpretation found in the desk studies. They had also been requested to determine whether or not the information provided in each desk study was adequate for TAC to make recommendations on the future role of the CGIAR in the subject matter area under review. They were further required to review the institutional options proposed and if necessary add some new ones. The pros and cons of each option were outlined by the TAC panels.

47. With the exception of livestock diseases in sub-Saharan Africa, the panel for which was prepared to make only an interim recommendation pending a comprehensive study of animal agriculture in sub-Saharan Africa; and the case of vegetables and AVRDC, where TAC was still in the process of organizing an external review, the panels had considered that TAC had all the information required to make its recommendations to the Group. TAC was in general agreement with the conclusions of the desk studies and the assessments made by the panels. The Committee was particularly pleased that the two Panels on Natural Resources and on Forestry had independently reached the same conclusion with respect to the future role of the CGIAR in agroforestry.

48. TAC considered and endorsed the institutional options set out by the TAC Forestry Panel. It decided to prepare a short paper on its conclusions and preliminary recommendations on forestry and agroforestry (including ICRAF) for consideration and comments by the Group at the CGIAR Mid-Term Meeting in May 1990.

49. Regarding the other subject matter areas, the outcome of the desk studies, the panels' reports and TAC's discussions had confirmed TAC's earlier conclusions concerning their relevance for CGIAR support. TAC had discussed the modes of operation and institutional arrangements for each of the non-associated centres. It had also considered the pros and cons of the institutional options proposed in the desk studies and in the panels' reports. Further, the implications of the possible expansion of the CGIAR on the structure and organization of the Group had been discussed at some length. Dr. McCalla had agreed to develop the ideas generated by the discussion (plus his own) on the future structure and organization of the CGIAR System into a discussion paper for consideration at TAC 52. TAC agreed to have further discussion on the non-associated centres, including AVRDC, in June, and then to prepare its comprehensive recommendations for ICW 1990.

#### CGIAR Priorities and Strategies - (Agenda Item 4)

##### - Report of the Standing Committee for Priorities and Strategies

50. Dr. C.T. de Wit presented a report on the activities of the Standing Committee for Priorities and Strategies. The Interim Report on a Possible Expansion of the CGIAR, which had been prepared for ICW 1989,

had since been distributed widely by the TAC Secretariat with a request for comments from donor agencies and CGIAR and non-associated centres. Consultations about the paper had also been planned with groups of national agricultural research agencies in different regions. Many useful responses had been received. These would be reviewed and a decision taken at TAC 52 on how to take them into account in improving the paper.

51. The Standing Committee was now preparing to revise the CGIAR priorities and strategies document. Revision was scheduled for completion by ICW 1991. The Standing Committee would have preferred to complete this task before undertaking the paper on the expansion of the CGIAR, but this had not been possible.

52. An annotated outline of the priorities and strategies paper had been prepared and was being considered by the Standing Committee. A revised statement of the mission and goals of the CGIAR had also been prepared and distributed to TAC Members for consideration and comments.

53. The Standing Committee had undertaken a review of the availability of socio-economic and natural resource data to provide background for the paper. Greater emphasis would be placed on natural resource and forestry issues than in past papers on priorities and strategies. Data would be analyzed on the basis of agro-ecological zones, using the data base of FAO, which was cooperating closely with the Standing Committee. Other data for the study were being collected and analyzed by IFPRI, on the location and consumption patterns of the poor, and by ISNAR, on the current status of national agricultural research programmes in developing countries.

54. The Standing Committee would, as far as possible, rely on available documentation on strategies and priorities and on plans and budgets from the individual CGIAR Centres. Every effort would be made to avoid overburdening the Centres with requests for more information. The Standing Committee would nevertheless welcome additional inputs from the Centres and other arms of the CGIAR System.

55. The Standing Committee was considering the use of a number of different models in priority setting. Pragmatic models based on spreadsheets and economic models would be used to strengthen the collective judgement of TAC. The time schedule of the Standing Committee was tight, however, largely because of the extra workload imposed by the need to consider the non-associated centres. Work on CGIAR priorities and strategies should be a continuing process, as had already been decided by TAC and endorsed by the CGIAR in 1987. It was noted that the 1985 report was already outdated.

#### Resource Allocation Process - (Agenda Item 5)

##### - Report of the Resource Allocation Process Review Committee

56. Dr. James R. McWilliam, Chairman of the ad hoc committee appointed jointly by the TAC Chairman and the Executive Secretary of the CGIAR to conduct a retrospective review of the resource allocation process, gave a progress report on the work of the Committee. He recalled that all thirteen Centres were currently operating under the new system.

57. The ad hoc committee had found broad consensus that the new resource allocation process was a distinct improvement over earlier approaches. It provided a longer-term horizon, permitted a more comprehensive review of a Centre's total programme and revealed overlaps among Centres. The process was more transparent, and relieved Centres of much of the burden of preparing annual budgets.

58. Among the problems were the differences observed between Centres in the classification of their activities into "essential" and "desirable" categories. TAC's programmatic assessment was also considered to have been somewhat uneven across Centres. The scale issue had not received adequate consideration and there had been no attempt to match the demand for funds with their supply.

59. Many lessons had been learnt from the study. It had confirmed TAC's view that the concept of assessing a Centre's total programme to define an "essential core" component was realistic and feasible. It had also revealed that Centres needed assistance in developing a comprehensive and coherent way of determining the minimum set of essential activities needed for a Centre to become a viable entity.

60. There was general unhappiness among donors and Centres with the use of the term "desirable". Further, while the demand-driven approach used by TAC to assess Centres' programmes had many merits, donors would like to see a supply constraint applied at some stage in the process, in order to achieve closer congruence between the demand for and the supply of funds. Sequencing the process in such a way that a Centre's strategic plan was followed by an EPR/EMR before the medium-term plan was prepared and considered by TAC was found to have contributed considerably to the clarity and transparency of the Centres' medium-term plans. Finally, there was need to develop a different mechanism and source of funding in the System for handling major capital items.

61. Improvements in System-wide priority setting were considered to be urgent in order to facilitate the resource allocation process. A more quantitative and transparent approach should be used by TAC for setting priorities among commodities and research areas. Priorities should be specified for agro-ecological zones and the criteria used should be clearly defined. The determination of a realistic "essential core" would help TAC to deal with the scale issue. It would also facilitate the handling of funding shortfalls.

62. The TAC Chairman welcomed the information provided by Dr. McWilliam, and noted that a first draft of his committee's report would be available in April 1990. He hoped that the report would provide a useful instrument for the preparation of future budget requests.

- Report of the Standing Committee for Resource Allocation

63. Dr. Dudal briefly reported that the Resource Allocation Process Review Committee had held its second session in Washington DC from 8 to 10 January 1990. TAC had been represented at this meeting by Drs. Raoul Dudal, Doris Calloway and Amir Muhammed. Dr. Alex McCalla, Mr. Alexander von der Osten, Mr. Ravi Tadvalkar, and Dr. John Monyo had participated as resource persons. The meeting was chaired by Dr. James R. McWilliam. It appeared that the Standing Committee for Resource

Allocation would need to follow-up the recommendations of the committee after the full report had been considered at TAC 52 in June 1990.

64. The Standing Committee had also been represented at a meeting on bridging the funding shortfall for 1990 held in Washington DC on 11 January 1990. The meeting had been chaired by Dr. Michel Petit of the World Bank. The results of this meeting were reported at the current TAC session by Mr. Alexander von der Osten. TAC noted that the mechanism adopted to tackle the shortfall of resources for 1990, namely to maintain the 1989 level of funding, could hardly be applied in 1991. If the shortfall persisted a less mechanistic approach would be needed. Furthermore, the implications of a possible expansion of the CGIAR to include some non-associated centres would need to be taken into account.

65. When the Standing Committee reviewed the Centres' requests for 1990 it was pointed out that a considerable proportion of budget increases was due to proposed capital expenditures. Considering the magnitude of the amounts involved the Standing Committee suggested that it would be advantageous in future to consider capital expenditures separately from programmatic resources. The Chairman of TAC charged the Standing Committee for Resource Allocation to look into this matter.

