TO: Members of the Consultative Group
FROM: Executive Secretary October 6, 1976
SUBJECT: 1976 International Centers Week –
Center Directors Presentations and
Informal Summary of Consultative Group
Meeting July 29–30

1. Attached is the informal Summary of Proceedings of the 1976
Consultative Group meeting. The texts of Center Directors'
presentations made during International Centers Week are
being mailed separately, in a single copy to Members and
Participants.

2. Please note in paragraph 53 that a meeting of those interested
in the TAC proposal on water buffalo research has been scheduled
for 2.30 p.m., Tuesday, October 26, 1976 in Room E1056, World
Bank Headquarters, Washington.

Attachments
CONSULTATIVE GROUP MEETING

JULY 29-30, 1976

WASHINGTON, D.C.

INFORMAL SUMMARY OF PROCEEDINGS

1. The eleventh meeting of the Consultative Group on International Agricultural Research was held at the headquarters of the World Bank in Washington, D.C. on July 29 and 30, 1976. The Chairman, Mr. Warren C. Baum, presided.

2. The meeting was attended by representatives of 29 members. Three donor members, Iran, the Kellogg Foundation, and the Asian Development Bank, were unable to attend. A list of participants is attached as Annex I.

3. Plenary Sessions of the Consultative Group were held on the preceding three days, July 26, 27, and the morning of the 28th, at which Center Directors reviewed the past year's activities and future prospects. Texts of these presentations will be attached to the final version of this summary. Meetings of ILCA donors and of the ICARDA Sub-Committee were held on the afternoon of July 28th.

Chairman's Opening Remarks (Agenda Item 1) and Selection of the TAC Chairman

4. The Chairman of the Consultative Group opened the meeting by welcoming new participants, including a representative of the European Economic Community. He commented that the achievements of the centers were impressive, and it was important to ensure their full support for the future, but with a careful watch on the efficient use of funds.

5. Before turning to the formal agenda, the Chairman referred to an unscheduled item which had arisen. As members knew, Sir John Crawford wished to relinquish his Chairmanship of TAC later in the year. This important post should be filled by decision of the Group as a whole. The three Co-sponsors would have submitted a recommendation for the Group's consideration, but they had been unable to reach unanimous agreement on such a recommendation. The Co-sponsors, therefore, proposed the establishment of a Selection Committee from among the Group members to recommend to the Group as a whole Sir John's successor.

6. The representative of FAO drew the members' attention to his organization's position on the necessary qualifications of any person to replace Sir John, to whose unique contribution be paid tribute. Among other qualifications, FAO believed that the next Chairman of TAC should this time be from the developing world, and suggested three possible candidates.

7. The Chairman indicated that the other Co-sponsors had felt that, other things being equal, they would be very pleased if the next Chairman
of TAC were from a developing country. However, in their view, the qualities of the individual, and his ability to provide sound, professional judgment and strong independent leadership, must be the overriding consideration in selection. The CG must find the best possible person, regardless of nationality, for the difficult and demanding job of TAC Chairman.

8. A speaker pointed to the strength and independence of TAC as one of the major elements influencing his agency's future support. He suggested that the Chairman name members of the Selection Committee from among donor members, the Co-sponsors being available for advice, but as observers only.

9. Several qualifications for the Chairman of TAC were mentioned, including the ability to devote adequate time to TAC’s work, an understanding of the CG system, and a knowledge of agricultural problems worldwide.

10. Several speakers, in supporting the proposal to establish a Selection Committee, stressed the great importance of the position of TAC Chairman to the CG system. It was felt that the proposed procedure should be used more widely in selection for important posts, or other decisions in which the Group as a whole had an interest.

11. It was agreed that the Chairman would appoint a Selection Committee, which would meet as soon as possible, so that a recommendation could be considered by the Group before the end of the current meeting.

12. The Chairman subsequently informed the Group that the Selection Committee would be made up of the representatives of Germany (Chairman), U.S., U.K., Canada, Sweden, Belgium, Nigeria, Rockefeller Foundation, and the Inter-American Development Bank. The Selection Committee met at 5:00 p.m. on July 29th.

13. The following morning the Chairman opened the session of July 30 by calling on Dr. Treitz, Chairman of the Selection Committee.

14. Dr. Treitz expressed the view that the difficult problem that had arisen over selection of a replacement for Sir John Crawford as Chairman of TAC had strengthened the Group in that its members had taken on more responsibility for decisions.

15. Dr. Treitz thanked members of the Committee and the Co-sponsors, and went on to review the criteria on which the selection had been based. These were that whoever was chosen would have to be of firm independent judgment; he should have the confidence of the Group; he should give adequate time (4 to 6 months a year) to TAC business; he should be fully qualified scientifically with experience in worldwide research; he should have financial and administrative experience, and a knowledge of developing countries; and he should know the CG system. The Committee felt that the new Chairman should not come from one of the Co-sponsors. They also considered that the selection should be based on individual qualifications without regard to whether he was a national of a developing or an industrialized country. The Committee further expected that the new Chairman would be prepared to stay in office for at least three years.
16. Dr. Treitz said that a number of highly qualified candidates had been proposed. After consideration, the Committee concluded that the best choice would be Dr. Ralph Cummings, and had been assured that he would be able to put in the necessary 4 to 6 months a year. Dr. Treitz asked the Group formally to approve the selection of Dr. Cummings, and the proposed term of three years.

