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**Dates:** 02/01/1972 - 07/01/1973

**Fonds:** Records of the Consultative Group on International Agricultural Research (CGIAR)

**ISAD Reference Code:** WB IBRD/IDA CGIAR-07

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TRV-- BELLAGIO V. CONF. Italy May 1972  
SEMINAR ON TROPICAL SOILS RESEARCH,  
Ibadan, Nigeria 5/15 - 5/25/72



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CGIAR: Bellagio Fifth Conference on International Agricultural Development, May 17-19, 1972 - Correspondence

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BELLAGIO V CONFERENCE ON INTERNATIONAL AGRICULTURAL DEVELOPMENT

The Bellagio Study and Conference Center  
Villa Serbelloni  
Bellagio, Italy

May 17, 18, and 19, 1972



## AGENDA

Theme of the conference: Approaches to accelerating the agricultural development process

Sessions: A.M. - 9:00 - 12:30  
P.M. - 3:00 - 6:00

Wednesday, May 17, 1972

### Session 1, A.M.

Chairman: Joel Bernstein, USAID  
Subject: The status of international agricultural development:  
situation and outlook  
Discussant: Montague Yudelman, OECD

### Session 2, P.M.

Chairman: Sterling Wortman, The Rockefeller Foundation  
Subject: Progress and evolving roles of the international agricultural  
research and training institutes  
Discussant: F. F. Hill, The Ford Foundation

Thursday, May 18, 1972

### Session 3, A.M.

Chairman: Alfred C. Wolf, Inter-American Development Bank  
Subject: New experience and concepts in organizing efforts to assist  
small landholders  
Discussant: Roberto Osoyo, Government of the State of Mexico, Mexico  
Second discussant: Andrew Mercer, IBRD

### Session 4, P.M.

Chairman: Ralph Melville, Overseas Development Administration  
Subject: Research and development gaps  
Discussant: Guy Camus, ORSTOM; The French model for identifying and  
resolving research and development gaps

Friday, May 19, 1972

Session 5, A.M.

Chairman: W. David Hopper, International Development Research Centre

Subject: Organization of capabilities at the international research  
institutes or other centers to deal with  
social and economic problems of agricultural  
development

Discussant: Arthur T. Mosher, Agricultural Development Council

Session 6, P.M.

Chairman: L. J. C. Evans, IBRD

Subject: Resume of the conference

List of participants in Bellagio V Conference on International Agricultural  
Development, May 17-19, 1972\*

Joel Bernstein, Assistant Administrator for Technical Assistance, USAID,  
Washington, D.C.

D. Bommer, Institut für Pflanzenbau und Saatgutforschung der Forschungsanstalt  
für Landwirtschaft, Braunschweig-Völkenrode, Germany

Guy Camus, Office de la Recherche Scientifique et Technique Outre-Mer, Paris

H. G. Dion, Canadian International Development Agency, Ottawa

L. J. C. Evans, International Bank for Reconstruction and Development, Washington, D.C

Lowell S. Hardin, The Ford Foundation, New York

F. F. Hill, The Ford Foundation, New York

W. David Hopper, International Development Research Centre, Ottawa

Omer J. Kelley, Office of Agriculture, Bureau for Technical Assistance, USAID,  
Washington, D.C.

A. R. Melville, Overseas Development Administration, London

Andrew Mercer, International Bank for Reconstruction and Development, Malawi

Arthur T. Mosher, Agricultural Development Council, New York

Peter A. Oram, Food and Agriculture Organization, Rome

Roberto Osoyo, Government of the State of Mexico, Mexico

John A. Pino, The Rockefeller Foundation, New York

G. P. Tiggelman, Landbouwhogeschool, Wageningen

Alfred C. Wolf, Inter-American Development Bank, Washington, D.C.

Sterling Wortman, The Rockefeller Foundation, New York

Montague Yudelman, Organisation for Economic Cooperation and Development, Paris

\*as of April 25, 1972

Tentative participation:

Hans E. Kastoft, Danish International Development Agency, Copenhagen

Ernst Michanek, Swedish International Development Agency, Stockholm

N. Tabe, Institute of Development Economics, Tokyo

*Baird* *copy to*  
*Kelly*

The Rockefeller Foundation

111 WEST 50th STREET, NEW YORK, N. Y. 10020

AGRICULTURAL SCIENCES

CABLE: ROCKFOUND, NEW YORK  
TELEPHONE: COLUMBUS 5-8100

February 16, 1972

Dear Joel:

In discussions held recently a number of agricultural representatives of assistance agencies, most of which are members of the Consultative Group on International Agricultural Research, expressed a desire to continue informal discussions such as those arranged at previous Bellagio conferences. The Foundation has been asked if it might not be willing, on behalf of the various assistance agencies, to host a meeting at an early date in 1972.