66. A first exchange of views took place with the Financial Officers of the CGIAR Secretariat. Various options were envisaged, such as making provision for a central capital fund, introducing amortization in the budgeting process, renting rather than building, and levying capital cost on special projects. The CGIAR Secretariat was to examine different possibilities and prepare a proposal for the consideration of the Standing Committee. It was felt, however, that the issue was not merely financial. It should be considered within the context of the overall structure to be recommended for CGIAR-supported research. Should more building be discouraged if modes of operation were to be decentralized and increased emphasis be given to devolving research and related activities to national institutions?

67. Two major issues remaining on the agenda of the Standing Committee were the transparency and comparability of Centres' budgets. At its previous meeting, in October 1989, the Standing Committee had reviewed the first draft of an annual budget manual developed by the CGIAR Secretariat. The comments made by the Standing Committee had been incorporated into a second draft which was available at the present meeting. This document would be used by the Centres to prepare their 1991 budget requests; these requests would be reviewed by the Standing Committee at TAC 52 in June 1990. This procedure would allow TAC to test the annual budget manual. As a result the manual could be finalized and could possibly become the basis for the preparation of a uniform budget structure to be recommended for the second round of the five-year resource allocation process.

68. The CGIAR Secretariat indicated that it was embarking on an exercise to assess cost efficiency. This would include looking into the categories of staff and the calculation of senior scientist year costs. The data would be indispensable for the Standing Committee's work on comparing the cost of doing research among Centres. Hitherto, it had proved very difficult to obtain precise information and it was hoped that the cost efficiency exercise would shed more light on this important topic.

69. The Standing Committee had examined a request by ILCA for the reclassification from "desirable" to "essential" of a Herbage Seed Unit. This activity, originally considered to be essential in the medium-term programme, had been listed as desirable in the 1990 programme of work as a result of financial constraints. A donor had expressed willingness to fund the project provided it was classified as "essential". The Standing Committee felt that it could not endorse a programmatic reclassification on the basis of availability of funds. It suggested that a programme change should be submitted with the 1991 funding request. This procedure would conform with the existing mechanism for adjustments when needed, with regard to the approved medium-term programme. Dr. John Walsh, Director General of ILCA, and Dr. Ralph Cummings, Chairman of the ILCA Board of Trustees, expressed agreement with this procedure.

#### CIP External Reviews - (Agenda Item 6)

70. In introducing the External Reviews of CIP, Dr. McCalla noted that, as a result of some far-reaching recommendations and suggestions made in a self-study organized by CIP management, the Centre Board and management had asked that the main phase of the Reviews be postponed by about six months. They needed the extra time to set in motion a process of organizational change. In the meantime, Dr. William Tossell had been elected Chairman of the Board of Trustees of IBPGR which, under existing TAC rules, made him ineligible to serve as the CIP EPR Panel Chairman. However, since the review process was already at an advanced stage, the TAC Chairman decided to waive the rule.

71. Dr. McCalla then welcomed Dr. William Tossell, EPR Panel Chairman, Dr. Lowell Hardin, EMR Panel Chairman, Drs. David Call and Lindsey Innes, Chairman and Secretary respectively of CIP's Board of Trustees, plus the members of CIP's senior management: Dr. Richard Sawyer, Director General, Dr. Jose Valle-Riestra, Deputy Director General, and Dr. Peter Gregory, Director of Research. Drs. Tossell and Hardin were invited to present the reports of their Panels.

72. Dr. Tossell stated that the major factors which had dominated the CIP External Reviews were the findings of the Centre's self-study, the security situation, and the impending retirement of the Director General. In the Panel's view, CIP as an institution was currently characterized by dynamic change.

73. The Panel had been impressed by the high quality of the Centre's research and related activities on potato. CIP had been very effective in distributing potato varieties bred elsewhere which were eventually for use by NARS either directly or in their breeding programmes. However, there was limited evidence of farm-level adoption of improved germplasm from CIP-bred material. The EPR Panel considered that production impact could be accelerated by developing a more integrated commodity strategy that linked the breeding work more adequately to farm-level constraints. With respect to sweet potato, the Panel commended the excellent progress made by CIP since 1985, but stressed the need to develop eventually a well planned and integrated programme.

74. The Panel noted CIP's plans to increase the relative proportion of the research budget allocated to sweet potato to 40% by gradually decreasing the resources allocated to potato. The Panel had had

difficulties in quantitatively determining the relative share of resources currently allocated to potato and sweet potato. On genetic resources, CIP was urged to improve its global potato germplasm collection, and to replicate its wild species collections. The Panel noted that only a small proportion of the materials was pathogen tested, which restricted the distribution of potato germplasm. It commended the rapid establishment of a world collection of sweet potato cultivars and the initiatives on wild species.

75. The training programme was rated highly for its effectiveness, and for its involvement of NARS partners in planning and execution. CIP had an excellent record of building capacity in NARS, and its decentralization strategy was considered to have been very effective. CIP's planning conferences, networks and innovative approach to contract research were considered to have expanded the Centre's scope and enhanced collaboration with NARS. However, the Panel saw a need for CIP to refine its criteria and arrangements for research contracts.

76. The EPR Panel concluded that CIP had impressive achievements to its credit. Its activities were client-oriented and decentralized.

77. In presenting the findings and recommendations of the EMR Panel, Dr. Hardin recalled that the self-study was a confidential document and therefore had not been seen by the External Review Panels. However, the self-study had led to the preparation of a change plan, which was made available to the Review Panels. Since the change plan was still being implemented, the EMR and EPR Panels had concluded that CIP was a Centre in transition.

78. According to Dr. Hardin, the self-study and the change plan were timely and necessary. The EMR would have been much more critical if the change plan had not been in place. The main themes of the change plan were: planning for the post-Sawyer era; developing a clearly articulated Centre-wide strategy; improving research management structures and processes; improving the effectiveness of the Board of Trustees; and upgrading the systems and practices for managing CIP's human, financial and physical resources.

79. It was clear from the change plan that the Director General had been a man of vision and a strong, authoritarian leader. The EMR Panel was satisfied that these attributes had served CIP well. However, a more participatory style of management was considered to be necessary for the future.

80. The EMR and EPR Panels had jointly recommended improvements in CIP's research management structures and processes. Among the suggested changes were the creation of a number of new posts: a Deputy Director General (Research) with two Programme Directors under him, one for the Potato Programme and one for the Sweet Potato Programme; and a Deputy Director General for Regional Programmes. The departmental structure at headquarters should be retained but the number of research thrusts and departments should be significantly reduced. Budgetary authority should be assigned to thrust managers and project leaders. They also recommended the formulation of a clearly articulated centre-wide strategy. In the light of the impending changes in management, the Panels had suggested that the new strategic planning exercise should be timed so that the new Director General would have a leadership role in its formulation. CIP was also asked to examine carefully the process in use for operational planning, programme monitoring and impact assessment.

81. The EMR considered that the time and talents of Board members were not being used effectively. It recommended that the Board should strengthen the role it plays in policy formulation and oversight. In the past there had been too much reliance on the Director General. Improvements were also recommended in the areas of administration, financial and human resources management.

82. Dr. Call, on behalf of the Board, paid tribute to the Review Panels for what he considered to have been excellent reviews. He thanked the Panels and TAC for giving CIP the time it needed to prepare the change plan. The self-study had been done by a group of CIP staff with the advice of external consultants. It had been withheld from the Panels because CIP staff had been promised confidentiality. However, he remarked that the issues raised by the self-study were clearly reflected in the change plan.

83. TAC was informed that the search process for a new Director General was well advanced. The new Director General would overlap with the incumbent to ensure a smooth transfer and his/her full involvement in shaping the new strategic plan.

84. Dr. Sawyer in turn thanked the Panels for their willingness to come to Peru despite concerns about the security situation. He noted that the decentralized nature of CIP's operations had enabled the Centre to function effectively in spite of the problems in Peru. Decentralization was in keeping with CIP's strategy of moving closer to its partners in national programmes. In his opinion, CIP was flexible, close to its clients and was a low-capital operation. He regretted that the Review Panels had been able to visit only a few regions.

85. Turning to the recommendations of the Panels, Dr. Sawyer stated that CIP would have preferred them to be considered as alternatives and suggestions, and not as specific recommendations. This was the way in which they had been discussed at CIP, but not as they had come across in the report. He observed contradictions between the recommendation of the Second EPR and those of the current EMR/EPR with respect to the number of research thrusts. He expressed concern that external reviews were tending to push Centres towards conformity in management and organization. In his opinion the System needed some differences in management styles as well as in organizational structures among Centres.

