FROM: The Secretariat

Consultative Group Meeting
October 30 - 31, 1980

Main Conclusions Reached and Decisions Taken

The Consultative Group on International Agricultural Research held its regular annual meeting, International Centers Week, on October 27-31, 1980, in Manila. This was the first time that Centers Week had been held outside of Washington, D.C. The first two days were spent in Plenary Session, when the international centers, and three other organizations, gave presentations about their activities. The third day was given over to a field trip to the International Rice Research Institute (IRRI) at Los Baños. The final two days were spent on the regular business meeting of the Consultative Group, the annotated agenda of which is attached.

This paper summarizes the main conclusions reached and decisions taken during the Consultative Group meeting on October 30 and 31. An informal Summary of Proceedings of Centers Week is in preparation, and after comments on the draft have been received from participants, will be issued to them in final form in early 1981, together with texts of center presentations. Others can get copies from the Secretariat on request.

Three main themes recurred throughout the meeting. One was recognition that the CGIAR's second decade would be quite different from its first, reflecting new realities in the donor community. Secondly, the forthcoming Review was seen as a critical step towards enabling the Group effectively to meet changing circumstances. And thirdly, there was repeated emphasis on the need to involve developing countries much more closely in the Group's activities.

1980 "Integrative Report"

The discussion of the agenda opened by considering the Secretariat's "1980 Report on the Consultative Group and the International Agricultural Research System - An Integrative Report" dated September 15, 1980. At its meeting in November 1979, the Group had decided to conduct during 1981 a second review of the CGIAR and the research system it supports, the first...
review having taken place five years previously. With the prospect of this review in mind, the 1980 Report discussed the place and role of the system within the context of other research directed at improving agriculture in the developing countries. It sketched the historical background to the CGIAR, examined various relationships among research systems, outlined aspects of a possible future strategy for international agricultural research, and looked at the financial prospects for the future.

The discussion, which supported the main observations and findings of the Integrative Report, served to emphasize the members' concern for the involvement of developing countries, for better accountability and cost effectiveness, and for correction of some misconceptions held about the nature and purpose of the Group's activities.

Five Year Plan

Last year, for the first time, the Group adopted a five-year indicative financial plan which was to be updated and revised annually. This year's revised plan for the period 1981-85 was proposed in the "Integrative Report". In discussing it, the members took a cautious view of the feasibility of continuing to expand the system, and several noted financial constraints. Despite such reservations, the Group generally endorsed the proposal in the Report as a target for planning purposes, with alternative and more conservative financial scenarios also to be considered in the formulation of annual budgets. This plan called for modest real growth in the system, from a target (which because of a shortfall in funding, will not be achieved) of $149 million in 1981 to $200 million (in 1981 dollars) in 1985, an average annual increase of 7.6% in real terms to accommodate both the addition of new activities and the expansion of existing programs. Inflation was already hurting the system, and its future impact would be hard to predict. Present estimates imply that to compensate for price increases the planning figure for 1985 would need to be about $300 million in current dollars.

King Baudouin Prize

The CGIAR had been awarded the International Development Prize by the King Baudouin Foundation of Belgium. The Group decided that the Prize money (about $50,000) should be invested to endow a recurrent biennial award to be made to the international center which, in view of a small Selection Committee, had made the most outstanding recent contribution to the Group's aims. The award would take the form of a token, such as a plaque, and cash to be spent by the Center on an activity to benefit the Group as a whole such as commissioning articles on the impact of the system's research. A Working Group prepared a paper suggesting the details of the award procedure, which the Group accepted.
TAC Chairman's Report on the 23rd and 24th Meeting of TAC

A number of items under review by TAC were the subject of separate agenda items, and were therefore touched on only lightly by Dr. Cummings, the Chairman of TAC, in his general report. He outlined the program for Quinquennial Reviews: ILRAD in progress, ILCA for autumn 1981, IRRI in late 1981 or early 1982, and CIMMYT in 1982.

TAC had been examining its own role in the CGIAR system and recognized that this would be a major topic for the forthcoming Review.

Among the other topics reviewed by Dr. Cummings were: TAC's involvement in the annual review of the programs and budgets of the Centers; TAC's responsibility for monitoring the scientific work of the CGIAR system; the priority of research on vegetables and aquaculture; plant breeders' proprietary rights; and TAC's study of plant nutrition.

A number of members cautioned against burdening TAC with the examination of new activities for which CGIAR funding was unlikely to be available.

Application of the International Center of Insect Physiology and Ecology (ICIPE) to become a member of the CGIAR System

TAC had been asked to consider ICIPE's application, and to recommend whether or not it would be in the CGIAR's best interests to adopt ICIPE as an international center for full core funding. The Chairman of TAC paid tribute to the quality of ICIPE's work and of its leadership. With regret, TAC was unable to recommend that ICIPE be adopted by the Group. In the ensuing discussion, although the members were generally in agreement that ICIPE's work was worthy of international financial support, they were more or less equally divided on the issue of whether it should be adopted into the CGIAR system. In the end, the Group as a whole decided not to adopt ICIPE.

In view of the evident wish of many donors to continue supporting ICIPE, and their concern for its long term financial security, it was agreed that a group of ICIPE's donors external to the CGIAR be constituted on a continuing basis. This group would be provided with secretariat assistance by the World Bank.

Proposal for the Creation of an International Institute for Research and Training on Irrigation and Water Management

The Group discussed a tentative proposal from TAC to establish a center for research and training on water management. The importance of irrigation and water management was repeatedly stressed. Members did not in general favor the specific proposal put forward by TAC. It was agreed
that TAC would set up a specialist team to study the question further, and bring another proposal to the Group at its next meeting.

The International Board for Plant Genetic Resources (IBPGR)

Quinquennial Review

The Quinquennial Review of the IBPGR carried out on behalf of TAC had endorsed the value of the Board's program. It had made a number of suggestions, most of which had been acted on by the Board.

Second Review of the CGIAR System

The Group agreed with the proposed organization of the Review. A Review Committee would be appointed by the Chairman of the CGIAR, who would act as its Chairman. Members would serve in their individual capacity, but the main constituents of the CGIAR system would be represented. A Study Team, led by Dr. Michael Arnold, had been engaged to serve the Committee. The Committee would meet three times, in January, May, and July 1981, and prepare its report and recommendations in time for the next meeting of the CGIAR in late 1981. Final decisions on the recommendations would be the responsibility of the Group as a whole. Members stressed the need to involve developing countries fully, and two regional seminars were proposed to this end. The Terms of Reference for the Committee contained in the proposal considered by the Group were adopted.

Stripe Analysis of Off-Campus Activities

The Stripe Analysis of the off-campus activities of the centers commissioned by TAC had contributed greatly to the members' understanding of a fast-growing activity, and one that would need careful monitoring in the future to ensure its consistency with the primary research functions of the IARC's.

Approval of 1981 Programs and Budgets

The Group approved the core programs of the centers for 1981 and their core budgets as given below.

The gross amount is the total amount approved for expenditures on operations and capital for the core program for the year. The net amount is the new funding required after allowance for funds carried over from the previous year and income expected to be earned:
However, as mentioned in the next paragraph, funds pledged by donors will fall short of the amounts needed to carry out the programs as approved.

**Donor Indications of Financial Support for 1981 and Beyond**

From pledges made at the meeting, and information given to the Secretariat, it appeared that contributions for 1981 would amount to about $139 million, about 5% less than the total of the approved net budgets. The centers would therefore have to make further reductions in their planned expenditures for 1981.

Few donors could give firm commitments for 1982. Many hoped to maintain contributions in real terms. In general, the prospects for real growth in resources in 1982 seemed to depend on whether donors could be found and at best some present donors could increase their contributions significantly in real terms.

**Report of Center Board Chairman**

Mr. Greenwood, as Chairman of the group of Chairman of Boards of Trustees, reported a growing awareness among his colleagues of the need to become more actively involved in the CGIAR's business, and to be better informed about it. A better dialogue with donors was needed.
Report of Center Directors

Dr. Sawyer noted his colleagues' concern about statements about the high unit costs of the centers' operations which had been quoted earlier in the meeting without adequate explanation. He felt levels of benefits at the centers were modest in comparison with the market. Recruiting was proving difficult from a number of countries. Center Directors, as a group, were assuming more collective responsibility for the good of the system as a whole. Directors expected to be fully involved in the forthcoming Review.

Next Meeting

The next meeting of the CGIAR, held in conjunction with International Centers Week, will be at the headquarters of the World Bank in Washington, D. C., on November 9-13, 1981.

Distribution:

CGIAR Members
Members of Center Boards
Center Directors
TAC Members
TAC Secretariat
Chairman of ICIPE Board
Director of ICIPE
Consultative Group Meeting

October 30 - 31, 1980

Polkabal Room, The Manila Hotel
Manila, Philippines

Annotated Provisional Agenda

Item 1 - Opening Remarks by Chairman

Item 2 - Adoption of Agenda


The 1980 Report (ICW/80/08) is in two main sections. The first (Parts I through III) puts the CGIAR system in context. It briefly gives the history of international agricultural research, describes the present array of such research and shows how the CGIAR system, which is only one element in the whole complex, has evolved and relates to the other international agricultural research activities. It considers the factors to be taken into account in developing a future strategy for the CGIAR and reviews various approaches to setting priorities. It emphasizes the importance of collaboration between the international centers and the national programs of the developing countries if the CGIAR system is to continue to be successful in achieving effective practical results.

This section of the Report does not so much raise issues for discussion as attempt to describe the environment in which the Group and the system operate and the context in which they should be viewed. Members will be invited to comment on the points made.

The second section of the Report reviews the system's use of resources and the needs for the future. Part IV reviews the recent past and the current year and addresses the needs for the immediate future.

Distribution:
CG Members
TAC Chairman
TAC Secretariat
Center Board Chairmen
Center Directors
particularly 1981. It describes how inflation more rapid than foreseen will put severe constraints on the research programs of the centers and make even modest real growth for many of them impossible unless contributions by donors are higher for 1981 than contemplated last year. It explains the actions taken to contain the budgets of the centers within the likely level of contributions and indicates what activities will have to be cut or postponed. Part V discusses the Group's rolling five-year indicative plan and sets out for the Group's consideration an updated plan, extended through 1985. In real terms, it is somewhat reduced from last year, though increased inflation has caused it to grow marginally in current terms.

Members will be asked for their views on the acceptability and feasibility of the plan.

Item 4 - King Baudouin Prize

The CGIAR has been awarded the King Baudouin International Development Prize as an organization which has made a unique and lasting contribution to development. This first award of the prize by the King Baudouin Foundation occurs on the 150th anniversary of Belgian independence. The prize is also being awarded to an individual, Paolo Freire, a Brazilian educator and philosopher. The prizes will be presented in the King's presence November 15, 1980. The CGIAR's award will be 1.3 million Belgian francs, roughly equivalent to US$50,000. Members will be invited to consider how best to use the prize funds.

Item 5 - TAC Chairman's Report on the 23rd and 24th Meetings of TAC

Dr. Cummings will report on the 23rd TAC meeting, held in Rome in February, and the 24th, held in Lima at CIP in July. His report on these meetings will summarize TAC's discussion and views on its own changing role and procedures, research on tropical vegetables, factor-oriented research, upland rice research, aquaculture, the problem of plant breeders' proprietary rights and the progress of its review of research on plant nutrition. He will also report on quinquennial reviews of centers underway and planned. TAC's recommendations on ICPE's application to join the CG system, its proposal on water management research, its quinquennial report on the IBPGR and its report on the off-campus activities of the centers, will all be discussed as separate Agenda items.

Item 6 - Application of the International Centre of Insect Physiology and Ecology (ICIPE) to Become a Member of the CGIAR System

The application of the International Centre of Insect Physiology and Ecology (ICIPE) to join the CGIAR was discussed at the Group's meeting in October 1979. It was decided to refer the application to TAC for its recommendation. TAC's report and recommendation have been provided to members (Centers Week Document ICW/80/12, TAC Document AGD/TAC: IAR/80/30).
TAC, in its report, states that ICIPE is an institution of high quality and excellence, meriting strong international support in its own right, but that TAC is unable to recommend its admission to the CGIAR system. The reasons for reaching this conclusion are fully set out in the Report. TAC emphasizes that meritorious scientific institutions such as ICIPE, located in developing countries and with a high training component, deserve to receive adequate consideration for assistance whether or not within the CGIAR system. ICIPE's application and TAC's report will be discussed with the object of deciding on the action to be taken by the Group.

Item 7 - Proposal for the Creation of an International Institute for Research and Training on Irrigation and Water Management

The Group has long recognized that poor irrigation water management is a major constraint in improving food production in developing countries. TAC has accorded the subject high priority, and has had it under review for a number of years, most recently by a subcommittee established for the purpose.

TAC is recommending in its present report that the Group give favorable consideration to the creation of an International Institute for Research and Training on Irrigation Water Management. The details of a tentative proposal are given in TAC Document (Centers Week Document ICW/80/10 and TAC Document ACD/TAC:IAR/80/20 Add.1). In outline it is proposed that there be a central headquarters with two or more smaller satellite facilities, each with modest physical plant. The principal unit would have a core staff of 20 to 25 senior scientists. A detailed capital and operating budget has yet to be prepared. As has been done for other new activities created by the CGIAR, a start-up fund of about $0.5 million is proposed for the first year of activity.

Members will be invited to express their views on the priority of research on water management for inclusion in the CG system and on the tentative proposal put forward by TAC. The objective of the discussion will be to reach a decision in principle on whether to add water management research to the CGIAR system and, if so, whether TAC should proceed to work up a definitive proposal for the Group to consider at its next meeting.

Item 8 - The International Board for Plant Genetic Resources (IBPGR) - Full Presentation and Discussion of the TAC Quinquennial Review

The IBPGR will make a presentation on its program. This will be followed by presentation of TAC's report on the Quinquennial Review of the IBPGR. (Centers Week Document ICW/80/17 and TAC Document ACD/TAC:IAR/80/2). Both the program and the review will then be open to discussion. Members of the Group may wish to address the recommendations of the Review Panel, particularly with reference to the suggested expansion in program, and modification to the Board's Terms of Reference. Other points which the Group might consider include the proposal for an Advisory Committee on Strategy and Program, the proposed creation of new Field Officer posts, and the question of an international legal framework for genetic conservation work.
Item 9 - Second Review of the CGIAR System

At its meeting last year, the Group agreed to undertake a second review of the CGIAR system, to be completed in time for its meeting in the fall of 1981. The Secretariat was asked to put forward for the Group's consideration a proposal for the conduct of the Review and draft terms of reference.

