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Agenda Item 8(c)

Proposed Expansion of the CGIAR
Proposals Regarding Restructuring of TAC

Attached is a document entitled Proposed revisions in the structure and operating mechanisms of the Technical Advisory Committee of the CGIAR, for consideration by the Group under agenda item 8(c).

Attachment

Distribution

CGIAR Members
Center Board Chairpersons
Center Directors
TAC Chairman
TAC Members
TAC Secretariat
PROPOSED REVISIONS IN THE STRUCTURE AND OPERATING MECHANISMS OF THE TECHNICAL ADVISORY COMMITTEE OF THE CGIAR

by Alex F. McCalla, Chair, TAC

I. Introduction

The paper presents an analysis of the needs of the CGIAR for technical and scientific advice from the Technical Advisory Committee (TAC). The paper concentrates on an evaluation of TAC's current and prospective future tasks and recommends a modified structure for fulfilling those tasks. The paper has benefited from discussions with TAC and a review by the Co-Sponsors.

II. Why a Reappraisal is Necessary

Since May 1988 the CGIAR has made two major decisions which could significantly broaden and alter the CGIAR's mandate and objectives. The first was the decision in Berlin (May 1988) to consider the addition to the CGIAR of some or all of the subject matter and/or institutions represented by an agreed upon list of 10 so called "Non-Associated Centers." The second was the agreement in Canberra (June 1989) in general terms to broaden the mandate of the CGIAR with a declaration of intent "... to continue to give emphasis to support for research on technologies and systems of enhanced food production that can be sustained by farmers overtime through the efficient utilization of their renewable natural resource base, and to expand this emphasis to include research on the optimal use of tropical and sub-tropical forest lands giving particular stress to the interaction of agriculture and forestry..." (emphasis added, from Summary of Proceedings and Decisions, CGIAR Meeting May 30-Jun 1, 1989, Canberra, Australia).

These two actions necessitate a careful review of TAC responsibilities, composition and operating procedures so that full and equal cognizance can be given to forestry as well as agriculture in its broadest definition.
III. Premises Taken as Given

The discussion in Canberra concluded that the following would be the required characteristics of technical advice:

(1) there would continue to be a need for independent, unified and coherent advice to the CGIAR;

(2) that this advice should come from a single mechanism of technical advice;

(3) that the mechanism for providing that advice should include significant and explicit involvement of eminent experts from forestry and resource related subjects;

(4) that additional mechanisms would need to be explored which would allow TAC to include, and/or have access to, an expanded range of scientific expertise.

In summary, the paper accepts as given that there should be a single TAC which includes significant forestry expertise and has access to a broadened range of expertise by discipline/subject matter area, commodity, ecology and region.

IV. Assumptions Underlying the Analysis

In approaching this task, two basic assumptions were made.

(1) First, the basic functions of TAC would not change and would continue to include five major tasks:

- **Context**
  - (a) Monitoring the changes in the global context which have implications for the CGIAR.

- **Priorities**
  - (b) Recommending medium and long-term strategies and priorities to the CGIAR;

- **Reviews**
  - (c) Evaluating the quality and relevance of CGIAR institute research and research related
programs (EPRs) and monitoring compliance with approved plans and CG priorities;

**Resource Allocation**

(d) Reviewing of center programs (5 year and annual) and making recommendations to the CGIAR on resource allocation;

**System Issues**

(c) Addressing across-center and system issues such as stripe reviews, commodity/activity balance, regional distribution, intercenter conflicts and monitoring of system evolution.

(2) The second assumption made was that with the broadened scope of the CGIAR it would be impossible to embody in the membership of TAC all necessary dimensions of expertise by:

(a) discipline; (b) subject matter area; (c) commodity; (d) ecology; and (e) region. Therefore some additional mechanisms would be required. Options include expanded use of consultants, panels of experts, an expanded TAC Secretariat or some combination of these.