17. The Chairman thanked Dr. Treitz and the Committee, and proposed to take the response to Dr. Treitz's announcement to indicate approval by the Group by acclamation. There was no dissent from this, nor to the length of the proposed term. Mr. Baum reminded the Group that Sir John would remain in office until after the October meeting.

18. Returning to the business of July 29th, after agreement on an item for inclusion under "Other Business," the provisional agenda was approved. It is attached as Annex II.

The Integrative Report (Agenda Item No. 3) and Report on Review Committee Progress (Agenda Item No. 4)

19. The Chairman summarized the coverage of the Integrative Report, which was broadly similar to that of last year's. This year's Integrative Report tried to avoid or deal only lightly with most of the topics that were under study by the Review Committee. As discussion proceeded, it was found difficult to separate the issues raised by the Report from the work of the Review Committee. At the suggestion of several speakers, therefore, the Chairman introduced the next item on the agenda, the progress of the Review, as it was felt logical to address this in conjunction with the Integrative Report.

20. The Chairman reviewed the background to the establishment of the Review Committee, summarized the progress made so far, and outlined the timetable for completion of the Review. This included another meeting of the Review Committee in September, and distribution of the report in its final form by October 1st. He indicated that he did not propose to give any of the Committee's preliminary findings, as there would be a full discussion of the Committee's Report, in its final form, at the October-meeting of the CGIAR. He hoped that any current discussion would be a useful input to the Review Team's work.

21. The Study Director, Dr. McCalla, agreed with the Chairman that it would be premature to give a report on substantive questions. However, he confirmed that three major questions being addressed by the Review Committee were the scope, boundaries, and future direction of the CG itself; the boundaries and functions of the activities the Group supports; and issues of long-range planning, management, and allocation of resources.

Special Projects (Integrative Report para. 37)

22. The discussion focussed first on the question of special projects. Most speakers took the view that, whilst centers needed the flexibility that special projects could provide, they were a legitimate matter for CG concern and some kind of review, as they absorbed a considerable
amount of managerial resources, and often found their way subsequently into core programs. Dr. McCalla confirmed that the appropriate balance between special projects and core programs was being studied by the Review Committee, as was the origin and nature of existing special projects. It was hoped to develop guidelines for special projects for the future.

Cost-benefit Analysis (Integrative Report paras. 38, 39)

23. The Chairman turned to the second of the issues highlighted in the Integrative Report—the question of whether the substantial grant funds now going into the centers required a more systematic analysis of benefits as compared to costs. The conceptual and technical difficulties in such an analysis were well recognized. But it could be asked whether a serious attempt was practical; and if so, whether donors would welcome it; and whether it would prove useful in the setting of future priorities.

24. A speaker recalled the study by Dr. Evenson, and the Airlie House seminar, both of which addressed this question. The major difficulty, as the Integrative Paper pointed out, was that of prediction. In appraisals of agricultural research projects, careful judgments were made on the balance of research within agricultural development as a whole, and on the effectiveness of research management. He would welcome more work on the cost-benefit analysis of research, but recognized its inevitable limitations. It was less clear that the CGIAR was the right channel for such work.

25. Other speakers endorsed the Integrative Report's suggestion that there was now need for guidelines on the evaluation of research benefits. One speaker, in emphasizing realism as to what could usefully be achieved, considered that the attempt might yield valuable information on constraints on the application of research results.

26. A number of speakers felt the need for greater ex-post evaluation of research efforts, while recognizing the difficulty of ex-ante analysis.

27. The problem could be seen as having two aspects: the general problems of analytical methodology, which might best be left to others; and the best existing methods for measuring research impact and the extent to which they are being used within the CGI system. It was suggested that a paper might be commissioned on this latter aspect.

28. Recognizing that there was scepticism, as well as support, for what might be achieved, the Chairman concluded that there was overall support for developing appropriate guidelines by which benefits of agricultural research could be better evaluated. He considered that a modest approach should be followed, emphasizing better monitoring and information rather than cost-benefit techniques. He proposed that the Secretariat review the preceding discussion, and prepare a paper for the October meeting recommending an appropriate course of action.

Multi-year Budgets (Integrative Report paras. 40, 41)

29. Turning to the next issue, the Chairman noted that there seemed to be a strong consensus in favor of multi-year budgetting. Some speakers,
recognizing the advantages for the centers, pointed out that the administrative and legislative constraints under which their agencies operated would make any firm long term commitments difficult or impossible. The value of financial plans covering several years was very evident with respect to major capital programs—as for example, in the case of ICRISAT, and possibly, in the case of ICARDA.

30. It was suggested that centers could work on the basis of multi-year budgets, but donors would still have to review and if necessary adjust them on an annual basis. It was confirmed that the Review Committee would be making recommendations on this question. The Secretariat would also canvass selected donors and prepare a statement for the October CG Meeting.

