

CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

1818 H St., N.W. Washington, D.C. 20433 U.S.A.
Telephone (Area Code 202) 477-3592
Cable Address - INTBAFRAD

FROM: The Secretariat

February 1, 1977

Consultative Group Meeting, October 27-29, 1976 Informal Summary of Proceedings

1. Attached is the Informal Summary of Proceedings of the Consultative Group Meeting held on October 27-29, 1976. It takes account of comments received on the draft circulated on December 20, 1976. The financial position has been updated to January 31, 1977 and is summarized in Annex IV.
2. Members will recall that a principal item on the agenda of that meeting was a discussion of the recommendations of the Review Committee. It was agreed that the Review Committee's Report, minus some of its appendices, would be made generally available together with a summary of the discussion. A condensation of the appropriate part of the attached Informal Summary has been prepared, and is included in the final version of the Report.
3. Members are asked to note especially paragraph 179, indicating that the 1977 International Centers Week and CG meeting will be held on September 12 to 16, 1977. The meeting will be at the headquarters of the World Bank in Washington.

Attachments

Distribution:

CG Members
TAC Secretariat
TAC Members
Center Directors
Participants

CONSULTATIVE GROUP MEETING

OCTOBER 27-29, 1976

WASHINGTON, D.C.

INFORMAL SUMMARY OF PROCEEDINGS

1. The twelfth meeting of the Consultative Group on International Agricultural Research was held at the headquarters of the World Bank in Washington, D.C. on October 27-29, 1976. The Chairman, Mr. Warren C. Baum, presided.

2. The meeting was attended by representatives of 23 members. A list of participants is attached as Annex I.

Chairman's Opening Remarks (Agenda Items 1 and 2)

3. The Chairman of the Consultative Group opened the meeting by welcoming the participants. He drew the attention of members to the agenda, which was adopted, and is attached as Annex II.

Report of the Review Committee (Agenda Item 3)

4. It had been agreed during 1975 Centers Week that the time was ripe for a comprehensive review of the Group's activities and future directions. A fifteen-member Review Committee had been set up, which had met three times. A Study Team of four consultants had been appointed, the Study Director being Dr. Alex McCalla.

5. Members had received the Committee's Draft Report. The Chairman thanked the Committee, the Study Team, and the many scientists and administrators throughout the system who had made great efforts on a formidable undertaking.

6. He pointed out that although many of the views expressed in the Report had been keenly debated in the Review Committee's three meetings, the Committee endorsed the Report and accepted full responsibility for it. Nevertheless, members of the Committee, who had served in their individual capacities, would have the opportunity to express personal views during the discussion. He suggested that the discussion be addressed primarily to the conclusions and recommendations which were summarized in the first 16 pages of the Report, since there clearly would not be time to review the very large amount of information it contained. The Recommendations are reproduced as Annex III.

7. Before turning to consideration of the recommendations in detail, several members made general comments, which may be summarized as follows:

-- the Report was of high professional quality, timely, and much welcomed. It would be most useful in charting the Group's future in the

medium term. Some members, however, felt the need for a longer term view than the Report provided.

-- the Report was seen by some as rather conservative and cautious. However, there was general agreement that the emphasis on consolidation rather than continued rapid growth was appropriate. There would be some expansion and change during this period of consolidation, which would not be a time of stagnation.

-- the dangers of too much bureaucracy were stressed, particularly in view of the importance of maintaining the individuality of the Centers, the autonomy of their Boards, and the flexibility of their programs.

-- the Report was essentially an internal document for the guidance of members of the Group.

-- the Report tended to confirm the recommendations of the TAC on emphasis and priorities.

-- there should be caution about attempting to set too rigid criteria for the priorities of the Centers, and for their optimum size.

-- the value of long-term planning was stressed.

-- the relationships between the Centers and national programs involved many and complex issues, which the Report could not treat exhaustively.

-- new initiatives would continue to come under the Group's consideration, but it would be unwise to attempt to take on too much.

-- full account needed to be taken of the views of developing countries. The Committee had three members from developing countries, and the Study Team had made extensive field visits.

8. The representative of FAO, in welcoming the Report, stressed the willingness of his organization to maintain its support for the TAC, and the value of the cooperation between the two organizations. He supported the recommendation for greater coordination of the two Secretariats.

9. The discussion turned to the Report's specific recommendations, which were reviewed in order.

Recommendations 1-4 (Scope of the CGIAR)

10. The Report concluded that there would continue to be a need for the CGIAR system for the foreseeable future and that its priorities were correctly set. Growth had been much more rapid than could have been foreseen when the Group was established, and a pause for reflection was now appropriate.

11. A speaker drew attention to the apparent divergence between the importance of livestock as a source of food, and the proportion of CGIAR resources directed to it. However, it was recognized that very much agricultural research was being done outside the CG system, and priority setting for research was extremely complex. Sir John Crawford, in reiterating TAC's approach to this problem warned against the use of over-simplifying indices. He emphasized the need for better information on research done by others, and TAC's role in continuing to assess its quality and quantity. TAC

must remain free to consider overall research needs, regardless of the ultimate sources of finance.

12. In supporting the recommendation that the Consultative Group remain in existence for the foreseeable future, a speaker stressed that this did not imply that it should continue in exactly its present form.

13. It was questioned whether CG activities should be directed to countries with the worst food deficits or to countries where the potential for increasing production was highest. Whilst recognizing that there could be exceptions, the view prevailed that the emphasis should be on food deficit countries.

14. Several speakers emphasized the need for the CG itself, and the work of the Centers, to remain problem oriented. There was a danger that too many meetings and too much debate could divert efforts away from research. The Study Team had met a wide divergence of views on the question of expanded roles for the CGIAR. The informal exchange of views that the CG already provided had proved helpful to at least one donor in coordinating technical assistance activities. There was support for the recommendation that the CG expand its role as a forum for discussion, provided this could be fully justified in terms of contributing to the aims of the Group, without too heavy a burden on the system. Closer involvement of developing countries was needed in orientating the Group's work.

15. The Swedish delegation proposed a change in wording to the second sentence of recommendation 2, to read as follows: "The research should be problem-oriented and produce results that benefit the majority of farmers in low-income countries on food commodities which are widely consumed and collectively represent a majority of the food sources of the developing world." The Group was reminded that it was not practical to rewrite the Report to reflect this or other comments, but the proposed wording was accepted as amplification. The Centers were directing efforts to low input conditions, and to the identification of constraints on the application of new technologies. The description "low-income," "low-input" and "food deficit" in practice tended to apply to the same people -- the small farmers.

16. In conclusion, the Group generally endorsed Recommendations 1-4, with the particular emphases noted above.

Recommendations 5 through 11 (Center and Inter-Center Issues)

17. Dr. McCalla emphasized that interaction with national programs was essential to the mandates of the Centers. The problem was to determine the appropriate nature and magnitude of these interactions. He cautioned against Center programs becoming overwhelmed by the needs of national programs, and reiterated the need for objective planning criteria. Major programs, funded outside the core budget, should be subject to review in the context of the entire program of the Centers and the CG as a whole. He commended for the consideration of other Centers CIP's method of involving outside experts in long-term program planning.

18. Dr. Cummings, while he felt he could not speak for Center Directors as a whole, pointed out that Center Directors had had ample opportunity to contribute to the Review. In general they welcomed it and supported its findings. Center managements should retain their flexibility, though general guidelines would be helpful. There was some concern from Center Directors that

advance approval might be needed for minor modifications to a Center's program -- which he did not feel was the intention behind the recommendations. He stressed the need for effective cooperation with laboratories doing fundamental research in the developing countries, and with agencies concerned with applying the new technologies.

19. A speaker, in pointing to the value of having objective criteria for program choice, in which TAC could help, supported the recommendation for forward research planning for every Center. Such plans could be reviewed during Centers Week.

20. Another speaker, recognizing that the Centers could only afford limited activities in support of national programs, felt that the CGIAR did have a responsibility to commission study papers on this question. He felt the need for more open discussion of program planning problems.

21. In stressing the central role of Center Boards and managements in program planning, a speaker cautioned against too much rigidity. He would welcome a presentation from Chairmen during Centers Week, highlighting the major issues faced in the recent past, and the reasons for the decisions taken on them. He felt that Directors' presentations would benefit from a deeper analysis of the issues.

22. Several speakers stressed that it was not intended that one set of criteria should be applied to the choices facing every Center within research and between research and other activities. However, Centers should state the reasons for the choices that they made.

23. A speaker commended the chart on page 82 of the Report regarding appropriate interaction with national programs, and the conditions laid out on page 83, in that it would help donors not to be tempted to get the Centers to take on inappropriate activities. He cautioned against seeing the Centers as technical assistance organizations.

24. It was pointed out that recommendations 8 and 9 restricted the use of extra-core funds. But extra-core funding gave Center Directors the opportunity to undertake activities which may at the time be of high priority.

25. On the question of the longevity of Centers, Dr. McCalla reported that the discussion had been very mixed, as was reflected in the Report. He found no strong argument for closing any particular Center in the medium term, say 5 to 10 years. Some activities of the Centers might well have an indefinite life, others might outlive their usefulness. Long standing projects should be rejustified during the course of quinquennial reviews. In general, Centers should be seen as having a finite life, or at least should have the responsibility of justifying their continuing to operate.

26. In clarifying the Report's terminology, Dr. McCalla pointed out that, in the Report, the distinction between "core" and "extra-core" was based purely on the source of funds. Centers had a single central integrated program which could be financed in various ways. Another speaker emphasized that the distinction between a "core" and an "extra-core" activity should be made by the Centers, and not by donors.