V. The Special Role of TAC

The CGIAR is characterized by independent centers, independent donors, no centralized decision-making authority or monetary clearing house, decisions by consensus and minimum authoritative bureaucracy. Therefore, TAC plays an integrative and special role in linking research needs, research entities and research funders. The implication of this is that TAC must be able to integrate across its various functions and provide the CGIAR, in its broadest context, with a comprehensive, coherent short and long run vision of the CGIAR. In fulfilling this special role certain critical characteristics must be preserved. These are:

(a) the necessity to continuously keep a global perspective of world food and agriculture needs and evaluate the appropriate role for the CGIAR, as a small, but significant actor;

(b) that TAC must be seen as and act as an independent and objective body for advice and review. Under no circumstances
can TAC be seen as having a vested or special interest in any particular component of the CGIAR;

(c) that TAC, through its ongoing activities, collects a comprehensive intercenter/system perspective that no other part of the CGIAR necessarily collects. In particular, given its activities in resource allocation, TAC should have a dynamic view of resource needs and allocations between: (a) centers; (b) activities; (c) commodities; (d) regions; and (e) ecologies. Similarly, TAC involvement with Center Strategic Plans, 5 Year P&Bs, EPR/EMR reviews and the designation of Center Liaison Scientists means it should have a collective wisdom about current activities and future plans unlike anyone else in the CGIAR.

Whatever operational mode is selected must preserve these critical and unique aspects. This integrative role could be damaged if certain responsibilities are fully delegated or if subgroups of TAC or panels reporting to TAC have partial, but not full, contact with the full range of CGIAR functions. If such delegations were to occur, an effective mechanism for coordination and information interchange would be critical.

VI. The Approach to the Analysis

Using the above as a background, it is clear that there are three critical characteristics that TAC must meet in a broadened CGIAR. First it must be able to accomplish its routine tasks efficiently, competently and fairly. Second it must utilize appropriate and high quality technical advice as necessary to provide balanced, analytical and objective analysis and recommendations. And third it must be able to develop, maintain and use its collective wisdom and the perspective that is acquired through the carrying out of its routine tasks. This suggests the need for coherence and collective judgement which of necessity limits what can be fully delegated by TAC. If for example delegation of analysis occurs, then coordination and communication becomes absolutely a critical variable to be considered.

In summary, any model must be task oriented, technically competent, and integrative and comprehensive either through collective
action or by effective communication and coordination. These three considerations weighed very heavily in the analysis.

The approach was first to review the history of TAC and its tasks, second to break the tasks into components and identify the actors involved; third to consider basic options for a restructured TAC, identifying operational variants and the strengths and weaknesses of each option, and fourth making recommendations for the future structure of TAC.

A. History of TAC

The analysis began by reviewing the history of TAC. Drawing mainly on Warren Baum's book (*Partners Against Hunger*) and the First and Second Reviews of the CGIAR, a brief history was prepared. It is attached as Appendix I. The operational tasks for TAC were most recently summarized by the TAC Secretariat Review Panel as:

- to ensure the quality of the research supported by the Group and its relevance to the CGIAR goals and objectives (normally discharged through External Program Review (EPR) assessments of the relevance of a center's activities and of the appropriateness and effectiveness of its internal review processes);

- to recommend research priorities and strategies for the CGIAR; (discharged mainly through the periodic update of the document on Priorities and Strategies of the CGIAR, but also through the 5-year and annual Program and Budget (P&B) appraisal process);

- to recommend resource allocation among centers in the context of CGIAR-approved priorities and strategies (discharged through the 5-year and annual P&B appraisal process); and

- to provide intellectual leadership to the CGIAR and to deal with intercenter and systemwide issues. (TAC Secretariat Review, p. 5)
For the purposes of this analysis, it seems useful to divide TAC functions out into the five main areas identified earlier: (1) CG in Global Context; (2) Priorities; (3) Reviews; (4) Resource Allocation and (5) System Issues.

B. The Tasks in Detail

Given these five tasks the second step in the analysis was to divide these broad tasks into components and identify (a) who was involved (TAC as a whole, TAC Chair, TAC Subcommittee, TAC Secretariat or outside experts) and (b) who was the decisionmaker or doer of the work. This analysis is presented in Table 1. It shows the pattern of who does the preliminary analysis, who listens to the presentations, who prepares the proposed TAC position and who takes final action. It is an attempt to accurately describe current procedures. The pattern that emerges is that, while some specific functions and preparatory tasks are delegated to subcommittees and/or the TAC Secretariat, TAC operating as a committee of the whole receives virtually all substantive presentations coming before it (P& Bs, EPRs, Papers relevant to Priorities, Strategic Plans, Activity Analysis, etc.) and ultimately acts as a committee as a whole. Thus, the committee itself is the integrator and the repository of the corporate, dynamic history of the various components of the CGIAR.

