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1977 Correspondence - Press Releases and Information Papers - Volume 1

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Washington, D.C.

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1975/77 T - Press Releases & CGIAR Information Papers I

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Consultative Group on International Agricultural Research [CGIAR] - 1975 / 1977 Correspondence - Press Releases and Information Papers - Volume 1

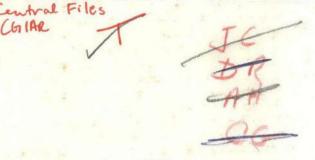
FORM NO. 635 (7-74)

This file is closed as of DEC. 31, 1976.

RECORDS MANAGEMENT SECTION

Industrial Relations Counselors, Inc.





December 1976

#### IRC MANAGEMENT COURSE IN INDUSTRIAL RELATIONS

Over the past few years, companies have expressed increased interest in IRC's Management Course in Industrial Relations. But since enrollment for the course is limited, IRC has not been able to accommodate all of those who wished to attend. In response to the large number who could not be accommodated at the most recent Management Course, we will conduct an extra session of the course from May 8 through May 13, 1977, in New Orleans, Louisiana.

Those not fully familiar with the IRC Management Course may be interested in knowing that it is the oldest and best known course of its kind and has attracted line and staff personnel from more than 700 companies from both the United States and abroad. The six-day course emphasizes how sound employee relations practices contribute to a company's growth and profitability. Both the challenges to employee relations in today's rapidly changing environment and the fundamental relationships between basic organization and employee relations concepts and practical problems are stressed.

Experience of leading companies is presented through company guest speakers, IRC staff and other specialists. Additionally each participant works as a member of a task force in dealing with a case that is related to all aspects of the program. The material reflects a balance between problems in labor relations and those in other areas of employee relations.

The course serves as a supplement to in-company development programs and as a training device to help both operating and employee relations managers understand the relationship between employee relations objectives and overall company goals. For staff the course helps to keep them in touch with current trends and exchange views and experience with representatives of other organizations. For line managers, it helps broaden their appreciation of their employee relations responsibilities.

This early announcement will permit your organization to note the dates of the additional session of the course and to consider candidates for participation. As we must limit the number of participants, we suggest that you reserve places tentatively now, confirming your reservations after your organization has selected its representatives. Please fill out the enclosed form and return it to the IRC course registrar.

If you wish to continue to receive announcements of IRC's activities, please take a moment to complete the postpaid card, also enclosed.

Richard A. Beaumont Director of Research

Attachments (2)

#### IRC MANAGEMENT COURSE IN INDUSTRIAL RELATIONS

New Orleans, Louisiana, May 8-13, 1977

#### Sunday, May 8

Course Registration
Objectives and Scope of the Course
Organization of Discussion Groups
Presentation of Course Case
IRC "Get Acquainted" Reception

#### Monday, May 9

"AN OVERVIEW"
Industrial Relations Challenges for the Next Decade
Top Management's View of Employee Relations
The Economic Outlook
Labor Unions Now and in the Future
Round-table Discussion

#### Tuesday, May 10

"THE EMPLOYEE RELATIONS ENVIRONMENT"
The Corporation and Social Responsibility
Occupational Safety and Health Developments
Equal Opportunity Developments
Trends in Labor Law
Considerations for Collective Bargaining
Round-table Discussions

## Wednesday, May 11

Collective Bargaining Session Afternoon Seminar

# Thursday, May 12

"HUMAN RESOURCES UTILIZATION"

Motivation and Productivity in the Workplace
Implementing Organization Development
A Skeptic's View of Behavioral Science Techniques
Effective Employee Relations for a Nonunion Organization
Round-table Discussions

#### Friday, May 13

"A FRESH LOOK AT EMPLOYEE RELATIONS BASICS"
Using Compensation More Effectively
Trends in Benefits
Basic Concepts of Employee Relations
Seminars
Critique of Course Case Study

# 67th IRC MANAGEMENT COURSE IN INDUSTRIAL RELATIONS

# New Orleans, Louisiana

May 8 - 13, 1977

Subject to la company:	ter confirmation, please	reserve	places for our
Name			
Position			
Company			
Address			
Telephone N	o		
Date			
Return to:			
	Course Registrar, Industrial Relations Co Box 1530 New York, New York 1 Telephone (212) 541-60	10019	

(Please Type or Print)



No Postage Stamp Necessary Postage has been Prepaid by:

> Industrial Relations Counselors, Inc. P.O. Box 1530 New York, New York 10019

We are currently updating our mailing list information. We would appreciate it if you would fill in the information requested and return the card

11011 1	equested and return the card
Thank	you for your cooperation.
	lease keep me on the list as shown elow.
	lease delete my name from your list s shown below.
† P	lease add the following person(s) o the mailing list. (Use space rovided or forward information eparately.)
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Title	
Compan	У
Addres	s
	Zip Code
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Title	
Compan	У
Addres	S
	Zip Code
Name	
Title	m , f
Compan	У
Addres	s

Zip Code

Mr. Daniel Ritchie

December 29, 1976

Michael L. Lejeune (signed) Michael L. Lejeune

Luncheons with Regions

Early in the game we planned to meet, from time to time, with key people in the Regions to talk about the CGIAR. I remember well that we had at least one lunch. I would like to organize a series of such gettogethers. Could you please discuss it with me?

MLLejeune:ia Files:T

December 29, 1976

Mr. Daniel Ritchie

Michael L. Lejeune

(signed) Michael L. Lejeune

#### Brochures and General Information Statement

- 1. I understand from Gene that we now have a supply of the new brochure.
- I think we should now draw up a list of people within the Bank, and closely connected with the Bank, to whom we would wish to send this brochure. One group, as you and I discussed this morning, is the Executive Directors (which includes the Alternate Directors and various hangers—on in the E.Ds. offices). Another group is those working in the agricultural sector within the staff of the Bank—— now over 350 people. Obviously, we do not want to send it to all the individuals in either group, so we should figure out what categories within the two groups should get a copyr The third general group comprises those in the Bank not specialists in agriculture, but for whom knowledge of the CGIAR would be important (Vice Presidents?, selected department heads?, who else?). It would be useful to ensure that those who give us direct help in the P&B Department, the Controller's Department, etc. get copies.
- 3. This internal Bank distribution would make a dent in our supply, so perhaps we should already begin to think about getting a replenishment.
- 4. There may be other people within the Bank or related to it whom we should supply. For example, there are several overseas offices of the Bank, including particularly those which are directly connected with project preparation, such as the two African offices and the office in Indonesia.
- 5. There is also the question of what delivery or covering paper to send out with the brochure. In most instances, I would guess a slip just saying "With the Compliments of etc." will suffice, but for certain categories or individuals, we might wish to say something more.
- 6. All this reminds me that we have a general purpose information statement which we have, in the past, used with some frequency, but which must now be getting rather out-of-date. We should certainly update it, but we may wish to consider afresh whether its substance and format are appropriate to the present state of evolution of the CGIAR system. Could you please look at it and give me your view?

MLLejeune:ia Files:T



# INSTITUTO SUPERIOR DE AGRICULTURA

APARTADO 166 - SANTIAGO DE LOS CABALLEROS, REPUBLICA DOMINICANA

December 28, 1976

Consultative Group on International Agricultural Research 1818 H Street, N. W. Washigton, D. C. 20433, USA

#### Dear Messrs:

The Instituto Superior de Agricultura(ISA) is an agricultural school founded in 1964. Since then we have been involved in several programs related to the agricultural development of our country.

Presently we are participating in a program aimed to improve our faculty through graduate and special studies in foreign institutions; thus, we will appreciate very much to receive information pertaining to the programs to be conducted at the International Centers during 1977, mainly those of academic nature.

Sincerely,

Carlos Nuñez/Guillén Development Committee

CNG/are



P. O. Box 3477 Sheungwan Post Office, Hong Kong, B. C. C.

MAIAR

P. O. Box 54149 Los Angeles, Calif. 90054 U. S. A.

Representative Office: 32129 Lindero Canyon Rd., Suite 207 Westlake Village, Calif. 91361 (213) 889-4546

William G. Douglas Senior Representative, USA

## AN AUTHORITATIVE ANALYSIS OF ASIAN AFFAIRS

December 28, 1976

Public Information Office World Bank 1818 H Street, NW Washington, D.C. 20433

Dear Sir:

In a recent press release, you referred to an Agricultural Research Center's program called the Consultative Group on International Agricultural Research.

I would like to obtain the names and addresses of the members of this group as well as the research centers.

Our company is in the process of developing an Asian Agribusiness Report and would find this information very helpful.

Thank you for your cooperation.

Sincerely,

William G. Douglas

Senior Representative, USA

WGD/jn

1

RECEIVED 1977 JAN -4 AM 9: 35 INCOMING MAIL UNIT INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS

President:

Secretary General

Treasurer:

Prof. F.B. Straub, Hungary

Sir John Kendrew, U.K.

Prof. D. A. Bekæ, Ghana

Secretariat: 51, Bld de Montmorency, 75016 PARIS - Teleg.: ICSU Paris 016 - Telex.: ICSU 630553 F - Tel.: 527-7702, 525-0329

JAN - 4 1977

FWGB/mh Ref:8.17

22 December 1976

Mr Michael L. Lejeune
Executive Secretary
Consultative Group on Inter'l Agricultural Research
World Bank Group
1818 H Street, N.W.
Washington, D.C. 20433
U.S.A.

Dear Mr Lejeune,

The International Council of Scientific Unions at its General Assembly in October 1976, in Washington D.C., decided to begin a study of what ICSU might do with respect to basic scientific research relating to the improvement of agricultural productivity. As part of this study, we wish to obtain information on what other groups are doing in order to avoid unnecessary duplication. Mr P.J. Mahler, the Executive Secretary of the Technical Advisory Committee of CGIAR, has suggested I write to you to request your assistance in obtaining the CGIAR publications.

Any help you can afford will be greatly appreciated.

With the Season's Greetings,

Yours sincerely.

FWG. Baker

F.W.G. Baker Executive Secretary

c. Dr P.J. Mahler

December 15, 1976

Ms. Jean-Marie Delwart Managing Director S.A. Floridienne N.V. Avenue Louise 479 1050 Brussels, Belgium

Dear Ms. Delwart:

Thank you for your letter of November 30th regarding your request for the publication about the Consultative Group on International Agricultural Research (CGIAR).

The CGIAR has recently published an updated brochure (copy attached) describing the organization and its work. The brochure, however, is not an annual report, such as you mentioned in your letter.

Thank you for your interest in the CGIAR.

Sincerely,

Carlos B. Gavino Remearch Assistant

CBGavino:ev1/File K

Dr. Eric Kocher
Associate Deam
Columbia University in the City
of New York
Faculty of International Affairs
420 West 118th Street
New York N.Y. 10027

December 14, 1976

Dear Dr. Kocher:

This is to acknowledge with thanks, your letter of November 24 to the Secretariat of the Consultative Group on International Agricultural Research. I am enclosing as you requested, a copy of the brochure describing the work of the international agricultural research centers sponsored by the CGIAR. I believe I sent you an earlier version with my letter of November 5, 1976.

I regret that we are not looking for recent graduates in the CGIAR Secretariat. We are a staff of only four, all of whom are staff members of the World Bank. If there are vacancies, they would ordinarily be filled from within the World Bank itself.

Thank you, nevertheless, for your interest in the CGIAR.

Sincerely yours,

Daniel Ritchie
Deputy Executive Secretary

DanielRitchie/ms/T

December 3, 1976

Mr. William T. Mashler
Senior Director
Division for Blobal and Inter-Regional
Projects
United Nations Development Programme
1 United Nations Plaza
New York, New York 10017

Dear Mr. Mashler:

Thank you for your letter of November 23rd to Mr. Ritchie acknowledging receipt of the Bank's contribution of \$6,000 for the brochures.

I would appreciate your arranging to send 300 copies of the brochures for distribution within the Bank. This number will also be sufficient to cover the day-to-day requests from the Secretariat. In future, we will call in our requests to Mr. W. Lineberry for additional copies needed.

Regards.

Sincerely yours,

Carlos B. Gavino

CBGavino:ev1/File T

Mr. Gaveno

# s.a. FLORIDIENNE n.v.

AVENUE LOUISE 479 1050 BRUXELLES DEC - 7 1976

DIRECTION

November 30, 1976.

Dear Sirs,

We would like to know more about your Institution and therefore, we would appreciate receiving your last annual report as well as any other documentation on your activities.

Looking forward to hearing from you, we are,

Yours sincerely,

Jean-Marie Delwart, Managing Director.

Consultative Group on International Agricultural Research 1818 H. Str. NW Washington DC 20433 U.S.A. Columbia University in the City of Aem Pork FACULTY OF INTERNATIONAL AFFAIRS

420 WEST IIBTH STREET NEW YORK, N.Y. 10027

DEC - 7 1978

OFFICE OF THE DEAN

CABLE: FAINACU

November 24, 1976

Secretariat of the Consultative Group on International Agricultural Research 1818 H Street NW Washington, D.C. 20433

Gentlemen:

At the suggestion of Ralph W. Cummings, Director of the International Crops Research Institute for the Semi-Arid Tropics, I am writing to request a copy of your booklet on "The Consultative Group of International Agricultural Research". We will put this material on our placement shelves in order to acquaint the students of the School with your work.

At the same time, I am wondering if you would have need for young graduating students who are specializing in economics within the degree of Master of International Affairs. This School turns out a considerable number of highly qualified students in this field, and we would be pleased to send you resumes for your consideration of adequately qualified individuals.

Sincerely,

Associate Dean

EK: pmr

Mildelie handle.

yellow "T"

# 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

FROM: The Secretariat

November 22, 1976

#### Revised Brochure on CGIAR

- 1. As indicated by the representative of UNDP at the meeting of the Consultative Group on October 29, 1976, an updated version of the brochure describing the work of the CGIAR is now available. Many of you obtained copies of the English language version which was distributed at the October CG meeting. The French and Spanish versions will be available in February 1977.
- 2. To obtain copies of the new brochure, please write to the UNDP indicating the number of brochures in each language which you require and the return address to which the brochures should be sent. Brochures should be ordered from:

Mr. Rudolph Skeete
Distribution Office
Room 1905
United Nations Development Programme
1 United Nations Plaza
New York, New York 10017

#### Distribution:

CG Members Center Directors TAC Members TAC Secretariat November 15, 1976

Mr. William T. Mashler
Senior Director
Division for Global and
Interregional Projects
United Nations Development Programme
1 United Nations Plaza
New York, New York 10017

Dear Mr. Mashler:

As per my telephone conversation of this morning with your Secretary, I am enclosing the names and addresses of those interested in receiving copies of the revised brochure on International Agricultural Research.

Thank you.

Sincerely yours,

gof

Elizabeth V. Liboro

Enclosures

evl/File T

# THE LIBRARY THE INSTITUTE OF DEVELOPMENT STUDIES

at THE UNIVERSITY OF SUSSEX, ANDREW COHEN BUILDING, FALMER, BRIGHTON BN1 9RE

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Executive Secretary
Consultative Group on Inter-Your reference
national Agricultural Research
1818 H Street NW Our reference GEG/CR/CGIAR
Washington, D.C. 20433
U.S.A. Date 23rd September, 1976

Dear Sir.

The Institute of Development Studies was established in 1966 by the United Kingdom government as an autonomous national centre for the study of development issues and technology throughout the world. The Library exists to complement the work of the Institute and to serve as a national centre for documentation on various aspects of development studies.

We are currently attempting to develop a register of international bodies whose work is of interest to us, and for this reason we should like to learn more about the activities, organisation and history of your body. We should therefore be pleased to receive any information which you can provide us along with a list of any publications which you may sponsor. Such background information will be of value in our attempt to serve the Institute and similar agencies engaged in development work.

Your attention in this matter will be greatly appreciated.

Yours faithfully,

Myroger

M. H. Rogers, LIBRARIAN Excentive Scoretary Consultative Group on Inter- varmance hattonal Agricultural Research 1818 H Street My

A INSTITUTE OF DEVELOPMENT STUDI

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The Library

The Institute of Development Studies

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Sussex, England

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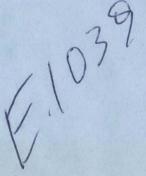
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SECOND FOLD HERE









Executive Secretary

Consultative Group on International

Agricultural Research

1818 H Street NW

Washington, D.C. 20433

U.S.A.

November 9, 1976

Ms. M. H. Rogers
Librarian
The Library
The Institute of Development Studies
University of Sussex
Andrew Cohen Building
Falmer, Brighton BN1 9RE
England

Dear Ms. Rogers:

Please accept my apologies for this late reply to your letter of September 23, 1976 addressed to the Executive Secretary of the Consultative Group on International Agricultural Research and requesting for information on the work of the CGIAR. I decided to hold on to your request until the revised brochure describing the work of the CGIAR was available. I am now enclosing a copy.

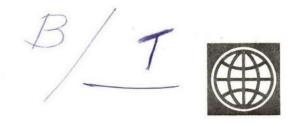
Thank you for your institution's interest in the CGIAR.

Sincerely yours,

Carlos B. Gavino

Enclosure

CBGavino:ev1/File T



# World Bank

1818 H Street, N.W., Washington, D.C. 20433, U.S.A. • Telephone: (202) 393-6360

NOVEMBER 2, 1976

#### FUNDS UPPED FOR AGRICULTURAL RESEARCH

The 12 international agricultural research centers and programs\* grouped under the umbrella of the Consultative Group on International Agricultural Research (CGIAR) are to be provided a total of about \$78 million to carry on their activities in 1977.

The amount is based on the indications of financial support from most of the 28 donor members\*\* of the CGIAR, which ended its three-day, semi-annual meeting at the adquarters of the World Bank, in Washington, D.C. on Friday, October 29th. The \$78 million figure is some \$14 million more than was pledged to the centers and programs a year ago for 1976.

CGIAR-supported programs aim primarily at increasing food crop production in the developing world through research. They also include research into animal production systems and diseases of livestock, conservation of plant genetic resources for use in research and production programs, and training.

In the six years of the Group's existence, the number of centers and programs supported has grown from four to 12, and financial assistance has increased more than fivefold. Currently, the 12 centers and programs are conducting research on the major food crops and on farming systems in all major ecological zones of the developing world.

The membership of the CGIAR—it now totals 36—also indicated general agreement with the findings of a committee which it set up a year ago to review the scope and functioning of the system of research supported by the Consultative Group. The review must be concluded that "the need for a sustained research effort to increase food availability in developing countries will continue and is likely to increase." It, therefore, recommended that the Group continue its support of "research and technology development that can potentially increase food production in the food—deficit countries," with particular emphasis on the needs of the small farmer and the low—income countries. The committee noted the rapid expansion of the activities of the CGIAR during its start—up phase and recommended bringing the programs presently supported to full development before taking on substantial new commitments.

The members of the Group also considered the findings of major technical evaluations of the scientific work of two of the centers, IRRI and CIMMYT, done by panels of international experts set up by the Group's Technical Advisory Committee. All the centers in the system are to be reviewed in this way every five years.

The Group also paid tribute to the Chairman of the Technical Advisory Committee, Sir John Crawford, who will retire from this post at the end of the year, having held it since the Committee's establishment. The Group then welcomed, as the new Chairman

of the Committee, Dr. Ralph Cummings, currently the Director of ICRISAT. The Technical Advisory Committee, composed of 13 scientists, advises the CGIAR on research priorities, on specific proposals for which CGIAR assistance may be sought, and on the effectiveness of existing international agricultural research and training programs.

The CGIAR is co-sponsored by the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP), and the World Bank.

#### \*Research centers and programs supported by the CGIAR

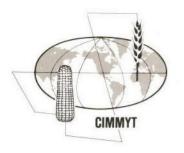
The International Center of Tropical Agriculture (CIAT) in Colombia, the International Maize and Wheat Improvement Center (CIMMYT) in Mexico, the International Potato Center (CIP) in Peru, the International Institute of Tropical Agriculture (IITA) in Nigeria, the International Rice Research Institute (IRRI) in the Philippines, the International Laboratory for Research in Animal Diseases (ILRAD) in Kenya, the International Center for Agricultural Research in the Dry Areas (ICARDA) with stations to be located in Iran, Lebanon, and Syria, the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in India, the International Livestock Center for Africa (ILCA) in Ethiopia, the International Board for Plant Genetic Resources in Rome, the West African Rice Development Association (WARDA) in Liberia, and the Current Agricultural Research Information Service (CARIS) in Rome.

#### \*\*Donor members of the CGIAR

Australia, Belgium, Canada, Denmark, France, Germany, Iran, Italy, Japan, the Netherlands, New Zealand, Nigeria, Norway, Saudi Arabia, Sweden, Switzerland, the United Kingdom, the United States, the Arab Fund for Social and Economic Development, the Asian Development Bank, the Ford Foundation, the Inter-American Development Bank, the International Development Research Centre, the Kellogg Foundation, the Rockefeller Foundation, the UNDP, the United Nations Environment Programme, and the World Bank.

### Other members of the CGIAR

African Development Bank
European Economic Community
Food and Agriculture Organization of the United Nations
Representing Africa: Morocco
Representing Asia and the Far East: Malaysia and Thailand
Representing Latin America: Argentina and Brazil
Representing the Middle East: Egypt and Pakistan
Representing Southern and Eastern Europe: Israel and Romania



#### CENTRO INTERNACIONAL DE MEJORAMIENTO DE MAIZ Y TRIGO

INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER

Londres 40, México 6, D. F. Apdo. Postal 6-641 Cable: CENCIMMYT

October 13, 1976

The Executive Secretary
Consultative Group on International
Agricultural Research
1818 H. Street, N.W.
Washington, D. C. 20433, USA

Dear Sir:

In regard to your memorandum of September 27, 1976, addressed to all (International) Center Directors, we are pleased to mail you under separate cover, the following CIMMYT publications, which include the most recently published:

This is CIMMYT (English and Spanish)
CIMMYT Today Nos. 1, 2, 3, 4, and 5 (English and Spanish)
CIMMYT Review, 1975 & 1976 (English and Spanish)
CIMMYT Annual Report on Maize, 1974 (English and Spanish)
CIMMYT Annual Report on Wheat, 1974 (English)
Adoption Studies: Kenya, Turkey, El Salvador, and Colombia (English)
From agronomic research to farmer recommendations (English and Spanish)
Maize diseases (English and Spanish)
International trials reports: Wheat and Triticale
International trials reports: Maize
CIMMYT Reprints and translations
List of publications - CIMMYT

We hope that these materials will arrive on time for the display arrangements.

Sincerely,

Gregorio Martínez Valdés Government and Public Affairs

# 1

## INTERNATIONAL CROPS RESEARCH INSTITUTE FOR THE SEMI-ARID TROPICS (ICRISAT)

1-11-256, Begumpet, Hyderabad-500 016, A. P., India.

October 12, 1976

The Executive Secretary Consultative Group on International Agricultural Research 1818 H St, N W Washington, D c 20433 U S A

Dear Sir:

Kindly refer to your letter of September 27, 1976 addressed to the Center Directors on 'Display of Center Documents at World Bank'. Under separate registered Air Mail cover we have arranged for the despatch of one copy each of our following publications:

- Sorghum Millets Peas: A Bibliography of the Indian Literature 1969-73
- Jain (T C) etc: Union Catalog of Theses: Available in the Libraries of All the International Agricultural Research and Training Centers
- 3 Rachie (K 0): Millets: Importance, Utilization and Outlook
- 4 International Workshop on Farming Systems 1974
- 5 International Workshop on Grain Legumes 1975
- 6 ICRISAT Annual Report 1973/74
- 7 Theses and Dissertation Available in the ICRISAT Library

We have included your address in our mailing list and you will continue receiving our future publications also.

I remain

Yours sincerely

T C Jain

Librarian

OCT. - 8 1976

OGT 1 4 1978

#### CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

#### INTERNATIONAL BOARD FOR PLANT GENETIC RESOURCES

SECRETARIAT:

Crop Ecology and Genetic Resources Unit Plant Production and Protection Division FAO

Via delle Terme di Caracalla 00100 Rome, Italy

PR 3/11 IBPGR Gen.

If you do not quote our code and date in your reply, the delivery of your correspondence may be delayed.

Dear Mr. Lejeune,

Thank you for your Memorandum dated 27 September.

I have pleasure in enclosing the following IBPGR documents for display at the World Bank:

- Annual Report 1975

- A Bibliography of Plant Genetic Resources

- Priorities among Crops and Regions

- The Conservation of Crop Genetic Resources.

A CHARLET AT A TOP A CO.

Yours sincerely,

R.J. Pichel Secretary

Mr. Michael Lejeune Executive Secretary CGIAR World Bank - Room E-1039 1818 'H' Street, N.W. Washington, D.C. 20433 the state of the s U.S.A.

Cables: FOODAGRI ROME

Telex: 61181 FOODAGRI

Telephone: 5797



# THE INTERNATIONAL POTATO CENTER

Address:
Apartado 5969
Lima - Perú
Cables: CIPAPA - Lima
Telephone: 354283 - 354354

OCT 1 4 1976

L-498-CIP-76

Mr. Michael Lejeune
Executive Secretary
Consultative Group on
International Agricultural Research
1818 H Street, N.W.
Washington, D.C. 20433
U.S.A.

wentle of

Dear Mike,

As requested by you, by separate cover a list of publications to date of the International Potato Center is being sent.

Best personal regards.

Sincerely yours,

October 5, 1976

Richard L. Sawyer
Director General

RLS/es

cc: Ms. Elsa Franco - CIP, Publications

The International Potato Center (CIP) is a scientific institution, autonomous and non-profit making, established by means of an agreement with the Government of Perú with the purpose of developing and disseminating knowledge for greater utilization of the potato as a basic food. International funding sources for technical assistance in agriculture are financing the Center.

October 6, 1976

Mr. Roy D. Bronson, Coordinator International Agricultural Undergraduate Programs Purdue University Department of Agronomy Life Science Building West Lafayette, Indiana 47907

Dear Mr. Eronson:

Thank you for your letter of September 30, 1976.

We are happy to know that our 1974 brochure on International Research in Agriculture has been helpful to you and your students.

A new brochure will be published in the very near future and we shall be able to send you 25 copies as requested. There will be no charge.

We appreciate your interest in our brochure, and if we can be of any more help please do not hesitate to let me know.

Sincerely yours,

Andrew J. Hayman Program Officer

IAudifferen: AHayman: ia

Files:T

#### PURDUE UNIVERSITY

DEPARTMENT OF AGRONOMY
LIFE SCIENCE BUILDING
WEST LAFAYETTE, INDIANA 47907

September 30, 1976

007 ... 1076

Consultative Group on
International Agricultural Research
c/o World Bank
1818 H Street NW
Washington, D. C. 20433

Gentlemen:

In 1974 you published a bulletin on the institutions for international agricultural research which are part of the CGIAR.

I have found this publication to be most factual and helpful in teaching international agricultural and agronomic subjects here at Purdue University. I also know that it would be a very useful source of information concerning the institutions for our students who are majoring in international agriculture or in the separate disciplines with an international emphasis.

I would therefore like to inquire about the availability of an updated version of this publication in multiple-copy quantities.

Would you please let me know whether a more recent edition can be obtained and if there is a related cost, what the cost would be for approximately 25 copies.

Very sincerely yours,

Roy D. Bronson, Coordinator International Agricultural Undergraduate Programs

RDB/tb

September 28, 1976

Dear Mr. Rempel:

Thank you for your letter of September 16 requesting information on current agricultural research relevant to developing areas.

I am enclosing a brochure describing the work of the Consultative Group on International Agricultural Research (CGIAR).

In it you will find a list of the international institutes located in developing countries which conduct research on a wide variety of crops.

Thank you for your interest in the CGIAR.

Sincerely,

Carlos B. Gavino

**Enclosure** 

Mr. Eric Rempel Mennonite Central Committee (Canada) 201 - 1483 Pembina Hwy. Winnipeg, Manitoba Canada R3T 2C8

Jile "T"

September 24, 1976

Mr. John Coulter

D.C. Pickering

# Exhibition of Publications by CGIAR Sponsored Institutions

- 1. Further to our various conversation, I have confirmed with Mr. Charles Olsen, the Bank/Fund Librarian, that he would be most willing to provide space and facilities to stage an exhibition of publications produced by institutions supported by CGIAR. He agrees that a period, say two to four weeks, in late December/early January would be suitable. Further, he suggests that one could obtain valuable publicity through Bank Notes and the Administrative Bulletins.
- I confirm our agreement that the next step would be for you to inform the center directors of our interest in bringing their work to the attention of Bank staff members via the proposed exhibition. To this end they would be asked if they would provide a representative sample of publications of potential interest, together with complete lists of their centers' publications. These would all be displayed at the exhibition. The objective would be to give individual staff members an opportunity to indicate their interest in specific types of publications from specific institutions. Having formed an assessment of the volume of interest it will then be possible to decide how to satisfy it in the most economical and effective way.
- 3. We agreed that you would ask center directors to route their contributions to CGIAR, and that we (CPS staff) would screen them jointly with you. Until this has been accomplished, hopefully by early December, it would be difficult to assess the scope of the exhibition in terms of space. We would then get together with Mr. Olsen following the screening exercise.

DCPickeringhrv

cc: Mr. Charles Olsen

Mr. J. Fransen

Assistant Directors, Agric. & Rural Dev.

Mr. Michael L. Lejeune

John K. Coulter

CGIAR Brochure

I have checked through the Introduction and corrected a few technical errors.

I have also been through the accounts of each center. Personally, I would have approached the writing of this section in a different manner. For example, it would be desirable to integrate some sections from all the centers, for example, training and international cooperation. It would also be desirable to have some cross-referencing, for example, the cassava programs at IITA and CIAT. Some of the centers, for example, ILRAD, take up considerable space stating what they plan to do. I think that this could have been shortened.

I would suggest that the aim of the brochure should be to sell the "system"; as it stands, it is more a question of each center selling itself.

However, these changes would require a time-consuming re-write; without this, I think that we can only let it stand as is.

Attachment

File T

JKCoulter : apm

Warren C. Baum

September 20, 1976

Michael L. Lejeune

Memorandum for your Signature

- 1. Attached for your signature is a memorandum to Mr. McNamara seeking his authority to put his signature to the new preface of the proposed revised CGIAR brochure.
- We have copies of the draft statements on the individual research centers if you would like to see them.

Attachment

MLejeune:evl

File: T

Robert S. McNamara September 20, 1976 Warren C. Baum Brochure on the CGIAR You will remember that two years ago we published a brochure on the CGIAR called "International Research in Agriculture." A copy is attached. We are now preparing a revised updated version of this brochure. It is ready to go to the printer. As before, we propose to have a preface signed by you, the Director General of the FAO, and the Administrator of the UNDP. This will be followed by a general introduction and chapters on the individual research centers. I attach a draft of the proposed preface, which has also been sent to Mr. Saouma and Mr. Morse. I also attach a copy of the proposed introduction. May we please have your authority to put your signature to the preface? Attachments MLejeune: evl File: T

Mennonite Centra! Committee (Canada)

201 - 1483 Pembina Hwy.

Winnipeg

Manitoba

Canada R3T 2C8 Telephone (204) 475-3550 Cable MENCENCOM Carlos

MCC

A Christian resource for meeting human need



September 16, 1976

76/933

Consultative Group on International Agricultural Research World Book 1818 H. Street N.W. Washington, D.C. 20433 U.S.A.

Dear Sirs,

Could you kindly send me your list of current agricultural research of relevance to developing areas. Erri Reups

ER:1g

Set 101.976

#### INTRODUCTION

Central "T"

of about 350,000 species of plants identified by botanists, archaeological evidence suggests, mankind at one time or another has tried perhaps 3,000 as food sources. By the end of the Stone Age, humans had already selected as their chief sources virtually all of the much smaller number of plants that serve them today. Over the space of 10,000 years or so, by a process of observation, selection, intuition and chance, cultivators have enormously improved the plant varieties with which they began. The yield of grain from a cereal plant today, for example, is over 100 times that of its primitive ancestors.

Plant improvement, nevertheless, became a scientific enterprise only after the start of the present century, when genetics began to be more widely understood and to be systematically applied to the breeding of plants. From this beginning, plant breeding and scientific experimentation was carried out chiefly in the temperate zones inhabited by the industrialized countries — a truly ironic circumstance, since virtually all the plants on which mankind now depends for sustenance seem to have originated in the tropics and sub-tropics populated today by the less developed countries.

Modern agricultural research in the tropics had its beginning only about a generation ago. Most tropical agriculture is still untouched by it. Breeding work until quite recently concentrated on wheat, rice and maize — and these under conditions of irrigation beyond the reach of most small cultivators — and paid relatively little attention to legumes and root crops which also are tropical staples. In spite of dramatic increases in yields achieved in cereal grains, the greatest achievements of agricultural research in the less developed countries still lie ahead. While the potentials of crop improvement obviously can be estimated only

roughly, it nevertheless appears that in the tropics these potentials are large indeed. It is possible that better breeding and better methods of cultivation could increase the typical yields of many tropical crops by a factor of 10 or more. In fact, in a limited number of cases, examples of such multiplication already are occurring.