86. Dr. Sawyer considered the self-study and the resulting change plan to have been very useful inputs into the external review process. A self-study of the Board was under preparation. He would participate in the preparation of the first draft of the revised strategic plan, which he considered to be an updating of the CIP profile 1972-2010. He expected the new Director General to be involved in the preparation of the final draft.

87. Before opening the discussion, Dr. McCalla reminded the participants that they should comment on both the EPR and EMR reports. In the ensuing discussion, TAC Members agreed that both CIP's commodities were important food crops. However, noting that over 80% of the world production of sweet potato was grown and consumed in China, where the national research system was relatively strong, they queried CIP's priority attention to this crop. Further, the demand for sweet potato as a major food staple would probably decline as incomes increase.

88. Questions were also raised on: the importance of experimental design vis-à-vis field plot technique; whether CIP was adequately doing research with a sustainability perspective particularly with respect to soil erosion problems; the rationale for reducing research on true potato seed; the adequacy on physiological studies; the status of cooperation between CIP and AVRDC; whether day length was taken into account in potato breeding and germplasm distribution; post-harvest and storage research; the integration of regional with headquarters programmes; and whether CIP considered agro-ecological diversity in the design and location of its regional programmes. Finally, CIP was requested to explain the apparently high figure shown for the cost of a senior scientist-year at CIP in some documents.

89. TAC Members were surprised by the low production impact of CIP-bred potato material, particularly given the decentralized nature of CIP's activities and the reported close collaboration with national programmes in the regions. CIP was, however, commended for its institutional impact and for its highly effective client-oriented training programmes. TAC considered that the EPR Panel had not given adequate recognition to CIP's scientific impact.

90. The Committee was in general agreement with the recommendations of the Review Panels. It expressed its concern with the current management style at CIP, favouring a more participatory type of management. Some TAC Members were of the opinion that the proposed organizational structure would still result in too high a workload on the Director General. There was general concern among TAC Members that it had not been possible to determine how resources were apportioned between potato and sweet potato.

91. TAC welcomed the indication in the interim CIP response that the issues addressed in the change plan and the recommendations of the External Review Panels were being considered for implementation. However, since there had not been a clear commitment in CIP's response to implement those recommendations, TAC would like to have a status report on the implementation of the External Review recommendations when it considers the final draft of the strategic plan in early 1991.

92. With respect to the production impact of CIP-bred material, Dr. Sawyer remarked that it was CIP's policy not to identify with material arising from its breeding programme. The policy had been to give the credit to NARS. It would be hard to measure CIP's own impact because it was a collaborative effort with NARS. CIP's short-term approach had been to distribute widely varieties bred elsewhere. About 30 countries had benefitted from this strategy. CIP has also developed for the longer term improved potato populations with wide genetic diversity while concurrently strengthening the breeding capacity of NARS. These populations would soon be tested in collaboration with NARS. Further, CIP was organizing a planning conference with cooperating NARS to discuss the issue of impact assessment.

93. Adaptation to the tropics, day length and resistance/tolerance to major pests and diseases were all included in the breeding programme. However, since many traits were involved, it took a long time to incorporate them in improved varieties and populations. CIP had plans for using molecular biology techniques to develop a genetic map of the potato in order to improve breeding. CIP was also in the process of documenting its potato and sweet potato germplasm.



94. On the issue of the apparent high cost of a senior scientist-year at CIP, the EMR Panel Chairman and the Director General of CIP considered the figure to be meaningless. Dr. Sawyer was of the opinion that the costs associated with each internationally recruited staff member would provide a better measure of the cost of doing research. If this were done, CIP would come out relatively low.

95. Regarding the socio-economic justification for CGIAR support to sweet potato research, CIP noted that TAC had endorsed the transfer of the mandate for sweet potato from IITA to CIP. Some work had been done on the role of sweet potato in the marketing system and CIP staff were also planning to conduct marketing studies. On the question of relationships with AVRDC, CIP had been in contact with AVRDC. The latter was currently preparing its strategic plan and would soon make a decision on its future plans for research on sweet potato. When that was done, CIP would continue the dialogue with AVRDC.

96. During further discussion, TAC endorsed research networks and the contracting mechanism as appropriate modes of collaboration with national institutions. It also stressed the importance of looking not only at production impact but at institutional and scientific impacts as well when assessing a Centre's achievements. Potential, as well as actual, impact should be highlighted in Centres' activities.

97. In concluding the discussion, Dr. McCalla expressed his gratitude to Drs. William Tossell and Lowell Hardin and their Panels for conducting the Reviews, and commended them for their close collaboration. Their reports were well written. Dr. McCalla noted that it would be the last time that Dr. Sawyer attended a TAC meeting as Director General of CIP. He expressed special appreciation to Dr. Sawyer for the dynamic leadership he had provided to CIP, and for CIP's important contribution to the System. On behalf of TAC, he thanked him for his commitment and vision and wished him well in his future activities.

#### TAC COMMENTARY ON CIP EXTERNAL REVIEW REPORTS

98. TAC commends the Chairmen and Members of the External Review Panels for their in-depth appraisal of the programmes and management of CIP. It is pleased that both Review Panels found the Centre to be a strong one, with competent staff, a high quality research programme, and effective interaction with national programmes and advanced institutions. TAC endorses the recommendations of the Review Panels and offers further comments for CIP's consideration.

99. TAC recognizes that CIP was in the process of organizational change at the time of the reviews, as a result of its self-study. The interim response of the CIP Board to the Reviews is appreciated by TAC, but it is felt that CIP will need to prepare a further, more comprehensive response in the form of a progress report responding to the Panels' recommendations in early 1991, by which time the Centre is expected to have completed its strategic planning process. TAC has had an encouraging dialogue with the Chairman and Secretary of the Board, the Director General, the Deputy Director General and the Director of Research of the Centre, who have agreed to take the review recommendations into account during CIP's reorganization exercise and

the preparation of its strategic plan, and to involve the new Director General in their formulation. TAC looks forward to reviewing the plan and continuing the dialogue.

### Conduct of the Review

100. TAC approved of the way the Review Panels had approached their task. The country visits and detailed interactions with CIP staff at headquarters and in regional offices provide a sound basis for the recommendations. The reports present valuable insights on both programme and management aspects of CIP and reflect the close cooperation between the two Panels.

### Research Programmes

101. TAC notes with concern the Review Panels' comments on the difficulty of assessing the impact of CIP's potato programme, and the suggestion that the economic impact may have been modest at best. This is surprising in view of the decentralized modus operandi of CIP which positions it close to the clients and target groups, and its advocacy of the "farmer-back-to-farmer" approach to the conduct of research and the design of technological options.

102. While CIP's policy of underpinning the breeding programmes of the national programmes and not attributing any impact to itself is commendable, analysis of the joint impact of CIP and national programmes on potato improvement is needed. TAC agrees with the recommendations and suggestions related to the need for continuous assessment of joint CIP-NARS impact, and that a clear organizational focus for such studies be identified within the Centre. These ex-post studies should be designed to provide guidance to the Centre in planning its future strategies and programmes, in addition to their value in demonstrating performance. TAC also notes that the scientific impact of CIP's programmes has not been considered sufficiently by the Programme Review Panel. Future EPR panels should explicitly address questions of Centre impact, distinguishing between the economic, scientific and institutional components.

103. The appropriateness of the balance between potato and sweet potato research at CIP has been difficult for the Panels to assess because the resources allocated to each commodity are not easily identifiable. TAC is of the view that CIP should initiate action to ensure this situation is rectified, as it does not believe the task is difficult, nor does it consider it prudent for CIP and TAC to be unaware of the share of resources devoted to each of the two crops.

104. TAC considers that, in the reorganization of CIP, a mechanism be developed for clearly identifying responsibility for coordinating the two commodity programmes. The strategic plan of CIP should articulate clearly the basis on which CIP apportions resources to the two commodities. In the case of sweet potato, this analysis should take into account the regional distribution of production, the strength of the NARS involved, the extent to which the commodity is used for food, feed or industrial raw materials, and equity issues. Consideration of the nutritional value of both commodities also deserves greater emphasis in CIP programmes.