The Rockefeller Foundation is pleased to inform you that we have been able to arrange the dates for such a meeting at the Foundation's Study and Conference Center at Bellagio from May 16 (arrival date) to May 20 (departure date). The conference proper would be conducted on May 17, 18, and 19.

I would like to mention here that the proposal to hold such a conference has been discussed with the Chairman and Secretariat of the Technical Advisory Committee and the Consultative Group respectively, who warmly endorse the idea.

The purpose of this letter is to inform you that we are proceeding with plans to hold such a meeting and would like to know whether or not it will be possible for you to participate. At the same time we would like to develop a series of topics which would form the main items of the agenda. As in previous meetings we would like to keep the agenda reasonably flexible but provide an opportunity to discuss specific issues relative to international agricultural development as we see it today.

Among the topics which we have considered for possible inclusion in the conference are the following:

1. New experience and concepts in organizing efforts to assist small farmers, particularly those subsequent to the Puebla Project.
2. Arrangements used by national assistance agencies and international organizations to bring expertise of international centers to bear on needs of less developed nations.

2/22/72

754



There are a number of examples of such efforts now underway which might be reviewed as models for the future. Some of these are as follows:

- (a) AID-IRRI-ICAR program involving the All-India Coordinated Rice Improvement Program
- (b) USAID-FF-CIMMYT arrangements with Tunisia, Morocco, Algeria
- (c) FF-CIMMYT associations with Pakistan, Argentina, and others
- (d) FF-IRRI-East Pakistan efforts to structure a semi-autonomous rice research institute in East Pakistan
- (e) The BID-CIAT-CIMMYT arrangements in training
- (f) FAO-CIMMYT cooperation on wheat improvement in the Middle East and the application of this principle to other crops and to other regions

3. Arrangements by which institutes in the developed nations can contribute significantly to programs of the international centers and through them to a resolution of the problems of the LDC's. There is a wealth of scientific talent resident in universities or research institutes of the developed nations. How can we bring this talent to bear on the development process of the LDC's?

4. Organization of capabilities at the centers or in other institutions for dealing with coordination and conduct of agricultural production efforts. We need some units, strategically placed in the world, which are close to the biological research efforts but also are competent to deal with organization of national efforts, including research and extension services, organizations to supply inputs (fertilizers, pesticides, machinery, etc.), to structure effective pricing systems and means of developing markets. These groups need not be large, but we must find some ways of developing some real interdisciplinary strengths in this field and some new young leaders who are good at managing the development process. A tough subject, but it needs to be addressed.

5. Consideration of new emerging centers of strength in commodity-oriented research, training, and production efforts in the less developed nations themselves. In other words, where are the promising points of growth and effectiveness which perhaps we all should know about and which we might find ways to encourage?

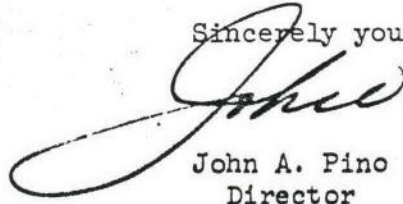
6. Major gaps in research and development efforts. This would be a consideration of the impressions formed at Bellagio II but which did not get much discussion. Beyond the projects getting attention by the TAC, what additional ones loom as high priority efforts?



There may be other topics which you may wish to suggest for inclusion in the agenda. I should be pleased if you would send to me at the earliest date those ideas which we might try to incorporate in the agenda. While we may not be able to include all of these in the agenda, your ideas will be helpful in formulating a constructive and profitable conference.

I look forward to hearing from you at an early date and will keep you informed of further details as the plans for the conference progress.