#### The CGIAR

It was to finance a revolution in the agricultural productivity of the less developed countries that the Consultative Group on International Agricultural Research (CGIAR) was founded in 1971. Sponsored by the Food and Agriculture Organization (FAO) of the United Nations, the World Bank and the United Nations Development Programme (UNDP), the CGIAR is an international consortium that seeks to increase food production in the developing world through research programs and through the training of research scientists and production specialists in the developing nations. In 1972, the first year of funding, the Group supported the work of five international research centers with financial assistance amounting to \$15 million. In 1976, the network of centers had increased to 11, and financial support had grown more than fourfold, to \$64 million.

Programs supported by the CGIAR now embrace the major crops, the chief food animals and most of the ecological zones of the developing world. The II centers (described in the subsequent chapters of this booklet) now employ more than 300 principal scientists, and more than 4,000 persons in all, in their investigations of the problems of tropical agriculture. The centers are:

— The International Rice Research Institute (IRRI), Los Banos, Philippines, aims to increase and stabilize the production of rice in developing countries, through the continuing developing of new varieties and the evolution of better

agricultural production systems involving rice as a principal crop. It was formally established in 1960, and is a lineal descendant of a program which began in 1944 as a joint undertaking of the Philippine Government and the Rockefeller Foundation.

- -- The International Maize and Wheat Improvement Center (Centro Internacional de Mejoramiento de Maiz y Trigo, or CIMMYT), seeks to improve the production of maize and wheat. Like IRRI, it has research and testing programs which extend to many nations outside its own host country. Unprecedently abundant harvests of wheat and of rice on irrigated land in the 1960s, especially in Asia, stemmed from the work of CIMMYT and IRRI, and earned the name, "Green Revolution."

  Dr. Norman Borlaug, director of the CIMMYT wheat program, was awarded the Nobel Peace Prize in 1966; and CIMMYT and IRRI shared the Unesco Science Prize in 1970.

  CIMMYT was formally established in 1966; it is an outgrowth of a cooperative program begun in 1943 by the Rockefeller Foundation and the Mexican Government.
- Tropical, or CIAT), Palmira, Colombia, has the objective of improving agriculture in the humid lowland tropics, especially in Latin America. CIAT was formally established in 1967. It was the first of the international centers to include in its mandate the study of farming systems; and it was the first to be concerned with the improvement of animal production. CIAT's efforts are concentrated on cassava, broad beans, beef and swine, and it cooperates with CIMMYT and IRRI in the local adaptation of new varieties of maize and rice.
- -- The International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria, was founded in 1968, on somewhat the same pattern as CIAT. It is concerned with the development of improved farming systems in the lowland humid tropics, especially

in Africa: one of its chief concerns is to develop settled cropping systems to replace the shifting cultivation now typical of much of Tropical Africa. The Institute also is carrying on crop improvement programs for root and tuber crops (cassava, yams, sweet potatoes) and grain legumes (cowpeas, lima beans, pigeon peas and sorghum), and is cooperating with CIMMYT and IRRI and the local adaptation of maize and rice.

- -- The International Potato Center (Centro Internacional de la Papa, or CIP), Lima. Peru, is a one-crop center, formally established in 1971. It seeks to develop improved varieties, and to expand the production of potatoes wherever they can advantageously be grown in developing countries. It already has established a regional network of production and training specialists for the latter purpose.
- The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Hyderabad, India, was formally established in 1972, and was the first international center to be inaugurated under the auspices of the CGIAR. It studies farming systems and water management methods to benefit farmers in the semi-arid tropics, and seeks to develop superior varieties of sorghum, pearl millet, chick peas, pigeon peas and ground nuts.
- -- The International Laboratory for Research on Animal Diseases (ILRAD),
  Nairobi, Kenya, is concentrating on immunological methods for controlling two
  major diseases of cattle -- theileriosis (also known in Africa as East Coast
  fever) and trypanosomiasis (the sleeping sickness carried by the tsetse fly).
  It was established in 1973.
- The International Livestock Center for Africa (ILCA), Addis Ababa, Ethiopia, is working to increase the output of animals (for the present, especially of cattle), through improved systems of production, including, for example, better forage grasses and better systems of range management.

- The West Africa Rice Development Association (WARDA), Monrovia, Liberia is a regional organization of West African Governments, devoted chiefly to applied research and aimed at making the region self-sufficient in rice.
- -- The International Board for Plant Genetic Resources (IBPGR), Rome, Italy, began its operations in 1974. It seeks to encourage and to help coordinate the collection and exchange of plant genetic materials of potential usefulness in the crop development programs of developing countries.
- -- The International Centre for Agricultural Research in the Dry Areas (ICARDA), with temporary administrative offices in Cairo, Egypt. Founded in 1976, ICARDA has taken over the crop improvement programs of a predecessor organization in Lebanon, and also is establishing principal research stations in Syria and Iran. It will study farming systems in countries with Mediterranean-type and coldwinter climates, among them systems including animals (primarily sheep) as well as crops: and it will aim particularly to develop improved varieties of wheat, barley and lentils.

In addition, for the time being the CGIAR also finances the Current Agricultural Research Information Service (CARIS) in Rome.

By August 1976, some 35 countries, international agencies and foundations could be counted as Consultative Group members. In addition to the three sponsors (FAO, World Bank, UNDP) the members were: 18 donor governments -- Australia, Belgium, Canada, Denmark, France, the Federal Republic of Germany, Iran, Italy, Japan, the Netherlands, New Zealand, Nigeria, Norway, Saudi Arabia, Sweden, Switzerland, the United Kingdom and the United States; three foundations -- the Ford Foundation, the Kellogg Foundation and the Rockefeller Foundation: three regional development banks (African, Asian and Inter-American Development Banks) and the Commission of the European Communities; and the International Development

Research Centre (IDRC), an autonomous organization based in Canada. Each of the five major developing regions of the world (Africa, Asia and the Far East, Latin America, the Middle East, and Southern and Eastern Europe) participate in the CGIAR through two representative countries designated for two-year terms by the membership of FAO. In addition, the Arab Fund for Social and Economic Development has expressed an interest in becoming a donor member of the Group.

The members of the Group attend meetings in Washington at the World Bank's headquarters twice a year. On the basis of reports of progress from existing centers and on needs for new research thrusts, the members decide which programs they will support, and to what extent. A member of the Group is free to provide funds for some centers and not for others; most international centers attract funds from several of the donors; none attracts funds from all donors.

The Consultative Group is assisted by a Technical Advisory Committee (TAC) consisting of 13 eminent scientists and economists. Apart from the chairman, the members are drawn equally from developed and developing countries. TAC advises the Consultative Group on research priorities, on specific proposals for which Group assistance may be sought, and on the effectiveness of existing international agricultural research and training programs. TAC's consideration of needs in developing countries takes into account not only the technical requirements of increased agricultural productivity but ecological, social and economic factors as well.

TAC usually meets two or three times a year, in Rome, Washington or one of the international centers. Members of TAC familiarize themselves with the work of the international centers and with research needs of developing countries by visits to centers and other programs of interest.

In order to concentrate on priorities and to achieve the necessary focus in objectives. CGIAR and TAC have to be selective in their support for international research. TAC itself originates research proposals; other proposals have to be channeled to TAC through a member of the Consultative Group. It is not possible for CGIAR to respond to requests to support national research programs, but co-operation between international and national research institutes is recognized as being of great importance.

#### The Center Concept

The centers and their predecessor programs were an innovative response to the need to increase agricultural productivity in the poorer countries.

The very idea of research on tropical subsistence crops was novel; previously, research in tropical agriculture had concentrated mostly on cash crops raised on large-scale plantations and intended chiefly for export. The weight of scientific talent which the centers brought to bear on crop development, and later on the problems of agricultural systems, was new; and the scale and speed of experimentation likewise had little precedent in the less developed countries.

Each of the crop centers is an autonomous, international, research and training institution, with an international staff of scientists and supporting technicians. Each is governed by its own international board of trustees; and each board is non-political and self-perpetuating; each contains leaders and experts drawn both from developed and developing countries.

The international centers have close relations with the countries in which they are based. For a purely nominal rent, the host country provides the sites in which center facilities are constructed and crops are grown. Most centers are situated near an agricultural university of the host country, and may carry on joint programs of research and study with them and other national research institutions.

Beyond the host country, an international center develops a cooperative network which links it with research centers in other countries through programs of assistance or collaboration. The center builds up a library and documentation services for international reference in the fields of the center's specialty. Conferences, seminars and workshops are organized to enable international scientists to meet and discuss findings. With the help of the IBPGR, some of the international centers (for instance, IRRI and CIP) are building up collections of the world's germ plasm for the crops which they are studying.

While research is at the heart of a center's activities, the training of research scientists and production specialists to serve in the less developed countries claims a large part of its time, its effort and its budget. The number of persons trained at the centers so far is well over 3,000, and the emphasis on this kind of activity continues to grow.

The centers seek in other ways to apply the fruits of their research directly for the benefit of farmers in the developing countries, often through special projects particularly designed for and carried out within individual countries. These and similar outreach activities are recognized as among the most important functions a center can perform. Measured in terms of budget dollars, outreach activities accounted for one out of every six dollars spent by the centers for operating costs in 1974; in 1975, the proportion rose to one in every four.

The size of the budget of an international center varies according to its scope of work. Centers have needed between \$5 million and \$20 million each for developing their buildings, laboratories, greenhouses, experimental farmlands and housing for staff and trainees. Average operating budgets for 1977 are at the level of \$7 million.

A hallmark of the centers is that their research is carried out by multidisciplinary teams of scientists, including plant breeders, geneticists, soil
scientists, plant physiologists, pathologists, entomologists or others as a
particular problem may demand. This is contrast to the research methods of a
generation ago, when specialists tended to perform their tasks singly instead
of telescoping them into a common endeavor. In part because of their international character, the centers have access to an enormous amount of genetic
material throughout the world; this greatly aids their efforts to breed many
desirable characteristics into a single plant variety. Techniques for duplicating

genetic material have been developed which enable a single center to make literally thousands of plant crosses in a single year, and the international testing system administered by each center in the crops of its major interest means that literally thousands of plants representing new genetic combinations can be produced in a single year. All these advantages mean that an international center can produce results five or six times as fast as old-style agricultural research stations.

The center system began with a strong orientation toward purely biological research; but it has broadened its interests beyond the test tube and the experimental plot. The green revolution began on irrigated farms of comparatively large size owned by relatively wealthy farmers; the centers have now turned their efforts to developing plant types and practices to benefit the small farmer, who must operate without the benefit of controlled irrigation or much help from fertilizer and pesticides. Centers also are deepening their studies of constraints to production that lie outside the realm of biology, such as social custom, consumer habits, costs of inputs and the like; and economists and other social scientists are playing an expanding role in the activities of the research network.

For each center, these and other aspects of the work carried on in the international research network are described in the pages that follow.

September 10, 1976

Central Feles
CGIAR Booklet "T"

PREFACE

Productive agriculture is both an economic and a humanitarian imperative in the developing world. The rural sector must generate savings and production to move development forward; and it must overcome the hunger and malnutrition that are the familiar lot of poor peoples everywhere.

In many developing countries, agriculture is not performing these essential roles. The rural sector is commonly not only the largest but also the most depressed part of the society. It is providing too little employment and too little production to raise living standards and prepare the way for further advance.

The world food situation continues to be precarious. On present form, the food deficits of the developing countries, which were about 20 million tons in 1970, will rise to between 55 and 85 million tons by 1985. At least 400 million people live on the edge of starvation; it has been estimated that more than 10,000 die of hunger every day. Throughout the world, another thousand million people subsist on sub-standard diets.

This state of affairs can be drastically changed. The world <u>can</u> feed itself. The basic problems affecting food supply result from decisions made by
governments and individuals, not from uncontrollable or irresistible forces of
nature. Solutions lie in new policies and new actions.

The necessary resources already exist or can be found. To mobilize them, however, requires acts of international cooperation and national initiative on an unprecedented scale — for example, in investment, trade, education, health and technology. The developed nations for some time must expect to continue food aid; but it is plain that the highest priority must be given to achieving a marked increase of food production in the less developed countries themselves.

An essential contribution to this objective can be made by the new and growing international system of agricultural research and training programs supported by the Consultative Group on International Agricultural Research (CGIAR). The Group is sponsored by the Food and Agriculture Organization of the United Nations, the World Bank and the United Nations Development Programme; and it consists, in addition, of 32 governments, international and regional organizations and private foundations. The purpose of the Group is to bring the resources of modern biological and socio-economic research to bear on the long-neglected possibilities of agricultural progress in the tropics and sub-tropics where nearly all the less developed countries lie. The research and training programs sponsored by the Group seek to arm the developing countries with superior varieties of essential crops and improved systems for the production of food plants and animals.

This booklet describes the activities of the Group and the international research and training system it sponsors. The opening chapter provides a general introduction to these subjects; the remaining chapters describe the work of each of the international institutes composing what has come to be known as the CGIAR network. The booklet is intended to be useful to policy-makers, specialists and interested laymen — both those who may find ways to benefit from the network's activities and those who may find ways to contribute to its success.

(Signatures)

September 8, 1976

Dear Mrs. Massignon:

Dr. Åberg has passed on your greetings to me, and thought that you would be interested in having more information on the CGIAR.

I am enclosing herewith the brochure, "International Research in Agriculture," the Integrative Report, distributed in July 1976 and our information sheet on the CGIAR.

We will be sending you an updated version of the brochure and a copy of the Review Committee's Report of the CGIAR as soon as they become available.

With best regards,

Sincerely yours,

Daniel Ritchie

Deputy Executive Secretary

Enclosures

Mrs. Nicole Massignon
Development Cooperation Directorate
OECD
2, Rue Andre-Pascal
Paris 16E
France
cc: Dr. Åberg

File T DRitchie:apm September 8, 1976

Mr. D. O. Hall
Botany Department
School of Biological Sciences
University of London
Kings College
68 Half Moon Lane
London SE24 9JF
England

Dear Mr. Hall:

I am writing on behalf of Mr. Baum in response to your letter of September 1, 1976.

The Consultative Group on International Agricultural Research is an organization of governments, international and regional aid groups and private foundations voluntarily associated to coordinate financial support for international agricultural research. The donor members of the Group make their contributions directly to the international centers and programs financed by the CGIAR. Consequently, I regret the CGIAR has no funds of its own to support activities such as yours.

We are, of course, very interested in the research effort devoted to photosynthesis, and we would appreciate being kept advised of the outcome of the proposed Congress.

I'm sorry we can't be more helpful.

Sincerely yours,

Daniel Ritchie Deputy Executive Secretary

DRitchie: evl

cc: Mr. Coulter

Mr. Hayman

Mr. Lejeune

File: T

September 3, 1976

Miss Brigitte Thebaud Office of the President Canadian International Development Agency 122 Bank Street Ottawa 4 Canada

Dear Miss Thebaud:

Attached is the short paper prepared by the World Bank and FAO in November 1970 regarding the Objectives, Composition and Organizational Structure of the Consultative Group on International Agricultural Research.

In essence, the paper reflects the internal structure of the CGIAR as it now exists.

Regards,

Sincerely.

Carlos B. Gavino

Attachment

File T

CBGavino: apm

# Possible Objectives, Composition, and

## Organizational Structure of an

# International Arricultural Research Consultative Group

#### A. Objectives

- 1. The main objectives of a Group as envisaged by FAO, IBRD and UNDP would be:
  - (i) to examine the immediate needs for agricultural research in, or on behalf of, the developing countries and, over time, to study in depth the longer-term priorities;
  - (ii) to attempt to ensure maximum complementarity of international and regional efforts with national efforts in financing and undertaking agricultural research in the future:
  - (iii) to review the financial and other requirements of those international and regional research activities which the Group considers of high priority, taking into account the need to ensure continuity of research over a substantial period. 1/
  - (iv) to undertake, with the help of a Technical Advisory Committee (TAC), a continuing review of priorities and research networks related to the needs of developing countries, to enable the Group to adjust its support policies to changing needs, and to achieve economy of effort; and
  - (v) to suggest feasibility studies of specific proposals on the advice of TAC, to reach mutual agreement on how these studies should be undertaken and financed, and to exchange information on the results.

### B. Composition

2. The co-sponsors of the Group would be FAO, IBRD and UNDP. Its membership, in addition to the co-sponsors, would be composed of representatives of interested donor countries, the regional development banks, and international agricultural research in or for the developing countries. Other interested parties might be invited to join or to participate as

<sup>1/</sup> It is expected that, in the first instance, financial support by the Group would probably be directed towards expanding the activities of quired to meet organt needs.

observers, as decided by the members. The Chairman and Secretary of the Group would be provided by the IBRD, and its base would be in Washington; but the venue of its meetings would be decided from time to time by its members.

#### C. Supporting Services

## (a) Technical Advisory Committee (TAC)

- 3. It is suggested that a Technical Advisory Committee be created by the Consultative Group, composed of technical representatives nominated by the Group, plus a limited number of advisers with special expertise, invited on an ad hoc basis to assist on particular problems. TAC would report to the Consultative Group.
- 4. TAC's telms of reference would be prescribed by the Consultative Group. As presently envisaged, TAC would, acting either upon reference from the Consultative Group or on its own initiative:
  - (i) advise the Consultative Group on the main gaps and priorities in agricultural research, both in the technical and socio-economic fields, based on the broad experience of its members;
  - (ii) recommend to the Consultative Group feasibility studies designed to explore in depth how best to organize and conduct agricultural research on priority problems, particularly those calling for international or regional effort;
  - (iii) examine the results of these or other feasibility studies and present its views and recommendations for action for the guidance of the Consultative Group;
  - (iv) advise the Consultative Group on the adequacy of specific international research programs; and
  - (v) maintain a continuing review of needs and priorities in agricultural research, and submit to the Consultative Group such proposals as appear feasible to facilitate rational planning of effort in, or for, the developing countries to meet those needs.
- 5. It is envisaged that the Technical Advisory Committee would a normally meet in Rome, and that its Secretary would be provided by FAO. FAO might also provide its chairman, or alternatively, a distinguished international scientist might be nominated by its members, or the chairmanship rotated amongst its members. It is hoped that agreement can be reached amongst the numbers of the Consultative Group to limit the size of the TAC in the interests of efficient working relations.

#### (b) The Secretariat

6. The Secretariat would be composed initially of the Secretary of the Consultative Group and the Secretary of the Technical Advisory Committee. Arrangements would be worked out to ensure liaison and collaboration between the two wings of the Secretariat.

#### D. Financial Arrangements

- 7. IBRD is prepared to pay for the personal services and travel costs of the Secretary of the Consultative Group, and FAO is prepared to pay for the personal services and travel costs of the Secretary of the TAC.
- 8. The co-sponsors are prepared to finance jointly the per diem and travel expenses of the special advisers to the TAC, but it is assumed that expenses of regular members of TAC would be covered by their respective countries or organizations.
- 9. Arrangements for financing future feasibility studies would be made by the Consultative Group or by individual members on an ad hoc basis.

Washington, D.C. November 17, 1970





## UNIVERSITY OF LONDON KING'S COLLEGE

TEL: OI-733 5666/7/8

68 HALF MOON LANE LONDON SE24 9JF

BOTANY DEPARTMENT
SCHOOL OF BIOLOGICAL SCIENCES

Professor J. W. Bradbeer

1st September 1976

Warren C. Baum Esq.,
Chairman
Consultative Group on International Agricultural
Research,

World Bank Washington, D.C. U.S.A.

Dear Chairman,

Support Grant Request - IV International Congress on Photosynthesis at the University of Reading, U.K. September 4-9, 1977

Please would your Organization consider making a grant to help support the next Photosynthesis Congress to be held in 1977. We are endeavouring to raise £15,000 to finance the Congress which we anticipate will attract between 700 and 1,000 participants. We have already obtained local support from the Royal Society and some industrial companies and have applications pending with various International Scientific Unions and Societies. However, we still need substantial sums of money to ensure that the cost of the meeting to all participants (research workers from developing countries, students, younger scientists, etc.) will be as low as possible. Thus we are approaching yourselves in addition to other Organizations.

Enclosed are 3 copies of our First Circular. You will see that we have a wide range of Symposia which fall in both specific and interdisciplinary categories. We have Symposia Chairmen from many different countries: USSR, Czechoslovakia, W. Germany, U.K., U.S.A., France, Australia, Israel and Italy. The International Photosynthesis Committee also has a world wide distribution. The Science Committee is representative of Photosynthesis in the U.K. and we are fortunate to have Professor T.W. Goodwin, CBE, FRS, and Professor Sir George Porter, FRS, from the Royal Insitution, on the Committee. The Chairman of the Finance Committee is Professor C.P. Whittingham, Rothamsted Experimental Station, Harpenden.

One of the main aims of this Congress is to attract a wider range of basic and applied scientists in the photosynthetic field. Previous Congresses have tended to be somewhat restricted but we feel with the far greater interest in photosynthesis since the onset of the food and fuel problems, that we have an excellent opportunity to attract many different kinds of interested workers.

Any help you can give to the Congress will be greatly appreciated. Please let me know if you require any further information.

Yours sincerely,

D.O. Hall

and Lyle Ltd Research and I England G6 2BX

#### Accommodation

Accommodation will be provided in the halls of residence of the University of Reading. These are situated on a pleasant wooded campus close to London (40 miles), Oxford (30 miles), and London Heathrow Airport (20 miles). A bus service runs from Heathrow to Reading station, where conference buses will be available to transfer participants to the campus of the University of Reading at Whiteknights.

The inclusive charge for five nights (full board, coffee and tea) will be in the region of £50, subject to change. It may be possible to offer some accommodation for an additional night or two pro rata.

The lectures will be held in the Palmer Building, which is within ten minutes walk of the halls of residence. A circular bus service may also be available at some time during the day.

Registration fees	before Feb 1977	after Feb 1977		
Full membership	£40	£60		
Full-time student				
and family membership	£20	£30		

Instructions concerning payment will be given in the second circular.

# 4th Internatic al Congress on Photosynthesis

4–9 September 1977

University of Reading Whiteknights Reading England



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N. K. Boardman (Canberra) W. L. Butler (La Jolla) L. M. N.

Duysens (Leiden) G. Forti (Milan) P. Joliot (Paris) S. Katoh

(Tokyo) A. San Pietro (Indiana) A. Trebst (Bochum)



#### Tentative programme

	Morning	Afternoon		Evening
	Registration	Registration		Registration
1 2	Light harvesting and reaction centres Photosynthesis in cells and tissues	Contributed papers and demonstrations		Reception
3 4	Organization of electron transport Photosynthesis and productivity	Contributed papers and demonstrations	10	Solar energy conversion in biology
5	Carbon metabolism	Contributed papers and demonstrations		
6 7	Photosystem II and O <sub>2</sub> evolution Regulation and metabolism	Contributed papers and demonstrations	11	Photosynthesis and food
8 9	Development of photosynthetic systems Photophosphorylation	Contributed papers and demonstrations	3 33	
	4 5 6 7 8	Registration  1 Light harvesting and reaction centres 2 Photosynthesis in cells and tissues 3 Organization of electron transport 4 Photosynthesis and productivity 5 Carbon metabolism 6 Photosystem II and O <sub>2</sub> evolution 7 Regulation and metabolism 8 Development of photosynthetic systems	RegistrationRegistration1 Light harvesting and reaction centres 2 Photosynthesis in cells and tissuesContributed papers and demonstrations3 Organization of electron transport 4 Photosynthesis and productivityContributed papers and demonstrations5 Carbon metabolismContributed papers and demonstrations6 Photosystem II and O2 evolution 7 Regulation and metabolismContributed papers and demonstrations8 Development of photosynthetic systemsContributed papers	Registration       Registration         1 Light harvesting and reaction centres       Contributed papers         2 Photosynthesis in cells and tissues       and demonstrations         3 Organization of electron transport       Contributed papers         4 Photosynthesis and productivity       and demonstrations         5 Carbon metabolism       Contributed papers         6 Photosystem II and O2 evolution       Contributed papers         7 Regulation and metabolism       and demonstrations         8 Development of photosynthetic systems       Contributed papers

Papers given at the symposia (numbered 1–11 above) will be presented by invitation, the chairman of each symposium will be:

- 1 A. A. Kranovsky 2 I. Setlik 3 A. Trebst 4 J. P. Cooper 5 M. Gibbs 6 P. Joliot 7 A. Latzko 8 N. K. Boardman
- 9 M. Avron 10 G. Forti 11 J. Heslop-Harrison

#### Sponsors and exhibitors

Initial support from the following industrial organizations is gratefully acknowledged: Booker McConnell Ltd, BP Trading, British Sugar Co, ICI, Monsanto, RHM, Shell, Tate and Lyle Ltd.

An exhibition of relevant scientific and commercial products will be held in the lecture building; potential exhibitors are requested to contact Dr J. Coombs or Professor D. O. Hall.

#### Proceedings

Only the proceedings of the symposia will be published in full. Participants will receive abstracts of all contributed papers.

#### Contributed papers

Contributed papers will be welcome on a topic which relates to the main symposium titles. It is hoped that contributions can be presented on the same day as the symposium to which they relate. Contributions may either be short (15 minutes) verbal presentations or *posters*. Please indicate your preference on the attached card, although at this stage there is no guarantee that any preferences can be accommodated.

#### Abstracts

Abstracts will be produced from typed copy submitted by the author(s) on a standard form which will be sent to participants in Autmn 1976. It is unlikely that it will be possible to accept more than one abstract from any individual participant.

#### Local organization

Dr J. Coombs Tate and Lyle Ltd PO Box 68 Reading RG6 2BX England

#### Scientific enquiries

Professor D. O. Hall King's College 68 Half Moon Lane London SE24 9JF England

Ple complete	(BLOCK	CAPITALS)	this car	dand	return	it a
soon as possible.						

Replies to the following questions will greatly help the organization of the conference:  would like to receive the second circular	Name
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2 3 4 5 6 7 8 9	(Indicate not more than seven)
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My talk could be best associated with symposium number\_

DE / JC TRIE T



DEPARTMENT OF PHYSICS • UNIVERSITY OF TORONTO, TORONTO, ONTARIO, CANADA, M5S 1A7

August 18, 1976

Mr. Carlos B. Gavino
Research Assistant
Consultative Group on International
Agricultural Research
1818 H St., N.W.
Washington, D.C. 20433

Dear Mr. Gavino:

Thank you very much for your letter of July 9 and the report on International Research in Agriculture. I was not able to acknowledge receipt at an earlier date because I have just returned from the International Weather Modification Conference in Boulder where I was conference chairman, and the International Cloud Physics Conference.

I was very interested in reading about the efforts of the different institutions involved in agricultural research; it makes me more aware of the problems faced. This I hope will be of great help to me in my activities relating to the Precipitation Enhancement Project of WMO. PEP as it is called for short is planned to be carried out in one of the semi-arid countries with the clear intention that agriculture would benefit from any possible increase in precipitation. The site selection phase, however, will take another three years and no weather modification will be attempted before the final selection.

Sincerely yours,

Roland List

Professor of Physics

RL/ok

Central Files

NEW YORK TIMES

July 31, 1976

# World Farm Study Group Picks Chief; Action Aids View Post Is Nonpolitical

By VICTOR K. McELHENY

After months of behind-thescenes debtate, the agencies financing a global network of agricultural research centers have agred on a new chairman of the Technical Advisory Committee that reveiews the scientific merit of the centers' work toward large, long-term increases in world food sup-

The debate concerned whether to accept a candidate named by Edouard Saouma of Lebanon, who became director general of the Food and Agriculture Organization of the United Nations this year, or to leave the choice to the full Consultative Group on International Agricultural Research, cosponsored by the F.A.O. and the parent body of the techni-

The choice was left to the ing the current practice of non- comes 65 years old at the end while the agencies belonging

by acclamation this week at a meeting of the Consultative of Australia, 66, who has foreign in Washington, is Dr. Ralph Cummings Sr., who is to retire as director of one of the research centers, at Hy-Consultative Group, in 1971.



Dr. Ralph Cummings Sr.

full group, apparently continu- derabad in India, when he be-

political direction of the centers by technical experts.

The new chairman, selected by acclamation this week at a by acclamation this week at a by acclamation the consultative of Australia 66 who has



Sir John Crawford

Sir John led the advisers to the Consultative Group rapwho was idly expanded the number of food research centers and their

# Selection of Farm Research Chief Aids View of Job as Nonpolitical

Continued From Page 27

more than half of the world's in the tropics. people live.

tween the F.A.O. and other leading sponsors of the Consultative Group, such as the Lebanon, Syria and Iran, spend-International Bank for Recon-struction and Development and tive Group may exceed \$90 the United Nations Develop-ment Program, the name of Mr. Saouma's candidate to succeed Sir John-who indicated a wish

to the situation, because many served by the laboratories. members of the Consultation Group a "politicization" of a nonpolitical process of setting priorities in food research for State, where he received his

Technical Advisory Committee's chairman not be "be holden" to any of the major interests represented in the Consultive Group.

Main Guaranter

or agricultural development in the tropics in 1955-56, when he leaded a mission to Peru.

From 1957 to 1966, Dr. Cummings was field director of the Rockefller Foundation agricultural development in the tropics in 1955-56, when he leaded a mission to Peru.

tative Group meeting this week varieties developed in Mexico. at the headquarters of the After work at both the Ford World Bank, Sir John fashioned and Rockefeller Foundation the committee into the main headquarters and an adminguarantor of scientific ob- istrative post at North Carolina tural centers.

These institutions study how to barriers to using the new constitutions to breed high-yielding, pest-director of the International Crops and how to remove barriers to using the new constitute in the Philippines before going his present job as director of the International Crops Research Institute for the Semi-Arid Tropics in India.

Sir John, an agricultural constitution widely as a leading civil varieties widely.

Rice Research Institute in the served as vice chancellor from Philippines, These centers de- 1968 to 1973.

veloped high-yielding wheat and rice varieties widely used

With the addition this week During the discussions be- of a new International Center

#### **Budget Total Soared**

The total budget of the Conto retire—was not disclosed sultative Group-supervised lab-It was understood that the oratories supervised by the candidate came from a devel- Consultative Group soared from candidate came from a developing nation.

Mr. Saouma's action in nominating a chairman was regarded by many other donors to the international food research centers in Asia, Latin America and Africa as a bid for leadership.

The action was resisted action in 1971, when the group was formed, to \$72.5 million this year. The Gonsultative Group brings together the aid agencies of 18 nations, seven international agencies, three private foundations,—Ford, Rockefeller, and Kellogg for leadership.

The action was resisted, according to several sources close ing the less-developed regions

developing nations.

One source said that the consultative Group's members State until he entered the field considered it vital that the of agricultural development in

Main Guarantor

According to agricultural experts attending the Consultation of modern wheat

jectivity in charting the course State, Dr. Cummings briefly for the international agriculinstitute in the Philippines be-

The laboratories include the servant in the Australian Gov-International Center for Maize ernment from 1942 to 1960 and and Wheat Improvement in Mexico and the International tional University, where he

August 26, 1976

Dear Bill:

Here are the remaining center chapters for the CGIAR brochure. As I mentioned might happen when we saw each other in Washington, I'm going to try some slightly different ideas on the preface and introduction. I can't get at this right away because of a journey to Tehran, but will try to have the results in your hands by the time of the co-sponsors meeting on September 13.

One thing that seems to emerge rather strongly from the present treatment is that the center chapters should revert to the order followed in the first edition of the brochure. To do it the other way around is to present the reader with three of the weakest, newest or least typical of the centers before he gets to the really productive centers in the system: that is, he starts with ICARDA, the Genes Board and WARDA (two of which are not even centers). The effect of novelty which was perhaps being sought with this different order maybe came be achieved with a somewhat revised introduction. Anyway, I feel strongly that the present, reverse order is disadvantageous.

Sincerely yours,

Harold Graves

Enclosure

Mr. William T. Mashler
Senior Director
Division for Global and Interregional Projects
United Nations Development Programme
1 United Nations Plaza
New York
New York
10017

File T

HGraves : apm

cc: D. Ritchie with enclosure

Dear Mr. Mashler:

With best regards,

Mr. Graves is returning herewith the bulk of the manuscript for the CGIAR brochure. He will send up the rest, including the Introduction, before the end of this week.

Sincerely,

Audrey Mitchell

Enclosure

Mr. William T. Mashler
Senior Director
Division for Global and Interregional Projects
United Nations Development Programme
1 United Nations Plaza
New York
New York 10017

File T

HGraves:apm

CC: D. Retchie w/manuscript

Mr. Edwin B. Oyer
Directors of International Agricultural
Programs of Land Grant Universities
102 Roberts Hall
Cornell University
Ithaca, N.Y. 14853

August 16, 1976

Dear Dr. Oyer:

Thank you for your letter of August 3, 1976. I am glad that you enjoyed the portion of International Centers Week which you were able to attend on July 27.

