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This file is closed as of
December 31, 1974
For further correspondence,
please see 1975/77 files.

CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

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

November 18, 1974

Dear Dr. Wortman:

I am grateful for your explaining last week that commitments can be made by the Rockefeller Foundation only after action by your Trustees and consequently anything said at the fall meeting of the Consultative Group can be taken only as an indication and not as a "pledge". This is quite understandable and many of the other donors (including the World Bank Group) are in the same position. The summary of the meeting will make clear that a number of donors have yet to obtain legislative or board approval.

I am also grateful for your confirmation that the Rockefeller Foundation continues in principle to be ready to allocate up to \$3 million per year to organizations being supported by the Consultative Group. As we discussed, the indications given at the CG meeting totalled slightly more than we calculated the centers need based on their submissions last summer and adjustments notified to us since then. But at the same time, given the economic uncertainties they all face during 1975, we feel this reserve is salutary and may need to be used before the year is out. I was, therefore, very glad to have your assurance that you would, if necessary, be willing to take recommendations to your Trustees for further allocations to selected centers up to a total for 1975 of \$3 million.

I plan to come up to New York in the first part of December after I return from visiting CIP and CIMMYT and would very much like to meet with you, John Pino, and others at the Foundation to discuss the aims and operations of the CGIAR in general.

With best wishes,

Sincerely yours,

Michael L. Lejeune

Michael L. Lejeune
Executive Secretary

Dr. Sterling Wortman
Vice President
The Rockefeller Foundation
111 West 50th Street
New York
New York 10020

D9

C.G.I.A.R. Files

November 15, 1974

Michael L. Lejeune

Rockefeller Foundation
Contribution for 1975

I spoke today to Dr. Wortman, Vice President of the Rockefeller Foundation, about the Foundation's contribution to the system for 1975. I said that traditionally the Foundation had "pledged" \$3 million each year (as did the Ford Foundation) but this year Dr. Pino had indicated how much would be contributed to each center and the sum of these contributions had been \$2.8 million rather than the traditional \$3 million. The difference was the \$200,000 which he had previously indicated to the Secretariat would be granted to the proposed World Food Policy Research Institute, but that this center would not now form part of the system to be supported in 1975. I said I hoped that the Foundation would continue to be ready in principle to supply the full \$3 million, though I doubted we would need the remaining \$200,000 in view of the surplus we already felt we could count on.

Dr. Wortman said that the Foundation stood ready to provide up to \$3 million for the system in 1975. No doubt Dr. Pino has been vague about the full \$3 million because the Foundation never "pledges" at C.G. meetings. Each commitment to each center was subject to action of the Foundation Trustees and hence while indications could be made, no "pledge" could be made in advance of the Trustees meeting in December. Moreover, if the amounts previously planned for the centers came to only \$2.8 million and the \$200,000 for the Food Policy Research Institute was to fall outside the financial plan for the C.G. system as a whole, Dr. Pino would have had no basis for indicating more than \$2.8 million.

I explained that we saw no need at present for the \$200,000 which would make up the Foundation's full \$3 million, but if agreeable to him we would in our presentation show a total of \$3 million for Rockefeller of which \$200,000 would appear (along with overages from others, including the Bank) as surplus to the present identified needs but in reserve for approved contingencies. He agreed to this.

I asked Dr. Wortman whether we could count on his being ready to recommend to the Foundation's Trustees approval of up to \$200,000 for specific allocations in 1975 if needed. He said we could.

We then discussed the attitudes of various donors (particularly the Canadian Government) toward the Food Policy Research Institute and planned to meet in New York for general discussions on C.G.I.A.R. after my return to Latin America.

cc: Mr. Graves
Mr. Cheek
Dr. Coulter
Mr. Gavino

139

November 14, 1974

Dr. Robert D. Havener
The Ford Foundation
P. O. Box 2379
Beirut, Lebanon

Dear Bob,

Many thanks for your letter of 30 October enclosing your paper given at Bellagio VI. I believe that the follow up of this meeting will be in Quebec.

I found the paper very useful for I have been trying to clarify my own ideas on regional activities. I enclose a copy of our Secretariat report on WARDA, which sets out some of the problems on that organization.

A WARDA type operation has the advantage of being a sort of 'home-grown' operation and therefor maybe capable of generating more interest by the territories concerned, but on the other hand it imposes an expensive super-structure on the already overburdened international scene.

Your list on page 9 & 10 of your paper on ways in which national programs could be strengthened is a useful one and could form the basis of a discussion as to which organizations are the best equipped to carry these out. Items 1-6 would appear to be within the role of the Centers; 7 is more properly the domain of the bilateral and multilateral donors; 8 would be a job for the centers where short term help is needed; 9 is within the role of the centers and 10 is generally not, though some centers seem to do this kind of work.

I have recently tried to make an analysis of the various way in which the centers interact with national programs and there are just about as many ways as there are centers. Evolution is the obvious and desirable way of going about this, but as the numbers of centers and the number of demands grow we may have to give more thought to guidelines as to the most probable useful approaches.

It looks as if my visit to Beirut in November - December is not on. It was dependent on a proposed visit to Egypt which has now fallen through. However, I hope to attend the ICARDA sub-committee meetings in Rome in February.

With best regards.

Sincerely,

John K. Coulter

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Proposal for the Formation of an
International Vegetable Research Institute
for the Tropics (IVRIT)

A. Colin McClung
Associate Director for Agricultural Sciences
The Rockefeller Foundation
December 1974

CONTENTS

Foreword	
Introduction	1
Program of the Proposed Institute	5
Objectives	5
Activities	6
1. Research	6
2. Training	6
3. Cooperative research programs	7
4. Outreach	7
Selection of Commodities	8
Relationship to Other International Centers	9
Location	12
Staff and Estimated Operating Budget	14
Physical Plant and Estimated Capital Costs	16
Governance	17
References	19
Annex I. History of the Asian Vegetable Research and Development Center (AVRDC)	
Annex II. "The Role of Horticulture in Meeting World Food Requirements," Proceedings of a Symposium held at the University of Kansas, Manhattan, August 4, 1971, sponsored jointly by the Committees on Food Science and International Horticultural Relations and published by the American Society for Horticultural Science, as a special insert in <u>HortScience</u> Vol. 7 (2), April 1972	
Annex III. Notes on Thailand as a Possible Site	
1. Agro-economic Zones	
2. Access to Educational Facilities	

FOREWORD

The proposal herein presented was prepared for consideration by the Technical Advisory Committee at its February 1975 meeting in Rome. It outlines a procedure which we feel might break the impasse that has thus far prevented the CGIAR from giving full attention to improving vegetable production in tropical areas. The proposal was prepared by the undersigned in consultation with R. F. Chandler, Jr., director of the Asian Vegetable Research and Development Center.

The TAC is asked to look upon this as a preliminary outline for an undertaking which requires considerable additional investigation on the ground and further consultations with scientists, administrators in the field of agricultural research, government officials, and others. We are aware, however, that the TAC has already studied the need for vegetable research in the tropics and that it has been briefed annually on the new but active program of the AVRDC. Some of these matters are reviewed in annexes to the proposal, and various other documents are available if needed. It is our feeling that sufficient background material on the problem now exists to justify an in-depth study by the TAC and the subsequent preparation of a more detailed and definitive proposal which could be brought forward to the CGIAR.

A. Colin McClung
December 31, 1974

Proposal for the Formation of an
International Vegetable Research Institute for the Tropics (IVRIT)

Introduction

An international center is urgently needed to conduct vegetable research in the tropics and to foster increased vegetable production in developing countries. The only international center potentially capable of doing this is the Asian Vegetable Research and Development Center (AVRDC) of Taiwan. Because of political constraints, it becomes increasingly apparent that AVRDC cannot fill this role.

This young center has moved rapidly in establishing a strong program which is well worth studying and which we intend to refer to throughout this proposal. (A brief history of AVRDC and a review of its research program are given in Annex I.) Because of its location, however, it has not been possible to bring AVRDC under the sponsorship of the Consultative Group on International Agricultural Research. A number of potentially interested donors have indicated that they cannot consider contributing to its financial support. This has not as yet materially affected AVRDC's home-base operations, but it is causing serious problems in the development of strong outreach programs in some of the developing countries.

This proposal therefore urges that prompt steps be taken to establish a sister center to AVRDC, which will have CGIAR sponsorship and which interested donors may support both in home-base research and training and in an active outreach program.

AVRDC's core funding through 1980 is reasonably assured, and based on results already obtained, we can expect significant output of new technology over the next few years. Beyond that time, it is not possible to predict what the Center's status

will be. Perhaps it will become basically a national agency. If that were to happen, the proposed vegetable institute could assume international responsibility for maintenance of world germ plasm collections and for research on the selected vegetable crops, and senior staff could be transferred there from AVRDC.

The new center, which we propose calling the International Vegetable Research Institute for the Tropics (IVRIT), should be organized to concentrate initially on the same crops as AVRDC so as to make maximum use of that Center's current and expected output. It might also assume relay responsibilities in Asia for cassava and cowpeas. In addition it should develop the capacity to take over much of AVRDC's international role and to do so without duplication. Scientist-to-scientist exchanges should be sought, but the proposed new center should be administratively fully independent. We further propose that the new center be located in the hot humid tropics, so as to assure maximum program orientation to the areas of greatest need.

The Importance of Vegetables

As a group, the vegetable crops constitute man's richest source of vitamins, minerals, and vegetable proteins; they also add variety, interest, and bulk to diets. They offer one of the best means of upgrading the nutrition of rural people in the tropics, and in addition they have distinct economic advantages.

Two factors work in favor of vegetables as potentially important foods for improving the diets of people in the tropics. First, many of them are high in nutritional value. They contain higher percentages of protein, vitamins, and minerals than do the cereals. Second - and this is often overlooked - many of them grow rapidly and thus may outstrip other crops by an even wider margin on the basis of the amount of nutrients they produce in a given period of time. By this measure, some of the vegetables may surpass the cereals in calorie

production as well as far exceeding them in protein and vitamin content. And farming systems which fit vegetables into combinations with one another and with the cereals offer by far the greatest opportunity for maximizing food production per unit of land and of time. (See Annex II for more detailed coverage.)

These facts tend to be overlooked in the temperate zone, where continuous cropping is not possible because of low winter temperatures. They tend to be overlooked in the tropics because of inadequacies in available vegetable technology. Some of the better vegetables cannot be used in the tropics to their best advantage because of lack of heat tolerance, inadequate disease resistance, and other factors. There is strong reason to believe that a modern research effort can resolve many of these problems.

Another advantage of certain vegetables is their relatively low demand for chemical fertilizer. Sweet potatoes are adapted to low soil fertility conditions and can produce more food with less fertilizer than most other crops. Leguminous crops such as mungbeans and soybeans, have the ability to fix atmospheric nitrogen through interaction with soil bacteria - a distinct advantage in areas where farmers can ill afford any cash outlay for commercial fertilizers. Some vegetables, among them certain brassicas, tend to tolerate acid soils and hence can be grown where many crops cannot.

Vegetable production could also provide a basis for economic gains in the low-income countries of the tropics. Vegetable raising is labor-intensive, an important consideration in areas where rural underemployment is a problem. Vegetables are adapted for small or large-scale production, and the income potential per unit of land is higher for these crops than for the cereal grains.

Tomatoes, soybeans, mungbeans, and the root and tuber crops can represent a source of cash income to upgrade the small producer's standard of living; with introduction of technology for preservation, processing, and storage, such crops could be raised commercially for export as well as for domestic sale. All of these secondary activities would, of course, create jobs. Soybeans and cassava are widely used in livestock feeding; the former is a major commodity in international trade.

Further, relay and multiple cropping in tropical climates is a means of extending the agricultural acreage of overcrowded, land-poor countries like those in South and Southeast Asia, and some in Central America, where pressures on the basic resources of soil and water can only grow worse as land is diverted from agricultural uses to make room for cities, highways, industrial plants, and similar purposes necessitated by growing populations and expanding economies.

Vegetable gardening at the household level is an activity often carried out by women, giving them an opportunity to have a direct influence on the family's diet and to earn part of its income. This pattern is familiar in Europe and the United States, and can also be found in Africa and Asia.

Program of the Proposed Institute

Objectives

The institute will have as its broad objective the development and application of new technology to permit vegetable crops to play a larger role in the nutrition and economic well-being of people in the hot humid tropics. Immediate application of the technology will be directed towards the South and Southeast Asian region, but it should be tested and adapted to other areas with similar agroecological conditions such as West Africa, the Amazon Basin and other low-lying areas of South and Central America, including the Caribbean.

The center will assist interested nations around the world to develop farming systems which will make more effective use of vegetables. This will require close involvement in cooperative research with national agencies and in extension or development programs they enter into. It will also require co-operation with several existing international agricultural institutes.

The IVRIT will focus its first attention on mungbean, soybean, the sweet potato, the Irish potato, the tomato, and the Chinese cabbage. Evidence in the results obtained at the AVRDC and at other places in the tropics and subtropics strongly indicates that major breakthroughs in adaptation of these crops to warmer conditions is possible. Genetic improvement of these species, coupled with better management practices, should have a high pay-off.

It has become increasingly evident that attention to the entire cropping system and not merely to one or several commodities is necessary in order to achieve the twin objectives of increased production and improved living standards. This is particularly true of the vegetable crops which are at their most useful when planted in conjunction with or in sequence with the cereals. They are especially suited to small-scale, labor-intensive farming situations.

Activities

The activities of the IVRIT will be patterned after the IRRI model and will include research, training and outreach as follows:

1. An integrated multidisciplinary research program will be designed to identify bottlenecks in production and to devise solutions to them. Major technological improvement will be sought for each of the crops being studied in terms of (a) yield potential as imparted by plant type, photosynthetic efficiency and tolerance to high temperature, and other physiological factors, (b) yield stability as imparted by plant resistance to disease, insects and drought, to be achieved by plant breeding and/or crop management, and (c) nutritional value as achieved through plant breeding, crop management and better post-harvest handling. Furthermore, emphasis will be placed on the development of varieties that are both high yielding and early maturing, so as to fit into multiple cropping systems.
2. A training program will be closely integrated with the core research effort. It will be planned to provide young scientists with an opportunity to gain experience in their own fields under the direction of qualified researchers. It will also be expected that participants will learn the practical aspects of vegetable crop production as well as research methods. Scholars who intend to make their careers in extension or production activities will be given intensive training in crop management and in communication techniques for introduction of new technology to traditional farmers. Emphasis will be on small farms where vegetable crops are grown in conjunction with cereals and other commodities. Students will learn the art and science of vegetable production per se but they must also understand the whole farming system in which vegetables complement other commodities, providing better diets for the farm family and increasing farm income.

In recent years some very effective techniques of "training the trainer" have been developed at the older international agricultural research centers, particularly IRRI and CIAT. The phased planting techniques of IRRI's rice production training program can be used in certain instances in IVRIT's program. In others, the crop production training program of CIAT may be more applicable. In this program the participants work in teams to plan and operate simulated small farms for one or more cropping cycles. They thus learn to deal with the complex planning and management questions which the small farmer faces.

3. Cooperative research programs in other countries will be established to evaluate the technology generated at IVRIT and to adapt it to specific conditions. This type of extended core or off-station research will be particularly important in the evaluation of breeding materials for their adaptation to the tropics. The cooperating national agency in each country will be a true partner in the development of the new technology.

4. Outreach programs of various types will be established. It is recognized, however, that trained manpower is very scarce in all the developing countries. Most national programs are understaffed in their research and development activities with even major crops and are devoting only marginal attention to vegetables. It is essential that ways and means be found to develop and disseminate vegetable-growing technology with a minimum of dislocation of on-going programs. This will be the aim of the outreach programs of IVRIT. Seed distribution, workshops, and symposia will be among the first outreach activities to be initiated after the center is established. Later, it is expected that in a number of cases the outreach will involve posting one or more IVRIT staff members to national programs. Assisting countries to establish workable seed production arrangements will most certainly be among the outreach activities. The cooperative programs will be funded separately, however, and are not included in this proposal.

Selection of Commodities

The AVRDC made a rather thorough study of the importance of specific vegetables in the Southeast Asian region and of fields of research which offer particular promise with these commodities. They selected six crops for initial attention: mungbeans, soybeans, tomatoes, sweet potatoes, white potatoes, and Chinese cabbage. The section on AVRDC's research program in Annex I, based on reports from the Center, defines the advantages and potential of these six crops and describes the progress made to date.

The IVRIT would initially focus on these same crops and their use under true tropical conditions. It is expected that as the major objectives are attained, there will be substitution of one crop for another. For example, it is expected that within 3 years, varieties of Chinese cabbage will be developed that have much higher resistance to disease attack and the ability to form good heads in the hot summer months. After this is achieved, the effort now being directed toward Chinese cabbage improvement will be directed to another crop.

Several of the species selected for study at IVRIT in the initial stages will probably be continued as major subjects of investigation for many years. Mungbean and soybean for example offer such promise, and the need for improved protein supplies is so great, that work on these species will be expected to continue at IVRIT for some time to come. Basic improvement in these commodities is deemed distinctly possible, but some fundamental work on their physiology will be required. This work, combined with an active program on pest control and agronomic practices, will require sustained effort.

Long-term commitment to cooperative research on the sweet potato is also indicated. This crop is already widely grown in tropical regions for both animal feed and human consumption. Particular attention will be given to nutritional quality of the roots and to disease and insect problems.

Indications are that a quick pay-off can be expected from research on the tomato. Prospects are good that heat-tolerant, disease-resistant lines can make it possible to produce this popular, high-quality food in tropical areas where it cannot presently be grown economically. During the first five to seven years, IVRIT will give top attention to this crop. Beyond that, it might be phased down as a research project and a different species taken up for similar intensive attention.

The Irish potato is a popular food in nearly every area, but its production is presently limited by its lack of heat tolerance. The International Potato Center (CIP) in Lima, Peru is giving worldwide attention to this crop and expects to evaluate an exceptionally large amount of genetic material for a range of characteristics including temperature tolerance and resistance to disease. Indications are that the area of adaptation can be considerably extended. IVRIT will focus on the production of potatoes in warmer areas and in warmer seasons of the year than those in which it has traditionally been grown. This may open possibilities of growing potatoes at lower altitudes in the tropics than previously and fitting the crop into cropping sequences where it is not now usable. However, if after a few years significant progress is not being made in developing a tropical white potato, its program will be discontinued.

Relationship to Other International Centers

The program of IVRIT proposes a new dimension to the integration of the worldwide agricultural research network. Initially IVRIT will not be working on any commodity independently of the other international centers. Instead, IVRIT will carry out studies (1) on the adaptation to the tropics, worldwide, of several commodities also being investigated at other centers and/or (2) on

the introduction and adaptation to the Southeast Asian region of technology arising at international centers which are also located in the low humid tropics or which are studying problems or commodities useful to these ecological regions.

The description of the proposed program of IVRIT, given in preceding sections, has focused on "1" above and we will return to some of the organizational implications of this effort, particularly as regards collaboration with AVRDC.

But the second kind of collaboration deserves particular attention in regard to making maximum use of the CGIAR network on a worldwide basis.

Those of us who are particularly aware of agricultural developments in South and Southeast Asia have for some time been concerned with effective mechanisms for assuring that these regions receive maximum benefit as promptly as possible from the work being done in the tropics of Africa and Latin America. The work at IITA on cowpeas is extremely promising, as is that with cassava both at CIAT and at IITA. We have mentioned the work of CIP on potatoes adapted to warmer regions. Each of these centers has an active outreach program, deeply concerned with the full utilization of their research output. But the distances to Southeast Asia are large and interchanges are inevitably slowed down. These centers need an anchor point or relay station in the region of the order of CIAT's small but highly effective rice program, which has been invaluable in bringing IRRI-based technology to Latin America. CIMMYT's influence on corn research in Asia has likewise been greatly enhanced by the Bangkok-based Inter-Asian Corn Program. We see a similar need emerging for introducing other technology to Southeast Asia in the immediate future as the output of other centers burgeons. ICRISAT's work with the food legumes could well benefit from an outpost in the region. Thus an important additional function of IVRIT would be to serve the international network as a

Southeast Asian base. We recommend that this aspect be carefully evaluated as IVRIT's proposed program is studied.

To broaden the involvement of IVRIT in a wider range of crops should not dilute its effectiveness provided the added commodity is technically backstopped by a major program of one of the world centers. CIAT's rice work underlines this point. Backstopping from IRRI has been provided in entomology, pathology, soil science, cereal quality and even production training. With this sort of help, CIAT's small rice team has tackled some rather complex problems in the South American region.

It will, of course, be essential that clearly understood working relationships be established between centers. The technical program must be developed with full collaboration of the center basically responsible for the commodity, while administrative responsibility rests with the relay station. Major reliance would, of course, be placed initially on cooperation between IVRIT and AVRDC. We propose that AVRDC maintain and expand the germ plasm collection and make most of the crosses designed to increase disease and insect resistance, heat tolerance, productive capacity, nutritional quality etc. These crosses would be made with particular reference to the range of problems facing production in the tropics as well as in the less severe conditions of the subtropics. Part of the seed from segregating generations of the crosses would be sent to IVRIT for evaluation and selection. The balance would be evaluated at AVRDC's home station which is representative of the subtropical regions of the world.

AVRDC would also be expected to continue its fundamental studies in physiology, entomology, pathology, and biochemistry. Scientists of AVRDC would be expected to visit IVRIT at regular intervals and to participate in cooperative studies, training programs, and other activities.

The IVRIT staff would thoroughly evaluate large segregating populations derived from crosses made at AVRDC, CIP and other cooperating centers. At a later stage, crosses might be made at IVRIT, but initially the effort would be to evaluate material under a range of conditions representative of the monsoon climate with 6 to 11 rainy months a year and to come up with significantly improved vegetable varieties.

Systems of management for the rolling uplands of the tropics as well as for use in the low-lying wetter lands would be sought. For both systems IVRIT would seek collaborative ties with agronomists from IRRI and the national agencies who are working on cropping systems research.

IVRIT would emphasize an international training program along the lines mentioned elsewhere in this proposal. It is expected that scholars from the tropical countries would generally undertake studies at IVRIT rather than AVRDC. In fact, if after 1980 the political situation develops adversely as far as AVRDC's operations are concerned, it might prove necessary to discontinue AVRDC and concentrate all the programs at IVRIT.

Location

Earlier we indicated that the center should be in the hot humid tropics. More specifically, suitable conditions might be expected in the zone from 15°N to 15°S latitude at altitudes of no more than 100 meters. The headquarters site should be one that receives from 1200 to 2000 mm. of rain per year, but it would be undesirable to have greater or lesser amounts. It would, further, be desirable if contrasting ecological conditions could be found reasonably near the home station, such as locations having higher or lower rainfall or lower temperature resulting from differences in altitude. The main station should, however, be located squarely in the hot humid tropics.

The center should, if possible, be situated close to an agricultural college or university. It should be reasonably near a major urban center with good international airline connections. It should be located in Southeast Asia because of the already established interest in vegetables, the density of rural population, and especially because of the acute food needs of the region.

Places fitting this description reasonably well could undoubtedly be found in the Philippines, Indonesia, Thailand, Malaysia, and perhaps elsewhere in the region. Before a final decision is reached various possibilities should be explored.

We have already raised the question with officials in Thailand, a location where essentially all of the requirements could be met, and we received an extremely favorable reaction. It seems likely that IVRIT, if located in Thailand, would receive a warm reception and much local support. Government officials assured us that the foreign staff of IVRIT would receive the same privileges that are now provided for the Rockefeller Foundation programs that have been operating successfully in Thailand for a number of years.

Our attention was called particularly to the new site of Kasetsart University at Kamphaengsaen, about 15 miles northwest of the city of Bangkok. A large tract of land has already been purchased by the Government of Thailand, and construction is starting on major new university facilities. The rector of Kasetsart, Prince M. C. Charabandhu, expressed the view that the University would welcome the proposal and would be able to release ample land. (See Annex III.)

The site is connected to Bangkok by good hard-surfaced roads, and housing of IVRIT senior staff in the city would be reasonably convenient. A new road is under construction which would shorten travel time from Kamphaengsaen to the city and would particularly improve access to the international airport. Bangkok has modern medical facilities and an excellent international school.

The environmental conditions at Kamphaengsaen are typical of much of monsoon Asia. It is located at about 14⁰ north latitude and is less than 100 meters above sea level. There are 6-7 rainy months; the mean temperature is 28⁰C, and the average annual rainfall is 1200-1400 mm. The region produces a range of crops, including vegetables grown commercially for the Bangkok market.

At Songkhla, about one hour south of Bangkok by air, rainfall is about 2800 mm. and there are 11 rainy months. Chiangmai, about an hour's flight north of the city, is at a higher elevation and could serve as a site for studies at cooler temperatures. Excellent research and training facilities also exist at Farm Suwan in the hills north of Bangkok where the Inter-Asian Corn Program is presently based. It is possible that arrangements could be made for IVRIT to participate in cooperative work at that site as well.

Staff and Estimated Operating Budget

Careful study of staff and budgetary needs will be required as plans for IVRIT are developed. Not only will adjustments in staffing plans bring about changes, but cost differences from place to place make it difficult to estimate requirements without detailed local inquiries. Also, worldwide inflationary trends make it necessary to have the latest information about basic cost data. We feel, however, that it would be desirable at this point to make some estimates of what size operation is indicated and what the approximate costs might be.

Because of the similarity of its program orientation to that of AVRDC, the IVRIT will be able to make direct use of most of AVRDC's output, and hence can be expected to function effectively with a smaller staff than would otherwise be the case.

We have estimated staff requirements for IVRIT on the presumption that its operating procedures will be similar to those of AVRDC and IRRI. The cost figures are based on what we expect would be needed if the center were located near Bangkok, Thailand. Our estimates are as follows:

A. Administration

Director
Associate director
Executive officer

B. Senior scientific staff

1 Legume specialist
1 Root crop specialist
1 Tomato specialist
1 Entomologist
1 Virologist
1 General pathologist
1 Horticulturist (crop management)
1 Soil microbiologist
1 Food technologist
1 Training officer
1 Information specialist

14 Senior professionals (salaries and perquisites) \$ 420,000

C. Support staff

4 Intermediate-level administrators
(comptroller, farm manager, property superintendent,
librarian) 40,000
60 Research assistants 144,000
30 Secretaries, accountants, bookkeepers, library
assistants, and clerks 60,000
25 Drivers, mechanics, carpenters, plumbers, electricians,
etc. 50,000
125 Field laborers, janitors, gardeners, etc. 210,000

D. Supplies and miscellaneous expenses for all departments 230,000

E. Equipment for all departments 230,000

F. Foreign travel (including home leave for foreigners) 136,000

G. General expenses (power, fuel, operating vehicles,
insurance maintenance) 350,000

Grand total annual operating expenses \$1,870,000

Staff in categories "A" and "B" above will be recruited from international sources. Some undoubtedly will be from the host country, but selection will be based on the principle of finding the best available person for the job. Staff in category "C" will be locally hired.

The staff described above will be reinforced by visiting scientists, post-doctoral fellows and resident scholars and trainees.

Physical Plant and Estimated Capital Costs

Land requirements for the center will amount to about 100 hectares at the headquarters site. Soil at the site should be mostly medium to light in texture. It should have or be provided with irrigation as well as drainage facilities. This area would be used mostly for experimental fields and training activities (including training in management of simulated small farms) but it would also accommodate the center's research training and support buildings. If a site is chosen at which it will be necessary to provide housing for senior staff and perhaps other categories of employees, additional land and capital funds will be needed.

We suggest the building plan described in the following outline. It is based upon the experiences of IRRI and AVRDC. As regards space requirements and kind of facilities, costs are those which might be encountered in Thailand, although, as we mentioned, inflationary and other price trends need to be closely watched.

A. Administration and laboratory building

(1) Administrative offices, accounting, conference room and related facilities	350 square meters
(2) Offices for 10 scientists	550 square meters
(3) Eight laboratories	1120 square meters
(4) Space for 30 research assistants and scholars (others are in laboratory and field building)	250 square meters
(5) Two offices for visiting scientists	50 square meters
(6) Library	360 square meters
(7) Auditorium (130-150 persons)	800 square meters
(8) Corridors, air-conditioning facilities, storage rooms, toilets, etc.	3500 square meters

Total floor area 6980 square meters at \$150/sq. m.

\$1,047,000

B. Service building (shops, field labs, seed and root storage, work areas) 4800 square meters @ \$100/sq. m.	\$ 480,000
C. Cafeteria-dormitory (space for 45 trainees and a guest house section for eight. Classrooms would be included) 3,800 square meters @ \$150/sq. m.	570,000
Bedrooms, including guest house and matron's quarters	1,830 sq. m.
Dining rooms, recreation hall, etc.	920 sq. m.
Laundry space, quarters for employees, etc.	350 sq. m.
Classrooms	300 sq. m.
Corridors and stairways	400 sq. m.
Total	3,800 sq. m.
D. Head house and greenhouses (imported portions included in equipment list)	200,000
E. Experimental farm development	300,000
F. Roads, storm drainage, sewer system, deep well, water system, power station	350,000
G. Equipment for experimental farm, automobiles, all laboratories, library books, air conditioners, etc.	1,500,000
H. Locally bought furniture and decorating	<u>300,000</u>
Grand total	\$4,747,000

Governance

It is suggested that IVRIT be governed by an international board of trustees of 12 members. Three members would be ex officio: the director of the center, and two top-ranking agricultural officials of the host country. Three members would be nominated from among the donor agencies, which would presumably be members of the CGIAR. The balance would be made up of six individuals selected by the board from among leaders in science and education in the countries served by IVRIT.

The board would be a self-perpetuating body. Members other than those who are ex officio would be elected initially for two, three, and four years. Thereafter they would be elected for three-year terms. They would not serve more than two consecutive terms.

The board would meet at least once annually. They would be responsible for reviewing the program of the center generally in accordance with practices employed in the CGIAR system. They would also approve and authorize major programs, budgets, and staff positions.

The board would select and appoint the director of IVRIT, who should be a scientist-administrator, reporting directly to the board.

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ANNEX I. History of the Asian Research and Development Center (AVRDC)

The AVRDC is located at Shanhua, Taiwan, Republic of China. Its headquarters site is on 216 hectares of land provided by the Republic of China, a few miles to the north of Tainan, at 23' 7" north latitude. The Center was formally organized on May 22, 1971, for the purpose of improving the production possibilities of important food crops in the Asian subtropics.

Building construction began in January, 1972, and made rapid progress. Dr. Robert F. Chandler, Jr., well known for his leading role in the creation of the International Rice Research Institute, accepted the directorship in August, 1971, but could not assume full-time responsibility for the Center until July of the following year. However, starting early in 1972, he devoted brief periods of time to planning the physical plant, organizing the administrative structure, and assembling an international staff. By October of that year, the AVRDC was able to occupy its administration building, its laboratory building, the service building, and eight residences for senior staff.

In 1973 the Center built six more senior staff residences, an apartment house for six research associates, and six greenhouses. During the latter part of that year, work was begun on the cafeteria-dormitory building, which was completed by the end of 1973. Further improvements in the experimental fields will be made when funds are available. As of the end of 1974, the physical plant was fully completed and equipped.

The development of the Center as it exists today represents the culmination of an effort that originated over ten years ago. In April, 1963, the United States Agency for International Development (USAID) suggested to 12 of its missions in Southeast Asia that they consider the possibility of the establishment of a research institute to improve the diet of the Asian people by increased production of protein and vitamin-rich vegetable foods. Nine countries responded, expressing an interest in such an institute. Taiwan was chosen as the potential site, and in 1966 an exploratory project was launched to determine the basis for establishing a regional vegetable production and marketing research center for

Southeast Asia, under the auspices of the Sino-American Joint Commission on Rural Reconstruction and USAID.

Surveys of vegetable production and marketing problems were made in the Philippines, Thailand, South Vietnam, Laos, Malaysia, South Korea, the Ryukyu Islands, and Taiwan. A Provisional Planning Committee composed of representatives of the Republic of China, South Korea, the Philippines, South Vietnam, Thailand, and the Ryukyu Islands and experts from Japan and the United States met in 1966; at a second meeting in 1968 a representative of the Asian Development Bank was also present.