Members will be asked for their views on the proposal (ICW/80/11), which suggests a method of operation broadly similar to that used for the first Review in 1976, and the draft Terms of Reference. The objective of the discussion will be to reach agreement on the procedure for conducting the Review and on its scope. The discussion will also give an opportunity for members to provide some guidance to those conducting the Review by identifying those topics which the members feel merit particular attention. A record of the discussion will be kept and provided to the Review Committee.

Item 10 - Report on Stripe Analysis of the Off-Campus Activities of the International Agricultural Research Centers

The term Stripe Review is used to refer to a study of an activity or group of activities which are engaged in by several of the international centers. Many of the centers already have substantial operations based away from headquarters, and this tendency is likely to increase throughout the system in the future. TAC was asked to study these activities, and engaged consultants for this purpose. Their Report (Centers Week Document ICW/80/09, TAC Document AGD/TAC:IAR/80/22 Add.1) and a compendium of information on off-campus activities supplied by the centers and compiled by the TAC Secretariat, was reviewed at a workshop held at CIMMYT on June 25-27, 1980, and at the 24th meeting of TAC on July 1-8, 1980.

Members will recognize that the time and resources available did not permit an exhaustive study of a very widely dispersed and diverse set of activities. They will wish to consider the classifications adopted by the consultants, and the recommendations made. Topics which may arise in the course of discussion include the possible need for a more systematic approach to off-campus activities; the relationship between a center's involvement in a national program and the development of overall national research capabilities, particularly with reference to ISNAR; and the training aspects of off-campus activities. The Group will wish to determine what further study, if any, TAC should make of this subject. It may also wish to consider whether the routine information issued by the centers on off-campus activities underway or planned (particularly in their annual Program and Budget Papers) is adequate for the Group's purposes.

Item 11 - Approval of 1981 Programs and Budgets

The programs and budgets of the individual research centers being funded by the Group will have been discussed following the presentation made by each Center Director during the presentation days of Centers Week.
This item of the agenda of the Consultative Group itself is the occasion for giving official approval of the programs of the centers and their funding as recommended by the Secretariat in its budget commentaries, subject to any changes resulting from the discussion following each presentation. The Secretariat will briefly restate the amount of funding recommended for each center and the aggregate amount required for 1981. The members will then be asked to give their approval to the whole package. This will be the opportunity for any member to raise any remaining question on the size of a center's budget before the Group's official approval is recorded.

Item 12 - Donor Indications of Financial Support for 1981 and Beyond

Each donor will be asked to give an indication of its intended financial contribution in 1981. For the sake of brevity, only the total amount should be indicated orally, together with any special or unique features of contributions which should be brought to the attention of the Group and the international centers.

The Secretariat has asked each donor to provide it separately with a statement of the details of its contribution, including allocations to individual centers, and separate contributions to cover the cost of the Review and the new brochure.

Item 13 - Report of Center Board Chairmen

The Chairmen of the Boards of the Centers consult together on matters of common interest. They will be meeting together in Manila. This item on the Agenda affords the Chairmen to make a collective report to the Group.

Item 14 - Report of Center Directors

Center Directors meet together regularly to consider matters of common concern. They will hold such a meeting immediately prior to Centers Week. The representatives of the Center Directors will report briefly on matters the Directors wish to bring to the attention of the Consultative Group.

Item 15 - Draft Press Release

The Group will consider the draft Press Release, and approve it after such amendments as seem appropriate.

Item 16 - Other Business

"Other Business" is the opportunity for members to raise any other matters which they wish to bring to the attention of the Group. The CG Secretariat would appreciate being informed in advance of any item which a member wishes to raise.
Item 17 - Time and Place of Next Meeting

The Group will be asked to decide upon the time and place of the next CGIAR meeting. It looks as if only one meeting will be needed in 1981. It is recommended that the 1981 meeting be held at the headquarters of the World Bank in Washington. There will be a number of important documents before the Group next year, including the Report of the Review Committee. To ensure that members have enough time to prepare for the meeting, it is suggested it take place during the week starting November 9, 1981.
Informal Summary of Proceedings

1. The ninth International Centers Week and the eighteenth meeting of the Consultative Group on International Agricultural Research were held at the Manila Hotel in the Philippines on October 27-31, 1980. The Chairman, Mr. Warren C. Baum, presided over the meeting of the Consultative Group. The plenary sessions at which Center Directors made presentations were chaired by Mr. Baum, Dr. Bommer, Dr. Cummings, Mr. Mashler and Mr. Yudelman.

2. Attached are the Informal Summary of Proceedings, the List of Participants, the Center Directors' presentations, texts of the addresses by Minister Tanco and Mr. Bambawale, and the report of the Working Group on the King Baudouin International Development Prize. Drafts of the first two were circulated earlier for comment.

Attachments

Distribution:

CGIAR Members
TAC Chairman, Members and Secretariat
Center Board Chairmen
Center Directors
Other Participants
Review Committee
Study Team
1. The ninth International Centers Week of the Consultative Group on International Agricultural Research (CGIAR) was held at the Manila Hotel in Manila, the Philippines October 27-31, 1980. The meeting was attended by representatives of 34 members of the Consultative Group, by Chairmen of the Boards of Trustees, Directors and staff of the international agricultural research centers and other programs supported by the Group and by a number of observers. Representatives of Mexico, the Philippines and Spain were present as donor members of the Group for the first time.

2. The plenary sessions of October 27-28 were given over to presentations by the international centers. As in the past the presentations were of 3 types, which are rotated among the centers from year to year: (a) a full length presentation covering various aspects of a center's program and budget; (b) a briefer presentation; and (c) very brief mid-term reports from those centers halfway through a biennial budget period. Each presentation was followed by a question and answer period. Full length presentations were made by CIMMYT, CIP, IITA, WARDA, and ICRISAT. Shorter presentations were made by ICARDA, IFPRI, ISNAR and ILCA. Mid-term reports were given by ILRAD, IRRI, and CIAT. Texts of these presentations are attached as Annex II to this summary.

Opening Remarks by the Chairman of the Consultative Group

3. The Chairman of the Consultative Group, Mr. Warren C. Baum, opened the ninth annual International Centers Week by welcoming the representatives of the newest donor members to the Group: Mexico, the Philippines and Spain. He then extended congratulations to the Group -- the centers, their Boards, the donors, and all those in the Group's service -- whose hard work had resulted in the award of the King Baudouin International Development Prize to the CGIAR. The prize was recognition by the King Baudouin Foundation of Belgium both of the achievements of the international centers in developing new agricultural technology for the poorer countries and of the successful efforts of the Group to generate and apply substantial resources to this task pragmatically and without formality.

4. Expressing gratitude on behalf of all the members of the CG for the warm reception by the Government of the Philippines, the Chairman introduced Mr. Arturo Tanco, Minister of Agriculture of the Philippines and President of the World Food Council.
Welcome by Minister of Agriculture of the Philippines

5. In his welcoming address (see Annex II) Minister Tanco first drew attention to the successful collaboration between IRRI and the Philippines as an illustration of how a developing country can utilize research and technology to solve its food problems. Until 1966 when IRRI released its first high yielding variety (HYV) of rice, the Philippines suffered from a chronic shortage of rice due to antiquated agricultural methods and a rapid population growth. Despite the widespread use of HYVs, however, Filipino farmers were not achieving the maximum yield potential of the HYVs. This was primarily because they had neither the money nor the knowledge to apply the inputs and farming techniques needed for the full potential of the HYVs to be realized. In 1973, the year of the Philippines worst rice shortage, a massive program based on IRRI's HYV technology was launched by the Government. Through a system of education, credit without collateral, subsidized fertilizers and pesticides and price support, the Philippines stopped importing rice within 3 years. The Minister reported that in 1980 the Philippines would export 300,000 tons of rice.

6. Turning to the global food situation, Minister Tanco admitted that the picture appeared bleak. In the 43 food deficit nations identified by the World Food Council, food production grew by only 2% per annum, well below their population growth, resulting in less food per person today than a decade ago. Therefore even more major and concerted efforts would be required to forestall another world food crisis in the near future. Nevertheless, there were some reasons for optimism, the primary one being the existence of the new tropical food production technology developed at the international centers. Among the developing countries where the new technology had served as the fundamental basis for vastly increased food production were: India, South Korea and China in Asia; Colombia, Cuba, and Brazil in Latin America; Kenya and the Ivory Coast in Africa. The new technology was, of course, not enough in itself the Minister pointed out. As in the case of the Philippines there must be the political determination and efficient government to ensure that the farmers have access to inputs and credit to acquire them, as well as guaranteed markets and fair prices. The World Food Council was trying to persuade countries to adopt this integrated approach to increased food production. With the cooperation of developing country leaders and assistance of international institutions and donor countries to increase technical and financial support, the World Food Council's strategy seemed to be working, Minister Tanco reported.

7. In the context of increased worldwide political determination to solve world food hunger, Minister Tanco commented on some priorities for agricultural research and development in the rest of the decade. Critical, should be the development of a cheap source of plant protein for the tropics, equivalent to the soybean of the developed nations. Also essential was greater research on aquaculture and marine fisheries as well as on the biology and breeding of tropical animals. Concentration on ways of influencing the weather, such as rain stimulation and typhoon moderation research, should be stepped up along with efforts to relate agricultural research and development to the current energy crisis. Finally, the Minister noted the need for
greater attention and resources for strengthening national agricultural research systems.

8. He stressed again, though, that any new technologies developed must be interwoven with credit, price support, an effective delivery system, management and political will if they were to be successfully applied.

9. Minister Tanco concluded his address by encouraging other developing countries to respond to the international centers' need for increased funding and paying tribute to the scientists and leaders whose vision and dedication had given reason to hope for a world without hunger.

Full Presentation by CIMMYT

10. Dr. Havener, Director of CIMMYT, presented CIMMYT's program. (See Annex II.)

11. A couple of members of the Group expressed concern over CIMMYT's shift in emphasis from plant breeding to agronomy to increase crop yields. Dr. Havener explained that CIMMYT's decision to concentrate, for the next 6 years, on agronomy as opposed to crop physiology was prompted by the belief that closing the gap between yield potential of current varieties and the production achieved on farmers' fields was the best way of increasing maize and wheat production in the next few years rather than by doing more basic research on raising yield thresholds.

12. Asked why CIMMYT had replaced the center's biometrician with a computer specialist, Dr. Havener replied that demand for the biometrician was erratic and that the computer expert was brought on to help CIMMYT adapt and take advantage of the new generation of computers. He pointed out that the institute's need for a biometrician would be met through the consulting arrangements established with the Agricultural University of Chapingo.

13. Another speaker congratulated CIMMYT for its work during the year and noted with satisfaction its cooperation with ICARDA on barley.

14. Responding to a question about the difference ISNAR's intended plans would make in CIMMYT's economics program, Dr. Havener said the two institutes had discussed the issue of coordination, but no conclusion had yet been reached.

15. Asked how CIMMYT would accommodate a possible funding shortfall in 1981, Dr. Havener replied that the short-term solution would be to reduce the number of trainees and staff brought on to fill vacancies.

16. In response to a question whether, as in the past, it was more difficult to apply technology in the field for maize than for wheat, Dr. Havener admitted this was still true as maize was frequently grown in much more difficult production environments -- in hot and humid climates and under high disease and inter-or mixed cropping conditions. However, national research
programs working on maize, he pointed out, were improving and now better able to use material coming from CIMMYT.

Full Presentation of CIP

17. The presentation was introduced by Mr. Charles Greenwood, Chairman of the CIP Board of Trustees, and made by Dr. Richard Sawyer, Director. (See Annex II.)

18. In introducing Dr. Sawyer, Mr. Greenwood explained that the Director's presentation to the Group would be focussing primarily on the Potato Center's relations with national programs to emphasize not only CIP's special concern with strengthening national research capabilities but the need for the entire center system and donor community to recognize this as critical in achieving their final objective in transferring the technologies developed at the international centers to the farmers.

19. Following Dr. Sawyer's presentation, Mr. Yudelman, Director of Agriculture Projects in the World Bank, noted that the Bank was responding to the need for promoting national agricultural research by increasing its financing of projects in this area and specifically by sponsoring in January 1981 a meeting of donors to discuss what needed to be done to strengthen national agricultural research and how it might be accomplished. Dr. Bommer of FAO also assured the Group of FAO's continued very strong concern with national programs.

20. While concurring with a speaker's comment on the need for advanced degree training for scientists, particularly in Africa, Dr. Sawyer explained that because too often scientists who were given advanced degree training did not return to their own country, CIP was using its limited resources to expand its training program for mid-career scientists who already had advanced degrees and were in-place in national programs.

21. On the subject of CIP's long-term plan, Dr. Sawyer reassured another speaker that CIP would not be discontinuing basic research even though certain aspects might be phased out so that CIP could focus on other problems such as marketing.

22. At the request of one of the delegates, CIP's director commented briefly on CIP's progress in transferring true seed to developing countries, noting that activities were even somewhat ahead of schedule. On the question of CIP's work on potato processing, he informed the same delegate that CIP was now exploring alternatives for moving from the dried potato obtained in processing to secondary products, like noodles, which were culturally more acceptable.

23. Another speaker, complimenting CIP's initiatives in storage, processing and marketing, asked Dr. Sawyer to elaborate on CIP's future plans in these areas. In these post-harvest areas, he replied, storage for
consumer potatoes in the lower tropics would be receiving greatest atten-
tion.

24. Several speakers welcomed CIP's development of a long-term plan as
requested by donors, noting that this was particularly useful in their own
administrative planning processes.

**Short Presentation by IFPRI**

25. Dr. Sen, Chairman of IFPRI's Board, introduced the Director,
Dr. Mellor, who reported briefly on IFPRI's progress during the year. (See
Annex II.)

26. Concern was again expressed by the representative of the Africa
region that Africa was severely lacking in the highly trained manpower essen-
tial to adopt and apply the research results coming from the international
centers, such as IFPRI. He indicated that the traditional bilateral approach
was not generating the necessary manpower and appealed to the CGIAR to give
the problem of higher level training greater attention.