I am enclosing an up-dated calendar of events for the meetings of the International Agricultural Research centers. The CG Secretariat does not itself produce publications for general distribution, but you may wish to be placed on the mailing lists of the international centers themselves. I attach a current list of directors and addresses of the international centers for your reference.

You indicated a particular interest in the presentation of the Genes Board. If you wish to obtain a set of slides, I suggest you write to:

Mr. R. J. Pichel
Secretary, Genes Board
Plant Production & Protection Division
Agriculture Department
Food & Agriculture Organization of the United Nations
Via delle Terme di Caracalla
Rome 00100, Italy.

Sincerely yours,

Daniel Ritchie

Deputy Executive Secretary

Ms. Patricia Stevens (Publications Unit)

August 9, 1976

Carlos B. Gavino, CGIAR Secretariat

Forthcoming Publication on the Philippines

In reply to Mr. John E. Merriam's memorandum of August 2, I would appreciate it if you could arrange to send a complimentary copy of the book, "The Philippines Priorities and Prospects for Development" to:

Dr. Nyle C. Brady Director-General International Rice Research Institute P. O. Box 933 Manila Philippines.

The International Rice Research Institute is one of the major agricultural research centers sponsored by the Consultative Group on International Agricultural Research (CGIAR).

I would also appreciate arranging for one copy of the book to be sent to the CGIAR Secretariat (Room E 1039).

CBGavino: apm

File T

#### INTERNATIONAL **AGRICULTURE**



DAP/2

Edwin B. Oyer, Director L. W. Zuidema, Assistant Director 102 Roberts Hall Cornell University Ithaca, N. Y. 14853 Phone 607-256-2283

AUG - 6 1976

August 3, 1976

Executive Secretariat Consultative Group on International Agricultural Research 1818 H Street, N. W. Washington, D. C. 20433

Dear Sir:

This is to acknowledge receipt of your memorandum, revised July 8, regarding the Provisional Schedule of Events for International Centers Week, 1976. It was my real pleasure to be able to attend the sessions on Wednesday, July 27. Previous commitments prevented me from attending the Monday and Tuesday sessions.

It was a pleasure to represent the Directors of International Agricultural Programs of our Land-Grant Universities at this meeting and I would appreciate your retaining me on your mailing list of events | that are of concern to the Consultative Group as well as significant publications.

- gene

Specifically, I attended the review of the slides on the germ plasm bank and feel it would be useful in many teaching programs. I think our group can be helpful in disseminating information on these kinds of visual aids which will give the international network much more visibility within our national institutions.

Yours truly,

EBO:b



WORLD BANK / INTERNATIONAL FINANCE CORPORATION

T Yellows

## OFFICE MEMORANDUM

TO: Mr. Daniel Ritchie

(signed) Milatel La Legoune

DATE: August 3, 1976

FROM: Michael L. Lejeune

SUBJECT: Possible Article for Finance and Development

- 1. An article by someone for Finance and Development on the CGIAR is not a bad idea. Crawford would be a good one to do it, but also any of us in the Secretariat could do it.
- 2. If we are going to do an article, I think it should be about the CGIAR in general and not pointed at desertification which is really not one of our main concerns. I would have no objection to the timing of the article being such as to fit in with the UNEP conference, but I don't think we should take support of that conference as the purpose of the article.
- 3. Could you please consider what we should do?

himming

cc: Mr. Coulter Mr. Hayman

MLLejeune:ia Files:T INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL BANK FOR RECONT TOUCH AND DEVELOPMENT

NTERNATIONAL FINANCE CORPORATION Contents Tiles: T

# OFFICE MEMORANDUM

TO: (see below)

DATE: August 2, 1976

FROM:

John E. Merriam Director, Information & Public Affairs

SUBJECT:

Forthcoming Publication: E. K. Hawkins and others, THE PHILIPPINES: PRIORITIES AND PROSPECTS FOR DEVELOPMENT. Copies available September 1976

1. This book is nearing completion and will be sold commercially through Johns Hopkins for \$8.50. It is adapted from the gray-covered report issued in May 1976. Complimentary copies will be sent to -

the authors

the Bank's usual specialized agency list and their the Joint Bank-Fund Library and the Executive Directors/library the Bank's informal depository libraries in LDCs members of the President's Council to Chief Economists in Area Departments to all Resident Representatives

- 2. The Secretary of Finance, Office of the Monetary Board, Central Bank of the Philippines, Manila, has arranged the purchase of 2,000 copies at cost for distribution in the Philippines, and the UNDP office in Manila is also purchasing 100 copies at cost. Copies will be available for the Governors at the annual meeting in Manila.
- 3. Apart from the above, if Department Heads wish to recommend names of staff or other institutions who should receive complimentary copies, please submit the names to the Publications Unit (Attn: Ms. Patricia Stevens, Room A-110), preferably by August 9.
- 4. There will be a special leaflet describing the contents of the book and where it can be purchased. This will be useful for addressees in the United States, Europe, and other developed countries, to whom we normally do not provide complimentary copies.
- 5. After the initial complimentary distribution is completed, a few copies will be stocked against payment at the special price the Bank charges to staff members. This special price is normally about 40% below the list price.

Circulation:

Members of President's Council (for information)

All Department Heads

European Office

Tokyo Office

All Resident Representatives (for coordination through their Departments)

Mr. Harry N. M. Winton
Consulting Editor
International Bibliography, Information, Documentation
Box 433
Murray Hill Station
New York, New York 10016

July

July 13, 1976

Dear Mr. Winton:

Thank you for your letter of July 9, 1976.

The only material published by the CGIAR itself for general distribution is the brochure International Research in Agriculture. I am pleased to enclose two English-language and one French-language versions. It is also available in Arabic and Spanish.

The brochure is presently being updated, and will include information on the International Center for Agricultural Research in Dry Areas (ICARDA), to be located in Syria, Iran and Lebanon. The Revision should be completed within the next couple of months. In the meantime, I am also enclosing a brief note regarding the proposed establishment of ICARDA.

The International Fertilizer Development Center is not presently supported by the CGIAR. For information on IFDC, I suggest you write to:

Dr. Donald McCune Director Tennessee Valley Authority National Fertilizer Development Center Muscle Shoals Alabama 35600

I hope this information is useful.

Sincerely yours,

Daniel Ritchie
Deputy Executive Secretary

July 12, 1976

Prof. Kenneth A. Dahlberg Department of Political Science Western Michigan University Kalamazoo, Michigan 49001

Dear Prof. Dahlberg,

Thank you for your letter of June 21 requesting information materials from the Consultative Group on International Agricultural Research (CGIAR).

I am attaching a brochure printed sometime in August, 1974 describing the work of the CGIAR. The brochure is currently being updated and I would be glad to send you a copy when available.

I am also sending you a short note dated May 11, 1976 prepared by the Secretariat describing the recent developments within the CGIAR. In addition, a 11 list of the international agricultural research centers and their addresses is attached. The address of the International Food Policy Research Institute is:

Dr. Dale Hathaway
International Food Policy Research
Infisticute
1776 Mass. Ave., N.W.
Washington, DC 20036

Sincerely,

Carlos B. Gavino Research Assistant

Enclosures

CGavino:sl File T

# International Bibliography, Information, Documentation

Address correspondence to:
IBID
Unipub
Box 433, Murray Hill Station
New York, New York 10016

9 July 1976

Consultative Group on International Agricultural Research c/o International Bank for Reconstruction and Development 1818 H Street, N.W.
Washington, DC 20433

Gentlemen:

International Bibliography, Information, Documentation (IBID)—now in its fourth year—is a quarterly bibliographic service covering publications and periodicals, both priced and unpriced, of intergovernmental organizations. Coverage in volumes 1 to 3 (1973-1975) was confined to material of organizations in the United Nations family, in volume 4 (1976) it is being expanded to include material of organizations outside the United Nations system.

Eight of the research institutes or centers in the CGIAR network have agreed to supply material for listing---only the International Livestock for Africa (ILCA), Addis Ababa, Ethiopia, has not responded to our request to participate.

If CGIAR itself, or its Technical Advisory Committee, should issue annual reports or informational brochures about CGIAR's activities, we should like to receive them for listing with annotations. Mrs Muriel Regan, Librarian, Rockefeller Foundation, has told me that restricted minutes of meetings are received by the Foundation, but of course, I do not inquire about internally circulated material.

We should like to receive for listing the English-language edition of <a href="Investigación">Investigación</a> <a href="Investigación">Internacional</a> <a href="english">en</a> <a href="Agricultura">Agricultura</a>, and to be informed of the establishment in future of the proposed Near East Institute and the Fertilizer Institute, or of other special centers.

Mrs Doris Bomstein, Information and Public Affairs, World Bank, can give you further information about <u>IBID</u> and its relations with the Bank.

Your cooperation will be greatly appreciated.

Yours truly, say was leverton

Harry N. M. Winton Consulting Editor

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# OFFICE MEMORANDUM

TO: Files

DATE: July 1, 1976

FROM: Michael L. Lejeune

SUBJECT: Brochure

- 1. In a conversation on June 19, Mr. Mashler informed me that the submissions of the Centers for revision of the brochure were now being edited and a draft of the whole revision (including the introduction) would be ready in two or three weeks. Mr. Mashler would be visiting FAO in about ten days time, and expects to discuss with FAO arrangements for translation.
- 2. I told Mr. Mashler that I felt it would be useful if Mr. Graves could go over the draft and I had already tentatively spoken to Graves about it. Mr. Mashler agreed, but pointed out that he had no money to pay for anything that Mr. Graves might do. I told him that the Secretariat would engage Mr. Graves only if it could provide the necessary funds.
- We can expect to receive the draft soon.

frohong s

cc: Messrs. Ritchie Coulter Hayman Gavino

MLLejeune:ia Files:T

June 18, 1976

Dear Br. Stern:

Thank you for your letter of June 3. I enclose a note giving the names and addresses of the Directors General of each center. We do not have any directory covering the names and addresses of each staff member, or their activities. These are fully covered in the annual reports of each of the centers and I would suggest you write to those centers in which you have specific interests asking them for copies.

I am not aware of any training brochure; training is an important activity of all the centers and this is usually covered in the annual reports as well as special documents set out by the centers.

Yours sincerely,

John K. Coulter Scientific Adviser

Enclosure

Professor W. R. Stern Department of Agronomy The University of Western Australia Nedlands, W. A. 6009

JKCoulter:apm

File T

Central Files T



DEPARTMENT OF PHYSICS • UNIVERSITY OF TORONTO, TORONTO, ONTARIO, CANADA, M55 1A7

June 15, 1976

Secretariat
Consultative Group for
International Agricultural Research
World Bank
1818 H Street, N.W.
Washington, D.C. 20433

Gentlemen:

I would be pleased indeed to receive your annual report for 1974. Would you also put me down on the mailing list for the 1975 report.

My personal involvement with the WMO Precipitation Enhancement Project makes me very interested in the efforts, goals and achievements of your organization.

Sincerely yours,

Roland List

Professor of Physics

(Meteorology)

RL/ok

RECEIVED

1975 JUN 22 PH 4: 08
COMPLUMINATIONS
SECTION

June 7, 1976

Dr. Vernon W. Ruttan
The Agricultural Development Council, Inc.
Tanglin P. O. Box 84
Singapore 10
Republic of Singapore

Dear Vern:

With reference to your letter of May 18, I attach a table showing both the gross and net requirements. I would suggest you use the gross figures, as these represent what the centers plan to spend.

CIAT no longer has a farming systems program per se, so it might be omitted. Though IPBGR is concentrating more on cereals at the moment, it will be working on other crops, so it might be better to state "crops of economic importance." To ICARDA you might add "broad beans" and for "rainfall," substitute "precipitation," to include snowfall.

I do not have copies of the budgets of IFDC and IFPRI, but we have just received that of AVRDC, a copy of which I enclose; their cost of research appears considerably lower than that of the other centers.

Sincerely yours,

John K. Coulter Scientific Adviser

Enclosures

JKCoulter:apm

File T

TELEGRAPHIC ADDRESS
"UNIWEST"
PERTH

TELEPHONE 80 3838



### The University of Western Australia

DEPARTMENT OF AGRONOMY

Nedlands, W.A. 6009

3rd June, 1976.

Mr. J. Coulter, Ford Foundation, 320 East 43 Street, NEW YORK, N.Y. 10017, U.S.A.

Dear Sir,

I am writing to seek information on International Institutes such as I.R.R.I., I.A.T.A., CYMMIT, etc. I understand there is a directory available which sets out the staff, activities and programmes of each institute. I understand there is also a training brochure and should be grateful to receive this also.

Thanking you in anticipation.

Yours faithfully,

W. R. Stern,

Professor of Agronomy.

W. R Stern

16658



FORD	FOUNDAT:	ION,		
320	East 43	Street,		
NEW :	YORK,			
N.Y.	10017,	U.S.A.	a la Van	

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### SENDER'S NAME AND ADDRESS

Prof. W.R. Stern,
Department of Agronomy,
University of Western Australia,
NEDLANDS,
WESTERN AUSTRALIA 6009.

POSTCODE

FOLD FLAPS BEFORE MOISTENING GUM. FOR

TO OPEN SLIT HERE FIRST-

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A/D/C

Canbo Som help pl ).

Mail: Tanglin P.O. Box 84

Phone: 379075, 379266, 379643

Cable: AGRIDEVEL, Singapore.

Singapore 10, Republic of Singapore

### The Agricultural Development Council, Inc.

Regional English Language Centre International House; 30 Orange Grove Road, Singapore 10, Republic of Singapore

Established by John D. Rockefeller 3rd

New York Office: 1290 Avenue of the Americas New York, N.Y. 10019, USA.

Incorporated in the State of New York, USA, with Limited Liability.

May 18, 1976

Dr John K. Coulter Scientific Adviser Consultative Group on International Agricultural Research 1818 H Street, N.W. 20433 USA

Dear John

Enclosed is a table "Present Structure of the International Agricultural Research Network" which I intend to use in a article on "Technical Change and the Amplification of Agriculture's Capacity to Produce" which has been commissioned for the September 1976 special issue on "food" of the Scientific American. It would be useful if I could insert the actual 1976 institute budgets rather than the proposed 1975 budgets. I wonder if you or Dan Ritchie could simply pencil in the appropriate budget numbers and return the table to me.

If you have data on the AVRDC, IFDC and IFPRI budgets, that would also be helpful. Other additional comments or corrections on the table would also be appreciated.

Sincerely yours

Vernon W. Ruttan

President/

VWR/tjk/at

Encl:

Table 3
Present structure of the international agricultural research natwork.

International Center	Location	structure of the international agriculti	Coverage	Date of initiz-	Proposed budget
IRRI	l or D.			tion	for 197
(International Rice Research Institute CIMMYT	Los Banos, Philippines	Rice under irrigation; multiple cropping systems; upland rice	Worldwide, special emphasis in Asia.	1959	8,520
(laternational Center for for the Improvement	El Batan, Mexico	Wheat (also triticale, barley); maize	Worldwide	1964	6,834
Of Maize and Wheat)			41.		
(International Center for Tropical Agri- culture)	Palmira, Colombia	Beef; cassava; field beans; farming sys- tems; swine (minor); maize and rice (regional relay stations to CIMMYT and IRRI)	Worldwide in lowland tropics, special emphasis in Latin America	1968	5,828
(International Institute of Tropical Agriculture)	Ibadan, Nigeria	Farming systems; cereals (rice and maize as regional relay stations for IRRI and CIMMYT); grain legume (cow-	Worldwide in lowland tropics, special emphasis in Africa	1965	7,746
		peas, soybeans, lima beans, pigeon peas); root and tuber crops (cassan)	×	*	
(International Potato Center)	Lima, Peru	Sweet potatoes, yams) Potatoes (for both tropies and temperate regions)	Worldwide including linkages	1972	2,403
CRISAT. (International Crops	Hyderabad, India	Sorghum; pearl millet; piecon pear.	with developed countries  Worldwide, special emphasis	1075	
Research Institute for the Semi-Arid Tropics)		chick-peas; farming systems; groundnuts	on dry semi-arid tropics, nonirrigated farming. Special	1972	10,250
LRAD (International Labora- tory for Research on Animal Diseases)	Nairobi, Kenya	Trypanosomiasis; theileriasis (mainly east coast fever)	relay stations in Africa under negotiation Africa	1974	2,170
(International Live- stock Center for Africa)	Addis Ababa, Ethiopia	Livestock production systems	Major ecological regions in tropical zones of Africa	1974	1,885
(International Board for Plant Genetic Resources)	FAO, Rome, Italy	Conservation of plant genetic material with special reference to cereals	Worldwide	1973	555
ARDA (West African Rice Development Asso- ciation)	Monrovia, Liberia	Regional cooperative effort in adaptive nice research among 13 nations with IITA and IRRI support	West Africa	1971	<b>5</b> 75
RDA international Center for Agricultural Research in Dry Areas)	Lebanon	Probably a center or centers for crop and mixed farming systems research, with a focus on sheep, barley, wheat, and lentils	Worldwide, emphasis on the semi-arid winter rainfall zone		
ssociate Center		and kinds			•
VRDC (Asian Vegetable Research and Development Centre)	Taiwan	Vegetable improvement, cropping systems	South, Southeast and South Asia	1971	•
		· · · · · · · · · · · · · · · · · · ·			•
1	Muscle Shoals United States	Development of new and improvement of fertilizer materials and processes	Worldwide	1975	٠
	Washington, D.C. United States	Food policy	Worldwide .	1975	•

Source: adapted from Micholas Wade, "International Agricultural Research," Science 188, p.587, May 197

Dear Mr. Jasper:

Thank you for your letter of May 3 requesting information on the Consultative Group on International Agricultural Research (CGIAR).

I am attaching a brochure describing the work of the Consultative Group and the International Research Institutes it sponsors.

I hope the brochure will help you in your research work.

If you need further information, don't hesitate to write again.

Sincerely,

Carlos B. Gavino

Attachment

Mr. Richard W. Jasper Graduate Assistant Office of International Programs University of Denver University Park Denver, Colorado 80210

CBGavino:apm

Mr. Jaime Hindman
Director/Ecuador
Bervicio Internacional de Voluntarios
Casilla 6087
Quito
ECUADOR

May 7, 1976

Dear Mr. Hindman:

I refer to your letter of April 10th, enquiring about publications.

The Consultative Group does not maintain a publication service. A great deal of material is, of course, put out by the individual research centers, much of it relating to your areas of interest. Many of them have extensive documentation centers and information services. I suggest that you might get in touch with them directly. Attached is a list of their addresses. Also attached is a booklet giving information on the Consultative Group on International Agricultural Research.

Sincerely yours,

Andrew Hayman Program Officer Michael L. Lejeune, Executive Secretary, CGIAR

### CGIAR

- 1. Thank you very much for telling me about your visit to ICRISAT and for your comments about the problems of disseminating new technology to the farm level. This a fundamental problem which has already attracted a lot of discussion within the CGIAR, and I can foresee that it will continue to be a principal concern.
- It occurs to me that you may be interested in knowing in a bit 2. more detail how the CCIAR functions. There are now 35 members comprised, as I mentioned to you, of governments, international organizations and private institutions, such as the Ford and Rockefeller Foundations. Five memberships are reserved for developing countries selected by the five regional conferences of FAO. Twenty-six of the members are active donors. Of these the five largest contributors are the United States (which aims to contribute about 25%), the World Bank (which each year has been prepared to contribute 10%), Canada, the Inter-American Development Bank and Germany. The other donors include most of the traditional aid-giving countries and, in addition, now for the first time include Nigeria, Saudi Arabia and Iran from the OPEC group. The total contributions so far committed for 1976 are about \$64.6 million. We estimate that about \$85 million will be required in 1977. This increase reflects expansions in the programs of older centers, rising expenditure (including for construction) of those centers developing their programs as they get underway, and a degree of cost inflation for all of the centers. This is a lower increase than in the past when it has averaged over 40% per year.
- 3. The CGIAR supports twelve entities, nine of which are research centers, and three of which are support activities. I mentioned to you the International Board for Plant Genetic Resources as an example of the latter. Other centers or activities may be added in the future, but on the whole the feeling is that since all the principal food commodities and all the principal ecological areas of the developing world are covered, the addition of any new activities will have to be very carefully weighed.
- 4. Each center is autonomous. It is constituted under the laws of the host country, has its own board of trustees and is managed by a director-general appointed by this board. Several of them antedate the establishment of the CGIAR. They all, however, obtain virtually all their funds from the members of the Group acting in concert. Each center presents its program and budget to the group for its consideration and each donor decides for

itself which of the centers it wishes to support, and to what extent. The centers make their presentations to a meeting of the Group annually in July, and the Group then meets again in October for the members to announce their pledges for the upcoming year.

- of programs and budgets and expenditure of money. The Bank, as such, controls and monitors only the use of its own contribution. It has, however, played a leading part in organizing the Group and in establishing its procedure. Moreover, it provides the Group's Secretariat, which, as one of its principal functions, is responsible for reviewing annually the programs and budgets of all the entities in the system. In addition, the Bank (along with the FAO and the UNDP) is a co-sponsor of the Group and as such exercises leadership in all matters of interest to the membership. Responsibility for scientific matters is in the hands of the Technical Advisory Committee. This is a committee of thirteen experts drawn from both the developing and developed countries. No new activity is adopted by the Group unless recommended by TAC. TAC is also responsible for reviewing at regular intervals the scientific programs of the research centers. Significant changes in the programs are reviewed as they occur. A general review is made each five years.
- 6. Each center puts forward its annual budget request in a form prescribed by the Secretariat, and the Secretariat then makes detailed comments on the request and on the substantive program underlying it. In formulating its comments, the Secretariat normally sends a mission to each center to discuss the current program and budget, as well as the projections for the future. Because the system has been growing rapidly, and the amount of money required has risen sharply each year, and since the Group has now been in being for five years, it was decided in October to undertake a review of the Group's purposes, objectives and priorities, and the way in which these are being carried out. It is not that the members of the Group are dissatisfied with the system, but we are now five years closer to the impending serious food shortages of the mid-1980s, and the members felt they should review the situation to ensure that the research they are supporting will adequately contribute to raising food production in the developing countries which are likely to suffer severe shortages.
- 7. I should be glad to provide you with any further information you might wish.

MLLejeune:ia Files:T

UNIVERSITY OF DENVER

### DENVER RESEARCH INSTITUTE





Office of International Programs

3 May 1976

Consultative Group on International Agriculture Research Secretariat World Bank Washington, D.C.

Dear Sir,

It was suggested to me that I contact the Consultative Group on International Agricultural Research in Washington, D.C. for information on the work you do with the different institutes throughout the world.

I am a graduate assistant at the Denver Research Institute at the University of Denver and am doing research on your organization as a transnational actor. Any information on the establishment of your organization and its functions with other institutes in the world is what is needed.

We would sincerely appreciate you cooperation and assistance in providing us this information.

Seeing that time is of the essence, I look forward to hearing from you at your earliest convenience.

Thanking you in advance,

Mr. Richard W. Jasper

Graduate Assistant

Office of International Programs

RWJ:ms

Mr. John Malcolm Office of Technical Assistance, Agriculture Room 3245 New State Dept. Building U.S. Agency for International Development Washington D.C. 20523

Dear Mr. Malcolm:

I refer to our telephone conversation of Monday.

I enclose some up-to-date background information on the CGIAR which I hope you may find useful. I also enclose a booklet which contains additional material on most of the programs the CGIAR supports.

Please do not hesitate to call me if we can be of any further assistance.

Sincerely yours,

CAM

Andrew Hayman Program Officer

# CONSULTATIVE CROUP ON INTERNATIONAL AGRICULTURAL RESEARCH (CGIAR)

- 1. The CGIAR was organized at the initiative of the World Bank in May 1971 to mobilize financial support for international programs of research and training whose purpose is to increase the quantity and improve the quality of food production in developing countries. It is jointly sponsored by the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP) and the World Bank. The Bank chairs the Group and provides its Secretariat. A Technical Advisory Committee (TAC), whose Secretariat is accommodated in FAO, advises the CGIAR on scientific and technical matters.
- 2. At present the Group is supporting programs whose research and training activities encompass crops and animals which account for three-quarters of the food supply of the developing countries. There are now over 4000 staff, including 300 senior scientists, working at the centers supported by the Group. In the five years of its existence the Group has grown from 23 to 35 members, the international centers and activities supported from four to twlve and the contributions from \$15 million in 1972 to about \$65 million in 1976. In 1975, Iran, Italy, New Zealand and Saudi Arabia joined the Group, and Nigeria and the United Nations Environment Programme made a financial contribution for the first time. A full list of members is attached as Annex I.

### Research Activity

3. Early in its existence, the Group reviewed the needs for international agricultural research and training and identified the most serious gaps and shortcomings, in terms of both foodcrops requiring attention and ecological zones in the developing world on which farming systems research was needed. As a result, the Group has sponsored the establishment of several new international centers and programs. Today members of the Group are supporting eleven international agricultural research programs, each governed by an international board and each with an international staff. They are:

The International Center of Tropical Agriculture (CIAT), based in Colombia and dealing with the development of farming systems for the humid tropics of the Western Hemisphere as well as with cassava, field beans, local adaptations of maize and rice, and production systems for cattle and swine;

The International Maize and Wheat Improvement Center (CIMMYT), based in Mexico; in addition to breeding improved varieties of maize and wheat, some research is also being conducted on barley, triticale (a cross between wheat and rye) and sorghum;

The International Potato Center (CÍP), based in Peru, currently serving potato growing regions of South and Central America and the Middle East, and eventually throughout the developing world;

The International Center for Agricultural Research in Dry Areas (ICARDA), to be based in Lebanon, Syria and Iran; it will deal with crop improvement (barley, probably durum wheat, broad beans and lentils), soil and water management and farming systems, including sheep husbandry, for arid zones;

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), based in India; it deals with the development of systems of farming in semi-arid zones and with developing improved varieties of groundnuts, sorghum, millet, chick peas and pigeon peas;

The International Institute of Tropical Agriculture (IITA), based in Nigeria, and dealing with the development of farming systems for the humid tropics as well as with cassava, cow peas, soybeans and local adaptations of internationally developed strains of maize and rice;

The International Livestock Center for Africa (ILCA), based in Ethiopia, dealing particularly with systems of cattle production;

The International Laboratory for Research on Animal.

Diseases (ILRAD), based in Kenya and studying two protozoal diseases which infect and are often fatal to cattle
in parts of Africa;

The International Rice Research Institute (IRRI), based in the Philippines;

The West Africa Rice Development Association (WARDA), based in Liberia, dealing with rice research and development in thirteen West African countries;

The International Board for Plant Genetic Resources (IBPGR), with headquarters in Rome, which seeks to stimulate and coordinate the collection and exchange of materials of potential interest to plant breeders in the developing countries.

- 4. A description of the basic mandate of each program, is provided in Annex II. Together they form a network encompassing the major food crops and ecological zones in the developing world.
- 5. A twelfth program is currently also being supported by members of the Group CARIS the Current Agricultural Research Information

  System. The Group has agreed to support this service, directed and managed by FAO, through 1976 after which it is expected to be financed fully from FAO's own budget.

#### Achievements

- 6. The major research achievements of the two oldest centers of the system, CIMMYT and IRRI, in breeding high-yielding varieties of wheat and rice, formed the basis for the original reputation of the network. Scientific advances continue. From these older centers, better varieties of cereals are emerging which are more resistant to disease and insects and tolerant to drought. Other varieties are being developed with higher nutritional value, and some which can be grown in poorer soils. IRRI is experimenting with strains of longer-stemmed rice which could be grown on the 30 to 40 percent of the rice-growing areas of Asia where the water annually is too deep for the short-stemmed varieties developed in the past which have proven so successful where water levels are lower. At CIMMYT, in addition to continuing advances in the breeding of wheat, maize and barley, important progress is being made in the development of triticale, a man-made cross between wheat and rye with several advantages over its two parents. Triticale offers better disease resistance, better cold tolerance, better protein quality, and wider adaptation than wheat and rye, and is now approaching general commercial use.
  - 7. Crop improvement programs at the newer centers are also beginning to show results. Examples are cowpeas which are tolerant to a number of pests (IITA), a cassava which gives very high yields on poor soils (CIAT), yams which freely yield seeds, thereby greatly facilitating the breeding of new varieties (IITA), and potatoes which give promise of being adaptable to humid, tropical conditions and capable of rapid maturity (CIP). Research on tropical forage legumes could open up large areas of the South American savannah to animal production (CIAT). Several centers are building up major germ plasm collections stores of genetic materials designed to ensure the preservation of the many primitive and traditional varieties as well as improved ones, so all will be available for future breeding. ICRISAT has built a collection of 12,000 accessions of sorghum, and CIAT of 10,000 varieties of beans, two major crops for which adequate germ plasm banks had not previously been established.
  - 8. Farming systems research programs are also beginning to yield results. Work at IITA has identified essential ingredients of highly productive stable agriculture for the small farmer previously obliged to follow shifting cultivation patterns. Systems of intensive rainfall conservation through ridge and furrow techniques and appropriate watershed design are being developed at ICRISAT to ensure the maximum retention of water in the typical conditions of the semi-arid tropics. IRRI has established the benefits of improved pest and disease control and higher overall yields from mixed cropping.
  - 9. An important trend in the research programs is to give increased attention to the problems of small farmers. A strong theme throughout the institutes is the concentration on breeding plants that combine good yields with resistance to pests and diseases and lower fertilizer requirements, recognizing that many small farmers cannot afford to use chemicals

for plant protection and fertilization. Another trend among members of the Consultative Group, and in the research institutions as well, is a growing concern that adequate measures be taken to put the findings of the research programs actually to work in farmers' fields. In this regard, many centers have established collaborative research programs with national research organizations for the testing and adaptation of materials. CIMMYT, for example, has testing programs in over 90 countries. Research results are also transmitted through symposia and extensive training programs offered by every center.

of new initiatives designed to continue to improve the direction and administration of the system as a whole. In addition to the annual CGIAR Secretariat review of the research program and budget of each international center, the Technical Advisory Committee will be undertaking detailed evaluations of the scientific research program and priorities of the international centers on a five year cycle. In December 1975, TAC conducted its first "Quinquennial Review" of the International Rice Research Institute. Two more TAC reviews — of CIMMYT and CIP — are scheduled for 1976. TAC and the Group will also be reviewing in 1976 overall priorities for agricultural research, including the possible association within the present research system of research on certain cash crops important to small farmers and of factor—oriented research such as on fertilizer and insect control.

### Future Prospects

11. Worldwide support for international agricultural research and the work of the CGIAR continues to be very strong. The needs of the research programs will continue to rise in the years ahead. While there are unlikely to be any large new centers established by the Group in the immediate future, major construction activity is expected to begin or to be underway on the ICRISAT, ILCA and ILRAD stations during 1976, and the research programs of the established centers are expected to grow.

# CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

### Membership as of December 31, 1975

Netherlands

### A. Continuing Members

Countries

Australia

Belgium New Zealand

Canada Nigeria

Denmark Norway

France Saudi Arabia

Germany Sweden

Iran Switzerland

Italy United Kingdom

Japan United States

### International Organizations

African Development Bank

Asian Development Bank

European Economic Community (FED)

Food and Agriculture Organization (FAO)

Inter-American Development Bank

International Bank for Reconstruction and Development

United Nations Development Programme (UNDP)

United Nations Environment Programme (UNEP)

Foundations

Ford Foundation

International Development Research Centre

Kellogg Foundation

Rockefeller Foundation

B. Fixed-Term Members Representing Developing Countries

Asia Region

Malaysia

Thailand

African Region

Morocco

Latin American Region

Argentina

Brazil

Southern and Eastern

Israel

European Region

Rumania

Near Eastern and

Egypt

South Asia Region

Pakistan

# CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

International Agricultural Research Centers supported by the CGTAR

### International Center for Tropical Agriculture (CIAT)

CIAT is concerned with the humid, lowland tropics of the Western Hemisphere, and is unique amongst present centers in having programs in both plant sciences (cassava, beans, maize and rice) and animal sciences (beef and swine), the latter covering both animal husbandry and animal health. Moreover, it is basically concerned with the development of small-scale farming systems. Thus the Center has had a major task in reconciling its board research mandate with the financial resources available to it.

It is still a young center having begun to assemble its permanent staff only in 1970, but has already had some impressive successes. In its collaborative rice program with IRRI, new varieties have been produced at CIAT and distributed to Colombian and Ecuadorian farmers; these have been widely adopted and average yields have nearly doubled. The Center has also envolved a beef production technology that has excellent potential for developing the thinly populated lands of South America using crops and pastures that are well adapted to low fertility soils. CIAT's work in this program and on rice, promises to lead to developments that could have a major impact on global food supplies.

#### International Maize and Wheat Improvement Center (CIMMYT)

CIMMYT has an outstanding record of success in breeding cereal varieties (wheat and maize) that give large yield increases under favorable soil fertility and moisture conditions. The work now in hand, and needed for the foreseeable future, is designed to maintain these yields where the effects of attacks from pests and disease and of drought and low soil fertility are damaging. The appearance of new races of fungi in India, and the increased seriousness of diseases of minor importance in the past, as for example in Brazil, show the need for this emphasis. Thus the program for crossing winter and spring wheats to achieve drought tolerance and disease resistance is of great importance. Work on triticale (a cross between wheat and rye) illustrates the rapidity with which a man-made plant, with many desirable qualities, can be evolved. Problems of grain size and quality have now been overcome and the protein value in triticale is better than that in wheat.