Sincerely yours,



John A. Pino  
Director

Mr. Joel Bernstein  
Assistant Administrator for  
Technical Assistance  
USAID  
Washington, D.C. 20523

JAP/hz

*Baird's Copy  
Kelley Charn*

AA/TA, Joel Bernstein

TRV: May 16-20, 1972 March 8, 1972  
*Bellagio II meeting*

TA/AGR, Cmer J. Kelley

John Pino's Letter of February 16 Proposing a Meeting at Bellagio  
and Your Draft Reply of March 7

I concur in your reply to Pino, but wish to comment on Item 4. We agree with your position that the kind of activity described by Pino is not appropriate for the international research institute. However, the area of work - that of coordination of production effort at the country level - or managing the development process is so important that it should be discussed, and the Bellagio meeting appears to be excellent forum for it.

We would like to have it viewed in the context of potential inputs by centers of competence in the developed countries such as some of our Land Grant institutions: for example, the pioneering agricultural sector analysis supported by AID at the country level by Michigan State University, North Carolina State University and Iowa University strongly indicate a mechanism of getting at country-level agricultural strategies. The work is not designed to unilaterally do the job of the government of the country, but to assist the country in obtaining and utilizing information which will permit more intelligent decisions (by the government) as to specific steps required to accelerate the development of the agricultural economy. Institutions, such as these universities, could become the centers at which expertise (interdisciplinary group) could be developed and brought to bear in response to individual country needs.

In other words, there is a need for a critical mass of sector analysis strategy experts and associated disciplinary wise specialists who can work cooperatively with and at the request of developing countries. This can be achieved by strengthening and integrating current efforts exemplified by those mentioned earlier.

*Burd Copy to Kelly*

The Rockefeller Foundation

111 WEST 50th STREET, NEW YORK, N. Y. 10020

AGRICULTURAL SCIENCES

CABLE: ROCKFOUND, NEW YORK  
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2/22/72

854



There are a number of examples of such efforts now underway which might be reviewed as models for the future. Some of these are as follows:

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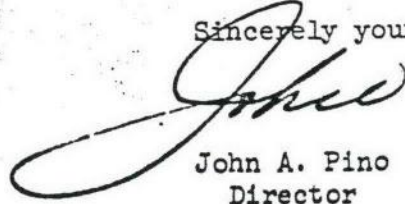
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I look forward to hearing from you at an early date and will keep you informed of further details as the plans for the conference progress.

Sincerely yours,



John A. Pino  
Director

Mr. Joel Bernstein  
Assistant Administrator for  
Technical Assistance  
USAID  
Washington, D.C. 20523

JAP/hz

*Baird*

March 15, 1972

Dr. John A. Pino  
Director, Agricultural Sciences  
The Rockefeller Foundation  
111 West 50th Street  
New York, New York 10020

Dear John:

Thank you very much for your letter of March 6, 1972 inviting me to the proposed agricultural conference at Bellagio on May 16 - 20, 1972. As indicated by Dr. Bernstein, I do plan to attend this meeting and look forward to it.

Dr. Bernstein and I had gone over the points listed in your letter of March 6 to me which are the same as in your letter of February 16 to Dr. Bernstein. His reply to you of March 10 gives both of our thinking with respect to these points.

Further reference is made to our telephone conversation concerning the forthcoming meetings and, as indicated at that time, if I can be of any help to you, please feel free to call upon me.

We look forward to this meeting and believe that it has potentials of being very useful.

Sincerely yours,

Omer J. Kelley  
Director  
Office of Agriculture  
Bureau for Technical Assistance



The Rockefeller Foundation

111 WEST 50th STREET, NEW YORK, N. Y. 10020

AGRICULTURAL SCIENCES

CABLE: ROCKFOUND, NEW YORK  
TELEPHONE: COLUMBUS 5-8100

JUN 28 1973

June 19, 1973

Dear Joel:

At the Bellagio V Conference on International Agricultural Development, which was held in May of 1972, there was an expression of interest in continuing this informal forum for examining various issues of concern to assistance agencies and the LDC's. At the last conference there was discussion about the possibility of holding a meeting in Mexico in 1973, but for various reasons this did not materialize. It is now time to lay plans for the next meeting, which is scheduled to be held March 18-22, 1974.

We have developed a preliminary proposal which incorporates items carried over from the last meeting as well as other new and pressing matters. This proposal is enclosed for your early consideration. Please look it over and return your comments to me at your earliest convenience. I would be particularly anxious to have your recommendations of individuals who might be asked to participate as resource persons for particular sessions. We will put together an agenda for your consideration by the middle of August, by which time I would hope to have your comments.