27. Two speakers asked Dr. Mellor what IFPRI was doing to take into
account health and cultural constraints in its studies. Dr. Mellor responded
that although IFPRI's consumption program did focus on how policy inter-
ventions, such as food and employment subsidies, affected nutritional status,
interactions between nutrition and other aspects of health were only begin-
ning to be more closely examined. With regard to IFPRI's role, alone and
together with other centers, in understanding what impact social and cultural
factors had on the acceptability of new technologies to the small farmer, Dr.
Mellor suggested that IFPRI could play an important part, particularly on a
macro level. He pointed out that there had been a shift in staff in order
to concentrate more heavily on the effects of food policies on the spread of
technology. On the micro level he felt that work IFPRI was doing with IRRI
and IFDC involving interaction with small farmers might serve as prototypes
for analyzing local responses and translating them into policy recommenda-
tions.

28. In reply to another question, Dr. Mellor remarked that IFPRI had
acquired in the past year a substantial understanding of the socio-economic
work being done at the other centers and that IFPRI and the other centers
were moving very quickly to a division of labor involving the least practi-
cable amount of duplication.

29. In connection with duplication, two speakers queried whether IFPRI's
mandated involvement in such broad areas as trends, trade, food aid and
security overlapped research already being conducted in other organizations
such as FAO, World Food Council and IFAD. Dr. Mellor assured them that IFPRI's
work on broad issues such as trade had very important specific implications for
the production-oriented research centers. Furthermore, the institute was in
close contact with UNCTAD, FAO and other organizations in order to avoid dupli-
cation and to ensure that IFPRI's work remained complementary to ongoing re-
search at the centers and external institutions.
30. Another speaker drew attention to the importance of pricing in determining whether many new technologies developed at the centers were effective and asked Dr. Mellor whether IFPRI could study this problem and advise governments in solving pricing problems. Dr. Mellor informed the speaker that most of IFPRI's work contained a price component in recognition of its importance, noting though the conflict between the higher prices desirable in encouraging output by farmers and the lower prices necessary for passing on benefits to low income consumers. The solution to this dilemma, he continued, was the increase in non-agricultural employment generated by increased agricultural output which IFPRI was monitoring closely.

Full Presentation by IITA

31. Dr. Guy Vallaey, Chairman of the Board of IITA, introduced Dr. Hartmans, IITA's new Director General, who made the presentation. (See Annex II.)

32. In reply to a delegate's question how collaboration between the crop improvement and farming systems programs was organized, Dr. Hartmans explained that the programs were linked by agronomists working in farming systems programs who specialized in individual crops and interfaced with the crop breeders. At one speaker's request, Dr. Shastry, IITA's Director of Research, briefly outlined IITA's arrangements for testing consumer preferences to the new varieties developed at IITA.

33. Regarding IITA's collaboration with other CGIAR- and non-CGIAR institutes in the region, Dr. Hartmans informed the audience that IITA had a core staff member stationed as Liaison Officer at WARDA and through a contract with ICIPE complemented and supplemented its research related to insect and pest management.

34. Addressing his remarks more to the CGIAR than IITA, another speaker expressed concern over IITA's forced program reductions due to serious financial problems largely outside the institute's control. He queried how the system, perhaps by improving its planning processes, could ensure that the existing centers' established ongoing programs were maintained.

35. Dr. Cummings, the Chairman of TAC, responded on behalf of the CGIAR, outlining briefly the existing mechanisms for assuring that available resources were used for the programs of highest importance and priority within the Group's overall objective. He pointed out that until very recently budgeting in the system had been completely unconstrained and elaborated further on how the planning process had been adapted to deal with the anticipated funding shortfall in 1981, allowing particularly for more exchange between center directors and TAC. A critical element, Dr. Cummings stressed, in the preparation of budget guidelines was obtaining information at an early stage from donors regarding funding -- and centers and Boards regarding program priorities and issues such as wage increases and inflation.
36. Dr. Fred Bentley, the Chairman of ICRISAT's Board, preceded the Director General with a brief comment on ICRISAT's reduced budget and its implications for the center's program. Dr. Swindale then made the presentation. (See Annex II.)

37. Complimenting Dr. Swindale on ICRISAT's progress, one speaker asked the Director how he intended to assure the efficient development of off-campus activities, particularly within Africa, given the present financial constraints. Dr. Swindale conceded that it would be difficult and that to a great extent ICRISAT's current program in Africa had been strengthened at the expense of programs in India. Nevertheless, what ICRISAT could not accomplish through its core budget would be achieved with special projects with national and bilateral programs.

38. Another speaker recommended that, regarding special projects, ICRISAT should be careful to involve itself only in projects of finite duration to avoid taking on the role of a technical aid agency. Dr. Swindale agreed, pointing out that ICRISAT had not increased its number of special projects for several years. He noted that ICRISAT would be very pleased if bilateral donors would develop programs of their own and draw on ICRISAT as a technical resource. In this connection he mentioned the successful training program ICRISAT had concluded just a month earlier for UNDP and FAO project managers. They had spent 10 days at ICRISAT, studying ICRISAT's work and selecting materials from the fields to use in their own projects around the world.

39. Referring to the local importance of pigeon pea in Africa, one speaker suggested this was a strong argument for retaining pigeon pea work in ICRISAT's program, rather than integrating it into India's national program.

Tuesday, October 28

Short Presentation by ICARDA

40. Dr. Papasolomantos, ICARDA's Chairman, made a brief introductory statement, after which the Director General, Dr. Darling, reported on ICARDA's work during the year. (See Annex II.)

41. Attention was drawn to ICARDA's extensive capital investment by one delegate, who queried the advisability of this in view of the area's instability and the current financial constraints. Another speaker asked Dr. Darling to comment on ICARDA's institutional arrangements for conducting its research, suggesting that greater decentralization and emphasis on off-campus activities would accelerate research results. Dr. Darling agreed with the speaker, pointing out ICARDA's efforts to establish research stations in other countries and their failure due to political events. He reassured the speaker that efforts would continue, however, to develop off-campus contacts and activities.
Short Presentation by ISNAR

42. Before introducing Mr. Will Mathieson, Chairman of ISNAR's Board, Mr. Mashler, who was chairing the morning session, expressed appreciation on behalf of the Group for the excellent work done by the Government of the Federal Republic of Germany and the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) [German Agency for Technical Cooperation (GTZ)] to bring ISNAR into being. He also thanked the Government of the Netherlands, ISNAR's host government, for its cooperation in the establishment of the Institute. Dr. William Gamble, Director General of ISNAR, made the presentation. (See Annex II.)

43. In his introductory remarks Mr. Mathieson seconded Mr. Mashler's thanks to the Bundesministerium für wirtschaftliche Zusammenarbeit [Federal Ministry for Economic Cooperation (BMZ)] and GTZ for their excellent work.

44. In reply to the first speaker's questions, Dr. Gamble referred to ISNAR's ongoing discussions with IADS for coordinating the institutes' work. He noted that like IADS, it was conceivable ISNAR might need to place staff in countries for a limited period to carry out their work. Responding to the same speaker's second query, the Director of ISNAR indicated that the Institute would probably be providing several different kinds of services for different conditions rather than concentrating either on the least well-equipped systems or evaluating the programs of the developing countries as a whole.

45. Another speaker observed that ISNAR's services would be provided only on request and asked how the availability of ISNAR's services were being made known to the developing countries. Requests would be generated in a variety of ways, Dr. Gamble replied: spontaneously; by visits to countries; and through regional and development organizations. He concluded with the hope that everyone in the audience would assist ISNAR in identifying areas of need.

46. The delegate representing Africa welcomed ISNAR's presence in Africa, stating that in the developing world Africa had the farthest to go in building up its research capabilities. He pointed out that African countries had made a commitment to strengthen their research programs and looked forward to collaborating with ISNAR.

Full Presentation by WARDA

47. After some introductory remarks by Dr. Sidi Coulibaly, Director of WARDA, Dr. B.A.C. Enyi, Research Coordinator at the Association, made the presentation. (See Annex II.)

48. In response to one speaker's question, Mr. Coulibaly said that in West Africa the main constraint to developing large irrigation schemes was cost and not health factors. Another speaker was assured that WARDA's refrigerated
seed storage was connected to a standby generator in case of electricity failures at headquarters which could jeopardize work in WARDA's seed laboratory.

49. Asked if WARDA was coordinating its proposed program on integrated pest management with the regional program FAO would be implementing on pest management in the Sahel, Dr. Enyi responded affirmatively. He noted that the FAO program was confined to the seven Sahelian countries and excluded the coastal countries. Through collaboration with FAO all West African countries were covered. Finally, Dr. Enyi responded that the sub-regional coordinating offices which were established to improve the quality of trials had already had a very positive effect.

Short Presentation by ILCA

50. The Chairman of the Program Committee of ILCA's Board of Trustees, Dr. A. Provost, introduced ILCA's Director, Mr. David Pratt, who made the presentation. (See Annex II.)

51. The first speaker complimented the Director on his presentation but observed that ILCA's type of program was difficult to judge due to lack of the kind of fixed and clear objectives that were typical of crop breeding programs. He made the general recommendation that the Group devise a mechanism for ordering priorities among those research programs in the system where progress was likely to be slow and targets were not well defined. Mr. Pratt noted, in this context, that it was important to differentiate among ILCA's production zones in discussing targets and speed in achieving research results.

52. ILCA's program was commended by another speaker who noted with satisfaction the growing support for ILCA's work by the Ethiopian Government.

53. In response to a question, Mr. Pratt commented that it was not possible to conclude from the success of certain crossbred cattle in one environment that the same cattle would achieve a similar potential in different environments. However, this applied primarily to transferability of research results from one production zone to another.

54. Another delegate was interested in learning when ILCA might be issuing a policy paper on its systems research work. Mr. Pratt conceded that ILCA needed to develop its thinking further on this matter. However, he noted that a description of the application of this approach in the highland environment was in the report under preparation on ILCA's work at Debre Zeit in Ethiopia.

Mid-Term Report by ILRAD

55. Dr. Allison, Director of ILRAD, made the mid-term report. (See Annex II.)
Mid-Term Report by IRRI

56. The report was made by Dr. Brady, IRRI's Director General. (See Annex II.)

57. One speaker asked Dr. Brady about the effectiveness of IRRI's use of its irrigation management team in its research. Dr. Brady stressed the importance of irrigation management to rice production, commenting that inefficient use of irrigation water was probably the most serious constraint to rice production in Asia and elsewhere. This stemmed not only from physical factors but social and economic relationships as well.

Mid-Term Report by CIAT

58. CIAT's Director, Dr. John Nickel, gave a short report. (See Annex II.)

59. One speaker cautioned the Group in its use of the term "low energy", in describing agricultural systems, suggesting that what was really being measured was cost efficiency. He observed that the systems requiring fewer inputs such as fertilizer, pesticides and labor were considered energy efficient because in fact, they cost less.

60. Another delegate congratulated Dr. Nickel on his presentation. He urged the Group to take an example from Dr. Nickel's report and in the future have all the Directors' presentations focus on the centers' work in the context of specific issues.

Presentation by the Asian Development Bank

61. The presentation was made by Mr. Bambawale, Vice-President, Operations. (See Annex II.)

Presentation by SEARCA

62. Rather than an oral presentation, Dr. Jose Drilon, Director, showed a slide and tape presentation on the activities of SEARCA. At its conclusion Dr. Drilon commented that although SEARCA's program was modest in scale, through cooperation with other national and regional organizations on a wide range of issues, SEARCA was able to expand its coverage. By developing linkages with other institutions, it could increase its technical as well as financial resources.

63. One speaker asked if SEARCA also worked with the international institutes, like IRRI. Dr. Drilon replied that currently SEARCA was collaborating with IRRI, CIAT and CIP on the transfer of technology related to rice, cassava and potatoes.

64. Another speaker asked about the work being carried out in SEARCA's social laboratories. Dr. Drilon explained that essentially this involved
mobilizing agricultural leaders -- farmers -- to identify and solve their problems.

Presentation by AVRDC

65. Dr. Selleck, Director of the Vegetable Center, made the presentation.

66. A speaker commented on the excellent work being done at AVRDC, suggesting that it was perhaps time again to review the need to include vegetable research in the CGIAR system. He hoped this would be done by the Review Committee in the coming year.
Items 1 and 2 - Chairman's Opening Remarks and Adoption of Agenda

1. The Chairman of the Consultative Group, Mr. Warren C. Baum, opened the 18th meeting of the Group by welcoming new arrivals, and outlining the proposed organization and agenda for the meeting.

2. He reminded members that the Group was approaching its tenth anniversary and had decided to initiate a second Review of its activities. This Review could look at all the Group's assumptions afresh, but a productive and secure future for the international centers must be assured. The world food situation, which though being better understood, continued to cause great concern, and the effect on nutrition of poverty and food security was seen as a major challenge. The Group's efforts would remain a small part of overall attempts to solve the food problem, but even so its tasks would become more difficult. The Group might need to change with changing circumstances, while retaining its fundamental purpose and those special features which members particularly valued.

3. The provisional Agenda was adopted without change. However, circumstances required some reordering of items in the course of the meeting. This summary follows the order of the Agenda as agreed, rather than the chronological order of the discussion. Due to shortage of time, part of one item, the Full Presentation of the IBPGR, was foregone. There were no initial requests for inclusion of items under "Other Business".


4. The Chairman introduced the item by outlining the structure and coverage of the 1980 Integrative Report, and suggested the discussion might initially be confined to Chapters I to III. Financial considerations, Chapters IV and V would be discussed later. He, and other speakers, saw the Report largely as a preliminary to the forthcoming Review of the CGIAR system.

5. In common with several subsequent interventions, the first speaker congratulated the authors of the Report, and recommended that members read it with care. He chose a number of points from the first parts of the Report for special emphasis. For example, the changes in the system since its foundation, and pressures for further change which might subvert it from its original purpose; the growth in "off-campus" activities; the need for the CGIAR to complement the efforts of others; recognition of the time element in research, and a degree of built-in inertia; the danger of seeing the CGIAR as an overall financial umbrella for agricultural research. He emphasized his delegation's concern with the cost of the system, in terms of dollars per scientist-year.
6. He summarized some conceptions and misconceptions about the CGIAR revealed by a recent informal survey by his authorities. Reporting these without comment, but mild amazement at their wide diversity, he referred first to views from outside the system. These saw the CGIAR as lavish, and endowed with virtually unlimited funds to take on any attractive activity. Some saw it as a "super-club" to which all with the right credentials could apply. Others saw it as a multilateral technical cooperation fund to which all manner of proposals could be addressed. Those inside the system also had a curious variety of views. Donors were perceived by some as a necessary nuisance; some saw TAC as managing the system; some donors tended to see Special Projects as a convenient way to conduct bilateral business. The CGIAR was regarded as a means to avoid continuing commitment to individual donor initiatives. Some had detected a tendency to refer almost any research gap to TAC for review and presentation to the Group. The speaker concluded that the survey revealed disparate and contradictory expectations, which the forthcoming Review should clarify. A member of the same delegation expressed concern about the apparently high unit costs of the CGIAR system.

