FROM: The Secretariat

Consultative Group Meeting
November 9 - 13, 1981.

Agenda Item 5

Attached is background material on the topic of Water Management. The material consists of a copy of the "Minutes of an Ad Hoc Meeting on Water Management" held on July 20 in Washington, D.C., and a copy of the "Terms of Reference of the TAC Study Team on Water Management Research and Training."

The topic of Water Management will be discussed under Agenda Item 5 at the Consultative Group Meeting in November.

Attachment

Distribution:

CG Members
TAC Members
TAC Chairmen
TAC Secretariat
Center Board Chairmen
Center Directors
Summary and Main Conclusions

1. The Committee re-confirmed the high priority which should be given to research and training in irrigation water management.

2. A large majority among the Committee appeared to consider that water management was an appropriate activity for the CGIAR. There was no conflict with the work of FAO in this field.

3. It was unanimously agreed that any new initiative in this direction by the CGIAR should be modest in scale, very limited as to capital requirements, and of a different pattern to the "traditional" CGIAR international center.

4. Some members saw a decision on water management as being linked to the CGIAR Review currently under way, and particularly to the design of mechanisms for re-assessing priorities, and identifying activities which should no longer be supported.

5. No clear consensus emerged on an appropriate organizational model for any new initiative.

6. TAC would organize a study by consultants, in time for their meeting in March 1982. A budget of up to $100,000 was agreed, and indication of donor support, in cash and kind, provided. Two Committee members felt this budget would not be adequate, but after discussion the Committee accepted it.

7. Draft Terms of Reference for the Study were circulated but would be revised by eliminating topics already agreed. The revised draft would be circulated to the Committee for comment.
Summary of Proceedings

1. The meeting was opened by the Chairman of the Consultative Group, Mr. Warren C. Baum. It was attended by 30 participants, a list of whom is attached as Annex I.

2. Mr. Baum sketched some of the background to the present meeting. A proposal for an initiative on water management had been before TAC for some time and a specific proposal had been considered at Centers Week in November 1980. It had been referred back to TAC, and it had been agreed to convene a meeting of interested parties in order that TAC might have guidance on how further to proceed. With the concurrence of the Chairman of TAC he had invited Dr. Cunningham to chair the meeting. Dr. Cunningham took over the chair at this point.

3. Disclaiming any technical background in water management, Dr. Cunningham had nevertheless been concerned with the topic for many years. TAC had identified the subject in its priorities paper of February 1979 as being among the top five priority topics, and had considered a report sponsored by IDRC at its meeting in Hyderabad in 1979. He drew the attention of participants to a TAC document entitled, "Proposal for the Creation of an International Institute for Research and Training on Irrigation Water Management" dated August 1980. While members of the Consultative Group had found much to favor in this TAC proposal, some of it did not find full support and TAC felt that before spending even more time on the subject, it would need further guidance from the Group.

4. He noted many different views of the importance of different gaps in the knowledge of irrigation practice and queried where the real gaps lay. Secondly, if such gaps existed, what activities to close them were appropriate for the CGIAR. For example, should they be narrowed to research and training. Thirdly, he questioned the extent of donor interest. And finally, he asked whether, if an activity on water management was desirable, but not for support by the CGIAR, what other organization could appropriately take care of it.

5. The Agenda was adopted as drafted, and is attached as Annex II.

6. Dr. Cummings briefly reviewed some further background to TAC's consideration of water management, emphasizing the large investments that were being made in irrigation in developing countries, quoting for example that India expected to invest $3.5 billion a year over the next 20 years in irrigation. Worldwide the scale of investment was immense, not only in new irrigation works, but in the rehabilitation of existing ones. The potential for raising food production through improved efficiency of water use was very great. So far no integrated approach to water management research had emerged, and progress had been disappointing. He felt the importance of the subject justified experiment. To be successful it would need international backing and prestige such as the CGIAR could command.
7. While TAC had concentrated primarily on the utilization of water at the plant root zone, nevertheless it recognized related problems both upstream — in water collection and delivery — and downstream, for example in drainage and salinity. There were also social and political problems. TAC’s proposal was for a decentralized arrangement with very modest capital investment. TAC was not committed to any particular model, but would explore alternatives after a consensus that such an activity would be appropriate for the CGAR and that members would be willing to invest in it. Dr. Cummings had canvassed opinions from the international centers and from donors known to be interested in the subject, and the responses had been unanimous on the importance of water management but not on how it should best be addressed.