With Best regards.

1. Comments on agenda items
2. Resource persons

Sincerely yours,

*John A. Pino*  
John A. Pino  
Director

Mr. Joel Bernstein  
Assistant Administrator for  
Technical Assistance  
USAID  
Washington, D. C. 20523

JAP:jr

(Signed in Dr. Pino's absence)

Enc. (2)

present;  
 Certain need more organized outreach  
 activities - i.e., become not  
 opaque - i.e.,  
 more - what  
 yield - something



urgently needed yet are not occurring. For example, at the 1969 IRRI conference on the subject "Rice in the 70's," it was noted that there are some 40 nations which grow 100,000 hectares or more of rice; yet it is probable that only a few of these nations are now benefitting in a major way from technological advances and training opportunities which now exist. The magnitude and seriousness of the job yet to be done should be rather clearly understood. Rice is only one example, and our understanding of the situation with regard to other commodities and problem areas may be even less satisfactory.

Definition of the task before the nations of the world may require organization of a strategic research group, possibly working in close association with FAO, TAC, and various donor agencies, which could be active over several years.

Discussion of this topic should be based on one or more substantial analyses of research and training gaps. This could include the Crawford-Hill strategy paper prepared for TAC, if Sir John thinks it appropriate.

The group in 1972 suggested that two days might be reserved for such discussion of research gaps.

*in last* 3. Linkages. Interests of the 1972 conference are described in section 1.06 of the attached aide-memoire. *Good topic!*

There do exist linkages (cooperative programs) between (a) some universities in North America, Europe and Asia, and the international centers, (b) international centers and developing countries, and (c) institutions in developed countries and those of developing countries. For example:

(i) IDRC and CIDA: cooperative efforts between Canadian universities and CIMMYT on triticales research; between Canadian universities and CIAT on cassava; between institutions in the anglophone and francophone nations. *PURDUE*

(ii) USAID: work on sorghum at the University of Nebraska, Texas A&M University, and institutions in Puerto Rico; cooperation between Purdue University and CIMMYT on high-lysine maize; cooperation between Texas A&M and CIAT on hemoparasitic research programs; cooperation between the University of Nebraska and CIMMYT on nutritional quality of wheat; arrangements for CIMMYT support of national wheat or maize programs in <sup>Tanzania</sup> Zaïre and countries of North Africa; others. *\* These need to be much more strengthened.*

(iii) Ford Foundation: arrangements for IRRI support of national rice programs in several countries of Asia and of CIMMYT support to maize and wheat programs of nations of North Africa and Latin America; the Arid Lands Agricultural Development program (ALAD); others.

(iv) Rockefeller Foundation: collaboration among Turkey, CIMMYT, and Oregon State University on winter wheat improvement; CIAT assistance to Guatemala. *Thailand - maize*



(v) United Kingdom: collaboration between IITA and universities in England in areas such as plant physiology.

The above partial and imperfectly described list of innovative arrangements is meant only to suggest some of the ways in which assistance agencies have arranged for expertise in their institutions to be linked with that of the international centers and in which capabilities of the centers can be brought directly to bear on the needs of individual nations desiring assistance. A discussion of linkages might be based upon 1-2 page descriptions of linkage arrangements already in existence and of others which might be useful.

Particular attention should be given to increased scientific collaboration between the international centers and institutions of nations of Europe.

4. Agricultural education and training for development. A separate series of Bellagio conferences on the subject of education for development has been underway during the past three years. The Rockefeller Foundation is attempting to clarify its own understanding of the needs for agricultural education and training in developing nations, particularly those in the tropics and sub-tropics. There is a possibility that some information of value on strategies would be available by March 1974. Other agencies may have papers available on strategies for improving agricultural education and training. If so and if enough agency representatives feel that this item should be placed on the agenda, it could be done. This might require a fourth day of meetings.

*Handwritten:*  
AIDS  
experts  
Rogers Univ.

The Rockefeller Foundation interests range from preparation at the secondary school level, organization of university undergraduate programs, ways of meeting needs at the graduate level, intensive training of crop and animal production specialists, and in-place training of extension personnel, all of which are important.

5. Suggestions of other agenda items of possible interest to the group are solicited.

Tentative arrangements have been made for the use of the Bellagio Study and Conference Center for a meeting of heads of agencies during the week of May 6, 1974. The recommendations emerging from the March conference of the agricultural representatives would be the basis for discussions of agency heads in May.