7. Most speakers warmly commended the Report, but one or two felt that it did not pay enough regard to work being done by others, including the private sector, or to important international conferences on relevant topics, in which developing countries were strongly represented. One speaker felt that what he considered omissions could have been avoided by closer consultation with the TAC Secretariat, and regretted what he felt to be a lack of comprehensiveness.

8. Certain themes persisted throughout the discussion of the first three Parts of the Report. The Group needed stronger representation from, and influence by, the recipient developing countries. One delegation strongly endorsed the periodic conduct of the Group's business in a developing country. The importance of training of LDC scientists was stressed.

9. Many speakers recognized the importance of a realistic time frame for research results, and the need for long-term commitments. At the same time, doubt was repeatedly expressed as to whether continued significant real financial growth would prove feasible. This subject occupied much of a subsequent discussion, summarized below. Concern was expressed as to the way in which the original purposes of the system might be altered through pressure on the centers to become development agencies. Speakers generally welcomed the Report's frank admission of certain strains and tensions between international and national research organizations.

10. Speakers representing a number of donors pointed to the value of the Report in maintaining support from their authorities. One emphasized that, far from diverting resources from bilateral programs, in his case the existence of the CGIAR enabled more bilateral funds to be put into national research activities.

11. The Chairman directed members' attention to Parts IV and V of the Integrative Report, which he suggested be reviewed in turn. He noted that the system was working out methods of allocating funds during scarcity through pragmatic experiment, as conducted during the meeting of TAC in July 1980.
12. Mr. Lejeune noted that, if contributions still fell below the reduced budgets proposed, further cuts would have to be made, on an approximately pro rata basis. A speaker, objecting in principle to a mechanistic approach to allocation of funds, particularly one which seemed to assume that all programs were of equal value, urged that the allocation process be very fully explored by the forthcoming Review, with which the Chairman and other speakers concurred. However, the process had followed the principles on varying rates of growth already agreed as the basis of the Five-Year Plan.

13. In reviewing the revised Five-Year Indicative Financial Plan proposed in the Report, speakers were unanimous in noting an adverse change in the overall financial environment in which the Group would have to operate. Donor representatives varied in their degree of optimism or pessimism about short-term prospects, but even the most optimistic could not envisage maintenance of the high rates of real growth achieved in the past. On the positive side, the success of the Group so far, the importance of the problems it addressed, and the relatively small share of total official aid to agriculture were stressed, as was the continued strong commitment of many donors. Conversely, resources for the CGIAR were increasingly under pressure from competing demands, sometimes within overall aid budgets which were static or even declining. This led a number of speakers to emphasize the need for equitable allocation procedures, for vigorous attention to accountability, cost-effectiveness and efficiency, and for caution in embracing new activities.

14. The value of the process of forward financial planning itself was recognized. Given the unpredictable nature of many of the assumptions that had to be made in this process, there was general support for the suggestion that a single plan be replaced by alternatives based on different views of the needs of the various centers, and the resources available from donors.

15. Among specific suggestions made during discussion of the financial plan were the following. The Group should consider setting up a standing committee of donors to deal with allocation of funds. Regular management audits of the centers should be instituted, and made available to members. TAC should advise on the merits of increased or decreased research activities at the margin. Possibilities for more bilateral funding of some programs should be explored. Some donors should be prepared to consider multi-year pledging. Donors should be supplied with more detailed information on center expenditures.

16. In summarizing, the Chairman noted no disagreement with the members' acceptance of a long-term commitment to the CGIAR system. He recalled a number of high-level international declarations of strong support for more resources for international agricultural research. It was the Group's duty to the world's hungry to set its sights as high as it realistically could. Inflation would remain a major problem since it was hard to predict, and varied from country to country without, in some cases, compensating movements in exchange rates. There were many other imponderables, but some grounds for optimism about long-term growth in donor commitments. New donors were
being actively pursued. He proposed that the figures in the Indicative Plan in the 1980 Integrative Report be retained as a target, while recognizing that they did not constitute a commitment on the part of any particular donor. Alternative financial plans, based on different assumptions as to the availability of funds, would be prepared by the Secretariat and TAC in time to influence donor decisions for 1982, probably shortly after the late June meeting of TAC. He stressed that even the most careful planning depended largely on judgements, as did comparisons among various research activities or expenditures.

17. A number of members endorsed the suggestions made by the Chairman in his summing-up.

Item 4 - King Baudouin Prize

18. The purpose of the discussion was to decide how the $50,000 (approximate) to be awarded to the CGIAR by the King Baudouin Foundation should be spent. Members considered recommendations of a Working Group appointed by the Chairman. The Working Group's Report is given as Annex III.

19. On the recommendations of the Working Group, the members decided that the prize money be invested to endow an award to be made to the international center judged by a small selection committee to have had the most outstanding impact on agricultural production as a result of application to technology, materials or knowledge originating primarily from the center concerned. The Award would take the form of a simple plaque or other token, and cash to be used at the Director General's discretion, preferably to commission articles publicizing the accomplishment concerned and the work of the Group as a whole.

20. The Working Group had considered a number of alternative suggestions, some of which were also made by members during the discussion. These included awards to individuals, to students, and to persons or organizations outside the system. However, the members were informed that the King Baudouin Foundation required that the funds be used to recognize achievements within, or directly supported by, the CGIAR system. Secondly, the amount of money available, and the immense administrative labor of screening nominations from innumerable sources, argued strongly for limiting the eligibility. Awarding cash to individuals was felt to be potentially invidious and divisive. The Working Group's recommendations would provide scope for recognizing the achievements also of developing countries, by emphasis on the successful application of research.

21. The first award along the lines agreed by the Group would be announced at International Centers Week 1981. The procedures outlined in Annex III were expected to be followed. The name of the King Baudouin Foundation would be associated with this recurrent award.
22. The Chairman noted that the Award ceremony itself, and Mr. McNamara's acceptance speech, would provide useful publicity for the Group. The speech would be circulated to members.

Item 5 - TAC Chairman’s Report on the 23rd and 24th Meetings of TAC

23. A number of items reviewed by TAC at one or both of its last two meetings occupied separate agenda items, and were therefore only mentioned in passing by the TAC Chairman, Dr. Cummings. The minutes of the 23rd meeting, and the draft minutes of the 24th, were available to members seeking detail on TAC’s discussions.

24. Reporting on Quinquennial Reviews, Dr. Cummings noted that the Review of the IBPGR would be discussed during the current meeting. The field work for that of ILRAD had just been completed. The Quinquennial Review of ILCA will be done in the autumn of 1981, that of IRRI in late 1981 or early 1982, that of CIMMYT in 1982, and that of ICARDA subsequently.

25. TAC had continued to analyze its own present and future role in the CGIAR system. This important matter would be discussed in detail with the Review Team during the 25th meeting, at ILCA in February/March 1981. TAC saw itself as a technical advisory body, not charged with responsibility for budgets. Nevertheless, budgets were the means to implement technical programs, and hence TAC could not be indifferent to them, and needed to coordinate its work with that of the CGIAR Secretariat. Dr. Cummings outlined the new approach to budget problems which had been taken at the 24th meeting, in consultation with Center Directors. He felt this had resulted in a more thorough and objective review of programs and budgets, and enabled center managements to refine their priorities under the pressure of limited funds.

26. TAC was keeping priorities under review, as the CGIAR faced a changing world. It would continue to consider new directions or initiatives in anticipation of future needs.

27. TAC had an important responsibility for surveillance and monitoring of the quality and relevance of the centers’ work, which it continued to carry out through annual program reviews, Quinquennial Reviews, and special studies.

28. Dr. Cummings touched on a number of topics which had been under review by TAC for some time. Regarding tropical vegetables, he had welcomed the presentation of AVRDC, and the comments thereon by the Australian delegation. AVRDC’s existence should not be ignored, and its political environment may in future change in ways that could not yet be predicted. While TAC did not envisage bringing a specific proposal on tropical vegetables before the Group very soon, they remained on the list of high priorities.

29. TAC had been asked to give more attention to factor-oriented research. Some work of this nature was already in the system. TAC would consider other moves in this direction on a case-by-case basis.
30. TAC had examined the work being done by IRRI, IITA, WARDA and CIAT on upland rice, and had recommended some rationalization, which would involve greater attention from CIAT, with consequent budget implications.

31. Aquaculture remained of high priority, and Dr. Cummings reported on an IDRC study and on a consultation under the auspices of FAO and the Rockefeller Foundation in May 1980. It was a highly complex subject on which TAC needed expert guidance. Four species had been identified as of particular importance, as had four lines of research — seed stock, nutrition, disease and breeding. TAC noted the proposal for a world center for aquaculture, but had reservations about it. TAC would keep the subject under review, and inform the Group if it found grounds for CGIAR intervention.

32. TAC had considered the very complicated question of Plant Breeders' Rights, which had implications in terms of national legislation, and the international movement of genetic material. The question needed further study before TAC would be able to provide a useful report. In answer to a question from the floor, Dr. Cummings noted the need for better acquaintance with work being done on this subject in the context of the EEC.

33. TAC had been asked for a more thorough study of plant nutrition. The great volume of work already done on this subject needed sifting before clear-cut issues could be put before the CGIAR. Various position papers had been written, and a more definitive paper was being prepared by a steering group helped by consultants. A report would be available for the next meeting of the CGIAR. A speaker from the floor urged that rapid progress be made in this area, noting its importance in getting improved technology adopted.

34. The same speaker, referring to Dr. Cummings' earlier remarks on possible new activities, felt these should be deferred while funds remained short for existing CGIAR activities. Another speaker endorsed this view, and cautioned against burdening TAC with the examination of too many things which were unlikely ever to be supported by the CGIAR. This, however, was no criticism of TAC which he felt was a highly professional body. Professional review took a great deal of effort, which might have been appropriate in the euphoric circumstances of unlimited funds. There was a tendency to dump on TAC all the questions on which the CGIAR could not make up its mind. TAC already had the heavy duty of assessing the 13 existing activities, and the Group should be very careful about imposing additional tasks on TAC if they were unlikely to lead anywhere.

Item 6 - Application of the International Center of Insect Physiology and Ecology (ICIPE) to become a Member of the CGIAR System

35. The Chairman drew the attention of members to the report of TAC on ICIPE's application, with its annexes. He reminded them that ICIPE had formally applied for full membership of the CGIAR, that the request had been given to TAC for consideration, and the Group had agreed to take early action on TAC's recommendations. He expected to hear widely differing views
during the discussion, but hoped it would lead to a conclusion which even those who disagreed with it could accept, in the interests of the Group as a whole. Similar problems had been resolved in this way in the past, and the Group had become stronger as a result. He felt that there was no room for disagreement as to the high quality of ICIPE's work, which many donors were clearly willing to go on supporting. The fundamental question was whether or not ICIPE was an appropriate activity for the CGIAR.

36. Dr. Cummings said that TAC had reached with regret its conclusion that ICIPE not be included in the CGIAR system. It had done so without consideration of financial implications, and with agreement with many of the findings of the panel which had provided a generally favorable report for TAC's consideration. TAC agreed that ICIPE did work of high quality, had exceptional leadership, and deserved continued international support. However, when considering ICIPE in the framework of the overall priorities of the CGIAR, particularly with regard to food production in developing countries, TAC had concluded that ICIPE's work did not rate high enough within those specific priorities.

37. Speakers were virtually unanimous in praising the quality of ICIPE's work, the distinction of its management, the importance of its area of work, and the example it set in a continent where national research was generally very weak. Those who supported ICIPE's application noted the value of its training effort, and some felt that its programs would be complementary to those of the IARCs and therefore its inclusion within the system was logical and desirable. Almost all who opposed its acceptance into the CGIAR stressed that they did so with regret. Some based their opposition on the view that there were other research gaps of higher priority; that insect control work might be more appropriately done, in the CGIAR context, at the IARCs, some perhaps on contract with ICIPE. Others noted that the question of ICIPE's admission was part of the broader one of priorities, shortly to come under detailed review. Others pointed to the present state of financial stringency, and questioned the wisdom of adding activities when existing ones were being cut. Some felt that ICIPE's admission should be contingent on a guarantee that existing ICIPE donors maintained their support in real terms. It was pointed out that the CGIAR should not be seen as the only source of funding for international agricultural research. The representative of one of ICIPE's original and strongest supporters reminded members of the history behind its application, and the involvement of TAC over the years. ICIPE had modified its research thrusts at TAC's urging, with ultimate CGIAR membership in view. TAC had repeatedly stressed the importance of factor-oriented research, and the quality of ICIPE's work. At its 17th meeting it had favored a form of support under CGIAR auspices. In view of the history, and of the findings of the expert panel which TAC had commissioned, he found TAC's present position ambivalent. He felt there was a strong case for ICIPE's membership of the system.

38. Noting the absence of voting procedures, the Chairman reported the results of an informal tally of opinions expressed from the floor which, some ambiguities aside, seemed to suggest that of those who spoke, delegations were almost equally divided on the question of ICIPE's admission, with one
more opposed than in favor. However, the delegations opposed accounted for about 65% of current CGIAR contributions, and were largely the donors from whom future increased resources for ICIPE would have to come. In view of the unprecedented closeness of the result, the Chairman called a short closed meeting of representative members on both sides of the issue. He was able to report the following findings and compromise solution, which the Group accepted.

39. There was not a strong enough consensus to warrant the adoption of ICIPE into the CGIAR, despite strong support for the quality of its work and management and the recognition of its merit in the African context. A group of donors should be established outside the CGIAR to meet regularly on a permanent basis to secure a more stable financial base for ICIPE. The World Bank would be prepared to provide Secretariat services for this group, act as its fiscal agent, and provide such other assistance as may be necessary. There should be a thorough review by TAC of the priority to be given by the CGIAR to insect and pest management. This would include ICIPE's program and relevant activities at the IARCs, as well as examination of possible CGIAR funding of specific programs of ICIPE, as in the case of WARDA.