105. TAC strongly supports the Review recommendation that CIP give greater emphasis to sustainability, especially in the area of soil erosion. This is in recognition of the fact that potatoes are grown at high elevation, often in mountainous regions. CIP should explore collaborative research with other Centres on topics such as agroforestry and intercropping to develop sustainable potato production systems.

106. CIP has developed a reasonably solid research base which could be utilized in studies of physiological aspects of growth and storage of potato and sweet potato. Root and tuber crops have a number of common physiological characteristics, which TAC considers worthy of more attention from CIP.

107. TAC notes the EPR Panel's endorsement of CIP's emphasis on pathogen testing of germplasm. Every effort should be made to overcome the delays in distribution of materials due to this bottleneck. In identifying the appropriate role for CIP in further international research on true potato seed, TAC considers that CIP should take into account the likely economic potential of this technology in future vis-a-vis alternative technologies such as tissue culture and other rapid multiplication techniques. Such an assessment should be made in the context of the strategic planning exercise.

#### Strategic Planning

108. TAC strongly endorses the emphasis placed by the Review Panels on the need for strategic planning. CIP's planning should entail a considered assessment of research needs and opportunities, supplemented by systematic analysis to provide a sound basis for decisions on the number of research thrusts and of regional centres, and the commodity balance and programme management. In particular, CIP should carefully reassess the agroecological heterogeneity of the regions in which it currently operates with a view to rationalizing its research strategies and organization. The Centre should factor genotype x environment interactions more explicitly into its considerations, along with regional differences in consumer preferences and the like.

#### Mode of Operation

109. The Review Panels noted the unique, decentralized organization of CIP's programmes and the contracting mechanisms with which CIP supports research in the national programmes of developing countries and in developed country institutions. TAC considers this to be an innovative and effective approach, but urges CIP to develop, as part of the strategic planning exercise, a rationale and a set of clearly articulated decision rules to guide the future contracting operations. The basis for decisions to initiate a contract rather than to undertake research in-house should be clarified, as well as a clearer distinction made between collaborative and contractual relations. Furthermore, it is preferable for CIP to have internal competence in all fields in which contracts are being entered into, to ensure effective oversight and integration of the research results into CIP's programmes, and ultimately into those of the NARS.

### International Cooperation

110. The Panels' comments on CIP's cooperation with AVRDC and other international Centres are noted by TAC. AVRDC is currently in the process of developing a strategic plan, and is being examined by TAC as part of the review of the non-associated centres. CIP and AVRDC should continue their dialogue on sweet potatoes, and CIP should keep TAC informed of progress in this area.

### Management

111. TAC commends the Panel for the sensitive but forthright manner in which management issues are addressed in the EMR report. TAC is concerned that CIP's personalized policies, decision-making and management procedures evolved in a way that meant they were dependent for their viability on the continued presence of the incumbent Director General. Management should be flexible enough to allow entrepreneurial expression, but with the support of well articulated policies and procedures which are based on sound management principles. TAC looks forward to further interaction with CIP on the progress that is made in this area, following the implementation of its change plan.

112. The recommendation that CIP consider the more explicit identification of commodity programme leadership so as to ensure proper integration of disciplinary components in the potato and sweet potato programmes deserves serious consideration by management as it implements its change plan in the context of the strategic planning exercise.

### Follow-up Action

113. TAC commends the two Reviews to the CGIAR for consideration, bearing in mind that TAC expects further interaction with CIP on the issues raised in the Reviews. CIP should present its Board-approved strategic plan to TAC for comments during 1991. CIP should inform TAC and the CGIAR Secretariat in a progress report of the action it has taken in response to the specific recommendations of the two Review reports at the time it presents the strategic plan to TAC.

### IITA External Reviews - (Agenda Item 7)

114. In introducing the discussion on the External Reviews of IITA, the Chairman welcomed Dr. James McWilliam, EPR Panel Chairman, Sir Ralph Riley, EMR Panel Chairman, Mr. Luis Crouch, Chairman of IITA's Board of Trustees, Dr. Lawrence Stifel, Director General, and Dr. Ken Fisher, Deputy Director General (Research).

115. According to Dr. McWilliam, IITA was one of the major, mature CGIAR Centres in the region, now approaching its first quarter century. It had a complex mandate, an urgent task and a difficult environment in which to operate. The Centre had a largely regional mandate, but it also had global responsibility for certain aspects of its programmes. Its major focus was on sustainable agricultural systems.

116. Dr. McWilliam stated that the EPR Panel had intended carrying out a strategic review, but had found that the big issues had been

adequately tackled by the Centre. Consequently, the Panel had spent more time on the more substantive issues related to programmes. The Centre had a good strategic plan and a good medium-term plan. Its four goals and three programmes were critical to solving the production problems of its mandate commodities in the West and Central African region. Thus, while Dr. Stifel was expected to leave in the near future, the Centre was "on track".

117. Following its Second EPR, IITA had reduced its range of commodities to three major and three minor crops. Its rice programme had been transferred to WARDA, while responsibility for sweet potato had been handed over to CIP. In both cases, IITA had parted with valuable germplasm. The Panel had concluded that the choice of crops and the level of activity devoted to each was correct, but had highlighted the fact that groundnut, although not one of IITA's commodities, was not receiving adequate attention. Dr. McWilliam noted that the pest management programme was a success story and a credit to the Centre.

118. Since the second EPR, IITA had made significant progress in strengthening national programmes in and outside Nigeria, and it was well regarded in West and Central Africa, where its products were being used.

119. The EPR Panel had made a number of recommendations on various aspects of IITA's work, including the Centre's research organization and management. With regard to the latter, the Panel had made four recommendations jointly with the EMR Panel. First, a Director of Crop Improvement (CI) should be designated to direct the work of research leaders and their teams for maize research; roots, tubers and plantain research; and grain legume research. Second, the Biological Control Programme (BCP) should evolve into a Biological and Integrated Control Programme (BICP). Third, to bring the crop-based working groups fully into the research structure, the research management at IITA should be reorganized to enable collaborative research projects based on cropping systems to involve scientists from the Resource and Crop Management Programme (RCM), as well as CI and BIC. Fourth, to facilitate the better understanding of plant-soil interactions, IITA should establish a capacity for crop management research outside the systems groups.

120. The EPR had also made a number of recommendations with respect to the commodity research programmes. For example, IITA should provide stronger support for its plantain and banana breeding programme; and that crop protection research related to grain legumes, maize and Striga should be strengthened. On genetic resources, IITA should urgently secure a location for the conservation of its valuable yam and bambara groundnut collections, and undertake a characterization of the most important African cassava varieties.

121. Concern was expressed on the scientific excellence of research programmes, and the EPR had recommended that IITA management should encourage the publication of the findings of IITA research in peer-reviewed, international scientific journals. With regard to IITA's collaboration with international centres, the Panel had considered two Centres - CIMMYT and INIBAP - to be critical for IITA, and had urged IITA to improve and consolidate its collaboration with them.

122. Sir Ralph Riley presented the report of the Second EMR. The Panel had concluded that there was no significant cause for anxiety

regarding the present state of management at IITA. Thanks to its Director General, Dr. L. Stifel, The Centre had successfully met the management challenges of recent years, and current efforts were leading to an effective management structure capable of serving a creative set of programmes. The Panel had considered the interactions between management and scientists to be good, although individual contacts needed to be encouraged between Board members and scientists. Top management were all new to their jobs, talented and very effective.

123. The EMR Panel had recommended that research management be better structured - as also stated by Dr. McWilliam - to ensure that research was holistic and organized on a project system of management, with clearly identified objectives, leaders, budgets and time-scales. IITA was praised for its excellent management of relations with national systems. The management of international cooperation gave rise to concern, and the Panel had recommended that an internal review be undertaken to sort out the lines of communication.

124. With regard to the management of human resources, great skill had been deployed by IITA in the formulation and implementation of new personnel policies. The high turnover of scientific staff in recent years was partly due to the implementation of the Centre's strategic plan and the restructuring of its research programmes. Because all international scientists were to some extent managers of considerable resources and staff, the Panel felt that they needed some training in management.