Dr. Melville has suggested that a side trip might be arranged to a community development project near Pisa. We would be pleased to have an indication of your interest in participating in such a trip so that appropriate arrangements can be made.

We would also be pleased to have names of possible resource persons.

J. A. P.  
June 1973

AIDE-MEMOIRE

BELLAGIO V CONFERENCE ON INTERNATIONAL AGRICULTURAL DEVELOPMENT

The Bellagio Study and Conference Center  
Villa Serbelloni  
Bellagio, Italy

May 17, 18, and 19, 1972

## AGENDA

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Session 6, P.M.

Chairman: L. J. C. Evans, IBRD

Subject: Resume of the conference

List of participants in Bellagio V Conference on International Agricultural  
Development, May 17-19, 1972

Ewert Aberg, Royal Agricultural College, Sweden

Joel Bernstein, Assistant Administrator for Technical Assistance, USAID,  
Washington, D.C.

D. Bommer, Institut für Pflanzenbau und Saatgutforschung der Forschungsanstalt  
für Landwirtschaft, Braunschweig-Völkenrode, Germany

Guy Camus, Office de la Recherche Scientifique et Technique Outre-Mer, Paris

E. DeLanghe, University of Ghent, Belgium

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Sture Linner, United Nations Development Programme, New York

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Alfred C. Wolf, Inter-American Development Bank, Washington, D.C.

Sterling Wortman, The Rockefeller Foundation, New York

Montague Yudelman, Organisation for Economic Cooperation and Development, Paris

Consultants: Andrew Mercer, International Bank for Reconstruction and  
Development, Malawi

Roberto Osoyo A., Government of the State of Mexico, Mexico

Bellagio V. Conference on International Agricultural Development

Bellagio, Italy - May 17-19, 1972

RESUME OF THE CONFERENCE

Session 1. The Status of International Agricultural Development: Situation and Outlook

Chairman: Joel Bernstein, USAID

Discussant: Montague Yudelman, OECD\*

1.01 General agreement was reached that with respect to agricultural development, important achievements, and changes in the last decade as well as continuing concerns include the following:

- (a) Major scientific and technological breakthroughs in the production of cereals, notably wheat and rice. Elements of these advances, despite limitations, are now in use on an estimated 5 million farms in the developing nations. These advances clearly contributed to India's capacity to deal with the feeding of an estimated 10 million refugees in the crisis of Bangladesh. Yields per unit land area have been rising in some areas as much as 3% annually over the last five years. If this rate could be achieved elsewhere and maintained where such levels now exist and coupled with a 1% increase in land area cultivated, the goal of a 4% annual growth in agricultural output could be achieved.
- (b) Positive attitudinal changes on the parts of many national policy makers in the developing nations with respect to the potential contribution of the agricultural sector to overall development.
- (c) Increased farmer enthusiasm for change in regions where profitable innovations have been successfully developed.

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Dr. Yudelman's paper with underlying analysis and supporting data will be circulated by him to all participants.



- (d) The productive presence of more trained, skilled people and functioning agriculturally-related institutions in many of the Less Developed Countries.
- (e) An increase in the support for agricultural development by both national governments and external assistance organizations (in a period when overall development assistance was not rising in real terms).
- (f) The overriding presence of ever larger, younger, hungry population in the LDC's. Even though farm-level crop yields appear to be increasing, the population pressure leaves no room for complacency.
- (g) Continued relative deterioration in the export demand or terms of trade for agricultural products from the developing nations. While product quality and standardization may be contributing factors, international trade prospects, amongst food products, appear to be most promising for milk and meat.
- (h) Rising concern about the relevance of the two-sector concept of development (Sir Arthur Lewis's neo-classical "subsistence to modern" theory) in many of the low income nations today. Mounting evidence indicates that:
  - (i) High rates of growth of the labor force are likely to continue for many years.
  - (ii) In the modern sector (including agriculture) output is increasing more rapidly than employment, in part due to the use of capital-intensive processes.
  - (iii) Population is exploding in the urban areas. Even in this modern sector growing numbers are unemployed and pressure is rising "to keep the people in the countryside."
  - (iv) Rural populations are continuing to increase absolutely despite heavy out-migration.