In the mid-1960's agricultural officials of the Government of Taiwan visited the International Rice Research Institute in the Philippines to examine its organization and methods of operation, with the purpose of determining whether a similar pattern of organization might be used in a vegetable improvement center.

Taiwan had already pushed its rice production to a level unequalled elsewhere in the tropics and had developed intensive cropping systems which combined rice with other crops, particularly the vegetables. Taiwan's success with multiple cropping served as a standard for agriculturalists throughout the region. These scientists had found, however, that poor adaptability to tropical conditions often placed strict limits on the uses that could be made of many of the vegetables, particularly as they were moved into regions having higher temperatures and higher rainfall. Here the problems encountered in the subtropical parts of Taiwan became more and more acute. Improving the reliability and productivity of certain major vegetables as an integral part of very intensive cropping systems seemed to be a goal of sufficiently broad interest to justify an international effort similar to that of IRRI.

By 1971 sources of financing for the proposed center had been identified, and an organizational meeting was held in Taipei. The Center was chartered and a Memorandum of Understanding was signed by representatives of the Asian Development Bank, Japan, South Korea, the Philippines, Thailand, the United States of

America, South Vietnam, and the Republic of China. These eight major donors are represented on the Board of Directors. At a subsequent meeting, Dr. T. H. Shen of the Republic of China was elected chairman of the board of directors and Dr. Phit Panyalakshana of Thailand, vice-chairman.

One of the first jobs to be done in outlining an effective institutional structure for the AVRDC was to decide which commodities would be given attention and at what level of intensity, since the vegetable crops offer a great diversity of material to be evaluated and improved. As many as 100 different crops have been classed as vegetables by botanists, and of these perhaps as many as 20 genera could be identified as important food crops. In the preliminary proposal of 1968, 26 vegetable crops were listed as having major importance for the countries of Asia, for either nutritional value, good shipping and keeping qualities, or high economic value. Of these 26, AVRDC scientists chose 18 as having high priority.

Through consultation with the Technical Advisory Committee of the CGIAR, the list was reduced to 12: mungbean, tomato, eggplant, sweet potato, onion, Chinese radish, the two types of Chinese cabbage, water convolvulus, sweet corn, and melons. Finally, the scientific staff of AVRDC decided to concentrate on five from this list and to add soybeans. The definitive choice was: the mungbean, Vigna radiata (syn. with Phaseolus aureus); the soybean, Glycine max; the tomato, Lycopersicon esculentum; the sweet potato, Ipomoea batatas; the white potato, Solanum tuberosum; and the Chinese cabbage, Brassica Pekinensis.

AVRDC staff was recruited during 1972 and 1973 for the departments of plant breeding, plant pathology, plant physiology, entomology, soil science, and chemistry; supporting staff for the administrative, experimental-farm, and library services were also hired during that period. Senior scientists on the Center's staff represent six nations; a junior cadre, called "research associates," was

created for young scientists with Ph.D. or M.S. degrees; these positions are filled mainly by Chinese at the present time.

The AVRDC receives strong local support and is a thriving institution. A measure of its successful development can be attributed to Taiwan's highly developed intensive agriculture and strong farm-level interest in improved vegetable-growing materials and methods. The farming community of Taiwan sets a high standard, and any agricultural research institution associated with it must meet high expectations.

Research progress since the initiation of the program has been substantial, and funding for the core program is assured through 1980. AVRDC has developed cooperative scientist-to-scientist relationships for testing of their materials at research centers in several countries of Asia and at the international research institutes. However, political sensitivities are proving to be a serious obstacle to the development of true outreach programs, and lack of sufficient financial support restricts the Center's expansion.

Progress of AVRDC's Research Program

Research on the six vegetable species chosen for major attention by AVRDC has focused on eliminating the main barriers to higher production levels in the tropics and subtropics; large-scale breeding and selection programs have been based on collection and screening of germ plasm collections for each of the crops. The collections presently contain the following number of accessions:

Tomatoes	3,800
Soybeans	4,500
Mungbeans & related species	2,200
Sweet potatoes (clones & seedlings)	1,691
White potatoes	1,501
Chinese cabbage	303

In a short span of time, the AVRDC has made substantial progress with most of these crops. A rapid synopsis of the programs will give some idea of their current status and suggest their potential for use in subtropical climates.

• The mungbean, an ancient and well-known leguminous crop in Asia, is an excellent source of protein and is eaten in many forms, including bean sprouts, green beans, boiled dry beans, and noodles. In the Philippines it is widely used in soups. Yet it has never received the level of research attention directed to most other important food crops.

Research at AVRDC has demonstrated that the average yield of 700-800 kg/ha obtained by farmers in South and Southeast Asia can be raised to over 2,000 kg/ha by the use of superior varieties. One of the chief limitations on mungbean production in Southeast Asia and Taiwan is Cercospora leaf spot disease, caused in this area by C. canescens. Plant pathologists have screened over 2,000 types of mungbeans and have identified resistant varieties, which can double yields to over 1,200 kg/ha. A major insect pest, the bean fly, can damage and destroy some species that show up to 100 percent infestation, whereas others have been found that have no more than 10 percent. Scientists at the Center are now making crosses between resistant varieties and those that have better plant type. A plant having a determinate growth habit and early maturity is desirable for certain countries; plants that produce a large number of well-filled pods are also being sought. AVRDC has made approximately 1,000 crosses, each month adding new materials to the crossing block, in the search for a superior mungbean. Scientists at the Center expect to achieve varieties that will give up to three metric tons per hectare. The next step will be to test the Center's varieties throughout South and Southeast Asia, particularly where there are virus diseases of the mungbean that do not exist on Taiwan. Plant density, soil management and fertilization, and other aspects of cultivation are also being studied.

The soybean is a major world crop, particularly in the United States, Brazil, and China. However, varieties for the Asian tropics have never been developed. Those Asian countries (such as Japan and Taiwan) sufficiently affluent to support a large domestic animal population import huge quantities of soybeans for feed. The main early objective of AVRDC is to find a variety or group of varieties that are non-photoperiod-sensitive, and yet that require about 35 days from planting to initial flowering. Many of the day-length neutral varieties from America grown in the tropics and subtropics during the summer months flower too early and do not develop enough of a plant to produce a real crop. By screening some 1,800 varieties out of the total germ plasm collection, scientists have found 212 with photoperiod insensitivity at 23° 7" north latitude. Among these several have a flowering period of around 35 to 40 days after seeding.

Varieties have also been found that have considerable resistance to soybean rust, which can cause up to 50 percent loss in crops under Asian conditions. Resistance has also been identified to downy mildew, purple seed stain, root knot and cyst nematodes, and a virus disease.

Yields of up to 4,000 kg/ha have been obtained by increasing population densities to 400,000 plants per hectare. (The best farmers in Illinois can get 6,000 kg/ha, but the average yield there is 2,000 kg.) Soybeans at AVRDC showed a marked response to nitrogen fertilization, suggesting a need for careful evaluation of microbiological aspects under local conditions and perhaps elsewhere in the tropics.

• Tomatoes were chosen for attention at AVRDC because they are a popular crop almost everywhere, and besides offering an excellent source of vitamins A and C, they can be an important cash crop for small farmers. However, tomato growing in the tropics is subject to many hazards; the most serious problems are lack of tolerance to high night temperatures - associated with failure to set fruit -

and high susceptibility to the bacterial wilt disease Pseudomonas solanacearum.

As a result, the tomato is a highly seasonal crop in the Asian subtropics, limited to the cooler, drier season.

Breeders at AVRDC have screened the world collection for tolerance to high night temperatures (22°C and above) and have found 31 varieties that will set fruit in the hot season. These have been crossed with lines that carry resistance to bacterial wilt and to tobacco mosaic virus, and the resulting crosses are being sent out for testing in other countries. Sources of resistance to other diseases have also been found in the collection, including leaf mold, gray leaf spot, early and late blight, and root knot nematode. AVRDC scientists predict that varieties will soon be available that can be grown the year round in the tropics.

• Sweet potatoes can feed more people from one hectare of land than rice can; they are a good source of vitamin A and contain more minerals than rice does. The tops can also be eaten as a source of protein, vitamins, and minerals. But unfortunately, sweet potatoes are an underrated, low-prestige food in the tropics of Asia.

In screening the world collection, AVRDC scientists have found a variation in protein content from 2.25 to 9.25 percent. Vitamin A also showed considerable variation - from 0 to 22 mg per 100 grams of beta-carotene on a fresh-weight basis. The Center expects to be able to develop varieties that have at least 8 percent protein on a dry-weight basis and at least 15 mg of beta-carotene per 100 grams of fresh weight.

Yields also can be greatly increased. A record yield of 100 metric tons per hectare was achieved in 140 days, but a shorter growing season has advantages that outweigh some loss in yield. Varieties that promise a harvest of 40 to 50 tons per hectare in 90 days - a good showing compared with the average 20 tons achieved by most farmers - are considered within reach by AVRDC scientists.

• There are no commercial varieties of white potatoes for use in the hot humid tropics, or for the hot rainy summer months in the subtropics. AVRDC's potato program is aimed at developing a variety that will form tubers in these conditions, by testing materials assembled from CIP, the University of Wisconsin, and other centers working on potato breeding. A number of selections have been found which this year produced tubers of 100 grams - two or three times the size of those obtained in earlier tests. The work is continuing, with the aim of developing a variety suitable for commercial use - or possibly reaching the conclusion that it is impracticable.

• The heading type of Chinese cabbage is another extremely popular crop that has seasonal difficulties in Asia. Although well adapted to higher altitudes and cooler seasons in the tropics, in hot weather it does not form heads and is susceptible to attack by several serious diseases. The two chief objectives of the research program are to develop varieties having resistance to bacterial soft rot and to breed for sizable heads during the summer months. Screening of the germ plasm collection has resulted in identification of sources of both disease resistance and heat tolerance. By crossing Korean lines that have good disease resistance with Taiwanese lines showing more of a tendency to head in the hot weather, a good-sized head of Chinese cabbage was produced, an achievement which is viewed at the Center as something of a breakthrough. The scientists are continuing to seek further development of this line and expect that within a few years they will have a variety superior to anything that now exists.

About 17 varieties that have apparent immunity to bacterial soft rot have been identified, and the selections are being used in the crossing program. Breeders hope to combine bacterial soft rot resistance with heat tolerance, to

produce a Chinese cabbage variety for the tropics in the near future. Sources of resistance to downy mildew and turnip mosaic virus have also been found in the germ plasm collection.

Another major consideration that entered into the choice of the six crop species to be given primary attention by AVRDC was shipping and keeping qualities. It is estimated that as much as 60 percent of food products grown in the tropics is lost to various agents of spoilage - microorganisms, chemical reactions, naturally occurring enzymes, and insects and rodents. The mungbean and soybean can be dried and stored for long periods with relatively inexpensive facilities. The white potato, too, can be stored using methods within the reach of farmers. Sweet potatoes are more perishable, but can be shipped to urban markets without difficulty. The tomato processing industry is developing rapidly in tropical Asia, particularly in Taiwan, Thailand, and the Philippines. Thus tomato growing near a cannery is a practical investment in these countries.



A site to be considered for the proposed International Vegetable Research Institute for the Tropics (IVRIT) is at Kamphaengsaen, Thailand (above), on land belonging to Kasetsart University. A new campus-experimental station complex currently being developed at this location is expected to be completed by 1979.

Annex III. Notes on Thailand as a Possible Site

1. Agroecconomic Zones

The agroecconomic zones of Thailand have recently been studied in detail under the auspices of the Thai Government, in connection with agricultural development for the nation's next five-year plan. Crop potentials have been identified for 19 major zones, to guide producers in the use of resources and to encourage investment in promising crops.

A soil survey has also been carried out by the Government in collaboration with the FAO. Data on the potential site for IVRIT's headquarters and on the locations for possible cooperative work at Thai national stations are available from these two sources, as follows.

The Kamphaengsaen location, proposed as the headquarters site, lies in a zone designated as suitable for rice and other rotation crops. Its soils are broadly classified as poorly to well-drained loamy or sandy soils on semi-recent alluvium, with moderately high potential for increased production. Both poorly and well-drained areas occur on the Kasetsart campus site. Crops of potential interest for increased production in this area include rice, maize, soybeans, mungbeans, peanuts, sesame, and tobacco. Yearly rainfall is between 1200 and 1400 mm, and the mean temperature is 28°C. The monsoon is from 5.5 to 6.5 months.

The town of Songkhla lies in an area recommended by the agroecconomic survey for rice, rubber, coconut, cattle, and coffee. The region has generally well-drained sandy to clayey soils on old alluvium or residuum and colluvium from acid rocks. Crops suggested by the soil survey for possible increased production include kenaf, cassava, maize, cotton, tobacco, sorghum, castor beans, peanuts, fruit, and soybeans. The area has from 7 to 11 humid months, with minimum temperatures of around 23°C in January and maximum temperatures up to 34°C in April.

Chiangmai, located in the northern region of the country, is in an area

recommended for growing leaf tobacco, soybean, and cattle. Its soils fall into a class of miscellaneous land types, some with laterite near the surface, which are not generally suited for cultivated crops except in small areas. There is already a keen interest in intensifying production in the better sites, because of the shortage of land. However, its potential for increased agricultural production is considered poor as compared with that of other parts of the country. (The purpose of choosing this site is its cooler climate, which will permit preservation of germ plasm and varietal tests under lower temperatures.)

2. Access to Educational Facilities

Establishment of IVRIT's headquarters at Kamphaengsaen would give staff and students access to two major educational institutions which have programs related to agricultural development: Kasetsart University and the Asian Institute of Technology.

Kasetsart, Thailand's main agricultural university, was established in 1943; today it has nine faculties: Agriculture, Economics and Business Administration, Engineering, Education, Fisheries, Forestry, Science and Arts, Veterinary Science, and a Graduate School. The University confers the degrees of B.S., M.S., and D.V.M.. Enrollment in 1972 was 3,960.

The Thai Ministry of Agriculture has research programs in agriculture, fisheries, livestock, and rice centered at Kasetsart and cooperates in the University's training programs. The Rockefeller Foundation-supported Inter-Asian Corn Program is also headquartered there.

The main campus is in Bangkok; five other centers are located in different regions around the country. One of these is at Kamphaengsaen, about 25 miles northwest of Bangkok, where a major new facility is being established.

Land amounting to about 1,400 hectares has been purchased and is being developed into a modern campus-experimental station complex. Funds from a World Bank loan are available for the building program, which is scheduled for completion about mid-1979.

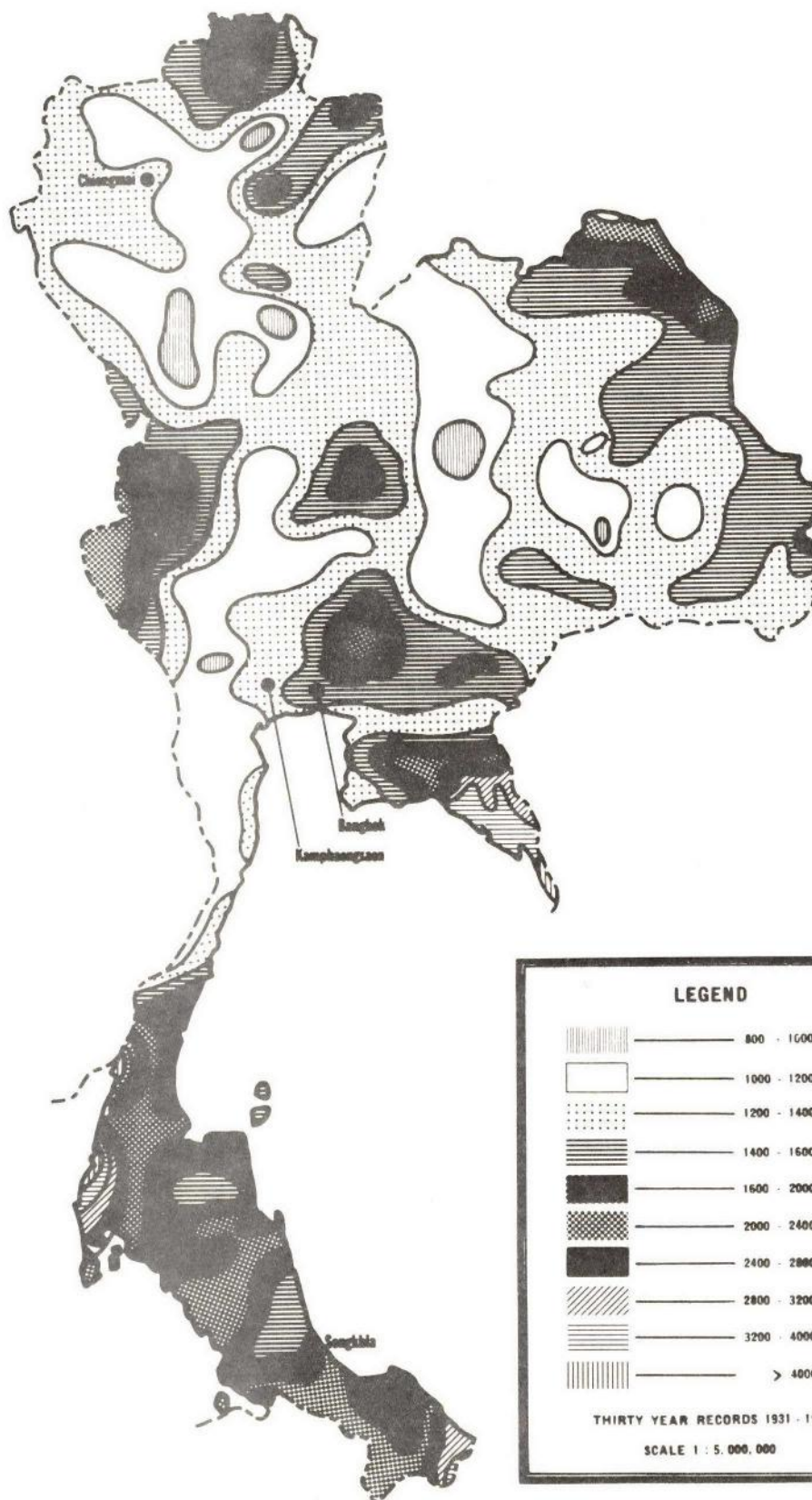
The new campus will be closely integrated with the old one at Bangkhen, and facilities at both places will be used interchangeably. The general plan is for students to be located at the old campus for the first two years and to spend the last two (or more) at Kamphaengsaen. When the present building program is completed, the new facilities will accommodate about 1,500 students out of an expected total of around 5,500. Those studying at Kamphaengsaen will be third and fourth-year undergraduates and graduate students from various University units, including agriculture, veterinary science, engineering, economics, and education.

The Asian Institute of Technology, located some 20 miles north of Bangkok, would be about a half-hour's drive from the proposed IVRIT site. A.I.T. is an advanced school of engineering operating as an autonomous institution under international auspices and drawing support from the Governments of Australia, Japan, New Zealand, the Republic of China, Thailand, the United Kingdom, and the United States and the Lee Foundation of Singapore.

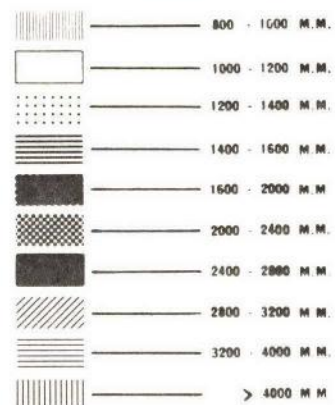
A.I.T. offers academic programs in engineering leading to a diploma, a Master of Engineering, a Master of Science, and a Doctor of Engineering degree. Fields covered include environmental engineering, soil engineering, applied earth sciences, development, irrigation engineering, agricultural engineering, and other areas related to the interests of the proposed vegetable research center. Present student enrollment is over 300 and is expected to increase considerably.

A.I.T. has well-equipped laboratories, including several soil laboratories, and an outstanding library. Courses are given in English.

These two centers represent high-level educational resources, offering potential opportunities for collaborative research and training arrangements with IVRIT.



LEGEND



THIRTY YEAR RECORDS 1931 - 1960

SCALE 1 : 5,000,000

D8

October 10, 1974

Dr. F. F. Hill
The Ford Foundation
320 East 43rd Street
New York
New York 10017

Dear Frosty:

During our very brief meeting at Centers Week I expressed the hope that we might be able to meet in more leisurely circumstances to discuss some of the issues in agricultural research in the tropics. I look forward very much to such a meeting as it would enable me to draw on the unique experiences of the Foundation in international agricultural research.

With a view to having some discussions, I could visit you at the Ford Foundation on the afternoon of October 24. I plan to stop off at UNDP headquarters on my way back from IITA and meet with Gordon Havord on the morning of the 24th. If you are not available at that time, then we can, I hope, arrange a mutually convenient time at a later date.

I think we could take as a starting point some of the issues raised by David Bell in his letter of August 14, 1973, to the President of the Bank. There are four issues, he suggested, which should be a major part of the initial assignment of the senior professional in the CGIAR. These were relationships between centers' outreach and national research programs, forward financial planning, recruitment of top scientists and the formulation of new projects.

The centers obviously need to do and be seen to be doing a first-rate job in agricultural research since they not only have considerable funds invested in them, but they also carry the belief of a lot of people that the system is the best way of supporting international agricultural research. They also carry the aspirations of many more people that their results will improve their lot in life. They provide not only the "material" goods for progress, e.g., new varieties, but also the concepts for improving tropical agriculture, concepts hitherto largely transferred from temperate agriculture.

The question of the interaction of the Centers with national research programs is therefore of the utmost importance. The Centers can be likened to the central research organization in a large industry. This provides the ideas and goes through the pilot plant stage, but it is the engineers and the marketing men who provide the final package for the consumers and this second stage costs a great deal more than the original research. Without it, however,

the project is a failure. By this analogy therefore we would expect national programs to take projects at the pilot stage and put them through the "engineering" and "marketing" stages. Unfortunately many national programs just do not have the resources to do this so the tendency seems to be to extend the centers' mandate more widely to take care of the secondary stages of projects. To do this properly will require vastly increased resources and I doubt if these will ever be available to the Centers. On the other hand, some national programs, possibly for purposes of prestige, tend to concentrate too much on a pale imitation of the Centers' programs.

This seems to suggest that we could usefully give much thought to the inter-action of the Centers and national programs and ways in which scientists of national programs can operate without considering themselves "second class" citizens of the scientific fraternity.

There was some useful discussion at the July Consultative Group meeting which suggested that the outreach programs of centers could be classified into those which centers needed to do to test their materials, those which they were invited to do to help national programs and those which they were invited to do in collaboration with donors, usually on a fairly closely defined aspect. Perhaps conceptual distinctions of this nature could be very useful.

The second part of the Bell letter, forward financial planning, is obviously of great importance too. The CG Secretariat has managed to have the centers put forward fairly uniform budgeting procedures but I feel that some of the Directors regard this as an exercise to keep the Secretariat happy rather than a useful part of their own planning mechanism. As funds become less readily available, forward financial planning becomes even more important. The last thing we want the centers to do is to have to make arbitrary expenditure cuts at short notice.

On the point about formulation of new projects, I am not clear myself how this works at present. (I don't include here proposals for new centers). Most of the ideas seem to come from the centers; how the TAC is supposed to deal with these depends on how they are presented, I suppose. As long as money was readily available, there was no lack of new ideas coming forward from the centers, but will this continue under financial restraints, particularly as it may mean cutting out other programs? I would like to think that the centers will be encouraged to come forward with new ideas and new initiatives, but presumably the Consultative Group and other donors will have to be more selective in deciding what to support. Nevertheless, I hope that we (and that includes all those interested in international agricultural research) could perhaps develop some ideas which we think the centers might consider. Should we, for example, ask the centers to develop novel ideas to deal with national programs and should we encourage some pilot projects, for instance, or is the diversity of conditions so great that we cannot hope to get beyond ad hoc arrangements? Should we encourage the idea of centers of excellence

October 10, 1974

within the centers? I am thinking here of drought tolerance, for example. Should one center concentrate on more basic studies on the physiology of drought tolerance, i.e., should one or more centers develop a strong field in one or other discipline?

Another point is that of the centers attempting to quantify the physical environment over which they are operating. You may remember that I worked with some people at IRRI on an initial project of this nature. In a recent conversation with Haldore Hanson, he was asking about the possibility of a similar approach for CIMMYT's programs. FAO and WHO have the raw data for this type of approach; perhaps they should be asked to arrange it into systems which would help the centers' objectives.

Farming systems research is another field where I would like to have a really critical look. I am sure that work must be done on this but I cannot, myself, get any feeling for the time span which will be required for this approach to make any impact. It is certain, however, that if any fairly revolutionary ideas emerge from the work, a great deal of adaptive research will be necessary at the local level. It would be useful to me if we could define, more clearly, the social and economic as well as the physical environment in which fairly revolutionary systems are likely to have an impact.

I have no shortage of questions, all of which I am sure have been discussed before and some of them perhaps resolved but nevertheless I would appreciate talking them over with you.

With best regards,

Sincerely yours,



John K. Coulter

JKCoulter:apm

D-7

October 1, 1974

Dear Mr. Bourrier:

Mr. Hulse no doubt will have mentioned to you the informal meetings which Consultative Group donors are intending to hold in New York and London this month, primarily for the purpose of comparing notes on their intentions concerning contributions to international agricultural research programs for 1975. We are looking forward to seeing Mr. Hulse at the meeting which is to be held in the offices of the Overseas Development Ministry in London on October 16.

In the meantime, I am sending you, for forwarding to him, two papers which donors will have in hand at these informal meetings. One paper is a set of notes on Center budgets, briefly mentioning any questions still outstanding in the evaluation of those budgets and suggesting, in some cases, which expenditures might possibly be deferred or reduced if that seemed advisable to donors.

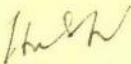
The other paper is a table showing a suggestion by the Secretariat of what allocations might be made by donors to individual research programs and how these might be fitted together to meet the needs of these programs. Some of these figures are those which were declared by the donors in question in the Consultative Group meeting last August 2; others are simply best estimates by the Secretariat which do not necessarily correspond to what donors actually have in mind.

Sincerely yours,

Harold Graves
Executive Secretary

Enclosures

Mr. G. R. Bourrier
Assistant Director
Agriculture Division
International Development Research Centre
Box 8500
Ottawa
Canada K1G 3H9


HGraves:apm

October 1, 1974

Dear John:

With this letter, I am sending you copies of two papers that we should have in hand at the informal meeting of donors in New York on October 9.

One paper is a set of notes on Center budgets for 1975, briefly mentioning any questions still outstanding in the evaluation of those budgets and suggesting in some cases where expenditures might possibly be deferred or reduced if that seemed advisable to donors.

The other paper is a table showing a suggestion by the Secretariat of what allocations might be made by donors to individual research programs for 1975 and how these might be fitted together to meet the needs of the programs. Some of these figures are those which were declared by the donors in question in the Consultative Group meeting last August 2; others are simply best estimates by the Secretariat which, as we may discover in New York, do not necessarily correspond to what donors actually have in mind.

Sincerely yours,

Harold Graves

Enclosures

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

Identical letters to: Dr. Lowell Hardin, Ford Foundation
Dr. Joel Bernstein, USAID
Mr. Peter Kilburn, C.I.D.A.
~~Mr. Alfred Wolf, IDB~~
Mr. William T. Mashler, UNDP

hwh
HGraves:apm

D9

CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

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

October 1, 1974

TO: Consultative Group Donors
FROM: Executive Secretariat
SUBJECT: Allocations to International Agricultural
Research Centers, 1975

1. Attached is a sheet showing a possible pattern of allocations from donors to international agricultural research programs in 1975. Observations by the Secretariat concerning the budgets for these programs are presented below:

CIAT

2. It appears that the core and capital requirements of CIAT, presented by the Center at \$6.06 million, can be met in full. If reductions were thought desirable, the proposal to add \$500,000 to CIAT's working capital fund could be scaled down, perhaps by \$100,000, and an item of \$60,000 for processing equipment in the meat laboratory could be deferred until 1976, without damage to the CIAT program.

CIMMYT

3. The core and capital requirements of CIMMYT are shown at \$7.07 million. This is a figure proposed by the Secretariat and does not, in the opinion of CIMMYT, make adequate allowance for inflation in Mexico. At the time of International Centers Week, CIMMYT's budget proposed an allowance of \$1,159,000 for rising prices, based on an estimate that inflation in Mexico would continue at a rate of more than 20 per cent annually. The Secretariat thought that such a rate could not continue without devaluation of the peso, from which CIMMYT, which receives most of its income in dollars, would derive some benefit. Taking the possibility of devaluation into account, the Secretariat proposed an inflation allowance of \$695,000, or 12 per cent, and the further accommodation that CIMMYT would be allowed to draw from its working capital to the extent that domestic inflation, after any offset from devaluation, exceeded 12 per cent.

4. This arrangement was accepted by CIMMYT for the time being; but the Center intends to submit a further note on inflation for consideration by donors. This note can be expected to argue, on the basis of CIMMYT's evaluation of recent price and wage trends, that its original estimate was conservative. In the meantime, the Secretariat is advised by World Bank economists dealing with Mexico that a devaluation of the peso no longer can be considered likely and that they expect inflation in Mexico to proceed at an annual rate of around 15 per cent.

5. Aside from the question of an allowance for rising prices, the Secretariat does not believe that further reductions in the CIMMYT budget are desirable. It already has been possible to reduce CIMMYT's 1975 capital budget by \$188,000 as a result of a special contribution by Germany in 1974. CIMMYT already has deferred the filling of important senior posts for well over a year, and should not be asked to delay further if that can be avoided.

CIP

6. It appears that the core and capital budget, at \$2.46 million, can be met. It is possible that IDRC may yet make a contribution to CIP's needs in 1975 which would be additional to the amounts shown in the table; but this is not certain.

ICRISAT

7. It was originally hoped that construction of ICRISAT's permanent installations might begin as early as July 1974; the present prospect is that construction is not likely to begin before January 1975. Some reduction of disbursements in 1975 might therefore be possible. New bids for construction, however, are being asked for and have not yet been received; and in the meantime, no firm cost figures are available for ICRISAT. In any case, it can be argued that donor contributions are linked to a time period (1975-78) rather than to a detailed schedule of disbursements.

8. Donors agreed at a meeting in Washington in April 1974 to make \$8.08 million available to ICRISAT in 1975; and it appears that this target can be met. Even if it is unlikely that this amount actually could be spent in 1975, the existence of an unexpended balance with which to begin 1976 could be very useful to ICRISAT and the Consultative Group.

9. Construction aside, there is a further question about ICRISAT which donors should specifically consider. Do they wish to give financial support to the inauguration of a groundnut program by ICRISAT in 1975? TAC suggested that this work should be approached cautiously because of the extra managerial load it would put on ICRISAT. The total of contributions shown in the attached tabulation does not cover the \$300,000 proposed in the ICRISAT budget for the groundnut program in 1975.

IITA

10. It appears that the IITA budget of \$7,115 million can be met. The Institute's allowance for inflation seems too low, but this deficiency is offset by a contingency item of \$200,000. If a reduction in this budget were considered desirable, the construction of additional housing for 4 senior staff, estimated to cost \$300,000, could be reduced or delayed until 1976.

IRRI

11. It appears unlikely that more than the amount shown (\$7.7 million) can be found for IRRI in 1975. The Secretariat believes that IRRI probably can carry on its activities within this figure without abnormal delays in, or omissions from, the program it presented to the Consultative Group for 1975. At the time of International Centers Week, IRRI proposed a budget of \$8.32 million, net of earned income. Since then, an advance contribution of \$250,000, available in 1974, has been found for IRRI's capital development program; and the figure shown for IRRI requirements has therefore been reduced to \$8.07 million.

12. The Secretariat believes that IRRI expenditures can be reduced by another \$330,000 through normal delays in new staff appointments (which IRRI has budgeted to be effective for 12 months in the year as against a 9-month figure used by other Centers, and as against still lower ratios observed in other institutions) and by reducing amounts for which no specific expenditure is foreseen (i.e., an appropriation of \$500,000 to working capital and a contingency item of \$120,000).

13. On the other hand, the bids for IRRI's construction work have not been received, and they may be in excess of present estimates. The plans for IRRI's construction, at the request of the Secretariat, have been examined by an engineer from the mission maintained in Manila by the U. S. Agency for International Development and have been found to be satisfactory from the standpoint of economy in design and specifications.