8. Dr. Horning reviewed the current status of the FAO International Support Program for Farm Water Management (ISP). This program approached water management from the farmers’ viewpoint whence it went both upstream and downstream. It was essentially a program in support of national programs, starting initially at the project level. It emphasized the importance of national institutions such as national water management services and national centers for training and research and national extension services. He noted the multiplicity of agencies involved in water-related projects, quoting the example of five such in Sri Lanka alone without any discernible coordination. Hence, there was an effort to establish an international network for exchange of information. Secondly, emphasis was given to training at the national level whereby location-specific diagnoses could lead to possible solutions. Dr. Horning emphasized that the proposal put forward by TAC would be complementary to FAO activities in this field. He questioned whether any international effort could reach the thousands or even millions of farmers who might be involved in particular irrigation projects.

9. The Chairman welcomed Dr. Horning’s clarification that the proposal before the meeting was essentially complementary to FAO efforts and stressed that what was being considered was very modest in terms of resources, citing a figure of approximately $5 million a year. He reminded participants of the philosophy behind the proposal by quoting from TAC’s paper as follows, “Emphasis would be placed on diagnosis of the constraints or limitations to the most effective use of water for crop production and on research designed to find replicable solutions to the various problems encountered of whatever nature they may be (engineering, design, construction, management of canal systems, etc.).”

10. Drawing on the experience of the Ford Foundation, Dr. Hardin felt the need for more system diagnosis. The effectiveness of systems could be measured and could hence be improved. Both the diagnosis and the prescription were researchable and teachable. Constraints could be identified in a cost-effective manner and lessons learned which would be replicable world-wide. While the methodology could be transferable, solutions were much more location-specific.
11. Another speaker, while supporting Dr. Hardin's view, noted a
great lack of diagnostic methodology and emphasized that it was not
generally known why systems were not working. While the design of a
distribution system was fairly straightforward, few attempts had been made
to check on how the irrigation systems as a whole were operating. The gap
was this basic lack of knowledge. A second universal gap was the unclear
definition of different responsibilities for water use and for agricultural
production. Generally those responsible for the irrigation system did not
measure their success in terms of production. The farmers might have
little influence on the control of the system. In this respect systems in
developed countries were fundamentally different from those in developing
countries.

12. A speaker from a developing country, noting that he was in
something of the minority, emphasized the great efforts his country would
have to make even if it were to remain at its present unsatisfactory level
of nutrition and food production. He mentioned widespread malnutrition,
food shortages, and the crisis in the supply of edible oils. Without sound
water management no improvement could be expected and famine and crisis
could result. Water use in his country had become something of a ritual in
which the real needs of the final users were largely ignored. However,
there had been a great deal of research. He felt the CGIAR should place
top priority on an international center for water management which could in
focus government attention and influence policy.

13. Another speaker felt that the great volume of research just
referred to cast doubt as to whether a new international institution would
be any more effective. It would be a great step forward if technology
already known could be applied at the farm level.

14. A representative of the World Bank supported TAC’s emphasis on
the need for water management research in view of the heavy investments it
was making in irrigation. The Bank had been increasingly involved in
on-farm water management efforts. It was essential to look at the total
water collection, delivery and use system. Water was sometimes controlled
by people with neither responsibility nor training for effective water
use. Noting a large number of institutions already in existence, Bank
staff had queried whether TAC’s proposal would provide a replicable model.
Regardless of any decision by the CGIAR, the World Bank would continue to
support water management research efforts at the national level.

15. While supporting the proposal for development of a diagnostic
methodology, another speaker felt it important to identify those elements
most amenable to improvement. Such a methodology provided great potential
for improvement in food production, both from existing systems and possible
new ones. The international centers could be influential either in
supporting studies to highlight problems, as for example the IRRI study on
constraints, or in supporting experiments for change. He cited the example
of the program in the Philippines whereby control over irrigation water was
largely delegated to associations of water users, a concept very powerful
in the Philippines but which would need modification to be successful
elsewhere.
16. The representative of France agreed with other speakers as to the magnitude of the problem and the difficulties inherent in solving it. His authorities did not feel that a new international initiative would necessarily be the most efficient approach. One improvement worth examination was in the gathering of available information and its coordination and exchange. He emphasized the importance of testing project methodologies on a pilot basis with farmers and the importance of securing their cooperation.