Donor Restrictions (Integrative Report para. 42)

31. The next issue concerned the restrictions imposed by donors on the use of their funds. Speakers representing several donors felt that center managements should have maximum discretion in the use of funds, but the policies of their authorities made it desirable to attach conditions in some cases, particularly if this could ensure that additional funds were made available. The movement, however, seemed to be in the direction of less restriction. It was necessary to be on guard against undue interference in matters that should properly be left to the centers. Several donors indicated that their restrictions were intended to ensure that centers made full use of the research resources of the developed countries. This again was a question very much in the minds of the Review Committee.

Working Capital (Integrative Report paras. 43-48)

32. The working capital problem was then addressed. This arose from the fact that some centers received donor contributions only very late in their financial year, thereby causing them to have insufficient funds to meet their obligations. The Chairman pointed out that the problem could be solved simply if donor contributions could be made more promptly. There was a timing problem as a result of the financial years of centers and of donors not necessarily coinciding. However, many donors indicated that they would be prepared to accelerate their contributions to the early part of the year.

33. A speaker, pointing out that increasing working capital funds tied up scarce aid resources for a long period, suggested that other possibilities be explored, such as inter-center loans, and commercial borrowing.

34. The size of a possible central working capital pool had yet to be calculated, and there were various alternative mechanisms for payments into and out of such a pool.

35. It was agreed that the Secretariat would prepare a paper for the October meeting on the practical considerations governing the timing of donors' contributions, and the merits of alternative ways of solving the cash flow problem.

Secretariat Commentaries (Integrative Report paras. 49-55)

36. The final question raised by the Integrative Report was that of the
Secretariat Commentaries. The Chairman noted that previous discussion had pointed to the need to have such commentaries more integrated with other parts of the review process.

37. Speakers reiterated the need to bring together scientific/program aspects and financial/managerial aspects, though it was recognized that this could affect the timing of the review cycle. It was felt that further discussion of this question could await the consideration of the Review Committee's report.

Report by the Chairman of TAC on the February and May meetings of TAC (Agenda Item 5)

38. The Chairman welcomed the Chairman of the Technical Advisory Committee, Sir John Crawford, and asked him to report on the twelfth and thirteenth meetings of TAC, held at Rome in February and Los Baños in May respectively. Sir John reported on nine main topics: priorities of the CGIAR; the IRRI, CIMMYT, and CIP Quinquennial Reviews; vegetable research; water buffalo research; the TAC subcommittees on grain legumes and fertilizers; relations between centers; and relations between centers and advanced research institutes.

Introductory Topics

39. Sir John commented on a number of other items before turning to the main topics listed above. Whilst recognizing that the decision to hold the May meeting at IRRI had been a most useful initiative, in enabling TAC and the Center Directors to get together well before the CG meeting, he thought that in future such meetings should be held two or three weeks later, to allow time for proper study of the Program and Budget papers. He touched on the possible shortfall in funds, reiterated TAC's opposition to across-the-board cuts, and referred members to TAC's recommendations on this question in the draft summary of the 13th TAC meeting. Cash flow problems were still of great concern, but Sir John noted that the Integrative Report addressed this issue. In concluding his introduction, Sir John reiterated TAC's willingness to assist the Review Committee, particularly on the question of priorities.

Priorities

40. The 1973 priorities paper had now been revised. It was noteworthy that the new version, although the work of a different TAC team, solidly confirmed the basic principles and approach of the earlier. Whilst not attempting to summarize the whole paper, Sir John commended it for serious study by members. He stressed some major points: the continued top priority of research related to improvement of food production and availability in the developing countries; the priority of those crops and livestock that contribute most to nutrition in those countries including cereals, food legumes, roots and tubers. Satisfactory arrangements for international agricultural research had now been made for all the most important crops except soybeans, which was under discussion. Attention may be given to bananas, water buffalo and goats; and he noted the importance of aquaculture and fish production.
40. Sir John noted that cotton was now listed as a second order priority, and as with vegetables, oil seeds, and tropical fruits, could now be considered by TAC. But first order priorities still had the first call on funds, and TAC was unlikely to recommend major new initiatives while funds were scarce.

42. Speakers drew attention to the potential importance of aquaculture, sesame, sugar crops, and bananas (plantain). Sir John pointed out that TAC had tended to put lower priority on commercial crops intended mainly for export. Another speaker drew attention to the need for more socio-economic and factor-oriented research.

The IRRI Review

43. Sir John formally tabled the Mission's report of the IRRI Quinquennial Review, and paid tribute to the Mission leader, Dr. Swaminathan. The Report had TAC's unanimous endorsement, but Sir John pointed out that it was the final Report of the Mission and not of TAC. Should TAC's views differ from those of the Mission, this would be set out in a separate paper.

44. The Mission had endorsed IRRI's present programs and future plans. IRRI's policy of producing high yielding varieties resistant to disease and insect attack had been of great benefit to large areas of the developing world. Although IRRI, rightly, aimed much of their work at the needs of the small farmer, Sir John emphasized the value of technology that is neutral to scale, and the role of national programs in adapting it for the small farmer.