27. A speaker, supporting the view that all elements in a program needed to be considered as part of a whole, and subject to consistent review processes, drew a distinction between main mission-oriented efforts which needed continuity

in funding, and other riskier or shorter-term activities. The distinction could perhaps be reflected in new program and budget definition guidelines.

28. Sir John Crawford stressed the importance of reviewing a Center's activities as a whole, regardless of the source of finance. If an activity looked like becoming a permanent one, it should be financed from sources of funds that were reasonably assured for the future.

29. In discussing TAC's role in reviewing extra-core activities the Group was reminded that it operated on the basis of consent and consensus, and no party had control over another. TAC, for example, could not instruct Centers to do anything; it could recommend that issues that it saw as significant and that should be discussed by the Group. Sir John Crawford, supporting this view, emphasized that TAC was not a censorious body, but was working with the Centers. It would be wrong for Boards to feel they could take no action without TAC's approval. But TAC was responsible for inquiring about new initiatives.

30. The Chairman felt that the discussion generally supported the spirit of the recommendations, which were based on the recognition that potential demand on the Centers from national programs greatly exceeds their capacity. He also noted general agreement on the underlying basis for the recommendations and on the need to review programs as a complete whole. The question of how Center activities could best be classified was referred to the Secretariat.

Recommendation 11 (Collaboration between Centers)

31. The Chairman recognized that cases of overlapping jurisdiction would continue to occur quite naturally, as for example over rice in Africa between IRRI and IITA. TAC's advice on these kinds of questions had been sought. Sir John Crawford felt that it would be appropriate to interpret the Committee's recommendation to mean that TAC and the CG would use their "good offices" to bring about a rationalization of responsibilities in cases of dispute. The Chairman concurred.

Recommendations 12 and 13 (Membership of Boards, and Staffing of Centers)

32. Dr. McCalla stressed the central and critical role of the Boards. There were a variety of arrangements for the appointment and continuation of Boards, on which better information would be helpful. A speaker drew attention to possible inconsistencies between the recommendation and the legal position of some Boards. The concept, for example, that the Group should "ratify" appointments to Boards would, in some instances, be inconsistent with the establishing legislation and charters of some Boards. But it was appropriate and desirable for the Group to participate in nominating Boards in future. It was pointed out that this recommendation should not have the effect of increasing the size of the Boards. Membership of the Boards may be broadened by the Group's participation, but qualitatively not quantitatively. The Secretariat, Center Chairmen and Directors should examine each case and develop a timetable and procedure appropriate to the particular circumstances of the Center.

33. The Chairman concluded that the discussion amounted to saying that the Group would participate in the selection of three Board members to the extent consistent with national laws or the charter of the Center concerned, varying from case to case.

34. In reviewing Recommendation 13, a speaker drew attention to the fact that the perquisites of scientists varied widely between Centers, which could lead to personal difficulties.

35. Some Centers were accustomed to inviting observers to their meetings, a practice which one donor found helpful.

36. The recommendation that staff positions be made widely known was welcomed. The Chairman drew the attention of the Group to the guidelines given on pages 91 and 92 of the Report.

37. It was suggested that the Secretariat keep track of cross-memberships of Boards, and any tendency towards creation of an in-group resisted. A Center Director mentioned that he had found cross-membership of Boards useful in sorting out collaborative arrangements with the other Centers.

Recommendations 14 and 15 (CGIAR and Center Review and Evaluation)

38. The Review Committee concluded that it was desirable to retain the essential elements of the current structure of the CGIAR. However, it was felt as important periodically to review the CGIAR itself as to review the Centers, in view of the rapid way in which the Group was likely to evolve. Future reviews might take a different approach from the current one. A speaker reiterated the importance of ensuring participation from developing countries, through participation in forum discussions, election to Boards, and taking an active part in CG meetings. This should be explicitly addressed in any future review of the system. More than one speaker stressed the need to evaluate the practicability and the degree of implementation of research results. Research achievements should be highlighted in the Integrative Report.

39. It was noted that developed countries had also benefited from the development of new varieties.

40. A speaker warned against proliferation of reviews, and another, questioning the value of the review process, asked whether there was any guarantee that their recommendations would be acted upon. He felt that the quality of staff at the Centers was more important than continual reviews.

41. The Chairman, summarizing the discussion, noted the general support for the recommendation. He stressed the importance of evaluating research results in terms of the degree of success in increasing farmer's production. More participation from developing countries was needed. Future reviews of the system as a whole should include a long-term perspective. The Group should guard against too many reviews, and should monitor the extent to which review recommendations were put into effect.

Recommendations 16-18 (Planning, Budgeting and Development)

42. Dr. McCalla, introducing the recommendations, pointed out that Centers have to make long-term plans and commitments, but at present cannot expect more than a one-year commitment from each of as many as twenty different donors. This puts a Center in a potentially precarious position. Longer-term commitments and longer-term planning would help Centers and donors alike. This was related to the question of the optimum size for a Center. The concept of a desirable size for a Center would be useful in developing biennial budgets, and beyond that, an indicative plan for each Center. He drew the Group's attention to the suggested components of indicative plans, given on page 99 of the Report. Indicative plans would be reviewed by TAC.

43. A speaker noted the difficulty of reconciling longer-term budgeting with the annual commitments of donors.

44. Another speaker, in questioning the value of setting desirable sizes for Centers, regretted the suggestion of lack of confidence in the Centers which he found in the Report's frequent reference to the need for reviews. He pointed out that Centers had internationally respected Boards; that they reported annually to the Group during Centers Week; that they themselves had considerable in-house analysis by the staff and the Board. He also pointed out that, if an optimum size were determined in advance, there would be a tendency for the Center to reach that size regardless of real need.

45. The Chairman, reminding the Group that the continued rapid growth of established Centers led to a consideration of the limits to growth, stressed that the recommendation did not suggest that a size range be imposed from outside but that Centers themselves would, with their Boards, determine more clearly their future growth.

46. In urging economic realism, a speaker likened research to education projects, which were not amenable to cost-benefit analysis. He thought the concept of a "critical mass" important for the Centers to function effectively. He did not think that the size of a Center should act as a model for national governments to follow. Other factors to be taken into account included: the program, the definition of "senior scientist," the balance between on- and off-campus work, and the preferences and decisions of Center Directors and Boards.

47. It was pointed out that the Centers had originally been established to fill gaps in existing research. It was possible that responsibility for them could revert to national governments. Countries of the region should take greater responsibility for Centers' operations.

48. A speaker thought that the largest Centers were probably approaching the limit in terms of size, but they could grow further if their Boards and TAC recommended it. He thought that the number of senior scientists was an appropriate measure of size -- but there were other important elements, such as equipment. He stressed that it was not intended to have a single size for all Centers, nor to impose rigid limits from outside. Another speaker felt that limits should be expressed in terms of program rather than number of scientists.

49. Noting particularly Recommendation 18 (which said that TAC should review the planned size of a Center and make recommendation on it) a speaker pointed out that the Report had generally tended to place numerous extra responsibilities on the Secretariats, senior staff of Centers, and Boards of Trustees. He hoped very strongly that this would not adversely affect the work of the scientists. The load on TAC would move from the formidable to the awesome, and specific guidelines were needed as to how TAC should handle it. There were questions about TAC which the Report did not address, such as the size and composition of its membership; the spread of disciplines; the method of selecting members; the number of meetings; and whether a member of a Board of Trustees should also serve on TAC. Whereas the past role of TAC was well summarized in the Report, a consideration of its future role would have been useful.

50. Sir John Crawford agreed that the Report would increase TAC's workload, but it was manageable and did not give him undue concern. TAC would hold three meetings a year instead of two. Its work would be eased to some extent by rationalizing the work of the two Secretariats. A biennial system might facilitate TAC's program reviews. Better scheduling of the meeting in the first half of the year would also help. The work of the

quinquennial reviews will continue to improve, with both outside and TAC representation on the panels. It might be necessary in future to consider expanding the TAC Secretariat. He would feel happier if TAC members did not serve on Boards, and confirmed the Chairman's recollection that members joining TAC are not required to relinquish Board memberships, but that no TAC member had accepted a new Board assignment while serving.

51. Sir John did not see any need to re-examine TAC's terms of reference at this stage, though this might be desirable in time. There was a need to maintain the mixture of good professional scientists and experienced science administrators.

52. Dr. Cummings, as Chairman-elect of TAC, recognized TAC's heavy responsibilities, and hoped that the Group would help in identifying good candidates for TAC. He felt that four months of the TAC Chairman's time was the bare minimum needed. He concurred with the proposal for three meetings a year, recognizing that about five days per meeting was about as long as most members could manage. He would like to have the opportunity at some later stage to suggest measures whereby TAC could continue to meet the responsibilities.

53. In answer to a question, the Executive Secretary said that it was proposed that about one-third of the Centers would prepare biennial budgets for 1978 and 1979, the rest would do so the following year. This would not initially reduce the workload of the Secretariats.

54. The Chairman, in summarizing the discussion, pointed out that the view had been strongly expressed that a rigid approach to the size of Centers should be avoided, but that it was also generally recognized that Centers could get too big, consequently changing their character. The largest Centers may be approaching the optimum size, but this question should be approached first through a review of their program. Centers would be doing more forward programming, which would identify the implications for numbers of staff and financial needs.

Recommendations 19 and 20 (Budget Allocation)

55. In introducing these recommendations, Dr. McCalla pointed out that the Study Team had early ruled out any suggestion for pooling of resources or collective decision making. Recommendation 19, whereby donors were urged to take as flexible and long-term view as possible, and in which cases of over- or under-funding were addressed, was intended as a guideline for donors without affecting their sovereignty. Recommendation 20, for a Standby Committee, suggested one way of handling the problem of a shortfall of funds.