The germ plasm bank at CIMMYT is a source of material for maize breeders around the world where the major objectives are short plants, resistant to disease and pests and having high-quality protein and a tolerance for an adverse climatic regime. Varieties of maize with high-quality protein are already under trial in several parts of the world and these show promise of improving the quality of the diets not only of humans but also of animals where surpluses of such material are available for animal production.

### International Potato Center (CIP)

This Center has a mandate for dealing with a single crop; however, the potato has a wide adaptability with a potential for providing additional food over a great range of ecological conditions. It is a crop which, per unit of land, has one of the highest food yields, both in quantity and quality.

Consequently the program at the Center, though sharply focussed on one crop, is aimed at increasing its adaptability and improving its performance not only in the traditional potato-growing areas but in other areas where it could make a major contribution to the alleviation of food shortages. CIP shares the advantages of the centers working on maize, wheat and rice in being able to utilize an enormous amount of basic research information accumulated in the developed countries. Consequently, it can use such information to develop programs aimed at solving major disease problems like late blight and bacterial wilt with the hope of fairly rapid results.

# Internationial Center for Agricultural Research in the Dry Areas (ICARDA)

This is the newest international agricultural research Center to be established under the auspices of the CGIAR. It is being created to deal with the problems of arid areas, particularly of the Middle East and North Africa. The research program will be concerned with (i) crop improvement, emphasizing barley and probably durum wheat, and including some work on broad beans, lentils and certain other crops, (ii) soil and water management, primarily for rainfed agriculture and (iii) farming systems, including sheep husbandry.

Because of the wide range of ecological conditions and agricultural practices to be covered, the Center will have three principal research stations to be located in Lebanon, Syria and Iran.

Members of the initial Board of Trustees have been selected and a Chairman, was chosen in January 1976. A number of the senior staff of the Arid Lands Agricultural Development Program, which is winding up its activities, have been engaged as a nucleus of the ICARDA staff.

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

ICRISAT was created to improve the food supply of the 400 million people who depend on rain-fed agriculture in the semi-arid tropics, an area defined roughly within the belt of 400 to 1,200 mm of rainfall. The Center has two major objectives, one being the genetic improvement of two cereals.

(sorghum and millet) and three grain legumes (chick pea, pigeon pea and ground-nut) and the other the development of principles for farming systems which will be applicable over a wide range of dryland environments in the semi-arid tropics.

ICRISAT was incorporated in July 1972. Since then staff recruitment has proceeded, temporary offices and buildings have been leased or constructed for the use of these staff, development of the farm, precision leveling, grading and the construction of dams has gone on apace; plans for the physical plant have been finalized and tenders let for a major part of the building program. It is expected that the buildings will be ready for occupation in 1977. At the same time plans have been made and funding obtained for a research program in West Africa.

## International Livestock Center for Africa (ILCA)

Africa. Its research approach will be multi-disciplinary, with an emphasis on social and economic research, as the constraints to increased production are as much sociological and economic as they are technical. —ILCA will also be carrying out almost half of its research activity away from its headquarters, to enable the Center to study the wide range of production systems which exist in Africa and to complement on-going research and development efforts at the national and regional level. ILCA's first priority will also be to inventory and evaluate what is known about existing livestock systems, before starting to synthesize new approaches to animal production.

Cooperative research programs are expected to being in 1976, dealing with traditional production systems in drought-prone areas (Mali), systems of production in highland regions (Ethiopia), and the monitoring of ongoing livestock development activity (Kenya). Construction of ILCA's head-quarters facilities in Addis Ababa will also be initiated in 1976.

# International Laboratory for Research on Animal Diseases (ILRAD)

ILRAD has the most sharply defined mandate of any Center in the CG system. Its initial objective is to develop effective control measures for two major animal diseases limiting livestock production in Africa: Trypanosomiasis and East Coast Fever. The general approach will be immunological. If the intensive research activity produces effective techniques for control of these diseases, ILRAD's Board of Trustees may recommend the study of other animal diseases.

ILRAD estimates that if these two diseases can be controlled, large areas of Africa could be opened to livestock, and production could be doubled.

### International Institute of Tropical Agriculture (IITA)

This Center has programs on maize linked to CIMMYT, cassava linked to CIAT and rice linked to IRRI, as well as a grain legume improvement program involving soybean and cowpea. IITA also has a farming systems program, within which a major thrust is devoted to the development of technology for managing soils in the humid tropics under a system of sustained continuous cultivation. This work has shown that, using herbicides (and no tillage) water receptivity of the soil can be greatly improved and erosion controlled; surface soil temperature can be reduced by mulching, thus improving germination of maize seeds greatly.

Work on breeding grain legumes has produced one variety of cowpea, the major legume in the humid tropics in Africa, that is resistant to the more serious pests and shows promise of greatly increasing yields in a crop where the average yield of the farmer in Africa is only 200 kilograms per hectare.

### International Rice Research Institute (IRRI)

Along with CIMMYT, IRRI is the oldest and best known of the international research centers. It is one of the centers concerned with only one crop. It has a well known record of success in developing high-yielding varieties of rice, the staple food in low-income countries of Asia, many of which are densely populated.

IRRI's current research program is aimed at capitalizing on recent advances, not only by breeding newer rice varieties with tolerance to an even wider range of pests and diseases, but also by intensifing the use of land where, by tradition, rice has been the sole crop. Rice varieties that mature quicker release land for other crops and the Center's multiple-cropping program is designed to find ways of utilizing such land for additional food production by small farmers.

### West Africa Rice Development Association (WARDA)

WARDA is unlike the other international Centers and programs within the CGIAR. It is an association of 13 West African countries interested in rice research and development. The Consultative Group supports its basic research program for coordinated rice trials. About 120 variety, herbicide, insecticide and fertilizer trials are carried out annually.

# International Board for Plant Genetic Resources (Genes Board)

The mandate of the Board as defined by the Consultative Group is to promote an international network of genetic resource activities for collection, conservation and utilization of plant germ plasm. In addition to supporting

the collection of germ plasm of important crops, the Board is sponsoring an information storage and retrieval system for management of genetic resources. It is also sponsoring regional genetic resource centers; the Near East, Ethiopia, Costa Rica, India and the Far East are under consideration. The Board is also working closely with the international centers in strengthening their role as major centers of collection for crops with which they are associated. It is organizing symposia on major crops and studying training requirements.

# Current Agricultural Research Information System (CARIS)

CARIS is a service under the direction and management of FAO which gathers and publishes basic information on agricultural research activities being carried out worldwide. The aim is to enhance and accelerate agricultural research by systematically providing to those engaged in it information on research projects elsewhere — particularly in the developing countries—which may have relevance to their work. Although this program is essentially an FAO activity, it is not covered in FAO's present biennial budget, but is expected to be in the next budget beginning in 1977. Meanwhile, the Consultative Group is providing bridging finance.

Mr. Giovanni Rufo
Visiting Fellow
The University of Sussex
Science Policy Research Unit
Mantell Building
Falmer, Brighton
Sussex BN1 9RF

Dear Mr. Rufo,

Thank you for your letter of April 13 regarding your request for information on the work of the Consultative Group on International Agricultural Research (CGIAR).

I am attaching a brochure that describes the work of the Group. In it you will find list of the International Institutes which do agricultural research on a wide variety of crops. In the last couple of years, two new centers were established to conduct research on livestock in Africa.

Regarding your inquiring on the funding of the CGIAR, attached is a table showing the contributions of donors to the CGIAR from 1972-1976.

For information regarding the Technical Advisory Committee (TAC), you may write its Secretariat directly. The address is:

Technical Advisory Committee Secretariat
Food and Agriculture Organization of
the United Nations
Via delle Terme di Caracalla
Rome 00100-Italy

I hope the information I have given above will help you in the preparation of your paper.

Yours sincerely,

(signed) Michael L. Lejeune

Michael L. Lejeune Executive Secretary

CGavino:vg

File:T

International Bibliography, Information, Documentation

April 16, 1976

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Box 433, Murray Hill Station

New York, New York 10016

APR 2 3 1976

Consultative Group on International Agricultural Research c/o International Bank for Reconstruction and Development 1818 H Street N.W. Washington D. C. 20433

#### Gentlemen:

We invite your attention to the first issue of the fourth volume of International Bibliography, Information, Documentation (I.B.I.D.), a quarterly bibliographic service covering publications and periodicals of international organizations (copy attached). Volumes 1 to 3 (1973-1975) listed material published by organizations of the United Nations system, but with the volume for 1976 coverage is being expanded to publications of autonomous institutes affiliated with or supported by these organizations.

Of the autonomous research institutes assisted by CGIAR we have made arrangements to list publications by IRRI, CIMMYT, IIATA, CIAT, CIP and ILRAD. We are asking ICRISAT, ILCA, and IBPGR to consider cooperating with I.B.I.D.

You will note also in the "How to Acquire Publications" section of the attached issue, that I.B.I.D. lists currently released publications of members of CGIAR: FAO, the World Bank, IDB, and UNDP.

We should like to list in I.B.I.D. the publications and newsletter, if any, of CGIAR itself which have been released since October 1975, with information as to their availability. The English edition of Investigaciones Internacional in Agricultura (New York, 1974) and other currently available explanatory brochures, and a catalogue or list of CGIAR publications should also be included in the initial listing in our next number.

Your cooperation will be greatly appreciated.

tarry N. U. Winter

Yours truly,

Harry N. M. Winton Consulting Editor

HNMW: ns Enclosure

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Address reply to: Government Publications April 14, 1976 G76-611

Dear Sirs:

Please send the publication(s) listed on the attached order form(s) and enclose an invoice to cover the cost.

Yours very truly,

Ms. Valerie Thorp

Mrs. E.D. Dodson, Head, Government Publications

#### GIOVANNI RUFO

ORGANISATION DE COOPÉRATION ET DE DÉVELOPPEMENT ÉCONOMIQUES DIRECTION DE LA SCIENCE, DE LA TECHNOLOGIE ET DE L'INDUSTRIE

> Visiting Fellow SPRUI. Summer Univ.

2, RUE ANDRÉ-PASCAL - 75016 PARIS

☎ 524-82-00



# THE UNIVERSITY OF SUSSEX SCIENCE POLICY RESEARCH UNIT

MANTELL BUILDING FALMER BRIGHTON SUSSEX BN1 9RF

Telephone: BRIGHTON (0273) 686758

13rd April, 1976

Dear Sir,

As I have been asked by the French scientific review "La Rechercle to write a short paper on the scientific and technological activities for LOC's, I wonder if you could be so kind as to send me some non-confidential information and booklets related to the CGIAR/TAC activities.

I am especially interested

in the 1975 budgetary situation:

- by "source of funds" (columnts and foundations); and

- by "sector of parformance" (Internat. Institutes, Centers,

Allowition and Laboratoris).

Thanking you very much.

Yours micerely

P. Rup

# SERVICIO INTERNACIONAL DE VOLUNTARIOS

Casilla 6087

Quito - Ecuador

Cable: VOLSERV - Quito

APR 2 8 1976

April 10, 1976

Consultative Group in International Agricultural Research c/o World Bank 1818 H. Street, N.W. Washington, D.C. 20433

Dear Sirs,

I would appreciate a current listing of <u>publications</u> that are readily available through your offices. Please include as well instructions as to the ordering procedure.

Should it be that you have specialized bibliographic information my institution would be interested in references in the following areas:

- a) agricultural production in tropical and sub-tropical zones
- appropriate technology for small-scale farming and rural communities
- c) health and nutrition in tropical and sub-tropical zones
- d) integrated rural development

Thank you for your assistance and I will look forward to hearing from you shortly.

La paz sea suya,

Jaime Hindman, Director/Ecuador

JWH:mes

IT MOUTH WE APPRECIATED IF THE POLICITING NOTE IS OBSERVED:-

THIS WILL BE FILED IN CENTRAL FILES. IF A COPY .

IS TO BE KEPT IN CGIAR FILES PLEASE CHECK / /

h Herman

Please house, but seems, but of warmer the Centers we should send they have should send they have a should send they centers the centers.

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#### Section for Bank Group Annual Report

#### International Agricultural Research

- Despite good harvests this year, the fundamental problem of an impending shortage of food in many of the developing countries in the longer term emphasized the importance of increasing agricultural productivity. A key factor is research. The Bank continues to serve as Chairman and, with the Food and Agriculture Organization (FAO) and the United Nations Development Programme (UNDP), as co-sponsor of the Consultative Group on International Agricultural Research. The programs and activities supported by the CGIAR continue to expand. Iran and Italy joined the Group, bringing to twenty-seven the number of members contributing funds in 1976 to the twelve international research centers and programs which comprise the CGIAR system. The total being contributed in calendar 1976 is about \$65 million, compared with \$47 million in the previous year.
- 2. Included in this total is up to \$6.8 million being contributed by the World Bank Group in the form of grants by IDA made in two tranches one in March and another planned for September.— The March tranche comprised grants totaling \$4.735 million as follows:
  - the International Center of Tropical Agriculture (CIAT), based in Colombia: \$250,000.
  - the International Maize and Wheat Improvement Center (CIMMYT), based in Mexico: \$110,000.
  - the International Potato Center (CIP), based in Peru: \$400,000.
  - the International Institute of Tropical Agriculture (IITA), based in Nigeria: \$1,000,000.
  - the International Rice Research Institute (IRRI), based in the Philippines: \$1,000,000.
  - the International Livestock Center for Africa (ILCA), based in Ethiopia: \$600,000.
  - the International Laboratory for Research on Animal Diseases (ILRAD), based in Kenya: \$1,200,000.
  - the Current Agricultural Research Information System, (CARIS), administered by the FAO: \$100,000,
  - the International Center for Agricultural Research in the Dry Areas (ICARDA), \$75,000.

- 3. ICARDA is in the process of being established to serve the needs of the countries of low average precipitation, mostly in the winter, in the area from Morocco to Afghanistan. With its establishment, the CGIAR network of international agricultural research training now embraces the major food crops and ecological zones of the developing world. In addition to those already named, the members of the CGIAR are supporting the International Crop Research Institute for the Semi-Arid Tropics (ICRISAT) in India, the field trials system of the West African Rice Development Association (WARDA), whose secretariat is in Monrovie, Liberia and the International Board for Plant Genetic Resources, whose secretariat is in Rome.
- 4. The Group now has 35 members: twenty-three countries (including those representing the developing countries as a whole) eight international development organizations, a national research center for international development and three private foundations.

CGIAR 4/15/76

#### The University of Reading

Professor of Agricultural Development Overseas: A.H. Bunting CMG MSc DPhil LLD FIBiol

Your ref:

Our ref: A/815.0 Airmail

Dear Dr. Lejeune,

Plant Science Laboratories University of Reading Whiteknights Reading England RG6 2AS

Telephone: (0734) 85123 Ext: 7907

APR - 9 1976

Telex No. 847813

5 April 1976

In Professor Bunting's absence abroad this is to acknowledge with many thanks the receipt of 10 copies of "International Research in Agriculture".

Yours sincerely,

A.A. Atkinson (Mrs.)

Secretary to Professor Bunting

Dr. Michael Lejeune,
Consultative Group for International
Agricultural Research,
International Bank for Reconstruction and Development,
1818 H Street, N.W.,
Washington D.C. 20433,
U.S.A.

APR - 2 1976

### The University of Reading

Professor of Agricultural Development Overseas:
A. H. Bunting CMG MSc DPhil LLD FIBiol

Your ref:

Our ref:

A/815.0

Airmail

Dear Dr. Lejeume,

Plant Science Laboratories University of Reading Whiteknights Reading England RG6 2AS

Telephone: (0734) 85123 Ext: 7907

Telex No. 847813

30 March 1976

We have just given out our last copy of the CG's valuable best seller "International Research in Agriculture". Do you think you could send us 10 copies? I think we make good use of them.

Yours sincerely,

A. H. Bunting Professor

Dr. Michael Lejeune, Consultative Group for International Agricultural Research, International Bank for Reconstruction and Development, 1818 H Street, N.W., Washington D.C. 20433, U.S.A.

Done 10 1/2/76

#### PURDUE UNIVERSITY

DEPARTMENT OF AGRONOMY LIFE SCIENCE BUILDING WEST LAFAYETTE, INDIANA 47907



February 2, 1976

Consultative Group on International Agricultural Research 1818 H St. N.W. Washington, D. C. 20433

Gentlemen:

It would be appreciated if we could receive a copy of each of the following:

Technical Advisory Committee of the Consultative Group on International Agricultural Research (1973) Potentials for International Support to Agricultural Research in Developing Countries. Rome.

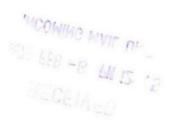
Technical Advisory Committee of the Consultative Group on International Agricultural Research (1975) Draft of Summary Record and Chairman's Conclusions and Recommendations. Rome.

Thank you.

Sincerely yours,

John D. Axtell, Director Purdue-AID Sorghum Project

ais



RECEIVED 1976 FEB -6 PN 12: 15 INCOMING MAIL UNIT Dr. Leo E. Bendixen Senior Fellow The East West Center 1777 East-West Road Honolulu HAWAII 96822

January 29, 1976

Dear Dr. Bendixen:

This is to acknowledge your letter of January 20, 1976 regarding possible financial assistance from the Consultative Group on International Agricultural Research (CGIAR) for your current research program at the East-West Center. The members of the Consultative Group provide financing directly to the international agricultural research centers, which comprise the CGIAR network. They do not finance research activity by individuals, nor do they support directly research activity in developed countries. Therefore, I am afraid there is no way in which the Consultative Group could support your research activity.

Nevertheless, thank you for your interest in the CGIAR. As you requested, I am enclosing a copy of the brochure "International Research in Agriculture."

Sincerely yours,

Daniel Ritchie
Deputy Executive Secretary

DanielRitchie/ms/File T

Dr. Ray F. Smith
Project Director
UC/AID Pest Management & Related Environmental
Protection Project
University of California, Berkeley
137 Giannini Hall
Berkeley
California 94720

January 26, 1976

Dear Mr. Smith:

I would like to acknowledge, with thanks, your letter of January 15, 1976 to Mr. Lejeune regarding the forthcoming meetings of the Consultative Group on International Agricultural Research and its international agricultural research centers.

I am pleased to enclose the provisional schedule of events for 1976 of the international network, which I hope you find useful. It is updated periodically but rather irregularly.

We do not issue announcements of individual meetings except for the two meetings of the Consultative Group as a whole. Information on these meetings is distributed to members of the Consultative Group only, but I am sure that AID would be able to keep you up to date in this regard.

Sincerely yours,

Daniel Ritchie

Depaty Executive Secretary



# The EAST-WEST CENTER

**EAST-WEST FOOD INSTITUTE** 

1777 EAST-WEST ROAD HONOLULU, HAWAII 96822 CABLE: EASWESCEN

January 20, 1976

Consultative Group on International Agricultural Research c/o The World Bank 1818 H Street, NW Washington, D.C. 20433

Gentlemen:

I am on leave of absence for one year from the Ohio State University to write a textbook on field crop ecology. They granted me Assigned Research Duty during the first three months to help support me during the leave.

I was granted a Senior Fellowship for one year by the East-West Center. In addition to writing the text I am to assist in the conduct of workshops on crop protection being held here and also to work with the student grantees in relating the discussions of each workshop to ecology.

My text will include discussions of crop protection and plant growth regulators, which have not been found in older texts nor planned for any new texts, to my knowledge. The 1972 RICOP (Resident Instruction Committee on Organization and Policy) report included the recommendation that curricula in crop protection be based on ecological principles. Discussions also emphasize the need of a crop-orientation in crop protection. Additionally, I plan to give an agricultural orientation and interpretation to discussions of the interactions of inheritance and the environment in crop production. This has previously not been done adequately, in my opinion.

I am in need of financial assistance to supplement my income from the East-West Center Fellowship, which was awarded on a cost-sharing basis.

Please send application forms to me if this proposal and request is within the requirements of the CGIAR.

Please send a copy of the booklet "International Research in Agriculture", if it is available for distribution.

Sincerely yours,

Leo E. Bendixen Senior Fellow

LB:jt

# T

## Section on CGIAR for 1975 Year Book of the U.N.

The Consultative Group on International Agricultural Research, which was established in 1971 under the sponsorship of the Bank, the Food and Agriculture Organization (FAO) and the United Nations Development Programme (UNDP), supports international agricultural research and training activities encompassing most of the major food crops and farming systems of the developing world. The objective is to increase the amount and quality of food produced in the poorer countries by developing technology which will increase yields and improve the protein content of food produced on typical small farms. The Group continued to expand in 1975. Four new members joined the Group: Iran, Italy, New Zealand and Saudi Arabia, increasing total membership to 35 governments, international and regional organizations and private foundations. In 1975 members of the Group gave financial support to 12 programs for international agricultural research, including a fund leading toward the establishment of an international center for agricultural research in the dry areas, which will be concerned with problems of special interest in the Middle East and North Africa.

Financial contributions by the Group to on-going activities increased to \$48,000,000 in 1975 as against \$33,000,000 in 1974. Members pledged a further \$65,000,000 for 1976.

# Office memorandum

TO: Mr. Michael L. Lejeune

DATE: January 7, 1976

FROM: William L. Bennett

SUBJECT: 1975 YEARBOOK OF THE UNITED NATIONS

Attached please find the section on CGIAR for the 1974 YEARBOOK of the UN. Using this as a guide, would you please have this section rewritten to cover CGIAR activities in the <u>Calendar</u> Year 1975. Mr. Friedgut, Chief Editor of the YEARBOOK, has requested that we submit copy to him by mid-February 1976.

On completion, please return the rewrite to me for incorporation in the overall description of the Bank/IDA.

WLB:pam Attachment Rowink for Calendar 1975

Agricultural Research, which was established in 1971 under the sponsorship of the Bank, the Food and Agriculture Organization (FAO) and the United Nations Development Programme (UNDP) continued to expand in 1974. Two new members joined the Group: Nigeria and the United Nations Environment Programme (UNEP), increasing total membership to 31 governments, international and regional organizations and private foundations.

In 1974, members of the Group gave financial support to 10 on-going programs of international agricultural research, of which the most recently accepted was the CARIS-AGRIS activity being carried on by FAO for the recording, retrieval and dissemination of information about agricultural

(OVER):

research in developing countries. Financial contributions by the Group to on-going activities increased to \$33 million in 1974, as against \$25 million in 1973. Members pledged a further \$48 million for 1978.

The Group agreed to take steps toward the establishment of an International Center for Agricultural Research in Dry Areas (ICARDA), which will be concerned with problems of special interest in the Middle East and North Africa, and an initial fund was established to finance preparatory work in 1975.

#### Education

In 1974, the Bank granted eight loans amounting to \$118 million for educational projects. The





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UC/AID PEST MANAGEMENT AND RELATED ENVIRONMENTAL PROTECTION PROJECT 137 GIANNINI HALL BERKELEY, CALIFORNIA 94720 TELEPHONE: (415) 642-6660

January 15, 1976

Dr. Michael Lejune World Bank 1818 H NW Washington, D.C. 20006

Dear Dr. Lejune:

I am enclosing a copy of a list of International Meetings pertaining to plant protection that the University of California/AID Pest Management Project compiles about once each quarter. This listing has become a very useful tool in the planning of travel schedules and the scheduling of other plant protection activities. Hopefully it helps to avoid conflicts in meeting dates and also makes it possible to take advantage of the fact that plant protection experts come together in one place and thus utilize them for another purpose. There has been one serious deficiency in our listings of meetings and that is that we have not listed meetings of the Consultative Group and their associated international network in the regular and effective way. Although we have good contacts in IRRI, CIAT, and ICRISAT, I am sure that we have missed many important meetings in our listings. Would it be possible to regularly receive the announcements of such meetings from the Secretariat of the Consultative Group? Any assistance that you can give me in this worthwhile activity would be very much appreciated.

Sincerely yours,

Ray F. Smith

Project Director

RFS:ec Enclosure

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January 15, 1976

Mr. Michael Lejune World Band. 1818 N. MW Washington, W.C. 20006

near Dr. Lejane:

Law enclosing a copy of a list of international Meetings pertaining to plant protection that the University of California/AID Test Management Project compiles about once each quarter. This listing has become a very useful tool in the planning of travel schedules and the scheduling of other plant protection activities. Increfully it helps to avoid conflicts in meeting dates and also makes it possible to take advantage of the fact that plant protection experts come together in one place and thus utilize them for another purpose. There has been one serious deficiency in ourllistings of meetings and that is that we have not listed meetings of the Consultaive Group and their associated international metwork in the Civity and ICRISAT, I am sure that we have good contacts in IJAI, and ICRISAT, I am sure that we have missed many important the announcements of such meetings from the Secretariat of the Consultative Croup! Any assistance that you can give me in this worth-while activity would be very much appreciated.

Sincerely yours,

Ray F. Smith Project Director

MPS:ec Enclosure MEOMING MAIL UNIT

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RECEIVED

# International Conferences Related to Pest Management



REVISED DECEMBER 1975

Compiled by the UC/AID Pest Management and Related Environmental Protection Project at Berkeley, under USAID Contract AID/ta-C-1195 with the Regents of the University of California.

#### INTERNATIONAL CONFERENCES

RELATED TO

PEST MANAGEMENT

Revised December 1975

Compiled by the UC/AID Pest Management and Related Environmental Protection Project at Berkeley, under USAID Contract AID/ta-C-1195 with the Regents of the University of California.

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#### Key to Symbols Used in List

- \*\* to be attended by UC/AID Pest Management Representative
- \* probably to be attended by UC/AID Pest Management Rep.
- + restricted attendance or attendance by invitation only
- probably not to be attended by UC/AID Pest Management Rep.

The UC/AID Pest Management Project would appreciate having any additions or corrections on this listing brought to its attention. Comments and suggestions should be sent to Professor Ray F. Smith, Project Director, 137 Giannini Hall, University of California, Berkeley, California 94720 USA.

#### INTERNATIONAL CONFERENCES

#### RELATED TO PEST MANAGEMENT

December 1975

FAO Consultation on the Establishment of a European Scientific Network on Pesticides Vienna, Austria

\*\*December 1-4, 1975

Annual Meeting, Entomological Society of America Marriott Hotel

New Orleans, Louisiana

Contact: J.S. Tynes

Cooperative Extension Service

Knapp Hall

Louisiana State University Baton Rouge, La. 70803

December 2-3, 1975

International Symposium on Status and Control of Grassweeds in Europe

UNESCO Building

Paris, France

Contact: M.R. Faivre-Dupaigre

8 Avenue du President Wilson

Paris, France 75116

+December 3-5, 1975

Executive Committee Meeting, International Board of Plant Genetic Resources Rome, Italy

December 6-11, 1975

2nd Scientific Congress

Baghdad, Iraq

Contact: Foundation of Scientific Research Baghdad, Iraq

December 8-12, 1975

Commission for Controlling the Desert Locust in the Eastern Region of its Distribution Area in Southwest Asia Karachi, Pakistan

December 12-17, 1975

Second World Congress on Water Resources New Delhi, India December 16-20, 1975

Course on Conservation and Development in the Tropics

Aberdeen, United Kingdom Contact: Adrian Marshall

University of Aberdeen

Institute of South-East Asian Biology

Aberdeen, Scotland

#### Conferences Projected for 1976

January 5-8, 1976

Joint US-Japan Seminar on Stored Product Insects

Kansas State University, Manhattan

Kansas, USA

Contact: R.B. Mills

Kansas State University

Manhattan, Kansas 66502 USA

or S. Utida

Kyoto University

Kitashirakawa, Sakyoku

Kyoto, Japan

\*January 5-9, 1976

Workshop on the Consolidation of Crop Protection Courses

Honolulu, Hawaii USA Contact: Philip Motooka

East-West Food Institute

1777 East-West Road

Honolulu, Hawaii 96322 USA

January 5-11, 1976

25th Pugwash Conference on "Development, Resources and

World Security"

Madras, India

Contact: Prof. J. Rotblat

Pugwash Conferences on Science and World Affairs

9 Great Russell Mansions 60 Great Russell Street

London WCIB 3BE, United Kingdom

January 6-8, 1976

Annual Meeting of the British Ecological Society

University of Wales

Cardiff, Wales

January 14, 1976

Weed Science Section, Finnish Plant Protection Society Tikkurila, Finland

January 29-30, 1976

17th Swedish Weed Conference Uppsala Sweden

January 28-30, 1976

Annual Meeting of COMALFI (Colombian Society of Weed Control and Plant Physiology)
Barranquilla, Colombia

January or February 1976

3rd International Conference on Culture Collections Bombay, India

Contact: Prof. F. Fernandes

Ciba-Geigy Research Centre Aarey Road, Goregson East

PO Box 9002

Bombay 400 063, India

February 1976

39th Winter Congress, International Institute for Sugar

Beet Research

Brussels, Belgium

Contact: O.J. Kint, Secretary-General

International Institute for Sugar Beet Research

Beaduinstraat 150 B-3300 Tienen, Belgium

February 1976

Weed Science Society of Israel Annual Meeting

Rehovot, Israel

Contact: Mr. A. Nir

Weed Science Society of Israel

c/o Weed Control Ltd.

1 Hayesod Street

Tel-Aviv, Israel

February 1-6, 1976

III Congresso Brasileiro de Entomologia

Maceio, Alagoas, Brasil

Contact: Roger N. Williams

Foreign Liaison Officer

Entomology, OARDC

Wooster, Ohio 44691 USA

February 2-12, 1976

Plant Protection Committee for the Southeast Asia and

Pacific Region (10th Session)

Canberra, Australia Contact: Dr. Bap Reddy

Regional Plant Protection Specialist

FAO Regional Office Maliwan Mansion Phra Atit Road Bangkok, Thailand

February 2-7, 1976

University of California/USAID presents a Regional

Pesticide Management Seminar/Workshop

Guatemala City, Guatemala Contact: Ray F. Smith

137 Giannini Hall

University of California

Berkeley, Calif. 94720 USA

February 3-5, 1976

Annual Meeting of the Weed Science Society of America

Hilton Hotel

Denver, Colorado USA

February 8-14, 1976

Symposium on Tropical and Subtropical Fruits

Lima, Peru

Contact: Dr. M. Holle

Departamento de Horticultura Universidad Nacional Agraria

Apartado 456 Lima, Peru

February 8-14, 1976

2nd Mango Symposium (joint symposia with tropical and subtropical fruits)

Lima, Peru

Contact: Prof. S.K. Mukherjee

College of Agriculture

35 Ballygunge Circular Road

Calcutta 19, India

\*\*February 10-12, 1976

ESA Meeting of the Southwestern Branch

Holiday Inn

Oklahoma City, Oklahoma USA

Contact: J. Pat Boyd, Secretary-Treasurer-

1007 E. Alan

Carrolton, Texas 75006 USA

February 16-21, 1976

Symposium on Arid Land Irrigation in Developing Countries:

Environmental Problems and Effects

Alexandria, Egypt

Contact; Prof. R. Keller

Schwarzwalderstrasse 18 0-7812 Bad Krozingen

Federal Republic of Germany

February 17-20, 1976

Society for Range Management Annual Meeting

Hilton Hotel

Omaha, Nebraska USA

Contact: David Smith

Executive Secretary, Society for Range Management

2120 S. Birch St.

Denver, Colorado 80222 USA

February 18-24, 1976

American Association for the Advancement of Science (AAAS)

Annual Meeting

Boston, Massachusetts USA

Contact: Meetings Office AAAS

1515 Massachusetts Avenue, NW Washington, D.C. 20005 USA

February 23-27, 1976

Third INTSOY Regional Soybean Conference

Chiang Mai, Thailand

Contact: International Soybean Program

113 Mumford Hall

University of Illinois

Urbana, Illinois 61801 USA

March J. - April 20, 1976

Workshop on Pest Management Research

Honolulu, Hawaii USA

Contact: Philip Motooka

East- West Food Institute

1777 East-West Road

Honolulu, Hawaii 96822 USA

March 1-4, 1976

Meeting of the Western Forest Insect Work Conference

Wemme, Oregon

Contact: LeRoy Kline

Oregon State Department of Forestry

2600 State Street

Salem, Oregon 97310 USA

March 8, 1976

Symposium on Test Methods for Vertebrate Pest Control and

Management Materials

Holiday Inn

Monterey, Calif. USA

Contact: Rex E. Marsh

Wildlife and Fisheries Biology

University of California Davis, Calif. 95616 USA

March 8-10, 1976

XI Congreso Nacional de Entomologia

Mexico City, Mexico

Contact: Centre de Convenciones

Reforma 445

Mexico 5, D.F. Mexico

March 14-13, 1976

Society of Toxicology

Atlanta, Georgia USA

Contact: Gale C. Boxill

Wyeth Lab. Inc.