Item 7 - Proposal for the Creation of an International Institute for Research and Training on Irrigation and Water Management

40. The Chairman pointed out that the Group was not expected to make a definite decision on whether or not to become directly involved in a new activity in research and training in irrigation and water management.

41. The Chairman of TAC noted that this subject had been under TAC's scrutiny since its first meeting. He strongly emphasized the very high priority TAC continued to give it, among those activities which the Group did not currently support. He noted the very heavy capital investments that had been, and continued to be, made in irrigation, but their performance was often unsatisfactory so that farmers could not reap the full potential benefit from the available technology. This presented the CGIAR with great opportunity, and the CGIAR could provide the visibility and international discussion the subject deserved. He referred to studies already completed, notably that sponsored by IDRC, and TAC's own preliminary proposal, now before the Group. He thought the latter still needed further refinement. He was seeking advice from CGIAR members, especially those from developing countries, on how TAC's proposal could be strengthened.

42. It was recognized that management of water in the root zone of the crop was the key to improving production, but that many upstream activities were involved. There was a need for engineers, agronomists, and social scientists to be involved in a multidisciplinary approach.

43. A proposal to set up a small specialist team to assist TAC in its consideration of alternative institutional models was endorsed by a number of speakers. A specific suggestion was the involvement of the International Commission on Irrigation and Drainage, based in India.
44. General agreement emerged that irrigation water management deserved high priority for consideration by the Group, but doubts were expressed as to the concept of TAC's proposal. Some members stressed that the problems of irrigation water management were mainly location-specific. Therefore, they were reluctant to support a new CGIAR initiative, especially since some IARCs and other institutions were already active in this field. Secondly, they recognized the need for increased effort, but felt that this should be met by strengthening existing national and international activities, including those of the IARCs. Other members, while recognizing the role of ongoing programs and the need for their reinforcement, suggested that TAC convene a Task Force to study the question and make recommendations for the consideration of alternative institutional models for international support for research and training in irrigation water management and operations, taking into account the ongoing activities of the IARCs and other international and national institutions working in this field. Another suggestion concerned the testing of various hypotheses, including the TAC proposal on a pilot scale at national levels. It was questioned whether water management research and training could be successful in isolation from other disciplines, such as, for example, the study of plant nutrition. One speaker felt that coordination of efforts in water management would be a proper function for FAO, and the representative of FAO confirmed his organization's willingness to participate in further elaborations. Research organizations in developed countries might play a role, and the Netherlands offered the cooperation of the International Land Reclamation Institute. Water management was felt by a number of speakers to be a legitimate part of strengthened research and training programs of existing international centers, rather than calling for the creation of a specialized center. There was some support for the network approach. TAC should consider those questions, and the findings of the second Review would be relevant.

45. One speaker felt that the CGIAR should consider, as one option, a living laboratory approach involving field experiments of limited life, whereby different hypotheses could be tested. This proposal was endorsed by other speakers.

46. In summing up, the Chairman felt the discussion had provided clear guidance as to how TAC should now proceed. There was no dissent from the very high priority of effective water management, particularly for lending institutions which were so heavily committed to irrigation investments. There was agreement that the subject be further pursued. Questions had been expressed whether this type of factor-oriented research properly belonged to the CGIAR, and as to the best way that the CGIAR might approach the subject. TAC should proceed with the suggestion to set up a small working group, but a large number of experienced people and institutions would have a strong interest in participating. TAC should consider how all this expertise could best be tapped. TAC should elaborate other options from that set out in its current proposal, drawing on the wide range of available expertise. Dr. Cummings noted that the CGIAR wished TAC to pursue the matter further, while stressing that very substantial study had already taken place over a long time. He noted the need to provide evidence that whatever model was proposed was the best to meet the Group's objectives.

Item 8 - The International Board for Plant Genetic Resources (IBPGR) - Discussion of the TAC Quinquennial Review

47. Due to pressure of time, the IBPGR agreed to the Chairman's suggestion that the full presentation of its program and budget be foregone.
48. The Chairman of TAC sketched the background to the Quinquennial Review. Given the widespread nature of the Board’s activities, the small TAC panel could not physically visit all of them, but had achieved a good sample. Perhaps activities in Africa might have deserved more emphasis.

49. The panel leader, Professor Simmonds, summarized the main findings and recommendations of the Review. Genetic conservation work, in all its aspects, was fundamental to effective long-term plant breeding. The importance of the activities in which the Board was engaged could not be overemphasized. The Board’s budget was modest, and its function was mainly promoting and stimulating the work of others. Largely through its efforts, an international genetic conservation community was in being. The panel felt that the CGIAR should reaffirm its continued confidence in the work of the Board.

50. The panel had stressed the value of the close link with FAO, a view shared by senior FAO officers.

51. The panel had recommended the correction of some imbalances. It felt the Terms of Reference of the Board, though appropriate when they were written, needed revision. The trend towards vesting more authority in the Board’s Secretariat should be accelerated, in part by redesignating the Executive Secretary as Director, on a par with the Directors of the other CGIAR institutions. Ad hoc working groups were in general preferable to permanent committees. There was a need for such a group, to include some outsiders, to advise on overall strategy. The panel welcomed the introduction of financial analysis on a functional basis, which greatly clarified presentation of the Board’s various activities. As to the Board’s program, some changes of emphasis were needed, as for example in reducing the effort in computing. In concluding, Professor Simmonds recognized the effective support his panel had received from TAC and its Secretariat, and was gratified that the Board had already acted on many of the panel’s recommendations.

52. The Chairman of the Board, Mr. Demuth, noted the value of the panel’s report, and the seriousness with which the Board had treated it. He was pleased that the panel had endorsed the Board’s general approach. The Board agreed that the association with FAO was valuable and should be maintained, and that more authority should be vested in the Secretariat. He appreciated FAO’s agreement in principle that the Secretariat be upgraded within the FAO organizational structure and be given greater visibility, but he regretted the time being taken to accomplish this. He foresaw a future shift in emphasis away from the main cereal and food crops to other plants, including some tropical trees. Conservation activities should be expanded, but not at the expense of collection. The Board had reservations about the recommendation to set up a separate strategy and planning group, believing that formulation of a long-term strategy and program could best be done by the Board itself on the basis of a draft prepared by the Secretariat with the help of consultants. However, if the Board’s approach did not prove successful, it was prepared to consider the alternative suggested by the panel. The Board
agreed to the appointment of additional regional officers, and had provided for this in the 1981/82 budget. He reported briefly on the recent symposium held in Japan for the countries of East Asia and the Pacific Islands, with the active participation of the People's Republic of China.

Item 9 - Second Review of the CGIAR System

53. The Chairman introduced the item by noting that the CGIAR should be prepared to change as necessary to meet changing circumstance, while preserving the features which had served it well. He drew members' attention to the proposal from the Secretariat, which outlined the scope and procedures for the Review, and included a draft Terms of Reference. It was proposed that the second Review be organized in much the same way as the first, being entrusted to a Committee appointed by the Chairman, assisted by a Study Team of more-or-less fulltime consultants (Drs. Arnold, Kearl, Pineiro and Tossell). The Chairman emphasized, however, that the decisions emanating from the Review would be the responsibility of the Group as a whole, and members would be given ample opportunity to join in the final formulation. The Committee would have a membership intended to represent all interests, from within the system and outside it. He had asked others to make informal soundings as to its Chairmanship, and concluded that it would be acceptable if he again chaired it in his capacity as Chairman of the Group. The members agreed with this suggestion and with the other details of organization covered in the Secretariat's proposal.

53. Many points relevant to the Review had been covered during the discussion of the Integrative Report. Many speakers reemphasized the importance of the fullest consultation with, and participation by, representatives of beneficiary countries and of donor agencies during all phases of the Review process. To this end, regional seminars were proposed, which Sweden, the Netherlands, Australia and other donors agreed to support. Kenya offered to host one in Africa if the resources were provided.

54. It was agreed that the Review should explicitly address possible contractions in parts of the system, as well as possible expansions. The value of the system to the most disadvantaged groups, including resource-poor farmers and women, should be analyzed. The discussion of ICIPE suggested to one speaker that the question of some form of associate membership might be reopened. Criteria for possible admission to the system should be spelt out. The need for institutes concentrating on factor research should be considered. The value of investment in agricultural research should be set in the context of all forms of agricultural development.

55. A number of speakers stressed the need for clear guidance on future directions. Specific options should be set out. Full financial accountability should be secured, and the process of program and budget review improved. The Review should be followed up by procedures for implementation and monitoring of progress, and the degree of success of the first Review should also be assessed. Several speakers noted the need for improvements in the program and budget review process.
A couple of speakers felt the manner in which ICIPE's application had been acted on indicated some weakness in the Group's procedures, and could have wider implications. It was recognized that the organization and management of the Group as a whole was a matter of the greatest importance for the Review, and a number of speakers inclined to think that stronger and more clearly defined central mechanisms were now needed. All activities of the centers should be of concern to the Review, and to the Group itself, regardless of source of funds, or the location of these activities on- or off-campus.

Dr. Arnold outlined the preliminary program of work for the Study Team. In common with previous speakers, he recognized the enormous scope of the Review, the limited time available for it, and hence the need to be highly selective in ordering the Team's own priorities. He urged members who had not already done so to send written comments to the Team, preferably before the end of December. He underlined the importance of an objective sampling of the views of developing countries, and outlined the means to achieve this, including the use of regional seminars which would have to be organized by some organization other than the Study Team. He stressed the Study Team's independence of the CGIAR Secretariat, and the limits to its resources.

In conclusion, the Chairman made it clear that he expected members themselves to bring their views before the Team or Committee. He also assured them that there would be ample time for full discussion by the Group as a whole, even if this meant holding a longer meeting than usual, or two meetings, for the purpose.

Item 10 - Report on Stripe Analysis of the Off-Campus Activities of the International Agricultural Research Centers

The first Review recommended that the CGIAR periodically commission "stripe" analyses, i.e. studies of activities engaged in by several centers. That of off-campus activities was the second of such studies.

With limited time and manpower, the study had not been intended to be fully comprehensive, but members in general felt that a valuable and thorough job had been done. Some had earlier questioned the need for the Compendium, but now they had received it, found it very useful. One speaker would have liked to have seen some projections of developments for the future.

Dr. Howarth, who had been one of the consultants working on the study on TAC's behalf, sketched the background to it, and summarized some of the team's conclusions.

It was recognized that the Stripe Analysis would be a most useful input to the Second Review of the CGIAR system. Off-Campus Activities, whether core-funded or not, were among the most rapidly growing of the centers' programs. There could be problems of balance between on- and off-campus research, and relations with national programs could be complex and sensitive. The creation of ISNAR brought a new dimension to the involvement
of the CGIAR system with national programs, and its role was seen by some as being potentially critical for the future. It would be a distortion of the Group's original purposes if the centers became increasingly active in technical assistance, instead of in the production of technology.

63. One speaker doubted whether all of the very varied range of Off-Campus Activities was really necessary, or of high priority. However, the centers clearly should not be limited to their headquarter countries. There should be a genuinely mutual relationship with national or regional programs, and one that was satisfactory for the host governments. This was not always the case. Perhaps more links should be forged with research programs in industrialized countries.

64. The funding situation was at the back of many speakers' minds, and led one or two to suggest that Off-Campus Activities might be a fruitful area for some pruning, or possibly the transfer of some Special funding to core budgets.

65. The Chairman noted that substantial and growing resources were being made available by financing institutions for national and regional programs. This could increase the pressure on the centers, and bend them from their original mandates. The growth of national programs, and their relationships with the CGIAR system, would need very careful watching.

**Item 11 - Approval of 1981 Programs and Budgets**

66. The Chairman noted that it had become the Group's practice explicitly to approve each center's budget, though this did not commit donors to supporting a particular center, nor to providing a particular amount. Bringing budgets in line with expected funds had again been difficult, and although some agreement had been reached, centers generally felt they had a case for more funds. The Review would have to address the budget process. Further across-the-board cuts might be necessary if pledges fell significantly short of current estimates.

67. Mr. Lejeune reminded members of the table on page 34 of the Integrative Report, where the recommended funding for each center was set out. The planning figure derived last year for 1981 had been $149 million. The original budget requests of the centers greatly exceeded this amount, due in part to high inflation. Discussions between the centers, TAC and the Secretariats at Lima in July resulted in the recommendations on page 34. The total contributions required for 1981 on this basis amounted to $145.6 million.

68. The representative of a major donor drew attention to an additional $1.5 million for capital expenditures at ILCA, about whose work his delegation had reservations, and an increase of 19% in the operational budget of ICARDA, plus an additional $3 million for capital. These led him to approve the budgets with reluctance, on the assumption, with which the Chairman agreed, that the budget allocation process would be very thoroughly addressed by the forthcoming Review.

1/ Reproduced as Annex IV.
Item 12 - Donor Indications of Financial Support for 1981 and Beyond

70. Indications of support made during the meeting were as given below. In some cases they were still subject to approval by authorities. The US dollar figure in the second column is the equivalent used by the Secretariat based on exchange rates of November 6. They may vary slightly from dollar estimates quoted by donors quoting amounts in other currencies. Where verbal statements vary slightly from figures given in writing to the Secretariat, the latter are used.

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<th>Country</th>
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<td>Denmark</td>
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<td>France</td>
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<td>Germany, Federal Republic of</td>
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1/ Rates prevailing as at November 6, 1980.
2/ Provisional. Subject to application of formula.

71. Few donors could give any definitive pledges for 1982. A number, Switzerland, Netherlands, UNDP, Canada and the United States, indicated that, as far as could be estimated, their 1982 contributions would at least keep up with inflation.
72. Taking account of the public pledges, and other information given to the Secretariat by donors not present or unable to announce figures, the Executive Secretary estimated the total amount of contributions to core budgets for 1981 at US$139 million.

73. The Chairman noted that, while this represented a significant increase over contributions for 1980, it was not enough to compensate fully for inflation in all cases, and hence meant real cuts in some research work. If this trend continued, it would adversely affect the achievement of the Group’s objectives.

**Item 13 - Report of Center Board Chairmen**

74. It had become customary for Center Chairmen to meet as a group in the course of Centers Week. This year’s meeting had been chaired by Mr. Charles Greenwood, Chairman of CIP. He had prepared a paper on the role of Boards of Trustees, and reported orally on the Chairmen’s meeting.