56. In responding to a speaker's need for clarification of "including supplemental requests" in Recommendation 19, it was stated that it had mainly to do with the second year of a biennial budget. The cooperation with regard to fulfilling Centers' needs should cover not only the original two-year budget request, but also any fully justified supplementary request for the second year.

57. It was pointed out that a two-year system of budgetting might make it necessary to consider supplemental requests. Donors should not be limited to financing the original budget, but could consider the budget as amended.

58. In responding to a question about donor flexibility, the Executive Secretary reviewed the current practice of some donors in leaving a portion of their funds unallocated, perhaps even until after the start of the budget year. This was very helpful, but clearly the nature of any underfunding could

only be identified once most of the funds had been allocated.

59. The representative of one donor reminded the Group of that donor's rules which were somewhat strict. It was felt that the Secretariat could draw up a system whereby individual donors could be better informed about what other donors intended to do. The Chairman pointed out that such a system was already being used. The recommendations did not imply any more formal arrangements than the present ones, which work well. Despite their different rules donors did in fact cooperate with the Secretariat in reallocating funds when problems arose.

60. It was queried whether the proposed Standby Committee would be charged with finding new donors. The Chairman thought that this should be a continuous responsibility for all the Group. He asked for the Group's views on who should appoint members of the proposed Standby Committee, what should be its size, composition and duration of membership.

61. A speaker thought that the members should be appointed by the Chairman, and that membership should be small enough to be convenient while adequately representing the different elements of the CG -- bearing in mind travel time and other commitments. He thought 8 to 10 members, plus the Chairman of TAC and Executive Secretary of the CG would be a reasonable assumption.

62. The Chairman thought that the purpose of the Committee would be to allocate possible shortfalls rather than to raise more money. The Group as a whole was too big to do this. A smaller body would be able to spend more time, and have the professional inputs from the Chairman of TAC and the Executive Secretary.

63. A speaker felt the need to be clearer about the authority or mandate of such a Committee, and the procedures and time schedule on which it would operate. Another speaker thought that the Committee would do its work in the period prior to the second annual CG meeting. The Chairman, agreeing, pointed to a complication if the timing of future meetings were to be changed. The Committee would report to the Group at the final pledging session.

64. Another speaker thought that a Standby Committee would provide the Chairman with a useful alternative to calling a session of the whole Group to deal with an emergency. The Chairman should be free to use the Committee in this way as the need arose.

65. Another speaker thought that existing procedures could handle the shortfall problem, and queried the need for a Committee. He hoped that donors could give firmer commitments in July, but the Chairman pointed out that this was not possible for some donors, and that in the past the requirements and availabilities had still been quite uncertain at that time. The forthcoming discussion on the timing of future meetings, and whether a September meeting could provide definitive pledges, would have a bearing on the need for a Committee.

66. A speaker welcomed the past tendency of the Group to avoid sub-committees. He thought the Secretariat had handled adjustment problems effectively in the past. If there were to be a Committee, he would prefer a smaller membership than that proposed.

67. A speaker emphasized that TAC, as a scientific advisory body, which had operated very well, would not be an appropriate body to decide on the allocation of shortfalls. TAC should be consulted, and its Chairman should be on the Committee. Sir John Crawford concurred that TAC should be an advisory, not an executive, body. TAC was opposed to across-the-board budget cuts, and would be able to advise on relative priorities.

68. The Chairman concluded that it was the Group's intention that the Committee exist on paper, and be activated when necessary. Members should serve for a two or three-year term. It would be specifically set up to deal with funding shortfall problems, though it might deal with other types of emergency. If necessary, it could be expanded on an ad hoc basis. He noted general acceptance of Recommendation 20 on the understanding that he would appoint the Committee, which would be small enough to be effective and large enough to be representative.

Recommendations 21 and 22 (Budget Analysis and Management)

69. Dr. McCalla, introducing the recommendations, stressed three points: that staff analysis of programs and budgets was important and should be done with adequate resources; that the Co-Sponsors should report to the Group on the budgets of the two Secretariats and, if adequate funds were not available, then they should be provided by donors; and that each Secretariat should report to the Group through its respective Chairman.

70. The Chairman, on behalf of the three Co-Sponsors, reported on the agreements reached between them at their meeting earlier in the week. The Co-Sponsors agreed that both Secretariats should have adequate staff and funds -- budgets being based on the work to be done. Secondly, the Co-Sponsors would report to the Group, at the July or September meeting, on the budgets of the respective Secretariats. If funds were not available to cover these budgets in full, donors would be asked to make up the difference. The Co-Sponsors further agreed that the Secretariats should report to the Group through their respective Chairmen.

71. The FAO representative, in confirming his organization's agreement and commitment to these recommendations, observed that, although he felt the TAC Secretariat's budget for 1977 to be adequate at least for a trial period, FAO would consider adding to its resources if necessary. This was on the assumption that the Australian contribution was continued, and that the cost of quinquennial reviews would continue to be carried in the budgets of the Centers concerned. He added that the budgets did not include considerable additional resources which supported the TAC Secretariat, such as office facilities, or assistance from FAO headquarters and field technical staff.

72. The representatives of the other two Co-Sponsors confirmed their agreement with the understandings as summarized by the Chairman. One, in agreeing with the assumptions made by the FAO representative, pointed out that there was some uncertainty about the adequacy of the TAC Secretariat's budget, in view of the new responsibilities being added. Either the Co-Sponsors might have to provide more funds, or ask the Group for additional support at its next meeting.

73. A speaker noted these agreements with approval. However, he felt that quinquennial reviews were a normal and continuing function which had been assigned to TAC, and hence its costs should be borne by the TAC budget, and not those of the Centers. He was not asking for a reconsideration of this

issue at the present time, but would raise it again in future.

74. It was noted that some unspent funds were being carried forward to 1977 from 1976, which implied some increase in requirements even if net contributions remained the same.

75. Sir John Crawford warmly supported the proposal that the Secretariats worked together in certain areas. The Chairman confirmed that steps were already being taken to have program and budget analyses done jointly during 1977.

76. A speaker noted that while in the past the commentaries had dealt well with financial and administrative matters, there had not been adequate consideration of the relationship between programs and budgets. He noted that the Review Committee had had before it a proposal to combine the two Secretariats and thought it useful to know why the Committee had rejected it.

77. The Chairman, confirming that the Committee had rejected this proposal, referred to the practical problems involved -- such as the different sponsorship, responsibilities and locations of the two Secretariats. The Committee had concluded that the preferred course of action would be to establish the concept of integrated analyses by the two Secretariats, and the Co-Sponsors had accepted this, at least for the time being.

78. A speaker stressed his government's welcome of the Chairman's statement of the Co-Sponsors' position, which he felt to make for a significant improvement in the effectiveness of the work of the Group.

79. The Chairman stressed that the Review Committee was not proposing a percentage levy on donors should funds be needed for the Secretariats. Such contributions would be on a voluntary basis.

Recommendation 22 (Donor Contributions and Cash Flow)

80. The Chairman pointed out that donors were being asked to provide pledged funds as early as possible in the fiscal year. The Secretariat would provide Centers and donors with a schedule of requirements and availability of funds. If these did not solve the cash flow problem, it was recommended that the World Bank explore alternative solutions. He noted that the problem appeared to be solving itself, largely due to the progress one principal donor had been able to make towards prompter payment.

81. The representative of the Inter-American Development Bank, in confirming the Chairman's statement, expected his organization to be able to make a substantial contribution to the Latin American Centers during the first quarter of 1977. For the first time, the IDB's pledge would be made with the Board's preliminary approval.

Procedure for Finalizing the Report

82. The Chairman observed that it was generally agreed that the Report could be accepted as the Committee's report to the Group as a whole. The discussion had the effect of making valuable points of clarification or emphasis, but had not involved the rejection of any recommendations. For purposes of illustration, he noted that:

- low-income countries and low-income producers would be included in criteria for determining CGIAR research objectives;
- "consolidation" did not imply stagnation;
- TAC would be urged to continue considering new initiatives;
- the possibility that the CG expand its role as a forum for debate should be approached with cautious enthusiasm and a concern for relevance;
- it was necessary to find means of evaluating research results;
- it was important to have periodic reviews, the next in about three years, and to take a longer-term view, which might provide the framework for a subsequent review.

83. He noted that the Report was an internal document, whose readership would be ministries and other interested groups in the donor countries, and the Centers. The Report could be issued in its present form, with a summary of the discussion attached.

84. A speaker thought the Report had much information of broader interest. He felt it would be useful to have it printed, perhaps without some of the appendices.

85. Another speaker also felt the need to have the Report in a more convenient form. The Chairman saw no difficulties, but it might be necessary to reconsider this if any arose.

86. The Chairman closed this part of the proceedings by thanking Dr. McCalla and the Study Team for their most effective work. Some of the Report's recommendations were already being implemented, and the others would be in due course.

Report by the Chairman of TAC on the 14th Meeting (Agenda Item 4)

87. Sir John Crawford was making his last report to the Group as Chairman of TAC.

88. TAC had found the Review Committee's Report very helpful, and planned to do its part in implementing the recommendations.

89. TAC was planning to meet in February in Rome, and again with Center Directors in May or June. TAC members had felt that it had been a mistake not to participate in Centers Week in 1976, and therefore proposed to have a short meeting prior to 1977 Centers Week; many TAC members then planned to stay on for Centers Week activities.

90. Sir John pointed out that TAC had been trying to improve its dialogue with the Centers, particularly by a joint meeting in the early summer. Such a meeting would be more effective if documentation for it were in the hands of TAC members in good time. This meeting could review relative priorities within each program.