Box 361

Paoli, Pennsylvania 19301 USA

March 28 - April 2, 1976

3rd Meeting of Asociacion Latinoamericana de Malezas (ALAM)

Mar del Plata, Argentina

April or May 1976

Near East Plant Protection Commission (6th Session)

Jordan

April 1-3, 1976

Annual Meeting of Japanese Society of Applied Entomology

ar. 7.00logy

Kyoto University

Kyoto, Japan

Contact: T. Kono

Nacional Institute of Agricultural Sciences

Nishigahara, Kita-ku

Tokyo, Japan

April 5-7, 1976

Annual Meeting of Japanese Phytopathological Society

Tokyo Kasei Women's College

Tokyo, Japan

Contact: K. Aoshima

c/o Japan Plant Protection Association

Komagome, Toshimaku Tokyo, Japan 1-43-11 April 6-8, 1976

Eucarpia, Genetics and Breeding of Peas

Norwich, Great Britain Contact: M. Mesken

Eucarpia Secretariat

PO Box 128

Wageningen, Netherlands

\*\*April 7-9, 1976

ESA Meeting of the North Central Branch

Denver Hilton Hotel

Denver, Colorado USA

Contact: C.A. Triplehorn, Secretary-Treasurer

Department of Zoology and Entomology

Ohio State University

1735 Neil Avenue

Columbus, Ohio 43210 USA

April 11-16, 1976

Annual Meeting of Federation of American Societies

for Experimental Biology (FASEB)

Anaheim, California USA

April 12-14, 1976

Symposium on the Origins of Pests, Parasites, Disease

and Weed Problems

University College of North Wales

Bangor, Wales

Contact: Dr. J.M. Cherrett

Department of Applied Zoology

University College of North Wales

Bangor, Wales

+April 15-16, 1976

EPPO Committee Meeting on Phytosanitary Regulations

Prague, Czechoslovakia

\*April 21-23, 1976

IV Reunion Nacional de Tecnicos en Control Biologico y

Organismos Auxiliares de Sanidad Vegetal

Tapachula, Chiapas, Mexico

Contact: Ing. Benjamin Ortega Cantero

Director General de Sanidad Vegetal Secretaria de Agricultura y Ganaderia

Mexico, D.F. Mexico

April 25-28, 1976

22nd Annual Meeting of Institute of Environmental Sciences Philadelphia, Pennsylvania USA

Contact: Institute of Environmental Sciences

940 E. Northwest Highway

Mt. Prospect, Illinois 60056 USA

+April 28-29, 1976

EPPO Executive Committee Meeting Paris, France

May 1976

International Society for Horticulture Science (ISHS) Symposium on Problems of Citriculture in Mediterranean Countries

Corsica, France

Contact: Dr. L. Blondel

Sta. de Rech. Agr.

San Giuliano par Mariani Plage

Corsica, France

May 1976

IOBC Working Group on Integrated Control in Cotton Growing 3rd Annual Meeting

May 10-12, 1976

Symposium on Virology in Agriculture

Beltsville, Maryland USA

Contact: Dr. T.O. Diener

Plant Virology Laboratory, USDA 252 Building OllA, ARC-West Beltsville, Maryland 20705 USA

May 10-14, 1976

Symposium on Plant Relations in Pastures

Brisbane, Queensland, Australia

Contact: Secretary of the Organizing Committee Symposium on Plant Relations in Pastures

Division of Tropical Agronomy, CSIRO St. Lucia, Queensland, Australia 4067

May 12-13, 1976

EPPO Working Party for Certification for Virus Tested Fruit Trees, Scions and Rootstocks Paris, France

May 28-30, 1976

1st Annual Meeting of Pesticide Science of Japan

Contact: I. Yamamoto

c/o Japan Plant Protection Association

Komagome, Toshimaku Tokyo, Japan 1-43-11 May 30 - June 4, 1976

27th Annual (AIBS) American Institute of Biological

Sciences Meeting

Tulane University

New Orleans, Louisiana USA

Contact: AIBS Meetings Department

1401 Wilson Boulevard

Arlington, Virginia 22209 USA

May 31 - June 4, 1976

Symposium on Cycling of Mineral Nutrients in Agricultural

Ecosystems

Amsterdam, The Netherlands

Contact: K.C. Plaxton

PO Box 330

Amsterdam, The Netherlands

May 31 - June 11, 1976

United Nations Conference on Human Settlements

Vancouver, Canada

Contact: Habitat

435 Lexington Avenue

New York, New York 10017 USA

June 1976

4th Symposium on Virus Diseases of Ornamental Plants

Commission for Plant Protection

Wageningen, The Netherlands

+June 7-14, 1976

1976 Annual Research Conference and Policy Advisory Committee

Meeting for ICIPE

Nairobi, Kenya

Contact: Dr. Thomas R. Odhiambo

ICIPE

PO Box 30772

Nairobi, Kenya

June 14-18, 1976

Intercongress Meeting of Three Commissions of International

Soil Science Society, "Agrochemicals in Soils"

Jerusalem, Israel

June 15-18, 1976

FAO/WHO/EPPO Conference on Rodents

Geneva, Switzerland

June 15 - July 31, 1976

Course on Environmental Toxicology, sponsored by Wageningen

University and Institute of Ecology

Padjadjaran University

Bandung, Indonesia

Contact: Director Soemar oto

Institute of Ecology Padjadjaran University

Bandung, Indonesia

June 19-23, 1976

VIth International Colloquium of the International

Society of Soil Scientists

Uppsala, Sweden

Contact: Dr. U. Lohm

Department of Entomology University of Uppsala

PO Box 561

Uppsala, Sweden S-751 22

\*\*June 22-24, 1976

ESA Meeting of the Pacific Branch

Holiday Inn Ventura, California USA

Contact: R. Duncan Carter, Secretary-Treasurer

PO Box 36

San Leandro, California 94577 USA

June 22-25, 1976

Annual Meeting of Canadian Federation of Biological

Societies

Halifax, Nova Scotia, Canada

Contact: Dr. D.T. Armstrong

Honorary Secretary, Canadian Federation of

THE STATE OF THE S

Biological Societies

University Hospital, Room 90F6 London, Ontario, Canada N6G 2K3

June 24-25, 1976

Yugoslav Symposium on Weed Control in Horticulture

Contact: Dr. A. Laban

Biotehnicki Institut

Pec 38300 Yugoslavia June 27 - July 1, 1976

Conference on "The Role of the Professional in Feeding

Mankind"

Ames, Iowa

Contact: William W. Marion

WIIIIam W. Flation

World Food Conference

102A Dairy Industry Building

Iowa State University

Ames, Iowa

June - July 1976

International Symposium on 'The Ecology and Management

of Some Tropical Shallow Water Communities"

Jakarta, Indonesia

Western Society of Naturalists co-sponsors

July 11-14, 1976

Annual Meeting of the Aquatic Plant Management Society

Pier 66 Bahia Mar

Fort Lauderdale, Fla. USA 33316

\*\*July 18 - August 29, 1976

University of California/USAID offers a Special Training

Workshop in Agricultural Pest Management for Entomologists

Cornell University

Ithaca, New York

Contact: Edward Glass

New York State Agricultural Experiment Station

PO Box 462

Geneva, New York 14456 USA

July 20-22, 1976

Meeting of Sociedade Brasileira de Herbicidas e Ervas

Daninhas

IAPAR Institute

Londrina, Parana, Brazil

July 26-30, 1976

International Society for Horticulture Science (ISHS)

Symposium on Breeding of Rubus and Ribes

Dundee, United Kingdom

Contact: Dr. D.L. Jennings

Scottish Horticultural Research Institute

Invergowrie Dundee

Scotland, United Kingdom

late July 1976

International Conference on Bacterial Wilt Concerned with Aspects of Pseudomonas solanacearum

North Carolina State University

Raleigh, North Carolina USA

Contact: Arthur Kelman, Associate Program Director or

Luis Sequeira, Program Director

College of Agriculture and Life Sciences

University of Wisconsin - Madison

1630 Linden Drive

Madison, Wisconsin 53706 USA

August 1-8, 1976

4th International Symposium on Tropical Root Crops CIAT (Centro Internacional de Agricultura Tropical) Cali, Colombia

Contact: Dr. T.U. Ferguson

University of the West Indies

Faculty of Agriculture

Cave Hill Campus

PO Box 64

Bridgetown, Barbados, West Indies

August 2-6, 1976

Second Workshop on the Consolidation of Crop Protection

Courses

Honolulu, Hawaii USA

Contact: Philip Motooka

East-West Food Institute

1777 East-West Road

Honolulu, Hawaii 96822 USA

August 5-6, 1976

Symposium on Vegetable Production in Organic Soils

Guelph, Canada

Contact: Dr. J.L. Nonnecke

University of Guelph

Guelph, Ontario, Canada

August 15-20, 1976

9th International Biometric Conference

Boston, Massachusetts USA

Contact: Dr. H. Thoni, General-Secretary

The Biometric und Populationsgenetik Eid

Technische Hochschule Universitatstrasse 19

CH - 8006 Zurich, Switzerland

\*\*August 19-27, 1976

XV International Congress of Entomology

Washington Hilton Hotel

Washington, D.C. USA

Contact: Ernest C. Bay, Secretary-General

XV International Congress of Entomology

PO Box 151

College Park, Maryland 20740 USA

August 30 - September 2, 1976

4th International Symposium on Biological Control of

Weeds

University of Florida

Gainesville, Florida USA

Contact: Dr. T.E. Freeman, Chairman

4th International Symposium on Biological Control

of Weeds

Plant Pathology Department

University of Florida

Gainesville, Florida 32611 USA

\*\*August 30 - September 4, 1976

WHO Regional Seminar on the Safe Use of Pesticides

Manila, Philippines

Contact: C.Y. Chow

WHO Regional Office for the Western Pacific

United Nations Avenue

PO Box 2932

12115 Manila, Philippines

August 30 - September 4, 1976

9th International Conference on Plant Growth Substances

Lausanne, Switzerland

Contact: Prof. P.E. Pilet

Institute of Plant Biology and Physiology

Place de la Riponne

1005 Lausanne, Switzerland

August 31 - September 2, 1976 (tentative)

EPPO Training Course for Plant Health Insepctors of the

Mediterranean Area

Piacenza, Italy

Contact: Dr. G. Mathys

**EPPO** 

1 Rue le Notre

Paris, France 75016

September 1976

Meeting on "Higher Education in Crop Protection in Europe" Sterling University, United Kingdom September 1976

International Society for Horticulture Science (ISHS)

Symposium on High Density Plantings

East Malling, United Kingdom

Contact: Dr. J.E. Jackson

Pomology Section

**EMRS** 

East Malling, near Maidstone

Kent, United Kingdom

September 1976

10th Symposium on Fruit Tree Virus Disease of the

International Working Group for Cooperation in Fruit

Tree Virus Research

Heidelberg, Federal Republic of Germany

September 1-8, 1976

Annual Meeting of the British Association for the Advancement

of Science

Lancaster, England

Contact: British Association for the Advancement

of Science

Fortress House

23 Savile Row

London W1X 2AA, United Kingdom

September 5-10, 1976

4th European and Mediterranean Cereal Rusts Conference

Interlaken, Switzerland

Contact: Dr. A. Bronnimann

Swiss Federal Research Station for Agronomy

CH - 8046 Zurich

Rechenholz, Switzerland

September 7-11, 1976

3rd International Society for Horticulture Science (ISHS)

Symposium on Vegetable Storage

Ithaca, New York

Contact: Dr. F.M. Isenberg

102 B E. Robert Hall

Cornell University

Ithaca, New York USA

+September 21, 1976

EPPO Executive Committee Meeting

Paris, France

September 23, 1976

EPPO Conference on Plant Protection in Modern Society

Paris, France

October 5-6, 1976

2nd International Symposium on Pear Growing sponsored by International Society for Horticulture Science (ISHS) and Societa' Orticola Italiana

Florence, Italy

Contact: Prof. F. Scaramuzzi

Inst. di Colt Arboree Facultad di Agraria Piazzale delle Cascine

Florence, Italy

October 12-14, 1976

EPPO Conference on Systems Modelling in Modern Crop Protection Paris, France

October 25-27, 1976

Annual Meeting of Entomological Society of Canada

Toronto, Canada

Contact: E.C. Becker

1320 Carling Avenue Ottawa, Canada K1Z 7K9

November 8-12, 1976

International Symposium on Grain Legume Insect Pests, IITA Ibadan, Nigeria

Contact: S.R. Singh

International Institute of Tropical Agriculture

Barclays Bank Chambers

PMB 5320

Ibadan, Nigeria

November 16-17, 1976

EPPO Working Party and Panel on Pesticides for Plant Protection Paris, France

November 19, 1976

EPPO Working Party of the Colorado Beetle Paris, France

November 28 - December 3, 1976

Annual Meeting of Agronomy, Crop Science and Soil Science Societies of America Houston, Texas USA

\*\*November 29 - December 2, 1976

Annual Meeting of Entomological Society of America

Sheraton Waikiki

Honolulu, Hawaii USA

Contact: Wallace P. Murdoch

Executive Secretary 4603 Calvert Road

College Park, Maryland 20740 USA

December 1976

3rd Congreso APECOMA (Peruvian Association of Weed Controllers) Ica, Peru

December 6-10, 1976

International Symposium on Integrated Pest Management

Tokyo, Japan

Contact: T. Kono

National Institute of Agricultural Sciences

Nishigahara, Kita-ku

Tokyo, Japan

\*December 13-17, 1976

Conference on the Impact of Pesticide Laws on Pest Management

Honolulu, Hawaii USA Contact: Philip Motooka

East-West Food Institute

1777 East-West Road

Honolulu, Hawaii 96822 USA

#### Undetermined Dates in 1976

International Society for Horticulture Science (ISHS)

Symposium on Curcubitaceae under Protection

Pont-de-la-Morge, Switzerland

Contact: Dr. Perraudin

Sta. Fed. de Rech. Agron.

1962 Pont-de-la-Morge

Switzerland

5th African Horticultural Symposium Alexandria, Egypt

International Society for Horticulture Science (ISHS)
Symposium on Plum Culture and Plum Breeding
Contact: Dr. R. Bernhard
Pont-de-la-Maye, France

FAO Caribbean Plant Protection Commission (4th Session) Caracas, Venezuela

+FAO Working Party of Experts on Pest Resistance to Pesticides 11th Session

Geneva, Switzerland

Contact: Roberto Gonzalez

Plant Protection Service, Room C-749

c/o FAO Office in Europe

Palais des Nations

1202 Geneva, Switzerland

FAO/SIDA Regional Workshop on Food Promotion in West Africa Accra, Ghana

FAO Storage Pest Control Training Centre in Central America (six weeks) Guatemala City, Guatemala

FAO/SIDA Conference on the Avoidance of Undesirable Environmental Effects from the Use of Agricultural Pesticides in Developing Countries
Rome, Italy

Xth Meeting of Asociacion Latinoamericana de Ciencias Agricolas (ALCA) Brasilia, Brazil

International Society for Horticulture Science (ISHS)
Symposium on Growth Regulators in Fruit Production
Contact: Dr. L.C. Luckwill
Long Ashton, Bristol, United Kingdom

#### Conferences Projected for 1977

3rd Congress of the Society for the Advancement of Breeding Research in Asia and Oceania (SABRAO)

Canberra, Australia

Contact: Dr. R.D. Brock

Division of Plant Industry

C.S.I.R.O.
PO Box 1600
Canberra City

A.C.T. 2601, Australia

February 8-10, 1977

Annual Meeting of Weed Science Society of America Jefferson Hotel St. Louis, Missouri USA

February 20-26, 1977

American Association for the Advancement of Science (AAAS)

Annual Meeting

Denver, Colorado USA

Contact: Meetings Office

AAAS

1515 Massachusetts Avenue, NW Washington, D.C. 20005 USA

April 3-8, 1977

Annual Meeting of Federation of American Societies for Experimental Biology (FASEB) Chicago, Illinois USA

\*\*April 17-19, 1977

Joint Meeting of the Southwestern and Pacific Branches of the Entomological Society of America and Sociedad Mexicana de Entomologia

Guadalajara, Mexico

Contact: Dieter Enkerlin

Inst. Tecn. y de Estudios Superiores de Monterrey Sucursal de Correos "J" Monterrey, Nuevo Leon, Mexico

June or July 1977

6th Asian-Pacific Weed Science Society Conference Indonesia

Contact: M. Soerjani

c/o SEAMEO Regional Center for Tropical Biology

PO Box 17

Bogor, Indonesia

June 21-24, 1977

Annual Meeting of Canadian Federation of Biological

Societies

Calgary, Alberta, Canada

Contact: Dr. D.T. Armstrong

Honorary Secretary, Canadian Federation of

Biological Societies

University Hospital, Room 90F6 London, Ontario, Canada N6G 2K3 July 17-20, 1977

Aquatic Plant Management Society Annual Meeting Holiday Inn Minneapolis, Minnesota USA

\*July 25-29, 1977

Conference on Surveillance and Prediction Techniques in Pest Management Systems Honolulu, Hawaii USA

Contact: Philip Motooka

East-West Food Institute

1777 East-West Road Honolulu, Hawaii 96822 USA

August 1977

2nd International Congress of Mycology Madison, Wisconsin USA

August 1977

Club Root Working Group (Woronin Centennial) Madison, Wisconsin USA

August 16-24, 1977

10th International Congress of the International Union of Quarternary Research
Birmingham, United Kingdom
Contact: Prof. F.W. Shatton, F.R.S.
University of Birmingham
Birmingham, United Kingdom

August 21-26, 1977

28th Annual American Institute of Biological Sciences (AIBS)

Michigan State University
East Lansing, Michigan USA

Contact: AIBS Meetings Department 1401 Wilson Boulevard Arlington, Virginia 22209 USA

August 22-26, 1977

International Symposium on Microbial Ecology

Dunedin, New Zealand

Contact: The Executive Officer

The Royal Society of New Zealand

PO Box 12249

Wellington, New Zealand

\*\*November 28 - December 2, 1977

Annual Meeting of Entomological Society of America

Washington, D.C. USA

Contact: Wallace P. Murdoch

Executive Secretary 4603 Calvert Road

College Park, Maryland 20740 USA

#### Undetermined Dates for 1977

VIth Symposium on Apricot Culture and Decline USSR

6th African Horticultural Symposium Abidjan, Ivory Coast

International Society for Horticulture Science (ISHS)
Symposium on Timing Field Production of Vegetables
Wellesbourne, United Kingdom

International Society for Horticulture Science (ISHS)
Symposium on Tissue Culture (ornamentals)

Ghent, Belgium

Contact: Prof. Boesmans

Coupure Links 235 9000 Ghent, Belgium

#### Conferences Projected for 1978

February 12-13, 1978

American Association for the Advancement of Science

(AAAS) Annual Meeting

Washington, D.C. USA

Contact: Meetings Office

AAAS

1515 Massachusetts Avenue, NW Washington, D.C. 20005 USA

April 9-14, 1978

Annual Meeting of Federation of American Societies for Experimental Biology (FASEB)
Atlantic City, New Jersey USA

Summer 1978 (possibly June)

Conference on Circum-Pacific Energy and Mineral Resources

Honolulu, Hawaii

Contact: American Institute of Mining, Metallurgical and Petroleum Engineers

\*\*June 1978

ESA Meeting of the Pacific Branch Scottsdale, Arizona

July 24-28, 1973

Fourth International Congress of Pesticide Chemistry (IUPAC)

Zurich, Switzerland

Contact: Dr. H. Geissbuhler

Scientific Program Committeee

PO Box 132

CH-4013 Basle, Switzerland

August 15-23, 1978

XXth International Horticultural Congress

University of Sydney

Sydney Australia,

Contact: Mr. G.R. Gregory, Secretary

XXth International Horticultural Congress

G.P.O. Box 475

Sydney, New South Wales, 2001

Australia

August 16-23, 1978

3rd International Congress of Phytopathology

Munich, West Germany

\*\*November 27-30, 1978

Annual Meeting of Entomological Society of America

Houston, Texas USA

Contact: Wallace P. Murdoch

Executive Secretary 4603 Calvert Road

College Park, Maryland 20740 USA

#### Conferences Projected for 1979

July 8-14, 1979

11th Congress of International Union of Biochemistry

Toronto, Ontario, Canada

Contact: M.K. Ward, Executive Secretary

c/o National Research Council of Canada

Ottawa, Ontario, Canada KlA OR6

\*\*August 5-12, 1979

IX International Plant Protection Congress

Sheraton Park Hotel
Washington, D.C. USA
Contact: Bill G. Tweedy

Secretary-General

CIBA-GEIGY Corporation

Box 11942

Greensboro, North Carolina 27409

August 12-17, 1979

Annual Meeting of American Institute of Biological

Sciences (AIBS)

Oklahoma State University Stillwater, Oklahoma USA

Contact: AIBS Meetings Department

1401 Wilson Boulevard

Arlington, Virginia 22209 USA

\*\*November 26-29, 1979

Annual Meeting of Entomological Society of America

Denver, Colorado USA

Contact: Wallace P. Murdoch

Executive Secretary 4603 Calvert Road

College Park, Maryland 20740

#### Conferences Projected for 1980

XVI International Congress of Entomology (tentative)
Tokyo, Japan

#### Conferences Projected for 1982

XXI International Horticultural Congress
Hamburg or Munich, Federal Republic of Germany

Vth International Congress of Pesticide Chemistry (IUPAC)
Japan (tentative)

Central Files - T

D.O.No. DFIU/PA/1/76

Lal Karamchandani,
Director Farm Information.

GOVERNMENT OF INDIA

MINISTRY OF AGRICULTURE AND IRRIGATION
(Department of Agriculture)

DIRECTORATE OF EXTENSION

Shastri Bhavan

New Delhi, the 1st January, 1976

Dear Communicator,

As we enter the New Year let us take this opportunity of wishing you all a happy and purposeful new year and hope that the new communication links we have established between each other may continue to grow stronger and stronger.

We thought this to be the best time to recapitulate some of our activities and achievements during last few months and also to tell you of our new projects and programmes in the new year. This is to establish a much more purposeful dialogue between you and us so that given the present limited resources we are able to do a much better job in the months to come.

#### SITE

We cannot make a better start than by sharing with you the excitement in the field of communication which SITE (Satellite Instructional Television Experiment) has generated. We in the agriculture know what an impact can this latest technological innovation make in the rural development; particularly as a motivational and information vehicle in this vast continent of ours. And the first evaluation reports flowing in from 2,400 villages in six SITE clusters conclusively prove that farm programmes are by and large far more liked than any other programme by all — men, women and children.

We on our side, and through our State Agriculture Information Units, have been fully involved in preparing the audiences for the programmes, providing support print materials, and following these up with discussion groups in most places.

### COMMUNICATION TRAINING

We had a spurt in our training programmes in communication when we held a series of training courses and workshops starting with Regional Training Seminars at Hyderabad (for Madhya Pradesh, Andhra Pradesh and Karnataka) and Bhubaneshwar (for Orissa, Bihar and Rajasthan) with emphasis on planning, production and utilisation of television programmes being broadcast under SITE (Satellite Instructional Television Experiment). This catered to the personnel working at Headquarters and in T.V. clusters in six States.

These were followed by a fulfledged information communication workshop at Trivandrum in September for extension, information and training personnel from the Southern Zone comprising Kerala, Tamil Nadu, Andhra Pradesh and Karnataka.

We also supplied resource people in conducting the State Agricultural Information Workshop at Calcutta (West Bengal), and also organised one at Kota (Rajasthan) for the benefit of Extension and Information Personnel in Chambal Valley Development and Rajasthan Canal Area Development Projects.

In the months to come we have plans to organise a two-week information Training Course, with emphasis on audio-visuals, for professional trainers at the Extension Education Institute, Nilokheri, in the latter part of February 1976, and a Communication Workshop at Agricultural University, Jorhat, for our eastern States, and a State Agricultural Information Workshop at Madras. We have also plans to hold a short intensive National Communication Seminar devoted completely to SITE, sometimes in March/April in the rural areas of Chatisgarh, Madhya Pradesh, where SITE is making a visible impact in the tribal belts.

#### FARM EXHIBITIONS

We made a complete departure from our set pattern of participating in big fairs and exhibitions primarily organised for the city audiences. We fabricated a complete new set of exhibits with its theme on 20-point economic programme launched by the Government. In fact the Exhibition entitled 'Agriculture on the March' caught the imagination of so many that we decided to multiply four more sets and hold this exhibition all over the country.

The first exhibition primarily meant for Commonwealth Parliamentarians was held on the lawns of Krishi Bhavan, New Delhi, in October, 1975. Different sets of exhibits then moved on to Bhubaneshwar, Gauhati, Chandigarh, Ambala, Kurukeshtra, Jammu, Jaipur and Trivandrum. Early this year in January, we plan to hold independent exhibitions in Bhopal, Lucknow, Patna, Bangalore and Madras. In February and March we intend taking this exhibition to Hyderabad and Eastern States of India including Manipur and even our newest State Sikkim.

## FILM-SLIDE LABORATORY

We have consolidated our set-up at the Centre, and the newly established Film-Slide Laboratory has got going in full swing. We have been able to prepare master sets on many subjects, and also multiply in hundreds these sets for supply to various Training Centres, Agricultural Universities, and Information Units all over the country. Another innovation has been our almost complete switch-over to colour slides; perhaps ours is the only set-up in the country which prepares, processes and multiplies film-slides in colour in hundreds and hundreds. You would have thought that this was manned by a fairly big unit but in fact there are only a few persons who are able to turn out the quantity of job which for its quality also, could stand comparison with the best set-up in any part of the world.

### PRINT MATERIAL

We were able to commission fully two Heidelberg Machines and turned out job after job almost in a continuous stream by printing almost 30 to 40 titles a month.

This support communication extension material is in addition to a huge programme of publishing four monthly magazines, posters and charts, bulletins and leaflets, and flip-books and flash-cards.

#### SHOWS

We had a fairly successful Regional Livestock and Poultry Show at Bhubaneshwar last September, but we are right now busy with the All India Livestock and Poultry Show coming up in Madras from 18th to 25th January 1976. There will be many innovations and new activities probably being introduced for the first time.

As far as Horticulture Shows are concerned, we organised one of the most successful Apple Shows in Delhi last September, where both the quality and quantity of the applies displayed came as a very pleasant surprise to all of us. The next one on the schedule is the All India Banana Show to be held again in Madras on 17th and 18th January 1976. This will be followed by an All India Grape Show perhaps during March in Hyderabad, the home of Anab-a-Shahi.

#### AGRICULTURAL FILMS

Perhaps not many are aware that the agricultural film production unit of the Farm Information Unit is one of the biggest of its kind in this part of the world, turning out nearly 35 reels of Instructional and Research films on various disciplines. Its success can be judged by the fact that year after year it has been winning almost all the top awards in various categories in the world famous agricultural film festival held every alternate year in West Berlin. This year also we are participating fully in the IX Agricultural Film Festival being held in the later part of January 1976.

This year we have plans to move into instructional films on agriculture for school-going children, annimation films for rural audiences and many more uni-theme subjects.

# INTEGRATED COMMUNICATION APPROACH

The Farm Information Unit operates in various areas at various levels in almost all communication activities in the rural India. It has established for itself the role which has taken it to a coverage which is both intensive and extensive.

But what we are excited about this year is a new concept of the total Integrated Rural Development Communication. The first attempt will be tried this month itself in Madras where we would be holding simultaneously at one location the All India Livestock and Poultry Show, The All India Banana Show, the Exhibition entitled "Agriculture on the March", a Film Production and Viewing Programme, apart from the maximum exposure of the both the urban and rural audiences through saturation newspaper coverage, posters, film-slides and all other media available.

We will watch this experiment with keen interest to find out whether by pooling all resources we can make the maximum impact by using all the media at our command. We shall of course keep you posted with the results of the experiment which we have a feeling would be far better than making sporadic and diluted communication programmes.

#### LIAISON WITH THE STATES

We have reactivated our liaison and dialogue with State Agricultural Information Units, Farmers Training Centres, Extension Institutes and Agricultural Universities and Communication Training Organisations both here and abroad. This has resulted not only in having better support with field agencies but also in making a much better communication impact at the grass-root level.

This letter is not exhaustive as we wish it to be but only indicative of some of the principal activities.

Wishing you again a Happy New Year to you all, and with Greetings of the Season.

Sincerely yours,

(Lal Karamchandani)

Mr. Carlos B. Gavino, Consultative Group of International Agricultural Research, Washington.

# T"

# OFFICE MEMORANDUM

TO: Files

DATE: December 17, 1975

FROM: Carlos B. Gavino

SUBJECT: CGIAR Mailing List

- 1. This memorandum describes the CGIAR mailing list and should serve as a guide for mailing of CGIAR documents.
- 2. Currently, there are five sets of individuals/organizations in our mailing list which are described below:

#### List 1

- (a) Donor representatives or "contact persons" who make decisions in the Consultative Group on behalf of their governments/institutions or foundations.
- (b) Washington-based constituents of Donor representatives who act as intermediaries for the Donors. Examples are the Bank's Executive Directors and embassy staff of member countries.

#### List 2

Individuals who like to be kept informed of activities of the CGIAR but do not exercise any decision-making responsibility in the Consultative Group. For example, Dr.Joel Bernstein, former U.S. representative to the CGIAR is in this list.

#### List 3

Members of the Technical Advisory Committee (TAC) with Sir John Crawford as Chairman.

#### List 4

Center Directors with Dr. Nyle C. Brady as current Chairman.

#### List 5

Chairmen of the Centers' Boards.

- 3. With regard to the kinds of documentation produced by the CGIAR Secretariat, the following general guidelines should be followed:
  - (a) Draft Summaries of Proceedings of the Consultative Group Meetings should be circulated to List 1 and to participants of the meetings for comments.
  - (b) Final Summaries of Proceedings should be circulated to Lists 1-5.
  - (c) Minutes of Subcommittee meetings should be circulated with instructions from the Chairman of the Subcommittee.
  - (d) The draft Calendar of Events is sent to Center Directors for marking-up and the marked-up calendar is circulated to Lists 1-5.
  - (e) Operational documents where a decision is called for from the Consultative Group are circulated to List 1 for action. For example, a memorandum seeking the approval of TAC nominees is sent to members of the Consultative Group.
  - (f) Documents of a general information nature is circulated to Lists 1-5, for example, an announcement of new members of TAC.
- 4. In summary, the general guideline to be followed should be that documents which require a specific decision from the Consultative Group should be circulated solely to List 1 while other documents should be handled as appropriate.

cc: Messrs. Lejeune Ritchie Coulter Mrs. Audifferen

CBGavino:ia

# The Rockefeller Foundation

1133 AVENUE OF THE AMERICAS, NEW YORK, N.Y. 10036

CABLE: ROCKFOUND, NEW YORK TELEPHONE: (212) 869-8500

December 8, 1975

Dear Mr. Ritchie,

Many thanks for sending me the very complete material on the most recent activities of the Consultative Group. I am enclosing a copy of the article which will be appearing in RF Illustrated (current issue enclosed). If you and Mr. Baum have any changes, please call me soonest ? Again, thank you,

Sincerely yours,

Henry Romney

Director

Information Service

Mr. Daniel Ritchie Deputy Executive Secretary Consultative Group on International Agricultural Research 1818 H St., N.W.

Washington, D.C. 20433

INCOMING MAIL DIG

1975 DEC 11 PM 5: 39

RECEIVED

RECEIVED
1975 DEC 11 PN 5: 39
INCOMING MAIL UNIT

2

Mr. Harry E. Walters
Assistant Executive Director
United Nations World Food Council
Via delle Terme di Caracalla
00100 Rome
ITALY

December 3, 1975

Dear Harry

Further to Mr. Lejeune's letter of November 21, I am enclosing, as you requested, information on the current and past levels of funding of the CGIAR and the Integrative Report of July 11, 1975 which shows in general terms the direction of research emphasis as reflected in the allocation of funds. Also enclosed is a copy of the Evenson Report on Investment in Agricultural Research. I hope you find these materials useful.

Regarding the recruitment of new staff, I have passed along your letter to Jim Road in the Personnel Department and to Jim Fransen of Agriculture and Rural Development Department, who may be able to suggest some candidates. As you may know, we do not ourselves maintain a roster of candidates so I am afraid we ourselves are unable to help you directly.

You also asked to be kept advised of meetings of the Consultative Group. The International Centers Week is currently scheduled for July 26-30, 1976 and we would be very pleased to have someone from the World Food Council present at those meetings.

I will be sending you shortly the informal summary of proceedings of our most recent Consultative Group meeting in October, which identifies some of the matters to be discussed next July.

Sincerely yours,

c.c. Messrs. Roan and Fransen with incoming

Daniel Ritchie
Deputy Executive Secretary

DawielRitchie/ms/File T

November 25, 1975

Mr. Lal Karamchandani Director, Farm Information Unit Directorate of Extension Ministry of Agriculture and Irrigation Shastri Bhavan New Delhi, India

Dear Mr. Karamchandani:

Thank you for your letter of September 17, 1975 to Mr. Leveune regarding the work of the Farm Information Unit of the Ministry of Agriculture and Irrigation of the Government of India.