75. The Chairmen felt the need for Boards to be more actively and effectively involved in the management and decision-making at their centers. To be so, there was a need for a more careful selection procedure to find well qualified and willing individual Trustees. Better reporting of Board and center activities, and a better dialogue with donors, were needed. Centers themselves needed to be more directly involved in CGIAR priority setting. Shortages of funds were creating new types of problems in resource allocation, both in drawing up original budgets, and also in their subsequent adjustment. Boards accepted the need to take their legal responsibilities for center budgets seriously. They would be taking steps to improve their responsiveness to the CGIAR and to individual donors.

**Item 14 - Report of Center Directors**

76. Center Directors had introduced the custom of meeting as a group twice during the year, once in the course of Centers Week. Their discussions this year had been quite extensive, covering many areas of mutual interest. The Chairman of the Directors, Dr. Sawyer, summarized a few of the more important conclusions.

77. Shortage of funds had created difficult decisions for Center Directors, and generated heated debate. They had collectively reacted with responsibility. They looked forward to future development of a formula whereby short-funding could be amicably resolved among Boards, Directors, and the Secretariat. The Chairman felt this would be an achievement indeed.

78. Directors had endorsed Mr. Greenwood’s paper on the role of Boards. They welcomed the second Review, expected to participate fully in it, and had confidence in Dr. Arnold as Study Director. They hoped the flexibility and informality of the system would be maintained.
79. Center Directors were very concerned about figures on the average total operating cost per senior scientist being quoted without adequate explanation. A relatively high figure could, in fact, reflect efficiency in senior scientists' ability to manage large research or training resources. A recent consultant's study had shown center salaries and benefits below the levels of all major European countries except one, and that one had recently caught up. Centers had great difficulty in recruiting scientists from Europe.

80. Dr. Sawyer said that, since 1972, he had noted a growing sense of collective responsibility among Center Directors, in the setting of benefits, policing of perquisites, and evaluation of services, such as those provided by the International Institute of Education. They were increasingly taking collective action for the good of the system as a whole.

81. Dr. Sawyer's successor as Chairman of Directors would be Dr. Hartmans of IITA, where their next meeting would be held in June 1981.

Item 15 - Draft Press Release

82. A draft Press Release was considered by members, and approved after minor amendments. Releases of this kind were only one of the means for publicizing the work of the Group, and the Chairman noted the need to do more in that direction. He hoped additional funds could be provided to produce the new Brochure in other languages.

Item 16 - Other Business

83. Mr. Mashler paid tribute to two of the most influential people in the Group's history -- Mr. McNamara of the World Bank and Mr. David Bell of the Ford Foundation. Neither were present, and both would have moved from their present positions before the Group's next meeting. There was applause in recognition of their commitment and contribution.

Item 17 - Time and Place of Next Meeting

84. The Chairman noted that there would be three meetings of the Review Committee during 1981, and informal meetings of European and Western Hemisphere donors. He suggested the Group retain the recent practice of holding only one meeting a year. The Group agreed with his suggestion that the next meeting be in Washington, and after a show of hands, the week of November 9, 1981 was chosen. The Chairman greatly regretted that all feasible dates precluded the attendance of Dr. Bommer, due to a conflict with the FAO Conference. The costs and benefits of holding meetings outside Washington would be carefully evaluated before a different location would be recommended.
Closing Remarks

85. In summing up, the Chairman noted the positive features of having met in the Philippines, and the Group's appreciation of the assistance of the host country, of IRRI, and of the Asian Development Bank. He regretted the pressure of time had made it impossible to do full justice to some items on the agenda. Also, a few important donors had been unable to attend.

86. The meeting had been dominated more than ever before by financial concerns, but the picture was a fairly favorable one, involving an increase in contributions in 1981 of about 17%. However, very high inflation would mean real cuts in some programs. This message should be heard in donor capitals. Most donors who spoke of the future seemed to intend at least to maintain the real value of their contributions. But more would be needed if inflation in each donor country was substantially lower than that in those where the Group's money was spent, and if the Group was to achieve the modest growth pattern proposed in the revised Five-Year Indicative Plan.

87. He noted the troublesome process of reaching a decision on ICIPE, one which had disappointed some. He felt that ICIPE would be greatly strengthened and stabilized by the new arrangements for a donors' group serviced by the World Bank. ICIPE's program had been strongly endorsed, and had much support.

88. The Group had spent much of its time in considering the forthcoming second Review. Procedures and Terms of Reference seemed realistic and feasible. But the task was very ambitious, and the Review could not solve every problem. The Group as a whole would have all the time it needed for the fullest possible consideration of the Review Committee's Report. The policies and decisions as finally adopted would be those of the Group as a whole, not of the Committee or Study Team.

89. Minister Tanco said his government and IRRI had greatly enjoyed co-hosting the meeting. The forthcoming field trip would allow delegates to see research results being applied in the field. He regretted the need for security precautions. President Marcos had pledged the full support of the Philippine government for the work of the CGIAR, reflecting his personal interest in science and research. He echoed Mr. Mashler's tribute to Mr. McNamara and Mr. Bell.

90. Mr. Babb of the United States, on behalf of the donors, expressed their appreciation of the work of the Chairman, of the Group's services, and of the Cosponsors.

91. The meeting adjourned at 5:00 p.m.
CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

List of Participants in International Centers Week
October 27-31, 1980

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

INTERNATIONAL AGRICULTURAL RESEARCH CENTERS

Centro Internacional de Agricultura Tropical (CIAT)

Dr. Werner Treitz
Chairman

Dr. John L. Nickel
Director General

Centro Internacional de Mejoramiento de Maiz y Trigo (CIMMYT)

Dr. Omond Solandt
Trustee, Acting for
Dr. Virgilio Barco
Chairman

Dr. Robert D. Havener
Director General

Centro Internacional de la Papa (CIP)

Mr. Charles T. Greenwood
Chairman

Dr. Richard L. Sawyer
Director General

Dr. F. Roger Rowe

Dr. Joab L. Thomas

International Board for Plant Genetic Resources (IBPGR)

Mr. Richard H. Demuth
Chairman

Dr. J. Trevor Williams
Executive Secretary

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

Dr. A. Papasolomontos
Chairman

Dr. Harry S. Darling
Director General

Dr. Mohamed A. Nour
Deputy Director General
<table>
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<tr>
<th>Organization</th>
<th>Chairman/President</th>
<th>Director General</th>
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<tr>
<td>International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)</td>
<td>Dr. C. Fred Bentley</td>
<td>Dr. Leslie D. Swindale</td>
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<td>Dr. J. S. Kanwar</td>
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<td>Mrs. Joyce Gay</td>
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<td>International Food Policy Research Institute (IFPRI)</td>
<td>Dr. Samar R. Sen</td>
<td>Dr. John W. Mellor</td>
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<td>Director</td>
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<td>International Institute of Tropical Agriculture (IITA)</td>
<td>Dr. Guy T. Vallaey</td>
<td>Dr. Ermond H. Hartmans</td>
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<td>Dr. S. V. S. Shastry</td>
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<td>Mr. M. A. Akintomide</td>
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<td>International Livestock Center for Africa (ILCA)</td>
<td>Dr. A. Provost</td>
<td>Mr. David J. Pratt</td>
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<td>Chairman, Program Committee</td>
<td>Director General</td>
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<td>Dr. M. Sall</td>
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<td>International Laboratory for Research on Animal Diseases (ILRAD)</td>
<td>Professor D. Zwart</td>
<td>Dr. Anthony C. Allison</td>
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<td>Director</td>
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<td>International Rice Research Institute (IRRI)</td>
<td>Dr. Nyle C. Brady</td>
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<td>Dr. Marcos R. Vega</td>
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<td>Mr. Hugh T. Murphy</td>
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<td>International Service for National Agricultural Research (ISNAR)</td>
<td>Mr. William A. C. Mathieson</td>
<td>Dr. William K. Gamble</td>
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<td>Director General</td>
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West Africa Rice Development Association (WARDA)

Mr. Sidi Coulibaly
Executive Secretary

Dr. E. A. C. Enyi

DELEGATIONS OF MEMBERS OF THE CONSULTATIVE GROUP

Asian Development Bank

Mr. A. T. Bambawale
Vice-President, Operations
Manila, Philippines

Dr. S. T. Senewiratne
Manager, General Agriculture Division

Mr. Alan R. May
Senior Executive Officer, Agriculture
and Rural Development Department

Australia

Mr. J. Ingram
Director
Australian Development Assistance Bureau
Canberra City, Australia

Dr. Rodney C. Hills
Australian Development Assistance Bureau

Mr. E. Mark Latham
First Secretary (Development Assistance)
Embassy of Australia
Manila, Philippines

Belgium

Mme. S. Vervalcke
Director of Administration
Ministere des affaires etrangeres
Brussels, Belgium

Professor G. R. Boddez
Dean of Faculty of Agronomic Sciences
University of Leuven
Heverlee, Belgium

Canada

Mr. E. N. Hare
Director, UN Programmes Division
Canadian International Development Agency

Mr. W. Clive James
Agricultural Adviser
Canadian International Development Agency

Dr. Patricia Roberts-Pichette
Senior Programme Officer
Canadian International Development Agency

Mr. J. J. Jasmin
Director General, Research Branch Canada
Agriculture
Canadian International Development Agency

Commission of the European Communities (EEC)

Dr. Gunter Gruner
Head of Division (Agriculture)
Directorate-General for Development
Brussels, Belgium
Denmark

Mr. Henning Kjeldgaard  
Head of Department, DANIDA  
Ministry of Foreign Affairs  
Copenhagen, Denmark

Professor Carl C. Thomsen  
Professor in Agricultural Policy  
The Royal Veterinary and Agricultural University  
Copenhagen, Denmark

Food and Agriculture Organization of the United Nations (FAO)

Professor Dieter F. R. Bommer  
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Annex II

Welcome Address by Minister Tanco

*Presentations by Center Directors - CIMMYT
   CIP
   IFFPRI
   IITA
   ICRISAT
   ICARDA
   ISNAR
   WARDA
   ILCA
   ILRAD
   IRRI
   CIAT

Presentation by Asian Development Bank

* The Quinquennial Review of the IBPGR was an item on the Agenda of the Consultative Group meeting. It was therefore planned that the IBPGR would make a presentation as an introduction to discussion of this item, instead of during the Plenary Session. As it turned out, the Consultative Group meeting found itself short of time. The IBPGR therefore agreed not to make a presentation as scheduled. Hence, there is no text for the IBPGR included in this Summary of Proceedings.
International Centers Week 1980
Manila, The Philippines

Keynote Address of
HONORABLE ARTURO K. TANCO, JR.
Minister of Agriculture

It is not given to many to participate in a distinguished gathering of the best agricultural scientists and leaders of our time. As Minister of Agriculture of the Philippines, it is therefore both a privilege and a pleasure for me to welcome you to our country on behalf of our government and the President of the Philippines.

We thank you for having chosen our country as the site of this meeting, the first meeting you are holding outside your headquarters in Washington, D. C.

The Philippine Experience

It is indeed fitting that the CGIAR meets here in our country because the experience of the Philippines in the past decade illustrates how a developing country can harness and utilize research and technology to solve its food problems.

Without the high-yielding varieties and the technology developed by the International Rice Research Institute - the first and oldest international agricultural research center in the world - we could not have obtained self-sufficiency in rice, our basic staple. Our collaboration with this premier international research institute established in the Philippines 20 years ago has been long and fruitful, and can be best illustrated by the story of Masagana 99, our rice program.

In the 1960's, the Philippines suffered chronically from a shortage of rice. Runaway population growth made it difficult for an agricultural society using age-old cultural practices and inferior seed varieties to meet the most basic food requirements.

When IRRI released its first high-yielding varieties in 1966, the situation began to change. By 1969, the new HYVs had spread to cover over half of our hectarage. Rice production rose, this time more rapidly than our population.

But record floods, droughts and tungro hit us in 1971 and 1972. Production slumped, and by 1973, we were again importing hundreds of thousands of tons of rice annually to meet our needs.

Despite the widespread use of HYVs, our farmers were producing only 1.7 tons of paddy per hectare, compared to the yield potential of these HYVs of about 5 tons per hectare. This was primarily because our
farmers neither had the money nor the knowledge to apply the inputs and cultural practices needed by these HYVs to reach their full potential.

In 1973, the year of our worst rice shortage, we launched a massive program to increase rice production called Masagana 99. We took the package of HYV technology developed by IRRI and extended it to more than a million farmers through a network of thousands of government technicians. We removed the financial constraints on the farmer by providing him with non-collateral credit and subsidized fertilizers and pesticides. We established a price support scheme to ensure the farmer a profitable price in case market prices fell at harvest time. Last but not least, in President Marcos, we had a political leadership totally committed to the program, then making it possible to cut red tape and to harness the increased resources and managerial expertise needed to get the job done.

Masagana 99 was a resounding success. Within three years, we stopped importing rice. By the fifth year, we had enough surplus for export. The Masagana 99 farmer with an average farm size of 2.3 hectares now nets the equivalent of about $400 per crop, an increase of 280% over the pre-Masagana income of about $108, despite the much higher cost of inputs at present.

Thus, the new technology and its effective transfer to farmers, non-collateral credit, the timely and adequate supply of inputs, price support, and political will—this was the combination of elements that made Masagana succeed.

The high-yielding varieties and package of technology developed by IRRI provided the basis for this success in rice production.

International Agricultural Research and World Hunger

Permit me now to address a few thoughts to you in my capacity as President of the World Food Council, the highest political and coordinating body for food within the United Nations system.

There are those who would paint the picture of the present world food situation as one of unmitigated doom and gloom, foreboding in its lack of hope.

There is certainly enough basis for this bleak point of view. The grim arithmetic of world hunger continues to parade before our eyes: a billion people hungry in the world, almost all of them in the Third World, 550 million of them severely malnourished; 17 million children—repeat, 17 million children—under the age of five died of hunger and malnutrition in last year's International Year of the Child. In the 43 food deficit nations identified by the World Food Council, food production grew by only 2% per annum, or well below their population growth—resulting in less food per person in these countries today than there was a decade ago. Especially alarming in these countries is the fact that
current and projected levels of investment, both external and domestic, in food production and distribution fall far short of assuring that the food needs of their population can be met in the immediate future.