45. Sir John commented on the Mission's recommendation on staffing, ultimately to allow for five or six new posts for outreach staff. He observed that IRRI's outreach work needed to be sharply defined and limited to technical advice, training, and matters directing supporting IRRI's own research. Other staffing changes and new facilities would strengthen IRRI's work in insect pests, the physical structure of soils, and constraints and consequences of new technology. IRRI's work in post-harvest technology should be kept at the farm and village level, as should the machinery program.

46. IRRI's high priority for upland rice was endorsed, but there were reservations about the expansion of the cropping systems program which tended to be location specific.

47. Sir John underlined the high priority of providing IRRI with secure storage for its irreplaceable germplasm collection. Other capital works could proceed piecemeal as funds became available.

The CIMMYT Review

48. Sir John noted that the draft report generally endorsed CIMMYT's approach, and listed impressive achievements. The panel recommended that CIMMYT's barley work should continue after the establishment of ICARDA, but TAC had not changed its earlier view that ICARDA should have a significant responsibility for barley. CIMMYT's Board should agree with that of ICARDA on the most appropriate arrangement for cooperative
barley programs. Other recommendations included bringing triticale into core programs and recognition of CIMMYT as the main repository of its germplasm, more intensive research into breeding lines for marginal management conditions, more intensive training of trainers, and the urgent need to solve the cash flow problem.

49. Sir John pointed out that the panel did not entirely agree with CIMMYT's major emphasis on breeding for wide adaptation, as opposed to adapting to specific agro-ecological conditions. A further report would be prepared on the regional programs in Egypt and Tunisia. The whole report would then be reviewed in October.

The CIP Review

50. Sir John briefly reviewed the schedule for this review, which envisaged a mission in December 1976.

51. He concluded his comments on the three Reviews with some general remarks based on the experience so far. It was necessary to start recruiting panel members earlier. Better advance preparation, by Centers and Missions, would be made in the future. More effort was needed to see the Review as a joint exercise, and to approach fundamental research problems with an open mind. The views of donors on TAC's approach to the Quinquennial Reviews would be most welcome. An analysis of the experience of the first three or four Reviews should be made for the benefit of the Group. Quinquennial Reviews should be concerned with every activity of a center, regardless of its source of funding.

Vegetable Research

52. TAC was aware of the very valuable work being done at AVRDC, and of the great importance of vegetables in South East Asia and Africa. It had rejected the idea of an international vegetable research center, but was recommending an International Vegetable Research Project, initially on a short-term pilot basis. A specific proposal for a pilot project would be prepared by one or two consultants funded by the TAC budget by early 1977. It would be for a period of 3 to 5 years, and should be a coordinated effort between one location in Asia and one in Africa. It would be an international project, financed by the CG, but possibly based on existing institutions. It would include a start on genetic evaluation and utilization of main vegetable species, and on training, the compilation of information on vegetable research, and specific proposals for a long-term program. There was no request for CG funding for this activity at the present time.

Water Buffalo

53. Water buffalo research had been before TAC for a long time and had aroused a great deal of interest. Sir John underlined four points. First, that a response to the proposing countries was overdue. Secondly, that the problem would be best tackled by a collaborative network rather than by a new international center. Thirdly, that the FAO would be the most appropriate Executing Agency. And fourthly, that the work would be
organized in two phases, an initial year in which the present capacity of national centers would be assessed and for which funds should currently be sought, and a subsequent two year phase. Sir John suggested that an informal meeting of those interested be convened to examine the proposal further, based on the report to TAC circulated at the July CG meeting.

Grain Legumes, Plant Nutrition and Other Matters

54. Of the major grain legumes, only soybeans remained a vital need for new international research initiatives. Sir John commended the emerging program of the International Fertilizer Development Center, and its linkages with some of the International Centers. He noted that TAC's subcommittee had made a number of suggestions for the better use of organic waste.

55. TAC did not propose to recommend any work outside of the international centers on post-harvest technology, but welcomed the establishment of a working group of donors to prepare substantive proposals in this area.

56. Regarding inter-center relations, Sir John noted that as center outreach activities expanded, the problem of coordinating activities became increasingly difficult. Center Directors were working out solutions, ranging from informal understandings to more formal agreements. TAC favored the more formal agreement to obviate misunderstanding, confusion and perhaps even maladministration.

57. In reporting on the proposed agenda for the October meeting, Sir John noted that TAC would consider soybeans, aquaculture, water management, coconut, and the place of farming systems work.

Report by the Chairman of TAC on the 1977 Center Programs (Agenda Item 6)

58. Turning to the Center Programs, Sir John emphasized that the term TAC "approval" of budgets should read "endorsement."

IRRI

59. Sir John did not discuss IRRI at length, having covered it in connection with the Quinquennial Review. He commended IRRI's proposal for three regional representatives in 1977 who would be funded from the core budget. Other appointments would be considered on a case by case basis. He welcomed the formal agreement between IRRI and CIAT for collaborative rice research.