91. Sir John reiterated that TAC was ready to use its good offices in promoting cooperation among Centers.

Nitrogen Fixation

92. The Secretary of TAC would be making available to CG members the paper on nitrogen fixation by Dr. Dart of ICRISAT. TAC had agreed that the Centers should not get involved in commercial production, distribution, or monitoring of rhizobium, but should maintain collections of strains appropriate to their crops, and be prepared to set up pilot projects as required to train and demonstrate to national staff. This question needed further discussion with Center Directors.

Water Management

93. Sir John stressed the importance of water use and management, which had been on TAC's agenda from the beginning. Despite the recommendation of a major study, TAC had decided against a single international center. There was a feeling among TAC members that some Centers were not giving enough attention to effective use of water in cropping systems. Sir John read his note on the subject into the record, as follows:

"TAC has considered again the priorities and needs for international support to research in the field of water use and management on the basis of a document prepared by FAO on this subject. I made a request for this document and am happy to say it proves very useful. TAC agrees with the views expressed in the paper that the main problems in irrigated agriculture lie at farm level where there are major requirements for the adaptation of known technologies to local conditions and their adoption by the farmers. It also recognized that this adaptation depends on a number of local factors and on national policies, legislation and institutions in the field of water resources. It felt that these requirements for adaptation of technologies could best be met in the context of land and water development and conservation projects, in particular those dealing with irrigation, drainage and related land consolidation activities."

94. There were three stages in water management -- the protection of stream source areas; the control of runoff; and use on the farm. The first two were properly the concern of national governments. The third had a bearing on the work of the Centers, as had the economics of water use. TAC was recommending consideration of devoting more resources to soil and water engineering and to the quantitative physical and biological study of soil water storage and crop water use under field conditions. The FAO document might be a basis for further TAC discussions, and the question might be appropriate for the kind of "stripe" analysis recommended in the Review Committee Report.

95. The UNDP representative hoped there could be mutual exchange of information on water management between TAC and the forthcoming World Conference on Water, in Argentina in March 1977.

Soybeans

96. Sir John summarized TAC's discussions with the International Soybean Resource Base, INTSOY. INTSOY offered many countries a complete production and utilization package. It had agreements with 11 countries, and one with IITA, which TAC welcomed. Means for the proper exchange of soybean research needed

further discussion, and would remain on TAC's agenda. INTSOY was not seeking support from the CG, and the discussions had no financial implications for the Group in 1977.

97. A speaker noted that INTSOY's core funding was inadequate for support of its cooperative program with IITA. Another speaker, taking INTSOY as an example, felt the need for guidance on activities identified as important by TAC, but not necessarily being funded by the CG. Sir John confirmed that TAC intended to continue to provide such guidance.

ICIPE

98. Sir John reminded the Group that TAC had previously recommended limited support for the International Center for Insect Physiology and Ecology, ICIPE, on the understanding that there were clear agreements between ICIPE and Centers for collaborative research. ICIPE has originally given the CG a proposal which would have involved the CG in a major academic venture, which ICIPE has recognized as impossible. Good negotiations had now taken place with IRRI and IITA, and were under way with ICRISAT and ILRAD. There was strong general support for ICIPE's proposed program which TAC thought essential and urgent for the Centers if they were to make progress in controlling major pests. TAC rated the program as being of quite high priority. Since ICIPE served the needs of several Centers, TAC now thought its program for CG activities should be directly funded by CG donors rather than funded through contracts with Centers, as TAC has originally recommended. TAC was aware of the Review Committee's recommendation against expansion of the CG. ICIPE should however be recognized as an institute providing basic support for the Centers. This would help ICIPE in finding funds outside the CG.

99. ICIPE had asked the CG for \$1.5 million for capital and \$1.9 million for operational costs for 1977. As ICIPE was discussing the financing of a new facility with a donor, its further capital needs would not be clarified for some time.

100. Negotiations were under way with a donor for the ICIPE-ICRISAT sorghum shoot-fly program. The cooperative programs needing CG funding in 1977 were, therefore, those with IRRI and IITA. TAC endorsed these, but felt that implementation should be phased in line with management and physical capacity. Preliminary discussions between ICIPE and the Secretariats indicated that funding needed to start the program in 1977 was of the order of \$0.5-\$0.7 million. A decision was needed on whether some part of the cost of ICIPE's general supporting services should be included in the direct cost of the bilateral program with each Center. The Secretariat will prepare a paper for the Group on ICIPE's requirements for 1977 and beyond. Should the CG as a whole not have funds available for ICIPE in 1977, Sir John hoped that members might find ways to help ICIPE outside their commitments to the CG. However, it was important to establish the CG's attitude to the ICIPE proposition as a whole. TAC's recommendation on ICIPE was a firm one, and carried the implication that CG funds should be provided no later than 1978, and earlier if available.

101. A speaker thought Sir John's remarks implied a substantial change in TAC's recommendations on the CG's approach to ICIPE, in that he was now suggesting direct support. The CG confined its support to selected mission-oriented research centers, and since ICIPE was not clearly mission-oriented, CG support for it would represent a departure. A detailed study of the various options for supporting ICIPE's collaborative programs with CG centers was needed.

102. Sir John agreed that his remarks implied a change, which he thought a debatable one. TAC had always pointed to the need for modest capital support to enable ICIPE to handle the proposed contracts. Center directors preferred direct funding of ICIPE. Provided the allocation of research support services could be properly done, he thought it made little difference whether the contracts were financed through the Centers or not. TAC maintained its view that the CG should not support the whole of ICIPE. Other donors would support ICIPE given the confidence that TAC had in its scientific quality.

103. A speaker, agreeing that ICIPE's work was of high quality and had at an earlier stage been supported by his own institution, did not agree that the channel of funding was immaterial. Unless TAC was prepared to review ICIPE in the same depth as the other Centers, it seemed preferable to have individual Centers responsible for their own contracts and warrant to the Group that the research was necessary to their programs.

104. The Director of ICRISAT was asked to comment on his Center's agreement with ICIPE. He saw it as parallel with those with some advanced institutions. The memorandum of understanding would be simply a statement of intention to cooperate where there was a mutual interest. This would in time be supplemented by a work plan, for which donor support would be sought. It was not planned to finance the ICIPE work through ICRISAT's budget, though there seemed to be no reason why this could not be done.

105. The Director of IRRI who was also asked to comment said his arrangements with ICIPE were similar to those of ICRISAT. There was a memorandum of agreement on brown plant hopper research and other activities. Funding could be handled through the CG or otherwise.

106. Another speaker was concerned about the extent to which relationships between the Centers and ICIPE implied subjecting the latter to the CG review procedures.

107. Several speakers emphasized their support for bilateral financing of cooperative programs with ICIPE, to proceed with the least delay.

108. The Chairman summarized the consensus as being that, without reflecting on the merits of ICIPE's work, nor on the desirability of bilateral assistance, the Group preferred not to make a decision until it had a paper examining the various options for the funding of ICIPE. This paper would be considered at the next meeting of the Group.

ILCA

109. Sir John re-emphasized the difficulty and complexity of ILCA's mandate. There were problems in formulating programs and getting them operational. TAC members would be meeting with ILCA's Board and Program Committee in late March to review these questions. This was in line with the original intention when ILCA was established.

Water Buffalo

110. TAC still strongly felt the need for coordinated work on water buffalo. It was aware of the research needs of various national centers, but was not well informed on the capacity of the various national research centers to meet them. TAC should investigate this, after which a firmer decision could be reached on the research program and its operation. TAC reaffirmed the importance of this area of research, and its Secretariat, with the help of

staff from FAO, would make a study within the TAC budget, and would report further to the CG.

Aquaculture

111. Sir John noted that the FAO-UNDP regional aquaculture program approached TAC's original recommendations. TAC members felt that they should keep the question on their agenda, and maintain a watching brief.

Farming Systems

112. TAC would invite specialists on farming systems from three or four Centers, including CIAT, to meet with outside experts for an exchange of views. The CG would be informed of the conclusions of this working group.

Vegetables

113. The vegetable research project is being formulated. Consultants were visiting parts of Asia and Africa, and would determine the degree of interest. The project would be based on two pilot sites at existing institutions. TAC would get a report next February. There was no intention of recommending a new international center for vegetable research. Sir John noted the effectiveness of AVRDC.

Coconut

114. TAC's views on coconut research could be influenced by a forthcoming conference in India in December.

CARIS

115. Turning to CARIS, Sir John noted that TAC had supported FAO's request for a one-year extension beyond the end of 1976, provided funds requested did not exceed the original budget, and that FAO would absorb CARIS after completion of the project, and ensure its follow-up. TAC was recommending approval of the extension and balance of the funds required to complete the project.

116. A speaker felt the need for more information on the regional operations of CARIS, and for assurances that the system would be effectively implemented in future. The FAO representative confirmed that the FAO 1978-79 budget would provide for the central coordination and development functions. There were already agreements that regional work would be done by regional institutions. FAO was undertaking to ensure that this need would be met, within its overall programs and negotiations with donors. He confirmed that the CARIS directories would be published in 1977, provided contributions still outstanding are received. The UNDP representative put on record that there was at present no assurance that UNDP would be able to do much or anything through its regional programs to support follow-up on the CARIS activity. He did not rule it out, but it was yet to be discussed. The Executive Secretary of TAC pointed out that the central unit of CARIS needed input from the regions. Contributions were being received, and supplementary financing after 1977 would be needed only to fill certain gaps.

Cash Flow Problems (Agenda Item 5)

117. The Chairman reminded the Group of the cash flow difficulties which had been experienced, mainly by the Latin American Centers. As a major donor

was able in future to accelerate its payments, the problem was largely solved, with a saving of some \$1.2 million in additional working capital. The World Bank had notified its Board of Directors that it might ask approval of a funding mechanism for short-term accommodation to Centers when needed.