ILCA and ILRAD

14. The estimates now shown for these two Centers are lower than those presented at the time of International Centers Week, and represent new estimates prepared at the request of the Secretariat by the Director of ILCA and the Chairman of the Board of Trustees of ILRAD.

Genes Board

15. At the date of this memorandum, no specific information was available to the Secretariat concerning the program and budget of the International Board for Plant Genetic Resources. The program proposals of the Board were dispatched to the members of TAC on September 27, and members were asked to communicate their reactions as quickly as possible directly to the Consultative Group Secretariat as well as to the TAC Secretariat; but it is possible that the recommendations of TAC will not be available until after the Consultative Group meeting of October 30-31. In the meantime, the Secretariat believes that the amount shown is a reasonable allowance for planning purposes.

WARDA

16. The amounts shown for WARDA are simply those which, in the opinion of the Secretariat, can reasonably be expected from donors who are known to

have an interest in the work of this Association. The Secretariat would not be prepared to justify a different figure until donors have had a chance to consider the results from a fact-finding mission sent to WARDA by the Secretariat; the mission report may not be complete before mid-October.

Middle East Center

17. So long as the initial stage of this Center does not involve the commencement of operations, the Secretariat believes that an amount of \$350,000-\$400,000, as shown, would constitute an initial fund adequate to carry preparatory work through 1975.

Aquaculture

18. Contrary to earlier expectations, no budget proposals for aquaculture projects will be presented to the Consultative Group for 1975.

CARIS-AGRIS

19. The proposed program and budget of this project for 1975 and 1976 was circulated to members of the Consultative Group on behalf of FAO on October 1. The two donors who supported the pilot work on this project in 1972 are Belgium and the United States.

Attachment

POSSIBLE PATTERN OF CGIAR ALLOCATIONS, 1975 (\$'000,000)

DRAFT 10/1/74

<u>TOTAL</u>		<u>CIAT</u>	<u>CIMMYT</u>	<u>CIP</u>	<u>ICRISAT</u>	<u>IITA</u>	<u>IRRI</u>	<u>ILCA</u>	<u>ILRAD</u>	<u>GENES</u>	<u>WARDA</u>	<u>MID EAST</u>	<u>CARIS</u>	<u>Un-allocated</u>
1.320	Australia				.415		.455	.300						.150
.555	Belgium					.380		.090			.055		.030	
4.105	Canada	.800	.835	.320	.800	.850			.400		.100			
.250	Denmark			.220				.030						
2.800	Ford	.600	.600			.750	.800					.050		
.175	France							.150			.025			
3.200	Germany	.200	.200	.080	.560	1.120	.040	.400	.400	.200				
3.700	IDB	1.645	1.685	.370										
1.100	IDRC		.100		.350		.600					.050		
.700	Japan						.700							
.290	Kellogg	.290												
.850	Netherlands			.150		.150	.150		.150	.150	.075	.025		
.730	Norway				.730									
2.900	Rockefeller	.600	.600	.100		.550	.700		.200	.100		.050		
2.130	Sweden			.220	1.275			.110		.270	.100			.155
.460	Switzerland	.115		.115	.230									
2.240	U. K.	.090	.090	.115	.480	.575	.460	.090	.230	.060		.050		
2.045	UNDP		.970		.850			.200				.025		
11.200	U. S.	1.510	1.760	.770	2.020	1.770	1.900	.450	.530	.200	.120	.050		.120
4.570	World Bank	.210	.230		.370	.970	1.900	.065	.260		.100	.050		.415
45.320	AVAILABLE	6.060	7.070	2.460	8.080	7.115	7.705	1.885	2.170	.980	.575	.350	.030	.840
45.740	REQUIRED	6.060	7.070	2.460	8.380	7.115	8.070	1.885	2.170	.980	.790	.400	.360	
	NET	=	=	=	-.300	=	-.365	=	=	=	-.215	-.050	-.330	

D10

September 24, 1974

Dear Jerry:

We have been in touch with the Kellogg Foundation regarding their contribution to the centers for 1975. Dr. Fahs had attended the Presentation Days in July but not the session of the Consultative Group where many donors had indicated their intentions for the coming year. Dr. Fahs has confirmed that the Foundation will contribute \$290,000 to CIAT for 1975. I am writing to let you know that we are attributing their contribution to your core budget.

Meetings with the other North America-based donors and the European donors have been set up for October and we shall be in touch with you on these broader financial matters as soon as practicable.

With best wishes,

Sincerely,



Bruce M. Cheek

Dr. U. J. Grant
Director General
Centro Internacional de
Agricultura Tropical
Apartado Aereo 67-13
Cali
Colombia

cc: Mr. Lewis
BMC:mcj

D9

September 23, 1974

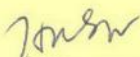
Dear John:

This is in response to your letter of September 12 concerning the third payment to Siemens for the electron microscope assembly. An order to make this payment to Siemens was cabled to Frankfurt on September 12.

Sincerely,

Harold Graves

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


HGraves:apm

D7

OFFICE MEMORANDUM

TO: Files

FROM: Harold Graves *HG*

SUBJECT: Canada

DATE: September 19, 1974


The new chief of the division of multilateral affairs in the Canadian International Development Agency is Mr. Peter Kilburn, who thereby becomes the Canadian representative to the Consultative Group. I paid a brief and informal call on Kilburn on September 17, and saw him again the next day, when he was an observer at the meeting of the steering committee for the International Food Policy Research Institute.

Kilburn is almost totally uninformed about the Consultative Group, although he doubtless will be a quick study. He was a member of the staff of the Pearson Commission, and spent about a year in the Bank in that capacity.

HGraves:apm

Files

D10
September 12, 1974

Bruce M. Cheek 

Kellogg Foundation -- Support for CGIAR in 1975

On September 4, I telephoned Dr. N. Fahs of the Kellogg Foundation to check with him on the level of support which the Foundation would give to CGIAR activities in 1975. He had attended the presentation sessions of Centers Week but not the actual meetings of the Consultative Group on August 1 and 2.

He confirmed that Kellogg would continue its support at about \$290,000 per year for the communications and training program of CIAT. He also referred to the approach by Dr. Sawyer during Centers Week concerning possible support for CIP. Dr. Fahs said that Kellogg would give favorable consideration to a request from CIP for funding part of its core program. He awaited a specific proposal from Dr. Sawyer. Finally, he confirmed that the interest of Kellogg was confined to Western Hemisphere centers.

BMC:mcj

D10

DN

August 28, 1974

Dear David:

Thank you for your letter of August 16 concerning the meeting to be held at IDRC on the subject of the establishment of an International Food Policy Research Institute. This note will confirm my intention of attending the meeting (and of occupying a room at the Carleton Towers Hotel on September 16 and 17). I will let Mr. Hannah know about my arrival plans in the next day or two.

Sincerely yours,

Harold Graves

Dr. W. David Hopper
President
International Development Research Centre
Box 8500
Ottawa
Canada K1G 3H9

HGraves:apm

HGraves

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

BAP

430
cc: D7.

OUTGOING WIRE

TO: HALLAM
INTERNATIONAL DEVELOPMENT RESEARCH CENTRE
OTTAWA

DATE: JULY 15, 1974

CLASS OF
SERVICE: TELEX 0533753

WV

Ext. 3592

COUNTRY: CANADA

TEXT:
Cable No.: URGENTLY NEED TO KNOW AS OF ANY RECENT DATE TOTAL IDRC EXPENDITURES
FOR INTERNATIONAL LIVESTOCK CENTER FOR AFRICA. PLEASE TELEX OR
TELEPHONE. REGARDS

GRAVES

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Harold N. Graves

DEPT. Agriculture and Rural Development

SIGNATURE *Harold N. Graves*
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: HNG/els

CLEARANCES AND COPY DISTRIBUTION:

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430
-cc: D7
March 20, 1974

International Development Research Centre
2197 Riverside Drive
Ottawa, Ontario
Canada

Gentlemen:

As is noted in the Preamble of the draft Memorandum of Agreement between the Empire of Ethiopia and the Bank, dated August 6, 1973, the African Livestock Subcommittee of the Consultative Group on International Agricultural Research "has asked the Bank to act as Executing Agency to bring the proposed center into being, and to that end to enlist the cooperation of the International Development Research Centre (hereinafter referred to as IDRC) pursuant to arrangements to be made between them." It is further noted in Section 13 (c) on page 15 of the draft that "the Bank has agreed, within the limitation of funds donated by members of the CGIAR, to act, with the cooperation of IDRC, in taking steps to establish the Center in accordance with the provisions of this Memorandum..."

I am now writing on behalf of the Bank to confirm the understanding between the International Development Research Centre (IDRC) and the Bank about their cooperation in establishing ILCA. In accordance with that understanding, IDRC's contribution towards the establishment of ILCA already has included arrangements for the preparation of a list of nominees to the Board of Trustees of ILCA, for the recommendation of a choice of sites for ILCA's headquarters and for research to be undertaken in Ethiopia, and for the preparation of estimates of the capital expenditures needed to construct and equip ILCA's facilities in Ethiopia.

In addition, the Bank and IDRC expect that IDRC will arrange for

- (a) continuing provision of a project development officer to assist in the above and other tasks associated with the establishment of ILCA; and
- (b) the performance of such other functions as may be agreed from time to time between IDRC and the Bank.

International Development Research Centre

March 20, 1974

IDRC and the Bank shall closely cooperate to ensure the successful establishment of ILCA. To that end, IDRC and the Bank shall from time to time, at the request of either party, exchange views through their representatives, and furnish to the other all such information as it shall reasonably request, with regard to the establishment of ILCA and its activities during the initial stage of its development.

Would you please signify IDRC's agreement with the above by countersigning the attached copy of this letter and returning it to the Bank.

Sincerely,

Michael L. Hoffman
Director
International Relations Department

Authorized Representative
IDRC

MS
HGraves/Michael L. Hoffman:apm

Cleared with Legat KPH

D7

February 6, 1974

Dear Barry:

Thank you very much for your letter about IDRC support of CIAT. We will adjust our tables accordingly.

Sincerely yours,

Harold Graves

Dr. B. L. Nestel
International Development
Research Centre
Apartado Aereo 53016
Bogota, D. E.
Colombia

cc: Dr. U. J. Grant

Ind
HGraves:apm

D9

December 28, 1973

Dear John:

Following our telephone talk this morning, I am enclosing two items: two copies of the "Budget Format" paper dated June 18, 1973 which is being followed by the centers in preparing their 1975 budgets, and which was followed fairly closely for 1974 as agreed among the directors at their February 1973 Bellagio session; and a copy of the two-page outline of points which we have given CIP, IITA and CIAT as being the points which we thought their program and budget papers (to be submitted in draft by March 31, 1974) should cover.

Regarding TAC, the Secretariat will be contacting the co-sponsors and then the CG members on the question of replacement of Pagot (retiring after February, 1974 TAC meeting) for the remainder of his term ending December 31, 1975; and concerning the renewal/replacement of the three members retiring at the end of 1974 -- El-Togby, Sauger and Elgueta. Meanwhile, if you have any suggestions re the Pagot slot please let us know. Crawford would like to see him replaced by another animal scientist.

With best wishes for 1974,


Sincerely,



Bruce M. Cheek

Enclosure^s

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



BMCheek:apm

November 30, 1973

Dear Dr. Pino:

I am very interested to have your letter of November 20 and to know of the steps you have been taking to encourage Mexico's interest in the Consultative Group. If the possibility of membership in the Consultative Group is pursued further by the Mexican Government, I should be glad to discuss the matter with the co-sponsors of the Group.


With best wishes,

Sincerely yours,

Warren C. Baum

Warren C. Baum
Chairman

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


BM Cheek:mcj

Files


September 20, 1973

Bruce M. Cheek

IADB Contribution to International Agricultural Research Centers

Mr. Knapp called me on September 20 regarding Mr. Demuth's memorandum of September 18 to Mr. McNamara on the above subject.

Mr. Knapp has spoken to Mr. Ortiz Mena, President of IADB. Mr. Ortiz Mena has approved the proposal that local currency funds (in the Social Progress Trust Fund) be made available for use by the three international centers in Latin America. This decision is subject to approval by the U. S. Treasury. The proposed formula is, as indicated by Mr. Demuth, for the IADB contribution to be equivalent to 3% of center needs, or \$1 million equivalent in 1974.


BCheek:apm

cc: Mr. Baum

✓ D7
cc: 53a

CG Files

August 23, 1973

Harold Graves

IDRC Grant to ICRISAT

In a telephone conversation yesterday, Mr. Hulse of IDRC said that the IDRC had agreed on a 2-year grant to ICRISAT which would be applied to ICRISAT's capital program: it would be used to pay for equipment (but not construction) required in ICRISAT's legumes program.

HG:mcj

John

D8

THE FORD FOUNDATION
320 EAST 43RD STREET
NEW YORK, NEW YORK 10017

DAVID E. BELL
EXECUTIVE VICE PRESIDENT

August 14, 1973

Mr. Robert S. McNamara
President, International Bank for
Reconstruction and Development
1818 H Street, N.W.
Washington, D.C. 20433

Dear Bob:

As you suggested, I am recording in this letter some of the comments I made on the telephone Friday about the recent meeting of the Consultative Group on International Agricultural Research. Hill, Hardin and I all thought it was a good and useful meeting, particularly marked by the thorough involvement of the Center Directors, the excellent performance of Sir John Crawford and the TAC, and further progress in fund-raising.

Looking ahead, we see several problems on which it seems to us stronger leadership on behalf of the Group will be required:

1. Important conceptual issues are coming to the fore, concerning relationships among the "core programs" of international Centers, their "outreach" projects, and the building of national research and extension capacity in less-developed countries. It is not only natural but essential that these issues arise, and that the Centers be seen increasingly as elements of a world-wide system. But the consequence could be much confusion and wasted effort unless these conceptual issues are carefully thought through and all concerned are working in the same direction.

2. The forward financial planning for the Group is still rudimentary. The TAC is providing increasingly clear indications of research needs, but a systematic means for relating research needs to potential financial availabilities, for considering the competing claims of existing and new Centers against inevitably

Mr. McNamara
AUG 17 1973

August 14, 1973

limited financial resources, and for involving the donors in forward planning of financial availabilities beyond the immediate year ahead, has still to be devised. There has been no major difficulty thus far, but as the Group approaches \$30 million in annual funds, heading rapidly toward \$50 million, and the number of Centers and programs coming within the Group's responsibility multiplies, it seems to us increasingly urgent to improve the Group's forward planning processes.

3. In the last year or two, we have all seen the crucial importance of first-quality scientific leadership in each Center, and the scarcely less crucial importance of first-quality membership on the Centers' Boards. Without infringing in the slightest on the essential autonomy of the Centers, we believe there needs to be more attention paid to these matters on behalf of the Group, to accomplish a number of objectives - for example, to think systematically about how to enlarge the pool of potential Center Directors (especially non-Americans) and of Board members; to make sure that the best experience becomes standard practice in establishing procedures for making appointments of new senior staff to the international Centers; to develop appropriate means for ensuring transfer of experience to the Boards of new Centers. (It is possible that this point should be broadened to cover other personnel issues, such as the best means to ensure the maintenance of top-quality scientific staffs at the Centers, without depriving less-developed countries of their best research talent.)

4. Until now, the consideration of possible new Centers has been handled on a catch-as-catch-can basis, with TAC, the Bank, FAO and various donors playing differing roles in different cases. Without straight-jacketing desirable sources of initiative, it should be possible to develop a somewhat more regularized process for reviewing new ideas and bringing them to the Group for decision.

These are in our opinion broad and difficult problems which should concern all members of the Group. The Foundation has tried and will continue to try to contribute as strongly and sensibly as we can to their solution. But as the Group's concerns have inevitably grown larger and more complex, we have come to believe that to deal effectively with these problems will require strengthening the Bank's staff, and we recommend specifically that you consider adding a full-time, senior professional to be concerned with the work of the Consultative Group. We have in mind someone who would have professional standing with the Centers and with the donors, and who could without limiting the autonomy or authority of either Centers or donors contribute in a major way to the evolution of the international agricultural research system that by now has such a promising start. The four problems listed above should in our opinion form a major part of the initial work assignment for such a person, but there are many other issues which will inevitably arise.

Mr. McNamara

-3-

August 14, 1973

Needless to say, this recommendation should in no way be interpreted as critical of the work of the staff the Bank has assigned to the secretariat of the Group. We think their efforts have been admirably energetic and effective. We simply consider that the time has come to augment them with additional strength.

We would be delighted to discuss these comments with you or any of your colleagues if that would be helpful.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Dave".

David E. Bell



Record Removal Notice



File Title Consultative Group on International Agricultural Research [CGIAR] - D7 to D10 - Members / Foundations - 1972 / 1974 Correspondence - Volume 1		Barcode No. 1758521
Document Date 01 May, 1973	Document Type Report	
Correspondents / Participants CGIAR Technical Advisory Committee		
Subject / Title Research Programme Concerning Trypanosomiasis and their Vectors		
Exception(s) Information Provided by Member Countries or Third Parties in Confidence		
Additional Comments		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information. This Policy can be found on the World Bank Access to Information website.
		<table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date 01-Dec-15</td></tr></table>
Withdrawn by Tonya Ceesay	Date 01-Dec-15	

D8

May 31, 1973

Dear Lowell:

I am sorry that we are not to have the pleasure of your company and the benefit of your wisdom at the June 13 meeting of the African Livestock Subcommittee in Paris.

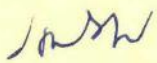
The cost of the lunch in the Bank the other day was \$21.90. If you will make out a check to me, I will handle the transaction here.

Sincerely yours,

Harold Graves

Dr. Lowell Hardin
Program Adviser, Agriculture
The Ford Foundation
320 East 43rd Street
New York
New York 10017

HGraves:apm



D8

THE FORD FOUNDATION
320 EAST 43RD STREET
NEW YORK, NEW YORK 10017

INTERNATIONAL DIVISION
OFFICE OF THE VICE PRESIDENT

February 28, 1973

Mr. Harold Graves
International Bank for
Reconstruction and Development
1818 H Street, N. W.
Washington, D. C. 20433

Dear Harold:

Enclosed are four signed copies of the Foundation's letter of February 27 for Mr. Demuth's signature. If agreeable, after they have been signed you might distribute them as follows: one for your files; return one to us; forward one to Dr. Cummings; give one to USAID.

Also appended is a copy of the Assignment and Assumption Agreement which has gone to Ralph Cummings for signature and a copy of our procedural memorandum to Ralph. Perhaps you will want to insert these in the "TCRISAT Transfer" folder we left with you.

Our thanks to you and your colleagues for your understanding help on these and related matters of mutual concern.

Sincerely yours,


Lowell S. Hardin

LSH:cf
Enclosures

D7

February 26, 1973

Dear Mr. Pfeifer:

I want to thank you for arranging to send some informative material about IDRC to Messrs. Pagot and Sauger of the Technical Advisory Committee of the Consultative Group, and am looking forward to receiving some of this material here.

Sincerely,

Harold Graves
Executive Secretary

Mr. J. C. Pfeifer
Secretary
International Development Research Centre
Suite 500 Pebb Building
2197 Riverside Drive
Ottawa
Canada K1G 3H9

HG:mcj

D7

February 20, 1973

Dear Joe:

Many thanks for sending me copies of your correspondence with Mr. Mogford of CARED.

Everyone missed you at the TAC meeting in Rome. I'm glad to hear that you are now back on your feet.

Sincerely,

Harold Graves

Mr. J. H. Hulse
Program Director
Agriculture, Food and Nutrition
Sciences
International Development Research
Centre
2197 Riverside Drive
Ottawa, Canada

HG:mcj

D9
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WBG ARCHIVES

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January 22, 1973

Harold Graves

CONFIDENTIAL

CIP ----- Rockefeller Contribution

On January 4, I had a telephone call from Dr. Sawyer, Director of the International Potato Center (CIP). He reported that on the previous day in New York, he had had what he regarded as a rather unsatisfactory conversation with John Pino concerning the Rockefeller Foundation contribution to CIP for 1973. According to Sawyer:

Despite Pino's assertion that the Rockefeller appropriation of \$141,000 for CIP was flexible, it was in fact far from being so. In fact, \$12,000 of it was specifically allocated to the costs of terminating the Rockefeller potato program in Mexico (e.g., separation payments to employees), which would be of no benefit to CIP. Another amount was specifically allocated to the salary of Dr. Niederhauser. Contrary to expectations, Niederhauser had not joined the CIP staff at Lima in the fall; he would now not do so before July 1; and in fact there was some doubt about whether he would ever do so. If Niederhauser did not join CIP, the value of the Rockefeller grant to CIP (taking the above-mentioned terminal costs into account) would not be \$141,000, but would be only about \$100,000.

mcj
HG:mcj

D10

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

OUTGOING WIRE

TO: GRANT
CINATROP
CALI

DATE: JANUARY 15, 1973

CLASS OF
SERVICE: LT

ITT

COUNTRY: COLOMBIA

TEXT:
Cable No.:

KELLOGG FOUNDATION CONFIRMS ITS 1973 GRANT TO CIAT WILL BE THREE
HUNDRED FIFTY THOUSAND DOLLARS. REGARDS.

GRAVES

COMMUNICATIONS
JAN 12 8 12 PM 1973

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Harold N. Graves, Jr.

DEPT. Development Services

SIGNATURE *Harold N. Graves, Jr.*
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE:

HG:apm

ORIGINAL (File Copy)

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INTERNATIONAL DEVELOPMENT
ASSOCIATIONINTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENTINTERNATIONAL FINANCE
CORPORATION

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D8

THE FORD FOUNDATION
320 EAST 43RD STREET
NEW YORK, NEW YORK 10017

INTERNATIONAL DIVISION
LATIN AMERICA

January 15, 1973.

Mr. Harold Graves
International Bank for Reconstruction
and Development
1818 "H" Street, N. W.
Washington, D. C. 20433

Dear Harold:

As you requested, I am sending to you a copy of a report prepared in 1972 on the Management of Records at IITA. This report was prepared by Mr. Robert V. Williams, Manager, Records Services for the Ford Foundation.

Best regards,



Norman R. Collins

NRC:eg

Enclosure



December 29, 1972

Dear Frosty:

Earlier this month, I had a note from Dr. Athwal, explaining that he expected only \$100,000 from IDRC for his core budget in 1973, rather than the full \$270,000 that Joe Hulse had mentioned at the most recent Consultative Group meeting. A conversation with Hulse proves this to be correct: IDRC has a firm commitment of \$100,000 to IRRI for its multiple-cropping work in 1973; it is willing to negotiate another \$170,000 for an expanded multiple-cropping program, but not until a Director of IRRI has taken office.

Some additional action with respect to IRRI is called for, and I have written Dr. Athwal the attached letter about what is being done in the World Bank Group to help close this financial gap. The upshot, I think, is that the core budget is fully covered, and that the capital budget will be, although IRRI may want to defer capital expenditures until there is more definite news about Japanese funds, perhaps in February.

With best wishes for the New Year,

Sincerely,

Harold Graves

Dr. F. P. Hill
The Ford Foundation
320 East 43rd Street
New York, N. Y. 10017

Enc.

cc: Dr. Hardin
Dr. Pino

HC/jk

December 21, 1972

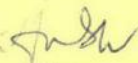
Dear Lowell:

Looking forward to the time when the International Development Association of the World Bank Group will be making grants to centers which we have not supported thus far, I would be grateful if you could tell me where IITA and IRRI maintain their New York accounts, give me an account number for each and let me know of any particular instructions to be followed in depositing funds (such as calling the attention of a specific bank officer to the deposit).

Sincerely,

Harold Graves
Associate Director
Development Services Department

Dr. Lowell Hardin
Program Adviser, Agriculture
The Ford Foundation
320 East 43rd Street
New York
New York 10017


HG:apm



INTERNATIONAL DEVELOPMENT RESEARCH CENTRE
CENTRE DE RECHERCHES POUR LE DÉVELOPPEMENT INTERNATIONAL

P.O. Box 8500
Ottawa, Canada
K1G 3H9
Cable: RECENTRE
Telex: 053-3753

D7

December 18, 1972

Mr. Harold Graves
World Bank
1818 H Street, N.W.
Washington, D.C. 20433
U.S.A.

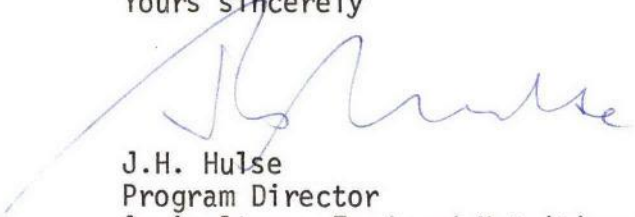
Dear Harold,

Thank you for kindly agreeing to dispatch the copies of Dean Peterson's report on farm water management to members of the Consultative Group.

Attached is a copy of the memorandum addressed to each member of the TAC with which a copy of Peterson's report was enclosed. As you will see, it is our understanding that the item will be considered during the afternoon of Thursday 1 February but presumably Peter Oram will advise all concerned if there is to be any change in the scheduling. I shall be visiting Oram next week in Rome and delivering his copy of the report.

With renewed thanks and warmest good wishes, I am,

Yours sincerely


J.H. Hulse
Program Director
Agriculture, Food and Nutrition Sciences

Encl.



INTERNATIONAL
DEVELOPMENT
RESEARCH CENTRE

CENTRE DE RECHERCHES
POUR LE DÉVELOPPEMENT
INTERNATIONAL

MEMORANDUM

NOTE DE SERVICE

TO/À: ALL MEMBERS OF TAC

DATE: 18 Dec. 1972

FROM/DE: J.H. Hulse

SUBJECT/SUJET: CONSULTANT STUDY
FARM WATER MANAGEMENT IN SOUTHEAST ASIA

Attached is a copy of a report prepared by Dean D.F. Peterson who was retained as a consultant by the International Development Research Centre to undertake a study of farm water delivery and management throughout Southeast Asia and to prepare a report with recommendations for consideration by the Technical Advisory Committee at its next meeting in Rome. We understand from the Secretary that the item will be considered during the afternoon of Thursday 1 February. In order to obviate any unnecessary delays which might result if the report were transmitted through FAO in Rome, at the request of the Secretary of TAC, Mr. Peter Oram, this report is being sent to you directly from the International Development Research Centre in Ottawa.

JHH/wh
Encl.

LITERATURE REVIEW AND DISCUSSION OF WATER
MANAGEMENT IN SOUTHEAST ASIA

prepared for

INTERNATIONAL DEVELOPMENT RESEARCH CENTER
OTTAWA, CANADA

by

Dean F. Peterson

Logan, ,Utah

December, 1972

LITERATURE REVIEW AND DISCUSSION OF WATER MANAGEMENT IN SOUTHEAST ASIA

CONTENTS

	Page
BACKGROUND. . . . .	. 2
NARRATIVE . . . . .	. 3
LITERATURE REVIEW. . . . .	. 6
WHAT IS BEING DONE . . . . .	.11
Pilot Projects . . . . .	.11
UNDP/FAO . . . . .	.11
Asian Development Bank . . . . .	.14
International Bank for Reconstruction and Development . . . . .	.14
Seminars and Conferences. . . . .	.15
Others . . . . .	.16
DISCUSSIONS AND RECOMMENDATIONS. . . . .	.17
REFERENCES. . . . .	.22
APPENDICES—attached	
FAO	
IBRD	
ADB	

LITERATURE REVIEW AND DISCUSSION OF WATER MANAGEMENT IN SOUTHEAST ASIA

BACKGROUND

1. During the past decade the importance of water management at the farm level in the development of more productive agriculture worldwide has been widely recognized.^{1/} Takase and Kano dramatically document this need for Southeast Asia in Chapter VII, Development Strategy of Irrigation and Drainage in Asian Agriculture.^{2/} Their analysis shows that implementation of water control in contrast to uncontrolled flooding and natural rain, has more than doubled rice yields (See page 9, Guidelines for Irrigation Project Preparation with Emphasis on Water Management, Asian Development Bank, attached.) Moreover, utilization of inputs, which can again more than double the yield, is usually futile except under conditions where water is controlled. The importance of the on-farm dimension of water control has been emphasized by the frustrations experienced with large and expensive capital development projects for irrigation, drainage and flood control throughout the world that have fallen far short of expectations because farmers did not, or could not, respond to the opportunities provided by these projects.

2. Recognition of these difficulties has led to a search for ways to accelerate the implementation of water control technology at the farm level. Research centers like IRRI or CIMMYT have been highly successful in developing new high-producing varieties responsive to inputs of fertilizer and improved cultural practices. The success of these efforts led to the question of whether or not a similar program of central research could help solve the water management problem. In 1969, Takase and Kano proposed the establishment of an Asian Institute for Irrigated Agriculture.^{2/}

3. In 1970, under Ford and Rockefeller Foundation sponsorship, Maurice L. Peterson and Ralph W. Richardson prepared a prospectus report for an international water management institute.^{3/} This report was discussed by the Bellagio Group in March of that year. Between that time and December, 1970, Ellis L. Hatt and David Hopper, under sponsorship of the IDRC, prepared a discussion paper on the key needs for agricultural water research

and training.^{1/} Hatt and Hopper concluded that "lack of a basic physical technology" is not the most critical "bottleneck" in the short run, but rather that greatly enhanced capability to coordinate the application of available technology and expertise to field problems is. They believed that a great deal more expertise is available in most countries than is being utilized. Hatt and Hopper recommended that A) implementation of pilot models of comprehensive agricultural development in portions of existing irrigation-drainage projects be emphasized, B) a seminar be held as soon as possible to review pilot project experiences and explore the usefulness of new regional or international mechanisms for pilot project assistance, and C) that separate task forces review the need for additional assistance in certain research, training and resource assessments. The Hatt-Hopper report was discussed by the Bellagio Group in December, 1970.

4. Before proceeding with the seminar, the sponsor's group felt a need to have a better understanding about what was going on and what was known about water management, and especially about the work of the pilot projects already underway. In late 1971, Mr. Hatt found he no longer had the time to continue as a consultant to IDRC and in early 1972, the writer agreed to undertake leadership of the literature survey with the help of an assistant. The terms of reference for this assignment were "to review projects and report upon applied research, training and demonstration directly related to farm water management in Southeast Asia. The review will include projects, both completed and in progress, which were or are sponsored, managed and financed by the UN agencies, including FAO and UNDP, and the IBRD and the Asian Development Bank."

NARRATIVE

5. Dr. Hatt called on the writer in Logan on December 1, 1971 and very competently outlined the background and history of the project.
6. On February 16, 1972 the writer visited with Mr. M. A. Huberman, Chief, Southeast Asia and the Far East Division and with Mr. L. Shapiro, Director, Management Information Service, UNDP, New York City, Mr. M. Gucovsky of the Bureau for Programme Coordination joined the discussion briefly. After the writer had explained the objectives of the study, Mr. Huberman felt that the documentation available at UNDP headquarters, since it consisted mostly of administrative reports, would likely not serve the purpose of the study; however, Mr. Shapiro, using recently initiated information retrieval procedures, had identified ten documents relating to nine projects which he thought might be of interest. Most of these documents were progress reports and discussed primarily administrative and logistic matters. Several of the projects were peripheral, dealing with soil surveys, forestry, etc. Two pilot projects were identified, one in Khmer, the other in Thailand. An interim report was available for the latter. After reviewing these documents, the writer agreed that a decision to expend further efforts at UNDP should be deferred until his reconnaissance at FAO headquarters. Mr. Shapiro made available a copy of the November 30, 1971 catalogue of reports on special fund projects^{4/} and a report showing the status of approved projects and listing completed projects in the Special Fund component as of the same date.^{5/} These reports proved to be very useful.
7. IBRD headquarters were visited in Washington on February 16. The morning was spent with Sir Kenelm Guinness and Mr. L. Bartsch, Deputy Chief of Irrigation Division I and Chief of Irrigation Division II of the Agricultural Projects Department. Mr. Bartsch felt their reports on projects would not be sufficiently specific to be useful to the writer. The morning was spent in discussing various irrigation projects and problems encountered. One of the major concerns is organization and for some irrigation projects a semi-autonomous agency has been set up. Other concerns related to manpower. There is a growing interest in "package" projects and in sectoral

economics, employment, income distribution, credit, settlement and other infrastructure. During the afternoon Mr. Robert Sadove, Director of Special Projects, Mr. Rafael Sison of the Mekong Group, and Mr. H. Vergin and Mr. Steven Allison of the Special Projects staff were visited. Mr. Sadove mentioned the UNDP plans for fourteen "pioneer" projects in the Mekong area. Planning is estimated to cost \$2 million and implementation possibly \$50 million. Additional information on the pioneer projects was provided by Mr. Sison. Mr. Vergin felt that the most definitive material at the Bank would be consultants' reports. Mr. Allison felt that considerable material of use to the writer could be identified. He volunteered to lend guidance and assistance toward locating such material.