Attached is a list of agricultural research centers supported by
the Consultative Group on International Agricultural Research (CGIAR)
to whom you could write directly regarding your farm communications
project. In particular you might find the activities of the International
Crops Research Institute for the Semi-Arid Tropics (ICRISAT) of particular interest.

Thank you for your interest in the CGIAR.

Sincerely,

Carlos B. Gawino

November 21, 1975

Mr. Harry E. Walters Assistant Executive Director United Nations World Food Council Via delle Terme di Caracalla 00100 Rome, ITALY

Dear Harry:

Thanks very much for your letter of November 13. I am on very point of leaving this evening on a long trip, so I am handing your letter over to Dan Ritchie who, as you know, is my Deputy, and he will give you the information you have asked for.

As to suggestions for people for you to consider for your staff, I would also have Dan look into that. But before I go I will make your interest known to Jim Roan in the Bank's Personnel Department, and emphasize to him that I would hope the World Bank would help you locate the right kind of people. Naturally, I and the others in the CGIAR Secretariat will, of course, do our best to make suggestions to you from those whom we may know.

Sorry this is not very substantive, but I am already on the run.

Best wishes,

Yours sincerely,

Michael L. Lejeune Executive Secretary

(dictated but not seen by Mr.Lejeune)
MLLejeune:ia
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# world food council conseil mondial de l'alimentation consejo mundial de la alimentación

**HEADQUARTERS** 

Via delle Terme di Caracalla 00100 ROME

Cable: FOODAGRI ROME Telex: 61181 FOODAGRI Telephone: 5797

**NEW YORK LIAISON OFFICE** 

U.N. Headquarters **NEW YORK, N.Y. 10017** 

Telephone: (212) 754 - 1234

Rome. 13 November 1975

Dear Michael,

I see from the Bank's press release that the donor members of the CGIAR will be providing \$64 million for the centers next year. Congratulations. I wonder if you have something already prepared which could give us some perspectives on how this compares with past levels of funding, on an annual basis -- since the centers started and since the CGIAR was inaugurated -- and an indication of direction of research emphasis as reflected in the distribution of funds.

I would also appreciate knowing when CGIAR meetings are to be held and whether you feel a World Food Council presence or input would be useful. John Hannah has assigned me the production area to look after in the secretariat and this includes research, so I am especially interested.

My major reason for writing, however, is that the secretariat is in need of competence in the food production field and we are looking for two people. Both would need to be flexible and broadly knowledgeable about food, but one needs to be especially knowledgeable about water and soils (including irrigation, drainage, basin development, etc.) and the other needs to have a solid footing in the production process as it relates to research, technology, seeds, inputs, etc.

In general the kind of thing that will be done by the secretariat is the following:

- 1) Following closely the programmes and policies of agencies and governments in the major subject areas covered by resolutions of the World Food Conference;
- 2) Drawing from a careful appraisal of these actions and policies conclusions about how these efforts can be better coordinated and developing suggestions for improvements to help guide Council discussions on these subjects; ./..

Mr. Michael L. Lejeune Executive Secretary CGIAR World Bank 1818 H Street, N.W. Washington, D.C. 20433

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# COMMUNICATIONS

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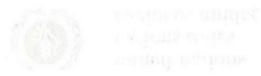
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- Preparation of specialized reports dealing with specific food problems as required by the Council;
- 4) Preparation of documentation for Council meetings which occur once a year and focus on a limited number of key issues related to food; and
- 5) Participating in the analysis of and development of overall strategies for food production.

For very practical reasons, it is important that additional people hired by the Secretariat be from Latin America, West Africa or other developing countries. At the same time however our staff is small and will never be large, so we have to be very selective.

At present we are only able to consider potential staff members on a consultancy basis for a few months with a view toward a longer term of assignment once our budget is established. We are interested in both bright young people or those with well established capabilities and more experience. The Council is located in Rome where staff members would be expected to reside. There is room for flexibility with respect to salary and conditions of employment within the general U.N. system which would apply.

I hope you can suggest some suitable candidates and also institutions you think might be good sources of candidates. We are quite serious about finding these people as soon as possible so I would appreciate an early reply.

One last request. Jim Greenfield, a staff member, is interested in obtaining a copy of "Investment in Agriculture Research, A Survey Paper" by J. Evenson, CGIAR, October 1973. We would be grateful if you could send us a copy. In this connection, the concern of the Food Council with research is the broad lines of how it is developing, how the emphasis is changing and what the research community thinks about these issues. To the extent there are reports or studies dealing with these issues, I would like to receive them.

Sincerely,

Harry E. Walters Assistant Executive Director

Havey

Mr. Roger H. Stevens 155 Walnut Drive Apt. 102 St.Charles Illinois 60174

November 4, 1975

Dear Mr. Stevens:

Now that I have returned to Washington, I wanted to write further to my letter of September 30, 1975 regarding your recent offer to describe your proposals for swine production systems.

Mr. McNamara had asked me to reply to your letter as I am the Executive Secretary of the Consultative Group on International Agricultural Research. The CGIAR is an organization of thirty-five members, whose primary objective is to support international agricultural research. The Group is presently providing finance to twelve international agricultural research centers and programs throughout the developing world. Their primary purpose is to develop improved varieties of food crops, more efficient means of animal production and improved systems of farming in the tropics, to help meet the food requirements of the developing world.

I am enclosing for your information a brochure describing the activities of the international centers supported by the Consultative Group.

You will note that there are two international centers whose basic mandates involve research on livestock production systems and diseases of cattle in Africa. In addition there is research being carried out in Latin America on beef and swine production systems and a new institute in the Middle East will be conducting research on production systems, including sheep production in the low rainfall areas.

As you can see, the Consultative Group takes an interest in new technologies in animal production, particularly for the benefit of producers in the less developed countries. While the CGIAR does not directly finance research in the developed world nor any kind of production and related investment, we do maintain an interest in putting individuals with research proposals in contact with the international centers performing research in related areas.

Toward this end, I am attaching a list of the Directors and addresses of the international agricultural research centers, and I suggest you may wish to contact one or two of them if you feel that your ideas might be of interest to them.

We would also be pleased to discuss your proposals should you be in Washington. Either the Scientific Adviser to the CGIAR, John Coulter or the Livestock Adviser of the World Bank, Don Stoops, would be available to talk with you.

Thank you for your interest in the problems of overcoming world hunger.

Sincerely yours,

(signed) Michael L. Lejeune

Michael L. Lejeune Executive Secretary

c.c. Messrs. Coulter & Stoops

DanielRitchie/ms/File T

Institute for Food and Development Policy

Post Office Box 57 Hastings-on-Hudson, New York 10706

(914) 478-2575

Co-Directors:
Joseph D. Collins
Frances Moore Lappe

October 15th, 1975

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

Dear Sir or Madam:

We would like to obtain a copy of the paper <u>International Research</u> in Agriculture.

Your help would be most appreciated.

Sincerely,

Joseph Collins

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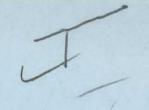
# CSIRO

THE CUNNINGHAM LABORATORY

Division of Soils

MILL ROAD, ST. LUCIA, QLD. 4067. CABLES TROPRESEARCH BRISBANE.

AWM/CRT



13 October 1975

Consultative Group on International Agricultural Research c/- World Bank WASHINGTON, D.C., U.S.A.

Dear Sirs,

I would appreciate very much receiving a copy of your publication "International Research in Agriculture" (N.Y., 1974).

Thanking you,

Yours sincerely,

ALAN W. MOORE

(OFFICER-IN-CHARGE)

# **AEROGRAMME**

BY AIR MAIL

PAR AVION

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### CSIRO

THE CUNNINGHAM LABORATORY



Consultative Group on International
Agricultural Research
c/- World Bank
WASHINGTON, D.C. U.S.A.

Approved by Postmaster-General for acceptance as Aerogramme No. 2

COUNTRY OF DESTINATION

"ARCHER" AEROGRAMME Regd. Trade Mark

#### SENDER'S NAME AND ADDRESS

Dr. A.W. Moore

FROM: THE CUNNINGHAM LABORATORY, CSIRO,

MILL ROAD, ST. LUCIA, QUEENSLAND,

AUSTRALIA. 4067

POSTCODE

TO OPEN SLIT HERE FIRST-

CSIRO

THE COOPER LABORATORY

Division of Tropical Agronomy

ST. LUCIA. OLD. 4067. CABLES TROPRESEARCH BRISBANE AUSTRALIA.

EMH/AGE:JM

13th October, 1975.

Dr. John K. Coulter, Scientific Adviser, CGIAR, 1818 H Street, N.W., WASHINGTON, D.C. 20433, U.S.A.

Dear Dr. Coulter,

#### LIAISON IN TROPICAL AGRICULTURAL RESEARCH

I have just returned to Australia from overseas and must apologise for the delay in replying to your letter of 9th May, responding to my suggestion of improved liaison between this Division of CSIRO and people overseas with similar research interests.

Thank you for outlining the way in which the CGIAR system operates. You will be interested to know that I have written to the Directors of the individual Centres and received a generally favourable response to the suggestion of improved liaison. I am hoping to arrange for more visits both by our people to the Centres and by scientists from the Centres to use to discuss our work. However, at present our ability to travel overseas is greatly restricted by a reduction in overseas travel by Australian Government employees, which was one of the austerity measures in the recent budget. The effect in my Division is to cut our quota of overseas visits from five to two. However, I am actively encouraging the Centres to send people to visit us. I have also written to Sir John Crawford but I have not yet been able to have a discussion with him because we have both been away from Australia in recent months.

I note your suggestion about the possibility of collaborating with the International Board for Plant Genetic Resources. This is very much in line with ideas we are developing to formalise our responsibility as a centre for important groups of pasture grasses and legumes. We have in effect been acting as a main centre for distribution of this material for some years and devoting significant resources to this work.

Again thanking you for your helpful comments and advice.

With kind regards,

Yours sincerely,

E. M. Hutton

E.M. HUTTON (GW)
CHIEF OF THE DIVISION

(DICTATED BY DR. HUTTON AND SIGNED IN HIS ABSENCE.)

# AEROGRAMME BY AIR MAIL . PAR AVION

# CSIRO

THE CUNNINGHAM LABORATORY



Dr. John K. Coulter,

Scientific Adviser,

CGIAR,

1818 H Street, N.W.,

WASHINGTON. D.C. 20433, U.S.A.

Approved by Postmaster-General for acceptance as Aerogramme No. 2

COUNTRY OF DESTINATION

SENDER'S NAME AND ADDRESS

DR. E.M. HUTTON
FROM: THE COOPER LABORATORY, CSIRO,

LAWES, QUEENSLAND,

AUSTRALIA. 4345

POSTCODE

TO OPEN SLIT HERE FIRST-

Mr. Roger H. Stevens 155 Walnut Drive, Apt. 102 St. Charles, Illinois 60174

Dear Mr. Stevens:

Mr. McNamara has asked me to respond to your letter to him of September 8. I have been away and now must go away again for a few days. When I return to Washington next week, I shall respond substantimely.

Sincerely,

(signed) Michael L. Lejeune

Michael L. Lejeune Executive Secretary

MLLejeune:ia

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 September 29, 1975 Mr. Robert Goldich Editorial Assistant Rosdale Press Inc. Organic Park Emmaus, Pennsylvannia 18049 Dear Mr. Goldich: Thank you for your letter of August 27 to Mr. Lejeune regarding information on the Consultative Group on International Agricultural Research (CGIAR). I am attaching what is available here in the CGIAR: (a) Brochure describing the activities of the CGIAR; (b) Annual reports for 1974 of the following International Agricultural Research centers: International Potato Center (CIP) International Maize & Wheat Improvement Center (CIMMYT) International Board for Plant Genetic Resources (IBPGR) International Crops Research Institute (IRRI) International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) International Institute of Tropical Agiculture (IITA) West Africa Rice Development Association (WARDA) (c) List of Center Directors and address of centers where information could be obtained directly. I hope the information we are sending would be useful for your purpose. Yours sincerely Carlos B. Gavino Enclosures

Dr. Leonard Stoloff
PDA, HFF 415
200 C Street, N.W.
Washington, D. C. 20204

Dear Mr. Stoloff:

You asked me the other day when at the various International Agricultural Research Centers might be interested in methology of protein evaluation. I am afraid that in the absence of our Scientific Adviser, Dr. Coulter, I cannot give you a definitive reply. I enclose, however, the names and addresses of the Directors General of those Centers concerned with developing food crops.

I also enclose for your information a copy of the brochure on the Consultative Group on International Agricultural Research

Yours sincerely,

Michael L. Lejeune Executive Secretary

Enclosures

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# OFFICE MEMORANDUM

TO: Files

DATE: September 25, 1975

FROM: Michael L. Lejeune

SUBJECT: SWEDEN - Visit by Mr. Janerik Larsson of

Sydsvenska Dagbladet

Mr. Janerik Larsson, Political Editor of Sydsvenska Dagbladet, came to see me about the CGIAR. He already knew a fair amount about the CGIAR system and had visited IRRI in recent times. He proposed to visit CIAT before long. He explained that he had a personal interest in the activities of the CGIAR in addition to his general interest as an editor of Sydsvenska Dagbladet. I assumed that he intended to write a series of articles of the CGIAR system.

Our discussion was general.

hilippen

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#### STATE OF INDIANA

EXECUTIVE DEPARTMENT
INDIANAPOLIS 46204

September 22, 1975

Mr. Michael L. Lejeune
INTERNATIONAL BANK for
RECONSTRUCTION & DEVELOPMENT
1818 "H" Street, N.W.
Washington, D. C. 20433

Dear Mike:

Our visit to South America is over, and a most successful venture it was in every way.

We were all agreed that a very high point, probably the high point, in an altogether most interesting trip, was our visit to CIAT. John Nickels was the very best of hosts, both gastronomically as well as intellectually. The work going on there and throughout the world must certainly be the most important of anything being done to preserve the world.

That activity is not a part of our job, but I am reinforced in my conviction that our part of the world's food problems is to attempt to assure that ample specialized agricultural equipment is available, and that assistance in education and extension service type of work is provided. Naturally, we are interested in expanding Indiana's economy and its job opportunities, but it intrigues me that there is room both for that, as well as participation in more humanitarian activities.

Thanks for causing our visit to be just that much more meaningful.

ROBERT D. ORR Lieutenant Governor

RDO: im

P.S. I almost forgot that, by strange coincidence, our Director of International Trade, Tom Hudson, sat next to a gentleman who got on the plane at Lima, who was just then leaving the potato research center for the U.S.A. He was all smiles and enthusi asm on account of the breakthrough on maturity time for potatoes, and even had photographs of the "sixty day" potato.

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September 22, 1975

Mr. Mohd Abdul Wali c23/208 M.I.G. Colony Gandhinagar, Bandra (East) BOMBAY-400051 (India)

Dear Mr. Wali:

Thank you for your letter of August 19 regarding your request for information on the Consultative Group on International Agricultural Research (CGIAR).

I am sending you a brochure that describes the activities of the Consultative Group and the international agricultural research centers which it sponsors.

I hope the brochure would give you the information you seek.

Sincerely,

Carles B. Gavino

Attachment

CBGavino:ia Files:T

September 22, 1975

Mr. William Lineherry United Nations Development Programme 866 United Nations Plaza New York, N. Y. 10017

Dear Mr. Lineberry:

I am attaching a letter from Mr. Brian Webster, Deputy Executive Secretary of the Technical Advisory Committee (TAC) requesting a number of CGIAR brochures to be distributed to all FAO member countries in FAO's forthcoming biennial conference. Also attached is my reply to his letter.

I would appreciate it, if you could send him the number of brochures he requires.

Due to the numerous requests of delegates to the International Centers Week last July, the CGIAR Secretariat is running low of the brochure in English. Would you please arrange to have a box of about 200 sent to me? Please let me know if there are any problems with these requests.

With best wishes,

Sincerely,

Carlos B. Gavino

Attachment

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Bistribution: Mr. Lejeune

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Lal Karamchandani, Director Farm Information.

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GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND IRRIGATION (Department of Agriculture)

DIRECTORATE OF EXTENSION

शास्त्री भवन

Shastri Bhavan

नई दिल्लो

New Delhi, the 17th September, 1975.

Does Mr. Lejeune,

I have pleasure in enclosing a copy of 'FIU Newsletter', through the columns of which we would try to attempt to give a graphic account of its multifarious development support communication activities of the restructured Farm Information Unit in the Ministry of Agriculture and Irrigation.

From time to time, we would highlight our communication problems and sometimes even spotlight the achievements. For this we bank upon your comments, suggestions and yet, cooperation to make it an effective inter-personal communication vehicle.

In case you have any interesting item, please send it on to us, for we want this to be really a two-way traffic between you and us.

With best wishes,

Sincerely yours,

(Lal Karamchandani).

Mr. Michael L. Lejeune, Executive Secretary, Consultative Group on International Agricultural Research, C/O 53 Lodhi Estate, New Delhi. RECEIVED

1975 SEP 30 PM 2: 42

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TO THE TANK THE PARTY.

# NEWSLETTER

From

LAL KARAMCHANDANI DIRECTOR

Farm Information Unit, Directorate of Extension
Ministry of Agriculture and Irrigation
Shastri Bhavan
New Delhi-110001



### INTRODUCING FIU!

The Farm Information Unit in the Directorate of Extension, Ministry of Agriculture and Irrigation is, perhaps, the country's only all-media, fully integrated, development support communication media unit With a technical aff of about 150 trained communicators, it provides a total suformation support to various programmes and

Lators, it provides a total suformation support to various programmes and projects operated by all Technical Divisions in the Ministry and, at the same time, gives technical guidance to the State Agricultural Information Units.

This it does through various channels at its disposal as also through other public and private owned media sources. Essentially, it operates through two main channels.

- a) The print medium
- b) The audio-visual medium

In the first category, it brings out the largest number of publications in the country by way of magazines (four monthlies - two in English and two in Hindi), leaflets and pamphlets, bulletins and text books, posters and charts, etc. for extension workers. In the audio-visual medium, the Fam Information Unit operates through three main channels: the film (it produces with the help of the Ministry of Information and Broadcasting about 40 reels of instructional, motivational and research films every year) exhibitions (mobile and stationary about 150-200 a year) and by way of producing audio-visual training materials like film-slides and film-strips in large numbers for supply to Famers Training Centres, Extension Training Centres and State Agricultural Information Units.

Recent acquisition of various audiovisual equipment by the Central and State Agricultural Information Units through the UNDP has provided yet one more avenue to the Farm Information Unit by conducting Information Workshops and training camps. Here the staff at State and District levels are trained in the use and maintenance of various audio-visual equipment.

The Farm Information Unit is also playing an active role in the SITE Project by way of coordinating the activities of the State Departments containing the six clusters, with those

of ISRO and AIR for the production of agricultural programmes which are shown on the satellite television. The Farm Information Unit is planning in a big way to ensure that there is immediate and effective follow-up of these programmes.

The Farm Information Unit is also planning to reorient these information programmes so as to reflect the new strategy of agricultural development by way of providing quick, authentic and attractive information support to the various training programmes and special projects like DPAP, SFDA, Command Area Projects. It is also planning in the next two months or so to produce attractive folders/hand-bills in large numbers containing 'package of practices' for various crops identified by the Crops Division of the Ministry.

With its technical expertise and the modem printing facilities and AV equipment at its disposal, the Central Farm Information Unit is now poised to provide substantial communication support through all media to any project or programme or campaign identified by the Ministry.

### **DESTINATION SITE!**

Day: 1st August, 1975, Time: 6.28 P.M.
Place: Mahapura Village some 20 kms from Jaipur, the capital city of Rajasthan.

Shri Harideo Joshi, Rajasthan's Chief Minister, switches on a specially manufactured T.V. receiving set and the bright and sharp picture of the Prime Minister Indira Gandhi comes on the screen telecasting through satellite direct to over 2,400 villages spread over in six clusters in six different states of India.

With this symbolic act India entered a new wonderful world of electronic media. This was even more symbolic in as much as perhaps for the first time in the history of mankind the latest and the most sophisticated invention of the man was being utilised for the benefit of less affluent sections of the society living in typical Indian villages.

SITE is the Satellite Instructional Television
Experiment programmed to last for one year. Perhaps
no other experiment has evoked such excitement and
response from both the experts and the laymen as has
the SITE, and for good reasons too!

India is the country of villages - almost half a million of them - and till very recently all the progress and all the development used to percolate down from the cities and the towns. Here was one experiment which was exclusively meant for villages themselves. For, the terrestrial T.V. beams only some limited programmes for limited time on limited days to villages.

The experiment is also unique in other ways. It is primarily instructional though entertainment has not been lost sight of. Programmes totalling over 1,300 hours are to be telecast in four languages - Hindi, Telugu, Oriya and Kannada.

No other experiment has undergone such intensive preparations in making the programmes timely, purposeful and educative. Villages after villages were thoroughly

researched and special audience profiles prepared by trained teams of researchers. Its programmes are prepared in advance, previewed by the village audiences and recast in the light of their reactions.

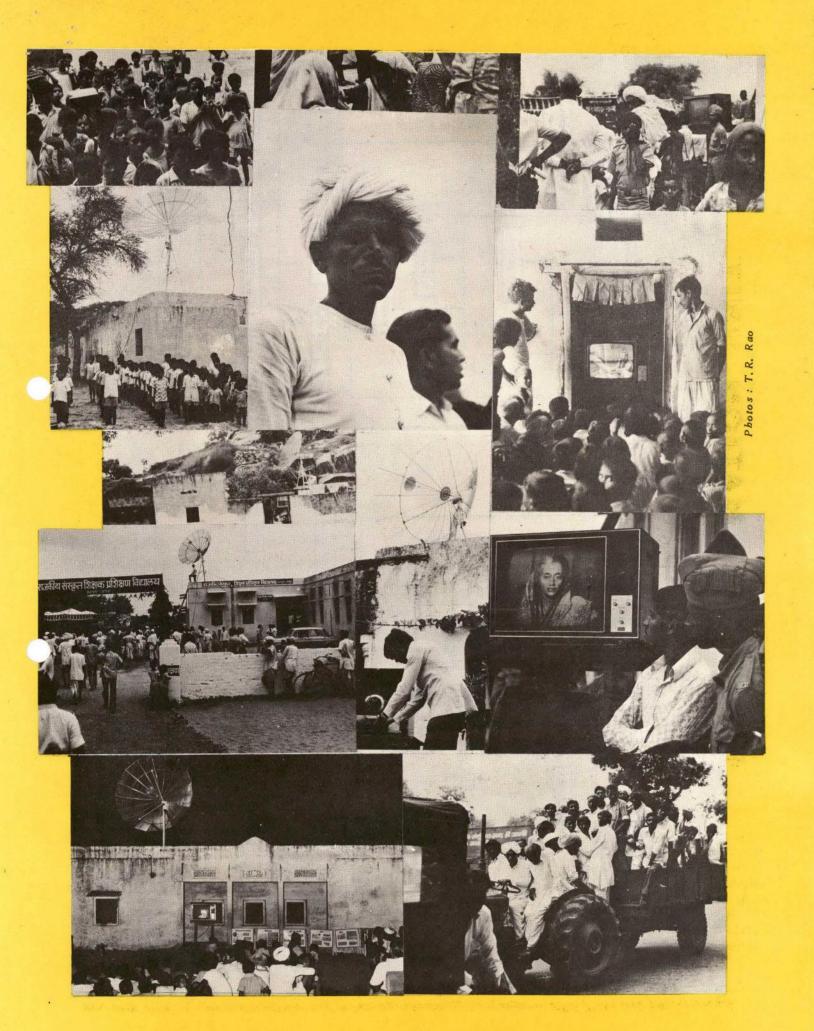
Thorough preparations were made to ensure the smooth working of T.V. sets - often a weak point in a mass educational programmes involving the use of mass media. Trained technicians are kept in readiness so as to repair or replace any faulty receiving set within the shortest possible time.

There would be lessons for primary school children, training for teachers, instructions for farmers, advice on family planning and nutrition, teaching of occupational skills, and the value of national integration. This is as full a plate as any!

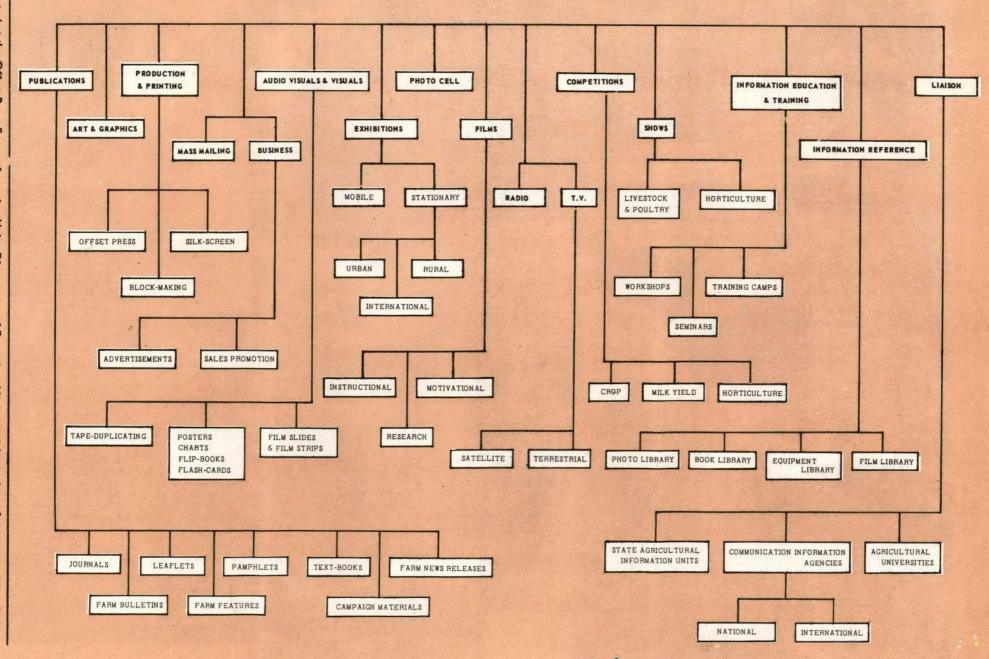
SITE offers both challenges and opportunities.
Our country has embarked upon a costly experiment using the most sophisticated space technology in a relatively technologically primitive environment.

What are the chances of people who have had little or no acquaintance with the conveniences of modern living making a mental quantum jump of a kind and passing instantly from the bullock-cart and cowdung-age to the age of T.V. programmes beamed from space? Will exposure to the programmes for four hours a day for the duration of a year change their lives, their outlook, their horizons substantially or marginally? Will it cause them to try and make technological advancements in their immediate surroundings? Or will the presence of a T.V. set in areas characterised by ill-health, malnutrition, lack of education, and poor hygiene and sanitation be little more than a diversion from the routine tasks that must be gone through in the same old way?

These questions should at least partly be answered when SITE ends after a year, It is, after all, an experiment and its results will be keenly awaited.



#### FARM INFORMATION UNIT



September 10, 1975

Mr. Triloki Nath Saraf
Deputy Representative at the
United Nations
United Nations Headquarters
Suite 2258
New York, N.Y. 10017

Dear Mr. Saraf:

As we agreed over the 'phone last week, I am sending you the following documents that were discussed during the Consultative Group meeting last July:

- (1) Integrative Report of the Consultative Group on International Agricultural Research, July 11, 1975 (10 copies).
- (2) Terminology Paper on the Program Activities of the International Centers, July 17, 1975 (10 copies).
- (3) Progress Report as of May 7, 1975 on the International Centre for Agricultural Research in the Dry Areas (ICARDA), (4 copies).

The documents listed above are what are available here in the Secretariat. The Summary of Proceedings of the Consultative Group meeting will be available soon and I will send you copies as soon as these are ready.

If you have any further question I shall be glad to answer it.

Sincerely yours,

Carlos B. Gavino

CGIAR Secretariat

Attachments

ec: Mr. Oram (w/o attachment)

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# **Record Removal Notice**



File Title Consultative Group on Internat Resources [IBPGR] - 1984/198	ional Agricultural Research [CGIAR] - G-12 - In 6 Correspondence - Volume 3	nternational Board	for Plant Genetic	Barcode No. 1762396	
Document Date September 8, 1975	Document Type  Letter and resume	S			_
Correspondents / Participants To: Mr. Robert S. McNam From: Roger H. Stevens	ara, President, IBRD				<u></u>
	r a system to mass produce swine.				
Exception(s) Personal Information					
Additional Comments			accordance with The	above has/have been removed in World Bank Policy on Access to icy can be found on the World Bank n website.	
			Withdrawn by Shiri Alon	Date 22-Mar-16	*

September 5, 1975

Dear Mr. McLaren:

Thank you for your letter of August 7 to Mr. Lejeune regarding your request for CGIAR documents on a regular basis.

I am attaching the following documents:

- (a) Summary of Proceedings, International Centers Week, July 1974.
- (b) Summary of Proceedings, Consultative Group Meeting, October, 1974.
- (c) Brochure describing the work of the CGIAR.

As you know, we have just concluded the International Centers Week meetings for 1975. As soon as the summary of proceedings are prepared I would be glad to send you a copy.

I have also arranged for your name to be placed on our mailing list for future reports of meetings of the CGIAR.

Best regards,

Sincerely yours,

Daniel Ritchie Deputy Executive Secretary

Mr. L. E. McLaren Chief Technical Officer Ministry of Agriculture Hope Gardens Kingston 6, Jamaica

Enclosures

CBGavino:ia

Form No. 27 (3-70)

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

#### OUTGOING WIRE

TO: NICKEL CINATROP CALI DATE: SEPTEMBER 5, 1975

CLASS OF

SERVICE: TELEX NO. 396-5769

(Ext. 3592)

COUNTRY: COLOMBIA

TEXT:

Cable No.: UNDERSTAND DELEGATION FROM INDIANA HEADED BY LIEUTENANT GOVERNOR ROBERT ORR
WILL VISIT CIAT ARRIVING CALI EVENING SEPTEMBER TWELVE AND DEPARTING EVENING
THIRTEEN STOP ORR IS GOOD FRIEND OF MINE AND LAST JUNE EYE HAD OCCASION
DISCUSS CGIAR AND ACTIVITIES OF CENTERS WITH HIM STOP DELEGATION'S LATIN
AMERICAN TOUR IS DIRECTED AT COMMERCIAL OPPORTUNITIES, BUT EXPECT THEY WILL
FULLY UNDERSTAND IMPORTANCE OF RESEARCH IN DEVELOPMENT OF AGRICULTURAL SECTOR
STOP WILL APPRECIATE ANYTHING YOU CAN DO TO MAKE THEIR VISIT USEFUL TO THEM
AND TO CGIAR REGARDS

LEJEUNE

**NOT TO BE TRANSMITTED** 

AUTHORIZED BY:

NAME

Michael L. Lejeune

DEPT.

CGIAR Secretariat

SIGNATURE

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Michael L. Lefterne

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COMMUNICATIONS

### CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH TECHNICAL ADVISORY COMMITTEE

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Via delle Terme di Caracalla, 00100 Rome, Italy
Cables: FOODAGRI ROME - Telex: 61181 FOODAGRI
Telephone: 5797

PR 3/3 General CF 5/1

September 3, 1975

Dear Carlos:

Thank you for your letter of 20 August to Mr. Oram enclosing the verbatim transcripts of the CGIAR July 31 meeting. Your prompt response is much appreciated.

I have been asked to request additional copies of the CGIAR Brochure on "International Research in Agriculture" as it has been decided that this document should be distributed to all member countries at our forthcoming biennial Conference for information. In order to cover the distribution of two copies per delegation, we would appreciate receiving 250 copies in English, 100 copies in French, 100 copies in Spanish, and 50 copies in Arabic.

Please let me know if these quantities are available and if so perhaps you could dispatch them by pouch through the FAO Washington office. I should be grateful also to know if there is likely to be any charge involved, especially in the event of your having to request reprinting.

I would like to record my thanks for your assistance to the TAC Secretariat during the July meetings.

With best regards,

Yours sincerely,

B. N. Webster

Deputy Executive Secretary Technical Advisory Committee

Mr. Carlos B. Gavino
Consultative Group on International
Agricultural Research
Room E 1039
1818 H Street, N. W.
Washington, D.C. 20433
U.S.A.

RECEIVED 1915 SEP 10 PM 2:59 INCOMING MAIL UNIT Washington, D.d. 1943. lalu A Sireet, D. m. in, contos B. Gavene Teamheal Advisory Constates B. H. HONGVOY Years sincerely, With best regards, durang the July meetings. I would like to record my thanks for your applicance to the ThO Secretarist THE PURE BASHE OF LOND PERSON OF DECEMBER LEBERTHETHE. grateful also lo lovow if there is likely to be any onerys involved, especially on the dispance at on by noted through the SAC mandapleon office. I smould be the Promote, 100 copies in Samilar, said for copies in printe. per delegation, To tould ampreciate receiving the dopies in Lagitsky 100 software Conference for information. In order to cover the distribution of the copies ment shortd be distributed to all asmbor computer at our furtheoming biomakal "International Research in Agriculture" as at has been decided that this docuolaved. transcripts of the CHIN July Di meeting. They prompt response is and dejec-Thank you for your learns of 20 August to Art their brolocker that very the Mear derlos: IN 3/3 General OF 5/1

September 3, 1975

Dear Mr. Small:

Enclosed as promised is the information you requested about the Consultative Group on International Agricultural Research. When you have had a chance to read the documents, I would be pleased to answer any questions you may have.