118. The UNDP representative stressed his organization's view that the Group should be provided with a central reserve to meet unforeseeable problems. The Chairman said that the Review Committee had discussed this proposal. It was not thought inadvisable or inappropriate, but was not feasible in view of the magnitude of the sums potentially needed.

Evaluating the Costs and Benefits of Research (Agenda Item 6)

119. The Chairman recalled guarded support for the view expressed in the Integrative Report that possibilities for evaluating research costs and benefits as they apply to the CGIAR be explored further. Discussion during the present meeting lent weight to this view. The Group had before them a proposal from the Secretariat which was limited and modest in scope, and amounted to a feasibility study to look into the prospects and problems of applying cost-effectiveness evaluation to research. He hoped the Group would agree that a study of this kind would be an appropriate use of any surplus funds from the Review Fund.

120. A speaker, recalling his previous reservations about cost-benefit studies, felt he could support the current proposal, particularly the proposals for a modest investigation into the prospects and problems of applying cost-effectiveness evaluation to the activities supported by the CGIAR.

121. Another speaker, emphasizing the distinction between cost-benefit and cost-effectiveness studies, thought the current proposal called for both. This made the scope very wide.

122. A speaker who had also been previously sceptical about the value of such studies, took the view that the subject would continue to crop up, and the Group should tackle it. The proposals were modest and seemed sound, and funds were said to be available.

123. The representative of the World Bank, supporting the proposal, believed it could have considerable value for the Bank's project work.

124. Sir John Crawford, noting his earlier scepticism, supported the current proposal on the understanding that no attempt would be made to devise a formula for ex ante cost-benefit analysis. Research was different from business investment, since research results and the timing of them were uncertain. Advance estimates of research costs were highly important, as was the quality of the scientists doing it. He emphasized the need to take account of all the inputs that went to achieving results from a new technology. Cost-benefit ratios were impossible even post hoc since too many variables were unquantifiable.

125. A speaker, noting that the need of donors for evidence of the value of their investment partly motivated the proposal, pointed to the importance of allocation of resources to national programs. He also thought that whoever did the assignment should be told that the Group did not want to sponsor substantial additional work.

126. Another speaker would welcome an analysis of comparative costs of alternative ways of achieving the same research result, such as in-house v.

contractual research. He also noted that three to four man-months implied a very modest study. As regards using the balance of the Review Fund, his authorities would need a formal proposal from the Bank as Trustee in order to consider the reallocation. The Chairman thought that an adequate sum would be left in the Fund, but this would depend on the cost of publication of the Review Report. He accepted a speaker's suggestion that the Secretariat put a formal proposal to the contributors to the Fund, on a no-objection basis.

127. It was stressed that, to do the work in three-four man-months, a person of the highest ability, who was thoroughly familiar with the system, would have to be found.

Quinquennial Reviews - IRRI and CIMMYT (Agenda Item 7)

128. In introducing the subject of quinquennial reviews in general, Sir John Crawford said that he believed the first two had been even more valuable than had been expected. Experience led TAC to propose improvements for future reviews, but the underlying principles and objectives were sound. Some of the value of a review was lost if there was no clear statement of the Center's own objectives for the next five years. The reviews were cooperative ventures between TAC and the Centers. The conclusions of the reviews should not be seen by the Group as any final judgment, but rather as considerations and recommendations to be referred to the Center Director and the Boards. TAC distinguished clearly between its own responsibilities and those of the review panel, and TAC did not alter the panel's report in any way. He proposed to summarize the experience of the first reviews, in a paper for consideration at the next TAC meeting.

129. Dr. Pereira outlined the composition of the IRRI review panel, and its terms of reference. It had been most helpful to start the review in the farmers' fields, in Thailand, Indonesia, and later, in the Philippines. The team met many farmers, extension workers, and national researchers, who were applying IRRI technology. Farmers believed the Green Revolution to be a reality, and very large increases in yield had been obtained.

130. In general the panel concluded that the Group could have full confidence in the way funds are being used by IRRI. Some suggestions had been made, as for example in improving the terms of service of out-posted staff. Many other detailed recommendations were given in the report. More resources were needed for water management, including the addition of a soils physicist. The panel had strongly recommended investment in secure storage for IRRI's vital rice material.

131. The panel noted the progress achieved by the international rice testing network. They had some reservations about the cropping systems program, which was highly location specific. TAC had urged IRRI to address the problems of upland rice, which was now being done effectively.

132. Dr. Pereira disagreed with the view of the role of the Centers as that of filling gaps in national programs. He saw a continuing need for the powerful scientific network which the Centers represented.

133. Dr. Brady, Director of IRRI, emphasized the value to IRRI of the review. He noted a logistical problem over travel arrangements, which he felt could be solved in future reviews by leaving these to the Center concerned.

134. Dr. Brady stressed IRRI's approach to pest control through development of resistant strains. However, the emergence of three previously unrecognized biotypes of the brown plant hopper had complicated the problem, causing IRRI to look at alternative means of pest management. The panel had recommended the addition of a staff member in both plant pathology and entomology. IRRI felt they should retain pesticide research. The panel had recommended that IRRI continue to analyze the consequences of the new technology, which would be done in cooperation with IFPRI. IRRI would help develop national studies into production constraints.

135. Dr. Brady's recent visit to China would stimulate discussion on IRRI's future directions. Chinese success in consistently raising production over vast areas raised questions as to whether farming systems research was necessarily constrained by location specificity.

136. A speaker, commending the report, thought that more analysis should have been made of priorities. In reply, another speaker pointed out the severe time constraints under which panels had to operate.

137. A speaker expressed concern about possible over-emphasis on farm machinery programs. He felt such activities more suited to extra-core funding.

138. A speaker referred to the panel's recommendation that an ICIPE scientist be stationed at IRRI. He stressed the importance of the brown plant hopper problem. His own government had funds which they would like to use in support of ICIPE, and would appreciate guidance on what practical steps could be taken quickly. The Chairman referred to the previous discussion in which bilateral support for ICIPE was strongly urged.

139. A speaker queried IRRI's relatively small resources devoted to post harvest technology. Another asked whether the large amount of data collected by IRRI could be effectively retrieved and used. He also thought that what appeared to be 13 additional staff members looked like a very ambitious expansion.

140. Dr. Pereira stressed that research resources should be put where there were opportunities for progress, and where insufficient work had been done in the past. Resources should not be distributed in proportion to production of crops. IRRI was now emphasizing the difficult problems of upland rice. IRRI was making a distinct impact on the policies of several governments.

141. Responding to a question, Dr. Brady confirmed that IRRI did not intend to request 13 additional positions next year. A viable program could be worked out with ICIPE. IRRI would continue to work with ORSTROM and IRAT.

142. In answer to a question, Sir John Crawford stated that TAC would prepare a "stripe" study of cropping systems for the Group's consideration next year.

CIMMYT

143. Sir John Crawford said that TAC was in full agreement with the panel's report, and with the general endorsement of CIMMYT's overall objectives and approach. The apparent issue of wide versus local adaptation was largely a matter of emphasis. He recommended that the proposal for training production agronomists in several crops be considered at a meeting of Center Directors. CIMMYT's supporting basic research capacity might need strengthening. TAC

supported CIMMYT's cooperative program, and felt that criteria for involvement in national programs needed to be more sharply defined. TAC agreed that CIMMYT should establish its regional services as part of its core program. It would have greatly helped the review if the panel had been given a statement of CIMMYT's objectives and priorities for the next five years. The Boards of ICARDA and CIMMYT should work out a cooperative agreement on barley, whereby CIMMYT would retain the major involvement in barley research in the highlands of Latin America. Mr. Hanson, Director General of CIMMYT, confirmed that mutually acceptable arrangements with ICARDA would be made for barley work. Sir John Crawford supported this view.

144. Dr. Riley, who had led the Review Panel, pointed to CIMMYT's great achievements, and emphasized the quality and dedication of its staff. It was wholly mission-oriented. He emphasized the creativity of CIMMYT, and cautioned against stifling it with bureaucracy. In a technology like plant breeding, planning was obviously necessary.

145. CIMMYT had been very successful in training technicians. Training of trainers should be further developed. CIMMYT's program in Egypt and Tunisia had had an impact on training, on the organization of research and development, and in improved tillage and varieties in bread wheat in Tunisia.

146. The proposed study of cost effectiveness might consider how data on research benefits could be provided to subsequent quinquennial review panels. Dr. Riley agreed with Sir John that reviews would be improved if a Center's future plans were known.

147. Mr. Hanson, said that his Center was very pleased with the way the review was done, and with its broad endorsement of their work, particularly of the regional services. The review process was very time consuming. He estimated that perhaps ten percent of CIMMYT's staff time had been devoted to it, raising the question of whether the result justified the effort, even though the review would reconfirm donor confidence. It was too early to say whether the review would bring about changes at CIMMYT. Internal reviews had brought about re-thinking of programs over a period of six months or a year. Another speaker expressed concern at the estimate of the effort that had gone into the review. He queried whether it would reduce the need for visits from individual donors. He also felt that the CG would sooner or later have to decide whether the Centers were to be seen as filling a temporary need, or a permanent one that cannot be filled in any other way.

148. Dr. Finlay, Deputy Director General of CIMMYT, confirmed that CIMMYT would remain production-oriented, and mainly go to other institutions for basic research. The amount of fundamental research that CIMMYT itself should do was under review.

149. A speaker thought that the need to test technologies under low-input conditions could have substantial manpower implications. He queried CIMMYT's rationale for an open-pollinated approach, as opposed to hybrids.