8. On March 29, Dr. J. H. Hulse, Program Director, Agriculture, Food and Nutrition Sciences, IDRC, visited the writer in Logan, Utah. Dr. Hulse provided background information on the Consultative Group on International Agricultural Research and outlined some of their decisions on additional international centers. IDRC has been given no specific terms of reference on its water management study; research and training could both be included. Details of the writer's study program and various approaches to the water management problem were discussed.

9. The writer spent May 2-5 at FAO headquarters in Rome, visiting principally with the staff of the Water Resources and Development Service, Land and Water Development Division. Mr. Clyde E. Houston is Chief of the Service. Besides members of his staff, Messrs. Tsutsui, Horning, Dieleman, Pruitt, Doorenbos, and Baudelaire, conversations were held with Mr. Campbell of the IBRD group, Mr. Constantinescu, Editor, Operations Service and Mr. Peter Oram, Secretary of the Technical Advisory Committee of the Consultative Group. A pretty good understanding of the type of information available and its location was gained. Several reports were read. A number of comments were made by the staff that were relevant and helpful to understanding what is taking place and what difficulties are being encountered. Arrangements were made for the visit of the assistant and the staff agreed to extend hospitality and assistance to him.

10. Early in June, arrangements were made with Herbert Paul, an experienced graduate student in agricultural and irrigation engineering to make the detailed literature reviews and prepare abstracts. Mr. Paul spent the period June 26 to July 11 at FAO headquarters in Rome. During August, Mr. Paul spent several days at IBRD headquarters in Washington reviewing material made available to him there.

11. The writer spent the last half of July, all of August and the first three days of September in the Middle East and South and Southeast Asia, primarily on a consulting assignment for the U.S. Agency for International Development evaluating the effectiveness of AID's regional irrigation seminar series in advancing on-farm water management practice in the Near East and South Asia Region. Short visits were made at Bangkok and Manila under IDRC auspices. Among the ADB region countries visited were Afghanistan, Pakistan, Nepal, India and Ceylon; the latter three are in the "Monsoon Asia" climatological region. Considerable information helpful to this study was obtained. In Bangkok August 28 and 29, the writer was able to contact Mr. George Finlinson, Acting Chief of the Water Resources Division; Mr. Karl Lee of the U.S. AID Regional Economic Development Group; Mr. Charin Athayodhin, Chief of the Operation and Maintenance Division of the Royal Irrigation Department and Dr. Ellis Hatt, now with U.S. AID in Bangkok. Mr. Athayodhin described the 6,600-hectare Sappaya Multipurpose project which he, Dr. Hatt and others had visited on the previous day. This project enjoys technical assistance from Taiwan and has a 124-hectare pilot project. Pros and cons of a possible regional water management center were discussed with Mr. Athayodhin and Dr. Hatt.

12. August 31 and September 1 were spent in Manila with personnel of the Asian Development Bank including Dr. S. C. Hsieh, Director, Projects Department; Dr. Kunio Takase, Senior Agricultural Engineer Projects Department; Peter Po-Chuan Sun, Agricultural Economist; and Mr. Chih Chen, Agronomist. The writer was given an excellent briefing on the water development problems and agriculture of the region, the programs of the bank in these

fields and various strategical possibilities for improving water management, including the usefulness of an international regional center.

13. As available time permitted, the period between mid-September and the date of this report was spent in studying and evaluating the material prepared by Mr. Paul, reviewing material from other sources and in preparing this report.

LITERATURE REVIEW

14. For the purpose of this review "on-farm water management" includes the following areas: 1) water requirements and timing of irrigations, 2) plant-soil-water relationships, 3) irrigation systems, 4) on-farm distribution systems, 5) salinity and alkali reclamation and 6) surface and sub-surface drainage. Soil fertility, soil survey, and feasibility reports of large projects were excluded except where they related to on-farm water management. The countries included are: Bangladesh (East Pakistan), Burma, Hong Kong, India, Indonesia, Japan, Khmer (Cambodia), Korea, Laos, Malaysia, Nepal, Philippines, Sarawak, Sri Lanka (Ceylon), Taiwan, Thailand and Viet Nam. Generally, the abstracts were restricted to the past five years except where the material was considered highly significant to the basic subject area.

15. The review is organized in three parts: 1) FAO, 2) IBRD, 3) ADB, and is bound separately as appendices. Most of the material is from the FAO source. The FAO material was located using the FAO Documentation Index; by reviewing UN agency bulletins, reports and expert reports gathered from various offices and libraries in FAO's headquarters; and by reviewing the periodicals published in English by the various countries in the study area. The introductory material as organized contains a Table of Contents listing titles and a topical index, and a list of titles found in the Documentation Index. This is followed by the abstracts of FAO and Joint FAO publications for South-east Asia generally, and then by countries. The next section contains materials abstracted from periodicals, arranged by periodical title. Three full-length papers are included; the first of these is on microfiche. All titles listed in the FAO Documentation Index were eventually found and abstracted, but they comprise only a fraction of the material abstracted.

16. The IBRD section contains only three abstracts followed by three full-length documents: the "UNDP Plan of Operation for the Detailed Preparation of a Programme of Pioneer Agricultural Projects in the Lower Mekong Basin," and two quarterly progress reports on the Mekong Pioneer Project. These cover the period up to June 30, 1972 on this programme. Two full-length papers comprise the contents of the ADB section.

17. The material found on pilot projects is discussed in the next section of this report. By and large, the literature review did not reveal the existence of a reservoir of specific technological information on water control that could be directly and quantitatively applied at geographical locations other than where the information was observed. Exceptions might include, for example, methods for estimating consumptive use or evapotranspiration, and with considerable caution, crop yield estimation under changed agricultural environments. The literature does identify a broad spectrum of general problems and strategies or tactics used to attack them at more or less specific locations. The problems and the identified strategical or tactical approaches to them may or may not apply at other sites. This is not to say that there do not exist problems that are quite general and pervasive throughout the entire area and that the tactics or strategy for their resolution are not similar. For example, flooding is certainly such a problem, but it does not necessarily occur everywhere, nor is the best strategy for its control always the same. The same kind of statement can be made about intra-monsoon droughts, or land fragmentation, or land forming, for example. This does not mean that the literature is of little value. Quite the contrary. In a broad sense, the literature identifies problems which might be overlooked at other sites; it narrows the limits within which answers may be sought by engineering design procedures, adaptive research and field trials, institutional development, and policy; and describes strategies and tactics that might be successfully extrapolated.

18. The literature does support the position that a large part of the problem is implementing technology that is already known. It contains up-to-date how-to-do-it literature which, if applied to engineering practice site specifically, could result in effective water control. This means more and better trained

people who are skilled in the arts of site-specific design or policy development are needed. The literature does not necessarily imply that there are no general problems that could not profitably be researched centrally. Much of the time, implementation of technology is constrained because of cultural circumstances that are site specific in detail even if generally pervasive. One such condition already mentioned, for example, is the fragmentation of holdings and their small size that make rights-of-way difficult to obtain and that work against the design of efficient water distribution and transportation systems. National policy also may affect the feasibility of change. Examples include crop and farm input subsidies, water laws, water pricing, etc. A similar statement can be made about institutional structure and the viability of institutions. The literature does not give specific answers. It does identify strategy and tactical variables that still need site adaptation.

19. Cost experience is another valuable contribution of the literature. Costs for conventional irrigation water supply works are usually estimated (or underestimated) from engineering designs. Costs associated with land consolidation, farm irrigation infrastructure, settlement or resettlement, etc., are often ignored or underestimated. As desirable as land forming may be from the point of view of saving water, for example, its cost still may not be justified under a classical, or even an improved, pattern of rice culture. Too often investments to achieve technological objectives, desirable as they may be from the point of view of water efficiency or increased production, are too costly for present and near-term economies. It is easy to be over-optimistic about the ubiquity of the economic viability of new technology per se.

20. While the common characteristics of the agricultural ecology of Southeast Asia are indeed a monsoon climate, pervasive cultivation of rice, and small-sized farms; there is great variance from place to place within these three general descriptors. The variances in rice culture, for instance, are roughly measured by the countless varieties of rice that are found in economic use, ranging from floating rice capable of growing in several meters depth of flood water rising several centimeters daily to short stem varieties growing under

conditions of excellent water control and full availability of fertilizer and other inputs. These crop-variety variances in turn reflect the variances in the monsoon climate, in soil and in topography. There are also wide variances in market situations, educational programs, institutions and other human cultural characteristics. There are two principal sites which need attention; the project or farm site, i.e., the production site, and the national or policy formulation site. Changes must be effected at both.

21. A substantial portion of the arable lands of the region enjoys some level of water control (irrigation, surface drainage, flood protection, internal drainage) at varying levels of effectiveness. No regional estimates for water control have been compiled; however, in the Philippines, about thirty percent of the rice-growing area is irrigated; in Ceylon about fifty percent, for example. The literature strongly supports the position that an assured satisfactory water regimen in the field is a necessary condition for economically effective use of inputs as far as rice growing is concerned, and that such regimes seldom, if ever, occur naturally. Since high-yielding varieties have already been introduced on most lands where water control exists, as well as on some others, the rice acreage now susceptible to the "Green Revolution" may already have been approached. In the Philippines, irrigation serves about 30 percent of the rice producing area, but high-yielding varieties were planted on nearly half the area in 1971. The literature leaves one pessimistic about the potential for growing high-yielding upland crops at an economic level of intensity using inputs and tillage moisture conservation practices, but drawing only on moisture residual from the monsoon or from inter-monsoon rains. However, the final chapter on the adaptation of high-yielding rice varieties to rainfed only conditions has not yet been written. Much less, has the potential for increased yields and new crops using inputs under purely rainfed conditions been explored.

22. No effort will be made to discuss comprehensively the substantive nature of the many problems and difficulties identified in the literature. Reference may be made to the topical index for references to particular problems. The list of important water control problems includes, but is not limited to: damaging flooding, inadequate distribution systems for supplying water to the

land at the right time and in the proper amount, land leveling or forming, salinity and internal drainage, field-layout and land fragmentation, canal and ditch seepage, weed control, mechanization, wind and water erosion, repayment of water costs, water supply, introduction of upland crops and introduction of multiple cropping for rice and upland crops. Introduction of water control, to be successful, means a new way of life for the farmers. Although civil engineers exercise central roles in project development, agricultural water management is not included in civil engineering curricula. Agricultural curricula are likewise deficient in basic principles of engineering necessary for water management. It has been stated that there exists a wide cultural gap between engineers and agriculturists that has so far not been bridged.

WHAT IS BEING DONE

Pilot ProjectsUNDP/FAO

23. In April, 1972, FAO Land and Water Division identified 14 field projects in Southeast Asia.^{6/} These projects are listed in Table 1. In addition, the writer has listed two completed projects that include pilot schemes, CEY 14 and KOR 4. The table also indicates whether a pilot scheme was found to be documented as a feature of the project. The last column indicates the page reference to the pilot scheme in the attached abstracts of FAO literature.

24. In Sri Lanka about 15 families have been settled on four irrigated pilot farms totaling 100 acres, located near the station and multiple cropping implemented (FAO Abstracts, p. 41). Problems are soils, incomplete infrastructure, supporting industrial factories, etc. Gannowura, Peradenaya (CEY 14) is the headquarters for the IRRI-Ford Foundation Ceylon Rice Project that operates four farmers' training centers on multiple cropping. These serve extension officers as well as farmers. Sri Lanka appears to be approaching rice self-sufficiency and IRRI people feel that multiple cropping will be essential to farm economy in the near future.^{7/}

25. In Fiji, development of a 17,000-acre irrigation project supported under FIJ 3, "Development of Rice Growing in the Rewa River Basin" includes a small pilot irrigation scheme. The pilot project was started in 1968. Problems encountered included poor seed, pests, fertilizer, etc.

26. Under IND 24 and IND 60, two farms were implemented on the Rajasthan Project. A wide range of problems are being tackled. These include crop variety-fertilizer trials, infiltration, leaching, soil amendments, drainage, farm irrigation efficiency, canal seepage and linings, canal and ditch maintenance, land classification, etc. (FAO Abstracts, pp. 65-74). India has embarked on a national program of pilot projects emphasizing water management. The first three were started in 1968 with U.S. AID technical assistance provided by the U. S. Soil Conservation Service. Locations are Patiala, Punjab; Bellary, Mysore and Dohrigat, U. P. The number has been increased to 11 and 14

Table 1. UNDP/FAO Water Management Projects in Southeast Asia

No.	Country	Title	Pilot Project Documented	Report Status	FAO (p. #) Abstracts
BUR 13 <u>c/</u>	Burma Sri Lanka (Ceylon)	Development of the Sittang River Basin Pumps for Nuthurajawela	-- --	<u>a/</u> <u>a/</u>	
CEY 14	Sri Lanka (Ceylon)	Agrarian Research and Training Institute, Paradenaya		<u>a/</u>	41
FIJ 3	Fiji	Development of Rice Growing in the Rewa River Basin	yes yes	Technical Re- port; Consult- ant's Report ^{b/} , Project Regional Rep's Manager's Report ^{b/}	
IND 24	India	Soil Survey and Soil and Water Management Research and Demonstration in the Rajasthan Canal Area			
IND 60	India	Land and Water Use and Management in the Chambal-Irrigated Area, Rajasthan	yes	Terminal	65, 66, 67
INS 18 <u>c/</u>	Indonesia Indonesia	Land and Water Resources Development in Southeastern Sumatra Dam Construction and Paddy Production, Waikome, Lumblen Island	yes no	Terminal Progress Reports ^{b/}	70
KMR 7	Khmer	Pilot Station for Irrigated Agriculture Battambang	--	<u>a/</u>	
KOR 16	Korea	Pre-investment Survey of the Maktong River Basin	yes	Progress Reports ^{b/}	
KOR 22	Korea	Supplementary Assistance to the Uplands Develop- ment and Watershed Project	--	Consultant's Report	
KOR 4	Korea	Tidal Land Reclamation Survey	--	<u>a/</u>	
KOR 24	Korea	Tubewell Irrigation Project	yes	Terminal	98
NEP 7	Nepal	Supplementary Assistance to the Feasibility Study of Irrigation Development in the Terai Plain	--	<u>a/</u>	
PHI 3	Philippines	Improvement of Irrigation Facilities Through Groundwater Development	--	Interim ^{b/}	
THA 20] THA 38	Thailand	Experimental and Demonstration Farm for Irrigated Agriculture, Kalasin (Phases I and II)	-- yes	<u>a/</u> Interim Report ^{b/} Progress Reports ^{b/}	

- a/ No report listed in FAO catalog of Reports on Special Fund Projects, November 1, 1971 (4)
b/ Found in UNDP Headquarters, New York City
c/ Project not listed in UNDP Catalog of Active or Completed Projects, November 30, 1971 (5)

more are to be added by 1974. The Fifth Plan (beginning 1974) is expected to add 25 more. A related "Command Area Development Program" provides for intensive pilot-like activities in major irrigation project areas where full water supply is available. Grants of 15 million rupees are provided for each project for infrastructure including roads and marketing. Farm development programs will be financed privately using institutionalized credit made available as necessary. Ten such projects are being started now and these will be increased to 16 under the Fifth Plan.^{8/}

27. A progress report on KMR 7 in French written by the resident representative on the "Pilot Station for Irrigated Agriculture, Battambang" was found at UNDP, New York. This referred to project manager's reports (but these were not attached), and dealt with logistical matters and problems of local government support.

28. Under KOR 4, a 60-hectare demonstration plot was set up within an experimental polder in Korea in connection with a study of a project to reclaim tidal lands. Although barley was successfully grown as a second crop, it was concluded that rice was the only crop likely to succeed because of the impermeable, saline soils and the low winter temperature.

29. An interim report (Restricted) on THA 20 was also found in the UNDP headquarters. This report cites "soft" soils and high groundwater as problems and concludes area is not suitable for dry land crops, and that the social and economic environment is "not ready." The region is too remote. A progress report (1 March-31 August 1971) on THA 38, the successor to THA 20, was also found in New York, but it dealt only with logistics. Technical assistance is being provided by Taiwan on the 6,585-hectare Sappaya Project. Included in the program is a 124-hectare pilot scheme featuring land consolidation, clearing and leveling, and farm roads, irrigation distribution, drainage, irrigation methods, and rice culture.^{9/ 10/}

30. Under FAO No. TA 2485 (p. 122 FAO Abstracts) the consultant describes five demonstration stations for upland irrigation in Taiwan and concludes that these, with two experimental stations managed by the Chansan Irrigation Association, meet the requirements of covering the points about which farmer understanding is needed.

Asian Development Bank

31. The Asian Development Bank gives special attention to the use of small pilot schemes in irrigation projects that it finances. As of July, 1972, the Bank had made 14 loans for 11 water development projects. Pilot schemes were constructed for three projects and under construction for three more. Construction has been scheduled for a seventh. Projects for which pilot schemes have been constructed or scheduled are located in Sri Lanka, Philippines, Laos, Indonesia (two projects), Nepal and Viet Nam. Other projects are located in Malaysia, Afghanistan, Indonesia and Korea. Since the first three pilot schemes were completed only in 1972, results of these efforts are not yet available. See p. 21, Guidelines for Irrigation Project Preparation, ADB Documentation, attached.

32. In 1968, ADB joined with the Philippines' National Irrigation Administration, N.I.A., in a training program headquartered at Angat. Eight pilot projects at various locations in the country including Angat were started. Pilot stations comprised 100 to 200 hectares. Angat is the most advanced project of the total of 105 being developed by the N.I.A. Originally, on the pilot station there were 16 meters of ditch per hectare. This has been increased to 62 meters per hectare. Previously, 17 varieties of rice were grown under six cropping patterns. This was reduced to five varieties with 3 cropping patterns and uniform application of irrigation water achieved. Yields were increased from 2.3 tons per hectare in 1967 to 2.9 tons per hectare in 1969. A farmer water-user's association has been established. N.I.A. is now extending the pilot results to the entire 32,000 hectare project. ^{11/}

International Bank for Reconstruction and Development

33. UNDP, with the World Bank as executing agent, has initiated a program of pioneer projects in the Lower Mekong Basin. (See the attached World Bank

Documentation). In September, 1971, a total of 14 projects were identified tentatively; four in Khmer, three in Laos, three in Thailand and five in Viet Nam. A World Bank progress report (World Bank Documentation) dated July 26, 1972 indicates that planning for eight of the fifteen is under way. The World Bank has delegated responsibility for execution of studies and investigations for two of the projects to the Asian Development Bank.

Seminars and Conferences

34. No comprehensive study of these activities was undertaken. The principal recent ones coming to the writer's attention are cited in the following paragraphs.

35. FAO, has organized the following seminars during recent years:^{6/}

- UNDP/FAO Regional Seminar on "Measures to accelerate water development projects by improved water management," Philippines, October, 1970. Major topics: Integrated approach to water management, measures to implement better water management. (The report of this Seminar, FAO No. TA 2964 is included in full in the literature review, appended).
- National Seminar on Water Management for Thailand, Thailand, March 1972. Major topics: water management for rice production and crop diversification.
- National Seminar for water management for Korea, Korea, March, 1972. Major topics: water management for rice cultivation and crop diversification.
- Japan/FAO Regional Seminar on "water management for agriculture." Japan, October, 1972. Major topics: water management for rice production and crop diversification.

36. In 1972, Asian Development Bank planned a workshop on irrigation water management for its water development project managers.^{12/}

Visits and discussions in the field were planned for the Philippines, Thailand and Indonesia. The scope of this workshop was to study, discuss and evaluate the progress and problem areas of 13 bank-assisted irrigation projects in ten countries, learn from experience gained in other countries having similar

agricultural environments, observe on-going ADB-assisted irrigation and similar projects in the countries visited, and prepare "Guidelines for Irrigation Project Preparation with Emphasis on Water Management." The workshop was originally scheduled for August, 1972 but had to be postponed due to the unusually heavy rains. It has tentatively been re-scheduled for January, 1973.

37. Biennial conferences on the overall program of water development are held by ECAFE under the Water Resources Division. These are concerned primarily with civil engineering aspects of water development, but there is a growing interest in agricultural water management.

Other

38. There are many research programs in the field of on-farm water management. IRRI is working in this area as are many of the countries. Guidelines and Manuals such as the ones prepared by the ADB (attached literature reviews) are generally available. These provide state-of-the-art information useful as a takeoff point for site specific engineering designs. Two efforts, one outside the South Asia Region and one overlapping part of it, with which the writer is familiar and that appear to have contributed significantly to water management improvement are the Near East South Asia (NESA) Irrigation Practice Seminars and the Inter-American Center for the Integral Development of Land and Water Resources (CIDIAT) in Latin America. In the NESA Seminars, which were held biennially beginning in 1956 until 1970, people at the national policy level and at the technical level from countries of the Near East and South Asia discussed their problems in a common forum under high-level national sponsorship.* A recent evaluation of the effort indicates that this inter-country exchange did indeed have an impact on national policies. One of the principal mechanisms was that success with a difficult problem in one country persuaded leaders in other countries that similar efforts at change in their own countries could be successful and worthwhile. The CIDIAT program is primarily an educational one sponsored

* Publication of an evaluation of this effort by the writer during 1972 is in process.

by Organization of American States and aimed at both policy level and technical level audiences. In this program, high-level policy people from the participating countries were involved in conceptualization and in on-going program development. Plans for country training courses were developed in concert with policy-level people.

DISCUSSION AND RECOMMENDATIONS

39. Agricultural water management is almost like the weather. "Everybody talks about it, but nobody does anything." Stated another way, the tremendous importance of agricultural water management by now is well recognized, but efforts to improve the situation commensurate with what is at stake have not been mounted. One reason for this lack is that a sufficiently convincing prospectus for action has not been developed. Unlike inputs, which can be developed, packaged and transported to the farm, water management problems have to be solved on the site. On the other hand, while the necessary technology may be sufficiently well known so that site problems could be solved by good engineers and agronomists, the linkages to off-farm considerations; physical, cultural, administrative and political; are both numerous and complex. Most are beyond the control of the farmer, many are beyond the control of the project and some may require development of people and of institutions. Actually, there are two main problem sites, the on-farm or production site and its immediate water service environment; and the country policy or national action site. Many problems at the first site cannot be solved in the absence of pre-conditions that are under the control of the latter. The impacts of specific policy, not only on water management, but also on other compatible or competing objectives demands total social benefit and cost considerations in a much larger context than the project or the farm. Consequently, systems analysis techniques provide the most promising rational approach for examining policy-level requirements necessary for improved water management.

40. The pilot scheme or pioneer project approach is the most promising means of dealing with on-site and near-site problems, but its impact in the arena of national policy may be indirect and possibly negligible. Even though pilot schemes are promising, their record of success has not been great, especially where external pre-conditions for project success are marginal or lacking. Pilot projects should be an important element in a regional effort to improve water management. They can be expected to accelerate progress, but the writer concludes that by itself, a pilot scheme effort will likely not be sufficient. Something more persuasive at the national policy site must be added.

41. In this role the international agencies have persuasive status, particularly the Banks and UNDP. The mechanisms could be coercive through imposing conditions on loans, for example. While this approach may be useful, a more positive leadership activity having both status and producing evidence is more likely to make a greater impact. National leadership at the decision-making and policy level must be brought into the dialogue. They must have a better understanding of what is required and be convinced that changes are feasible. These considerations imply a network that would include the international agencies, particularly the developing agencies, pilot and pioneer projects and related regional research centers, with central leadership and sufficient status to impact both on the production sites and the policy sites. While physical technology is well understood and there is under-employment of those who understand it, this does not appear to be quite the case in the arena of coordination and policy-making and implementation. The writer also believes that there may be substantial research opportunities in adapting technology used in developed countries to developing-country conditions. More effort may be needed in trying to change technology to fit existing cultures better rather than in changing cultures to fit developed-country technology.

42. The writer agrees essentially with the Hatt-Hopper report^{1/} and its Recommendations A and C (see page 2), but believes that reconsideration should be given to the proposed seminar review of pilot projects under Recommendation B and that a more positive move toward an international center for water management should be made at this time. Geographical definition of the region seems quite clear also. The Center should serve "Monsoon Asia." Because of climate, the agriculture ecology of this region is sufficiently different from the Middle East (Pakistan and to the west), to warrant a separate approach at the regional level.

43. Justification for action stems from the basic need to continue to increase food production and to increase the diversity of agricultural crops, not only to improve nutrition, but as a basis for economic development in a region where agriculture is, and will be for some time, the dominant economic activity. The need for action is emphasized by extremely large investments in water supply and flood control development for agriculture, both committed and anticipated, and the disappointing results from heavy investments made in the recent past. In recent years, new inputs have been substituted for water control to increase production, but the point at which water control will be constraining is being approached rapidly.

44. The principal areas of concern to which a Center could make a substantial contribution include technology development and adaptation, economics, institutional development, policy, and systems analysis. The Center would need to have a strong educational thrust. The concept of a small research station that would attempt to adapt technological opportunities under the simulated constraints of existing cultural systems appears to have merit. Alternatively, it might be more desirable to have all technological researches identified by the Center undertaken at existing research institutes and for the new Center to concentrate upon research, information and education related to the total system of farm water delivery and management. Much of the research is visualized as consisting

of field studies involving probably mostly case histories in order to identify the economic, institutional and policy elements necessary for success. The Center should begin to think about systems research and analysis as a means for approaching the complex problem of economic and cultural linkages to water management. These topics would be of general regional interest. A selective information processing and retrieval system should be given consideration. Some specific priority problems are development of farm-level irrigation water distribution systems; dry season and upland cropping technology and strategy; land forming, field layout and fragmentation; and an understanding of the potentials and opportunities for rainfed agriculture. Audiences would include project planners; pilot, pioneer and full-scale project managers; national and international development agencies; national officials at the policy level; and educational institutions. That the problems lie partly outside of the area of conventional technological and biological research experience does not mean they are not researchable.

45. Since the strategy of the proposed Center will be somewhat different from that of conventional agricultural research centers, the Center should start fairly modestly with a small but competent team who would concentrate initially on priority topics where lines of approach seem fairly clear and concurrently develop, with their advisors and consultants, strategies and program approaches to those problems where there is less experience and the approach is less obvious. Leadership should be broadly based in engineering and economics, supported initially by technical specialists in these fields and probably in soils and agronomy. In developing its role, discussions with policy-level personnel as well as with responsible technical officials in the participating countries seems important. The former should have a role in developing the program of the Center and appropriate workshops or seminars, as well as discussions, should be held to achieve that end. Appropriate linkages with the international agencies, other Centers, and with pilot schemes will need to be formulated. The results of

the Center's efforts would be implemented through development programs of the international financing agencies, workshops and seminars at appropriate levels, pilot scheme programs, in-house training efforts and technical assistance. The Center is not envisaged as becoming a large institution comparable to CIMMYT, but rather a small interdisciplinary group of researchers dedicated to the study in a practical context of the problems outlined above.

46. The writer recommends:

- A. That an Asian Center for Water Management be authorized and a Board of Advisors appointed.
- B. That a small consulting team; in consultation with country and international agency personnel at the policy level, and at the technical level as needed, and the Board of Advisors; prepare a charter for the Center within the general area of activities identified in the preceding paragraphs; identify a location for the Center's headquarters, and prepare a tentative program statement, staffing pattern and budget for the first three years of operation; and nominate a director and other key personnel.
This should be done as soon as possible.
- C. That the Center concentrate its activities upon a total systems study of farm water delivery and management throughout Southeast Asia emphasizing
 - i) empirical soil management, agronomic, engineering, on-farm water management systems and other relevant technical concerns,
 - ii) economic constraints and benefits,
 - iii) national and regional policies as they affect water delivery and utilization.
- D. That the Center provide an information dissemination service through retrieval from existing literature, in addition to seminars, working groups and training programs for both technical and administrative personnel of the region.

REFERENCES

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3. Peterson, Maurice L. and Ralph W. Richardson, Jr. An International Water Management Institute - A Prospectus. Draft copy for review and comments. Ford and Rockefeller Foundations. March, 1970.
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5. United Nations Development Program. Status of Approved Projects in the Special Fund Component as of 30 November, 1971. DP/SF/REPORTS. Series A, No. 71. New York. 1971.
6. Tsutsui, H. Internal Communication through C. E. Houston to Mr. F. W. Hauck. Subject: 12th Session of the IRC, Bangkok, 13-15 November, 1972. FAO. AGLW Division. Rome. 25 April, 1972.
7. Personal interview with William G. Golden, Jr., Rice Production Specialist. IRRI-Ford Foundation Ceylon Rice Project. Colombo. Sri Lanka. August 25, 1972.
8. Personal interview with B. R. Shori, Member, Central Water and Power Commission; B. B. Vohra, Joint Secretary and M. A. Quraishy, Additional Secretary, Ministry of Agriculture. Government of India. August 17-18, 1972.
9. Personal interview with Charin Atthayodhin, Chief, Operation and Maintenance Division, Royal Irrigation Department, Bangkok, Thailand. August 29, 1972.
10. The Chinese Agricultural Technical Mission to Thailand. First Report on Sappaya Multipurpose Cooperative Project and Vegetable Seed Production Project covering the period June, 1969 to May, 1971. Ministry of National Development, Ministry of Agriculture of the Kingdom of Thailand. Bangkok. May, 1971.
11. Personal interview with Dr. Tunio Takase, Senior Agricultural Irrigation Engineer, Projects Department, Asian Development Bank, Makati, Philippines. August 31, 1972.

12. Asian Development Bank. Regional Workshop on Irrigation Water Management. Program and Arrangements. Manila. July, 1972.

JK/CS D8
December 13, 1972

Dear Lowell:

With this letter, I am sending you a draft of the memorandum which Mr. McNamara will send to our Executive Directors on the subject of proposed World Bank Group grants to the centers for 1973. I would be most grateful if you would scrutinize it and let me have comments and corrections, particularly as regards the activities of the centers and institutes.

Sincerely,

Harold Graves

Enclosure

Dr. Lowell Hardin
Program Adviser, Agriculture
The Ford Foundation
320 East 43rd Street
New York
New York 10017

HC:apm

D9

December 11, 1972

Dear John:

You may remember that a couple of weeks ago, I asked whether, so far as was known in New York, there were any substantial peso expenditures to be made under CIAT's capital budget. Last week, I finally got around to asking Jerry Grant, and his cabled reply is attached.


The Inter-American Development Bank will be trying to make up its mind in the next two or three weeks whether, in principle, it can supply local currencies for the capital budgets of CIAT, CIMMYT and CIP. As soon as it does so, I will let you know.

Sincerely yours,

Harold Graves

Enclosure

Dr. John Pino
The Rockefeller Foundation
111 West 50th Street
New York
New York 10020


HG:apm

December 6, 1972

Dear Lowell:

Here is a more or less final reckoning of how grants were allocated to the international agricultural research centers for 1972. The figures, as usual, have some limitations: we are not sure that our information is complete or correct in all cases; and interpretations of what does or does not constitute a contribution to unrestricted core budget may not be absolutely uniform throughout the table. But I think the tabulation is about as close as we are likely to come to a final resolution of these matters.

Please show this to Dave Bell and Frosty if you think they would be interested.

Sincerely,

Enclosure - Dec. 5 Tabulation of Grants for, *Harold Graves*
Dr. Lowell Hardin *International Agricultural*
Program Adviser, Agriculture *Research, 1972*
The Ford Foundation
320 ^{East} 43rd Street
New York
New York 10017

HW
HG:apm

DS

December 6, 1972

Dear Sterling:

Here is a more or less final reckoning of how grants were allocated to the international agricultural research centers for 1972. The figures, as usual, have some limitations: we are not sure that our information is complete or correct in all cases; and interpretations of what does or does not constitute a contribution to unrestricted core budget may not be absolutely uniform throughout the table. But I think the tabulation is about as close as we are likely to come to a final resolution of these matters.