*This should receive greater emphasis in working relations*

(j) Mounting concern about the welfare of the less advantaged (the 20% or more bypassed by modernization). If reliance cannot be placed on older development models, how can nations do more about (reconcile where necessary) the multiple objectives of:

- (i) further expanding output (growth);
- (ii) generating productive employment and increased real incomes for small holders, landless laborers, and marginal populations;
- (iii) improving income distribution;
- (iv) producing and moving into consumption higher quality, more nutritious foods (Special note was taken of increasing research, education, and policy work on human nutrition. Emphasis was given to expansion of research on protein quantity and quality in cereals plus the need for expanded work on food legumes.);
- (v) Making public services more generally available (especially in the rural areas).

*need to really get going on this*

Session 2. Progress and Evolving Roles of the International Agricultural Research and Training Institutes

Chairman: Sterling Wortman, The Rockefeller Foundation

Discussant: F. F. Hill, The Ford Foundation

2.01 International network of agricultural research activities

A large number of nations, perhaps 70-80, still are burdened with extremely low productivity of agriculture, particularly of those food crops and animal species which are the sources of livelihood for high proportions of rural people. Many of these nations are relatively new and small; all have limited resources with which to meet diverse and urgent developmental needs, of which agriculture is but one. While these nations

vary in their abilities to meet present food needs or raise farmers' incomes, increasing numbers are seeking to markedly accelerate agricultural output through rapid creation of modern, intensive, science-based farming systems. One prerequisite is appropriate technology for a complex of crops, seasons, and ecological regions - technology which in large part eventually must be generated within the nations themselves, on a continuing basis.

2.02 Factors limiting rapid increases of agricultural production per unit area per unit time, include:

- (a) lack of new, complete, highly productive, profitable combinations of production technology for regions where yields are low and static, and the use of which can clearly be made understandable to farmers through appropriate trials and demonstrations in their own farming areas;
- (b) lack of access by farmers to inputs (i.e., fertilizers, seed, credit, vaccines, feed supplements) required for intensified crop or animal production;
- (c) lack of markets, or of product/factor price relationships which would provide incentive to farmers to increase output.

2.03 To meet, simultaneously and individually, the diverse needs for technology of so many nations, is presently beyond the combined capabilities of the nations and of assistance agencies. The situation must be considered serious if agricultural output, of the poorer countries generally, is to be raised from 2.8% per annum to the targeted 4.0% level - a level which would cover demands of growing populations, with only modest increases in food supply or incomes on a per person basis.

2.04 The concurrent acceleration of agricultural progress by many nations will require continuing, concerted efforts of the nations themselves and of the assistance agencies which would help them. This can best be accomplished through:



- (a) a combination of rapidly strengthened national organizations;
- (b) a limited number of international research and training centers to which nations can turn for assistance specifically tailored to their needs;<sup>1</sup> and
- (c) increased support by centers of specialization of the technically advanced nations.

2.05           A worldwide network of scientific, technical, and action programs is needed which will:

- (a) link together all relevant institutions and individuals able to contribute significantly to the goals of the nations being assisted;
- (b) provide for appropriate division of labor among all cooperators;
- (c) allow for maximum benefits to nations assisted, including rapid development of capabilities of individual nations to sustain their own progress at desired rates;
- (d) allow expertise, wherever it exists, quickly to be brought to bear wherever it would be useful, and to permit problems, wherever they occur, to receive prompt attention by specialists able to solve them.

2.06           Presently, the Consultative Group has agreed to support four established agricultural research institutes (IRRI, CIMMYT, CIAT, IITA). An International Potato Center, the International Laboratory for Research on Animal Diseases (ILRAD), and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) are being organized. Additional institutes, in all probability, will be required. However, care must be exercised that multilateral and bilateral aid to nations and to international centers is kept in appropriate balance, since the measure of success of the total effort will be the advances in the nations to be assisted. Centers to be added to the network must be established to attack problems which likely

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<sup>1</sup> Examples include IRRI, CIMMYT, CIAT, IITA, plus ORSTOM and the GERDAT institutes of France.

could not be resolved in any other way, in the time period available. Consideration should be given to creation of short-term specific programs, whenever possible, to funding of such programs at existing institutions, and to use of workshops or seminars.