17. The need for an integrated approach was recognized as was the difficulty of looking at all the various elements together. Even though the basic problems may be well understood, location-specific problems might be so great as to cast doubt on the relevance of general principles. A concerted international approach to strengthen training programs in LDCs was needed and a multidisciplinary approach should be encouraged.

18. A participant from Germany noted his own government's very substantial investment in agriculture and in irrigation in the developing countries. Experiences with some irrigation projects suggest that in future a much more cautious approach should be taken. While there would be great advantages if available technology could be successfully applied, there were still gaps in the technology, for example, on the question of tolerance to salinity. There were four main categories of gaps: (1) knowledge on agronomic and biophysical characteristics; (2) delivery systems and the political, legal, and socio-economic problems that were encountered; (3) engineering, as in the construction of dams and canals; and (4) in training. For the first of these he doubted whether any special institute were needed, feeling that the international centers and national programs could probably manage satisfactorily. Research on delivery systems was very important as were logistic and political factors, but he was unclear what institution should best address them. Engineering problems were much more readily understood and the easiest to deal with. Training might call for additional institutions and he suggested the possibility of financing training out of investment funds.

19. A speaker felt the overall objective should be to find the optimum situation where each country could continuously improve its own irrigation management and efficiency. He distinguished between the use and the management of water. Developing countries needed to know how efficiency could be improved, such as for example, better plants, better farming systems or cropping patterns, and the more efficient use of other factors. There was a great shortage of properly trained and motivated people. An international effort could focus on testing different methods of monitoring and supplying information on methods tried by others. While a major training effort was needed, it was not clear whether it was best done in national or in international programs.

20. The major contribution of the international centers was their success in building national programs. A speaker cited Indonesia's near self-sufficiency in rice research as an example. He felt the meeting should agree on a number of small efforts where an international activity could accelerate national programs.
Reverting to the suggestion that a methodology of diagnosis be derived, a speaker thought that perhaps this should be done for a limited period on an experimental basis. It was necessary to assure adequate training both during the development of projects and their operation under national control. While there tended to be good communication between professionals in the same discipline, there was less dissemination across disciplines. A technology needed to be made accessible through translation into nontechnical local languages, which was not necessarily an activity for an international center.

Another speaker felt that water management research was largely a question of the study of interrelationships and noted a number of precedents for this within the CGIAR system. There were also cases where research activities felt to be highly location-specific and essentially the business of national governments had nevertheless been adopted by the CGIAR—for example, IFPRI in the field of food policy, and ILCA in livestock production systems. A large part of ISNAR's expected activities would be in diagnosis.

Another speaker approached the question from the viewpoint of systems engineering. He emphasized that irrigation for food production was only one of several competing uses of water, for example, industry, drinking water, or protection of the environment. He questioned whether any new institution was necessary since there were many in existence already, such as the International Institute for Systems Analysis in Vienna which had a program on agricultural water use. There were many such institutions focusing on the problems of the developing countries, as for example those in France, Italy and Spain.

The representative of a development bank emphasized the importance his institution gave to agriculture and to irrigation. More research and training was needed, as was an inventory of ongoing activities. He felt much could be done to strengthen existing institutions and doubted whether the CGIAR should support a new one in view of financial constraints. He emphasized the need for criteria whereby the CGIAR might create or adopt an institution. He felt such criteria when available might emphasize specific crops.

In summarizing the discussions so far, the Chairman detected some difference of view as to whether any new initiative should attempt to look at all features of a water management system or whether it should focus only on some. He noted that the international centers had not influenced governments by virtue of any authority but by their example. Nobody wanted to create an international policeman instructing national governments as to how to manage their water resources. What was needed was diagnosis of problems and then informing governments through the training of high-level people. He detected a consensus in favor of the strengthening of an international capacity to diagnose problems and to work out appropriate methodologies, and secondly that national governments should be better informed largely through the medium of training.
26. It was thought that developed countries must have worked out satisfactory techniques and if so, it may be asked why they had not evidently been transferred to developing countries. For the US, it was noted that there were methods available for some irrigation systems but typically these only involved a small number of farmers. Operations in developing countries were very different as, for example, in the matter of average farm size and the number of delivery points. There was a project within USAID to develop diagnostic techniques and to teach them, which had been in operation for three years. This project was not being adequately supported.