150. Another speaker, highly commending the report, looked for more consideration of the overall balance between different elements. The examination of wide versus specific adaptability was particularly useful. He informed the Group that beginning in 1977, core contributions from CIDA to CIMMYT would be unrestricted. He hoped the triticales program would continue to get high priority.

151. Sir John Crawford stated that TAC was in complete agreement with the triticale program. As far as the problems of marginal-input conditions were concerned, he saw the need for greater discussion between CIMMYT and TAC prior to any TAC recommendation.

152. Dr. Riley emphasized the fundamental distinction between crop improvement programs which aimed at increasing total national productivity, and those which aimed at improving the capacity of the poorest farmers.

153. Dr. Finlay pointed out that CIMMYT did not distribute varieties as such, but rather materials in the form of "crossing-blocks," from which national programs made their selections.

154. A speaker suggested that Centers which had been reviewed should comment to the Group at some point on the steps they plan to take to act on the panel's recommendations. Presentation of the reviews would be improved by a brief summary. Quinquennial reviews reduced the need for individual donors to examine particular Centers.

155. A speaker, noting that others had expressed disappointment that the two reviews had not looked enough at the future, pointed out that this had not been their real aim. He stressed the time constraints, and the difficulty for outsiders to grasp the workings of a very complex system.

156. Another speaker stressed the value of the reviews in maintaining the support of his authorities for the system. He would like to see more consideration of relationships with institutions in developed countries. Questions of scientific management should be addressed. Dissemination of information was a critical function which needed examination. Referring to Dr. Riley's distinction between two research philosophies, i.e. on the one hand working towards raising total production, or on the other concentrating primarily on the needs of the small farmer, his authorities certainly inclined to assisting the poorer farmer. The Chairman thought this was true for the Group as a whole.

157. A speaker felt the need for information on activities useful to the Centers, which they could not themselves undertake. This would help to coordinate efforts to involve scientists in developed countries.

158. A speaker noted that Centers had review procedures of their own, and warned against duplication with quinquennial reviews. Sir John Crawford thought the situation was improving in that respect.

159. Summarizing the lessons that could be drawn from the first two quinquennial reviews, the Chairman concluded that everyone concerned felt that they were extremely worthwhile. They would stimulate new thinking on the part of center scientists. There was a need for a clearer sense of priorities. A statement of forward plans was needed from the Centers, as was some assessment of benefits. The review provided helpful reassurance to donors.

IFDC Board Members (Agenda Item 8)

160. The Chairman reminded the Group of the agreement reached in July that the CG should nominate three members to the Board of Trustees of the International Fertilizer Development Center, IFDC. A good response had been received to the Secretariat's request for suggestions.

161. The Executive Secretary pointed out that there was already a general procedure for the CG to nominate Board members for some international Centers. Exact procedures varied in accordance with the constitution of each Center. A number of excellent candidates had been proposed and after consultation with IFDC, the Secretariat would propose a balanced slate of three for the consideration of the Group.

Financial Support (Agenda Item 9)

162. The Chairman mentioned that there had been considerable adjustment to the financial requirements of the Centers since the July meeting. Total requirements had been reduced and now stood at about \$79.5 million. Any estimate of contributions at this point was unreliable as there were still a number of uncertainties, particularly about possible new donors, but there seemed to be a gap of about \$2 million between funds needed and those available. This was less than the expected gap for 1976, which was eventually eliminated.

163. Many donors had sent in written statements as requested. Donors were now being asked to make a statement as to their total pledge to 1977 core budgets, and to factors affecting future support. Allocations of funds should be given to the Secretariat.

164. Donor's statements are summarized below. The figures shown are the contributions as determined on January 31, 1977. In some cases, they differ from statements made at the meeting, reflecting subsequent discussions with Centers and the Secretariat, or subsequent decisions by authorities. Figures that have changed in this way are marked with an asterisk. It may be noted that by the end of January the gap noted by the Chairman in October had been essentially closed. The initial financial position for 1977 by donor and Center is shown in Annex IV.

-- UNDP would contribute \$3,880,000 for 1977. Support would be maintained beyond 1978.

-- Germany would make available up to DM13.8* million. This was a real increase over 1976. About 15% was restricted to scientific cooperation with European research institutes. The rest was unrestricted. DM1.75 million was as yet unallocated. The German government would consider suggestions from the Secretariat on allocations between Centers. Payment would be made promptly.

-- Switzerland expected final approval in mid-November of a contribution of \$1,050,000.

-- Iran would make \$2 million available. Allocation was flexible and would be discussed with the Secretariat.

-- The Ford Foundation would contribute \$1,500,000 to the core budgets. Preferences had been given to the Secretariat, but they were flexible.

-- The Netherlands would make \$1.5 million available, the same as in 1976. Government budgets were linked to GNP, which had not increased in the past year. Future contributions might grow if GNP did.

-- The U.K. would contribute £2 million, all to unrestricted core budgets.

-- IDRC would contribute Can\$1.485* million. This was a firm commitment, but other projects were being discussed, and the Secretariat would be informed of any new commitments.

-- Canada would contribute Can\$7.15* million to the core budgets in 1977, subject to normal approvals. Unrestricted contributions would be made for the first time to CIMMYT and CIAT. There was a substantial increase in the contribution to IRRI. The implications of the absorption of CIMMYT's regional services into the core budget were being studied.

-- Japan could not yet announce the amount of its contribution for 1977. Efforts were being made to increase it substantially over 1976, and to add other Centers to the list of recipients.

-- The Rockefeller Foundation would contribute \$1.6 million, available at the beginning of 1977.

-- Norway would contribute, in Norwegian currency, the equivalent of about \$1.5 million. In 1978, about \$1.8 million.

-- Sweden would contribute SKr10.35 million in 1977. The small increase over 1976 would mainly go to the Genes Board, which had taken over responsibility for the Izmir Institute.

-- The United States would contribute up to \$20 million, subject to the normal criterion that the actual contribution could not exceed 25% of total contributions from members of the CG.

-- France would contribute the equivalent of \$535,000. Information was needed on ICARDA's plans for 1977 and the status of implementation of its program before France's contribution could be indicated.

-- New Zealand may contribute \$100,000 for 1977, but this would not be known before January or February.

-- Australia would contribute up to A\$1.61* million, subject to parliamentary approval, payable early in 1977. In addition, an amount of A\$100,000 may be provided for ICIPE's work with the Centers, subject to TAC endorsement of ICIPE. Australia would also continue to provide A\$115,000* for the support of TAC.

-- Denmark intended to ask approval for a contribution of Dkr3.6 million for 1977. Future contributions would at least maintain real values.

-- Belgium had allocated BFr79 million for 1977, BFr7.5 million for extra-core activities and there remained BFr8.5 million still to be allocated, some perhaps to extra-core activities also.

-- The Inter-American Development Bank had received approval from its Board for a contribution of the equivalent of \$5.7 million for 1977, for core and any special projects combined. Funds might be available in the first quarter of 1977. Preliminary approval had been given for \$6.2 million equivalent in 1978. The Bank would be flexible should directors wish to reallocate resources to outreach or other special projects. The Bank hoped that training resources should be used as much as possible for training and upgrading young professionals from Latin America.

165. At this point the Chairman paid tribute to Mr. Wolf's great efforts

on behalf of the Group, and gave him the Group's very best wishes on his retirement.

-- The World Bank would contribute up to 10% of the CGIAR's commitments, or up to about \$8 million.

-- The European Economic Community, subsequent to the October meeting, announced its intention to contribute the equivalent of \$2.5 million to ICRISAT.

166. The Executive Secretary, on behalf of donors who could not be present, indicated that the Arab Fund for Social and Economic Development was seeking approval from its Board for a contribution of \$0.5 million to ICARDA. UNEP would contribute \$340,000.

Other Business

167. A draft Press Release was considered and, with certain amendments, was approved. The final Press Release is attached as Annex V.

168. The Chairman paid tribute to the outstanding efforts of Sir John Crawford, who as Chairman of TAC since its inception, had done more than any other individual to shape the character and direction of the Group.

169. Mr. Bell, recognizing that there was no precedent for proposing resolutions to the CG meeting, nevertheless moved that the Group adopt the following resolution:

"The members of the Consultative Group on International Agricultural Research wish to recognize and salute Sir John Crawford's outstanding service to the Group during his period as Chairman of the Technical Advisory Committee from 1971 to 1976."

170. The motion was seconded, and approved unanimously.

171. An inscribed statement was presented to Sir John, who expressed his thanks. He would do all he could to help the new Chairman.

172. The representative of the UNDP drew the attention of the Group to the revised booklet, copies of which could be got from UNDP in New York. He suggested that the Secretariat might do more to encourage a wider dissemination of information about the work of the Centers. The Chairman agreed that the Secretariat would see what could be done.

Time and Place of Next Meeting

173. The Group considered a proposal that International Centers Week be re-scheduled in 1977 to September, with another CG meeting in November. The Chairman pointed out that the recommendations of the Review Committee put heavier burdens on the two Secretariats. There were complex scheduling problems in interrelating the various cycles of activity, such as the budget years of donors, TAC's consideration of innovations in the Centers programs and the presentation and approval of Center budgets. He proposed that the Secretariat prepare a paper examining the various options.

174. A speaker thought that the gap between a July and an October meeting served a useful purpose.

175. The Executive Secretary reviewed the present cycle of preparing documentation. Closer integration between the Secretariats, which he strongly supported, would stretch the time needed. If the first meeting were held in September, the papers would still reach the Group by the end of July.

176. Some speakers thought they would have difficulty in making firm pledges in September, and hence a second meeting for this purpose was likely to be needed.

177. A speaker proposed that one meeting each year be held in Europe.

178. Another speaker emphasized the need to retain the technical aspects of Centers Week.

179. On the basis of a show of hands, it was agreed that the first meeting in 1977 would be held in September. (The dates subsequently confirmed would be September 12-16, 1977.) A study might indicate another date for future years.