Thanks for your interest in the CGIAR.

With best wishes,

Sincerely yours,

Daniel Ritchie Deputy Executive Secretary

Mr. Errol Small Agricultural Attache Embassy of Trinidad and Tobago 1708 Massachusetts Ave., N.W. Washington, D.C. 20036

Enclosures

DRitchie:ia Files:T Wh. Coulter Hold

August 29, 1975

Dear Vern:

Thank you for your letter of August 11 and for the 50 copies of the ADC/RTN Seminar Report. I shall distribute these to members of the Consultative Group; I may need additional copies and if so, will let you know.

With best regards,

Yours sincerely,

John K. Coulter Scientific Adviser

Dr. Vernon W. Ruttan
President
The Agricultural Development Council, Inc.
630 Fifth Avenue
New York
New York
10020

JKCoulter:apm

Juli T

# RODALE PRESS INC., ORGANIC PARK • EMMAUS, PENNA. 18049

August 27, 1975

Mr. Michael Lejeune Executive Secretary Consultative Group on International Agricultural Research World Bank Washington, D. C.

Dear Mr. Lejeune:

Rodale Press is currently engaged in a comprehensive study of international agricultural research. Quite a bit of our attention is focused on the work of the various research institutions funded by CGIAR.

Dr. Guy Baird of A.I.D. suggested I write you to see if we could get a copy of the proceedings of the recent meeting (July-August, 1975) of the center directors that was held in Washington, D.C.

If such proceedings are not available, or will not be available in the future, is there any information you can give us regarding agricultural advances that were reported and priorities for CGIAR that were discussed at the meeting.

Sincerely yours,

Robert Goldich Editorial Assistant

Robert Holdich

to Robert Rodale

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#### FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Via delle Terme di Caracalla, 00100 - ROME PR 3/3 General Cables: FOODAGRI ROME

Telex: 61181 FOODAGRI 20th August Telephone: 5797

Ref

Dear Mr. Saraf,

Thank you for your letter of the 12th August but I am afraid I am going to have to give you a somewhat disappointing reply. In the first place FAO does not provide the Secretariat for the Group itself but only for its Technical Advisory Committee; the Secretariat of the Consultative Group is provided by the World Bank.

I will, of course, be happy to send you a copy of the Report of the TAC as soon as this is completed which will certainly not be until the middle of September. The Consultative Group Report is prepared by its Secretariat and I doubt whether this will be ready much earlier as the meeting was a long one. I am copying this letter to Michael Lejeune who is the Executive Secretary of the Consultative Group and asking him herewith to send you two sets of the papers presented at the last meeting for your information. I think this would be much quicker than us sending them through the pouch especially as some lengthy documents would have to be photo-copied in order to do so as I do not have more than two complete sets myself. If you have any difficulties I suggest that you telephone Mr. Lejeune at the Bank, (202) 477 3592.

I hope that you are finding life pleasant in New York,

With very best wishes,

Yours sincerely,

P.A. Oram Director Research Development Centre

Mr. Triloki Nath Saraf
Deputy Representative at the
United Nations
United Nations Headquarters - Suite 2258
New York, N.Y. 10017

U.S.A.

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### ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE



ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA Y LA ALIMENTACION

#### FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Via delle Terme di Caracalle, 00100 - ROME FIX 3/3 General.

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I hope that you are finding life pleasant in New York,

With wary best maked,

Yours sincerely,

P.A. Oven Director Research Devalopment Centre

Mr. Priloid Math Saraf Deputy Representative at the United Mations United Mations Headquarters - Suite 2298 Sew York, M.Y. 10017

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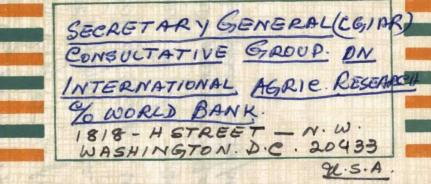
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### The Agricultural Development Council, Inc.

630 Fifth Avenue, New York, N.Y. 10020

Established by John D. Rockefeller 3rd

Tel: 212-757-8566 • Cable: Agridevel New York

August 11, 1975

Mr. John Coulter Consultative Group on International Agricultural Research, Secretariat IBRD 1818 H Street, N.W. Washington, D.C. 20433

Dear John:

Under separate cover we are sending you 50 copies of the ADC/RTN <u>Seminar Report</u> on "Resource Allocation and Productivity in National and International Agricultural Research Systems." The report represents a summary of the discussion at last January's Airlie House Conference.

You may want to make copies available to members of the Consultative Group. If additional copies are needed, please let us know.

I also wanted to thank you for your personal contribution to the success of the Conference.

Sincerely yours,

Vernon W./Ruttan

President

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COMMUNICATIONS SECTION

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Sent 22 lest

Mr. Yudelman Room D 823

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Associate Director, Office of Agriculture
Bureau for Technical Assistance
U.S. Agency for International Development
320, 21st Street, N. W.
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13

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Mr. Peter Oram, Executive Secretary Technical Advisory Committee Food and Agriculture Organization of the United Nations Via delle Terme di Caracalla Rome 0100, Italy

Mr. J. F. Yriart
Assistant Director-General
Development Department
Food and Agriculture Organization of the
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Rome 0100, Italy

. 1 )

Dr. R. Olembo United Nations Environment Programme P. O. Box 30552 Nairobi, Kenya

Malaysian Agricultural Research and Development Institute Serdang, Selanger Malaysia

Attention: Director

Head, Technical Assistance Preparation Division - International Technical Assistance Department Ministry of Foreign Affairs



Research and Training Network

### a seminar report

## Resource Allocation and Productivity in National and International Agricultural Research

THOMAS M. ARNDT and VERNON W. RUTTAN

This seminar report is based on a Conference on Resource Allocation and Productivity in National and International Agricultural Research held at Airlie House, Virginia on January 26-29, 1975.

The conference was sponsored by the Agricultural Development Council under its Research and Training Network Program. The ADC/RTN program is funded under a contract with the U.S. Agency for International Development. Support for international participation in the conference was also provided by the International Bank for Reconstruction and Development.

Single copies of this report are available at no charge from the Agricultural Development Council. A book based on the papers presented at the conference will be published by the University of Minnesota Press in 1976.

> Abraham M. Weisblat Director A/D/C Research and Training Network

#### Introduction

Within the last decade significant steps have been taken to narrow the agricultural technology gap among countries. A new set of international agricultural research centers have been institutionalized. A number of developing countries have made substantial progress in strengthening national agricultural research capacity. On a global basis it is estimated that expenditures on agricultural research, in constant 1971 U.S. dollars, rose from approximately \$1.3 billion in 1959 to \$3.8 billion in 1974. In the less developed countries of Latin America, Africa and Asia, the increase was from an estimated \$141.0 to \$957.0 million.

The effect of this surge in research investment was dramatized by the Green Revolution. But the process of building research capacity in developing nations was less dramatic. Years of agricultural development effort, based on the extension of existing or imported technology, or on research directed primarily to increasing productivity in export crops, had revealed the need to develop more broadly based agricultural research capacity in tropical countries.

The organization of two international research institutes in the early 1960's, the International Rice Research Institute (IRRI) in the Philippines and the International Maize and Wheat Improvement Center (CIMMYT) in Mexico, was part of a wider contemporary re-focusing on research as a

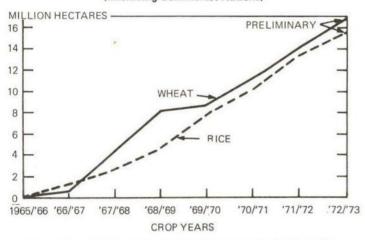
necessary instrument of agricultural productivity change in LDC's.

The ensuing story is well known. CIMMYT and IRRI developed short-strawed, fertilizer-responsive, high-yielding wheat and rice varieties which were rapidly adapted and adopted in parts of Asia and produced a take-off in grain production popularly known as the Green Revolution.

In 1972/1973, 30 million hectares of crop land in Asia were planted to high-yielding wheat and rice varieties adapted from IRRI'S AND CIMMYT'S research (Tables 1.1 and 1.2). The packages of technology derived from the work of these two institutes are estimated by one scholar to have added \$1.0 billion to Asian grain production in 1972/1973.\*

With the success in wheat and rice, support for internationally sponsored agricultural research mushroomed. Crawford identified 9 international research institutes and two other international programs, in operation or in the process of being established in the tropics (Table 2). Their budgets, which were \$4 million in 1969, totalled \$34 million in 1974 and are \$46-48 million in 1975.

Figure 1.
ESTIMATED HIGH-YIELDING WHEAT AND RICE AREA,
ASIA AND NORTH AFRICA, 1965/66 to 1972/73
(Excluding Communist Nations)



Source: Dana G. Dalrymple, "Development and Spread of High-Yielding Varieties of Wheat and Rice in the Less Developed Nations," Foreign Agricultural Economic Report No. 95 (Economic Research Service, U.S. Department of Agriculture, Washington, D.C., 1974).

The international institutes were originally conceived to back up the developing countries' own research programs. The attention accorded the institutes during the Green Revolution tended to obscure this relationship for awhile. It has increasingly re-asserted itself as the complexity of the research task facing developing countries has been recognized. The conception that began to grow in the 1960's—that effective research capacity in developing countries is a primary means to raise agricultural productivity—is

now widely shared. Investment in agricultural research in developing countries has grown rapidly in recent years. The World Bank, USAID, and other donors have moved agricultural research up their lists of priorities for assistance.

As the agricultural research system has continued to expand, research productivity and research resource allocation have become important issues for development planners and for science managers. One purpose of the Airlie House Conference was to examine recent evidence on the returns to investment in national and international agricultural research systems. A second objective was to explore the relevance of social and economic factors for the organization and management of national and international research systems. Technical issues related to the measurement of research productivity, the planning of research programs, and the management of research systems were also discussed.

The conference drew together fifty-four natural scientists, social scientists and administrators from research and international agencies—some of them wearing more than one hat. This seminar report attempts to systhesize (but not summarize) the Conference's twenty-five papers and three days of discussion\*.

#### The Conference Agenda

The first session was devoted to a series of studies of the organization and productivity of national research systems in both developed and less-developed countries. It includes a paper on cycles in research productivity and in international diffusion patterns for three commodities-sugarcane, wheat and rice (by Robert E. Evenson). There were two papers on returns to investment in agricultural research in developing countries-Columbia (by Reed Hertford) and India (By A.S. Kahlon, H.K. Bal, P.N. Saxena, and Dayanatha Jha). There were also two papers on the organization and productivity of research systems in developed countries-the federal-state system in the United States (by Willis L. Peterson and Joseph C. Fitzharris) and the nationalprefectural system in Japan (by Yujiro Hayami and Masahatsu Akino). The papers in this session were summarized by Alain de Janvry. The model of the research process which de Janvry presented in his summary served as an organizing theme for discussion throughout the conference (see below).

The second session was devoted to a discussion of the impact of the new international research system on agricultural research capacity and research productivity. One way in which the new system of international agricultural research institutes exerts an impact on national systems is through the training of research scientists, technicians, and production specialists. The first paper in this session (by Burton E. Swanson) presented a comparison of the objectives and the performance of the CIMMYT and IRRI training

Based on 1972 world market prices and using a moderate factor to determine the portion of output growth resulting from new technology; from Dana C. Dalrymple, "Impact of the International Institutes in Crop Production," presented at Airlie House, Virginia Conference, January 26-29, 1975.

<sup>\*</sup> The authors wish to express their appreciation to Lowell S. Hardin, (Ford Foundation), M.G.C. McDonald Dow (National Academy of Sciences), and Fred Wittenbert (Parker Pen Company) for access to their conference notes in preparing this summary. We have also made liberal use of comments by other conference participants on an earlier draft of this summary.

Table 1.1 — Estimated area planted to high-yielding varieties of wheat in Asia and North Africa (in hectares)

	Country	Unit	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73
enia	ASIA									(Prelim)
1.	Afghanistan	Hectares		1,800	22,000	122,000	146,000	232,000	255,000	450,000
2.	Bangladesh	Hectares	_	-	-	8,400	9,100	13,500	15,000	21,450
3.	India	Hectares	3,000	540,900	2,942,000	4,792,700	4,917,600	6,480,000	7,861,400	10,236,800
4.	Iran	Hectares	-	-	-	10,000	90,000	250,000	277,000	298,000
5.	Iraq	Hectares	-	77	6,400	41,700	195,200	125,000	950,000	457,000
6.	Jordan	Hectares	-	-	_	90	100	120	140	150
7.	Lebanon	Hectares		-	50	400	2,500	7,000	12,000	20,000
8.	Nepal	Hectares	1,400	6,600	24,800	53,800	75,500	98,200	115,900	170,300
9.	Pakistan	Hectares	4,900	101,200	957,100	2,387,700	2,681,500	3,128,500	3,286,200	3,338,800
10.	Syria	Hectares	_	<u> </u>	-	_	-	38,000	75,000	180,000
11.	Turkey	Hectares	-	600	170,000	579,000	623,000	640,000	650,000	(650,000)
S	ubtotal	Hectares	9,300	651,100	4,122,400	7,995,800	8,740,500	11,012,100	13,497,600	15,822,500
	AFRICA									
1.	Algeria	Hectares	-	-	-	-	5,100	140,000	320,000	600,000
2.	Morocco <sup>2</sup>	Hectares	w.	-	200	4,900	46,500	90,000	206,000	294,000
3.	Tunisia	Hectares	_	-	800	12,000	53,000	102,000	60,000	99,000
Sı	ıbtotal	Hectares	-	-	1,000	16,900	104,600	332,000	586,000	993,000
To	tal Asia		-							
and	l Africa	Hectares	9,300	651,100	4,123,400	8,012,700	8,845,100	11,344,100	14,083,600	16,815,500

<sup>&</sup>lt;sup>1</sup>1971/62 area. <sup>2</sup>Unofficial estimate.

Table 1.2 - Estimated area planted to high-yielding varieties of rice in Asia (in hectares)

Country	Unit	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73
ASIA									(Prelim)
Bangladesh	Hectares	(100)	200	67,200	152,200	263,900	460,100	623,600	1,069,600
Burma	Hectares	-		3,400	166,900	143,000	190,900	185,100	199,200
India	Hectares	7,100	888,400	1,785,000	2,681,000	4,343,500	5,589,200	7,411,400	8,639,100
Indonesia	Hectares	-	_	-	198,000	826,000	913,000	1,338,000	1,521,000
Korea (South)	Hectares	-	-	-	-	-	-	2,700	187,000
Laos	Hectares	_	360	1,200	2,000	2,000	53,600	30,000	50,000
Malaysia	Hectares	42,300	62,700	90,700	96,100	132,400	164,600	196,900	217,300
Nepal	Hectares	-		-	42,500	49,800	67,800	81,600	177,300
Pakistan	Hectares	-	80	4,000	308,000	501,400	550,400	728,500	643,500
Philippines	Hectares	-	82,600	653,000	1,012,800	1,354,000	1,565,000	1,827,000	1,752,000
Sri Lanka	Hectares	-	-	-	7,000	26,300	29,500	29,600	17,600
Thailand <sup>1</sup>	Hectares	-	-	-	_	5,000	115,000	315,000	350,000
Vietnam	Hectares	-	-	500	40,500	201,500	502,000	674,000	835,000
al Asia inded)	Hectares	49,400	1,034,300	2,605,000	4,706,000	7,848,800	10,201,100	13,443,400	15,658,600
	ASIA Bangladesh Burma India Indonesia Korea (South) Laos Malaysia Nepal Pakistan Philippines Sri Lanka Thailand Vietnam	ASIA  Bangladesh Hectares Burma Hectares India Hectares Indonesia Hectares Korea Hectares Korea Hectares Malaysia Hectares Pakistan Hectares Philippines Hectares Philippines Hectares Thailand Hectares Wietnam Hectares I Asia Hectares	ASIA  Bangladesh Hectares — Burma Hectares — India Hectares 7,100 Indonesia Hectares — Korea Hectares — Korea Hectares — Malaysia Hectares 42,300 Nepal Hectares — Pakistan Hectares — Philippines Hectares — Philippines Hectares — Thailand Hectares — Wietnam Hectares — Wietnam Hectares — Il Asia Hectares 49,400	ASIA  Bangladesh Hectares — 200  Burma Hectares — —  India Hectares 7,100 888,400  Indonesia Hectares — —  Korea Hectares — — —  Korea Hectares — — 360  Malaysia Hectares 42,300 62,700  Nepal Hectares — — 80  Philippines Hectares — 82,600  Sri Lanka Hectares — 82,600  Thailand Hectares — — —  Wietnam Hectares — — —  Il Asia Hectares — — —	ASIA  Bangladesh Hectares — 200 67,200 152,200 263,900 460,100 623,600  Burma Hectares — 3,400 166,900 143,000 190,900 185,100  India Hectares 7,100 888,400 1,785,000 2,681,000 4,343,500 5,589,200 7,411,400  Indonesia Hectares — — 198,000 826,000 913,000 1,338,000  Korea Hectares — — — 198,000 826,000 913,000 1,338,000  Korea Hectares — — — — — — 2,700  Malaysia Hectares — 360 1,200 2,000 2,000 53,600 30,000  Malaysia Hectares 42,300 62,700 90,700 96,100 132,400 164,600 196,900  Nepal Hectares — — 42,500 49,800 67,800 81,600  Pakistan Hectares — 80 4,000 308,000 501,400 550,400 728,500  Philippines Hectares — 82,600 653,000 1,012,800 1,354,000 1,565,000 1,827,000  Sri Lanka Hectares — — 7,000 26,300 29,500 29,600  Thailand Hectares — — 5,000 115,000 315,000  Vietnam Hectares — 500 40,500 201,500 502,000 674,000				

<sup>&</sup>lt;sup>1</sup>Unofficial estimate.

Source: Dana G. Dalrymple, "Development and Spread of High-Yielding Varieties of Wheat and Rice in the Less Developed Nations," Foreign Agricultural Economic Report No. 95 (Economic Research Service, U.S. Department of Agriculture, Washington, D.C., 1974.

Table 2
Present structure of the international agricultural research network.

Center	Location	Research	Coverage	Date of initia- tion	Proposed budget for 1975 (\$000) (7
IRRI (International Rice Research Institute	Los Banos, Philippines	Rice under irrigation; multiple cropping systems; upland rice	Worldwide, special emphasis in Asia	1959	8,520
CIMMYT (International Center for for the Improvement of Maize and Wheat)	El Batan, Mexico	Wheat (also triticale, barley); maize	Worldwide	1964	6,834
CIAT (International Center for Tropical Agri- culture)	Palmira, Colombia	Beef; cassava; field beans; farming sys- tems; swine (minor); maize and rice (regional relay stations to CIMMYT and IRRI)	Worldwide in lowland tropics, special emphasis in Latin America	1968	5,828
IITA (International Institute of Tropical Agriculture)	Ibadan, Nigeria	Farming systems; cereals (rice and maize as regional relay stations for IRRI and CIMMYT); grain legume (cow- peas, soybeans, lima beans, pigeon peas); root and tuber crops (cassava, sweet potatoes, yams)	Worldwide in lowland tropics, special emphasis in Africa	1965	7,746
CIP (International Potato Center)	Lima, Peru	Potatoes (for both tropics and temperate regions)	Worldwide including linkages with developed countries	1972	2,403
ICRISAT (International Crops Research Institute for the Semi-Arid Tropics)	Hyderabad, India	Sorghum; pearl millet; pigeon peas; chick-peas; farming systems; groundnuts	Worldwide, special emphasis on dry semi-arid tropics, nonirrigated farming. Special relay stations in Africa under negotiation	1972	10,250
ILRAD (International Labora- tory for Research on Animal Diseases)	Nairobi, Kenya	Trypanosomiasis; theileriasis (mainly east coast fever)	Africa	1974	2,170
ILCA (International Live- stock Center for Africa)	Addis Ababa, Ethiopia	Livestock production systems	Major ecological regions in tropical zones of Africa	1974	1,885
IBPGR (International Board for Plant Genetic Resources)	FAO, Rome, Italy	Conservation of plant genetic material with special reference to cereals	Worldwide	1973	555
WARDA (West African Rice Development Asso- ciation)	Monrovia, Liberia	Regional cooperative effort in adaptive rice research among 13 nations with IITA and IRRI support	West Africa	1971	575
ICARDA (International Center for Agricultural Research in Dry Areas)	Lebanon	Probably a center or centers for crop and mixed farming systems research, with a focus on sheep, barley, wheat, and lentils	Worldwide, emphasis on the semi-arid winter rainfall zone		

Source: Nicholas Wade, "International Agricultural Research," Science 188, p. 587, May 1975.

programs. A second paper (by Dana Dalrymple) documented the impact of the CIMMYT and IRRI varietal development programs on wheat and rice production in Asia, Africa and Latin America. A third paper (by Rober: E. Evenson) presented measures of the rates of return to the resources invested in research at the international agricultural research institutes. A particularly noteworthy feature of the Evenson paper is . . . . the quantitative demonstration . . . . of (a) the complementarity between internal research capacity and capacity to borrow from other national systems and the international system and (b) the relatively high payoff to investment in supporting research (i.e. directed basic research) in both developing and developed countries.

The third session was devoted to a discussion of the

development and growth of the new system of international agricultural research institutes. The first paper (by J.G. Crawford) traced the evolution of the institutional system for organizing, funding and managing the new institutes—first by the Ford and Rockefeller Foundations and later through the Consultative Group on International Agricultural Research. The problem of establishing effective working relationships between the international and national agricultural research systems was reviewed (by Sterling Wortman). The programs that have been developed to achieve closer articulation of the research programs of the international and national systems were outlined by the Director of IRRI (Nycle C. Brady) and by the Director of CIMMYT (Haldore Hanson). There was also a particularly interesting discussion (by S.M. Sehgal of Pioneer Hi-Brid

International) of the contribution of private sector agricultural research to the development and diffusion of genetic technology, in relation to public sector national systems and the international system. In his summarization of the material presented in this session Arthur Mosher raised an issue that received a good deal of discussion throughout the rest of the Conference—are the programs of the international agricultural institutes evolving from a primary research focus to a broader agricultural development focus? Is such an evolution desirable or undesirable?

The objective of the fourth session was to review some of the issues bearing directly on the management of agricultural research systems. The first paper (by Albert Moseman) outlined the evolution of coordinated commodity research programs as an efficient device for the organization of national research effort. Two papers focused on the problem of reorganizing or reforming national research systems in the United Kingdom (by T.L.V. Ulbricht) and in Brazil (by Jose Pastore and Eliseu R.A. Alves). Pastore and Alves argued that the national systems characterized by highly coordinated commodity-oriented programs are more relevant to today's LDC experience than the more decentralized system that had been employed in Japan and the United States. Two other papers focused on the methodology of research planning. The literature on the formal models and methods used to allocate resources in research was reviewed and evaluated (by C. Richard Shumway). A systems approach to research resource allocation was described and evaluated (by Per Pinstrup Anderson and David Franklin). Much of the discussion (led by Richard Nelson) focused around issues relating to centralization and decentralization in research resource allocation.

The purpose of the fifth session was to examine the role of economic and social factors in the choice of research priorities. The first paper (by Martin Abel and Delane Welsch) outlined a theoretical model for exploring the relative effects of environmental constraints, prices and the commodity composition of agricultural output on research resource allocation. An empirical investigation of the effects of efforts to relate research resource allocation to alternative goals such as labor absorption was presented (by John W. Mellor) using data from India. Use of an economic model to establish research priorities, based on Brazilian data, was illustrated (by G. Edward Schuh). The role of resource endowments and relative prices in inducing the choice of alternative paths of technical change-along laborsaving and land-saving paths-was documented (by Hans Binswanger). A paper which explored the theory of scientific discovery was presented (by Yoav Kislev). The discussion (led by Raj Krishna) focused on some of the conceptual limitations in efforts to define an optimum research strategy.

The final session focused on research strategy and management issues that face both national research systems and the new international research systems. In the final discussion paper (by J.G. Crawford) the policies and problems facing the Consultative Group on International Agricultural Research and its Technical Advisory Committee in its efforts to strengthen national and international agricultural re-

search were reviewed. A second paper (by Theodore W. Schultz) focused on the problem of establishing an effective economic and institutional environment for the release of the creative power of agricultural science and the productive capacity of agricultural producers.

In the following sections we discuss in greater detail the issues which activated the conference dialogue. We have organized these issues under five headings: (a) agricultural research productivity, (b) the demand for research and technical change, (c) the generation and diffusion of agricultural technology, (d) the productivity and potential of the international agricultural research institutes, (e) the organization and management of agricultural research, and (f) improving research decision making.

#### Productivity of Agricultural Research

The fundamental significance of technical change is that it permits the substitution of knowledge for resources, or of less expensive and more abundant resources for more expensive resources, or it releases the constraints on growth imposed by inelastic resource supplies.

There has been a proliferation of studies in recent years which indicates that returns to investment in agricultural research have been high compared to other investment opportunities. Several papers presented at the conference added to this evidence (Tables 3.1 and 3.2).

The rate of return estimates for agricultural research were challenged by Webster and Ulbricht on both methodological and empirical grounds\*. Webster pointed out that they tend to array gross benefits from research against only the direct costs of research, omitting implementation costs. Correcting this deficiency, some argue, would bring the returns more in line with conventional development projects (for which a 15-20% internal rate of return is considered good). Ulbricht argued that the estimated rates of return imply a spurious accuracy to the estimates of benefits that are at best highly subjective. Relatively few studies, other than the studies of tomato harvesting in California by Schmitz and Seckler and the Hayami and Akino paper at this conference (Table 3.1), have taken the distributional effects of technical change into account.

A counter argument is that the benefits are conservatively stated and that indirect effects, such as spillover benefits beyond the country or region originating the research, are not fully captured.

The majority of conference participants were of the opinion that while there are methodological problems with such studies, the over-all robustness of the return figures is not in doubt. This judgment was not accepted by Webster and Ulbricht. They supported the conclusion that investment in agricultural research in developing countries is warranted, not on the basis of the high rates of return that have been estimated, but because agricultural research has been an important input leading to increases in agricultural productivity.

<sup>\*</sup> The basic theoretical foundations for the returns to research studies are most thoroughly explored in John Martin Currie, John A. Murphy and Andrew Schmitz, "The Concept of Economic Surplus and its Use in Economic Analysis", The Economic Journal, Vol. 81, (December 1971), pp. 741-799.

Table 3.1
Summary of Direct Cost-Benefit-Type Studies of Agricultural Research Productivity

Study	Country	Commodity	Time Period	Annual Internal Rate of Return (%)
Griliches (1958)	U.S.A.	hybrid corn	1940-1955	35-40
Griliches (1958)	U.S.A.	hybrid sorghum	1940-1957	(20)
Peterson (1966)	U.S.A.	poultry	1915-1960	21-25
Ardito-Barletta (1970)	Mexico	wheat	1943-1963	90
Ardito-Barletta (1970)	Mexico	maize	1943-1963	35
Evenson (1969)	S. Africa	sugarcane	1945-1962	40
Ayer (1970)	Brazil	cotton	1924-1967	77+
Hertford, Ardila, Roches and Trujillo (1975)	Colombia	rice	1957-1972	60-82
114jiiio (1775)	Colombia	soybeans	1960-1971	
	Colombia	wheat	1953-1973	
	Colombia	cotton	1953-1972	none
Peterson and				
Fitzharris (1975)	U.S.A.	aggregate	1937-1942	50
			1947-1952	51
			1957-1962	49
			1967-1972	34

<sup>\*</sup>From papers presented at ADC/RTN Conference on Resource Allocation and Productivity in National and International Agricultural Research, Airlie House, Virginia, January 26-29, 1975.

Table 3.2
Summary of Selected Sources-of-Growth-Type Studies of Agricultural Research Productivity

Study	Country (Commodity) Time Period	Annual Internal Rate of Return (%)
Griliches (1964)	U.S.A. (Aggregate) 1949-1959	35-40
Latimore (1964)	U.S.A. (Aggregate) 1949-1959	not significant
Evenson (1969)	U.S.A. (Aggregate) 1949-1959	47
Tang (1963)	Japan (Aggregate) 1880-1938	35
Ardito-Barletta (1970)	Mexico (Crops) 1943-1963	45-93
Peterson (1966)	U.S.A. (Poultry)	21
Evenson (1969)	South Africa (Sugar- cane) 1945-1958	40
Evenson (1969)	Australia (Sugarcane) 1945-1958	50
Evenson (1969)	India (Sugarcane) 1945-1958	60
Jha & Evenson (1973)	India (Aggregate)	40
Kahlon, Bal, Saxena & Jha (1975)	India (Aggregate)	63

aReturns to maize research only.

Sources: The estimates that were presented at the Conference on Resource Allocation and Productivity in National and International Research (Airlie House, Virginia, January 1975) are identified by an (\*). The other estimates have been summarized by James K. Boyce and Robert E. Evenson, National and International Agricultural Research and Extension Programs, (New York: The Agricultural Development Council, August 1975).

The sources of the individual estimates are as follows:

Ardito-Barleta, N., Costs and Social Returns of Agricultural Research in Mexico, Ph.D. Dissertation, University of Chicago, 1970.

Ayer, H., The Costs, Returns and Effects of Agricultural Research in a Developing Country: The Case of Cotton Seed Research in Sao Paulo, Brazil, Ph.D. Dissertation, Purdue University, 1970.

Evenson, R., International Transmission of Technology in Sugarcane Production, Mimeo, Yale University, 1969.

Evenson, R., The Contribution of Agricultural Research and Extension to Agricultural Production, Ph.D. Dissertation, University of Chicago, 1968. Griliches, Z., "Research Costs and Social Returns: Hybrid Corn and Related Innovations," Journal of Political Economy, 66 (419-431), 1958.

Griliches, Z., "Research Expenditures, Education and the Aggregate Agricultural Production Function," American Economic Review, December 1974.

Hertford, R., Ardila, J., Roches, A., Trujillo, C., "Productivity of Agricultural Research in Colombia," ADC/RTN Conference on Resource Allocation and Productivity in National and International Agricultural Research, Airlie House, Virginia, January 26-29, 1975.

Hines, J., The Utilization of Research for Development: Two Case Studies in Rural Modernization and Agriculture in Peru, Ph.D. Dissertation, Princeton University, 1972.

Latimer, R., Some Economic Aspects of Agricultural Research and Extension in the U.S., Ph.D. Dissertation, Purdue University, 1964.

Kahlon, A.S., Bal, H.K., Saxena, P.N., Jha, D., "Productivity of Agricultural Research in India," ADC/RTN Conference on Allocation and Productivity in National and International Agricultural Research, Airlie House, Virginia, January 26-29, 1975.

Peterson, W.L., Returns to Poultry Research in the US, Ph.D. Dissertation, University of Chicago, 1966.

Peterson, W.L., and Fitzharris, J.C., "Productivity of Agricultural Research in the United States," ADC/RTN Conference on Resource Allocation in National and International Agricultural Research, Airlie House, Virginia, January 26-29, 1975.

Tang, A., "Research and Education in Japanese Agricultural Development," Economic Studies Quarterly, 1963.

<sup>&</sup>lt;sup>b</sup>Returns to maize research plus cultivation "package."

<sup>\*</sup>From papers presented at ADC/RTN Conference on Resource Allocation and Productivity in National and International Agricultural Research, Airlie House, Virginia, January 26-29, 1975.

The question was raised several times regarding the value of even the most precise historical estimates of research productivity for research planning. Kahlon emphasized, in discussion, that parliamentary leaders in India are continuously pressing for evidence of the productivity of public investments, including investment in agricultural research. The productivity estimates do represent a useful device for monitoring research program performance.

The studies by themselves, however, provide only partial evidence with respect to the policy choices involved in research resource allocation. They do not explain the many unsuccessful research investments nor the variability in returns to research (for instance, the disparate results in the Columbian studies reported by Reed Hertford). They indicate little about the distribution of benefits of research among various groups in society. They do not explain the relationship of research investments at home to research done elsewhere. They do, however, serve as a point of departure to explore some of these issues. And the productivity measures do represent useful measures for monitoring the returns to the resources devoted to agricultural research.

#### The Demand for Research and Technical Change

The theory of induced innovation is the launching point for much of our understanding about the nature of the demand for technical change in agriculture. The study by Hayami and Ruttan\* of technical change in agriculture in Japan and the United States indicated that both countries had similar agricultural growth rates despite radically different factor endowments. In Japan land was expensive and labor was cheap. In the United States labor was expensive and land was cheap.