2.07 Major and rapid progress has been made with wheat and rice in raising productivity of farms, large and small, in favorable growing areas of Mexico, India, and Pakistan, with scattered successes elsewhere with various crops. In many regions, especially where crop-growing conditions are more difficult, new technology either has not been applicable or has not been developed, if indeed it can be. In many regions, especially in parts of Latin America, population density is high, landholdings are very small, and the farmers are yet to benefit - a situation considered serious, if not explosive, by the nations concerned. This demands serious attention by all who can contribute to identification of effective remedies. These marginal producers - in less favored areas or with small landholdings - require help, and research efforts to the extent appropriate must be oriented to provide suitable technology for them.

2.08 As financial support for international agricultural institutes is broadened, both the institutes and the donors must exercise care to maintain the unique characteristics of the centers which have made them successful. These include apolitical and autonomous boards of trustees; speed and flexibility of action; focus of research and clear-cut goals; highly qualified, internationally recruited staff; long-term assignments for key staff; and stability of support. Broadening of financial support to include private or industrial sources may be explored by the institutes individually or collectively.



Session 3.    New Experience and Concepts in Organizing Efforts to Assist Small Landholders

Chairman:     Alfred C. Wolf, Inter-American Development Bank

Discussants: Roberto Osoyo A., Government of the State of Mexico, Mexico  
              Andrew Mercer, IBRD, Malawi

3.01            The conference had presentations by Roberto Osoyo about small-holder development in the State of Mexico and by Andrew Mercer about the International Development Association-financed rural development project at Lilongwe in Malawi. Common characteristics of the two situations include: small farm size; non-irrigated farming; importance of maize; low educational level of farmers; scarcity of capital and need for farm credit. Common to the approaches used in each case are: reliance on self-help to supplement official aid; necessity of recognizing farmers' self-respect, of gaining their confidence, and of securing their participation in decision-making; and provision of credit in kind at interest rates close to commercial rates. In each case different organizational and institutional arrangements have been devised to suit different circumstances. Other differences include: the use of farmers as demonstrators and extension agents in Mexico, which was not successful in Malawi; on the other hand, a significant role for women in staff positions and as committee members in Malawi, which is not appropriate in Mexico; and the need to provide almost all infrastructure, such as roads, at Lilongwe.

3.02            The conference noted that at a seminar on rural development held earlier in the week at the OECD Development Center in Paris, it had been recognized that rural development schemes depended for success inter alia on political support, populace participation, and heavy input of skills, including good management. On the basis of experience reported in the Mexican and Malawi cases and elsewhere, the conference concluded that:

- (a) rural development projects are not likely to conform to one organizational pattern, but would take different forms in different places and at different stages;



- (b) the prevention of land fragmentation is essential and land consolidation is sometimes required;
- (c) an appropriate melding of agricultural production and social development is essential;
- (d) plans need to be flexible and planners need to look ahead to the stage beyond the end of the official "project";
- (e) it is possible to devise ways of extending credit to small farmers, and small farmers can be good credit risks provided there is a sound technical and financial basis for their farming;
- (f) a satisfactory economic rate of return can usually be demonstrated for properly conceived rural development projects, notwithstanding that the methodology of cost benefit analysis needs to be improved in relation to the estimation of social benefits.

03

The conference felt that the accounts of experience in Mexico and Malawi, and experiences reported elsewhere, are encouraging. (It was recognized, however, that there are situations where a particularly harsh environment or political or institutional constraints may defeat efforts to find a workable approach.) It was recognized that approaches need to be devised for particular situations but that a sharing of experiences of different situations and further comparative analysis (such as that done by Carl Gotch) would be extremely useful. The importance of developing approaches which would reduce the cost per family was stressed.

3.04

Reference was made to two important aspects of the Plan Puebla in Mexico: It not only benefited small farmers in Puebla and the State of Mexico by demonstrating how technologies developed at CIMMYT could be applied by them; it also benefited CIMMYT's maize research work and helped to correct any unintentional institutional bias in the research in favor of larger scale farming. The significance of linking Puebla-type projects to research centers was emphasized, and the conference also recorded its

recognition of the importance of extending and improving rural development approaches in view of the urgent need to find ways of alleviating rural poverty amongst many millions of people in the poorest segment of society.