180. The meeting adjourned at 4:19 p.m.

CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

1818 H St., N.W. Washington, D.C. 20433 U.S.A.
Telephone (Area Code 202) 477-3592
Cable Address - INTBAFRAD

LIST OF PARTICIPANTS IN CONSULTATIVE GROUP MEETING
(October 27 - 29, 1976)

Chairman

Mr. Warren C. Baum
Vice President, Projects Staff
World Bank

Chairman, Technical Advisory Committee

Sir John Crawford
Canberra, A.C.T., 2600
Australia

Chairman-Elect, Technical Advisory Committee

Dr. Ralph W. Cummings
Hyderabad 500016, A.P.
India

INTERNATIONAL AGRICULTURAL RESEARCH CENTERS

International Maize and Wheat Improvement Center (CIMMYT)

Mr. Haldore Hanson
Director General

Dr. Keith W. Finlay
Deputy Director General

International Rice Research Institute (IRRI)

Dr. Nyle Brady
Director General

DELEGATIONS OF MEMBERS OF THE CONSULTATIVE GROUP

Australia

Mr. Bruce M. Cheek
Alternate Executive Director for Australia
World Bank
Washington, D.C.

Belgium

Mme. Suzanne Vervalcke
Director, Multilateral Cooperation
Ministry of Foreign Affairs
Brussels, Belgium

Professor G. R. Boddez
Dean of Faculty
Louvain University
Louvain, Belgium

Canada

Mr. Paul Ladouceur
Section Head
Canadian International Development Agency (CIDA)
Ottawa, Canada

Mr. Thomas G. Willis
Special Adviser, Agriculture
CIDA
Ottawa, Canada

Denmark

Mr. Finn Jønck
Head of Section
Ministry of Foreign Affairs
Copenhagen, Denmark

European Economic Community (EEC)

Mr. Hellmut Eggers
Principal Administrator
Brussels, Belgium

Food and Agriculture Organization of the United Nations (FAO)

Dr. Donald C. Kimmel
FAO North American Representative
Washington, D.C.

Ford Foundation

Mr. David Bell
Executive Vice President
New York, N.Y.

Dr. Lowell S. Hardin
Program Officer, OVP/International
New York, N.Y.

France

Mr. Henri Vernede
Commissaire du Gouvernement aupres
des Instituts de recherche
specialises outre-mer
Ministere de la Cooperation
Paris, France

Mr. Suchod
Ministry of Foreign Affairs
Paris, France

Mr. Rene Paul Rigaud
Alternate Executive Director
World Bank
Washington, D.C.

Germany

Dr. Werner Treitz
Ministry of Economic Cooperation
Bonn, Germany

Dr. Ute Spieker
Federal Ministry of Agriculture
Bonn, Germany

Inter-American Development Bank (IDB)

Mr. Victor M. Horcasitas
Consultant, Technical Assistance
Division

Mr. Alfred Wolf
Program Advisor

Mr. Jorge del Aguila

International Bank for Reconstruction and Development (IBRD)

Mr. Montague Yudelman
Director
Agriculture and Rural Development Department
Washington, D.C.

International Development Research Centre (IDRC)

Mrs. Ruth K. Zagorin
Director, Social Sciences Division
Ottawa, Canada

Mr. Douglas Daniels
Senior Research Officer
Ottawa, Canada

Iran

Mr. Hussein Mirheydar
Vice Minister
Ministry of Agriculture and Natural Resources
Tehran, Iran

Japan

Mr. Hisashi Suzuki
Research Coordinator for
International Program
Ministry of Agriculture and Forestry
Tokyo, Japan

Mr. Kiyohiko Nanao
First Secretary
Embassy of Japan
Washington, D.C.

The Netherlands

Dr. P. F. Kiewiet de Jonge
Head, Preparation Division
Ministry of Foreign Affairs
The Hague, Netherlands

Dr. Dick de Zeeuw
General Director, Agricultural
Research
Ministry of Agriculture and
Fisheries
The Hague, Netherlands

Mr. H. T. Clevering
Assistant Agricultural Attache
Netherlands Embassy
Washington, D.C.

New Zealand

Mr. Bruce M. Cheek
Alternate Executive Director for New Zealand
World Bank
Washington, D.C.

Norway

Dr. Lars Strand
Professor, Agricultural University of Norway
Norway

Rockefeller Foundation

Dr. John A. Pino
Director for Agricultural Sciences
New York, N.Y.

Dr. James E. Johnston
Deputy Director, Agricultural Sciences
New York, N.Y.

Dr. Peter Jennings
Associate Director, Agricultural Sciences
New York, N.Y.

Sweden

Ms. Gun-Britt Andersson
Head of Planning and Administration
Swedish Agency for Research
Cooperation with Developing
Countries (SAREC)
Stockholm, Sweden

Mr. Bo Bengtsson
Research Officer, Rural Development
SAREC
Stockholm, Sweden

Switzerland

Mr. Guy Hentsch
First Secretary
Embassy of Switzerland
Washington, D.C.

United Kingdom

Mr. C. R. A. Rae
Under Secretary
Ministry of Overseas Development
London, England

Dr. R. K. Cunningham
Principal Agricultural Research Adviser
Ministry of Overseas Development
London, England

United Nations Environment Programme (UNEP)

Dr. Reuben J. Olembo
Deputy Director
UNEP
Nairobi, Kenya

United Nations Development Programme (UNDP)

Mr. Gordon Havord
Senior Technical Advisor
New York, N.Y.

United States

Mr. Curtis Farrar
Assistant Administrator
Technical Assistance Bureau, USAID

Dr. Guy B. Baird
Associate Director, Research
Technical Assistance Bureau, USAID

Mr. Kenneth A. Haines
Director
International Programs Division
ARS - USDA

Mr. Dana Dalrymple
Agricultural Economist
Program Analysis, USAID

Dr. Leon Hesser
Director
Office of Agriculture, USAID

CG
3
X
JH

The Consultative Group Secretariat

Mr. Michael L. Lejeune
Executive Secretary

Mrs. Gene Audifferen

Mr. Daniel Ritchie
Deputy Executive Secretary

Mrs. Monica Stillwell

Dr. John K. Coulter
Scientific Adviser

Mrs. Audrey Mitchell

Mr. Andrew J. Hayman
Program Officer

Mrs. Bel Liboro

Mr. Carlos Gavino
Research Assistant

Technical Advisory Committee (TAC)

Secretariat: Mr. Philippe Jean Mahler
Executive Secretary
Rome, Italy

Assistant to the Chairman: Mr. William MacNally
Canberra, Australia

IRRI Quinquennial Review: Dr. H. C. Pereira
Ministry of Agriculture, Fisheries and Food
London, England

CIMMYT Quinquennial Review: Dr. Ralph Riley
Plant Breeding Institute
Cambridge, England

CGIAR Review Committee Study Team

Dr. Alex F. McCalla
Professor, Department of Agricultural Economics
University of California
Davis, Cal.

OBSERVERS

Consultative Group on Food Production and Investment (CGFPI)

Mr. Moise C. Mensah
Vice Chairman, Executive Secretary
World Bank
Washington, D.C.

Mr. Subash Mazumdar
World Bank
Washington, D.C.

CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

1818 H St., N.W. Washington, D.C. 20433 U.S.A.
Telephone (Area Code 202) 477-3592
Cable Address - INTBAFRAD

MEETING
October 27-29, 1976

AGENDA

1. Chairman's Opening Remarks
2. Adoption of Agenda
3. CGIAR Review Committee Report
4. TAC Chairman's Report on 14th TAC Meeting
5. Proposal for Dealing with Cash Flow Problems
6. Proposal for Study of Evaluating Costs and Benefits of Research
7. Quinquennial Reviews of IRRI and CIMMYT
8. IFDC - Board of Directors
9. Financial Support for 1977 and thereafter
10. Other Business
11. Time and Place of Next Meeting

CGIAR REVIEW COMMITTEE RECOMMENDATIONS

Recommendation 1: *The need for a sustained research effort to increase food availability in developing countries will continue and is likely to increase. Therefore, we recommend that the Consultative Group on International Agricultural Research proceed on the basis that it should continue to function for the foreseeable future (pp. 58-60).*

Recommendation 2: *We recommend that the CGIAR should continue to endorse TAC's conclusion that the primary focus of the CGIAR should be to support research and technology development that can potentially increase food production in the food-deficit countries of the world. The research activities supported by the CGIAR are appropriately focused on food commodities which are widely consumed and collectively represent the majority of the food sources of the developing world and no major changes or additions are called for at this time (pp. 61-63).*

Recommendation 3: *We recommend that the next three years should be viewed by the CGIAR as a period of consolidation. During this period continued support should be provided for the current set of centers and related activities. We caution against undertaking initiatives requiring major financial commitments. TAC should continue during this period of consolidation to explore the need for new initiatives and changes in existing programs (pp. 61-74).*

Recommendation 4: *In addition to the current practise of receiving reports from related activities such as IFDC, IFPRI, AVRDC, and CGEPI, we recommend that the CGIAR should support fora for information exchange among members of the Group, technical personnel from their agencies, centers, other aid agencies and national programs in developing countries.*

In this connection the CGIAR should consider two specific activities (1) commissioning papers as a basis for discussions of CGIAR issues of interest to donors and research beneficiaries and (2) explicitly seeking to foster increased information exchange among CGIAR donors and related agencies about other activities in which they are jointly involved (pp. 61-63).