C. The Basic Options

Using these tables as a beginning point one could begin to ask what tasks or task components could be delegated to alternative substructures of TAC if a different TAC structure were implemented. Three basic options were considered in the analysis.

Option I - A smaller committee (8-10) which focused mainly on strategic issues and delegated operational responsibilities to either standing subcommittees or standing panels of experts (as proposed by the TAC Secretariat Review Panel). The review panel recommended that TAC be

"...a small committee composed of scientists who have distinguished themselves in their respective specialities, but who in addition have broad experience in priority setting, research management, and development ..."
<table>
<thead>
<tr>
<th>Task</th>
<th>Task Components</th>
<th>TAC Chair</th>
<th>TAC Standing</th>
<th>TAC Ad hoc</th>
<th>TAC Secretariat</th>
<th>External Agencies and Experts</th>
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<tbody>
<tr>
<td>1 CGIAR in the global context</td>
<td>a. Survey and Collection of relevant literature</td>
<td>X</td>
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<td>X-FAO-World Bank</td>
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<td>b. Maintenance and/or access to global data bases</td>
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<td>c. Identification of emerging issues of importance to CGIAR</td>
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<td>d. Maintenance of information of CG &amp; Center activities</td>
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<td>X-CG Sec</td>
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<td>e. Production of periodic papers on global context and CGIAR</td>
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<td>2 CGIAR Medium and Long Term Strategies and Priorities</td>
<td>a. Monitoring implementation of CG priorities by Centers</td>
<td>X</td>
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<td>X-CG Sec and EPRs</td>
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<td>b. Review and Comments on Center Strategic Plans</td>
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<td>c. Periodic Revisions of CG Priorities</td>
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<td>ii. by commodity and activity</td>
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<td>d. Inter Center issues of mandate and relative resource allocation</td>
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X - involved  (X) - decisionmaker and/or doer of work
### Major TAC Tasks

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<th>Task</th>
<th>Task Components</th>
<th>TAC Chair</th>
<th>TAC Standing</th>
<th>TAC Ad Hoc</th>
<th>TAC Secretariat</th>
<th>External Agencies and Experts</th>
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<tr>
<td>A. Center EPRs</td>
<td>a. Schedule of Reviews</td>
<td>(X)</td>
<td>X</td>
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<td>X-CG Sec, Donors &amp; Centers</td>
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<td></td>
<td>b. Identification of issues for review missions</td>
<td>(X)</td>
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<td>X-CG Secretariat</td>
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<td>c. Identification of Candidates</td>
<td>(X)</td>
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<td>X-Center Director General</td>
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<td>d. Recommendations for Chair</td>
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<td>e. Recommendation for members</td>
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<td>f. Approval of Chair candidate</td>
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<td>g. Approval of Panel of Members</td>
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<td>h. Appointment of Chair</td>
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<td>i. Appointment of Panel members conducting review</td>
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<td>j. Logistics of Review</td>
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<td>k. Receipt of report</td>
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<td>l. Preparation of TAC Commentary</td>
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<td>m. Approval of TAC Commentary</td>
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<td>n. Transmission to CGIAR</td>
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<td>o. Monitoring of Implementation</td>
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<td>B. Cross Center Commodity or Activity Reviews or Analysis (Stripe reviews)</td>
<td>a. Identification of Commodity/Activity to be reviewed</td>
<td>(X)</td>
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<td>b. Terms of Reference</td>
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<td>c. Mechanism for Review</td>
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<td>d. Selection &amp; Appointment of Review Panel or Consultant</td>
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<td>e. Conducting Review</td>
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<td>(X)-External Panel</td>
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<td>f. Logistics of Review</td>
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<td>h. Preparation of TAC Commentary</td>
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<td>j. Disposition of Report</td>
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X - Involved  (X) - decisionmaker and/or doer of work
## Major TAC Tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Task Components</th>
<th>Actors Involved in Analysis and Decision Making</th>
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<tbody>
<tr>
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<td>TAC</td>
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<td>Chair</td>
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### 4 Reviews and Recommendations Regarding Resource Allocation