Sincerely,

Harold Graves

Enclosure Dec. 5 tabulation of Grants for International Agricultural Research,
1972

Dr. Sterling Wortman
Vice President
The Rockefeller Foundation
111 West 50th Street
New York
New York 10020

cc: Dr. Pino

sm
HG:apm

D7

Files

December 1, 1972

Harold Graves

IDRC Grant to ICRISAT

Mr. Pfeifer, the Secretary of IDRC, confirmed on the telephone this morning that the IDRC grant to ICRISAT could be used for both core and capital expenditures.

hmh

HG:mcj

D7

December 1, 1972

Dear Mr. Hathaway:

This is to confirm that the IDRC grant to ICRISAT has now been received in the ICRISAT Special Account. The IDRC grant is in the amount of 100,000 Canadian dollars. The U.S. dollar equivalent deposited in the account is \$101,297.88.

The cumulative total of deposits into the Special Account is now \$577,662.90.

Sincerely yours,

Harold Graves
Associate Director

Mr. Dale E. Hathaway
International Division
Asia and the Pacific
The Ford Foundation
320 East 43rd Street
New York, New York 10017

cc: Dr. Cummings
Dr. Bentley
Dr. Hardin

HC/jk

nm

640

~~1. H. Kaps~~ ~~2. H. W. G.~~
~~3. R. H. D.~~

THE FORD FOUNDATION

TO: Dick

DATE: 11/21

You may be interested in
the attached. Dave Reel
sent copies to the
International Committee
of the Ford Foundation's
Board of Trustees which
which Bob McNamara
is a member.

Firstly

F. F. HILL

RECEIVED

1972 NOV 24 AM 10:45

640

THE FORD FOUNDATION

D 8

Inter-Office Memorandum

TO: McGeorge Bundy
David Bell

DATE: November 16, 1972

FROM: F. F. Hill *W. Hill*

COPY TO: Messrs. Staples
Carmichael
Fredericks
Hardin
Collins
Hathaway
Ward

SUBJECT: Operations of the Consultative Group
Concerned with Financing International
Agricultural Research and Training

In my opinion, the operations of the Consultative Group (CG) financing international agricultural research and training are going extraordinarily well. In fact they are going better than I would have thought possible for a new kind of international organization only 18 months of age making grants to finance a complicated set of operations on a worldwide basis.

This judgment is based on last week's meeting of CG, International Centers Week in August, the job that has been done during the past year in getting the new center in Hyderabad (ICRISAT) organized and underway and day-to-day operations over the past year insofar as I am familiar with them.

I found last week's meeting of CG particularly interesting and stimulating. The agenda was long and covered a variety of topics including financial pledges for 1973 in excess of \$20 millions. There was wide participation in the discussions -- representatives of large countries and small countries, founding members of CG and new members, developing countries and developed countries. I would classify the greater part of the discussion as thoughtful and to the point. I sensed, or thought I sensed, an increasing personal interest on the part of a number of donor representatives in the activities being financed despite the fact that most of them have had little personal experience in dealing with such activities. This interest produced both searching questions concerning center policies and operations and a willingness on the part of donor representatives to go as far as possible to meet center needs within the institutional frameworks and policies in which they necessarily operate.

Personal interest of this kind on the part of donor representatives, if it can be sustained, will go far to guarantee the future financing of international centers in amounts and on terms that will permit their effective operation. Whether in fact such financing is provided will depend, of course, on whether the centers produce. We are now riding on the successes of CIMMYT and IRRI and the belief that new center directors, such as Ralph Cummings "can do it again".

In the early days of a new operation, particularly a large and complicated one, a few individuals often make contributions that are crucial to getting off to a good start:

- (a) Without Bob McNamara's able and forceful leadership, the CG idea would never have gotten off the ground.
- (b) Dick Demuth and his associates in IBRD are experienced, expert operators in the field of multi-country finance relating to LDC's. They have worked long and hard to get the CG show on the road and their efforts are paying off.
- (c) The whole CG operation could easily have bogged down in a sargasso sea of "good projects" sponsored by earnest people if Sir John Crawford, or his equivalent, had not been available to head the Technical Advisory Committee that is responsible for advising CG on priorities. There are never final, agreed-upon answers to the priority question in any grant-making organization, of course, but, for a variety of reasons, the early months of the CG operation have been particularly difficult in respect to priorities.
- (d) The Lowell Hardin "hot line" operation has been of inestimable value in helping keep the far-flung CG center financing effort on the tracks and moving during the early months. As one would expect, there have been numerous problems and many questions from persons in organizations around the world on a wide variety of topics relating to CG-center operations - some technical, some organizational, some operational and some financial. "When in doubt call Hardin", either to get the answer or to find out who has it, early became an operational reflex that has produced a large amount of business for A. T. & T. For an international operation such as CG, which was literally organized one day and pitchforked into large-scale, world-wide operations complete with deadlines the next, the Hardin "switchboard" operation was a must; someone with a knowledge of the technological, organizational and financial aspects of center operations and close working relations with CG/TAC personnel in Washington and Rome and with key persons in bilateral aid agencies.

- (e) The speed with which the ICRISAT idea was crystalized into a carefully prepared proposal and the proposal acted upon and launched by CG has created an action atmosphere unusual in international technical assistance efforts. Ralph Cummings deserves much credit for this although the operational arrangements that have been worked out by IBRD and the Ford Foundation for starting new ventures made fast action possible.

The foregoing cheerful notes are not intended to suggest that all of the problems of CG are solved. But in learning to skate the novice who does not fall or go through the ice in the first 100 yards is more likely to make it than the one who does.

FFH:cf

F. F. Hill



INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

Cable Address - INTBAFRAD

INTERNATIONAL DEVELOPMENT ASSOCIATION

Cable Address - INDEVAS

1818 H Street, N.W., Washington, D. C. 20433, U.S.A.

Area Code 202 • Telephone - EXecutive 3-6360



November 8, 1972

Dear Mr. Pfeifer:

With this letter I am sending two documents having to do with the IDRC grant to ICRISAT.

One is a copy of your instruction to deposit the proceeds of the grant in the ICRISAT Special Account, signed by Mr. Thapa for IDRC, by Dr. Lowell Hardin for The Ford Foundation, and by Mr. Richard H. Demuth for the World Bank. I am also sending a xerox copy of this instruction as signed.

The second document is a memorandum from Mr. Robert Jones of the Controller's Department of the World Bank, suggesting a procedure for making this deposit. I am sending an extra copy of this memorandum also.

I note that IDRC wishes to be furnished with quarterly statements of disbursements from and balances in the Special Account, and will arrange for this to be done.

Sincerely yours,

Harold Graves
Associate Director
Development Services Department

Enclosures

Mr. J. C. Pfeifer
Secretary
International Development Research Centre
Suite 500 Pebb Building
2197 Riverside Drive
P. O. Box 8500
Ottawa
Canada K1G 3H9

cc: Mr. Robert Jones
Dr. C. F. Bentley
Dr. Ralph Lunnings
Dr. Lowell Hardin

HG:apm



INTERNATIONAL DEVELOPMENT RESEARCH CENTRE
CENTRE DE RECHERCHES POUR LE DÉVELOPPEMENT INTERNATIONAL

P.O. Box 8500
Ottawa, Canada
K1G 3H9
Cable: RECENTRE
Telex: 053-3753

October 24, 1972

To: (1) I.B.R.D.
(2) The Ford Foundation

Dear Sirs:

This is to inform you that pursuant to arrangements between us and ICRISAT, we intend to make a contribution to ICRISAT in the amount of One Hundred Thousand Dollars (\$100,000) (Canadian).

We have been furnished with copies of the Memorandum of Understanding (ICRISAT Project) dated February 22, 1972, and of its Annexes. We intend to deposit in the ICRISAT Special Account the amount of our contribution. To that end we hereby agree to be bound by the provisions of the ICRISAT Special Account Agreement as though we were a "Donor", as such term is defined in such Agreement.

Please confirm your agreement with the foregoing by signing the form of confirmation on the enclosed copy of this letter and returning it to us.

Yours sincerely,

INTERNATIONAL DEVELOPMENT RESEARCH CENTRE

Per: Bhekh B. Thapa

Acting President
Bhekh B. Thapa

Confirmed:

INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT

Richard H. Smith

By Director, Development Services Department

THE FORD FOUNDATION

Lowell D. Harkin

By Office of Vice President

D7.

November 8, 1972

Dear Lowell:

For your information and records, here is an exchange of correspondence with IDRC concerning the deposit of IDRC's grant to the ICRISAT Special Account. A copy of the letter bearing your signature, along with the signatures of Dr. Thapa for IDRC and of Mr. Demuth for the World Bank, is included in the exchange.

Sincerely,

Harold Graves
Executive Secretary

Dr. Lowell Hardin
The Ford Foundation
320 East 43rd Street
New York, New York 10017

HG/jk

Encs.

D7

Mr. Robert Jones

November 8, 1972

Harold Graves

Handwritten initials

IDRC Deposit in ICRISAT Special Account

Here is a letter from the International Development Research Centre (IDRC) of Canada, countersigned by the Ford Foundation and by the World Bank, concerning the deposit of a grant from IDRC in the ICRISAT Special Account. A Xerox copy of this letter, as signed, also is attached.

In addition, I am attaching a letter of November 8 on this same subject from me to Mr. James C. Pfeifer, the Secretary of IDRC.

Attachments

HC/jk



Record Removal Notice



File Title Consultative Group on International Agricultural Research [CGIAR] - D7 to D10 - Members / Foundations - 1972 / 1974 Correspondence - Volume 1		Barcode No. 1758521
Document Date 06 November, 1972	Document Type Memorandum	
Correspondents / Participants To: Mr. H. Graves From: Robert Jones		
Subject / Title ICRISAT		
Exception(s) Financial Information d		
Additional Comments		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information. This Policy can be found on the World Bank Access to Information website.
		<table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date 01-Dec-15</td></tr></table>
Withdrawn by Tonya Ceesay	Date 01-Dec-15	



INTERNATIONAL
DEVELOPMENT
RESEARCH CENTRE

oct 31, 72
CENTRE DE RECHERCHES
POUR LE DÉVELOPPEMENT
INTERNATIONAL

News

Nouvelles

No. 72-014

(Français au verso)

FOR IMMEDIATE RELEASE

OTTAWA, October 31, 1972: In its first full year of operation, the International Development Research Centre helped put into action 32 projects which will require a total \$3.6 million in Canadian funds, according to the IDRC Annual Report for 1971-72 which was made public today.

The report shows (on page 58) that Africa and Latin America together attracted 45 percent of these research funds, while another 26 percent is being spent on projects in the Caribbean and Asia. The rest has mostly been allotted either to projects which have worldwide application, or else to a scholarship program designed to increase the number of Canadians with specialised training in the problems of development.

When the Centre was established in 1970 as a public corporation by Act of the Canadian Parliament, the principal objective was set of "applying and adapting scientific, technical and other knowledge to the economic and social advancement" of the world's developing regions.

The report says (pages 8-9) that the process of "sharpening the focus of Centre activities" is nearing completion. It gives details of the work and the plans of the four divisions now established at the Centre: Agriculture, Food and Nutrition Sciences; Information Sciences; Population and Health Sciences; and the Social Sciences and Human Resources Division.

The focus of the agricultural program, which claimed 44 percent of the funds for

more...

approved projects in 1971-72, has been concentrated upon the semi-arid tropical countries of Latin America, the Caribbean, Africa and Asia where many of the poorest rural communities in the world subsist. In those regions the Centre is supporting research into particular crops, such as cassava, triticale, sorghum and millet (pages 17-19).

The report gives several instances of Canadian inventions or research findings being applied to the conditions and needs of developing countries. Examples include a new grain milling process now being tested in Nigeria (page 18), a process of preserving tropical fruit and fish by osmotic dehydration which is being tried out by businessmen in Trinidad (page 24), and the possibility that work done in Newfoundland to control the blackfly population through introducing a parasitic worm can be adapted for West Africa where the blackfly is the carrier of onchocerciasis or "African river blindness" (page 36).

But, the report adds, constant stress has been placed on the importance of research workers in developing countries taking the prime responsibility for identifying and organising the projects on which they will work, and upon the training of younger research workers during the period of the projects. It lists a number of conferences and workshops, from one of Asian food technologists in Singapore to another of East African social scientists in Nairobi, which the IDRC financed in order to help research workers from a particular region to meet and determine their own priorities.

In furthering the aim, set out in the Act, of assisting developing regions to build up their own research capacities and the innovative skills of their own people, the

Centre has not launched a large technical assistance program of Canadian experts, although it has financed half-a-dozen advisers working abroad. Instead, a small number of senior staff have travelled widely to help grantees formulate the technical details of their projects (page 66).

Another feature of the administrative structure stressed in the report (pages 24 and 40) is the decentralisation of specialist staff from the Ottawa headquarters to universities and institutes across Canada and abroad, where they may remain close to their field of specialisation. As well, regional offices are being set up in Africa, Asia and Latin America (page 13).

The IDRC is at present totally financed by the Canadian Government, and it makes an annual report to Parliament through the Secretary of State for External Affairs. Its 21-member Board of Governors is headed by the Rt. Hon. Lester B. Pearson as Chairman, and there are 10 other Canadian governors. Among the non-Canadian governors, six are from developing countries (page 3). The President of the International Development Research Centre is Dr. W. David Hopper.

For further information:

31-10-72

Public Information Office
International Development Research Centre
P.O. Box 8500
Ottawa, Canada K1G 3H9

Telephone: (613) 998-4131 Ext. 267



INTERNATIONAL
DEVELOPMENT
RESEARCH CENTRE

CENTRE DE RECHERCHES
POUR LE DÉVELOPPEMENT
INTERNATIONAL

News

Nouvelles

N° 72-014

(English on reverse)

POUR DIFFUSION IMMEDIATE

OTTAWA, le 31 octobre 1972: Au cours de sa première année complète d'activité, le Centre de Recherches pour le Développement International a contribué à faire démarrer 32 projets qui absorberont entre eux 3.6 millions de dollars en fonds canadiens. C'est ce que nous apprend le Rapport Annuel du CRDI pour 1971-72, publié aujourd'hui.

Le Rapport précise (page 58) que l'Afrique et l'Amérique Latine ont ensemble mobilisé 45 p. 100 de ces fonds destinés à la recherche, alors qu'une autre tranche de 26 p. 100 sert présentement à la réalisation de projets aux Antilles et en Asie. Le solde a été en majeure partie attribué soit à des projets s'appliquant à l'échelon mondial soit encore à un programme de bourses d'études visant à accroître chez les Canadiens le nombre des spécialistes des problèmes de développement.

Lorsqu'en 1970, il a été constitué en société publique en vertu d'une loi du Parlement du Canada, le Centre s'est vu attribuer comme principal objectif "l'application et l'adaptation des connaissances scientifiques, techniques et autres au progrès économique et social" des régions du monde qui sont en voie de développement.

Le Rapport dit (pages 8 et 9) que le processus de "mise au point de ses opérations" est sur le point de se terminer. Il expose en détail les travaux et les plans des quatre divisions que compte maintenant le Centre, soit les Divisions des Sciences de l'Agriculture, de l'Alimentation et de la Nutrition; des Sciences de l'Information; des Sciences de la Population et de la Santé; et des Sciences Sociales et Ressources Humaines.

Le programme agricole, qui en 1971-72 a accaparé 44 p. 100 des fonds affectés aux projets approuvés, a concentré son activité dans les régions tropicales semi-désertiques de l'Amérique Latine, des Antilles, de l'Asie et de l'Afrique, où subsistent bon nombre des populations rurales les plus déshéritées du monde. Le Centre

à suivre...

subventionne des travaux de recherche portant sur des cultures propres à ces contrées, telles que celles du manioc, du triticales, du sorgho et du mil (pages 17 à 19).

Le Rapport cite plusieurs exemples d'inventions de constatations de recherche attribuables à des Canadiens, qui sont actuellement en train d'être adaptées aux conditions et aux besoins des pays en voie de développement. Citons un nouveau procédé de mouture des grains dont on fait actuellement l'expérience au Nigéria (page 18), une méthode simple de conservation des fruits et des poissons tropicaux par déshydratation osmotique actuellement mise à l'essai par des hommes d'affaires à Trinidad (page 24), et la possibilité d'adaptation à l'Afrique occidentale où la simule sert de vecteur à l'onchocercose ou cécité des rivières (page 36), de travaux effectués à Terre-Neuve en vue de circonscrire la prolifération de cet insecte au moyen d'un ver parasite.

Cependant, ajoute le Rapport, l'accent a constamment porté sur l'importance pour les chargés de recherche dans les pays en voie de développement de prendre l'initiative de choisir et d'organiser les projets sur lesquels porteront leurs travaux, et sur l'importance de la formation de jeunes chercheurs au cours de la durée des projets. Il énumère un certain nombre de conférences et d'ateliers, à partir du travail d'un Asiatique de Singapour, technologiste en alimentation, à celui des spécialistes des sciences sociales de Nairobi, en Afrique orientale, que le CRDI a soutenus financièrement afin de faciliter à des chercheurs d'une région en particulier l'établissement et la réalisation de leurs propres priorités.

Afin de promouvoir l'objectif, défini dans la loi, d'aider les régions en voie de développement à se livrer à la recherche scientifique et à favoriser l'épanouissement des techniques innovatrices de leurs populations, le Centre s'est abstenu de confier à des experts canadiens quelque vaste programme d'aide technique, même s'il a assumé les dépenses d'une demi-douzaine de conseillers exerçant leur activité à l'étranger. Un petit nombre de membres de son personnel de cadre se sont plutôt déplacés de par le monde afin d'aider les bénéficiaires à formuler les détails techniques de leurs projets (page 66).

Un autre aspect caractéristique de la structure administrative, signalé dans le Rapport (pages 24 et 40), est la décentralisation du personnel spécialisé, depuis le bureau central d'Ottawa, auprès des universités et des institutions à travers le Canada et à l'étranger où il lui est possible de continuer à oeuvrer dans son domaine. De même, des bureaux régionaux sont en train d'être créés en Afrique, en Asie et en Amérique Latine (page 13).

Actuellement, le CRDI voit ses activités financées en totalité par le Gouvernement du Canada. Il soumet un rapport annuel au Parlement par l'entremise du Secrétaire d'Etat aux Affaires Extérieures. Son Conseil des Gouverneurs, dirigé par le Très Honorable Lester B. Pearson, à titre de Président, compte 21 membres, dont 10 Canadiens, six viennent des pays en voie de développement (page 3). Le Président du Centre de Recherches pour le Développement International est Monsieur W. David Hopper.

Pour de plus amples renseignements:

31-10-72

Service de l'Information Publique
Centre de Recherches pour le Développement International
Case postale 8500
Ottawa, Canada K1G 3H9

Téléphone: (613) 998-4131 poste 267



Record Removal Notice



File Title Consultative Group on International Agricultural Research [CGIAR] - D7 to D10 - Members / Foundations - 1972 / 1974 Correspondence - Volume 1		Barcode No. 1758521
Document Date 24 October, 1972	Document Type Letter	
Correspondents / Participants To: Harold Graves, Associate Director From: James C. Pfeifer		
Subject / Title IDRC Funds		
Exception(s) Information Provided by Member Countries or Third Parties in Confidence		
Additional Comments		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information. This Policy can be found on the World Bank Access to Information website.
		<table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date 01-Dec-15</td></tr></table>
Withdrawn by Tonya Ceesay	Date 01-Dec-15	



INTERNATIONAL DEVELOPMENT RESEARCH CENTRE
CENTRE DE RECHERCHES POUR LE DÉVELOPPEMENT INTERNATIONAL

57
P.O. Box 8500
Ottawa, Canada
K1G 3H9
Cable: RECENTRE
Telex: 053-3753

October 24, 1972

To: (1) I.B.R.D.
(2) The Ford Foundation

Dear Sirs:

This is to inform you that pursuant to arrangements between us and ICRISAT, we intend to make a contribution to ICRISAT in the amount of One Hundred Thousand Dollars (\$100,000) (Canadian).

We have been furnished with copies of the Memorandum of Understanding (ICRISAT Project) dated February 22, 1972, and of its Annexes. We intend to deposit in the ICRISAT Special Account the amount of our contribution. To that end we hereby agree to be bound by the provisions of the ICRISAT Special Account Agreement as though we were a "Donor", as such term is defined in such Agreement.

Please confirm your agreement with the foregoing by signing the form of confirmation on the enclosed copy of this letter and returning it to us.

Yours sincerely,

INTERNATIONAL DEVELOPMENT RESEARCH CENTRE

Per: _____

Bhekh B. Thapa
Acting President
Bhekh B. Thapa

Confirmed:

INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT

Richard H. Smith
By Director, Development Services Department

THE FORD FOUNDATION

Lucille D. Harrison
By Office of Vice President

D9

THE ROCKEFELLER FOUNDATION

AGRICULTURAL SCIENCES
ECUADOR OFFICE

R. F. 35

Casilla 2600
San Javier 295
Tel. 30354
Cable Address: ROCKFOUND

October 23, 1972

Mr. James M. Fransen
Agriculture Research Coordinator
Agriculture Department
International Bank for Reconstruction
And Development
1818 H. Street, N. W.,
Washington D. C. 20433 U. S. A.

Dear Jim:

I appreciate very much your letter of October 3rd. On the same date of September 25th., I wrote you another letter concerning INIAP's new production program and collaboration with CIAT. Enclosed is a copy in case you did not receive the original.

We have made considerable progress recently in formulating more concrete items and plans for INIAP to move as rapidly as possible into commodity-oriented production-education programs. Fabian, of course, has a very tough job of handling the local politics so as not to endanger present programs and other aspects of national development.

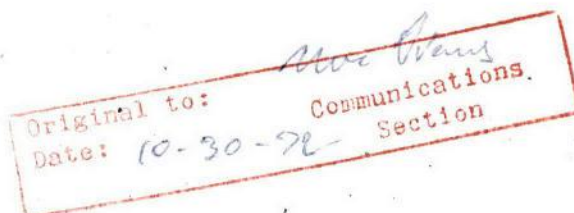
I am enclosing some materials including two summary reports, one prepared in July, 1971 and the other one this past June, and a general letter to Jocko Roberts. These should provide you with a little more background on our efforts here. I am still very anxious to discuss the project with you, and in case you are unable to visit us here, I will try to get to Washington some time in the near future.

Any comments or suggestions you wish to make would be very much appreciated. Best personal regards.

Sincerely yours,

Jack
Jack Dee Traywick
Project Leader-Ecuador

JDT:ggd.



D9.

Many thanks for your letter of October 19 and your generous offer to come to Washington before visiting IITA. As it happens, however, Jim Evans, the Director of our Agriculture Department, will be away from Washington between now and November 13; and he is the person whom we would most want you to talk with during a visit to the Bank. In the circumstances, I doubt that we should put you to the trouble of coming to Washington; it probably would be more valuable, from our point of view, if we could talk with you on your return.

Sincerely yours,

Dr. E. J. Wellhausen
The Rockefeller Foundation
Calle Londres 40, 3 Piso
Mexico 6. D. F. Mexico

Jonah

D7

October 17, 1972

Dear Dale:

Many thanks for sending a copy of your letter of October 12 to Fred Bentley. At about the time it was being written, we were discovering here that it might not be such a complicated matter, after all, to handle IDRC's grant to ICRISAT as part of the ICRISAT Special Account. Since this would be the least time-consuming alternative, we are pursuing this possibility with IDRC, and will be in touch with you as soon as there is something to report.

Sincerely yours,



Harold Graves

Mr. Dale E. Hathaway
International Division
Asia and the Pacific
The Ford Foundation
320 East 43rd Street
New York, New York 10017

cc: Dr. Lowell Hardin

D7

October 13, 1972

Dear Mr. Pfiefer:

No doubt you will have had a telephone call by now from Professor Bentley, made in his capacity as Chairman of the Governing Board of the International Crops Institute for the Semi-Arid Tropics (ICRISAT), and concerning your Center's very welcome recent grant to ICRISAT. It would be a very great convenience to ICRISAT, as you know, if the funds from the IDRC grant could be handled administratively as part of the Special Account which has been established by a number of other donors to ICRISAT. Accordingly we have drafted for your approval and eventual signature a letter indicating that IDRC (without joining the more general agreement in connection with which the Special Account was established) would deposit the proceeds of its grant in this Special Account.

I am attaching a copy of the draft letter. If it meets with your approval, I would appreciate your arranging for signature of three copies. If you will send all three to me, we will arrange the other signatures, and will return one signed copy for your records.

With this letter, I am also sending copies of the Memorandum of Understanding (ICRISAT Project), to which a text of the ICRISAT Special Account Agreement is attached.

Sincerely yours,

Harold Graves
Associate Director
Development Services Department

HG

Enclosures

Mr. J. C. Pfiefer
Secretary
International Development Research Centre
Suite 500 Pebb Building, 2197 Riverside Drive
P. O. Box 8500
Ottawa, Canada K1G 3H9

cc: Mr. Delaume
Mr. Hathaway, Ford Foundation
Mr. Kaps

HG: ap.

[To: (1) I.B.R.D.
(2) The Ford Foundation]

Dear Sirs:

This is to inform you that pursuant to arrangements between us and ICRISAT, we intend to make a contribution to ICRISAT in the amount of

We have been furnished with copies of the Memorandum of Understanding (ICRISAT Project) dated February 22, 1972, and of its Annexes. We intend to deposit in the ICRISAT Special Account the amount of our contribution. To that end we hereby agree to be bound by the provisions of the ICRISAT Special Account Agreement as though we were a "Donor", as such term is defined in such Agreement.

Please confirm your agreement with the foregoing by signing the form of confirmation on the enclosed copy of this letter and returning it to us.

Yours sincerely,

By

Confirmed:

INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT

By

THE FORD FOUNDATION

By

JK

September 29, 1972

Dear Lowell:

This will record the report that I gave you last week to the effect that the International Development Research Center has approved a grant of \$100,000 to ICRISAT. Joe Hulse is authority for the statement that IDRC, under its statutes, is unable to sign the Memorandum of Understanding, of which the ICRISAT Special Account is a part. An agreement will be negotiated directly with Dr. Bentley; indeed, this may already have been done.

In any case, the IDRC grant raises the total of funds subscribed to ICRISAT so far to \$576,365.00.

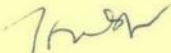
Sincerely yours,

Harold Graves

Dr. Lowell Hardin
The Ford Foundation
320 East 43rd Street
New York, New York 10017

HG/jk

cc: Dr. Cumming^s, Dr. Baird, Dr. Pino, Mr. Mashler, Mr. Cooper



D8

September 8, 1972

Dr. Lowell Hardin
The Ford Foundation
320 East 43rd Street
New York
New York 10017

Dear Lowell:

It is most gracious of you to offer lunch and a meeting place for our gathering on Friday. Dick Demuth, Franz Kaps and I will be coming from the Bank. I will let you know as quickly as possible about other names and numbers.

With this letter, I am sending two documents. One is an updated version of a paper we distributed during Centers Week, showing core and capital requirements as stated by existing centers and institutes for 1973. As you will see, these requirements total about \$22.8 million.

The second document is a quite preliminary mock-up of what we know, guess or hope about grants for international agricultural research in 1973. The unadorned figures are, at the least, fairly firm; some are quite certain. The figures in brackets, on the other hand, are guesses or suggestions. The first column of figures in the mock-up indicates that amounts available from donors might amount to about \$24.3 million.

As far as availabilities are concerned, two or three comments should be made: The German figure includes \$1.9 million which we believe to be Bonn's contemplated budget figure for 1973, plus a carryover of about \$635 million from funds which we still expect to be appropriated for 1972. The Canadian figure is simply the middle of the \$2.5-\$3 million range which Mr. Greenwood mentioned during Centers Week. The American total is simply the sum of amounts indicated for individual centers. These amounts are calculated on the assumption that the budget of each center (excluding the capital budget of CIAT) will be fully subscribed; in fact, as you know, if other donors do not come up to the mark, the American subscription would be reduced.

Dr. Lowell Hardin

- 2 -

September 8, 1972

As far as allocations to centers are concerned, these are indicated to the right of the first column. You will notice, however, that no attempt has been made to suggest allocations for three new projects: genetic resources; the ICRISAT network of relay stations; and the Asian Vegetable Center. The status of these projects is something we can talk about Friday.

Sincerely yours,

Harold Graves

Enclosures

HG:ap

D9

September 8, 1972

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

Dear John:

I am very glad to know that the Rockefeller Foundation will be represented at a meeting to be held next week for a preliminary discussion of grants to international agricultural research in 1973. As you know, the other participants will be the Ford Foundation, USAID, the Canadian International Development Agency and the World Bank; and Dick Demuth will be in the chair. As you also know, the meeting will be held in the headquarters of the Ford Foundation, and will begin with lunch there at 12:30.

Will you please let me or Lowell Hardin know whether anyone will be coming with you, so that he can set up lunch accordingly?

With this letter, I am sending two documents. One is an updated version of a paper we distributed during Centers Week, showing core and capital requirements as stated by existing centers and institutes for 1973. As you will see, these requirements total about \$22.8 million.

The second document is a quite preliminary mock-up of what we know, guess or hope about grants for international agricultural research in 1973. The unadorned figures are, at the least, fairly firm; some are quite certain. The figures in brackets, on the other hand, are guesses or suggestions. The first column of figures in the mock-up indicates that amounts available from donors might amount to about \$24.3 million.

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Dr. John A. Pine

- 2 -

September 8, 1972

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Sincerely yours,

Harold Graves

Enclosures

HG:ap

DEPARTMENTAL ROUTING SLIP				Date <i>Sept 29</i>	
DEVELOPMENT SERVICES					
	Mr. Abdi			Mr. Hoffman	
	Mrs. Boskey		✓	Mr. Kaps	
	Mr. Chatenay			Mr. Martin	
	Mr. Demuth			Miss Powell	
	Mr. Elmendorf			Mr. Raphaeli	
	Mr. Escobar			Mr. Riley	
	Mrs. Foulon			Mrs. Williams	
	Mr. Franco-Holguin				
	Mr. Graves				

Long -
If there is an international
center work file, I
suppose this should be in it.
I don't think Caryl needs
it but perhaps Central Files
should have it.

1/10/80

217

D8

THE FORD FOUNDATION

Inter-Office Memorandum

TO: Representatives/Program Advisors
in Agriculture

DATE: August 21, 1972

COPY TO: W. D. Carmichael
W. Fredericks
E. S. Staples
F. X. Sutton
D. E. Bell

FROM: L. S. Hardin, F. F. Hill, N. R. Collins,
D. Hathaway

SUBJECT: International Agricultural Research and Training

This memo reports our impressions of the deliberations which took place at the expanded International Centers' Week held in Washington July 31 - August 4, 1972. Participants included the Directors of CIMMYT, CIAT, IITA, CIP (potatoes), ICRISAT and the Asian Vegetable Institute (Dr. Chandler, Taiwan); members of the Consultative Group for International Agricultural Research (CG); members of the Technical Advisory Committee (TAC) to the CG; the CG secretariat; and observers.

The CG is to our view an impressive experiment in helping to organize, evaluate and fund a major international development effort. While important procedures remain to be worked out, the CG members, secretariat (which is staffed by IBRD) and TAC are working constructively and diligently to make the undertaking succeed.

You will recall that the principal elements of the system include:

1. The international agricultural research and training institutes presently in the CG family, plus such future international or regional endeavors as may come under CG sponsorship. The demonstrated achievements of IRRI and CIMMYT, it seems to us, have made it possible to launch the CG effort.

2. The CG itself, chaired by Richard Demuth of IBRD and co-sponsored by the World Bank, UNDP and FAO. The CG now has 21 members (donor nations, foundations, regional and international banks) plus representatives from the developing nations chosen from the five FAO regions. This body evolves policies and procedures. Donor members, however, make their "bilateral" grants to individual recipient institutions (thus far the six centers) taking into account the deliberations of the "multinational" forum provided by the CG. When the CG meets formally in November, members will have had before them a "recommended" set of international agricultural research programs and budgetary needs (for 1973 and estimates for the next four years). Presumably the CG members will come into the meeting prepared to make pledges in specified amounts to specific institutions for 1973 and will give an indication of intentions for the five-year period ahead. Following the meeting representatives of recipient institutions and of donors will negotiate actual grants for 1973. David Bell represents the Foundation as a member of the CG.