IITA

60. IITA's farming systems research looked promising, and encouraged TAC to investigate systems research further. Sir John endorsed IITA's proposal for a humid tropical field station. He noted with approval the

1/ Subsequently scheduled for 2:30 p.m., Tuesday, October 25th, in Room E 1056, World Bank Building, Washington.
collaborative work on soybeans with INTSOY, and the intention to collaborate with ICIPE on pest control. He noted other collaborative proposals, such as with IRRI, WARDA, and CIAT, and expressed the need to put them on a more formal basis. Sir John expressed concern that IITA might be overextending its proposed virus research, and underlined the TAC view that such research should be limited to IITA's own crops. He commented favorably on the reshaping of the engineering program towards the improvement of simple farm implements, a program which he considered to be reaching its optimum size in 1977, and which should not develop into a large scale engineering program.

ICRISAT

61. Sir John commended ICRISAT on the progress achieved. In line with ICRISAT's own views, he stressed the priority of research on groundnut rosette disease and striga on sorghum and millet. He was in agreement with ICRISAT's approach to systems work.

CIP

62. Recognizing that there had been some questioning of the appropriate balance in the CIP program between headquarters-based research and the regional research effort, TAC was impressed by the innovatory aspects of the core research through contracts with advanced institutions, and endorsed the attention given to village-level processing and storage, and to tissue culture transfer. The heavy program of workshops and seminars, and the burden on regional staff were, in a sense, the price to be paid for CIP's decentralized approach. Sir John reminded the Group that CIP was next in line for a Quinquennial Review, which should prove particularly interesting, in view of CIP's unique method of operation.

WARDA

63. Sir John noted the improving efficiency of WARDA's operations, and the development of its relations with IITA and IRRI. TAC supported the new regionalization, but expressed concern for the technical supervision of trials and the effect on the administrative structure. Sir John regretted that the Chandler report that recommended it had not been made available in time for the TAC discussion. It would be available for discussion at the October meeting, at which time TAC might have further comments. Although WARDA was not seen as a permanent research institute, since its role was primarily in development, it was nevertheless proving important and increasingly effective in strengthening local research capacity.

ILCA

64. ILCA had, in Sir John's opinion, the most difficult mandate of all the centers. The TAC document had overstated the escalation in ILCA's budget, an error which would be corrected. Sir John complimented Dr. Pagot on his earlier presentation, and on the vigorous way in which the documentation program has been pursued. He queried whether too much was being spent on cooperative programs, or too much emphasis being put on animal breeding at the expense of animal health. TAC could not endorse
ILCA's budget at the present time, but Dr. Pagot was invited to the October TAC meeting at which time it could be thoroughly reviewed.

ILRAD

65. Sir John had been impressed with the energy and enthusiasm evident at ILRAD during his visit in March. TAC was satisfied with the progress being made, and supported the request for a tsetse fly and tick facility, and the screen cattle facility. He hoped ICIPE would have access to the tsetse facility.

CIMMYT

66. Sir John had already covered CIMMYT in his earlier report on the Quinquennial Review. He pointed to the need for a further report on the outreach program. TAC saw no need for any changes to the 1977 program, pending the review of the Quinquennial Report in October.

CIAT

67. Sir John commended Dr. Nickel and the CIAT Board on their decision to reorient the beef program. He was convinced that this was the right approach, and he endorsed the priority given to improving animal nutrition through research in the llanos and other acid savannah lands. The suitability of the new site near Palmira for beef programs would be reviewed in 1977. Although the economists had now been assigned to interdisciplinary teams, Sir John hoped that they would remain in contact so as to follow consistent methodologies.

ICARDA

68. Sir John recorded his appreciation of the work of TDRC and ALAD in maintaining momentum under very difficult circumstances. He assumed that, if a new location were considered for the facilities intended for Lebanon, that the advice of TAC would be sought, since this was a matter which had been the subject of intense debate. TAC would also be ready to advise on program questions and on relationships with other centers.

IBPGR

69. Sir John did not expect that TAC would have any problems with the proposed program. The Board had agreed to prepare a priorities statement for the October meeting. He did have some hesitation over the Board's forestry proposals, and felt that the views of the Group should be taken into account before action was taken, since it could raise questions as to the priority of forestry as against food crops.

IFDC

70. Although IFDC should not be seen as likely to have the same relationship with the Group as the other centers, its work was important. There was a need for IFDC to develop priorities for their research. TAC gave a priority to the development of new types of fertilizers for tropical conditions.
ICIPE

71. Sir John expected that TAC could support the provision of some funds for ICIPE. Encouraging progress had been made and ICIPE had concluded provisional understandings with certain centers. A specific recommendation would be made in October.

Discussion of Center Programs (Agenda Item No. 7)

72. The Chairman opened the discussion of Sir John's report.

73. A representative of the UK, greatly welcoming Sir John's review, suggested that the Group might consider how such a review could in future be coordinated with the CG Secretariat reports on centers. Turning to the gap in virology work, he offered IITA and ICRISAT assistance from virologists being funded by his government in Kenya. As for CIP, storage by tissue culture seemed to have tremendous potential. He noted improvements in WARDA's control of field experiments, and offered WARDA the services of a tropical biometrics unit at one of his government's research stations until WARDA has one of its own. He suggested close contact between CIAT and the tropical forage laboratory in Queensland. He was glad to see some attention being given to the coconut, by TAC and the IBPGR, since this was a crop of special importance in the Pacific.