Session 4. Research and Development Gaps and Linkages

Chairman: Ralph Melville, Overseas Development Administration

Discussant: Guy Camus, ORSTOM

- 4.01 The conference received papers by Guy Camus outlining the structure of the French system of scientific and technical assistance in developing countries. The general characteristics and functions of the organizations constituting the system and the processes by which research boards, committees, or ministries define objectives, identify needs, and shape programmes was explained. Points emphasized were the flexibility of the system, the high-level scientific coordination, and the effective collaboration of French and African nationals in the system.
- 4.02 The importance of training of specialists of many countries was stressed and also the continuous replenishment of the staff of ORSTOM by annual recruitment to fill vacancies, for which the competition is keen. ORSTOM's permanent staff of 550 research scientists includes 150 economists and social scientists.
- 4.03 The conference discussed the ways in which research gaps may be identified. It was noted that the various sources from which suggestions for research might come to the Technical Advisory Committee include inter alia: members of the Consultative Group (comprising donors, sponsors, and representatives of developing countries), meetings such as this at Bellagio, or from members of TAC itself. The procedure by which the ICRISAT proposal had been taken from initiation to final approval was favorably commented upon. Tributes were paid to the outstanding work which TAC has achieved in a comparatively short time.



4.04

The question of the scope of TAC's work, especially in relation to nonbiological research, such as research into problems of unemployment or agricultural credit, was mentioned, and a number of different opinions were expressed. The question of whether TAC should be asked to consider research in industrial crops was discussed. No conclusion was reached, and the conference decided that this question merited further discussion at a future meeting in the context of "research gaps."

4.05

The value to the international centers of their program committees and independent review panels was mentioned by some speakers. Mention was also made of the responsibilities of donors for satisfying themselves about program and budgets of institutes which they supported; it was felt that procedures for achieving this might usefully be discussed at a Consultative Group meeting.

4.06

The conference expressed considerable interest in the question of linkages between research bodies. It was agreed that:

- (a) Appropriate linkages should be built to tie together relevant research activities being undertaken in LDC's, DC's, and at international institutes. Linkage in a network system should enhance the effectiveness of relatively small and scattered efforts by relating them to activities elsewhere.
- (b) International agencies, donors, and international institutes should take initiatives in encouraging and supporting the building of effective linkages.
- (c) In some cases it may be desirable to devise machinery for coordinating or monitoring related research activities of different bodies, to arrange for the exchange of information, and perhaps in addition to identify gaps and suggest how to fill them. Such functions might appropriately be undertaken by an international institute; new centers should not be created simply to undertake such functions, but appropriate means of achieving suitable linkages should be found.



- (d) The matter of linkages is, in the opinion of the conference, important and complex but much remains unclear. A further meeting would be useful to consider the matter, on the basis of papers which would have to be prepared describing examples of existing linkage and network arrangements and experience to be derived from them. The meeting should aim to reach conclusions about linkage arrangements generally and make recommendations to meet the needs of any particular situation where absence of appropriate linkage was judged to constitute a serious gap.

Session 5. Organization of Capabilities at the International Research Institutes or Other Centers to Deal with Social and Economic Problems of Agricultural Development

Chairman: W. David Hopper, IDRC

Discussant: Arthur T. Mosher, Agricultural Development Council

5.01 The conference expressed considerable interest in this subject, on which a paper was presented by Arthur Mosher. It was noted that the next meeting of TAC was scheduled for August 1-4, 1972, and it was decided to defer further consideration of the matter until a reaction could be obtained from the TAC chairman; a copy of Arthur Mosher's paper would be sent to him by Peter Oram together with a copy of a detailed note which Peter Oram would send to all participants of the conference recording the various views expressed in the course of discussion.

6.01 Future Meetings

It was agreed that it would be useful to have another meeting, at which there could be further discussion of:

- (a) linkages (referred to in paragraph 4.06) and
- (b) research gaps (paragraph 4.03)

It was suggested that one day would be needed to discuss linkages and two days to discuss research gaps.

6.02           The Rockefeller Foundation agreed to plan and organize such a meeting and will arrange for appropriate assistance from The Ford Foundation, IDRC, Inter-American Development Bank, and other agencies, especially in relation to the documentation which will need to be prepared for the meeting.

6.03           It was agreed that it would be desirable to plan for such a meeting to take place in the period December 1972 to March 1973. Possible meeting places suggested were Bellagio, New York, IDRC headquarters or at an international research center such as CIMMYT. John Pino undertook to notify prospective participants (including perhaps some representatives of developing countries) when location and timing had been arranged.