27. The TAC Chairman quoted the remark of a center director who had recently edited a book including a chapter on water management which underlined the unsatisfactory state of the art in the United States and its much worse condition in developing countries. It appeared impossible to guarantee the long-term productivity of irrigated land.

28. A speaker asked whether full account had been taken of the International Commission for Irrigation and Drainage (ICID). This was a body based in India, having some 80 countries as members, with a small secretariat largely concerned with setting up an annual executive council meeting and study tours and a full-scale international conference every three years with published proceedings. It had no research funds to do research itself or to commission it from others. ICID had been informed of TAC’s proposal.

29. Mr. Mahler confirmed that TAC was well aware of the activities of ICID which was essentially a professional association. TAC had been in contact with its Secretary-General and President. TAC felt it premature to explore any individual host country or explore the interest of ICID in contributing to the proposal. ICID did not of itself support any operating activities. TAC was awaiting ICID’s reaction to its proposal with interest.

30. One participant, a former member of ICID, had emphasized that the members were controlled by national governments and this would be an uncomfortable arrangement for the CGIAR.

31. The representative of France noted that he had been instructed to suggest that an international approach could appropriately be made through ICID or by means of strengthening ICID. Three-quarters of its members were from developing countries. ICID members were involved not only as government officials but also as project people implementing actual schemes. ICID might be a valuable channel of communication to governments. However, another speaker, who had served on a national committee of ICID, felt that it was not an appropriate organization for the kind of initiative in mind.

32. Another speaker addressed the basic question of the CGIAR’s present mandate which was seen as food with an emphasis to the most deprived farmers. Subsistence foods did not usually provide the economic pay-off which made irrigation attractive. The CGIAR seemed to remain
oriented mostly towards crops rather than production factors. Therefore it was queried whether irrigation was a proper concern for the CGIAR under its present mandate. Many ultimate beneficiaries in the CGIAR system would have access to irrigation. Her government, Canada, therefore did not support water management as an activity for the CGIAR as a new international center. However, others felt the Committee should not take too narrow a view of the CGIAR’s mandate. It was not only a question of production of food but access to food which meant employment and income. Irrigation stimulated demand for food in a number of ways and it was felt it would fit conveniently within the CGIAR’s overall objectives. Whether in fact water management questions were researchable in practice was a different question.

33. The Chairman of TAC noted that the CGIAR had been more pragmatic than consistent in its choice of activities. Three already supported were in fact factor-oriented but they were consistent with the overall objectives of the Group.

34. A speaker wished to correct what he thought was a misunderstanding in that it was felt by some that only big farmers benefitted from research into the more efficient use of water. This was not the case. Small farmers also needed help in irrigated as well as in rainfed areas. An international institute would help small farmers although large farmers might benefit more. He felt this activity fell well within the scope of the CGIAR.

35. In answer to a question Mr. Yudelman confirmed that the World Bank was not at the present time envisaging a consortium for water management on the same pattern as that for ICIPE.

36. Another speaker felt the Committee had not yet reached the position on whether or not it would be appropriate to link the proposed activity with FAO. He felt this question should remain open. Dr. Horning reiterated that FAO’s approach was at the national level and had much in common with that of USAID. He did not see the need for much further research, but FAO was not opposed to it. FAO would, however, not be interested in a new international institute, but he agreed that there was no conflict between FAO and the proposal as it currently stood.

37. The Chairman of TAC outlined TAC’s current proposal. It was for a decentralized type of institute with very light facilities at headquarters and with no large experimental farm. It would have cooperative arrangements with existing systems which would provide it with a kind of field laboratory. Headquarters facilities would be largely limited to diagnostic laboratories, some housing, training facilities, and administrative accommodation. It would have a number of satellite units on a smaller scale. TAC felt that such an activity should have its own visible identity and not be submerged under other activities. It would have its own Board of Trustees, including representation from host countries.
38. Other speakers concurred that any new initiative should not involve heavy capital expenditures. Various models that fell between the type of model represented by ISNAR and the "traditional" international center were discussed.