3. The TAC consists of 12 scientist members plus Chairman Sir John Crawford of Australia. Six of the members are from LDC's. TAC's mandate is broad. In part the CG has said: "TAC will, acting either upon reference from the CG or on its own initiative, advise the CG on the main gaps and priorities in agricultural research related to the developing countries, both in the technical and socio-economic fields, based upon a continuing review of existing national, regional and international research activities..." TAC may mount study teams, hold conferences, employ consultants or use other procedures in the conduct of its affairs.

The recent International Centers' Week was essentially a forum. The CG met informally, hence took few decisions. TAC met on its own to prepare its recommendations to the CG.

Estimated 1973 funding requirements of the ongoing institutes as brought forward for CG consideration are:

<u>Funds Requested in Millions</u>				
<u>Institute</u>	<u>For Core Operations</u>	<u>For Capital</u>	<u>Less Earned Income</u>	<u>Net Core and Capital Total</u>
CIAT	3.463 ^{a/}	0.718 ^{a/}	0.064	4.117
CIMMYT	5.170	1.183	0.344	6.009
CIP	1.085	.289	--	1.374
IITA	4.549	0.352	0.110	4.791
IRRI	3.017	0.236	0.150	3.103
ICRISAT	1.200	2.080 ^{b/}	--	3.280
Total	18.484	4.858	0.668	22.674 ^{c/}

The above takes no account of new activities for which TAC might recommend support in 1973; e.g., conservation of genetic resources or the development phase of an African livestock research project.

Initial soundings with respect to donor intentions brought forth the following as a highly tentative support profile for 1973. Totals rather than allocations to specific centers are the significant figures at this stage.

^{a/} Includes \$518,000 for which funds are being sought in 1972.

^{b/} Includes capital expenditures of \$380,000 for which funds are being sought in 1972.

^{c/} Excludes special projects, primarily outreach endeavors funded by direct grants to the nations or centers involved; e.g., CIMMYT's assistance to national wheat production programs in North Africa funded by USAID and the Ford Foundation.

Possible Contribution Toward Support of CG Endeavors in \$ Thousands

Donor	CIAT	CIMMYT	CIP	IITA	IRRI	ICRISAT	TOTAL
UNDP		700				700	1,400
Ford F.							3,000 ^{a/}
Rockefeller F.							3,000 ^{a/}
Kellogg F.	250						250
U. K.			70	500	343	200	1,113
CIDA	400	450		750		800	2,400
USAID							5,500 ^{b/}
IDRC					100		100
Netherlands	125			125			250
Japan					56		56
Germany							1,500 ^{c/}
Sweden			150				250
Norway							75
Switzerland						125	250
Denmark			150				250
IBRD							3,000 ^{d/}
					Provisional Total		23,144

The above is tentative but quite promising. CG members could well provide \$20 million or more in 1973. The sum raised for 1972 was about \$15 million.

^{a/} Precise allocation to be determined by needs and fund availability; preference expressed to continue as ongoing supporters of original four institutes.

^{b/} Prepared to go up to 25% of core budgets and possibly some capital to a maximum of \$7 million total.

^{c/} Because of legislative difficulties Germany has thus far been unable to provide funds in 1972; 1973 situation uncertain.

^{d/} The bank would act as a residual financing agency in an effort to balance needs against fund availability; would seek authorization to grant up to this total.

Matters requiring continuing effort remaining before the CG include the following:

1. Clearer definition of criteria for choice and specification of priorities by TAC. Sir John Crawford and his committee are working on this matter; TAC will attempt to hammer out a statement by the end of February. Presumably this statement will delineate the types of projects that TAC would consider for recommendation to the CG (e.g., which food crops and livestock enterprises? industrial as well as food crops? aquaculture? forestry? agricultural business and marketing? regional as well as fully international undertakings?). TAC's recommended guidelines will then come forward to the CG for review, possible modification and adoption.

2. Improved forward budgeting, evaluation, and integrated presentation of the proposed programs of each center or endeavor being considered by TAC and the CG. An annual analytical projection would treat both financial requirements and probable fund availability; would deal with the short-run budget commitment and allocative process, keeping constantly in mind the longer-run implications. Components of such an analytical and operational process might include:

- a) Further improvement in the format in which institutions receiving or seeking CG support develop and submit their programs and budgets. Greater uniformity in use of key program and accounting terms and procedures will likely be necessary.
- b) A procedure whereby the financial requirements of each center (program) are objectively considered and evaluated -- without overburdening the researchers with outside reviewers. The principle of external review appears to be generally accepted.
- c) Forward, relatively firm statements of intentions by donors including proposed allocations to recipient institutions.
- d) Use of a 2-year rolling budget process which would provide a year's lead time to grantees.
- e) Periodic (every 5 years or so) in-depth evaluative, planning and outlook reviews which establish longer-run targets.
- f) Possible establishment of a central fund ("surge tank") from which recipient institutions borrow as necessary to meet short-run cash flow needs occasioned by delays on the part of donor agencies.

3. Continued emphasis on bilateral and multinational assistance to national programs. We do not regard international research and training as a substitute for national efforts; rather the international endeavors are, to our view, a means of accelerating and complementing the development of national capability. While CG deliberations may alert assistance agencies and developing nations to national needs, arrangements for mounting, funding and executing these essential national efforts are made outside of the context of the CG framework. With respect to other efforts presently being considered by TAC, it is our understanding that:

- a) Encouragement is being given to the Asian Vegetable Research and Development Center in Taiwan (Dr. Robert Chandler, Director), but the institution is not yet directly included in the CG network of directly supported institutions.
- b) The request for support by the West Africa Rice Development Association, a regional undertaking involving 14 nations, will be considered again at a future date. Hence support is not recommended at this time.
- c) Development of an African relay station for ICRISAT was viewed with favor. Definitive action, however, will await further development of ICRISAT itself.
- d) Development of an improved international network for the preservation of genetic resources appears to be favored. Creation of a Trust Fund and companion program at FAO is being considered.
- e) Further action on the establishment of ILRAD (International Laboratory for Research on Animal Diseases to focus on trypanosomiasis and east coast fever) was deferred pending receipt of a letter from the East Africa Community. It appears that the community may withdraw its earlier invitation to be a host-sponsor of such a laboratory.
- f) The CG-sponsored study of possible means of accelerating and improving the linkages among livestock research endeavors in Africa south of the Sahara is still in progress.
- g) A task force will be deployed to the Middle East early in 1973 to evaluate crops and livestock research needs and programs in that region.

Full minutes of the presentations of center directors and of the CG discussions will be available later. Haldore Hanson's presentation as director of CIMMYT is already in hand; a copy is attached.

Enclosure

(182)

D8

THE FORD FOUNDATION
320 EAST 43RD STREET
NEW YORK, NEW YORK 10017

INTERNATIONAL DIVISION
OFFICE OF THE VICE PRESIDENT

August 15, 1972

MEMORANDUM

TO: Directors, International Research and Training Institutes

FROM: Lowell S. Hardin *LSH*

SUBJECT: Follow-up on our International Centers' Week Session, August 3, 1972

Summarized below are the major items requiring follow-up as a result of our Thursday afternoon session in Washington.

1. Accounting, budgeting, program presentation considerations.

Each of us has a copy of the draft paper prepared by Michael Ruddy. Each is to have his written comments and suggestions back to Mr. Ruddy by October 1, 1972. It is expected that Mike, with such assistance as he may need, will then further revise the paper in light of suggestions received. Reaction of donors will also be sought. The revised paper will then be circulated.

It was suggested that were it possible for Mike to do so (again drawing upon assistance as needed) it would be helpful to prepare a "model" program-budget presentation. If an example could be worked through for one center, this could in turn be made available to all. Not that each presentation would be a carbon copy of the other. But an example in the flesh to accompany the guidelines would go far in helping all of us understand and apply the concepts involved.

2. Salary, perquisites and personnel considerations.

Mr. Gormbley, assisted by William Reed, is preparing a survey questionnaire which you will receive soon. As requested, this will cover items included in the Gormbley study of two years ago. Additionally Mr. Gormbley will seek to acquire and share with us information concerning:

SUB 12 11

RECEIVED

1972 AUG 18 AM 8:46

COMMUNICATIONS
SECTION

- Study leave policies
- Trends in remuneration, in general and by selected professional disciplines.
- Practices in acquiring the service of short-term seconded personnel (university service agreements, government secondment, etc.).
- Spouse travel as a component of the perquisite package.
- Comparative practices and policies concerning professional remuneration among international organizations.
- Provisions for termination, severance.

Mr. Gormbley has suggested that if the institutes seek regular personnel surveys and services of the type discussed, the institutes may wish to consider: (a) building such a service into the IIE package or (b) requesting it from the CG secretariat. We have suggested that Mr. Gormbley inquire of IIE concerning their interest in and the possible cost of undertaking such an activity.

The results of Mr. Gormbley's updated survey should be available this fall.

3. In-house meeting of Institute Directors.

It is our understanding that the Institute Directors will hold their own meeting at Bellagio in February, 1973. Dr. Albrecht is arranging the agenda. Discussion papers may be solicited. Several of the items which were inadequately discussed in our Washington meeting will likely be taken up in February. In addition to the foregoing items the agenda will probably include these topics:

- Division of labor among the centers (primary and relay responsibilities).
- Inter-center staff recruitment, exchange, travel.
- The conduct of training operations.

- Center relationships to: national governments and programs; individual donors; CG; TAC; universities and other resource bases in both industrialized and developing nations; governing boards; host governments; etc.
- Informational publications on the centers.
- Establishing a calendar of events.
- Reviews, planning and outlook.

cc- Messrs. H. Graves
M. Ruddy
W. Gormbley
W. Reed
J. Pino
F. Hill
N. Collins
D. Hathaway

D8

July 27, 1972

Dear Lowell:

During the war, the OSS in southeast Asia had a secret radio link to the Deputy Chief of Military Intelligence in Thailand. This individual had a conference each morning with his opposite number in the Japanese Army. By radio, we used to ask our Thai friend the most variegated and disconnected questions, which he somehow managed to put to his Japanese friend; and then he gave us the answers by radio. After the war, when we finally met our Thai ally face to face, we asked him more than once how he had accomplished these miracles. All he ever told us was, "It wasn't easy."

So I won't ask you how you brought our great negotiations to their present state. It does seem to me we are getting somewhere. I am attaching a slightly modified version of your table for possible later discussion.

Sincerely,

Harold Graves

Dr. Lowell Hardin
Hay-Adams Hotel
800 16th Street, N. W.
Washington, D. C. 20005

HG:sjc

EST. 1972ALTERNATE MODELCore Operations (\$'000)

Ford	750	467
Rockefeller	750	750
USAID	725	725
CIDA	746	746
ODA	171	171
Netherlands	81	81
Earned income	50	50
Belgium	-	343
	<hr/>	<hr/>
	3,273	3,333

CONTINGENTCore

Germany	-	125
		<hr/>
		3,458

Capital

Germany	-	625
		<hr/>

Total	4,083
-------	-------

Budget	3,882
--------	-------

Additional to Budget	201
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OFFICE MEMORANDUM

TO: Files

FROM: Franz H. Kaps *Franz Kaps*

SUBJECT: Kellogg Foundation Contribution to Consultative Group
Financial Requirements

DATE: July 26, 1972

*Consultative Group on International
Agricultural Research**D10*

Dr. Mawby, the President of the Kellogg Foundation, called me this afternoon to inform me that his Foundation would not be able to send a representative to International Centers Week.

Dr. Mawby told me that the Kellogg Foundation will contribute \$350,000 to CIAT's 1973 budget. This was a firm commitment. As for subsequent years, Kellogg would continue its support to CIAT for at least 3 to 5 years in the amount of \$250,000 - \$300,000 per year.

Dr. Mawby asked that this statement be communicated to members of the Consultative Group at their meeting on August 4, when donors' intentions of possible financial contribution for 1973 and subsequent years is being discussed.

cc: Mr. Demuth
Mr. Graves
FHK:mcj

THE FORD FOUNDATION

IN

BHC
HG
CJ

TO: Mr. Harold Cross

DATE: 7/18

D8

Dear Harold,

Last nite I read
through your set of
Secretariat comments on
the centers. My congratulations
to you and your colleagues.
They are, to my view, thoughtfully
and sensitively done. And
they get at the big
issues with economical
use of words.

What I'm saying is
that, having tried ^{myself} to do
what you have done well,
I think I can recognize
a good job when I see it.

Lowell S. Hardin

Lowell

Alfred S. Howard

March 10
to Vincennes

110

111

112

INTERNATIONAL DEVELOPMENT ASSOCIATION

ROUTING SLIP				Date
INCOMING MAIL				
Mr. Adler	D630	Mr. Paijmans	D1032	
Mr. Aldewereld	A1226	Mr. Rayfield	N434	
Mr. Alter	A837	Sir Denis Rickett	A1230	
Mr. Baum	C303	Mr. Ripman	C303	
Mr. Benjenk	A712	Mr. Rotberg	A1042	
Mr. Blaxall	D628	Mr. Stevenson	D532	
Mr. Broches	A813	Mr. Twining	N635	
Mr. Cargill	A613	Mr. Votaw	A613	
Mr. Chadenet	C303	Mr. Wiese	A837	
Mr. V.C. Chang	H702	Mr. Williams	B1210	
Mr. Chauffournier	C702	Mr. Wright	A1136	
Mr. Cheek	C702			
Mr. Chenery	A1221			
Mr. Wm. Clark	D928			
Mr. Clarke	D1029			
Mr. Cope	B1210			
Mr. Demuth	D1128			
Mr. D.A. de Silva	N635			
Mr. Diamond	D829			
Mr. El Emary	A1143			
Mr. Fontein	C602			
Mr. Fowler	A1219			
Mr. Gabriel	H700			
Mr. Goodman	C602			
Mr. Goreux	N235			
Mr. Graves	D1122			
Mr. Gutierrez	A1136			
Mr. Hartwich	A712			
Mr. Hayes	D429			
Mr. Henderson	D529			
Mr. Hittmair	A1042			
Mr. Hoffman	D1123			
Mr. Husain	A1013			
Mr. Knapp	A1230			
Mr. Lejeune	A1013			
Mr. Lerdau	D432			
Mr. McNamara	A1230			
Mr. Mendels	A1219			
Mr. Muller	N436			
Mr. Nurick	A802			

JUL 25 1972

ki



ASIAN DEVELOPMENT BANK

COMMERCIAL CENTER P.O. BOX 126
MAKATI, RIZAL D-708, PHILIPPINES

Consultative Group on International
Agricultural Research

D7

TELS. 88-87-81, 88-26-11
CABLE ADDRESS: ASIANBANK
TELEX NOS. 7425071, 7222094 & 3587

17 July 1972

Mr. Richard H. Demuth,
Chairman,
Consultative Group on International
Agricultural Research
1818 H St., N.W.,
Washington D.C. 20433,
U.S.A.

Dear Mr. Demuth,

President Watanabe has asked me to reply to your letter of 21 April inviting the Bank to be represented at International Centers Week to be held in Washington D.C. from 31 July to 4 August.

As already advised to you by cable, I regret that the pressure of operational activity will not allow us to send a senior staff member to take part.

However, I understand that the conclusions reached during the International Centers Week will be submitted to the November meeting of the International Consultative Group for final review and consideration.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Hsieh".

S. C. HSIEH
Director,
Projects Department.

15 JUL 52 11 3:33

RECEIVED

1972 JUL 25 PM 3:33

COMMUNICATIONS
SECTION

Projects Department
Director

S. C. HSIEH



Yours sincerely,

final review and consideration.

November meeting of the International Consultative Group for
during the International Centers Week will be submitted to the

However, I understand that the conclusions reached

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As already advised to you by cable, I regret that

31 July to 4 August.

national Centers Week to be held in Washington D.C. from

letter of 21 April inviting the Bank to be represented at Inter-

President Matsushita has asked me to reply to you.

Dear Mr. Demuth,

U.S.A.

Washington D.C. 20433

1818 H St. N.W.

Agricultural Research

Consultative Group on International

Chairman

Mr. Richard H. Demuth

13 JULY 1972

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MAKATI, PHILIPPINES
COMMERCIAL CENTER B.O. BOX 152
ASIAN DEVELOPMENT BANK

DJ

Agricultural Research
Consultative Group on International

Consultative Group on International
Agricultural Research

✓ cc: 92a
D9

June 22, 1972

Dear Jocko:

I am much obliged to you for your letter of June 12 concerning CIAT. I am still concerned that Jerry Grant is going to have to present his capital budget to the Consultative Group as a completion item, since it was felt last year that the Group would want to consider only new items; but perhaps we can figure out what to do about this as the time approaches.

Sincerely yours, . . .

Harold Graves

Dr. Lewis M. Roberts
Associate Director
Agricultural Sciences
The Rockefeller Foundation
111 West 50th Street
New York
New York 10020

HG:ap

[Handwritten signature]

cc: Mr. Kaps
Mr. Fransen

The Rockefeller Foundation

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

FI
VCC: Dg

OFFICE OF THE PRESIDENT

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

June 12, 1972

Dear Mr. Demuth:

I have just seen the letter of May 19, 1972 from Mr. Jackson, Mr. Cohen, and you, requesting members of the Consultative Group on International Agricultural Research to act on matters concerning the Group's Technical Advisory Committee.

I understand the necessity to elect members of TAC to assure continuity of work and a full complement of committee members. In the present instance I understand that Professor Fukuda wishes to serve only until the end of his present term, and Drs. Hopper, Muriithi, and Pagot are being nominated for re-election, and I would agree with this recommendation.

I do not know Dr. Noboru Yamada well, but I am sure he is well known to others on the committee and of the consulting group, and I would be glad to support his nomination. His C.V. is quite impressive.

I further understand that one more member should probably be added to TAC to create a committee of twelve, plus the chairman. For this post Professor Dieter Bommer has been nominated. Here again, while I do not know Professor Bommer personally, I am sure he is fully qualified and I am glad to support the nomination.

With best regards,

Sincerely yours,

J. G. Harrar
J. G. Harrar

Mr. Richard H. Demuth
Consultative Group on
International Agricultural Research
1818 H Street, N.W.
Washington, D.C. 20433

cc: Mr. Harold Graves

Original to: *rm Demuth*
Date: *6-14-72* Communications Section

The Rockefeller Foundation

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

AGRICULTURAL SCIENCES

CABLE: ROCKFOUND, NEW YORK
TELEPHONE: COLUMBUS 8-8100

June 12, 1972

Dear Harold:

John is at home sick today, so I will try to answer the questions in your letter that came this morning.

As far as I have been able to determine, there were no written agreements between the Rockefeller Foundation and the Ford Foundation or between the Rockefeller Foundation and the Kellogg Foundation with respect to their providing capital development funds for CIMMYT, CIAT and IITA. As you are aware, the Ford Foundation provided the capital funds for IRRI. As the plans for the development of CIMMYT, CIAT and IITA took shape in the late 60's, the top officers of the Ford and Rockefeller Foundations came to a verbal understanding that the RF would take the responsibility of providing or helping to raise the funds needed for the initial phases of development of CIMMYT and CIAT, and that the Ford Foundation would do the same for IITA. A bit later the Kellogg Foundation decided that it would provide funds for operations and capital development of CIAT. In 1969 the Kellogg Foundation made a grant of \$1,157,715 for CIAT's capital development. In addition, the Kellogg Foundation has provided annual support for operations since CIAT began.

The Rockefeller Foundation has provided a total of \$3,258,543 for CIAT's capital development, as you will note from the attached summary sheet. This summary is right up to date, and was made last week after telephone conversations with Dr. Grant and after the Kresge Foundation made its recent grant to CIAT for development purposes. You will note from this summary sheet that CIAT still needs approximately \$700,000 to complete its equipment requirements. In my conversations with Jerry last week he stated that he plans to present this need to the Consultative Group at its meeting the first week in August. He will undoubtedly soon be sending you a copy of this summary sheet

Original to: *Mr. Grant*
Date: *6/16/72* Communications Section

UNITED NATIONS
DEVELOPMENT PROGRAMME



PROGRAMME DES NATIONS UNIES
POUR LE DEVELOPPEMENT

Executive Group on International
Agricultural Research

93a
cc 03

UNITED NATIONS
NEW YORK

TELEPHONE: 754-1234

CABLE ADDRESS: UNDEVPRO • NEW YORK

REFERENCE:

DP/GLO/71/013
DP/GLO/214/71/013

12 June 1972

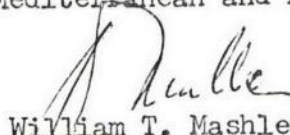
Dear Mr. Demuth,

Reference: International Crops Resource Institute for the
Semi-Arid Tropics (ICRISAT)

We have been informed that the Governing Council has taken
note of the Administrator's approval of the above-mentioned project.
In this connexion we are today requesting the Controller's office of
the United Nations to deposit the amount of \$100,000 to your account.

Yours sincerely,

for the Assistant Administrator
and Director, Bureau for
Europe, Mediterranean and Middle East


William T. Mashler

Chief
Section for Global and Interregional Projects

Mr. Richard H. Demuth, Director
Development Services Department
International Bank for Reconstruction
and Development
1818 H Street, N. W.
Washington, D. C. 20433

Original to: *Development*
Date: 6-17-72
Communications
Section

pa 1
International Agricultural Development

The Rockefeller Foundation

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

Consultative Group on International
Agricultural Research

D9

AGRICULTURAL SCIENCES

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

Projects Dept. Correspondence

ANS'D BY

DATE

June 8, 1972

Dear Jim:

I am pleased to send to you under separate cover an Aide-Memoire which was prepared in connection with the Bellagio V Conference on International Agricultural Development. This document is being distributed to all participants of the conference. If there are other individuals who you feel should receive copies of the Aide-Memoire, please let me know.

You may recall that at the last session there was some discussion regarding a future meeting in this series. A number of us have given this matter some thought since the Bellagio meeting and have decided to explore the possibility of holding the next conference in Mexico. Tentatively we are looking into the possibility of meeting in Ciudad Obregon, Sonora, Mexico, where the Centro de Investigacion Agricola del Noroeste (CIANA) is located. As you may know, this is where CIMMYT's main wheat breeding work is done, and it is undoubtedly the most important wheat-breeding center in the world today.

If arrangements can be made to hold our meeting in Ciudad Obregon, I am sure it will provide the participants with an exceptional opportunity to become familiar with the workings of the wheat program. Perhaps we might follow up the meetings there with a visit to the CIMMYT headquarters facilities in Mexico City. The date of this next meeting would be sometime during the month of March, 1973, when the wheat-breeding material can best be observed.

SECTION
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COMMUNICATIONS
SECTION

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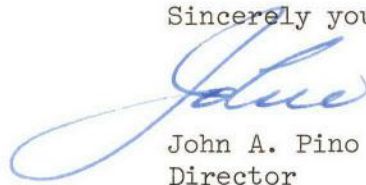
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Mexican Consulate in Mexico City on June 14, 1972.
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Mexican Consulate in Mexico City on June 14, 1972.

June 8, 1972

I would be pleased to have your reactions to these suggestions for the next conference.

It was a pleasure to have been with you at Bellagio.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "John A. Pino".

John A. Pino
Director

Mr. L. J. C. Evans
World Bank
1818 H. Street, N.W.
Washington, D.C. 20433

JAP:11

P.S. We are also sending you a revised English version of Ing. Osoyo's report. He was a bit unhappy with the English copy which he brought with him to Bellagio. Therefore we have redone his Spanish manuscript, and I am pleased to send a copy for your information.

OFFICE MEMORANDUM

TO: Files

FROM: Franz H. Kaps *Franz H. Kaps*

SUBJECT: ILRAD Report -- International Development Research Center Comments

DATE: June 7, 1972

I spoke today to Mr. Hulse in IDRC asking him about his comments on the ILRAD Report. They are as follows:

1. He was missing any reference to a possible relationship between ILRAD and the East African Veterinary Research Organization (EAVRO).
2. The annual operating budget of \$2.8 million seemed to be very high as compared to other international centers which calculated expenditures of \$70-80 thousand a year for senior staff, while ILRAD's figures were much higher. There would also be a big discrepancy between salaries for ILRAD staff and EAVRO staff.
3. He would prefer a single Board of Trustees for ILRAD and a possible African Livestock Center, since any merger at a later stage might cause substantial problems.
4. Referring to paragraph 17, "Further Steps Required and Needed Financial and Logistic Support Pending Full Establishment and Funding of the Laboratory", where it is mentioned that "Presumably it would be the responsibility of the Rockefeller Foundation as the Executing Agency to proceed with these matters with the guidance of concurrence of the African Livestock Subcommittee of the Consultative Group", he wondered whether this should not be the task of ILRAD's Board of Trustees rather than the one of the Rockefeller Foundation.

cc: Mr. Demuth
Mr. Evans
Mr. Graves
Mr. Fransen

FHK:mcj

Consultative Group on International
Agricultural Research

The Rockefeller Foundation

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

D9

AGRICULTURAL SCIENCES

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

June 6, 1972

Dear Harold:

In your letter of May 22 you asked for figures on support from The Rockefeller Foundation to outreach programs of the international agricultural centers for 1972.

The attached pages list our grants either directly to the centers, or to other recipients for programs in which they are cooperating with one of the centers.

Sincerely yours,



John A. Pino
Director

Mr. Harold Graves
Consultative Group on International
Agricultural Research
1818 H Street, N. W.
Washington, D. C. 20433

JAP:S
Enclosure

1972 ROCKEFELLER FOUNDATION SUPPORT TO OUTREACH PROGRAMS
OF INTERNATIONAL CENTERS

INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER (CIMMYT)

Middle East Wheat Improvement Project	
RF 71086, Alloc. 4 (breeder and pathologist)	\$ 62,000
RF 71086, Alloc. 5 (local expenses in Turkey)	47,500
RF 71019, Alloc. 10 (program support)	9,600
 Oregon State University for cooperative program in wheat improvement in Middle East, RF 70011	 116,500
 Spring-winter wheat program at Oregon State University, RF 71086, Alloc. 3	 26,100
 Inter-Asian Corn Program (IACP)	
Operating costs for 1972, RF 71086, Alloc. 1	38,280
Maize and IACP (IAP budget), RF 69022, Alloc. 5	11,850
 Puebla Project, RF 71003	 128,655
 University of Nebraska, modification of corn germ plasm, RF 68026	 25,000
 Broad crosses, GA AGR 7124	 2,500
 Plant factors contributing to efficiency of grain production in maize, GA AGR 7126	 3,000
 Cornell University, cold tolerance in maize, GA AGR 7202	 15,000
 FAO for training program for Near East cereal specialists, RF 71006	 40,000
 Washington State University, biological evaluation of triticale, GA AGR 7121	 7,500

INTERNATIONAL RICE RESEARCH INSTITUTE (IRRI)

Experimental rice production program, RF 71040

\$ 23,400

Upland rice (Paulsen, Kansas State University), GA AGR 7113

7,500

INTERNATIONAL POTATO CENTER

Mexican Regional Program, RF 71086, Alloc. 6	\$ 82,000
--	-----------

University of Minnesota, frost resistance, RF 69053	21,000
---	--------

University of Wisconsin, research to increase yield and adaptation of cultivated tetraploid potatoes, GA AGR 7206	15,000
--	--------

Toward costs of completing the collection of the world germplasm of corn, wheat, rice, sorghum, and millets, RF 72023

IRRI: \$ 80,000

CIMMYT: 220,000 (\$115,000 for corn; \$105,000 for wheat)

Sorghum and millets: \$50,000

mjs
June 6, 1972

Consultative Group on International
Agricultural Research

93a
Vcc D8

June 5, 1972

Mr. Lowell S. Hardin
Program Adviser, Agriculture
The Ford Foundation
320 East 43rd Street
New York, N.Y. 10017

Dear Lowell:

Just a line to thank you for sending me copies of the communications you have sent out to the ICRISAT Board Members and to Dr. Swaminathan. As Harold Graves may already have told you, I will plan to arrive in New Delhi on July 2 and will join the committee meeting at The Ford Foundation offices at 9 a.m. on July 3.

I hope the surgical procedure that you have had to undergo was not too painful and that your recovery is rapid.

Best regards.

Sincerely yours,



Richard H. Demuth
Director

Development Services Department

RHD/hm

THE FORD FOUNDATION
320 EAST 43RD STREET
NEW YORK, NEW YORK 10017

✓ 31
✓ CC 58

INTERNATIONAL DIVISION
OFFICE OF THE VICE PRESIDENT

May 31, 1972

Mr. Harold Graves
Secretary
Consultative Group on International
Agricultural Research
1818 H Street, N.W.
Washington, D.C. 20433

Dear Harold,

This is in response to your letter of May 19, in which you solicit comments on the report "Proposal for an International Laboratory on Animal Diseases (ILRAD)" prepared by Drs. Pritchard, Robertson and Sachs.

This report, it seems to me, treats clearly the key question the authors were asked to address: assuming that ILRAD is to be created, what should its mission be and how should it be organized and operated? Not in the team's frame of reference and therefore only indirectly discussed is the prior question: should ILRAD be created? That is, where does ILRAD stand in priority relative to ongoing and other new proposals before TAC and the CG?

We are all mindful of the ongoing financial requirements of IRRI, CIMMYT, CIAT, IITA, PCI and ICRI SAT. It seems important, therefore, that the Consultative Group see its way through the financial requirements of the foregoing institutions prior to giving ILRAD - or any additional new venture - the green light.

With respect to the ILRAD proposal before us, we offer the following comments.

1. Life expectancy. Some of us had conceived of the proposed Laboratory as narrow in its span of activities and sharp in its focus. We perceive the Institute not to be an open-ended one. Nor was it envisioned that ILRAD would move beyond Trypanosomiasis and the East Coast fever to other diseases thus committing it to continuous life. It was thought that a beginning and perhaps an end point could be foreseen. At one time it was suggested that within five to seven years of work it should be possible to determine whether or not a breakthrough with Trypanosomiasis would in fact be possible. Given this information a decision could be then made with respect to ILRAD's future.

Original to: Mr. Graves
Date: 6-5-72
Communications
Section

Mr. Harold Graves

May 31, 1972

The text conveys the impression of a fairly long if not indefinite life expectancy for ILRAD. This is reflected in (a) separate facilities rather than joint use of existing laboratories and acreage at Muguga, (b) construction of permanent staff housing, (c) reference to five-year renewable terms for Board members, etc.

While I would favor the narrower mission with clearly defined check points for review, this may not be the desired model. Whatever the model, however, we suggest that assumptions with respect to life expectancy be clearly spelled out so that they are generally understood.

2. Division of responsibility between ILRAD and existing institutions researching the same diseases. The report proposes cooperative or collaborative research fully to utilize the capacities of existing institutions, to prevent duplication and to assure that ILRAD focuses on the basic missing ingredients. While this proposed division of labor needs further clarification, I speak here to operational concerns. It is suggested that ILRAD contract with other institutions to do the work assigned to them. Is this to be new work, activities in which the existing institutions are not already engaged? If not, why should funding via ILRAD be necessary?

Presumably existing institutions are already financed, probably on a bilateral basis. ILRAD's offer to contract for services (\$500,000 per year) should not, to my view, substitute ILRAD support for that of other donors presently funding national research endeavors.

In principle we have thus far held that international institutes should not be sub-granting bodies. Their task is research and training, not making and managing grants. A contract probably is not a grant. And again the proposed ILRAD model may be the appropriate one in its circumstances.

Alternatively, it seems to me that existing national and external support to the research entities which collaborate with ILRAD might be continued or increased if necessary to assure that the work is not interrupted. Although this procedure might give ILRAD less direct control than is desired, it would assure ongoing bilateral support to existing institutions.

Because of the above point I feel that further analysis on this point is desirable.