We must face the reality that the world hunger problem has been getting worse rather than better, and that major and concerted efforts are required if we are to forestall another world food crisis in the very near future.

We in the World Food Council however, are optimistic in the face of these facts. We believe that we now have the means and the growing will to enable us to step back from the brink, to move us back from the precipice.

A major reason for our optimism is the undeniable fact that we now have - for the first time in our history as a planet - the new tropical rain-forest technology so vitally needed by the developing countries of this world. Before the establishment of all our international agricultural research institutes, beginning with IRRI only twenty years ago, almost all of the research done in the world was on temperate crops and animals, to be used in the developed northern part of the globe, and in the main non-transferable to the tropical southern developing world. This was of course understandable since most of the money and almost all of modern agriculture was in the rich developed nations of the north. What is not often understood is that developing nations, as a corollary to this, were simply unable to increase their food production for lack of suitable high-yielding disease-resistant varieties.

The rapid establishment of the international agricultural research centers throughout the developing world, beginning with IRRI for rice and CIMMYT for wheat and corn in the early sixties, changed all that.

You who have been at the heart of this worldwide scientific revolution above anyone else know the impact of what you have wrought.

I have already shown you that we could not have converted ourselves from a rice-importing country into a rice-exporting country without the high-yielding, disease-resistance varieties produced by IRRI.

In spite of its superb national research system, I doubt if India could have become self-sufficient in wheat had it not been for Norman Borlaug and the rest of the dedicated scientists at CIMMYT.

These are only two, albeit among the most dramatic, examples of how the new technology has served as the fundamental basis for vastly increased food production in developing countries. These are many other examples: Colombia, Cuba and Brazil in Latin America; Kenya and the Ivory Coast in Africa; South Korea and China in Asia, among many others.
Thus the basis for our optimism. It is now possible, first time, to double, or even, in some cases, to triple yields of most of the staple crops in the tropical and subtropical regions of the southern part of the world. This, by the way, is where hunger is most widespread.

This has been and continues to be one of the brightest spots in the whole world food picture today.

The credit, of course, goes primarily to the scientists present or represented here today by their center heads. In working doggedly and quietly and superbly, in working together as teams of scientists exchanging information worldwide, in adopting that humanitarianism of spirit without which all efforts are doomed, the international research centers have given to the bulk of mankind the fundamental technology without which the world cannot feed itself. This is a singular achievement arrived at in a remarkably short time.

The concentration of top international scientists in each of the centers, combined with the superb research facilities provided them, resulted in these early breakthroughs. For this we have the donors and the CGIAR to thank. From the original pioneering support given by the Ford, Rockefeller and other foundations, the amount of money and the list of donors mobilized by the CGIAR has grown by leaps and bounds. I understand that donors contributed $117 million dollars in 1980, compared to only $20 million in 1972. I also understand that the number of donor countries and organizations now stands at 35.

I congratulate the CGIAR. The King Baudouin international award is well-deserved.

I congratulate all of you.

It is of course not enough that we develop the new technology needed by developing countries. As we have learned in the Philippines and other countries that have achieved breakthroughs, there is need for an efficient government or private body to bring the technology to the farmers. Inputs must be available at the right time and place. Funds are needed by the farmer if he is to procure these inputs and realize the full benefits of the new technology. Markets and fair prices have to be guaranteed to the farmer. And for all these to materialize, there is need for a firm political determination at the highest levels of government to get the job done using the best possible managerial talent available in the country.

Banking on the new technology that you have made available, the World Food Council is trying to persuade countries through its food
strategy approach to adopt this integrated approach to increased food production. Working with international institutions, we are trying to raise the external resources and obtain the transfers of technology that will assist these developing nations to carry out their food programs. Although I have no time to elaborate, permit me to say that this approach seems to be working. Suffice it to say, in my extensive travels as World Food Council President the last three and a half years I am convinced that world leaders are now more determined than ever to solve the problems of hunger in their own countries. This is beginning to be matched by an almost equal determination by international leaders and donor countries to increase technical and financial assistance to these countries. The realization that the problem of food is the fundamental problem of our time, even more than the problem of energy, has spread throughout the world.

It is in this context of the increased worldwide political determination to solve world hunger that we must view the directions that agricultural research and development should take in the rest of this decade.

New Directions of Research

Allow me to share with you a few thoughts on some new research directions which I believe should be stressed in this new decade of the eighties. From my visits and discussions with Third World Leaders in the countries of Asia, Africa, and Latin America as World Food Council President, these are the concerns which I believe we need to focus on:

First, the critical need for a cheap source of plant protein for the tropics. It is one of the research scandals of our time that in all the developing world, there is not one single cheap source of plant protein. The western world, the developed nations have their soybean. The Third World does not have any. I am aware, of course, of the tremendous amount of work already being done on this area.

Second, an even greater emphasis on aquaculture research and on marine fisheries. Fish, after all, today continues to be the cheapest source of protein of the developing world today.

Third, an emphasis on the biology and the breeding of tropical animals, particularly the ever-present buffalo and the dairy-cow. Buffalos give much less milk and take a longer time to procreate than the temperate cow. A temperate cow which yields 18 liters a day in the U. S. and Europe, when taken to the tropics yields only 8-9 liters a day under the best of management. Research must be marshalled to solve the problem of tropical animals.
Fourth, with the scientific knowledge accumulated over the past ten years on conquering space, it would seem to me urgent to now concentrate on developing effective ways to influence the weather. Rain stimulation and typhoon moderation research are in their infancy. Efforts along this line need to be stepped up.

I concur with current efforts to relate agricultural research and development to the current energy crisis. The need to get away from oil-based products is critical.

The CGIAR has rightfully stressed in recent years that greater attention and more resources need to be devoted to the strengthening of national agricultural research systems. We in the World Food Council are pleased to have participated in the birth of ISNAR and hope that the world community will continue to nurture and finance this new agency and give it the assistance it deserves.

These directions I have outlined briefly are the new challenges the scientific community must meet if technology is to continue contributing its vital share in the battle against world hunger.

Technology, however, must be interwoven with other elements or factors - credit, price support, an effective delivery system, management, and political will. All these must be integrated and blended into one harmonious whole.

It is up to you, our scientists, to continue developing the technology that will provide the foundation for increased food production in the developing world. We in the World Food Council, through the FAO, UNDP, WFP, other U.N. food bodies will continue mobilizing the other factors that will make farmers accept and utilize the new technology you develop.

Need for Increased Funding of Research

I spoke earlier of the excellent job that the CGIAR has been doing in assisting international research institutes. I understand, however, that contributions from developed country donors have slowed down because of the economic recession in these countries, and that it has therefore become increasingly difficult to expand international research in real terms. I am informed that there may even have to be substantial cutbacks in research activities because of this.

The World Food Council is alarmed at this development. Such a cutback would be disastrous for the developing countries that are so dependent on the research output of the international institutes supported by the CGIAR.
Allow me to use this most appropriate forum to reiterate my appeal to the donor countries present and to all leaders throughout the world, to provide increased funding to international research institutes through the CGIAR. No more worthy enterprise is deserving of funds; no other activity so profitable an investment as far as increased food production is concerned.

In this connection, we in the Council welcome the recent move of the CGIAR to invite the more wealthy of the developing countries to become donor members. This is both commendable and appropriate, since it is these developing countries themselves who have benefited and will continue to obtain immense benefits from these institutes.

I am pleased to say that the Philippines, in an effort to set an example although poor in foreign exchange - has recently become a donor member, one of the first developing countries to respond to this recent call of the CGIAR. Nigeria, of course, had been a donor member since 1975. Our contribution of $500,000 for 1981 is modest, but by international standards large for a small country.

I hope that it will be followed by similar responses from other developing countries, especially those who have directly benefited from the research results of the international institutes.

Conclusion

In closing, let me pay tribute to the scientists and leaders whose vision and dedication have brought us closer to our dream of a world without hunger.

I spoke of optimism earlier. I believe that scientists are the most unabashed optimists of all. They refuse to accept reality as it is, always striving to change it for the better, never ceasing to push back the frontiers of knowledge in order to create a better world. They are the true dreamers.

It is this spirit which I hope will infuse us all as we struggle to give substance to our dream of a broad, green world growing enough food for all.

On the night Robert Kennedy died he gave this description which I believe describes scientists. He said: "Others see things as they are and ask why; they dream dreams that never were, and ask why not?"
Center Directors' Presentations, pp. 49-178.

Deleted when volume bound.
ADB'S ROLE IN AGRICULTURAL DEVELOPMENT AND RESEARCH

(Address by Mr. A. T. Bambawale, Vice-President of the Asian Development Bank, to the Annual Meeting of the Consultative Group on International Agricultural Research, Manila, 28 October 1980)

I was very pleased to learn that when the decision to hold the 1980 Annual Meeting of the Consultative Group outside Washington for the first time was made, the location selected for the Meeting was Manila. This city has, of course, been the home of the Asian Development Bank since we opened for business in December 1966, nearly 14 years ago. And so your Meeting gives us an opportunity to meet you and to tell you something of our operations and our philosophy as well as giving you a chance to see and learn something more of the developing countries of the Asian region.

In most of the Bank’s developing member countries (DMCs), agriculture contributes between about 30 to 70 per cent of the Gross Domestic Product, and the proportion of the national labor force employed in agriculture ranges between 50 and 90 per cent. Over a third of the value of exports of all these countries comprises agricultural commodities (including those in processed form), and in quite a few countries the share is over one-half. It is clear that, in these countries, agriculture is the most important sector.

This sector is characterized by a dual structure, with a predominantly subsistence economy comprising a large number of small farms mostly growing food crops existing alongside a smaller but relatively modernized commercial plantation economy mainly producing industrial crops for export. About 40 per cent of all farms are under one hectare in size and over 90 per cent are under five hectares. Since the mid-1960s, more advanced agricultural technology has been increasingly extended into the small farm subsector also, largely through the adoption by producers of farming systems centered on the cultivation of the new high-yielding varieties (HYVs) of the major foodgrains, rice and wheat. The estimate that in all the Bank’s DMCs at least a third of farmers depend primarily on cereal production for their livelihood, and in some instances this proportion exceeds four-fifths, underlines the economic significance of this “Green Revolution”.

Because of the importance of agriculture in the Asian economy, the ADB undertook in 1967, as one of its first operational activities, a regional agricultural survey. This was designed to provide the necessary policy guidelines for Bank assistance in promoting agricultural and rural development. The Asian Agricultural Survey (AAS) was primarily concerned with the problem of how modern science and technology could most effectively be used to increase the productive capacity of regional agriculture.
The AAS report reflected the then prevailing mood in international circles with regard to prospects for agricultural, particularly foodgrain, production growth, and looked forward optimistically to a fairly rapid elimination of the food problem in Asia. Encouraged by the then recent release of high-yielding varieties of rice and wheat, the first report laid considerable emphasis on the role of new technology in agricultural growth.

The Bank was, meanwhile, expanding its lending and technical assistance activities in the field of agriculture and rural development, as it was in other sectors of the economy. By 1975, lending overall had reached $660 million a year of which $246 million was for agriculture and agro-industry. Lending on a cumulative basis had reached $2.6 billion of which $589 million was for agriculture and agro-industry.

In 1976, the Bank decided to undertake a second Asian Agricultural Survey to provide it with an appropriate perspective and the necessary impetus for contributing more effectively to the process of agricultural and rural development in light of the changes in the agricultural situation in Asia which had occurred since the earlier study was made. Whereas the first study concentrated on the productive potential of recent advances in agricultural technology through a sub-sectoral approach, the second survey (AAS-II) concentrated rather on the economic, social and institutional aspects of agricultural conditions in the region, as well as on the inter-relationships between agriculture and other sectors of the economy.

AAS-II found that much had been achieved in agricultural and rural development in the DMCs during the previous decade. Many problems, however, persisted. Little progress had been made towards improving the food situation — despite modest growth in per capita income over the past decade, per capita foodgrain production declined slightly — and there had been a disquieting increase in under-employment and the incidence of rural poverty.

With regard to prospects for the coming decade, the picture emerging from the Survey was grim. Firstly, the foodgrain import requirement for the region could be four or five times as large as the current level of about 8 million metric tons. It seems that the orders of increase in cereal demand which are projected for most DMCs represent targets beyond the limits set by the kind of production growth rates which have been achieved in the past. Secondly, relying on agriculture to contribute a substantial part of the import-purchasing capacity of DMC economies is probably going to be an increasingly hard strategy in which to achieve success, except in those countries where large gains in productivity can more than offset the falling prices which will result from substantial increases in supplies of non-cereal commodities. Thirdly, unless far-reaching programs and reforms are implemented which result in a complete break with past experience in the area of employment generation, the prospects for providing productive jobs sufficient to match the number of people who will be looking for them are limited.
Following finalization of the Survey, the Bank held two sub-regional seminars to discuss its findings with DMC specialists. Thereafter, it conducted a review of its own policies, practices and procedures with regard to agricultural and rural development assistance in light of the Survey's findings, the discussion at the two seminars and its own extensive operational experience in this area.

Intensive discussion of this review by the Bank's Board of Directors took place early in 1979. A number of important policy decisions resulted from this review. The Board decided that the Bank, while ensuring that adequate resources would continue to be made available for other sectors, should aim to increase the absolute level of its lending to the agriculture and rural development sector by 20 per cent each year during the period 1979-1982. It was also decided that, in order to encourage the developing member countries to adopt more labor intensive methods in construction and other development activities, the Bank should be prepared to finance a large proportion of local currency costs in the projects it finances. A third important decision was to liberalize the conditions under which the Bank extends program loans to the agriculture and rural development sector.

By the end of September 1980, the Bank had approved $1.93 billion in loans for 139 agriculture and agro-industry projects. This constituted 27 per cent of the Bank's total lending of $7.15 billion for 436 projects. The total investment involved in the agriculture and agro-industry projects, including local costs financed by the borrowing countries and some co-financing by other multilateral and bilateral sources, is estimated at $4 billion. Over half of the total amount lent by the Bank for agriculture has been financed from Special Funds on concessional terms.

The largest share of lending for agriculture and agro-industry by the Bank has gone for irrigation and rural development ($1 billion or 53 per cent of the total for 67 projects), followed by fisheries ($290 million or 15 per cent for 24 projects), agro-processing ($226 million or 12 per cent for 19 projects) and fertilizer production ($183 million or 10 per cent for 9 projects). Lending for agricultural credit, livestock, forestry and seed production together comprise the remaining $197 million or 10 per cent for 20 projects. A feature of the Bank's lending for agriculture and agro-industry is the unusually large share — 15 per cent — devoted to fisheries development compared with other multilateral institutions.