74. In reply, Sir John thought strongly that there should be much closer coordination between the two Secretariats in preparing program and budget commentaries, a point with which the Chairman agreed, although there was some coordination already.

75. In responding to the Chairman's query about the TAC position on CARIS, Sir John said that TAC thought the project basically sound, and should have the resources to carry on. The original budget was not fully met by pledges and it appeared that about US$ 270,000 were outstanding and would be required to complete the project. An extension of the timetable was reasonable with, however, two provisos: (a) that funds provided through the CG should be no more than originally recommended, and (b) that, upon its completion, the follow-up of the project be absorbed into the FAO programmes.

76. A member of the U.S. delegation thought it important that an early decision be made about the future place of CARIS in the FAO programmes about which his own government's views were somewhat divided. While not anticipating any problem for a further contribution to the present project, he felt it necessary to be assured as soon as possible by TAC that its recommendations on the changes and reductions in the scope of CARIS had been implemented.

77. The representative of FAO, summarizing his organization's views, considered the first stage a success so far and looked forward to its completion. On the basis of the results of the first stage, the Director-General of FAO was intending to submit to the approval of its governing bodies a proposal for the funding of the CARIS central coordinating unit, in the order of US$ 250,000 annually. FAO was concurrently taking steps to secure, after this first phase, the funding of the other aspects of the CARIS programme from other sources of financing.

78. Turning to the question of training, a speaker, stressing its importance, asked whether the Secretariat could not derive means of properly qualifying trends in resources going to training. It was agreed that a more complete analysis should be attempted.
Relations of Centers with Developed Country Institutions (Agenda Item No. 8)

79. Sir John Crawford, in pointing to the considerable interest among advanced institutions to collaborate with the international centers, stressed the importance of center management ensuring that the centers retained their independence and did not become swamped by their relationships with other institutions. Some research problems could be more efficiently solved using the resources of the advanced institutions, whether in industrialized or developing countries. TAC had not yet mapped out guidelines for such relationships, but would be reviewing the question again in October.

80. Dr. Bernstein reported on the study conducted by the National Academy of Sciences concerning the contribution U.S. science and technology might make to worldwide efforts to improve food production and alleviate malnutrition. This was the result of a Presidential request, which in turn stemmed from resolutions of the World Food Conference.

81. The study addressed two general questions: (a) what improvements are needed in U.S. food research resources, and how should they be related to the work of the centers, and (b) what are the main priorities for accelerated research. The latter question had been addressed by identifying all the constraints on world food production and nutrition, and grouping these for analysis by teams of specialist experts. Each team would identify relevant research needs, and recommend which had the highest priority for U.S. support. These would then be examined in terms of their likely impact on world hunger, in the short and long term. Another group was examining organizational ways in which the scientific basis of U.S. food research could be strengthened; how international food research collaboration could be promoted; and how food research could have a greater impact, in the U.S. and in the developing countries.

82. After reviewing the technical, economic, and political arguments for international cooperation in research, Dr. Bernstein listed seven areas of possible collaboration between the centers and U.S. institutions, all of which already existed in greatly varying degrees. These were: (a) direct science research support by U.S. institutions for specific problems in the centers' programs; (b) work on science problems of food production technologies in developing countries, but which is not yet close to the applied research stage of the centers' work, as for example, nitrogen fixation, or photosynthesis; (c) division of labor and exchange in applied research, as for example in lateral collaboration in plant breeding; (d) specialized help on selected factors in technology systems, in areas where the U.S. has strong expertise, as for example in fertilizers or seed multiplication; (e) collaboration on outreach programs to strengthen national efforts; (f) bilateral and triangular collaboration on combined research and training. These would improve developing country research capability, and the effectiveness of U.S. capability for work on the problems of developing countries. These could also advance research work, and encourage international networks; (g) Personnel support, through visiting scientists, or short-term help from distinguished experts.
83. During the following discussion, speakers pointed to the danger of centers being overwhelmed by too heavy a collaborative effort, and also of increasing management complexity. There was felt to be a need for better and more systematic information on collaborative research, and Sir John Crawford considered this a field for action by the two Secretariats. Mr. Mahler reported on a TAC study of the feasibility of a survey of ongoing research supported by CG members. A questionnaire had been designed, and it was estimated that the survey, including computer processing, would cost some $50,000. He planned to put a specific proposal to the next CG meeting.

Donor Indications of Financial Support for 1977, '78, and '79 (Agenda Item No. 9)

84. The Chairman asked members to give a preliminary indication of the likely level of their financial support for the system in 1977 and beyond. He noted that the estimated total amount requested for 1977 was $84.5 million, without taking account of any possible new additions to the system. The Secretariat had estimated, on the basis of very fragmentary information, that some $78 million seemed reasonably assured.