**A. Five Year P&Bs**
- a. Analysis of proposed 5 year Programs and Budgets (P&Bs)
- b. Review of 5 year P&Bs
- c. Preparation of TAC Commentary
- d. Approval of TAC Commentary

**B. Annual Budgets**
- a. Analysis of proposed annual budgets
- b. Review of Annual Proposals
- c. Approval if within 5 yr. P&B
- d. Approval, if contain significant program and/or budget change

**C. Monitoring and Evaluation**
- a. Monitoring Compliance
- b. Continuing evaluation of across center implications
- c. Periodic Comprehensive Evaluation

### 5 Between Center and/or System Issues

- a. Stripe reviews (see 3)
- b. Issue/activity analysis
- c. Regional issues and analysis
- d. Intercenter dispute resolution
- e. Interface role
  - i. with centers
  - ii. with Center Board Chairs
  - iii. with Center Directors
  - iv. with Donors and Cosponsors

### 6 Special Assignments

- a. Non-Associated Centers
- b. Forestry

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X - involved  (X) - decisionmaker and/or doer of work
strategy. TAC should be supported by standing panels of leading experts in various fields, appointed individually, possibly on a nominal retainer basis, and served by the profession staff of the Secretariat. They could be convened as individuals, specialized panels or as multidisciplinary panels. . . . The panels need not be convened on a regular basis, but rather on a case by case basis as appropriate* (p. 7).

The smaller TAC would need significant forestry input (approximately 3) and therefore would have reduced agricultural competence.

**Option 2:** Retaining the current size of TAC (14 plus Chair) replacing up to four current areas of expertise with forestry/agroforestry/resource expertise. A substructure of either standing committees of TAC (functional or subject matter) or panels of experts were considered.

**Option 3:** An expanded TAC (to 18-20) adding forestry expertise (4-5) and again operating with some form of subcommittees/panels.

Each Option was considered regarding (a) operational variants; (b) the characteristics of TAC members and time required; (c) implied requirements for Secretariat support; and (d) strengths and weaknesses of options.

The process of evaluating options very quickly led to focusing on two basic models. The first was a technical advisory mechanism which had two tiers with a small formal TAC focusing on strategic issues and a second tier of standing committees and/or panels of experts. The smaller TAC would of necessity have to delegate certain functions to subcommittees or panels both because of time limits and because of the necessity of utilizing the broader range of technical expertise which could only be accommodated in second tier entities. Thus the issues of information exchange, coordination and coherence of TAC advice becomes paramount. It was difficult to discover an effective method of coordination unless either members of TAC served as Chairs of the standing committees or panels (a large time commitment) or the TAC Secretariat was expanded substantially so it could provide coordination.
The second choice involved considering a TAC expanded by the addition of up to 4 forestry/agroforestry/resource management experts. This model allowed the explicit inclusion of forestry expertise without necessarily diminishing the range of agricultural expertise available. Further it would allow the Committee to act as a committee as a whole on most substantive tasks that TAC is required to do. While one could not expect that every type of technical expertise regarding commodities, disciplines, ecologies, regions and subject matter would be represented, a committee of 16-20 people would allow sufficient breadth that more specialized expertise could be drawn on an "as needed basis" from standing rosters of experts (consultants) which would be identified and retained for potential TAC services.

Despite an early preference for the smaller TAC version, the analysis lead to the conclusion that an expanded TAC offered the best solution at this time. The reasons for this choice are presented below. A more detailed description of the proposed TAC structure follows in the next section.

D. Reasons for Choosing an Expanded TAC

Four basic considerations were influential in making the recommendations that follow.

First TAC has a unique and special role to play in the CGIAR. It is the body which must understand the components (Centers) in detail, place these in a coherent notion of the system (CGIAR) and keep donors apprised of the CGIAR in the broader global context. A substantial portion of the information that allows TAC to perform this role (which no one else is able to do) comes from TAC, as a committee of the whole, performing its ongoing tasks--strategic plans, P&B reviews, EPRs, and priority analysis. That "dynamic feel" for the ever evolving system could be lessened with a decentralized, delegated, two tier system.

Second the smaller strategic TAC represents a large and difficult to manage problem of coordination and linkages. There would be a real danger of fragmentation and loss of coherence. Further, the time required of those who would link the two levels would be considerable. A further
consideration would be the difficulty of comparable levels of expertise and equitable treatment of issues.