39. It was felt that the new activity should essentially be a monitoring system that made experiments on various types of improvement. The effort needed to be comparative. It should be conceived from the beginning as being a collaborative effort and should use networks. It should involve collaboration with advanced countries.

40. The representatives of both the Netherlands and Canada went on record as being in principle opposed to the establishment of a new center. Dr. Koopman felt that mobile teams stationed in irrigated areas were needed and quoted as a successful example of this arrangement the ICARDA Nile Valley project.

41. The representative of France said that his authorities were in favor of a two-tier system — a somewhat light system for the exchange of information and the establishment of a data base involving existing international centers. The feasibility of this needed to be studied in connection with possible collaboration with FAO, UNESCO, etc. Functions and financing should be studied, as well as the existing sources of information such as AGRIS, CARIS, etc. In addition local and regional approaches were needed. Development projects should include support for applied research which should preferably be done before construction was undertaken. There should be cooperation with research institutes and universities in developing countries and also contact with farmers.

42. The representative of the United States said his government was in favor of an effort in water management, preferably under the aegis of the CGIAR. He tended more towards the ISNAR model than to that of a traditional center. People in developing countries should know how their water was in fact being managed. National programs might be linked together and common elements fostered so that comparisons could be made across countries. Any such new activity would need its own resources, probably fairly substantial. However, he felt that an order of magnitude of about $3-5 million a year was about right.

43. The representative of Germany confirmed that his government felt irrigation to be a proper field of activity for the CGIAR but at the present time he was reserving his position as to the appropriate type of model.

44. A speaker cautioned the Committee against trying to move prematurely towards a decision. The purpose of the meeting was to respond to TAC's request for guidance. He, himself, did not feel ready to be committed to a particular proposal although his authorities in Australia would probably support whatever the Group would finally recommend.
45. The Chairman confirmed that the Committee had no standing as far as the governance of the CGIAR was concerned and was indeed constituted merely to respond to TAC and to give views to its Chairman. However he felt that there was consensus that any new initiative should not be housed in an existing international center but that there should be cooperation with them, and secondly, that there should be no new international center for water management of, for example, the IRRI type. He noted the French proposal for a two-tier system. There was need for some modest international activity, but most of the work would be carried out in regional networks.

46. Another speaker supported the notion of a limited life and felt that the CGIAR should conduct its own experiment by setting up a pilot program. It could be with its own board or under the aegis of an existing center. It would call for the best available people but minimum capital investment. It was necessary to specify the hypothesis to be tested.

47. Mr. Mahler, recalling the discussions with the Center Directors at the last TAC meeting, felt it would be difficult to graft new activities onto centers that were themselves having to cut back activities such as training. He queried what was meant by a "service" and whether this in fact meant a consulting organization. A speaker who had introduced the concept of a "service" confirmed that this was meant to describe the scale and nature of the activity.

48. Summarizing the discussion to that point, the Chairman felt that there had been a consensus on the type of work that the proposed new initiative should undertake and that on balance it would be better within the CGIAR than elsewhere. However, there was as yet no consensus on the type of organization within the CGIAR, and the possibility of using the existing centers should be examined. Beneficiary countries felt the need for a focus provided by an institution of high quality. There was support for a comparatively modest activity requiring between $3-5 million a year. He felt it implicit that the location should be in a developing country but this question was still open.

49. Confirming that Australia would accept a consensus provided the matter had been fully considered, Mr. Ingram pointed out that the CGIAR was at an important stage in its development due to the review process and the concerns that lay behind it.

50. The representative of the United States felt that water management was so important that his authorities would probably be able to find new funds despite serious financial difficulties and repeated scrutiny of activities it supported. However, it was absolutely necessary to have, and to be seen to have, an effective process for the allocating of resources to the highest priorities among activities already supported and those that might be supported in the future.