85. Donors then indicated their intentions, though many were not yet in a position to quote figures. After making certain assumptions, the Secretariat calculated from the indications given by donors that the overall financial position was likely to be very similar to that given in the Integrative Report, that is that total pledges would be about $5 million less than the amount requested, including the requirements of CARIS. The gap might be narrowed by so called "technical adjustments" to some center budgets. Several budgets were still subject to revision.

86. The Chairman stressed the need for donors' representatives to impress upon their treasuries the growing needs of the system. There was a danger of a serious shortfall, and the question of allocation of funds could therefore be a real issue. It was hoped that the Review Committee would make specific recommendations for dealing with such a situation.

Matters Introduced by Center Directors (Agenda Item No. 10)

87. The Chairman asked Dr. Brady to introduce matters which the center directors wished to have brought to the attention of the group.

88. Dr. Brady commented on the great value of having had the last TAC meeting at the same time and place as the Center Directors meeting, and hoped this could be arranged in the future. It was proposed to have a directors and a TAC meeting at CIAT during the week of May 23, 1977. Centers had made considerable progress in working out formal agreements to cover activities of mutual concern.

89. The directors were concerned that the new technology they were developing had come in for some ill-informed criticism, as for example, that the new varieties were particularly susceptible to pests and diseases. It was therefore proposed to improve the state of knowledge on the new technology by action on three fronts: to the general public by an article in a popular magazine; to scientists through an article in "Science" or
"Nature"; and for the future by an inter-center publication which would analyze the characteristics of the products of the centers, particularly as compared to older technologies.

90. Dr. Brady referred to the recommendations of a study by MIT into a new computerized communication network linking the centers. A specific on-site study was now needed, and Dr. Brady hoped there would be donor interest in getting it done.

91. The centers were looking into their patent policies with the hope of evolving more standardized policies, which would also be acceptable to the donors. They were also making progress towards more consistent policies for the conditions of service of outreach staff. Finally, Dr. Brady reported some differences of opinion on the value of the Quinquennial Reviews, the overall impression being favorable. However, the directors would have some suggestions in October on how they might be improved.

Other Business (Agenda Item No. 11)

92. The Chairman noted that Mr. Farrar of USAID wished to raise the question of the international status of the International Fertilizer Development Center.

93. Mr. Farrar reminded the group of the great relevance of IFDC's work to that of the centers. It was the opinion of IFDC, USAID, and the U.S. State Department, that the only practical way to enable IFDC to be recognized by the Federal Government as an international organization would be to restructure it so that a majority of its directors would be named by the U.S. Government and by the Consultative Group. This would have the added advantage of increasing cooperation between IFDC and the Group. It was therefore proposed that the CG Secretariat should put forward three candidates for the IFDC board, for the approval of the Group as in the case of CG-appointed board members for the international centers. The U.S. Government would name two more, making a majority of the nine-member Board.

94. Mr. Farrar emphasized that this arrangement implied no other changes in IFDC's relationship with the Group, and certainly did not include the suggestions that the Group would take on financial or any other responsibilities for IFDC.

95. Many speakers supported the proposal, and it was agreed that the procedures to be followed would be same as those for Board members of the centers within the CG system.

96. A speaker proposed that the Group meet once a year instead of twice. The Chairman noted that this was one of the things being worked on by the Review Committee.

Time and Place of the Next Meeting (Agenda Item No. 12)

97. The Chairman pointed out that the October meeting would include discussion of the detailed recommendations of the Review Committee, as
well as of the Quinquennial Reviews of IRRI and CIMMYT. He recommended, and it was agreed, that there should be a three-day meeting, Wednesday through Friday, October 27-29, in Washington.

98. In response to a question, the Chairman said that donors would be asked whether they would prefer to put their pledges in writing, rather than announcing them at the meeting.

The meeting adjourned at 3:40 p.m.
CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

LIST OF PARTICIPANTS IN CENTERS WEEK

(July 26 - July 30, 1976)

Chairman

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

INTERNATIONAL AGRICULTURAL RESEARCH CENTERS

Centro International de Agricultura Tropical (CIAT)

Mr. Luis Crouch
Chairman
Dr. John Nickel
Director General

International Maize and Wheat Improvement Center (CIMMYT)

Mr. Virgilio Barco
Chairman
Dr. Keith W. Finlay
Mr. Oscar Brauer

Mr. Francisco Cardenas

International Potato Center (CIP)

Dr. Mariano Segura
Chairman
Dr. Richard L. Sawyer
Director General

Dr. O. T. Page

International Center for Agricultural Research in the Dry Areas (ICARDA)

Dr. Taher Obaid
Chairman
Dr. William L. Pelton
Acting Director General

Dr. Omond Solandt

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)

Dr. C. F. Bentley
Chairman
Dr. Ralph W. Cummings
Director

Mr. A. D. Leach
Mr. V. Balasubramanian

International Institute of Tropical Agriculture (IITA)

Prof. Thomas R. Odhiambo
Chairman
Dr. William K. Gamble
Director General

Mr. R. A. Woodis
Dr. Dennis J. Greenland
International Livestock Center for Africa (ILCA)

Dr. Ralph E. Hodgson  
Chairman

Dr. George Tacher

Dr. K. L. Turk

International Laboratory for Research on Animal Diseases (ILRAD)