125. Considerable problems had existed in finance when Dr. Stifel had taken over, but these had been largely resolved. There was now a financial information system in place. The first EMR had recommended the establishment of internal audit mechanisms; accordingly, IITA had created an Internal Audit Committee of the Board. This Committee was working effectively, and internal audit mechanisms were operating well.

126. Mr. Crouch, Chairman of IITA's Board of Trustees, informed TAC that the Board had presented its response to the Reviews to TAC and that it would be quick to accept the recommendations. The Panels had performed excellently, given the changing circumstances of IITA and the, now past, prolonged crisis which had led to a deterioration of the scientific environment at IITA. He thought that the main reason for the deterioration was the lack of adoption of IITA's technologies. In the past, IITA had been involved in too many commodities and activities, and its farming systems research had lost direction.

127. Mr. Crouch emphasized that restructuring research management and programmes was helpful, but was not a sufficient condition for the development of a scientific culture. The first priority of the Board of Trustees and management was to work towards establishing a scientific ethos that would make everyone at the Centre think intuitively about sustainability.

128. In this regard, Dr. Crouch noted that the Panel had not evaluated or discussed the paper by management entitled "A conceptual framework for IITA's research activities and achievements". This paper expressed managements' endeavours to instill a scientific culture. Mr. Crouch concluded by saying that the EMR Panel's recommendations and TAC's commentary on them would be included on the Board's agenda.

129. Dr. Stifel began his response by acknowledging the capabilities of the External Review Panels. He informed TAC that the period since the 1983 External Reviews had been difficult and there had been rapid changes. On the programme side, there had been changes in the commodity focus, the geographical orientation, the attitude to the issue of small-versus large-scale farmers, and the attitude towards the trade-off between research and development. Most importantly, there had been a change in terms of greater emphasis on an integrated, systems approach to sustainable agriculture. On the organizational side too, there had been attempts to make fundamental changes. Organizationally, IITA was moving toward a private-sector model with the emphasis on efficiency and cost-saving.

130. Dr. Stifel agreed that management had been characterized by a top-down approach, but there had been no alternative for bringing about the necessary changes in strategy, programmes, organizational structure and senior scientific staff. He informed TAC that he and his colleagues had appreciated the fact that the EPR had endorsed IITA's plans, its off-station work, its internal review process and the resource and crop management research. The suggestions made by the EMR on how to reorganize research management were a useful contribution to IITA's effort to improve efficiency and increase the quality of the research effort. However, Dr. Stifel expressed concern at the first main recommendation of the EPR, that IITA should establish a capacity for crop management research outside the systems groups. He also expressed concern at the harsh criticism directed at the Grain Legume Improvement Programme and the Tuber and Roots Improvement Programme.

131. In the ensuing discussion, TAC generally endorsed the recommendations and suggestions made by both Panels, and was pleased that the IITA Board and management had responded positively to most of them.

132. Some TAC Members expressed concern at the high turnover of scientific staff at IITA during the period under review. TAC was informed that this was due partly to the implementation of the strategic plan and the drive to improve research quality. The turnover was now expected to stabilize and fixed-term contracts would be more appropriate in the future to ensure that the Centre had adequate flexibility.

133. A TAC Member recalled that the serious weaknesses in scientific quality had been strongly highlighted by the 1983 EPR, which also had made recommendations on the action IITA should take. Six years later the Centre had not made much progress, and it appeared that there was a need for TAC to think further about the question of scientific quality. IITA informed TAC that the reason why it had taken so long to revitalize the scientific staff was that this had required a change at senior management level which had been achieved only two and a half years ago. Several TAC Members stressed the need for the Centre to put in place mechanisms that would allow it to adequately evaluate scientific quality.

134. The importance of soybean research was discussed in its own right as well as in relation to groundnut research. TAC endorsed the conclusion of the EPR that IITA's effort had been significant and successful, and that the Centre should stand ready to respond to future increases in demand for this commodity. However, TAC expressed reservations about IITA's involvement in groundnut research, preferring instead increased collaboration with ICRISAT.

135. There was considerable discussion on the balance of IITA's research in the different agro-ecological zones with their differences in population pressures, potential productivities and opportunities for breakthroughs. IITA explained that in the humid areas, the problems were substantially greater, population pressure was higher and the return to research more long-term. In the moist savanna, opportunities for breakthroughs were greater, and the maize-cowpea systems had the potential for offering surpluses. However, while the strategic plan had paid full attention to these issues, it had not been possible to scientifically define a correct balance in research between different ecological zones.

136. A TAC Member commended the EPR Panel for its vision of IITA's future. He pointed out that when the vision was quantified in terms of actual harvests, it called for grain production increases of 35-45 kg/ha a year. These were equal to or greater than the rates of increase realized during the last green revolution. He stated that IITA was in a position to determine what kinds of systems, animals, crops and policy changes were required, and to develop solutions. He said that, when pressures were large, the changes needed were also large. A green revolution in Africa was overdue, and the CGIAR System should be at the base of it.

137. Clarification was sought by TAC on the question of the need to strengthen strategic crop-soil research, and the apparent disagreement by IITA with the EPR recommendation to locate this research outside the systems work. Additional comments were made by TAC on the need to assess impact, the need for peer reviews of publications, the need for agroforestry work other than alley cropping, and the apparently low training budget.

138. In concluding the discussion, the Chairman expressed his appreciation to Dr. McWilliam and Sir Ralph Riley for accepting the challenging tasks of undertaking the External Reviews and for producing analytical and forward-looking reports. He also expressed his thanks to Mr. Crouch, Dr. Stifel and Dr. Fisher for their thoughtful and provocative comments. On behalf of TAC, he thanked Dr. Stifel, who would be retiring in the near future, for his commitment and vision, and wished him well in his future activities. Finally, he reminded TAC that it had to prepare a commentary on the IITA External Reviews, for which an ad hoc working group had been nominated.

#### TAC COMMENTARY ON IITA EXTERNAL REVIEW REPORTS

139. In submitting its commentary on the reports of IITA's External Programme and Management Reviews, TAC commends and thanks both Panels, chaired respectively by Dr. J.R. McWilliam and Sir Ralph Riley, for their constructive, analytical and forward-looking reports. The Committee also expresses its appreciation to the IITA Board of Trustees and management for their speedy and thoughtful response to the contents of the reports.

140. The reports were discussed during TAC 51 in the presence of the Panel Chairmen; the Chairman of IITA's Board of Trustees, Mr. L. Crouch; the Director General, Dr. L. Stifel; and the Deputy Director General (Research), Dr. K. Fisher. TAC is pleased to note the progress made by IITA during the period under review, in both its management and programmes.



141. The report of the EMR reviews the major changes in management that IITA has successfully completed, leading to a leaner operating structure, greater organizational cohesiveness and a high degree of decentralization. TAC shares the Panel's view that IITA is to be congratulated for the resolution with which it has faced the many management problems that have arisen, and is pleased to note that no major anxieties were aroused in the minds of the Panel members during the course of the review.

142. TAC also found much to endorse in the report of the EPR. TAC was especially pleased to note the progress IITA has made in implementing its revised strategy, giving greater focus and clearer direction to the research programmes. The report also reviews IITA's achievements since the previous Review, which include the release of maize material resistant to the streak virus, an achievement that was acknowledged by the CGIAR through the King Baudouin Award.

143. The Tuber and Roots Improvement Programme has also achieved notable successes. The outstanding success of the biological control of the cassava mealy bug is now well documented and widely recognized, and has rightly led to the organization of this work as a separate programme. TAC notes the Panel's comments, however, on the need to re-examine the underlying science of some aspects of the work on cassava and cowpea, and looks forward to opportunities to discuss these aspects in greater detail during its forthcoming meeting at IITA.

144. TAC notes the accomplishments of IITA on sweet potato and rice, and commends the satisfactory manner in which these programmes are being transferred to CIP and WARDA respectively.

145. TAC endorses the views of the EPR on the possibilities for expanding soybean research in the future. TAC has some reservations, however, about future increases in expenditure on groundnut research, and considers that further joint initiatives by IITA and ICRISAT on groundnut in the region should be pursued only in the light of clear indications of increasing demand. TAC also considers that the time has now come for the CGIAR to review its System-wide strategy for soybean. The Committee will analyze the needs and make appropriate proposals in its revised priorities and strategies paper.