Recommendation 5: *We recommend that all projects undertaken by a center be regarded as components of its total integrated program regardless of sources of funds and that the entire program be subject to the review procedure as outlined in this report (pp. 75-76).*

Recommendation 6: *We recommend that each center develop an objective set of criteria for program choice and periodically reassess the balance of its program with respect to: (1) research and technology development, (2) training, (3) cooperation with national programs and advanced research institutions; and (4) communication and exchange of information*

between center scientists and others in related fields (pp. 76-79).

Recommendation 7: *We recommend that centers continue to develop and strengthen their cooperation with national programs, insofar as this is essential to accomplish their research mandate. Beyond this centers should remain alert and responsive to additional opportunities for cooperation to the extent that extra-core funds are available, that these activities do not compromise or distort the central research mission of the center and that they are within the centers' capacity to staff and manage (pp. 79-84).*

Recommendation 8: We recommend that all support to a center other than that provided through the CGIAR be classified as extra-core funding.

Further, we recommend that these funds be used to supplement activities supported by core funds and/or to finance activities that the center may wish to undertake primarily to benefit a particular country (pp. 84-86).

Recommendation 9: We recommend that any proposal for a new project to be supported by extra-core funds should be forwarded by the center to TAC for review when (1) there is a question as to whether the purpose of the activity lies within the center's mandate, (2) acceptance has implications for future core support, (3) the proposed activity might put undue additional strain on center management, or (4) the extra-core funding is particularly large (pp. 84-86).

Recommendation 10: We recommend that all centers develop more effective forward research program planning procedures and include as advisors international scientists with competence in the appropriate areas (pp. 88-89).

Recommendation 11: We recommend that centers should be encouraged to collaborate wherever possible in executing their cooperative research activities with national programs when working in the same region or with the same commodity. The negotiation and administration of these linkages should be the responsibility of center directors and the respective boards of trustees. TAC or the CGIAR should serve only to advise and assist in reaching a solution in the case of disputes that cannot be resolved by the centers. Further, we recommend that agreements and arrangements between centers be formally recorded in writing and a copy of all such agreements be sent to the CGIAR Secretariat (pp. 89-90).

Recommendation 12: We recommend that each board of trustees define criteria and procedures for the selection and appointment of its own members and that these be made available to the CGIAR. Further, we recommend that each board of trustees broaden its membership by including, when appropriate and consistent with national laws, three members selected in conjunction with and ratified by the CGIAR (pp. 91-92).

Recommendation 13: Since quality of the staff is a central factor in the success of the program, we recommend that: (1) center directors advertise as widely and openly as possible in seeking candidates for staff positions, (2) every effort be made to maintain staff vitality, and (3) outposted staff receive the same sabbatical privileges as staff posted at headquarters regardless of source of funds supporting the scientist (pp. 92-94).

Recommendation 14: We recommend that the CGIAR review its overall program and operation every three to five years. The CGIAR should appoint an ad hoc committee to conduct a review of the substantive program of the CGIAR as well as review those policies, procedures, and management mechanisms which require attention. TAC should provide a major input into this long term forward look at the substantive program (pp. 96-98).

Recommendation 15: We recommend continuation of the TAC quinquennial reviews for evaluation of scientific quality, scope, and balance of current programs, and to evaluate future plans, including explicit review of center proposals to continue projects of long standing. We also recommend that the TAC give greater emphasis to periodic, across center analysis of particular topics (strike analysis) (pp. 98-99).

Recommendation 16: We recommend that the concept of a desirable size range for centers be adopted. We further recommend that centers be asked to propose their desired size based on the number of senior scientists translated into financial terms. Until these plans are developed, we recommend that any proposed increase in senior staff numbers that would take centers above the size of the largest existing centers should be closely scrutinized (pp. 86-87 and 98-100).

Recommendation 17: We recommend that a biennial budget cycle be adopted for centers and related activities. In addition, a further indicative plan for the two years beyond the biennium should be developed. These budgets and indicative plans to be developed by centers should be consistent with their proposed desired size (pp. 98-100).

Recommendation 18: We recommend that the desired size and indicative plan proposals from centers be reviewed by TAC. TAC should make appropriate recommendations to the CGIAR, after the discussion of any proposed adjustments with the centers. The CGIAR approved plans would then form the guidelines for the preparation of the center's next biennial budget. Until this process is in operation, centers should recognize that proposals for budget increases will be reviewed very carefully in the spirit of our recommended period of consolidation (pp. 98-100).

Recommendation 19: We recommend that within the framework of the following guidelines, donor autonomy be preserved and that center budgets result from the sum of independent donor decisions. The guidelines are: (1) donors be encouraged to increase the flexibility of their pledges, (2) donors be encouraged to continue support for a reasonable period of time to allow centers to produce research results, (3) donors be encouraged to precede

any substantial reduction in support by two years' notice, (4) that donors agree to cooperate to assure that no center or other CGIAR supported activity receives greater support than its budget request, including supplemental requests, and (5) donor(s) of last resort fund a center that is seriously underfunded, but if that situation continues for two or three years the future of the center should be reviewed by the CGIAR (pp. 100-101).

Recommendation 20: We recommend that a standby committee of the CGIAR be authorized. Its membership should include the chairman of the TAC and the executive secretary. We suggest the committee stand ready to advise on how the Group should deal with significant shortfalls in funding. The committee could also be activated by the CGIAR or the Chairman of the CGIAR for advice should other policy issues or circumstances arise (pp. 101-102).

Recommendation 21: We recommend that steps be taken to ensure closer coordination between the TAC and CGIAR secretariats to enable them to jointly produce integrated program and budget analysis for the CGIAR. Certain additional points of organization and procedure should be agreed upon:

- (1) Adequate staff and financial resources must be provided for the work of each of the secretariats.
- (2) The co-sponsors should report to the Group at its July meeting on the budgets of the secretariats for the coming year. If sufficient resources cannot be provided by them, donors should be asked to make additional funds available.

(3) Each secretariat should recognize that it reports only to the Group, through its respective chairman.

We further recommend that the co-sponsors report to the Group at the forthcoming meeting (October 1976) whether they foresee any difficulty in meeting these considerations (pp. 102-103).

Recommendation 22: We recommend that donors be strongly encouraged to provide their pledged funds as early in the fiscal year as possible. Further, we recommend that the CGIAR Secretariat provide donors and centers with a time schedule of center budgetary needs and availability of donors' funds. If these two mechanisms do not solve the cash flow problem, we recommend that the World Bank explore alternative solutions (pp. 103-104).

ANNEX IV

CGIAR Allocations, 1977 (US\$ million)
as estimated at January 31, 1977^{1/}

	<u>TOTAL</u>	<u>CIAT</u>	<u>CIMMYT</u>	<u>CIP</u>	<u>ICRISAT</u>	<u>IITA</u>	<u>IRRI</u>	<u>ILCA</u>	<u>ILRAD</u>	<u>GENES</u>	<u>WARDA</u>	<u>ICARDA</u>	<u>CARIS</u>	<u>UNALLOCATED</u> ^{2/}
Arab Fund	.310											.310		
Asian Dev Bank	(.500)						.500							
Australia	1.705	.140		.080	.410		.480	.375				.220		
Belgium	2.430	.140		.085	.025	1.000	.140	.470	.085	.055	.110	.025	.055	.240
Canada	7.085	.940	1.685	.540	.690	1.090	1.090		.400	.100	.250	.300		
Denmark	.620		.180	.260			.050	.130						
EEC	2.500				2.500									
Ford	1.500	.300	.350			.500	.300					.050		
France	.535							.270			.125	.100	.040	
Germany	5.840	.635	.525	.320	.205	1.355	.400	.650	.800	.040	.085	.085		.740
IDB	5.700	2.395	2.620	.685										
IDRC	1.470		.010	.055	.465		.640					.300		
Iran	2.000		.350			.300	.250	.600				.500		
Italy	.100											.100		
Japan	(2.500)	.150	.150		.250		1.800				.150			
Kellogg	.310	.310												
Netherlands	1.500	.200		.250	.125	.275		.125	.175	.100	.100	.150		
New Zealand	(.100)						.075					.025		
Nigeria	.640					.400		.160			.080			
Norway	1.505				.650	.055		.465	.240	.095				
Rockefeller	1.600	.400	.400			.200	.300		.300					
Saudi Arabia	(1.000)		.150	.050	.125		.125	.020	.020	.010		.500		
Sweden	2.510			.535	.920			.525		.350	.120	.060		
Switzerland	1.050	.180		.180	.280			.230	.180					
UK	3.400	.170	.270	.210	.640	.765	.780	.210	.195	.075		.085		
UNDP	3.880		1.880		1.600		.400							
UNEP	.340					.170	.070			.100				
US	19.600	2.340	2.900	1.350	.950	2.750	2.800	2.100	1.200	.200	.050	1.000	.110	1.850
World Bank	8.000	.475	.150	.700		1.200	1.000	1.500	.800			.100		2.075
AVAILABLE	80.230	8.775	11.620	5.300	9.835	10.060	11.200	7.830	4.395	1.125	1.070	3.910	.205	4.905
REQUIRED	79.625	9.015	12.240	5.580	9.800	11.150	11.570	8.380	4.630	1.100	1.280	4.460	.420	
NET POSITION	.605	-.240	-.620	-.280	.035	-1.090	-.370	-.550	-.235	.025	-.210	-.550	-.215	4.905

1/ Except where figures are in parentheses, the total contribution shown against each donor has been confirmed, and is shown at the exchange rate prevailing on December 31, 1976. Figures in parentheses, and the allocation of these between centers, are still subject to confirmation.

2/ The World Bank's intended contribution is made in two tranches. The first tranche is allocated among centers as shown. As donor of last resort, the Bank will review the needs of the centers in September and will allocate further contributions up to the amount shown as "unallocated."