51. Another speaker, agreeing, noted concern for a lack of a system to decide what activities should be phased out. It was regrettable that the Group could approve budgets, but donors would provide resources inadequate
to cover them. Her government, Canada, gave first priority to support of existing activities, but at the present time could not even guarantee to maintain the real value of contributions. She looked forward to the recommendations of the Review on criteria for new initiatives.

52. Another speaker who was a member of the Review Committee confirmed that its last meeting had been dominated by concern for allocation and the ability to discriminate between programs of differing value. He urged prompt action.

53. Mr. Yudelman noted that the World Bank's long-term support for any new initiative was constrained by its position as a donor of last resort. However, the Bank would support activities in water management, particularly in view of the Bank's reaction to the Brandt Report. The Bank would not favor a large-scale institution.

54. Dr. Treitz confirmed the German government's support for work in water management but underlined the prevailing financial situation. He felt the matter needed further study. Similar cautions were expressed by Mr. Landau on behalf of the Inter-American Development Bank.

55. For France Mr. Trunel expressed the need to know more about the specific proposal and the importance of effective information exchange. He stressed the importance of regional aspects, for example the special problems of the Sahel.

56. For the Netherlands Dr. Koopman confirmed that his government was in support of a modest effort in water management.

57. Dr. Benedini confirmed Italy's support provided the scope of activities was absolutely clear and there was an opportunity for participation of Italian institutions.

58. Speaking now on behalf of the United Kingdom, the Chairman felt that his authorities thought water management possibly of the highest priority. They looked to the CGIAR to accommodate it. It would be premature to guess how the review process would conclude but nothing so far would exclude water management from the CGIAR. He expected a mechanism for allocating resources and determining priorities to emerge from the review process. For the time being he felt it unlikely that a new initiative in water management would release additional funds from the United Kingdom, but it was important to keep interest in the matter alive.

59. Moving to Agenda Item 87, the Chairman reminded the Committee of the proposal that the details be examined by a small working group on behalf of TAC. There was some consideration about a possible timetable and it was agreed that it would not be possible to conclude any such study prior to the November meeting. It was agreed that the target would be to complete a report in time for the meeting of TAC in March 1982. It was felt possible that the CGIAR might hold an additional meeting in May 1982. This schedule would avoid having a proposal brought before the Group before TAC had had the chance to consider it.
60. A draft terms of reference for a study was distributed. Since this had been drafted prior to the meeting, a number of its provisions were felt to have been eliminated by the consensus that had been reached. Mr. Mahler felt that the terms of reference should be reduced in order to make the work feasible in the time available.

61. Nevertheless, the Chairman stressed that there should be completely open position regarding the type of model to be recommended. As to the type of research to be done, he noted two distinct viewpoints -- some Committee members favoring the inclusion of entire irrigation systems and others who felt it more effective to concentrate on one or two more narrow areas. This question was still open. Although there was no strong support for a formal steering committee of TAC to guide the proposed study team, it was felt that TAC should call some outsiders to form an ad hoc committee. The composition of the team in the draft terms of reference was felt generally appropriate but flexibility should be maintained. Short-term support could be provided by consultants. The Chairman of TAC confirmed that suggestions as to suitable experts had been solicited and a large number of names received, but other names would still be welcome.

62. Both the Inter-American Development Bank and France offered the help of their experts. The Netherlands had already identified an expert and was prepared to make him available free of charge and also take responsibility for his travel and other related costs. The representative of Germany confirmed that unallocated German contributions to the CGIAR might be applied towards the cost of the proposed study, eventually, in kind. A representative of the Ford Foundation confirmed that his organization could provide a modest contribution in cash and in kind.

63. There was some divergence of view as to the cost that an effective study would incur. A compromise estimate of approximately $100,000 was agreed. There was some disagreement on the amount of travel that the experts would have to undertake.

64. Some donors noted difficulty about direct contributions to FAO and felt that funds for the study should be channeled through the CGIAR Secretariat.

65. The Chairman concluded that the draft terms of reference would be substantially revised by the two Secretariats and distributed to participants for comment. There was no dissent from his suggestion that the Committee would not need any further meetings for the foreseeable future.
Annex I

CGIAR Ad Hoc Meeting on Water Management

* * *

July 20, 1981
World Bank, 1818 H Street, N.W.
Washington, D.C.

Room C1006, 9:15 a.m.