Dr. John A. Pino  
Chairman

Dr. James B. Henson  
Director General

International Rice Research Institute (IRRI)

Dr. F. F. Hill  
Chairman

Dr. Nyle C. Brady  
Director General

Dr. D. S. Athwal

International Board for Plant Genetic Resources (IBPGR)

Mr. Richard H. Demuth  
Chairman

Dr. R. Pichel  
Secretary

Prof. A. Hugh Bunting

West Africa Rice Development Association (WARDA)

Dr. Jacques Diouf  
Executive Secretary

Dr. Harry Will  
Deputy Executive Secretary

Asian Vegetable Research and Development Center (AVRDC)

Dr. J. C. Moomaw  
Director General

Dr. James J. Riley  
Associate Director General

TECHNICAL ADVISORY COMMITTEE (TAC)

Mr. William J. MacNally  
Assistant to Chairman

TAC Secretariat

Mr. Brian N. Webster  
Deputy Executive Secretary

Mr. Philippe Jean Mahler  
Technical Advisory Committee

Technical Advisory Committee

Rome, Italy

Miss Caryl Jones
## DELEGATIONS OF MEMBERS OF THE CONSULTATIVE GROUP

### Australia

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<thead>
<tr>
<th>Mr. Bruce M. Cheek</th>
<th>Dr. James H. Whittem</th>
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<td>Alternate Executive Director for Australia</td>
<td>Scientific Attaché</td>
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### Belgium

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<th>Prof. Edmond De Langhe</th>
<th>Mr. J. Ronchaîne</th>
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<td>Professor of Agronomy</td>
<td>Agricultural Attaché</td>
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### Canada

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<th>Dr. Paul Ladouceur</th>
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<td>Section Head</td>
<td>CIDA, Agricultural Advisor</td>
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| Mr. Franc Mes | |
|---------------||
| CIDA | |
| Ottawa, Canada | |

### Denmark

| Mr. Poul A. Hansen | |
|--------------------||
| Agricultural Attaché | |
| Embassy of Denmark | |
| Washington, DC | |

### European Economic Community (EEC)

| Mr. Hellmut Eggers | |
|--------------------||
| Agricultural Division | |
| Brussels, Belgium | |

### Food and Agriculture Organization of the United Nations (FAO)

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<th>Mr. J. F. Yriart</th>
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| Dr. D. C. Kimmel, Director | |
|-----------------------------||
| Director | |
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Dr. David Bell
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Ministry of Economic Cooperation
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Dr. Erhard Kruesken
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Dr. Klaus Lampe
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Dr. Ute Spieker
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Mr. Victor M. Horcasitas
Officer, Technical Assistance Division

Mr. Jose Soto Angli
Mr. Jorge del Aguila

International Bank for Reconstruction and Development

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Director
Agriculture & Rural Development Department

Mr. James Fransen
Agricultural Research Advisor

International Development Research Centre (IDRC)

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Mr. Douglas Daniels
Research Officer
Ottawa, Canada

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Director, Agriculture, Food, & Nutrition Sciences
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Director General of Agricultural
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Ministry of Agriculture
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Mr. Gerrit de Bakker

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Federal Ministry of Agriculture
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Lagos, Nigeria

Mr. D. E. Iyamabo, Secretary
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Swedish Agency for Research Cooperation with Developing Countries (SAREC)  
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Swiss Technical Cooperation  
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Assistant Secretary  
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Mr. W. A. C. Mathieson

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United States

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Technical Assistance Bureau, USAID
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Agricultural Economist
USAID - Department of Agriculture
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Head of Agricultural Research
Volcani Institute
Beit-Dagan, Israel

Representing Latin America (Peru)

Jose F. Torres-Muga

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Executive Secretary

Mrs. Gene Audifferen

Mr. Daniel Ritchie
Deputy Executive Secretary

Mrs. Monica Stillwell

Dr. John K. Coulter
Scientific Advisor

Mrs. Audrey Mitchell

Mr. Andrew Hayman
Program Officer

Miss Suzanne Lewis

Mr. Carlos Gavin
Research Assistant

Observers

Arab fund for Economic & Social Development

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Senior Agricultural Specialist
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Mr. Clyde C. Applewhite
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Director
Nairobi, Kenya

International Fertilizer Development Center (IFDC)
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Director
Muscle Shoals, Alabama

International Food Policy Research Institute (IFPRI)
Dr. Dale E. Hathaway
Director
Washington, DC

World Food Council
Mr. John A. Hannah
Executive Director
Ottawa, Canada
AGENDA

1. Opening remarks by Chairman
2. Adoption of Agenda
3. The Consultative Group and the International Research System (The Integrative Report)
4. Report on Review Committee Progress
5. Report by the Chairman of the Technical Advisory Committee (TAC) on its Deliberations at its February and May 1976 Meetings
6. Report by the Chairman of TAC on the 1977 Center Programs
7. Discussion of Center Programs
8. Relations of Centers with Developed Country Institutions
10. Matters Introduced by Center Directors
11. Other Business
12. Time and Place of Next Meeting