146. TAC has commented in the past on the need for a more coherent programme of research on Striga, not only across the various programmes at IITA but also through collaboration with ICRISAT and other institutions working on parasitic angiosperms. TAC is disappointed to see the general lack of progress in developing this collaborative approach, and urges IITA not only to implement the suggestions of the EPR but also to establish more productive interaction with ICRISAT and other interested research institutions.

147. While recognizing IITA's achievements in training, TAC notes the Centre's explanation that the relatively low budgetary allocations under this head do not include the cost of the time spent on training activities by scientific staff. TAC understands that all scientific staff at IITA are expected to devote part of their time to training.

148. In general, TAC endorses the recommendations and suggestions made by both Panels and is pleased that the IITA Board and management have responded positively to most of them. TAC notes, however, that a few of

the Panels' recommendations have given rise to some contrary opinions and considers that there are some aspects of IITA's future strategy that would benefit from further amplification.

## 1. Crop Management Research

149. TAC notes the Panel's discussion of IITA's approach to crop management research, which is currently incorporated into three "crop-based systems working groups". The Panel considers that these working groups have contributed to improving the linkages in IITA's research, both between on-farm adaptive research and Centre research, and among the research programmes at IITA. The Panel sees a need, however, to strengthen both the research of these groups and their image within IITA.

150. It considers that the research could be strengthened by providing a specific input from strategic research designed to give greater understanding of some of the underlying principles, such as the complex interactions among soils and crops in intercropping systems. The Panel sees this input as running in parallel with research on soil/water problems, to be undertaken by the resource management group in the revised organizational structure. The Panel further recommends that the image of the working groups should be strengthened by giving them a clear place in the organizational structure and renaming them "System Project Groups".

151. TAC is pleased that IITA accepts the need to strengthen crop management research, but notes that the Centre disagrees with the Panel's recommendation that this aspect of the work should be separated from the system project groups. TAC recognizes that IITA's new approaches to integrating its research are still evolving and that there might well be organizational alternatives for achieving similar purposes. Nonetheless, TAC urges IITA to keep under review the Panel's concerns about conducting both strategic and adaptive research through the same channels and professional staff. There are dangers that, in its desire to foster a systems approach in this way, IITA might be led into making undesirable compromises in methodology.

## 2. Scientific Quality

152. The quality of the science at IITA was questioned in the 1983 Review and again by the 1990 Panel. A general weakness in scientific publication and peer discussion was identified.

153. TAC understands that the firm management needed to revitalize the Institute over the last five years has delayed attention to the question of scientific creativity. Transition is ongoing, but the influx of new managers is now allowing increased attention to the problem. TAC endorses the measures taken by IITA to promote peer reviews and increased scientific publication. It notes the management's view that the turnover of staff represents an upgrading of quality. However, TAC is concerned that excessive turnover could jeopardize the continuity in staffing that is essential for scientific achievement. It believes the introduction of project budgetting will focus research efforts and facilitate the identification of issues and results meriting formal publication.

154. TAC endorses the suggestions of the Panel for increased intra- and inter-disciplinary interaction in the interests of scientific openness and peer debate. The Committee emphasizes the need for openness and self-criticism as an important criterion in the selection of scientific leaders for the Institute.

### 3. Impact

155. IITA needs to ensure that the impact of its work is assessed. TAC notes that, with the exception of the external evaluation of the biocontrol programme on cassava mealy bug, the approach used by IITA to demonstrate impact has been largely anecdotal. The Committee encourages IITA to develop systematic approaches to the assessment of impact at three levels: on science, on national systems development, and (selectively) on farmer productivity. TAC is sympathetic to the concern expressed by IITA regarding the additional costs of collecting better data for impact assessment. The Committee emphasizes the need to be selective, particularly in measuring impact in farmers' fields where new, primary data are required. TAC notes that the question of impact assessment is a system-wide concern, and needs to be tackled at that level too.

### 4. Agroforestry and Resource Management

156. TAC agrees with the Panel's critical comments on alley farming and the need to broaden the approach into other systems aimed at sustainability. The Committee notes IITA's progress in collaboration with ICRAF, which will help to broaden its approach to incorporating woody species into cropping systems. TAC sees the intolerance of Leucaena to acid soils as a constraint to the widespread adoption of production systems that include it as the woody component.

157. Moreover, IITA's view of the potential for achieving impact in the moist savannas tends to lead it away from the more humid forest regions where the possibilities for successfully incorporating trees into cropping systems increase. In these regions, IITA might explore the use of other nitrogen-fixing trees planted by large cuttings, not only in alley cropping but also as more widely planted trees that are periodically pruned to give a minimum of shade with a maximum of mulch.

158. Looking to the future, TAC considers that the approach should be further broadened by including different aspects of soil and water management, such as encouraging controlled surface runoff as well as the formation of terraces and contour ridges by using easily applied techniques. In addition to techniques that rely on strip-planting of crops and perennial vegetation, the use of simple implements and, where appropriate, animal traction should be more vigorously explored.

### 5. Vision of the Future

159. In its chapter "Vision of the Future", the EPR stresses that the role of IITA has to be visualized in a rapidly evolving African scene, characterized by population increase and urbanization.

160. TAC recognizes that, in some countries where humid lowlands dominate, part of the increasing demand could still be met by continued expansion of agricultural land, but often at the expense of further destruction of rain forests. Under many circumstances, however, it would be necessary, or at least preferable, to meet the increasing demand through increased and sustainable production on existing agricultural land.

161. Further, TAC recognizes that projected yield increases are about the same as those that have been occurring in Asia, the United States and Western Europe. But because, in Africa, these increases have to be achieved under less favourable agro-ecological and socio-economic circumstances, a different kind of green revolution will be required.

162. Consequently, TAC considers that the CGIAR in general, and IITA in particular, should be more assertive in projecting the needs. It is necessary to understand more quantitatively what farming systems could meet the challenge, which crops and trees should have a central function, what minimum external inputs would be needed for maximum sustainable utilization of natural resources, and what changes in the socio-economic and policy environment would be necessary to generate the required rate of change.

163. TAC will consider the implications of these needs during the preparation of its revised paper on priorities and strategies.

### Conclusions

164. The reports of both the Programme and Management Reviews illustrate the vigorous ways in which IITA has responded to the recommendations of the 1983 Reviews, and how it has gone further in desirable directions through its thorough and penetrating process of strategic planning. TAC recognizes that to have implemented, during the period under review, such extensive changes to its management structure, programmes and staffing has inevitably also been somewhat disruptive to the continuity of effort. Nonetheless, TAC sees IITA as having now emerged from this process as a stronger and potentially more cost-effective institute, with a greater potential for assisting the national programmes it serves.

165. TAC considers both Reviews to have been well conducted and to have met the requirements set out in their terms of reference. The reports give penetrating insights into the major issues and present comprehensive analyses of the current state of the Institute both from a programme and management perspective. TAC commends the observations and recommendations of both reports to the CGIAR for serious consideration, taking into account the additional comments made in this commentary.

### Future Reviews - (Agenda Item 8)

#### - Report of the Standing Committee for External Reviews

166. Dr. Arnold, Chairman of the Standing Committee for External Reviews, informed TAC that the ICRISAT and IFPRI Reviews were proceeding as planned and that in 1991 three Centres, IBPGR, ILCA and ISNAR, would be reviewed. The Review of ILCA would be followed by the Review of

ILRAD in early 1992. IRRI was scheduled to be reviewed towards the end of 1992, followed by WARDA in early 1993. Proposals on the composition of the EPR/EMR Panels for IBPGR and ISNAR were presented to TAC. These included the short list of names. The Panels will consist of a chairman, plus four to five members. The short-lists were accepted by TAC, and Dr. McCalla was requested to go ahead with the next steps in firming up both the panel chairs.

167. The Reviews of IBPGR and ISNAR would, at the request of these Centres, be done by joint panels. Dr. Arnold reminded TAC of the distracting effect external reviews can have on the Centres, and the advantage to the Centres of joint reviews when these were appropriate. He also reminded TAC of the observation made by Dr. Lowell Hardin, Chairman of the CIP EMR Panel, that it was important for the review team to have the right talents, including the ability to write and listen. In this regard, the size and complexity of the centre, strategic issues and management were all important elements.