List of Participants

Dr. Robert K. Cunningham, U.K. (Chairman)
Mr. Warren C. Baum, Chairman, CGIAR
Mr. David E. Bell, Ford Foundation
Prof. Marcello Benedini, Italy
Dr. Walter M. Carlton, USAID
Dr. Gilbert Corey, USAID
Dr. John K. Coulter, World Bank
Dr. Ralph W. Cummings, Chairman, TAC
Dr. Dana Dalrymple, USAID
Dr. Lowell S. Hardin, Ford Foundation
Mr. Andrew J. Hayman, CGIAR Secretariat
Dr. E. M. Horning, FAO
Mr. F. L. Hotes, World Bank
Mr. Jean-Louis Imhoff, France
Mr. J. C. Ingram, Australia
Dr. G. Jan Koopman, The Netherlands
Mr. Georges D. Landau, IDB
Mr. Michael L. Lejeune, CGIAR Secretariat
Mr. Philippe J. Mahler, TAC Secretariat
Dr. Amir Muhammed, Pakistan
Dr. John L. Nickel, CIAT
Mr. Peter Oram, IFPRI
Dr. Donald L. Plucknett, CGIAR Secretariat
Dr. Patricia Roberts-Pichette, Canada
Dr. Werner Treitz, Germany
Mr. J. C. Trunel, France
Dr. Edgar Upegui, IDB
Dr. Floyd Williams, USAID
Dr. Montague Yudelman, World Bank
Dr. Mohammed S. Zehni, TAC Member
CGIAR Ad Hoc Meeting on Water Management

July 20, 1981
World Bank, 1818 H Street, N.W.
Washington, D.C.

Room C1006, 9:15 a.m.

Agenda

1. Opening remarks by the Chairman of the CGIAR, Mr. Baum.

2. Opening remarks by the meeting Chairman, Dr. Cunningham.

3. Adoption of Agenda.


5. Priority for water management research and training within the CGIAR system, including indications of long-term support.

6. Discussion of alternative organizational models.

7. Suggestions for any further study, and, if positive, terms of reference, budget, funding and timetable.

8. Other business.

9. Time, place and attendance at next meeting, if any.
TERMS OF REFERENCE

TAC Study Team on Water Management Research and Training

I. OBJECTIVES

The primary objectives of the study, to be conducted by a team comprised of individual irrigation experts, are as follows:

1. On the basis of available reports (and additional information to be collected), to identify the extent to which training and research in irrigation water management is now being performed by:

   (a) existing IARCs;

   (b) existing principal water resources research institutes of universities in developing and developed countries;

   (c) existing institutions, such as FAO, UNDP, UNESCO, CEFIGRE and The Netherlands International Land Reclamation Institute; and

   (d) other organizations making significant contributions to training or research.

2. To determine the aspects of training and research activities in irrigation water management which are not receiving sufficient attention, which could provide significant improvements in irrigation water management in developing countries and which might be addressed more effectively through international -- as contrasted to national -- efforts in this area and to specify the contents of the research and training programs which might be needed under the various alternative courses of action.

3. To formulate the alternative courses of action for CGIAR support in this area and indicate the pros and cons of these alternatives such as the following, and to elaborate the specific types of problems which would be addressed in relation to each:

   (a) No involvement from CG -- other than encouragement of international support for irrigation water management.

   (b) Formation of an institute as set forth in TAC's 1980 proposal.

   (c) A model along the lines of an international service, operating in and using the facilities of a limited number of selected irrigation systems in a few host countries.

   (d) Feasibility of existing IARCs undertaking water management in their ecological environments, and the extent to which this might or might not meet the requirements.
(e) Any other approaches which might be suggested as a result of the study.

4. To indicate how the above courses of action would be complimentary to activities of other agencies concerned with this subject.

5. In the event that no involvement from CG is recommended (Item 4 (a) above), to identify present training and research efforts which should be continued or expanded, and to suggest new activities or steps which could be undertaken to improve and support irrigation project performance in developing countries.

N.B. It should be noted that "irrigation water management" includes all activities from upstream at the point of diversion or storage, to the point of on-farm use, and downstream to the point of disposal from the irrigated areas, and perhaps to the sea.