3. ILRAD outreach. The report suggests a \$500,000 per year funding requirement for outreach. Presumably this involves adaptive research and extension

Mr. Harold Graves

May 31, 1972

activities away from the headquarters unit. I understand these activities to be different from those proposed under the collaborative research contract. Differentiation between collaborative research and outreach activities needs to be sharpened. Further, it is not clear why the \$500,000 per year funding for this activity is mentioned in the ILRAD discussion. Again, referring to prior practice, the institutes have thus far looked to bilateral funding for outreach projects in other countries. While core budgets have contributed to training, seminars and consultative work on the part of the institutes, outreach programs in other nations have not been funded from core program grants provided by Consultative Group members. Again, a variation in previously prevailing models may be proposed. If so, the rationale probably needs further development.

4. Staff housing component of capital budget. More than one-third of the estimated \$3.37 millions in capital costs for ILRAD is allocated to staff housing. As summarized on page 39 senior staff housing would cost \$546,000, junior staff housing \$270,000, junior staff flats \$72,000, junior staff quarters (local) \$324,000 for a total of \$1,212,000. I presume that this is to provide individual houses for senior and junior staff and would take care of the housing and cafeteria requirements for trainees (and perhaps for conferences).

I further note that the study team suggests that some of this housing might well be located in the city of Nairobi itself.

All of this raises the question of the need to construct new housing for senior, junior and local staff. Has the alternative of renting housing on the local Nairobi market then examined? If ILRAD's life expectancy could be relatively short (i.e. ten years) and if Nairobi being only 20 miles away can provide rental housing, is it wise for ILRAD to make such a large investment in staff housing?

5. Administration and government. It occurs to me that it may be difficult to expect African persons nominated to the Board by their governments to fill five-year terms. Maybe persons named to the Board would be permanent civil servants whose tenure would therefore not be interrupted by changes in governments. Generally, however, where elective officials nominate individuals of their choice to Boards, newly elected officials like to replace those named to such posts by their predecessors. This is not a major point, for obviously if a Board member resigns someone can be named to fill his unexpired term.

6. External review panel and advisory committees. The scheme for appointing and using the external review panel is attractive to me. On the other hand, it occurred to me that there might be useful linkage between the external review panel and the advisory committees called for in the report. I would be curious as to the reaction of the authors

Mr. Harold Graves

May 31, 1972

of the report to the possibility that the external review panel be constituted from among the members of the advisory committees. It is my impression that with both the external review group and the advisory committees the numbers of persons coming and going could be fairly large. And presumably the advisory committees are not directly beholden to ILRAD hence are external and could be objective in the overall review. This, another minor point, would require further examination.

To my view the ILRAD executive team has clarified many of the issues and has written a persuasive report. The concept of a community of effort involving existing institutions and focussing on basic work in ILRAD itself is imaginative. Undoubtedly it will be necessary to have some of the staff on hand full-time before details of such responsibility sharing can be spelled out. Incidentally, if ILRAD moves forward and if there is reluctance to appoint a director or acting director, the work could be placed under the interim leadership of a project development officer.

Sincerely yours,


Lowell S. Hardin

cc: Dr. John Pino, RF

Consultative Group on International
Agricultural Research

41
✓cc: D9

May 22, 1972

Dear John:

In Rome in April, Sir John Crawford asked me for figures about grants to outreach programs of the international centers for 1972. Perhaps this relates to the question of support by members of the Consultative Group for regional or national research programs of international significance.

Anyway, I would be grateful if you would give me figures indicating what support the Rockefeller Foundation is giving, for 1972, to national or regional programs in which an international center, through its outreach programs, is a partner or participant.

Sincerely yours,

Harold Graves

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

HSW
HG:ap

✓cc D8

May 22, 1972

Dear Lowell:

In Rome in April, Sir John Crawford asked me for figures about grants to outreach programs of the international centers for 1972. Perhaps this relates to the question of support by members of the Consultative Group for regional or national research programs of international significance.

Anyway, I would be grateful if you would give me figures indicating what support the Ford Foundation is giving, for 1972, to national or regional programs in which an international center, through its outreach programs, is a partner or participant.

Sincerely yours,

Harold Graves

Dr. Lowell Hardin
Program Adviser, Agriculture
The Ford Foundation
320 East 43rd Street
New York
New York 10017

lwh
HG:ap

B. M. Kops. 11/11/72
3 () files

THE FORD FOUNDATION
"PARUJATA"
6-3-1109/1, RAJ BHAVAN ROAD,
SOMAJIGUDA, HYDERABAD - A. P.
TELEPHONE :- 35462

May 2, 1972
D 8

Dr. Lowell Hardin
The Ford Foundation
320 East 43rd Street
New York, NY 10017, USA

Dear Lowell :

I am writing with further reference to my cable message of May 2, concerning the procedure for promulgating the constitution of ICRISAT.

In the discussions with a representative of the ICAR Secretariat, it was pointed out that registration of the Institute or its incorporation under provisions of Indian law would subject the Institute to a degree of regulation, control and reporting which could in time become restrictive. It was further suggested that this would not be necessary and that these restrictive conditions could be avoided if we are careful to retain the international status as contemplated in the memorandum of understanding. Therefore it has been suggested, as indicated in my cable message, that the Institute be formed and the Constitution promulgated by an Association of Persons (more than one), three in number being ample. Accordingly, the suggestion was put forward that we have the constitution promulgated by three persons officially designated by The Ford Foundation, The Rockefeller Foundation and the IBRD, respectively.

I am enclosing a re-draft of the constitution in which Mrs. McLean's suggestions are incorporated and which contemplates signatures by these three parties. This draft indicates that the signatories are acting in furtherance of the proposals of the Consultative Group on International Agricultural Research. This body could, at its next meeting, endorse by resolution appropriately recorded in its minutes the action taken in establishing ICRISAT and in promulgating this constitution. On this basis the Government of India would issue its notification in the Official Gazette and this would provide the legal charter which is necessary for the institution to operate as a legal body. It is contemplated that the notification in the

Official Gazette will specify that where the United Nations Privileges and Immunities Act of 1947 specifies "United Nations", the word "Institute (ICRISAT)" would be substituted therefor, and where the Secretary General is mentioned the Director would be substituted therefor. Under this Act the Institute would have much greater freedom than would be the case for a society or corporation registered under Indian law and would enjoy all of the privileges specified in the agreement, with a minimum of red tape. It would, under the provisions of the notification, backed up by full Cabinet action, be able to institute legal proceedings, negotiate leases and carry on its full operations. It would have certain immunities including those to legal suits instituted by others, which are not enjoyed by a registered corporation or society.

I have discussed this proposed procedure with Mr. J.B. Dadachanji, our privately engaged legal counsel, and he advises informally that this appears to be not only a feasible procedure but one that is highly desirable and very much preferred to forming the Institute as a society registered under and subject to Indian law. He is studying the matter in more detail and will give us in due course a written opinion together with suggested texts of draft resolutions which the concerned bodies may wish to adopt and record.

I hope very much that The Ford and Rockefeller Foundations and the IBRD will be willing to designate an appropriate person to sign and promulgate a constitution on this basis.

Very truly yours,

Ralph W. Cummings
Ralph W. Cummings

Encl : As above

Copy to : 1) Dr. Sterling Wortman, The Rockefeller Foundation,
111 West 50th Street, New York, NY 10020.

✓ 2) Mr. R.H. Demuth, IBRD, 1818 H Street,
Washington, D.C.

3rd DRAFT

May 3, 1972

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

Preamble

The persons signatory to this constitution, acting in furtherance of the proposals of the Consultative Group on International Agricultural Research*, being desirous to promote the improvement and productivity of agriculture in the rainfed areas of the seasonally dry, semi-arid tropical regions of the world and thereby raising the standards of living, levels of nutrition and general welfare of the people living in these regions, hereby establish the "International Crops Research Institute for the Semi-Arid Tropics" (ICRISAT), hereinafter referred to as the "Institute" as an autonomous, international, philanthropic, non-profit, research, educational and training organization.

Article I

Legal Status

1. The Institute is constituted as an ~~autonomous~~ , international, philanthropic, non-profit, research, educational and training institute, in pursuance of the Agreement executed on the Twenty-eighth day of March, 1972, between the Government of India on the one part and The Ford Foundation acting on behalf of the Consultative Group on International Agricultural

* Minutes of Meeting of Consultative Group on International Agricultural Research, held in Washington, D.C., December 3-4, 1971.

Research on the other. The said Agreement is appended hereto as Annexure.

Article II

Purposes and Activities of the Institute

1. The Institute will serve as (a) a world center for the improvement of sorghum, millet, pigeon peas, and chick peas; (b) a center to promote the development and demonstration of improved cropping patterns and systems of farming which optimize the use of human and natural resources in the low rainfall, unirrigated, seasonally dry and semi-arid tropics; and (c) a center which may undertake such other programmes or extensions of these programmes as its Governing Board shall determine.
2. The Institute will engage in any and/or all of the following types of activities :
 - (a) Research on practical and theoretical problems including plant breeding related to the production of sorghums, millets, chick peas, and pigeon peas, and on the cropping and farming systems in which these crops are major components.
 - (b) Collection, evaluation, maintenance, manipulation and distribution of basic germ plasm and of improved plant materials for use in breeding, improvement, and production programmes of national and regional programmes.

- (c) Publication and dissemination of research results.
- (d) Organization of periodic conferences, forums and seminars on problems related to the Institute's objectives.
- (e) Training of scientists who will be involved in research, educational, and action programmes in the various countries in which the Institute's programme will be applicable.
- (f) Assistance in the development of appropriate educational, research and extension institutional arrangements in the cooperating countries to facilitate use and application of the work of the Institute.
- (g) Establishment and operation of an information center and library which will provide a collection of the world's literature on the major and related subjects of concern to the Institute.
- (h) Such other activities as the Institute may find necessary in furtherance of the objectives of the Institute.

Article III

Powers

In furtherance of the aforesaid purposes and activities, the Institute shall have the following powers :

1. To receive, acquire, or otherwise obtain from any governmental authority, national or local, foreign or domestic, or from

any corporation, company, association, person, firm, foundation or other entity, such charters, franchises, licenses, rights, priveleges, concessions and assistance, financial or otherwise, as are conducive to and necessary for the attainment of the purposes of the Institute.

2. To receive, acquire, or otherwise obtain from any governmental authority, national or local, foreign or domestic, or from any corporation, company, association, person, firm, foundation or other entity, by donation, grant, exchange, devise, bequest, purchase or lease, either absolutely or in trust, contributions consisting of such properties, real, personal, or mixed, including funds and valuable effects or things, as may be useful or necessary to carry out the purpose and objectives of the Institute, and to hold, own, operate, administer, use, sell, convey, and dispose of the said properties or valuable things.
3. To enter into contracts.
4. To employ persons.
5. To institute legal proceedings.
6. To do and perform all acts and things as are necessary, expedient, suitable or proper for the furtherance, accomplishment or attainment of any and/or all of the purposes and activities herein stated, or which shall appear, at any time, as conducive to and useful for the purposes and the activities of the Institute.

Article IV

Principal Headquarters Location

1. The Principal Headquarters of the Institute shall be at Hyderabad, India.
2. The Institute may establish such subsidiary offices or experimental stations as may be determined by its Governing Board as being necessary for the effective conduct of its programme.

Article V

Governing Board

1. The Institute shall operate under the authority of a Governing Board, consisting of not more than fifteen members selected as follows :
 - 3 members nominated by the Government of India (the host country).
 - 3 members nominated by the Consultative Group on International Agricultural Research.
 - 1 Director of the Institute, ex-officio.
 - 6 to 8 members-at-large with relevant interests and qualifications from countries or areas being served, or from countries or agencies which have concern for and provide substantial support for

work in the fields of the Institute's major responsibilities. These 6 to 8 members of the first Governing Board shall be selected and appointed by the Sub-Committee on ICRISAT constituted by the Consultative Group on International Agricultural Research.

2. Three members of the Governing Board shall be appointed on nomination by the Government of India and shall serve for such terms as the Government of India may specify.
3. The Director of the Institute shall be a member of the Governing Board, ex-officio, for as long as he continues to serve as Director.
4. All other members of the Governing Board shall be appointed for three year terms, with the exception of the members of the first Board, one-third of whom shall be appointed for one, one-third for two, and one-third for three year terms respectively. Vacancies caused by these members by reason of their retirement, death, incapacity, or any other cause may be filled by the Governing Board. New appointees shall be appointed for the remainder of the term of the member who is being replaced or for three years in case of those appointed to fill vacancies occurring as a result of expiration of the term of a member.

5. The Governing Board shall :

- (a) frame rules of procedure for its own working;
- (b) elect a Chairman annually;
- (c) determine the policy of the Institute;
- (d) select and appoint the Director of the Institute for such period or periods as deemed necessary and appropriate;
- (e) develop and/or approve the Institute's programmes;
- (f) consider for approval the appointment of senior staff members of the Institute on the recommendation of the Director;
- (g) scrutinise and approve the budget estimates for the Institute; and,
- (h) do and perform all other acts that may be considered necessary, suitable and proper for the attainment of any or all of the purposes, activities, and objectives of the Institute as enumerated in Article I above.

Article VI

Committees

1. The Board may designate an executive committee of its members who shall have the power to act for the Board in the interim between Board meetings on all matters which the Board delegates to it.

2. All interim actions of the Executive Committee shall be reported to the full Board at its next subsequent meeting.
3. The Board may create other standing committees or ad hoc committees as may be deemed necessary for carrying out its responsibilities.

Article VII

Director

1. The Institute shall be administered by a Director, who shall be selected and appointed by the Governing Board.
2. The Director shall be a member of the Governing Board, ex-officio.
3. The Director shall implement the policies determined by the Governing Board, follow the guidelines laid down by the Governing Board for the functioning of the Institute, carry out the directions of the Governing Board and abide by its decisions.
4. The Director shall be responsible for the internal operation and management of the Institute and for assuring that the programme and objectives of the Institute are properly developed and carried out.
5. The Director shall be responsible to the Governing Board.

Article VIII

Relationships with Host Country and
with other countries being served

1. The Institute will establish cooperative relationships with relevant programs of the Indian Council of Agricultural Research and with other organizations, including agricultural universities, as it deems appropriate toward the attainment of its objectives.
2. The Institute will develop cooperative relationships with relevant regional and national research and action programmes in India and other parts of the world as may be deemed appropriate and useful in achieving its objectives.

Article IX

Financial Support

1. Without prejudice or detriment to the generality of its powers as elaborated and set forth in Article III of this Constitution, the major basic financial support for the Institute will be derived from subscriptions provided by various members of the Consultative Group on International Agricultural Research, based on annual estimates of budget requirements presented and considered by this Group.

Article X

Meetings

1. The Governing Board shall meet at least once annually.
The annual meeting of the Board shall be held at the principal headquarters of the Institute, unless decided otherwise by the Governing Board.
2. The annual meeting of the Governing Board shall be held at such time as the Board shall determine.

Article XI

Amendments

1. This Constitution may be amended at any meeting of the Governing Board by three-fourths majority vote of the members of the Board, provided notice of such proposed amendment together with its full text shall have been mailed to all members of the Board at least six weeks in advance of such meeting.

Article XII

Dissolution

1. The Institute may be dissolved by a three-fourths majority vote of the Governing Board if it is determined that the purposes of the Institute have been achieved to a satisfactory degree or if it is determined that the Institute will no longer be able to function effectively.

2. In case of dissolution, the disposition of assets other than land and fixed capital improvements thereon shall be determined by the Consultative Group on International Agricultural Research, after receiving recommendations thereon from the Governing Board. Any land and permanent fixed capital improvements thereon would, upon dissolution, revert to the Government of India.

Date

Signature, name and title

The Rockefeller Foundation

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

D9(2)

AGRICULTURAL SCIENCES

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

April 27, 1972

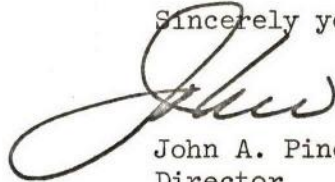
Dear Jim:

Enclosed you will find a finalized version of the agenda for the Bellagio V Conference on International Agricultural Development, which is scheduled to be held at the Villa Serbelloni on May 17, 18, and 19. We have scheduled to work sessions daily - one in the morning from approximately 9:00 to 12:30, and one in the afternoon from 3:00 to 6:00. Evening sessions may be arranged if necessary and desirable, but it is hoped that the evenings will be left free for individual or group discussions, or to be used as participants may wish.

Documents for distribution by discussants should be available to all participants on the day of arrival, May 16. Discussants and participants having papers for distribution are asked to bring them to Bellagio rather than sending them to me prior to the conference.

I look forward to seeing you in Bellagio.

Sincerely yours,



John A. Pino
Director

Mr. L. J. C. Evans
World Bank
1818 H. Street, N.W.
Washington, D.C. 20433

JAP:11
Enclosure

Original to: Agric. Proj.
Date: 5/1/72 Communications
Section

THE FORD FOUNDATION

TO: *Harold Graves*
IBRD

DATE: *4/23*

D 8

Harold,

Though the attached
is more than a year old
and dated, it has some
"output" data of the type
we were discussing at
noon. See parts with
my marginal notes.

Thanks again for
taking the extra effort to
come and share with us
today.

Lowell

Lowell S. Hardin

O. A. VOGEL HONORARY SYMPOSIUM

WHEAT IN THIS CHANGING WORLD

Monday, March 26, 1973

Compton Union Building Auditorium

Washington State University

Pullman, Washington

Department of Agronomy and Soils and
Washington State University Cooperative Extension Service
1973

INTERNATIONAL AGRICULTURE'S PROGRESS--
EVERYONE'S RESPONSIBILITY

Norman E. Borlaug

It is a real privilege for me to participate in this honorary symposium, paying tribute to our great scientist and good friend, Dr. Orville A. Vogel. His indirect and direct contributions to science and agriculture have been both numerous and great.

Perhaps, among his greatest indirect contributions to wheat research and agriculture in general have been his disregard for scientific orthodoxy and status quo and his unusual curiosity and drive to explore new approaches to developing higher yielding varieties, even when he was criticized for doing so by either ultra-conservative or ultra-sophisticated peers and superiors. Moreover, he was not satisfied with just developing wheat varieties with high yield potentials, but he was equally concerned about extending researches into the disciplines of agronomy and pathology, so as to discover how to exploit the genetic yield potential that had been built into his new varieties and, thereby, assure that they would be used to produce the maximum amount of food.

As a result of his unique drive, vision, and scientific skills, he established new yield plateaus for wheat. His many years of productive work in plant breeding culminated in the development of the varieties Gaines and Nugaines, with which Washington farmers established world record yields, and these ceilings still stand and are likely to remain for a long time as a monument to his productive work. I, personally, as well as the members of our international staff, am deeply indebted to Orville for generously providing us with the genetic materials that were an important ingredient in developing the Mexican dwarf wheat varieties that gave birth to the so-called Green Revolution.

And, he never rested either physically or mentally in the conventional sense of the word. For when he relaxed or "rested," he designed and invented new equipment and "gadgets," which would increase the efficiency of wheat, oat, barley, rye, rice, and sorghum scientists around the world. Perhaps, these inventions have contributed indirectly to expanding world food production even more than did the varieties he developed, which in themselves revolutionized wheat production. Our international staff and scientific colleagues from many other countries have profited enormously from these inventions. Currently, they permit us to handle vastly greater numbers of genetic materials and agronomic plots beyond what we would have been able to handle without them. They have permitted the developing nations to better utilize the scarcest of their resources: trained scientific manpower.

Orville, I know that I express the sentiments of our entire CIMMYT staff, as well as those of hundreds of collaborating scientists in many foreign lands, when I say: "Orville, we salute you for many jobs well done! You have done much to make the world a better place in which to live. Moreover, your dedicated life, scientific work, and accomplishments, which have contributed greatly toward improving the well-being of mankind, will be a model for many young agricultural scientists in the decades ahead. May you enjoy many more happy, creative years! God bless both you and Bertha always!"

WHAT IS THE WORTH OF FOOD?

I would like to begin my comments on the topic I have been assigned by asking a simple question: What is the biologic, economic, and political worth or value of food?

The concept of the value of food, just as in the case of the concept of a good environment, is largely a matter of opinion. It is largely a subjective, rather than an objective, criterion. In the case of food, it depends on how empty your belly is and how long you have been without food.

Most individuals in the affluent nations, such as the United States, take food for granted. Diets are more or less automatically well-balanced because of the availability of an abundance of animal proteins, cereals, fruits, and vegetables, at a price well within the economic reach of the majority of the public. The general public, therefore, assumes food should always be cheap, because it comes from the supermarkets, and it is so abundant. They have never had empty stomachs and have never known the pains of hunger, much less the fear of famine provoked by an unstable food supply. This is in contrast with the underprivileged, low income groups of the slums and ghettos of these same affluent nations, who are often short of food, and whose position is further jeopardized today by soaring food prices.

The "average" American, however, has had, and continues to have, the best food buy in the world even today despite the furor about food prices in press, radio, and television. In recent years he has spent from 16 to 18% of his take-home pay on food, a far smaller proportion than the citizens in any other country. He has come to take for granted the efficiency of American agriculture and animal industry through which it is possible for 4-1/2% of the population to produce enough food for the domestic needs of the entire nation, as well as an exportable surplus valued currently at ten billion dollars per year. Yet, today, with an increase in food prices, and especially that of meat, there is a furor from the urban press and from Washington.

When I currently read in the American press about high food prices in the United States--while I am working in food-deficit countries--if I did not know the facts, I would get the impression that the American consumer is in a grave food crisis and that things have never been so bad for the average American. Obviously, this is not the case at all; nevertheless, it must again be emphasized that the increase in food prices does further erode away the precarious standard of living of the low income sector. The current furor in the media concerning food prices is understandable. The "opinion molders" of the press come largely

from urban areas, and moreover, a vast majority of congressmen represent urban constituencies. Similarly, labor leaders are concerned with protecting the interests of the industrial worker. These groups know little or nothing about agriculture, but it is politically expedient to look for a villain in the food price situation.

The farmer and livestock man is now, after many years of depressed prices, receiving good prices for his produce. Unfortunately, he is now being accused of making excessive profits and gouging the consumer.

Most urbanites fail to comprehend that farmers, too, have suffered and are continuing to suffer from inflation and increased production costs; moreover, urbanites also fail to consider the increasing costs all along the food chain from farm to supermarket, which include higher costs for labor, packaging, transport, and handling. The consumer and most politicians shortsightedly consider only the retail price of food and its effect on the family budget. They seem much less concerned about the other aspects of general inflation. One, for example, seldom hears criticism about increases in the prices of television sets, alcohol, tobacco, sporting equipment, recreation, airline tickets, hotel rates, or automobiles. The idea seems to prevail among the non-rural consumer that prices should follow the economic law of supply and demand for all goods and services except for food. Somehow, they fail to comprehend that it costs money to produce food, and consequently, they are convinced food must always be cheap.

Lest we forget, there is no easy way to clearly separate the social economic problems of rural America--farm, ranch, and small agricultural towns--from the social economic ills of urban America. Depressed agricultural prices and low income over the past four decades, except for the inflated prices during the war years of the 1940's, were primarily responsible for driving many people--both blacks and whites--off the small farms into the cities. They left the land with the hope of finding a job and an easier life with a better standard of living. Many failed to find such opportunities and became permanent residents of, and contributed to, expanding the slum areas of our cities. They are worse off than they were before they fled the farms in search of a better life.

Have we not yet learned of the folly of a lack of policy to prevent such dislocation and its consequences? Are we still trying to add to the size of these slums by displacing more low income people from rural areas to urban slums? Are we trying, proverbially speaking, to kill the goose that lays the golden eggs?

Now, let us look at the food situation in the developing nations, where agriculture is inefficient and where food production is unstable and almost always inadequate to meet the national needs. Invariably, under these situations, food is expensive. Animal proteins are so scarce and expensive that they are beyond the economic reach of the vast majority of the population. Consequently, cereals must provide for these people 70 to 80% of the calories and 65 to 70% of the protein. Under these conditions, the average urban family in the developing nations of Asia and Africa generally spends from 60 to 80% of its income on food in normal times, and when droughts, floods, frosts, diseases,

or pests unduly reduce the harvests within the country, all earnings go for food, and even so, many families are unable to buy what they need. Under these circumstances, many of the subsistence farmers themselves--who constitute 60 to 80% of the total population--are short of food. Besides, to make things even worse, since many of the most populous developing nations, e.g., India, Bangladesh, Indonesia, etc., are food-deficit countries and must import large quantities of food even in good crop years, they are also highly vulnerable to the disastrous impact of sky-rocketing international cereal grain prices resulting from crop failures beyond their borders. Such was the case during 1972, and the dangers of an international food crisis still persist. Could there be bad harvests again in one or more of the populous nations during 1973? The danger exists and could easily become reality if the drought in the USSR, China, and Southeast Asia persists. If this happens, widespread famine could occur, since there are currently no rice reserves anywhere in the world, and world wheat stocks are the lowest in 20 years. This sad state of affairs does not necessarily mean that the world food grain production is being out-distanced by world population growth, as would appear to be the case at first glance.

Now, let us consider the paradox on the current international food grain front where, for the first time in nearly a decade, cereal grain farmers and, especially, wheat farmers in the United States, Canada, Australia, Argentina, and France find themselves with the prospects of receiving good prices for their grain. They are being urged by their governments to expand their production as rapidly as possible so as to meet world food needs. This change of policy is certainly in drastic contrast to the various policies that have been used by the first three above-mentioned exporting nations over the last few years, while attempting to reduce cultivated area and production and thus avoid further build-up of surplus wheat stocks with all of the inherent economic and political consequences with which they had been cursed. So, in fact, within the last year, the much maligned "subsidized ugly duckling" American wheat farmer--because of climatic and political events beyond the United States borders--has suddenly been transformed into a beautiful white swan, who will now once again fly forth to feed the world's hungry. Now, let us examine how and why such a rapid metamorphosis of political and public opinion took place.

THE PRESENT WORLD FOOD GRAIN SITUATION

The precariousness of the world food supply has been brought sharply into focus by events of the past eight months. It has become clearly evident again that a poor harvest in a single, large cereal-producing country can have world-wide impact on food grain stocks, food prices, and transports. What would happen if there were poor harvests in several of the large countries in the same year or if there were two successive widespread crop failures in one or more of the large producing countries?

Although the 1972 world grain harvest has been estimated at 1,064 million metric tons, the second largest crop on record, production, nevertheless, declined by approximately 42 million tons over that of the previous year. Much of this decrease resulted from a poor wheat harvest in the USSR, caused by severe winter killing of the winter crop followed by severe drought in the spring wheat producing areas, combined with a reduction of approximately 10% in

cereal production in the People's Republic of China, also largely resulting from drought. The poor harvest resulted in Russia contracting to buy 20 million tons of wheat in the international markets as of October 1, 1972. Estimates indicate that the net effect of these purchases, as well as an increase in imports by a number of other countries, will increase world wheat trade during the 1972-73 year to about 67 million metric tons, compared to 52 million tons for the previous year. Concurrent with the expanded demand for wheat grain, prices have risen sharply in the international market to the detriment of the wheat-importing developing nations. On July 1, 1972, the cash price for No. 2 red winter wheat at United States gulf ports was about 55 dollars per metric ton; by December 31, it had increased to over 100 dollars per ton. The heavy demand for railroad cars and the shortage of freighter shipping capacity also have increased ocean freight rates by 40% during the same period. The poor harvest coincides with a growing shortage of fertilizers, especially phosphatic, on the international market, and phosphate fertilizer prices have climbed 10 to 30%. All of these price increases undoubtedly have had more adverse effects on the economics and food prices of the poor developing nations, who must import food, than they have had on an importer such as USSR.

Fortunately for the world, the poor harvest in the USSR coincided with a time when the total world grain stocks stood at a moderately high level, e.g., July 1, 1972, 132 million metric tons. It is estimated that the stocks will fall to 117 million tons by July 1, 1973. The world grain situation, however, is much more critical in food grains, especially wheat and rice, than in feed grains.

The world wheat stocks in exporting nations stood at 49 million metric tons on July 1, 1972, and current estimates indicate they will fall to 34 million tons by July 1, 1973, the lowest level in 20 years, which represents less than 10% of recent annual world production. The food grains' situation in Asia is also further complicated by a severe shortage of rice, caused by military disruptions in Bangladesh, Vietnam, and Cambodia; by floods in the Philippines; by drought in India and Indonesia; and by unwise or shortsighted economic policy which restricts production in some other countries.

Fortunately, the 1972 wheat harvests from India to Morocco were good to excellent. India, Afghanistan, Pakistan, Nepal, Iran, Iraq, Turkey, Jordan, Lebanon, Tunisia, Algeria, and Morocco harvested either record or near-record crops. Throughout the area, the impact of the so-called Green Revolution, especially on wheat production, continues to expand. The area sown to high yielding varieties and the use of chemical fertilizer and other improved cultural practices continue to spread on both irrigated and rain-fed areas. Favorable weather throughout the Indian-Pakistan subcontinent, the Middle East, Near East, and North Africa during the 1971-72 wheat crop season also contributed greatly to the excellent harvest. Losses from plant diseases and insects were of little consequence anywhere in the North Africa or the Near and Middle East regions during the 1971-72 crop season. It should be pointed out for the benefit of the critics of the Green Revolution that a number of new, high yielding dwarf wheat varieties developed in these countries and carrying different types of disease resistance are beginning to reduce the commercial area sown to the widely-grown cross 8156 derivatives, e.g., Kalyansona, Mexipak, 7 Cerros, etc.,

that were introduced directly from Mexico. This diversification of genotypes reduces, even though it does not eliminate, the dangers of widespread disease epidemics. The vigorous wheat breeding programs now in full flower in nine Asian and African countries must be maintained and further expanded, so as to provide a continuous flow of new varieties with new sources of resistance with which to provide better protection against diseases and, especially, against new races of airborne pathogens, which are certain to appear.

Despite the progress being made in increasing wheat production in many of the aforementioned countries, there is no room for complacency. One can readily imagine the famine and human suffering that would have resulted if adverse weather conditions, such as those which struck the wheat growing areas of the USSR and China during 1972, had also struck simultaneously in the Indian-Pakistan subcontinents. One must also be concerned about what will happen should the drought be prolonged for another year, especially now that the world wheat stocks have been reduced to a dangerously low level, and world exportable rice stocks are non-existent. Indeed, India could stockpile 9.0 million tons of grain, mainly wheat*, largely because of the last five consecutive record-breaking wheat harvests which culminated in a 1972 harvest of 26.5 million metric tons with an average yield of 1,368 kilos per hectare. This stockpile is now serving India well to offset the poor 1972 rice and sorghum harvest and the currently diastrophously high prices for wheat on the international market.

In times of pending food crisis, such as those the world is now facing, one must take stock not only of the shortfalls in production, but also of the progress achieved in recent years. What would the world food grain situation be today without the achievements of the Green Revolution in recent years in the subcontinent of India and Pakistan? What would the plight of their people be today if these countries were still producing 15.5 million metric tons of wheat (jointly) as they did in 1965 instead of the 33 million tons they harvested in 1972?

There has been substantial concrete progress in increasing wheat production in Afghanistan, Algeria, Iran, Iraq, Jordan, Lebanon, Morocco, Tunisia, and Turkey in the last three years. Virtually all of the production in these countries is under rain-fed or non-irrigated conditions. Progress in increasing production in these countries is likely to continue.

Wheat production in Latin American countries declined during 1972 with the exception of Argentina, which harvested 8.5 million metric tons, its second highest all-time crop, despite a reduction in area sown to this crop. Production in Chile was down appreciably because of unsettled economic and political conditions. Production in Brazil dropped from 2 million metric tons to .6 million tons because of severe losses from frosts and a severe epidemic of Septoria.

*Indian wheat production has increased as follows during the past five harvests: 16.0 (1968), 18.0 (1969), 20.0 (1970), 23.0 (1971), and 26.5 (1972) million metric tons, compared to a production of 12.4 million tons in the pre-Green Revolution year 1965, which was a very favorable year from a climatic standpoint.

Mexican wheat production dropped considerably during the past year, largely because of policy designed to increase oil-seed production and to expand cotton acreage and exports while reducing the area sown to wheat, with the illusion of importing cheap wheat.