168. Dr. Arnold then reported on three topics discussed by the Standing Committee: briefing and debriefing of panels; information; and joint planning and consistency of criteria. There had been rapid progress on the joint activities of the two Secretariats with regard to joint documentation and joint briefing. Not enough had been done in the past to prepare panel chairmen. A more structured briefing procedure was now in place. It had been applied recently with the External Reviews of IITA, IFPRI, and ICRISAT. As soon as the panel chairmen had been appointed, the TAC Chairman or the Chairman of the Standing Committee had briefed the panel chairmen. It would be preferable to do both panels together and to hold a joint briefing after the panel chairmen had been briefed. Similarly, a structured debriefing was needed.

169. In response to Dr. McCalla's request, Dr. McWilliam, Chairman of the IITA EPR Panel, informed TAC that he had found the briefing very useful. Even more useful was the visit to the centre before the main phase. This familiarization visit should be made mandatory, because it allowed the panel to formulate hypotheses and priorities, and delegate responsibilities. Dr. McWilliam said that documentation provided by the centre was useful, but that the centre could produce more structured material. Dr. Lowell Hardin, Chairman of the CIP EMR Panel, informed TAC that, on the basis of the experience gained with the EMRs conducted to date, a conceptual framework had been developed for future reviews.

170. The Standing Committee had identified information management as one area requiring a closer look. However, the Standing Committee held back because the CGIAR Secretariat was going ahead with the information study. The Woolston report had recently been completed and was being circulated. Mr. Alexander von der Osten informed TAC that the CGIAR Secretariat did not intend to do anything further on the subject of information, and TAC needed to decide what it wished to see done. Dr. Arnold said that the Standing Committee would be taking up the matter in June, by which time feedback would have been received on the Woolston report.

171. With regard to joint planning and consistency of criteria, Dr. Arnold informed TAC that the Standing Committee had reviewed the criteria for selecting panel chairmen and membership. The following had been accepted as forming the general principles governing selection:

- Individuals were appointed in their personal capacity and would be required to have the right qualities for the job.
- It was necessary to exclude, as far as practical: individuals who had contracts with centres; members of donor agencies and Co-Sponsors; centre board chairpersons; immediate past directors general; members of governments and individuals intimately related to the host country or centre.
- Panel chairmen must have served on a review panel as a member.

172. Dr. Arnold said that TAC's view was required on Co-Sponsors, particularly FAO, whose expertise had been used in the past, but since the criteria had been established the Standing Committee had tried to be evenhanded. However, the Standing Committee realized the need for flexibility in making exceptions.

173. In the discussion that followed TAC agreed that exceptions should be permitted where there was no conflict of interest and/or where it would further the purpose and objectives of the review process. Co-Sponsors were examples of corporate organizations that were a good source of expertise, and suitable individuals from appropriate departments could be considered without compromising any of the basic principles.

#### Overview of Management in the CGIAR Centres - (Agenda Item 9)

174. In his introductory remarks the Chairman expressed his concern that the draft paper on this subject had only been made available to TAC Members at the meeting. Since TAC Members had had very limited time to review the paper, he suggested that those wishing to make written comments should send them directly to the CGIAR Secretariat. He noted that the paper was based on information and experience obtained over the last 6-7 years.

175. Dr. Selcuk Ozgediz presented the paper, with an apology for the delay in sending it to TAC Members. He stressed that the overview was limited to management issues in the CGIAR Centres and that the paper would be submitted to the CGIAR at the Mid-Term Meeting in May 1990 unless the comments received made major revisions necessary.

176. Dr. Ozgediz explained that the conceptual framework described in the paper was not intended to be a blueprint for assessing management in the IARCs. It was one of several ways of organizing themes for studying management. The study took into account the EMRs conducted to date, noting that they varied in quality and had a built-in negative bias. The paper did not reach centre-specific conclusions.

177. The main conclusions emerging from the study were that the Centres had made impressive progress in governance, strategy formulation, managing relationships with clients and among the Centres themselves, information management, and management skills. The stronger role played by Boards, the EMRs, self-studies organized by Centre management and Boards, and management training organized by the CGIAR Secretariat were considered to have contributed to the improvements observed.

178. Further improvements were still needed in governance, leadership, human resources management, management skills, information management, administrative services, programme reviews and innovation. There was evidence of strong momentum in the Centres for improvements in some of these areas. Ways in which further improvements could be achieved were suggested in the paper.

179. In the ensuing discussion some TAC Members expressed reservations on citing names in the report. TAC noted that while the report advocated that Boards of Trustees should limit themselves to policy and strategic issues, there was no evidence that Board members were selected on the basis of specific skills and strategic thinking. Members considered that there would be merit in including on Boards of Trustees some individuals who were or had served as chief executive officers in other organizations. Doubts were expressed on the notion that a project management approach was conducive to innovation.

180. It was implicit in the paper that strengthening NARS was as important as research. But there were no explicit criteria for determining how Centres contributed to capacity building in NARS. It was not clear whether assertions on this subject were based on the funds allocated to training, or on senior scientist-years earmarked for training vis-à-vis research, or on the time spent by the Boards of Trustees discussing issues relating to NARS.

181. Many issues requiring further elaboration or explanation were raised, such as whether leadership was a constellation of factors or a constellation of personalities, the patronizing attitude of some Centres, and the problems of promoting exploratory behaviour in NARS in order to enhance innovation. Risk taking was considered to be a more delicate matter for NARS than for IARCs. Members noted that the report had considered figures on senior scientist-year across Centres to be unreliable. Concern was expressed about this matter because reliable quantitative indicators were needed to facilitate comparisons among Centres with respect to resource allocation and scale of activities. TAC Members also noted that the overview seemed to be assessing inputs rather than outputs and did not comment on the influence of capital expenditure and the maintenance and rehabilitation of physical plant and equipment on Centres' budget growth.

182. It was pointed out that some important features of Boards of Trustees were not clearly reflected in the paper. It should be realized that the Boards of Trustees of IARCs were not like Boards of Directors of large private companies or those of non-profit private foundations. The accountability of the Boards of Trustees of IARCs was only in terms of public trust. These Boards also faced the additional problem that they were largely dependent on the Directors General for the interpretation of CGIAR priorities, which made it very difficult for the Boards to make an unbiased assessment of the situation.

183. While commending the effort that went into the preparation of the paper, a Centre Director expressed his concern with the process. In his opinion the paper had received wide circulation before the major players had been given a chance to provide some feedback.

184. In his response Dr. Ozgediz thanked TAC Members for their comments, which would be considered when revising the paper. He agreed that the quality of Board members was a very important factor and hoped

that the candidate information system being developed by the CGIAR Secretariat would improve the selection process. He also agreed with the idea of having some chief executive officers or individuals of equivalent calibre and experience among Board members. He explained that the citing of names was intended to add flavour to the report. On the observation that EMRs seemed to be more input- than output-oriented, Dr. Ozgediz agreed and noted that EMRs had attempted to look at the management of relationships while the EPRs discussed the content of the relationships.

185. Regarding the yardstick for measuring the contribution of Centres to capacity building in NARS the strategic planning process was considered to be one possibility. There was substantial evidence that Boards of Trustees devoted considerable time to NARS issues. Agreeing that leadership was a very important factor in management, he cited the contribution of management training courses towards changing the patronizing image of Centres. More and more Centres were now adopting a listening attitude to NARS.

#### Other Business - (Agenda Item 10)

186. In introducing this item, Dr. McCalla indicated that there were eight subjects which had to be covered, and these were successively presented and discussed.

#### (a) Progress Report of the TAC/Centre Directors Working Group on Plant Genetic Resources 1/

187. Dr. Arnold reminded Centre Directors and TAC that both had jointly worked in the past on a policy statement on plant genetic resources. This had led to the setting up of a small working group consisting of two Centre Directors and two TAC Members to see if those items of policy were being put into effect. The working group had been charged with keeping an eye on what was happening in the world of intellectual property rights, and was expected to come up with new guidelines for the Centres on how to handle plant breeders' rights. The working group had adopted the position that it could not produce new guidelines until legislation on this subject had been sorted out in the USA and the European Community. However, this position was now being challenged by people in the Centres and outside, who suggested that the CGIAR was an influential body and should have a position in order to influence the opinions of others. Dr. Arnold said that the working group needed guidance and advice. Given the fact that intellectual property rights is a field in which ideas were rapidly changing, TAC in consultation with Centre Directors agreed to put the item on the June agenda, and Centre Directors agreed to get a response to TAC in time for the June meeting.