II. PROCEDURE

1. Recruit and assemble a Task Force comprised of an agriculturist, engineer and social economist, all experts in irrigation projects, and with multi-country experience, aided by TAC which in particular would supply expert knowledge of the CGIAR System and Objectives, under the guidance of a Steering Group.

2. A briefing note compiling the reports listed in Annex A would be made available to the Task Force prior to their first meeting. At or prior to the first meeting a schedule would be prepared of visits to various institutions and operating irrigation systems in developing countries to obtain needed information not readily available otherwise. During these visits information pertinent to the first five objectives would be obtained specifically.

3. Field visits to selected countries and irrigation projects.

4. The Task Force would assemble at a convenient central point following the field visits for discussion and drafting of the final report to TAC. A progress report would be submitted by the Task Force Chairman to the TAC Chairman by January 15, 1982.


Attachments
Annex A

Background Reports

1. Pereira Report: Opportunities for Increase of World Food Production from the Irrigated Lands of Developing Countries, April 1979.


3. Factor-Oriented Research under the CGIAR, TAC, 1980.


Tentative Proposed Program

Water Management Study

Oct. 5-14 - Team meets Rome - Chambers joins Oct. 12

Briefing
Review of documentation
Meeting with selected specialists & consultants
Preparation of detailed draft plan of study, alternative models and hypotheses to be examined in field studies, develop specific draft plans for field studies.

Oct. 15-16 - Team meets with Steering Committee - Rome

Finalizes plans for conduct of study.

Oct. 17-31 - Team Disperses - Schulze (Netherlands)
Kirpich (IBRD - India)
Chambers (Ford - India)

Nov. 1 - 14 - Entire team in India

Nov. 14-19 - " " " Pakistan

Nov. 20 - Travel to Philippines

Nov. 21-22 (Sat. & Sunday) - Team reviews observations;
reviews and revises outline of report;
assigns tasks to members, including additional travel to other regions, drafting -

Nov. 23-28 - Philippines - Discussion with IRRI, Philippine officials, and visit to irrigation project.

Nov. 29 - Team disperses

Nov. 30 - Dec. 31 - Team members individually follow up on assigned tasks, including drafting of respective sections agreed upon, additional visits of individual team members to other regions as agreed upon.

Jan. 3, 1982 - Team re-assembles in Rome.

Jan. 4-9 - Discussions, preparation of preliminary draft.

Jan. 11-12 - Meeting of team with steering committee.

Jan. 13-15 - Finalization of team report for submission to TAC.
Steering Group, Water Management Study - TAC/CGIAR
1st Meeting, FAO Headquarters, Rome
October 15-16, 1981

Dr. Werner Treitz, Federal Republic of Germany, Chmn.

Dr. Robert K. Cunningham, United Kingdom (will not be able to attend meeting October 15-16)

Mr. Fred Hotes, World Bank, Washington

Dr. Floyd Williams, USAID, Washington

Dr. H. M. Horning, FAO, Rome

____________________, France (individual name not yet confirmed)

Dr. Amir Muhamed, Pakistan (not yet confirmed)

Dr. Adnan Hardan, Iraq (not yet confirmed)

Dr. Norman Collius, Ford Foundation

Dr. M. S. Zehni, TAC member, Libya

Dr. Hussein Idris, Sudan, now with UNDP

Dr. Jan Koopman, Netherlands

Dr. Ralph W. Cummings, Chmn TAC

Mr. Philippe J. Mahler, Executive Secretary TAC

____________________, Interamerican Development Bank (individual name not yet confirmed)
**Water Management Study Team**

Dr. F. E. Schulze, Director, International Land Management Institute, Wageningen, Netherlands — Chairman

Mr. Philip Kirpich, Irrigation engineer, The World Bank, American Citizen, now residing in Athens, Greece

Dr. Robert Chambers, Social Scientist, The Ford Foundation, New Delhi, India

Dr. Matthew Dagg, Agricultural scientist, now on the staff of ISMAR, The Hague, Netherlands; will join the team for its initial two weeks preparation in Rome, but will not be available for the field visits.

_______________ consultant in economics, to be nominated by the Interamerican Development Bank, for assistance in the meetings of the team in Rome.

The team may call in other consultants, if needed, for particular phases of its work.