By far the greatest share of the Bank's technical assistance has gone to agriculture and agro-industry. By the end of September 1980, the Bank had been involved in 194 national and regional technical assistance projects in these sectors at a total cost of $40.4 million (including projects financed by the United Nations Development Programme for which the Bank acts as the executing agency). This represented some 51 per cent of the total cost of the Bank's technical assistance at the regional and national levels. The Bank has found that, of all sectors, agriculture requires the greatest input of technical assistance for project preparation and, in particular, for project implementation.
While both technical assistance and loan projects in agriculture have covered a wide range of activities with wide geographical distribution, there has been a noticeable tendency to concentrate on integrated schemes for small- and medium-scale irrigation development, non-irrigated land development and settlement, product processing and marketing, fisheries development, and provision of institutional rural credit. These were some of the areas in the rural economy which the first Asian Agricultural Survey, undertaken by the Bank in 1967, identified as requiring priority attention from the Bank.

In irrigation and flood control, the Bank has tended to favor projects which have short gestation period and are, therefore, relatively quick-yielding. Thus, the Bank has in several instances chosen to undertake rehabilitation and expansion of existing irrigation systems, and has confined financing of new construction to smaller schemes.

The Bank has also gone to pains to ensure that its projects reach down to, and have an impact at, the farm level. Hence, considerable stress has been placed on water management and the formation of irrigators' associations to ensure that potential benefits are actually realized. Emphasis has also been placed on training and on institution development and these items have been included as components in practically all the Bank's agricultural projects.

An examination of agricultural and rural development possibilities in the Bank's DMCs indicates that a lack of suitable additional land and inadequate capital for investment in land development are serious constraints to an expansion of the area under cultivation. Accelerated agricultural production in these areas will, thus, have to come from increases in per hectare yields which in turn will be dependent on the better utilization of the available work force and the development of improved techniques of production, through expanded and intensified agricultural research. A Bank co-sponsored meeting of DMCs on Food Production, Nutrition and Investment, held as a follow-up to the Mexico Declaration of the World Food Council, emphasized these aspects and suggested that agricultural research be particularly directed at low cost intermediate technology. The Bank's Sector Paper on Agriculture and Rural Development also stressed the need to improve the productivity and security of rainfed agriculture. The Paper went on to state that, because of the size of the rainfed subsector, even modest improvements in unirrigated farming systems would, if achieved at relatively low investment cost per hectare or per farm household, have a significant impact on agricultural production and rural incomes.

Taking into consideration the urgency of the efforts to increase food production and the need to close the existing calorie gap and stave off the food deficits forecast for the years ahead, the Bank has continued to adopt a strategy of assisting its DMCs improve their national food supplies and diversify their agricultural economies with a view to minimizing risk and increasing rural incomes. Further, since these DMCs also support some of the poorest farmers in Asia, the justification for making all efforts to improve the productivity of these lands is even greater in the context of achieving higher family incomes and better living conditions.
Whilst limited in its resources for technical assistance operations, the Bank has recognized the importance of agricultural research and has funded such ventures on a selective basis at the project, national, regional and international levels. In so doing, the Bank has followed a three-point policy: firstly, as a regional institution, we support only such research as would be of interest and application in the Asian region; secondly, we do not make general budget-support grants; and thirdly, we support specific, measurable and time-bound research projects which are pertinent to our operations in the agricultural sector.

In keeping with the Bank's endeavor to promote agricultural research that is of direct benefit to small farmers, considerable emphasis has been placed on production-oriented adaptive research efforts by building such components into Bank projects, to enable a continuous flow of new technology for expanding farm output. Such projects have, in addition to initiating or strengthening research, made provision for the transfer of new technology through extension services to end-users and for assisting local authorities to improve their capacity for research and training.

The earliest effort made by the Bank in this direction was in the Walawe Development Project in Sri Lanka. This was followed by other irrigation projects with built-in research support such as the Kankai Irrigation Project and the Chitwan Valley Development Project, both located in Nepal. Such built-in research components derive their significance from the fact that production-oriented adaptive research can be evaluated under specific local conditions and can provide valuable guidance to research and extension workers as well. If, however, such efforts are overshadowed by the implementation of the main project components, it is likely that these research efforts will not receive adequate attention and thereby prove to be less useful. We emphasize the importance of such research stations with the objective of bringing the research findings emanating from the international agricultural research institutes to the grass-roots level and so to the attention of farmers.

Agricultural research at the national level has received attention in Bangladesh, where the Bank is strengthening overall research capability in jute and assisting in setting up a seed program that will, hopefully, be expanded to meet the country's requirement of jute seed. Under this program, existing jute research has been vitalized, seed production farms have been set up and seed processing facilities are being installed. These latter facilities are being built in to ensure maximum utilization of the research efforts and the new varieties that will be released. Similarly, investment in rubber research and training has been included in the recently approved Rubber Rehabilitation and Development Project also in Bangladesh.

A Bank project, to be co-financed by IDA, has been formulated to strengthen and reorganize agricultural research extension services in Western Samoa. Once implemented, this Project should cater fully to the needs of Western Samoa and help accelerate agricultural production and rural development programs in that country. The Bank has also under active consideration a program under which agricultural sectoral studies will be carried out in selected countries with considerable emphasis on determining agricultural
research needs. It is anticipated that such studies will point to local agricultural research requirements which, once identified, would be subject to further project formulation and possible Bank assistance.

In addition to these project-related research activities, the Bank has supported research on specific topics at the regional level, apart from the Asian Agricultural Surveys referred to earlier. One such study concerned the coconut industry and covered all coconut-producing countries in Asia and the South Pacific. The study covered aspects of production and processing and related topics. Another activity was a workshop concerned with irrigation water management. This workshop was based partly on the applied research carried out in the Bank-supported irrigation scheme at Angat in the Philippines and was participated in by those actively engaged in matters relating to irrigation in the Bank's DMCs. We are now actively engaged in pursuing the recommendation made in the Bank-sponsored South Pacific Agricultural Survey that the Bank examine the possibility of setting up a Sub-Regional Agricultural Research Center in the Pacific to work on crops of significance in the South Pacific areas. In accordance with the wishes of the South Pacific DMCs, the Bank is now organizing a Regional Meeting of interested parties to finalize arrangements for a pre-feasibility study to consider the matter further. The Bank hopes that CGIAR and its members would render assistance in this undertaking as may be appropriate.

The Asian Vegetable Research and Development Center was set up in the Republic of China in 1971 and the Bank, at the request of the seven participating member countries, agreed to support the Center to the extent of $300,000. The funds were utilized for parts of the infrastructure development within the main campus and the research farm. Subsequently, in view of the Center's impressive record of research and the development of elite selections and hybrid progeny, the Bank, at the request of the Republic of Korea, the Philippines and Thailand, agreed to support outreach programs in vegetable research in each of these countries for two years. The Bank support enabled AVRDC to station a staff member in each country, provide visiting expertise and equip the outreach center with essential equipment. The Bank's support for the outreach program amounted to $390,000.

In July 1971, the Bank became a member of the Consultative Group on International Agricultural Research. The Bank welcomed the creation of the Consultative Group under whose overall direction and supervision agricultural research has made great strides, thus benefitting developing countries in Asia and elsewhere and enabling them to accelerate food production and move towards the goal of an adequate supply for their increased populations and improved nutrition. Here in the Philippines, our host country, we have seen the results of rice research emanating from national research efforts and the International Rice Research Institute reach the small farmers, thus enabling the Philippines to attain its goal of self-sufficiency in rice. Apart from the efforts of IRRI, we see, as we move around in the Bank's DMCs, the impact of agricultural research emanating from the International Maize and Wheat Improvement Center, the International Potato Center and the International
Crops Research Institute for the Semi-Arid Tropics, amongst others. Thus the international research institutes are generating some of the technology required for agricultural modernization in Asia. The resources required for this enormous task are large and we acknowledge the role of the Consultative Group in assisting to mobilize these resources.

With due regard to our resource constraints, the Bank has supported the international agricultural research network and, as I have noted, such support has been made available on a project basis rather than as direct budgetary support. The Bank has assisted IRRI on three occasions. The first was support for equipping the new laboratory and training center in 1975 to the extent of $300,000; the second was assistance for equipping the Rice Genetic Resources Laboratory in 1977, with a grant of $500,000; and the third was support for a program designed for intensification of rice research for disadvantaged areas with an allocation of $700,000 in 1979. Our grant assistance in an amount of $325,000 to the International Crops Research Institute for the Semi-Arid Tropics, made in 1976, was specifically aimed at assisting the establishment of a research unit for the purpose of developing improved animal drawn farm equipment, suited for use in the small farms of the semi-arid tropics. We feel that these project-oriented grants serve specific selected purposes and help resolve some of the critical problems at the field level.

Agricultural research and training facilities are both urgently required and essential to help the developing countries in Asia reach self-sufficiency in food, increase agricultural production overall and diversify cropping patterns. Worldwide inflationary trends, increases in oil prices and thus fertilizer and other agro-chemical costs all tend to slow down the use of agro-chemical inputs in peasant agriculture. Thus the need for agricultural research to develop crop varieties with a wider range of insect, pest and disease resistance so as to minimize the use of pesticides and fungicides becomes more urgent than ever before. Similarly, in an effort to minimize fertilizer costs, the development of techniques to minimize the use of inorganic fertilizer, whilst promoting the use of organics, even to meet part of the nutritional needs of crop plants, should receive even more emphasis than it has in the past. These are significant and important considerations to small farmers who farm small fragmented land holdings with very little capital resources at their command. I believe these specific needs are receiving the attention of the Consultative Group.

On our part, we will continue to give high priority to agricultural research, extension and training in our DMCs and emphasize such components when formulating projects for Bank assistance and investment. As indicated earlier, we will carry out sectoral studies to identify such needs and consider ways and means by which we could help remove the constraints. Whilst pursuing these objectives, we hope to collaborate fully with the international agricultural research Institutes as appropriate, particularly in helping to establish outreach programs in DMCs with the objective of assisting in the transfer of technology and in the dissemination of research results. We will continue our interest in supporting the international research institutes on selected projects, and work closely with those located in Asia or those that have programs of immediate benefit to farmers in Asia. I hope that our close cooperation and exchange of views will result in tangible benefits and an improved quality of life for the small farmers in this region.
King Baudouin International Development Prize

* * *

Application of Prize Money

Report of the CGIAR Working Group

The CGIAR is to be presented with the King Baudouin International Development Prize on November 15. The award is accompanied by a check for BFr 1.3 million (about $50,000) which the Group is free to use for any worthwhile purpose.

At the beginning of International Centers Week 1980 the Chairman of the CGIAR appointed a Working Group consisting of Mme. Vervalcke, Messrs. Bentley, Cunningham, Quisumbing and Sawyer to make recommendations as to how the prize money should be used. Mr. Hayman of the CGIAR Secretariat served as secretary to this Working Group.

The Working Group met on October 28th and 30th, and presented the recommendations that follow. They were accepted by the CGIAR members after discussion.

1. **Principles.** The funds should be invested to endow a continuing modest activity, rather than used for a single larger activity. The income from the invested funds should be applied in such a way as to acknowledge and stimulate agricultural research and other activities relevant to the CGIAR system, and to recognize an International Center's contribution to the development of the Third World, and the agricultural production of ordinary farmers.

2. **Custody of Funds.** The funds should be held in trust by the World Bank, invested by it, and the income similarly held in trust.

3. **Name of Award.** The King Baudouin International Agricultural Research Award.

4. **Frequency.** Biennially, and covering the previous three years. The first award would be announced at International Centers Week in the fall of 1981, and every two years thereafter.

5. **Eligibility.** Any of the International Centers within the CGIAR. The award cannot be made to individuals or teams.
6. **Type of Achievement.** The Award is intended to recognize the application, use, and impact of a particular technology, material or knowledge developed by any of the International Centers.

7. **Time Frame.** For the first Award, application of technology since January 1978 would be eligible. For subsequent awards, the eligible period would be the three years preceding the CGIAR meeting at which the Award would be announced.

8. **Procedure.** The CGIAR Secretariat would biennially notify the Directors of the International centers of the items and conditions of the next Award, and the closing date for submissions. Center Directors could make one submission per Award, but would not be required to make any submission if they could not identify any appropriate achievement. Submissions should be in the form of a brief paper, not to exceed three pages. An unsuccessful submission could be re-submitted once. Directors' submissions would be considered by a Committee of the CGIAR appointed by the Chairman. This Committee would be expected to be comprised of: a person nominated by the King Baudouin Foundation; one person nominated by the group of Center Directors but not of their number; the Chairman of TAC; and a person appointed by the Chairman of the CGIAR after consultation with the Cosponsors, Donors, and other members of the Group. This latter person should be someone who is not actively participating in the activities of the CGIAR.

9. **Form of Award.** The Award shall be made as a simple and dignified plaque to the Center being recognized, inscribed appropriately. In addition a cash payment in US dollars will be made in an amount determined each year by the World Bank, equivalent to about 90% of the interest earned on investment of the original prize, less any service charges and other direct costs such as plaques, etc. The actual amount to be made available should be subject to prior approval by the administrators of the trust fund. At the discretion of the Center Director concerned, it should preferably be used to publicize to laymen the achievement selected. This should include commissioning an independent journalist to produce an article or series of articles describing the achievement, which should have world-wide circulation for the benefit of the Group as a whole.

10. **The Next Steps.** The CGIAR Secretariat will make arrangements for the establishment of an Award Fund, to be administered by the World Bank. Investment of principal shall be at the discretion of the World Bank. Terms and conditions for the 1981 Award will be issued by the CGIAR Secretariat not later than March 31, 1981. The Award Committee will be appointed not later than July 31, 1981. The winner should be notified well before International Centers Week. The award will be presented during Centers Week.

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1/ Subject to the Foundation's agreement.
From: 1980 Integrative Report

### Recommended 1981 Core Budget Funding

**($'000)**

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<th><strong>Real Growth 1/ in Operations 1980/81</strong></th>
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#### Establishing Centers

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#### Subtotal

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1/ As compared to the centers' operational budgets approved by the Group in 1979.