Third the current size of TAC is too large to be an interactive coherent group but not large enough to have the range of expertise needed for the broadened CGIAR mandate. Further, the management of a committee of 16-20 would not be significantly different than for a committee of 14.

Fourth the enlarged CGIAR requires additional breadth of expertise not less.

Thus the broadened committee best approaches the three basic requirements laid out above (p. 6). It must be able to do TACs tasks, it must have a sufficient range of technical competence and it must be able to be integrative and comprehensive.

VII. The Proposed Structure of TAC

The recommendation is to expand TAC by the addition of at least four eminent experts in the area of tropical and sub-tropical forestry/agroforestry/natural resource management. Given the current committee size of 14 this would lead to a committee of 18. In the long run the recommended size is 16-20 members. The appropriate size should again be evaluated after 2-3 years to see if a smaller Committee (16) is sufficient to do the tasks facing TAC. It is proposed that TAC would continue to have functional subcommittees as at present on (a) Budget and Resource Allocation, (b) Reviews and (c) Priorities and Strategies. Additionally TAC should move immediately to identify panels (rosters) of technical experts from which individual consultants or experts committees could be utilized on an "as needed basis." The first of these rosters for forestry should be identified immediately and used to formulate a proposed program of work for the CGIAR within the five topic areas identified by Bellagio II.

A. Characteristics of TAC Members

TAC members should be broad cross section of expertise but a basic characteristic should be breadth and integrative capacity. Specialized
technical expertise could come from the panels (rosters). A possible constellation of TAC membership is presented in Appendix 2. This disciplinary/subject matter area classification is only one of several critical dimensions. Individuals selected to fill TAC positions should also have a diversity of interests in commodities, regions, and ecologies. A matrix approach seems the most appropriate way to proceed.

Some TAC members should be deliberately recruited because, in addition to particular skills, they are broad gauged strategic thinkers who could serve on the Priorities and Strategies Committee. Further it would be necessary to recruit specifically for members to serve as Sub-Committee chairs who had the time available and people management skills.

B. Secretariat Requirement

The TAC Secretariat would have to be expanded to include at least one expert in forestry. The Secretariat would require subject matter expertise to identify and use experts, to provide technical analysis and to provide integrative analytical and writing skills. It would also have to have strong logistical and secretariat capacity for ongoing tasks.

C. The Advantages and Disadvantages of the Proposed Approach

There are three fundamental advantages of this approach. First it allows TAC to continue to function as a coherent committee of the whole which enables it to perform its unique integration function. Second it eliminates the potential problems of coordination in a two-tiered TAC. Third it allows for a broader range of disciplinary, regional, ecology and subject matter expertise to be represented on the committee.

The disadvantage is that it is a larger, more costly and difficult to manage operation. However it is the judgement of this analysis that its advantages out weigh the disadvantages.
VIII. The Transition

At this point in time there are two imperatives that must be met. The first is to augment TAC with forestry expertise. The second is to not lose continuity in the current TAC which is midway through its analysis of the non-associated centers. Thus the proposal is to immediately add at least four members with appropriate forestry/agroforestry/natural resource management expertise. These terms should be appropriately staggered so they would not all leave in one future year. Regarding the current members of TAC, I would propose to continue the current TAC in place until December 1990 when all terms would expire. Current members would be eligible for appointment to the new TAC and past service would not necessarily limit time served on the new TAC. It would be absolutely essential that significant continuity be maintained at least in the transition period.

The third step to be taken would be to immediately establish a roster of experts in Forestry/Agroforestry/Natural Resource Management and, from them and the new members of TAC, establish an ad hoc panel to continue previous work to develop a substantive set of plans for CGIAR support of international research in forestry.
Appendix I

Brief History of TAC
(drawn from Baum, Partners Against Hunger
and 1st and 2nd Reviews of CGIAR)
prepared by Lindy Watts

The need for a technical advisory committee within the CGIAR was perceived with the inception of the Group. It was discussed during the early negotiations and the concept was put forward in the paper "Possible Objectives, Composition, and Organizational Structure of an International Agricultural Research Consultative Group" presented to initial organizers at a meeting on January 14-15, 1971. The paper suggested:

"the creation of a technical advisory group of agricultural experts, serving in their individual capacities, to review research proposals, to assess the results of feasibility studies and in other ways to provide technical expertise."