OUTLOOK FOR THE 1973 CROP IN ASIA, AFRICA, AND LATIN AMERICA

The wheat crop conditions in India and Pakistan are currently, in general, favorable. Both countries have aimed to increase wheat production during 1973 because of the precariousness of international wheat supply and ruinous import prices. India set as its target 33 million tons, e.g., an increase of 6.5 million tons over its excellent 1972 harvest, so as to offset its poor 1972 rice and sorghum harvest, but this goal will be unachievable because of a severe shortage of fertilizer, especially phosphates, at planting time. In all probability, they will harvest a crop slightly larger than that of last year, namely 27 to 28 million tons. Pakistan aimed at producing 7.5 million tons, the needs for self-sufficiency. They, too, were "trapped" with an extreme shortage of phosphate fertilizer at planting time, but have tried to offset this by increasing the area sown to wheat. In all probability, even with the very favorable winter rains with which they have been blessed in the northern parts of the country, they will harvest at best 7.0 million tons.

Moisture conditions and crop prospects throughout North Africa from Morocco to Egypt are currently good to excellent. The wheat crop conditions are also good throughout the Near East countries, with the exception of Syria and parts of Turkey where there is a shortage of moisture.

There have been unconfirmed reports that the area sown to winter wheat in the USSR in the fall of 1972 was reduced by 20% over that of a year ago because of a shortage of soil moisture. Moreover, unconfirmed reports claim there was little snow cover up to mid-February, which may have again produced severe winter killing. Similar unconfirmed reports indicate a winter rainfall below normal in parts of the winter wheat areas of the People's Republic of China. If these reports prove to be true, and should the drought be prolonged in the spring wheat producing areas of the USSR, there will be a continuing heavy demand and sky-rocketing for wheat in the international market place.

In all probability, if the prospects for a short wheat crop for Asia continue through April, Argentina and Australia will substantially expand the area sown to this crop. I need not tell you that restrictions on area sown to wheat have been relaxed in both the United States and Canada. If all goes well, it may lead to a rapid replenishing of world wheat stocks. It may even lead to a glut in world wheat markets, followed by a crash in the world wheat prices which will again bring ruin to the wheat farmers of the exporting nations--if weather is favorable--but there still could be famine in 1973-74 if weather conditions in major producing areas are unfavorable. This is the paradox of attempting to maintain an adequate food stock reserve and not have it become a glut. As of now, neither economists nor planners nor politicians have emerged as masters of the vagaries of the weather or the wild gyrations in international wheat prices that periodically bring economic ruin to farmers in both exporting and importing nations and disastrous economic consequences, with even threats of famine, to the economically weak, food-importing developing nations.

THE NEED FOR ESTABLISHING AND MAINTAINING NATIONAL
AND INTERNATIONAL GRANARIES OF FOOD GRAIN RESERVES

The world stocks of wheat and rice will be at the lowest level in 20 years by the end of June, 1973; these stocks will be considerably lower than is prudent from a world safety standpoint. For there are 1,100,000,000 more people now than there were in 1953.

Should there be a poor wheat or rice crop again in 1973 in any of the larger, more populous nations such as the USSR, China, Indonesia, or the Indian-Pakistan subcontinent, where will the needed grain come from to avoid widespread hunger, if not famine? Weather is a major factor in causing short-term fluctuations in cereal grain production, but weather effects tend to average out over a period of several years. If the world is to avoid disaster, however, ways must be found to finance the stockpiling and storage of sufficient quantities of food grains at both the national and international levels to provide reserves for emergency use in those years when weather is unfavorable and crop production drops. Moreover, as world population grows, the amount of grain that must be held in reserve must be increased.

Since the end of World War II, the principal wheat exporting nations, Australia, Canada, and the United States, have frequently, inadvertently served as the "warehousers," "holders," and, in fact, "brokers" of world food grain reserves, generally to the detriment of their own economy. This has certainly provided much fuel for rhetoric for urban congressmen and much copy for urban reporters in these exporting countries.

Precisely in order to reduce the economic burden of producing, buying, and storing huge quantities of wheat, each of these exporters has been struggling desperately to reduce domestic production and stocks of wheat during the past several years. The poor wheat crops in the USSR and China and the poor rice crop in South and Southeast Asia in 1972 occurred just when these three exporting nations had succeeded in reducing their stocks to economically manageable levels. So, these reserve stocks have now in a single year largely disappeared. What will happen if there is another short crop this year, and who will bear the responsibility?

It must also be pointed out that most nations, including the developing nations, have been neglectful of carrying national food grain stock reserves to protect against bad harvests. India is one of the few developing nations who has made a serious effort to carry a sizable food grain stock reserve. Others must be encouraged to do likewise.

Today we have international institutions of many kinds, including the United Nations and its family of dependent agencies, the World Bank, and various Regional Development Banks, but we have no International Granaries. But, you cannot eat--at least when you are hungry--either words or money. What good will international conferences, dealing in idealistic words, do, and what good will come from allocating international credits for purchase of food grains in times of emergencies if there is no food grain stock available?

I have advocated several times over the past three years that the time has arrived when International Granaries of Food Reserves, financed by all nations, should be established for use in case of emergencies. These granaries should be strategically located in different geographic areas of the world so as to simplify logistics and also to minimize the problems of the disruptive effects of strikes in transport and shipping in time of emergencies. And, these grain reserves must be made available to all countries that need them before famine strikes, not afterwards. All nations must cooperatively establish and finance such a project to prevent the tragedy of famine in the future instead of trying with pious regrets to salvage the human wreckage resulting from a period of famine as has so often been done in the past. Moreover, these reserves could be financed and managed so as to minimize the wild gyrations in food grain prices, which are equally ruinous to the importing developing nations and to the farmers of the exporting nations.

I would like to emphasize that the short wheat and rice crops produced during 1972 in Asia, resulting largely from drought, do not necessarily mean that world food production is falling behind population growth. First, one must remember that the three leading wheat exporting nations have been trying to reduce their production for a number of years so as to reduce the economic burden of huge stockpiles. They have rightly and understandably become tired of assuming alone the responsibility of being guardians and bankers for the grain reserves for the world. Nevertheless, these nations have already taken action to again expand production to meet growing demand, but the danger still exists that disaster could result if another poor harvest occurs in Asia prior to the time when reserve stocks have been replenished. I wish to emphasize that there is no evidence whatsoever at present to indicate that a new, long-term downward trend has begun in per capita food production in either the developing countries or in the world as a whole. Yet, the situation today following the poor 1971-72 crop year is not unlike what it was in the declines from 1958-60 to 1961-63 that misled many economists, sociologists, environmentalists, and anthropologists into believing that population had outgrown our food supply and that doom was at hand. This was the background of the avalanche of articles and books of gloom that were published on the food problem during the 1964-66 period. Prepare yourselves to see again another avalanche of doom-sayer, best-seller books written by armchair philosophers on hunger, famine, and the myth of the "Green Revolution."

Nevertheless, we must continue to take inventory of the world's present position on both the food production and population fronts and what the Green Revolution is and what it is not.

THE FUTURE OF THE GREEN REVOLUTION

Food production per capita in both the developing and developed countries and on a world-wide basis has increased modestly but gradually during the past 20 years. Within the past six or seven years, there has been rather spectacular increases in cereal grain production, especially in wheat, in a number of the most populous developing countries that have long suffered from chronic shortages. This rapid increase in production has been called the Green Revolution by the popular press. It has resulted from the introduction, adoption, and

widespread use of new, high yielding crop varieties, together with new technology which permits the expression of their built-in high genetic yield potential. The impact of the new technology has been greatest when "married to" sound government economic policy that makes available to the farmers the necessary production inputs, e.g., seed, fertilizer, and credit with which to buy them, and assures the farmer a fair price for his grain. Where such policies have been used and where a viable new technology is available, adoption and increased production have followed rapidly.

I am convinced that food production can be expanded to stay ahead of population growth until the end of the century at least if aggressive research and production campaigns continue to spread the new, effective technology to many areas still untouched by the new methods and if realistic allocation of funds is made available for agriculture so that the new technology can be applied. Hopefully by then, there will be some progress in taming the population monster.

The biggest increase in cereal production in recent years in the developing nations has resulted from breakthroughs in wheat production. In the next decade, more of the increased production will need to come from rice, maize, sorghum, and millet. There is considerable evidence that this is likely to happen. Production of grain legumes must also be increased to meet protein needs and, consequently, improve nutrition. If these objectives are achieved, it not only will increase total grain production but at the same time help to stabilize production. In years when the production of one crop falls below the target because of factors beyond the control of man, it will be compensated for by others. For example, during the past summer the monsoon rains came late and resulted in sub-normal total precipitation in India, which, in turn, lowered rice production. The drop in rice production should have been compensated for by an increase in sorghum production, since new, effective technology was available but up to now has not been effectively applied to increase production. Needless to say, any new technology serves no useful purpose until applied. It now appears, however, that India is on the verge of a breakthrough in both rice and sorghum production.

BREEDING FOR INCREASED YIELD STABILITY

Turning specifically now to wheat production problems of the developing nations for the next decade, I would assign the highest priorities in research to increasing yield stability. Better control of diseases is the most important single factor contributing to increased yield stability that can be manipulated effectively by plant breeders. High yielding, broadly adapted spring wheat varieties have been introduced into many of the spring wheat growing areas of the developing nations during the past five years. Similar high yielding, broadly adapted varieties are now needed but not yet available for winter wheat areas. It is the belief of CIMMYT scientists that the present average national yield and production of spring wheat in all of the developing nations can be doubled with the genetic yield potential that is present in the currently available new commercial varieties if adequate fertilizer were available and applied and if diseases were controllable. This being the case, wheat breeders in the developing nations should not be lured into placing undue

emphasis on developing higher yielding varieties at the expense of not improving the level and broadening the spectrum of disease resistance in the type of varieties currently available. Major emphasis must be given to controlling the airborne pathogens such as the rusts, Septorias, and mildews that can, when ecological conditions are favorable, rapidly build into devastating epidemics.

Currently, our major emphasis at CIMMYT is to broaden the genetic gene pool for disease resistance, especially to the three rusts, the two Septorias, scab, and mildew. Since the genetic materials from CIMMYT are fed into national breeding programs as either segregating or advanced lines in 40 different countries, it behooves us to incorporate the broadest possible base for disease resistance. This we attempt to do by constantly modifying and improving the gene pool on the basis of monitoring and the "feedback" of information received from a series of international nurseries grown by a network of world-wide, collaborating national programs.

We are also currently attempting to incorporate genes for resistance to high levels of aluminum toxicity into the gene pool so that the CIMMYT materials can become more useful to Brazil, where low soil pH and high levels of soluble aluminum are major obstacles to wheat production.

FERTILIZER NEEDS FOR THE NEXT DECADE IN THE DEVELOPING NATIONS

A rapid expansion in fertilizer use is absolutely necessary for expanding food production to stay ahead of population growth in the developing nations. Although some of the developing countries, such as India and Pakistan, have made dramatic progress in increasing both the use and production of fertilizer during the past five years, they are, nonetheless, still among the lowest consumers of fertilizer in the world, whether measured on either a consumption per hectare or on a consumption per capita basis.

Dr. Raymond Ewell has estimated that the developing nations will need to expand their fertilizer production capacity by 19 million metric tons, as well as to increase imports of fertilizer to 8 million tons during the next decade, if they are to meet their food production goals. He estimates that an investment of 28 billion dollars will be required to achieve this target. These costs will include investments in new fertilizer plants (5.8 billion), transportation facilities (3.0 billion), marketing facilities (3.0 billion), imported fertilizer to make up the deficit (8.0 billion), raw materials to operate indigenous plants (7.0 billion), and spare parts and chemicals (1.4 billion). It is obvious that, to reach this fertilizer production goal, allocations of both public and private funds will have to be greater than they have ever been for agricultural improvement in the developing nations in the past. This is also more evidence which should help to destroy the myth that it costs little to produce the food we all need to sustain life. In the past, investments of this magnitude have been restricted to large public works projects such as the multiple purpose dams, development of heavy industries, defense outlays, and national airlines.

THE POPULATION MONSTER

Whenever we talk about the world food production problem, the depletion of natural resources, or the deterioration of the environment, we cannot speak about any of them as isolated problems. They are all interrelated and intertwined with the world population problem. No matter what we do toward correcting the abuses of the environment, in slowing the depletion of non-renewable resources, in developing substitutes, and in expanding food production, world civilization will, nonetheless, be doomed unless we tame the population monster. I am of the firm belief that more research on human reproductive biology--which could lead to the development of a more effective birth control technique, whether chemical or non-chemical--is the answer. Such control must be equally effective, acceptable, and safe from a health standpoint in privileged suburbia and in the slums of the developed nations and in the back villages of the developing countries. Once such a technique or method is available and is combined with a world-wide educational program--while simultaneously muffling the voices of the loud "anti-chemical extremists"--I am convinced that the peasant families will respond positively to reducing their family size. I witnessed first hand the destruction of the myth of the non-receptivity of the peasant farmer to changes in agricultural methods and new technology and saw it give rise to the so-called Green Revolution in food production. I look forward to seeing in my lifetime a change in attitudes that will tame the population monster and give rise to a "Revolution in Human Dignity."

Despite the dreary pictures of many doomsayers, I have faith in the Naked Ape. He has come a long way since he discovered agriculture and domesticated animals a short 10 to 12 thousand years ago, and he will achieve even greater heights, unless we destroy him with negativism and pessimism. Neither of these ingredients is mortar with which greatness is built.

1ARG3a.

April 18, 1972

✓ cc - CROSS ref: D8

Mr. Robert Jones

Franz H. Kaps

ICRISAT Account

Attached is a copy of a letter we received from The Ford Foundation
indicating the person who will be responsible for the ICRISAT Account.

Attachment

FMK:mcj

FMK

1AR-93a
cc 1AR-D8

THE FORD FOUNDATION
320 EAST 43RD STREET
NEW YORK, NEW YORK 10017

DIVISION OF ADMINISTRATION

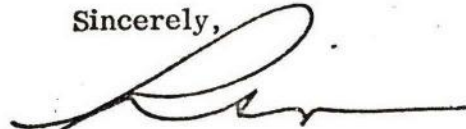
April 14, 1972

Mr. Franz H. Kaps
Consultative Group on International
Agricultural Research
1818 H Street, N.W.
Washington, D. C. 20433

Dear Mr. Kaps:

Mr. Bell has referred your letter of April 10 to me for reply. The person to contact at the Foundation to arrange appropriate payment and account procedures for ICRISAT expenses incurred by the Foundation is Mr. Kenneth Hudson, Assistant Comptroller (telephone: 212 - 573-4844).

Sincerely,



Robert A. Mayer
Assistant to the Vice President

RAM:mmm

The Rockefeller Foundation

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

OFFICE OF THE PRESIDENT

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

April 6, 1972

Consultative Group on International
Agricultural Research

Dear Mr. Evans:

I was pleased to learn from your letter dated March 15th of the meeting of the Subcommittee of the Consultative Group on African Livestock which was held on January 21, 1972 and of the expression of support by members of the Subcommittee for the establishment of an animal disease research laboratory in East Africa. We have long felt that such a laboratory, in which the research effort would be directed to the important "killer" diseases of livestock, could play a critical role in eliminating some of the major constraints impeding the expansion of a more efficient cattle industry on the African continent.

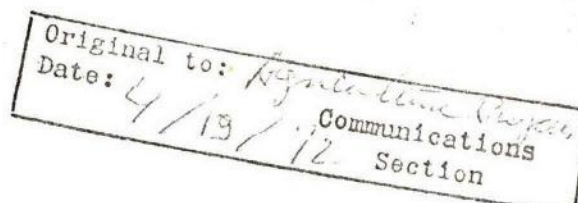
It is with pleasure that The Rockefeller Foundation is prepared to respond to the request of the Subcommittee to act as an Executing Agency and to carry out the activities which are outlined in Annex A of your letter. Dr. Pino has advised me of the various discussions which have led up to the present stage of negotiations, and I am confident that the further stages will be developed successfully. It is my hope that the donor agencies, who are particularly anxious to see this activity initiated, will be in a position to take action on this matter in the near future.

Sincerely yours,

J. G. Harrar
J. G. Harrar

Mr. L. J. C. Evans, Chairman
African Livestock Subcommittee
Consultative Group on International
Agricultural Research
1818 H Street, N. W.
Washington, D. C. 20433

JGH:ep



THE FORD FOUNDATION
320 EAST 43RD STREET
NEW YORK, NEW YORK 10017

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VCC: D8.

INTERNATIONAL DIVISION
OFFICE OF THE VICE PRESIDENT

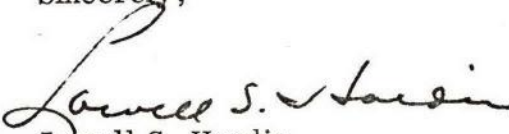
March 27, 1972

Mr. Richard H. Demuth
Chairman
Consultative Group on International
Agricultural Research, IBRD
1818 H Street, N.W.
Washington, D. C. 20433

Dear Mr. Demuth:

This letter is to confirm in writing the assurance I gave you on the telephone this afternoon. The Ford Foundation currently anticipates that the Foundation, acting as agent for the Consultative Group on International Agricultural Research, will spend on procurement of equipment and supplies during the Initial Stage of the Proposal no more than three-fourths of the total amount contributed by members of the Consultative Group on International Agricultural Research for the purpose of implementing the Initial Stage of the Proposal and deposited by the Bank in the ICRISAT Special Account. As you know, the terms used herein are defined in a Special Account Agreement dated March 20, 1972 between the International Bank for Reconstruction and Development and the Ford Foundation.

Sincerely,


Lowell S. Hardin

cc: Ralph Cummings
Sheila McLean

THE FORD FOUNDATION

TO:

Harold Cranes

DATE:

8/23

Hope Mexico was up
to expectations!

Thanks for the nudge
in your 17 March letter.
Attached is an attempt
to follow up.

Tail Twister Hardin

Lowell S. Hardin

THE FORD FOUNDATION

Inter-Office Memorandum

D8

TO: Messrs. Henrie, Anderson,
Gonzalez and Salacup

FROM: Lowell S. Hardin

SUBJECT: Follow-up On Our Accounting-Budgeting
Workshop Assignments

DATE: March 23, 1972

COPY TO: Messrs. Albrecht, Chandler,
Cummings, Grant, Hanson,
Sawyer, Ruddy, Graves
and Doran

Gentlemen:

In more cheerful days in Pakistan one of my program colleagues there was, rather affectionately, called the "Tail Twister." We will not debate whether your arm or some other part of your anatomy is being twisted in this memo. But its objective is to refresh your mind about the assignments you accepted and the timetable to which you agreed at our February seminar here in New York.

Specifically, as I read your summary document it was agreed, among other items, that:

1. Mr. Ruddy would provide a new budget format and instructions. This he did in his letter and enclosures of 18 February.

2. You men would prepare discussion papers, original to Michael Ruddy, copy to John Doran. First papers were to be mailed to Washington and New York by March 13, 1972. Michael and John tell me that these have not yet been received. These assignments were:

Balance Sheet - Anderson
Operating Statements and Cost Accounting - Gonzalez
Budgets - Henrie
General - Salacup

All of us fully appreciate the urgency of current concerns once one gets back home. In all seriousness, however, I stress the importance of living by the timetable you adopted. Your papers need not be perfect to move the total interactive process forward. For the current and longer-term welfare of the Institutes, however, the job needs to be done promptly. Treasurers and accountants of donor organizations are pushing us (I have had two phone calls already this week concerning CIAT, for example). Mr. Graves needs your definitions for inclusion in International Centers' Week papers now in preparation.

May I therefore request this action. If you will not have the first draft of your paper to Washington and New York by March 30, please write Michael and give him a firm date by which he can expect your draft. You who are in the institutes are in the best position to do this important task; we certainly hope that you can squeeze it in.

Sincerely,

A handwritten signature in cursive script, reading "Lowell Hardin". The signature is written in dark ink and is positioned to the right of the word "Sincerely,".

LSH:eg

1AR D9.

March 20, 1972

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

Dear John:

Thank you for your letter of March 6, inviting me to participate in the Bellagio conference on agriculture scheduled for May 16-20.

I have delayed responding to your letter because I very much wanted to accept your invitation. As of now, however, it does not appear to be feasible to fit the conference into my schedule and I must, therefore, regretfully decline. I know that Jim Evans is planning to attend and I will look to him to brief me on what happens.

With all good wishes,

Sincerely yours,



Richard H. Dazuth
Director
Development Services Department

RHD:tf

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END:EE

DEVELOPMENT RELATES DEPARTMENT
DIRECTOR

WALTER H. DUNN

Sincerely yours,

Walter H. Dunn

After the on March 20th.

that the name is being used to receive and I will look to him to
execute and I will, therefore, respectfully decline. I know
does not appear to be related to the conference into my
mind wanted to receive your invitation. As of now, however, it
I have delayed responding to your letter because I will

execute for May 19-30.

beliefs in the Bellagio conference on scientific

Thank you for your letter of March 9, inviting me to

Dear John:

New York, N.Y. 10030
111 West 20th Street
The Rockefeller Foundation
Biological Sciences
Mr. John A. Dunn, Director

March 30, 1972

146 Dd

March 16, 1972

Dear Mr. Hauge:

As Mr. Kaps mentioned to you yesterday, a meeting on agricultural research to be organized by the Rockefeller Foundation will take place at the Rockefeller Foundation's Study and Conference Center in Bellagio, Italy, from May 16 to May 20, 1972. Invited to that meeting are agricultural scientists that are also involved in policy making positions in their respective countries. Countries that were approached are more or less identical to the major donor countries of the Consultative Group on International Agricultural Research. Among the topics the Rockefeller Foundation is considering 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.

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

- (a) the All-India Coordinated Rice Improvement Program
- (b) USAID-Ford Foundation-CIMMYT arrangements with Tunisia, Morocco, Algeria
- (c) Ford Foundation-CIMMYT associations with Pakistan, Argentina, and others
- (d) Ford Foundation-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 problem 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.

I hope that this information will help your government in suggesting the name of an expert who could be invited to attend the meeting; and I would be most grateful if you could communicate to me the name of the expert whom your government suggests.

Sincerely yours,

Harold Graves
Executive Secretary
Consultative Group on International
Agricultural Research

Mr. Erik Hauge
Royal Danish Embassy
3200 Whitehaven Street, N.W.
Washington, D. C. 20008

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CHERRINGTON, D. C. 30008 CE
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THE FORD FOUNDATION

Inter-Office Memorandum

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TO: Directors Albrecht, Chandler, Cummings
Grant, Hanson, Sawyer

DATE: March 13, 1972

FROM: Lowell S. Hardin *LSH*

COPY TO: M. E. Ruddy
R. H. Demuth
H. Graves
J. P. Doran
H. Akmajian

SUBJECT: FY 1973 Budgeting & Accounting

As I am sure your colleagues who participated have reported, the budgeting and accounting workshop elicited excellent cooperation. To my view the group made real progress.

Under date of February 18 Michael E. Ruddy, IBRD, mailed to those of us who participated in the workshop a set of proposed budgeting forms. These present important advances in terminology and procedure. We trust that these suggested tables, as modified in your exchanges with Mr. Ruddy, may be used in your 1973 program - budget submission.

Harold Graves advises me that Mr. Ruddy has agreed to become your accounting and budgeting consultant on institute matters. He will help with the follow through on the workshop and expects to be available for further consultation, within limits, as the need arises. Probably he and colleagues Demuth and Graves will be writing you further concerning Mike Ruddy's availability for visits if this seems desirable sometime in 1972 or '73. In the meantime the group is working to complete the CIAT manual.

I am sure that you join me in welcoming Mike to the International Center family.

LSH:el

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ROUTING SLIP

Date

February 28

NAME

ROOM NO.

Dr. Pino

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REMARKS

John -

As long as Jim Evans is coming to this meeting, I think I should probably use this time for something else.

If you were to invite Dick Demuth, I think he might very well accept.

We still hope to extract some names from the Germans, Dutch and Belgians for you.

From

Hank Evans

1AR-D9

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 Harold:

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.

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.

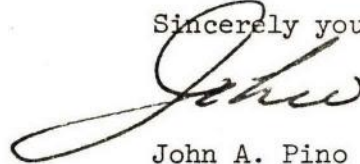
5. Consideration of new emerging centers of strength in commodity-oriented research, training, and production efforts in the less developed nations themselves. In other words, where are the promising points of growth and effectiveness which perhaps we all should know about and which we might find ways 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. Harold Graves
World Bank
1818 H. Street, N.W.
Washington, D.C. 20433

JAP/hz

THE FORD FOUNDATION

55 LODI ESTATE, NEW DELHI 3, INDIA
TELEPHONE: 619441 CABLE: FORDFOUND, NEWDELHI

D-8

February 3, 1972

Dr. Harold Graves
International Bank for Reconstruction and
Development
1818 H Street, N.W.
Washington, D.C. 20433

Dear Dr. Graves:

Thank you very much for your thoughtfulness in sending me the final text of the Memorandum of Understanding between the Donors and the Bank, the Special Account Agreement, and the draft Memorandum of Understanding with the Government of India.

We have had excellent discussions with Secretary of Agriculture and the Director General of the Indian Council of Agricultural Research and have made slight revisions in the draft memorandum. These have not been very substantive and I think they are quite satisfactory. The Secretary is forwarding these to the Cabinet for consideration with a recommendation for approval. We hope that this may have prompt consideration. I am enclosing with this letter a copy of the memorandum incorporating the revisions we have made here in our discussions.

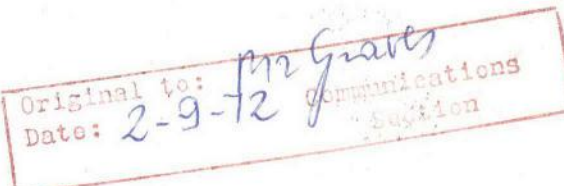
I shall be spending the latter part of this week and all of the next week in the field on site evaluation. I have assembled a partial list of all architectural firms and am getting more information on major projects which they have carried out.

Our discussions are proceeding well thus far.

Sincerely yours,

Ralph W. Cummings
Ralph W. Cummings
Program Advisor

Encl:



THE FORD FOUNDATION
320 EAST 43RD STREET
NEW YORK, NEW YORK 10017

INTERNATIONAL DIVISION
OFFICE OF THE VICE PRESIDENT

January 26, 1972

MEMORANDUM

To: Participants, Forthcoming Workshop on Budgeting and Accounting,
International Agricultural Institutes, February 7-9, 1972

From: Lowell S. Hardin

Gentlemen:

We look forward to your joining us at 9:30 A. M. February 7, Conference Room, 9th Floor of the Ford Foundation. Rather than suggest a fixed agenda at this time, we propose that as a group we develop our own order of procedure. We would hope that the workshop would develop and agree upon:

1. A suggested standard format for program and budget presentations;
2. The suggested form and content of a basic set of financial reports;
3. A system or systems of accounting which will yield an agreed upon set of basic reports and such other reports as are likely to be requested by individual donors or required by institute directors and trustees for management purposes.

Our suggestions will be subject to review, discussion and approval, of course, by center management and, in the case of budget and donor reports, by donor agencies.

We will rely heavily upon the draft "CIAT Accounting Manual" as a basis for our discussions of accounting systems capable of supplying the information required for various types of reports. If you have materials of this kind which you are prepared to share with the group, please bring them along.

Earlier we suggested that trial definitions of terms such as "core programs" and "special projects" would be forwarded to you in advance of the workshop. On reflection we have concluded that we will do better to discuss the kinds of distinctions that are needed for meaningful interpretation of budgetary and financial reports before discussing possible terminology.

A listing of probable participants is attached. Others who receive informational copies are also welcome of course. Should they care to join us, the Monday sessions will likely be of the greatest general interest.

Probable Participants in Workshop on Budgeting,
Accounting, International Agricultural Institutes
February 7-9, 1972

IPC	Richard Sawyer, Director Hugo Osorio, Administrative Officer
CIMMYT	Bernard Henrie, Comptroller
IITA	J. C. Anderson, Treasurer Robert Mitchell, Principal Administrator
CIAT	Luis Gonzalez, Administrative Officer Jesus Cuellar, Administrative Staff
IRRI	Faustino Salacup, Executive Officer-Treasurer
IBRD	Harold Graves, Secretary, Consultative Group James Francen, Consultant to Consultative Group
Rockefeller Foundation	Alex Daunys, Assistant Comptroller Steven Katz, Internal Auditor
Ford Foundation	John Doran, Assistant to Comptroller Herant Akmajian, Office of Comptroller

THE FORD FOUNDATION
320 EAST 43RD STREET
NEW YORK, NEW YORK 10017

Consultative Group on International
Agricultural Research

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INTERNATIONAL DIVISION
ASIA AND THE PACIFIC

January 25, 1972

Mr. Harold N. Graves
Executive Secretary
Consultative Group on Inter-
national Agricultural Research
International Bank for Reconstruction
and Development
1818 H Street, N.W.
Washington, D. C.

Dear Harold:

As agreed in the meeting of the ICRISAT subcommittee on January 20, I am beginning to assemble lists of possible candidates for the post of Director of the Institute and for membership on the Governing Board. I shall look forward to receiving your suggestions on both as soon as possible.

Along with each name suggested, it would be helpful if you could attach a curriculum vitae, including information on present employment, mailing address and your own evaluation of the candidate if you can conveniently do so. At this time, I hope we can make our search a wide one and identify the people who are best qualified to serve the Institute over this developing period, wherever they may be at present. We can determine the probable availability of the most promising candidates later. I trust that the notes concerning the proposed composition and functions of the Governing Board and on the qualities desired in the Director of ICRISAT, which we discussed and revised in the meeting, will be helpful as you think of names for possible consideration.

I shall look forward to hearing from you soon.

Sincerely,

Ralph W. Cummings

Ralph W. Cummings

Consultative Group on International
Agricultural Research

The Rockefeller Foundation

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

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OFFICE OF THE VICE-PRESIDENT

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

January 11, 1972

Dear Dick:

The December 3-4 meeting of the Consultative Group seemed to go especially well, and you and your staff are to be congratulated for the great amount of work which made the success possible. The participation of Germany, Denmark, Belgium, and the Bank, establishes the Group as a truly international activity. And, the indication that several other nations will participate in 1973 is good news.

We have reprinted a paper, "The Technological Basis for Intensified Agriculture," which was prepared for the first meeting of the heads of agencies ("Bellagio Group") in April 1969 at the Foundation's Conference Center in Italy. Because it gives in part the rationale for the growing international cooperation in agricultural research, and because it includes data prepared by Dr. Theodore Schultz (page 10) on returns to investment in properly organized and oriented research, there has been some demand for it. Should you wish copies for distribution within the Bank, they are available. A copy is enclosed for your ready reference.

With best wishes for the New Year.

Sincerely yours,

Sterling

Sterling Wortman

Mr. Richard Demuth, Director
Development Services Department
International Bank for Reconstruction and Development
1818 H. Street, N.W.
Washington, D. C. 20433

SW:msl

This letter was dictated by Dr. Wortman but signed in his absence.

Enclosure

THE FORD FOUNDATION

Inter-Office Memorandum

TO: Messrs. Albrecht, Chandler, Grant, Hansen, DATE: January 5, 1972
Sawyer, Cummings, Graves, Pino.

COPY TO:

FROM: Lowell S. Hardin

SUBJECT: Second Memo Concerning Workshop on Budgeting and Accounting,
International Agricultural Institutes, New York February 7-10, 1972

Gentlemen:

This is a follow-up on our 22 December memo pertaining to our forthcoming workshop. Attached is your copy of a working draft of a proposed "CIAT Accounting Manual". CIAT, as you will recall, is our case study for the workshop. Messrs. Akmajian and Doran, authors of the draft document, caution us that the manual is not yet a finished product. It will be field tested this month. We expect that workshop participants will also contribute to the further development of the manual and procedures.

Not included here are draft working definitions of terms as were mentioned in our earlier memo. We hope to get these to you within a couple of weeks. Not all of the institutes have told us who will represent their organizations at the workshop. Presumably, we will have heard from you by the time you receive this.

We are indebted to Herant Akmajian, John Doran and colleagues for holiday inputs over and beyond the call of duty for the timely production of the attached draft manual.

Informational copies to:

J. Doran
H. Akmajian
F. F. Hill
D. E. Bell
A. Trottenberg
K. Bracken
R. DeMuth

S. Wortman
K. Wernimont
G. H. Dion*
W. D. Hopper
J. Bernstein
G. B. Baird*

N. Collins*
H. Walker
W. Hertz*

* With copies of draft manual