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1/ Joint Session with Centre Board Chairmen and Centre Directors



(b) The CGIAR Committee on Sustainability 1/

188. Dr. Swindale, Chairman of the CGIAR Committee on Sustainability, reminded TAC that the interim report had been presented by the committee to the CGIAR at ICW 1989, and that, after discussion, the Group had called for additional inputs. The committee had subsequently met in Paris in December 1989 and had covered in depth a number of areas which had been touched upon rather superficially in the first interim report. The committee was now in a position to indicate clearly what the Centres were doing with regard to sustainability, where they should go in the future, how deeply they should enter into the field and what the complications were. TAC was informed that, in developing this discussion, the committee had used, as a framework, TAC's own determinants of sustainability. The committee had thus built directly upon TAC's own report. Consequently, it was now possible to indicate clearly how TAC's suggestions were being taken up by the Centres. The committee was planning to present its report to the Group at ICW 1990, and a draft would be sent to TAC for comments before the report was finalized.

(c) The King Baudouin Award

189. The TAC Chairman introduced this item by stating that no problem was expected regarding the Award for 1990, for which invitations for submissions had already been sent to the Centres. The list of candidates would be examined at TAC 52. However, it was becoming increasingly difficult to explain to outsiders why the CGIAR System was awarding itself an Award. An alternative to the present system would be to award a national research programme for its most effective collaboration with a CGIAR Centre(s). Several pros and cons were identified to this suggestion. A majority of the TAC Members proposed that the Award be changed, but that the alternative suggested was not fully satisfactory. It was therefore agreed to establish a small special committee to review the Award and to advise TAC accordingly. TAC Members proposed for the ad hoc committee were: Drs. Amir Muhammed (Chairman), Doris Calloway and Raoul Dudal.

(d) Proposal for a Study of Needs and Priorities for Research to Support Animal Agricultural Development in Developing Countries

190. Dr. McCalla presented background information and the general outline of the study. He emphasized that such a study would be very useful for the preparation of both the CGIAR priorities and strategies paper, and the ILCA and ILRAD EPRs, which are scheduled for the end of 1991 and early 1992 respectively. He also indicated that ILCA and ILRAD recognized the need for such a study and were very supportive of the approach chosen. Preliminary contacts with the African Bureau of the World Bank had confirmed the relevance of such a study.

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1/ Joint Session with Centre Board Chairmen and Centre Directors

191. Questions were raised on the feasibility of completing such a comprehensive study in a very limited period of time - by the end of 1990. Worries were also expressed on the difficulty of gaining access to information in different countries, the need to address all the many animal products, and how to take into consideration the needs of consumers.

192. In replying to these questions, the TAC Chairman indicated that what made this study attractive was the fact that it would not be yet another desk analysis, but that the project was designed to involve NARS in the identification of needs and priorities. The TAC Chairman also indicated that he expected some inputs and concrete proposals from the Standing Committee for Priorities and Strategies on what was really needed and feasible within the short period of time available for the study. It was therefore agreed that some comments on the proposed study would be prepared and given to the TAC Chairman.

(e) The World Bank Conference on Irrigation and Drainage Research

193. Dr. McCalla informed TAC of the existence of an ongoing study on irrigation and drainage technology research sponsored by the World Bank. Dr. Muhammed informed TAC that a meeting would be held on the subject in Washington DC on 19-20 April 1990. He was asked by the TAC Chairman to attend the meeting on behalf of TAC and to report during the June 1990 meeting.

(f) Capital Budgeting in the CGIAR

194. Dr. McCalla reminded TAC that the budgeting of capital items in the CGIAR had been raised by the Standing Committee for Resource Allocation and also by the Resource Allocation Process Review Committee. However, the issues involved, including the question of maintenance of physical facilities, had not been discussed sufficiently. TAC agreed to put the item on its continuing agenda.

(g) Use of the Expressions "Upstream" and "Downstream" Research

195. "Upstream" research was often understood to be the strategic research conducted by international centres, while "downstream" research was taken to be the adaptive research conducted by NARS. It was agreed that this distinction was not appropriate and had a negative connotation for NARS. Considering this misleading interpretation and the fact that both types of research have their advantages and their difficulties, the TAC Chairman strongly recommended that the use of these terms be avoided in future TAC discussions and writings.

(h) Commission on the Application of Science to Agriculture, Forestry and Aquaculture (CASAFA)

196. This item was raised simply to acknowledge the fact that TAC was always formally invited to the meetings organized by CASAFA. Three meetings were planned for 1990: control of grassy weeds, sustainability of biodiversity, and biotechnology and animal reproduction.

Future Meetings - (Agenda Item 11)

197. TAC confirmed the dates and venues for TAC 52 and 53 and agreed on tentative dates and venues for TAC 54 to 58 as follows:

- TAC 52: 11 to 17 June 1990, IITA, Ibadan, Nigeria
- TAC 53: 22 to 27 October 1990, Washington DC, USA
- TAC 54: 9 to 17 March 1991, ICARDA, Aleppo, Syria
- TAC 55: 24 to 30 June 1991, FAO, Rome
- TAC 56: 21 to 27 October 1991, Washington DC, USA
- TAC 57: March 1992, FAO, Rome
- TAC 58: June 1992, ISNAR, The Hague, Netherlands

198. Dr. Muhammed proposed that the President of the "Third World Academy Science" based in Trieste should be invited to attend half a day of a TAC meeting. The suggestion was supported by the TAC Chairman, who requested Drs. Muhammed and de Wit to initiate contacts and to organize a discussion before the the paper on CGIAR priorities and strategies was finalized.

TAC Chairman's Closing Remarks

199. In closing the meeting, Dr. McCalla, on behalf TAC, once again thanked FAO for hosting TAC 51. He expressed his appreciation to the observers and resource persons for their active participation and valuable contribution to TAC's discussions. It was his view that tremendous progress had been achieved in the assessment of the non-associated centres. He considered that there was still a lot of work to be done before the Committee could reach its final conclusions and recommendations on the non-associated centres. However, he was confident that TAC would be able to cope. He expressed his immense gratitude and pleasure for the dedication, hard work and productivity of the TAC Members and the staff of the two Secretariats. With these remarks he declared the 51st Meeting of TAC closed.

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AGENDA

1. Opening Session
  - (a) Opening Remarks
  - (b) Adoption of TAC 50 Report
  - (c) Matters Arising from TAC 50
  - (d) Adoption of the Agenda
2. Report from the CGIAR Secretariat
3. Assessment of Non-Associated Centres
  - (a) Results of Desk Analysis
  - (b) Recommendations by Subject-Matter Panels
  - (c) Next Steps
4. CGIAR Priorities and Strategies: Progress Report
5. Resource Allocation Process:  
Report of the Resource Allocation Process Review Committee
6. CIP External Reviews
7. IITA External Reviews
8. Future Reviews
9. Overview of Management in the CGIAR Centres
10. Other Business
11. Future Meetings

LIST OF DOCUMENTS

<u>Item</u>		<u>Document Number</u>
1	Draft Report of the 50th Meeting of TAC	AGR/TAC:IAR/90/1
2	Funding of International Agriculture Research: Trends and Prospects	CGIAR Secretariat
3	Activities and Modes of Operations within the CGIAR System: Options for the Future	AGR/TAC:IAR/90/4
6	Report of the Third External Programme Review of the International Potato Centre (CIP)	AGR/TAC:IAR/89/14
	Report of the Second External Management Review of the International Potato Centre (CIP)	CGIAR Secretariat
7	Report of the Third External Programme Review of the International Institute of Tropical Agriculture (IITA)	AGR/TAC:IAR/90/2
	Report of the Second External Management Review of the International Institute of Tropical Agriculture (IITA)	CGIAR Secretariat
8	Third External Programme Review of ICRISAT - Progress Report	AGR/TAC:IAR/90/3
	Second External Programme Review of IFPRI - Progress Report	AGR/TAC:IAR/90/10
9	Overview of Management in the CGIAR Centres - Draft for Discussion	CGIAR Secretariat

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(as of March 1990)

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