The concept firmed during the first meeting of the CGIAR on May 19, 1971. The Terms of Reference for the Technical Advisory Committee were completed during the meeting and are as follows:

"The TAC will, acting either upon reference from the Consultative Group or on its own initiative:

(i) advise the Consultative Group on the main gaps and priorities in agricultural research related to the problems of the developing countries, both in the technical and socioeconomic fields, based on a continuing review of existing national, regional and international research activities;

(ii) recommend to the Consultative Group feasibility studies designed to explore in depth how best to organize and conduct agricultural research on priority problems, particularly those calling for international or regional efforts;"
(iii) examine the results of these or other feasibility studies and present its views and recommendations for action for the guidance of the Consultative Group;

(iv) advise the Consultative Group on the effectiveness of specific existing international research programmes; and

(v) in other ways encourage the creation of an international network of research institutions and the effective interchange of information among them."

Under the Terms of Reference the Committee has reviewed centers and made recommendations for the inclusion in the Group, conducted regular and detailed reviews of center activities (the Quinquennial reviews began in 1975), reviewed annually major changes in a center's program, conducted studies of activities common to more than one center, and reviewed centers long-range plans. The TAC has also prepared four studies recommending priorities to the system.

The TAC was not initially charged with the review of budgets and determination of fund allocation as it was felt that this area was not within the purview of the TAC and would indeed detract from it's mission. However, with the dwindling resources of the system, it became increasing apparent that TAC's input into the allocation of resources was needed if budget decisions were going to be made based on the priority of research rather than across-the-board reductions. The inclusion of TAC in the budget process commenced following the acceptance of the second system review of 1981.

The second review rephrased TACs charge as follows: (p. 71, 72)

"(i) To advise the Consultative Group on priorities in agricultural research related to the problems of the developing countries in both the technical and socio-economic fields based on a continuing review of existing national, regional and international research activities."
(ii) To review and recommend appropriate action regarding the technical component of major programme changes proposed by any Centre before they are formally incorporated into annual budgets.

(iii) To ensure that periodic external assessments are made of the scientific quality and effectiveness of the activities financed by the Group, and of the continuing need for these activities especially to ensure that they are not continued longer than necessary and that activities of lower priority are replaced by those of higher priority.

(iv) To review the long-range research and training programmes of each Centre and to prepare on a continuing basis a long-range research plan for the system as a whole based on technical considerations and the needs of the developing countries.

(v) To encourage the creation of an international network of research institutions and the effective interchange of information among them.

(vi) To recommend to the Consultative Group feasibility studies designed to explore in depth how best to organize and conduct agricultural research on priority problems particularly those calling for further activities by the CGIAR system."

Membership

In the initial discussions of the TAC, it was perceived to be a committee of 7 individuals. During the first CGIAR meeting this was enlarged to a group of twelve including the TAC Chairman. An additional member was added the following year bringing the total number to thirteen. As the Group was concerned that developing country representation be present in the system, TAC membership was to include 6 individuals from developing countries, 6 from developed countries as well as the Chair. Two additional members were added in mid-1985 to include a specialist in the new biotechnology and allow for greater developing country participation.
The length of assignment of TAC members was initially set at two years with the possibility of reappointment for an additional 2 year term. By recommendation of the Report of the Review Committee of September 1981 this was increased to a maximum length of service of three two-year terms. The review also suggested the amount of time devoted by the TAC chairman be extended to near full-time, from the previous one quarter time.
Appendix 2

Possible Areas of Expertise for Expanded TAC

Forestry:
- Genetics/Tree Breeding and Improvement
- Ecology/Silviculture
- Forestry/Natural Resource Policy Economist
- Agro Forestry (with farming system background)

Agriculture - Plant
- Genetics/Plant Breeding/Crop Improvement (2)
- Agronomy
- Soil/Water/Nutrient Relationships
- Crop Protection

Agriculture - Animal:
- Animal Production (genetics, physiology or nutrition)
- Animal Diseases

Fisheries (Aquatic Animal specialist)*

Social Science/Management
- Economists (2): (farming systems, macro)
- Anthropology/Sociology
- Management/Human Resource Development

General
- Biotechnology/Molecular Biology
- Nutrition/Human Health
- Environment/Ecology/Sustainability

* If aquaculture is added to CG mandate