The capacity of each country to introduce a series of technical innovations which utilized cheap factors while conserving expensive factors was a key source of productivity growth in their agriculture.

In both Japan and the United States factor endowments have provided the compass and much of the motive power for technical change in agriculture. Relative factor scarcities have been reflected in relative factor prices which in turn have induced a search for technical innovations to conserve scarce factors. In Japan this led largely to land saving biological innovations; in the U.S., this led toward labor saving mechanical technology.

The effectiveness of the process by which technical progress is generated along a path induced by relative factor scarcities or by changes in factor-product price ratios is conditioned by many circumstances. These include the state of scientific knowledge, the capacity of industry to supply inputs and materials, the levels of technical and scientific skill embodied in people, market distortions, and the tugs and pulls of social/political circumstances.

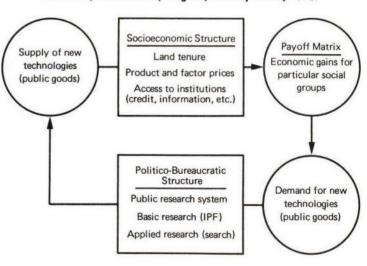
In its simple form, the theory of induced innovation assumes that all technical innovations are equally possible. Binswanger, in a paper presented for the Conference, asked if technical change in some directions (e.g., labor saving

technology) is not more easily produced than in others. If so, there may be "fundamental biases" in technical change which offset or neutralize the inducement mechanisms which pull toward conserving relatively scarce factors.

Binswanger's analysis indicates that the paths of landlabor intensity of the five countries which he has studied (United States, Japan, United Kingdom, France and Germany) are generally consistent with the induced-innovation theory. The countries with limited land endowments have followed much more labor intensive paths of agricultural development. However, fundamental biases do exist and have conditioned the direction of technical change. In the United States technical change has contributed to a continued increase in capital intensity well after increases in relative machinery prices should have induced a reduction in the rate of substitution of capital for labor. He concludes from this that it may take massive changes in relative factor prices to alter the direction of technical change in the absence of public policies designed to reinforce the inducements provided by relative price changes.

In an attempt to articulate the variety of forces which condition technical change, de Janvry presented the Conference with a conceptual model of the process involved in the inducement and diffusion of technical innovations. De Janvry views technical change as a circular, cumulative process rather than the essentially linear view implied by Hayami and Ruttan.

Figure 2
The inducement and Diffusion of Technological Innovation (based on Alain de Janvry, "The Organization and Productivity of National Research Systems" ADC/RTN Conference on Resource Allocation in National and International Agricultural Research, Airlie House, Virginia, January 26-29, 1975.



The key to the model is the pay-off matrix in the upper right hand corner. This consists of particular interest groups in society—commercial farmers, landed elites, subsistence farmers, consumers—who derive income gains or losses from alternative public goods such as research. The supply and demand for research is centered in the pay-off matrix and is conditioned by the socioeconomic structure on the one hand and the political-administrative structure on the other. Each social group pressures the political-administrative

<sup>\*</sup> Yujiro Hayamı and Vernon W. Ruttan, Agricultural Development: An International Perspective (Baltimore: The Johns Hopkins Press, 1971)

structure for research goods to be (or not be) generated depending on the particular pay-off that it expects.

The relative social power of different groups determines whether and how their demands get translated into the allocation of men and money for particular lines of research. The extent of basic scientific knowledge determines the area within which technical innovation is possible.

The resulting supply of research is filtered through the socio-economic structure and produces specific pay-offs for different social groups. In agricultural research, the pay-offs are determined by: (1) the physical characteristics of the innovation in terms of its ability to raise yield or reduce cost; (2) the extent of the diffusion of the innovation which is conditioned by its suitability to local ecologies and social and institutional arrangements such as land tenure, access to credit etc.; and (3) prices which determine its relative profitability. These pay-offs induce further demands for new research.

De Janvry's model is a useful intellectual articulation; it helps in interpreting some of the studies of agricultural research presented at the conference.

Hayami and Akino's study on Japan indicates how agricultural research can prosper where social and economic forces flow together to present a clear demand for technical change.

During the Meiji era when Japan was modernizing there was a unified pull for agricultural research from several groups: farmers were seeking land-augmenting technology, consumers were seeking lower food prices, industrial employers desired low priced wage goods to keep costs down and save foreign exchange, and government sought higher land tax revenues. The social and political structures in Meiji Japan, particularly the breakdown of feudalism and the high degree of social organization in the countryside, were uniquely conducive to the generation and diffusion of agricultural technology.

Similarly, Peterson and Fitzharris' study of U.S. agricultural research on how "better, wealthier farmers", abetted by a social structure which encouraged the organization of farm groups and a political structure which enabled them to press their demands on the body politic, created a highly productive federal-state research system.

In most countries, particularly the developing countries, effective clientele groups capable of serving as an "agricultural research constituency" have not emerged. The demand for technical change in agriculture remains latent.

Hertford's analysis of research in Colombia notes that concentration of rice, soybean and cotton growers in limited areas or in organized groups had a major impact in inducing research, and in affecting adoption of research results. The land tenure arrangements among wheat growers in Colombia, on the other hand, had a negative effect on the spread of new wheat technology and the subsequent demand for technical change.

Hertford's study also reveals the importance of prices in inducing or dampening research. Rice prices rose 82% over three years following imposition of import controls. This stimulated rice research. In wheat, the availability of PL 480 wheat dampened incentives for research for a number

of years. In this vein, Schultz pointed to the persistent under-pricing of food grains by political authorities in developing countries as a force-majeure constraining demand for research and diffusion of its products.

The Conference's exploration of the demand side of technical change ended with a trail of question marks leading to unexplored territory. There has been limited empirical work in LDC's which indicates how the demand for new technology derives from particular groups and how the pay-offs are distributed. The studies on returns to research noted above are based on aggregate estimates of benefits. Research to identify how the new income streams generated by productivity growth are partitioned among laborers, tenants and landowners, and between producers and consumers would be an important step in understanding how research is induced, why it takes the direction it does, and whether it will serve broad development goals.

There has also been little work on how political/bureaucratic institutions create and condition demand for technical change and agricultural research. How is the political and economic position of those who gain (or lose) as a result of agricultural research reflected in research investment decisions? And there remains the persistent question: why, despite the evidence of high returns, does investment in agricultural research remain so low in many developing countries? Does the answer lie primarily on the demand side? Or does it lie primarily on the supply side, as some at the conference argued? If so, what is the nature, origin and direction of this demand?\*

### The Generation and Diffusion of Agricultural Technology

Recent econometric investigations have made some major inroads in understanding how advances in agricultural technology are made and diffused. Applied agricultural research may be understood as a search for new technology within the boundaries of existing scientific knowledge. Basic knowledge establishes the frontier within which innovation is possible. If basic knowledge is static, applied research is subject to diminishing returns and eventual exhaustion as the cost of successive technical innovations within the existing knowledge boundary rises. Without advances in basic knowledge, technical change will eventually stagnate as the marginal cost of innovations rises to meet marginal returns.

Advances in basic knowledge widen the horizon for applied research and make it more productive by providing new opportunities for technical innovations. Kislev states that the faster the advance of basic knowledge, the higher the productivity of applied research will be. The rate of technical progress thus reflects both (a) the rate of growth in the supply of new knowledge, resulting from investment in basic or supporting research, and (b) the rate of growth in the effective demand for technical change as reflected by investment in agricultural experiment station capacity.

Since basic knowledge does not expand continuously or

<sup>\*</sup> These questions are not confined to agricultural research. There has been low investment in research by LDC's in all fields. For one interpretation of this phenomen see the Journal of Development Studies (Special Issue on Science and Technology in Development), Vol. 9, No. 1, October 1972.

smoothly, technical progress can be expected to move in cycles or spurts. A break-through typically leads to an initial rapid harvest of new innovations, followed by a slowing down of innovative activity.

Evenson documents the existence of such spurts in the successive break-throughs and expansion of improved sugarcane varieties throughout the world beginning in the late 1800's. In a similar vein, Hayami and Akino show that agricultural research in Meiji Japan, which was based on development of technology from existing knowledge, was slowing down until revitalized by a turn to more basic research in the 1920's.

Given this characteristic of technical progress, the introduction of "miracle" rice and wheat by IRRI and CIMMYT was not miraculous at all. Based on established scientific knowledge, IRRI and CIMMYT did some sophisticated genetic engineering and produced technology which was markedly superior to that previously in use in many areas of Latin America, Asia and Africa. This led to very large spurts in production.

The institutes filled a gap created by the delay on the part of the developing countries in taking advantage of technical opportunities which were available to them through previous advances in scientific knowledge. The primary reason for this failure, Evenson asserts, was the low level of research investment in LDC's in the 1940's and 1950's and hence their consequent incapacity to capitalize on this knowledge. This delay was particularly apparent in many former colonial countries where agricultural research capacity had been developed primarily to facilitate production of export commodities rather than domestically consumed food commodities.

If technical innovation is defined as filling the gap between the technology in practice and the technology which is possible given existing knowledge, then innovations are achieved by well trained scientists who know what is possible and who can design new technology to take advantage of it. This skill—Swanson terms it the skill of the "biological architect"—is what made CIMMYT and IRRI so successful.

Productive applied research in LDC's—Evenson argues—is strongly dependent on the availability of this type of high-order technical skill in these countries. The highly trained scientist has an understanding of science and the basic knowledge embodied in existing technology which he manipulates to create superior technology for the production conditions in his country. Evenson demonstrates that the availability of high order research skills represents an important source of agricultural productivity growth in LDC's.

Without these high order skills, Evenson asserts, LDC's tend to engage in relatively unproductive low level research, which often replicates work done elsewhere. Typically there are a number of small research stations each performing limited (and often duplicative) experiments based on accepted textbook principles. As skill levels increase, there is a tendency for LDC research systems to pull together around a lead research institute in order to take advantage of the higher-order and more productive skills developing there. The higher the skill levels, the more capable the re-

search station is of generating new technology. At the highest level, it is capable of basic research to produce scientific knowledge.

Availability of research skills in developing countries also has important effects on the diffusion of technology discovered elsewhere. The diffusion of agricultural technology is circumscribed by geo-climatic conditions. A breakthrough in one area may directly diffuse to other areas characterized by similar environment and economic conditions. This is direct diffusion of technology.

Skilled adaptive research magnifies the area in which the discovery is applicable. Adaptive research, as noted above, is based not only on diffusion of the technology but on diffusion of the knowledge embodied in the technology. It is reformulated by local scientists to produce superior technology for local conditions. Ultimately, however, the extent of technology diffusion through adaptive research is also constrained by geo-climatic conditions.

Evenson's studies of the international diffusion of sugarcane varieties and other commodities shows both direct and adaptive diffusion processes at work. He demonstrates that the rate of both processes depends on the availability and quality of indigenous research capabilities.

The availability of sugarcane research capacity in various countries had, in the first instance, a simple extension benefit. It speeded up the importation, testing, and release of sugarcane varieties generated elsewhere. Evenson showed that in Australia, South Africa, and the Caribbean area this speed-up effect alone justified the countries' investment in research, notwithstanding any adaptive research produced by the countries subsequently.

Hertford's studies of cotton research in Colombia showed a similar result. Initiation of cotton research there facilitated the importing and testing of U.S. cotton varieties which yielded high returns even though the Colombian research itself did not produce varieties which were superior to U.S. varieties. This is also the role that is often very efficiently performed by private sector research and development, as described by Sehgal.

Subsequent adaptive research enabled countries to take further advantage of the initially imported varieties. Evenson shows internal rates of return to adaptive research on sugarcane of around 40% in South Africa, 50% in Australia, and 60% in India. Kislev observes that the improved wheat varieties in Israel, drawing on Mexican materials, went through three stages: (1) direct transfer of the improved Mexican varieties to tarmers; (2) selection from among the Mexican materials (Mexican Norin 10 dwarf types) and (3) development of improved varieties which incorporated both local and Mexican materials. Only the varieties that emerged in stage three were significantly superior to the local materials previously used.

Evenson concludes that countries without the capacity to do internationally significant agricultural research also lack the capacity to benefit from the research of others in similar geo-climatic zones. Evenson's estimates of the magnitude of these spillover effects are shown in Table 4. His conclusions buttress the argument for investment in agricultural research in developing countries. They imply (but do not yet prove) that developing countries will need to emphasize not only development of the capacity for adaptive or applied research but also the development of high-order conceptual-scientific skills if they are to take full advantage of the potential contribution of agricultural science to national development. In the future it will primarily be people with high level conceptual skills to break new ground and lead effective national research programs.

#### The Productivity and Potential of the International Agricultural Research Institutes

During the early 1970s the international agricultural research institutes constituted about a tenth of a percent of world expenditure for agricultural research. Even in the developing world they account for only about five per cent of agricultural research expenditure. Yet, their impact has been very large. As indicated earlier, Dalrymple estimates that the technology packages derived from the work of the institutes added \$1.0 billion in wheat and rice production in Asia alone in 1972-1973. These technology packages were the joint products of research at the institutes and of original and adaptive research within the LDC's.

In addition, the institutes have had substantial indirect consequences, which are not measurable. Wortman points out that they have demonstrated the potential of science-based agriculture and stimulated investment in agricultural research in LDC's. They have instituted a trend toward problem-oriented, commodity-focused, multi-disciplinary research in a number of countries.

However, it is important to place the success of the institutes in perspective. The lag in investment in applied agricultural research in the LDC's during the 50's and early 60's provided a ready opportunity for the international centers to convert existing scientific knowledge into technologies which were superior to those in use in the tropics. Furthermore, both CIMMYT and IRRI adopted a research strategy designed to develop grain varieties which were usable under relatively wide environmental conditions.

Progress has slowed as the new varieties spread onto less-favored lands. The productivity of the international institutes remains high. But it will be difficult to maintain the rate of return that was achieved from the initial investment. Evenson estimates that the "second generation" returns to wheat and rice research, though exceedingly high by conventional standards, has fallen below the "first generation" levels (Table 5).

Progress also has not been uniform. The return on investment in corn research at the international centers (and predecessor institutions) has been realized more slowly than wheat and rice, although private research on corn has been relatively profitable. Except for IRRI and CIMMYT, the other nine institutions are in their early stages and have yet to make major contributions. This does not mean that the international centers will become just another type of research unit in the near future. They are at present uniquely structured for effective action. They have independent boards of trustees, organizational discipline, well established pipelines to the aid resources of donor countries and an ability to recruit skilled staff from all over the world.

Table 4.0
Estimated Marginal Benefit Streams Associated with National Research Investment. (Estimated levels (in 1973 \$US) to which benefit streams associated with a one-thousand dollar research investment will rise eight or ten years after the initial investment.)

	Research Investment in Developed Countries		Research Ir in Developing	
-	Technology Oriented	Science Oriented	Technology Oriented	Science Oriented
Part 1: Appropriated by investing country a) direct contribution	630	12,300	3,710	35,600
<ul> <li>b) through complementarity with research in other countries</li> </ul>	1,620	1,620	7,200	7,200
c) total appropriable	2,250	13,920	10,910	42,800
Part 2: Contributed to countries other than the investing country	5,150	17,000	49,000	37,300
Total benefit stream real- ized from an international perspective (Part 1 + Part 2)	7,400	30,920	59,910	80,100
Part 3: Benefits realized by a typical country from re- search investment by other countries in similar climate zones (or regions)				
(a) with average indigenous research capability	8,580	520	55,000	1,700
(b) with no indigenous research capability	4,560	520	1,700	1,700

Source: Robert E. Evenson, "Comparative Evidence on Returns to Investment in National and International Agricultural Research" ADC/RTN Conference on Resource Allocation and Productivity in National and International Agricultural Research, Airlie House, Virginia, January 26-29, 1975.

Table 5.0
Income Stream and Cost Calculation for International Center Research

		neration eties		generation ieties
-	1965-6 to	1969-70	1970-1 t	o 1973-73
Item	Wheat	Rice	Wheat	Rice
Annual Increment to income stream (1973 million\$)	135	270	56	360
Associated cost on an annual basis*				
(1973 million\$)	.6	1.0	1.2	2.8
Income stream per \$1,000				
investment	\$225,000	\$270,000	\$46,666	\$128,500

\*Computed from Dalrymple (1975), Table 1. The second-generation costs are based on annual budgets for 1966-68. First-generation costs are all prior costs at IRRI (capital expenditures are amortized) and a capital adjustment is made for CIMMYT costs to make them roughly comparable with IRRI.

Source: Robert E. Evenson, "Comparative Evidence on Returns to Investment in National and International Agricultural Research, ADC/RTN Conference Resource Allocation and Productivity in National and International Agricultural Research, Airlie House, Virginia, January 26-29, 1975. More importantly, the institutes have carved out positions as centerpieces in the constellation of research institutions working on improved agricultural technology world-wide. They have access to scholarly capital and technical raw material from around the world. They have established communication links with the national research centers and production programs with responsibility for work on the committees on which the centers are conducting research.

The extent of the centers' relationships with developing countries is indicated by the following array of IRRI's activities:

- Germ plasm collection: 33,000 samples collected at IRRI, 16,000 samples sent to LDC scientists in 1973;
- Publication Workshops: Maintains bibliography of world rice literature; eight major symposiums held since 1966;
- Training: 90 man-years of training for LDC rice scientists and educators provided in 1973;
- (4) Collaborative Research: Research with LDC's on location-specific problems such as deep water rice; tolerance to toxic soils.
- (5) Research Networks: Formal research network with LDC's on evaluation and testing of genetic material cropping systems with rice, agroeconomics, etc.
- (6) Direct Assistance to LDC Research Systems: 12 country projects since 1966.
- (7) Assistance to Country Rice Production Programs: Planning expansion of pilot rice production program developed in Philippines to other Asian countries.

CIMMYT conducted collaborative wheat trials at 1,140 sites in 66 countries in 1973. Through this procedure, CIMMYT and its collaborators are able to test wheat varieties under widely different conditions of day length, temperature, moisture, diseases, and insects: They are able to obtain yield data which can guide future experiments both at CIMMYT and at cooperating research stations. They obtain germ plasm from around the world for future trials and breeding. It is estimated that it would take any one national experiment station fifty years of repeated trials to obtain data as comprehensive as that for one year of trials organized through this international network.

The institutes have used the tools of organization to achieve significant multiplier effects from limited resources. There are only 13 wheat scientists at CIMMYT itself.

It is this institutional innovation which may in the long run be judged the most significant real achievement of the institutes and ensures their continuing relevance for the future.

The established institutes are now vigorous adolescents. What adulthood is expected? One rare path to adulthood is to plan an adult role based on a careful assessment of one's strengths and limitations. The other is to just grow, responding to present circumstances as seems most appropriate and trusting in one's innate strength to bring one out all right in the end. Mosher sees the institutes as tending to follow the latter path. He asked the conference to consider the correctness of this.

The trend is for the institutes to evolve from research and training centers into research-based institutes of agricultural development. To their core research and training programs, they have increasingly added commitments to strengtnen national research capabilities of LDC's. They are tentatively involving themselves in production programs in LDC's.

The reasons for these developments are first, that the institutes are conditioned to judge the success of their programs by actual increases in commodity production in LDC's. This has given them a practical orientation and a sharp sense of purpose, But as the spread of high yielding varieties has slowed and as evidence mounts that farmers are not adopting the whole package of practices, the tendency for IRRI and CIMMYT to be concerned about LDC production programs has increased.

In addition, the quality of resources available at the institutes has led to increasing demands from LDC's and aid agencies for the institutes to take on variegated responsibilities. In some cases they are attributed credibility in areas where they have not yet achieved substantial research capacity.

Mosher asked if these developments will dilute the centers' ability to apply high-level conceptual-scientific skills to research problems. Should not the institutes sharply limit activities other than research and training?

On the other hand, the involvement of the institutes in strengthening LDC research and production programs is consistent with the evidence on international diffusion of technology. If lack of capacity for indigenous research implies lack of capacity to benefit from international research, then the institutes, the developing countries, and AID donors can expect high returns in both the short and long term from the centers' outreach efforts.

The important question, as Mosher points out, is how the centers will define their role in relation to other actors who are now on stage or in the wings. These include not only LDC governments and traditional aid agencies but also representatives of the private sector, whose role in production programs and adaptive research may well expand. It includes the potential for regional institutes, such as the West African Rice Development Association (WARDA) and the South East Asia Regional Center for Graduate Study and Research in Agriculture (SEARCA) which are funded by the developing countries themselves and by aid consortia.

While these questions were posed, they were not closely examined by the conference. The representatives from the institutes did not see their involvement with outreach programs as diluting their effectiveness. On the contrary, the institutes have yet to come up against budget constraints which would require hard choices. The consensus was that the institutes probably would and should continue to evolve as research-based agricultural development institutes. However, some participants did question whether acceptance of a broader charge might not weaken the capacity of the institutes to contribute in the area where their advantage is greatest relative to national institutions—the design of efficient technologies capable of releasing many of the technical and institutional constraints in production.

# The Organization and Management of Agricultural Research

The United States and Japanese agricultural research systems have been more thoroughly studied than others. The Hayami/Akino and Peterson/Fitzharris papers indicate that each system successfully responded to the needs of farmers. Each shared certain attributes. Both Japan and the U.S. evolved decentralized Federal/state systems. The state units (prefectures, in Japan) were able to respond flexibly to changing local circumstances and to develop locally appropriate technologies for even micro-environments.

In each country, the state units were backed up by national research systems. In 1926, Japan and the U.S. independently reinforced their federal/state systems by introducing centrally orchestrated, nation-wide research programs on specific crops and problems. These "coordinated" research programs coincided with a trend toward more basic research in both countries. They were effective in mobilizing scientific talent around specific programs without sacrificing the responsiveness to local problems which characterized the state or prefectural units.

The United States formally integrated research, extension, and education in the land grant colleges. Japan did not. But relatively close liaison between the three levels was maintained by less formalized arrangements. In both countries, there were well organized groups of farmers, relatively equitable land distribution, high levels of education, growing industries, progressive governments, and a social/political structure which favored communication with farm groups\*.

Whether the Japan and U.S. experiences provide models for the LDC's is an open question.

The Pastore/Alves paper on reform of Brazilian agricultural research argues that the model is not applicable to the extent it implies relatively antonomous, multi-purpose, locally responsible institutes such as U.S. land grant colleges. The social and economic circumstances, such as farmer organization, which ensured that these institutes responded to needs of farmers are not present in most developing countries.

Pastore and Alves assert, in effect, that autonomous institutes work best in cohesive social structures. They imply that the structures which characterize rural areas in developing countries favor a centrally directed, aggressive research system. "Directed" means that the system has a central planning unit which coordinates the activities of various units. "Aggressive" means that it systematically seeks information about the farm sector through social research or other means, that it orients itself around explicit development and production goals, and that it gears its research program to these ends.

Brazil is moving toward greater centralized direction and coordination of its national and state research systems. Wortman argues that research should be organized on a multidisciplinary, commodity basis to achieve production targets established by governments. Moseman urges governments to take hold of their typically scattered research units and institute centrally coordinated national programs around specific crops or problems.

Moseman's appeal—in a sense—is the reverse side of Evenson's paper on productivity of national and international research. Evenson, from an analytic standpoint, notes that decentralized small-scale research stations are characteristic of countries with low skill levels. As skill levels rise, concentration occurs in order to take advantage of the economies of scale and higher productivity which consolidating high order skills can achieve. Moseman, from a practitioner's standpoint, urges governments to begin the process of consolidation which will be needed to fructify the high level skills which the country presumably will be training.

The stress on coordinated or directed national research programs in a sense alters the traditional debate over what type of research institute works best in an LDC (single crop vs. multi-crop; land grant colleges or government research institutes). It shifts the focus to developing a national system. It implies that many types of institutions can be productive if integrated (coordinated) effectively around specified national/regional research goals. But can a research system continue to be productive if its direction continues to come primarily from the center? It was pointed out in discussion, by Kahlon, that one effect of a productive agricultural research program (as in the Indian Punjab) is to create a research constituency.

The discussion of central coordination and planning for research systems touched off some lively debate. Nelson raised the question of whether formal criteria should be used in research planning and project selections. He asked what these criteria should be and how the weights can be derived. Nelson reported that the Rand Corporation studies of the economics of research and development had shown that cost projections on research and development projects were typically highly inaccurate. Studies by Mansfield of industrial research indicated substantial error in predictions of time to completion and project output.

Ulbricht reported that at a recent OECD meeting on the relationship between agricultural research and socioeconomic policy there was a general consensus that attempts to develop weighting criteria resulted in spurious precision. He argued that subjective judgement was inevitable but could be refined by systematic analysis combining technical and economic information. Schultz argued strongly that research is an entrepreneurial activity, whose success depends on relatively rare personal qualities of creativity and insight. The organizational task for research is to create structures where talented individuals (and teams of individuals) can exercise their creativity. He pointed out that the market was an effective transmitter of information about technological needs and that researchers usually read these signals pretty well. Nelson asked, do you want to bet on proposals or on people?

The counter argument was that coordination and planning may be potentially stultifying but need not be. They can enhance the effectiveness of individuals and organizations by clarifying goals, increasing the flow of

It should be noted that in regions where these conditions did not prevail, as in the United States "Old South", agricultural research, agricultural productivity, and rural development lagged.

information, and promoting team work. In any case, the potential problems of over-centralization hardly apply to developing countries where the problem is that research units are few and typically diffuse. Since many LDC's have fewer qualified research scientists than a single major U.S. experiment station, the question of competition among multiple centers does not arise except in larger countries. It was also argued that the entrepreneurial concept of research reflects Western, intellectual traditions which do not operate well in transitional societies where economic signals may be distorted and where particularism and communalism are still strongly held social values. There may be a tendency for scientists in developing countries-left to respond to the market-to direct their entrepreneurial talents toward the international scientific market from which rewards and emoluments flow. Or they may respond to highly limited demands such as from large land owners.

The discussion of this issue was characterized by Fishel as excessively ideological. He insisted that it is possible to quantify and communicate events that lie in the undiscovered future, based on the experience of the past. Ideally the resulting measures should not be neat point estimates, but probability functions which incorporate all the information about the future including the uncertainty involved. Schultz insisted that the analytical capacity is not yet available to respond to Fishel's challenge.

Bernstein stressed that the discussion was hampered by a failure to differentiate between the control and rationalizing dimensions of research management. He pointed out, in discussion, that systems for rationalizing the use of scarce and potentially high-yielding research resources can operate with very small amounts of control built into the system.

The discussion did underline the need for better understanding of the origin, nature, and direction of demand for agricultural research in developing countries. Such understanding would permit consideration of whether to stimulate research productivity by altering the market rather than by striving for more comprehensive systems of planning.

Better understanding of demand would also help resolve one of the traditional questions about research institutes in LDC's. That is, what sort of organization might be established to provide the feed-back to central research units from regional research stations in order to achieve the interplay between national and local problem solving that was so evidently productive in the U.S. and Japanese systems?

The question marks arise around the local units—the sensors at the end of the system. The Pastore/Alves view implies that such units will not relate to local farm conditions well in the absence of the coherent socio-economic circumstances which nourished local research organizations in Meiji Japan and the U.S. Making them effective would require the thorough reform of the rural sector. Many rural development specialists argue that almost no rural development institution, including agricultural research and extension programs, can be effective at the local level in the absence of a reasonable degree of equity in the distribution of resources in rural communities.

The pertinent concern, for our purpose, is with the productivity of local research units. As noted above, Evenson argues that location-specific research is related to the level of skill of a country's research establishment. Low skill levels imply numerous small-scale research stations doing location-specific adaptive research based on cookbook principles. As the country develops, concentrations of highly-trained scientists with access to international networks and wide scientific knowledge are able to produce markedly superior technology, which is suitable for more diverse ecological conditions. Branch stations attenuate and serve as locations for testing and evaluation.

The validity of Evenson's point has been demonstrated in part by the international centers. To an extent, they are reversing traditional plant breeding procedures which are devoted to development of highly location-specific varieties. They have applied their scientific skills to developing varieties which are tolerant to wider variations in day length, disease and other conditions.

Schuh notes that the extent to which central, high quality research can supersede branch stations is tempered by the state of scientific knowledge as well as the supply of skills available. For instance, scientists have to conduct local tests for such things as the response of plant varieties to fertilizer because biological science does not yet have a unifying theory of how plants respond to fertilizer under different soil and climate conditions.

The attempt to derive general principles for the organization of LDC research can not be pushed too far because of the incompleteness of theory and empirical knowledge. In the judgment of many research managers, increasing the effectiveness of local or regional research stations by incorporating them into national research programs directed toward specified national/regional research goals should be placed toward the top of the agricultural development policy agenda.

## Improving Research Decision-Making

Optimizing research decisions is difficult and important.

First of all, research resources in developing countries are scarce. Well trained scientists are few, and the organizational competence necessary to facilitate research is in even shorter supply. Because research is potentially very productive, the opportunity costs of bad, decisions are high.

Secondly, different kinds of technical change affect a nation's economic and social goals unequally. Monotheism in development planning—with a single focus on growth—has been superseded by pantheism in recent years as other social goals have moved into the sanctuary. There are economic growth goals such as increasing the net income of the agricultural sector, or maximizing the contribution of agriculture to the economy as a whole; there are welfare goals such as increasing employment and the income of labor employed in agriculture, reducing the real price of food for consumers, and improving health and nutrition; and there are equity goals such as mitigating income inequalities and opening the benefits of growth to particular groups, such as small farmers. The choice of crops, regions or disciplines for research affects these goals unequally.

Choice is further complicated because the production process and outcomes of research are uncertain. This is true in two senses: a) The time and resources required to attain stated technical objectives can only be estimated. The risks of misestimation are high. b) The appropriation of benefits, once technical objectives have been attained, is quite uncertain. In agriculture, the decision to adopt new technology flowing from research is in the hands of many farmers, each of whom maximizes his private welfare and acts in accordance with his own assessment of the risks involved in new technology.

Research may shift production functions but many farmers will tend to operate at less than what appears to be the optimum level of production. How much below and for how long is imponderable. It depends on extension, input supplies, access to credit, economic policies and other circumstances. It also depends on the accuracy with which the research planners have judged the private welfare optima of the farmer. Agricultural commodities are produced by farmers—not by planning commissions, research scientists, or extension workers.

Finally, the market place is an imperfect decision-making guide for research. Society places a value on research, but the market place may not reflect this value accurately. The benefits of the research cannot ordinarily be fully captured by the individual or firm which bears the cost of producing it. This is also true of much agricultural technology produced by research (e.g., new seeds, or cultural practices). Hence, private profit is often an inadequate incentive for research particularly in industries, such as agriculture, which are characterized by small producing units. The market undercompensates private innovation in agricultural research. Research decision-making receives indirect guides from the market place through factor and product prices, but little direct guidance.

These uncertainties evoked two types of responses from the conference—neither of them mutually exclusive.

The first was a consensus that there are severe limits on the ability to make quantitative objective assessments of the value of particular kinds of research. This implies that the choice among alternative lines of research must continue to incorporate large areas of subjective judgment. The objective criteria available to guide research decision-makers through the uncertainty surrounding research decisions are limited. Use of conventional tools such as cost benefit analysis is limited by the precision that the research scientist can bring to bear in estimating both the resource requirements and the output of a research project or program.

At the research project and program levels, the judgment involved is essentially that of the scientist. At higher levels, the judgments are partly scientific and partly political. There was agreement that the high rates of return from past research implies that the subjective judgment of knowledgeable scientists and science administrators should receive high marks. Given the right institutional and social setting, including efficient markets for inputs and commodities, scientists' judgments of technical constraints and opportunities for increasing production have led to effective research resource allocation decisions. Nonetheless, the

second response was that the tools of social science can and should be developed as guides to decision-making. These tools become more significant in countries characterized by the absence of efficient input and commodity markets.

On the micro-level, Pinstrup-Anderson described a methodology being developed at CIAT for determining research priorities within a single commodity. The method proceeds through logical stages: 1) attempt to identify reasons for low productivity; 2) identify researchable problems which are expected to improve productivity; 3) estimate the impact of solving each of the problems on production; 4) estimate the probability of research success, likelihood of adoption of results, and the time required; and 5) estimate the impact of alternative research results on product supply, input demand, farm income, and farm size.

Data are collected by a four-man team of agronomists and economists who visit a sample of farms throughout a complete crop cycle.

CIAT is also developing a method of systems analysis for small farms. The method attempts to describe the motivating forces and constraints on small farmers in light of the biological, ecological, and institutional environments facing them. Once these relationships are understood, it is possible to use the model to simulate the likely results of alternative technical packages which might be developed through research.

A test of the system in Guatemala indicated high probable returns to the use of herbicides. This finding has led the Guatemala Research Agency to initiate research on herbicides.

The type of method developed by CIAT and other methods reviewed by Shumway provide research managers with vastly more information than do traditional informal methods. The methods do entail costs both in terms of time and trained people. Whether their marginal advantage over informal methods justifies their cost is not yet certain. CIAT reports interest in their systems among several research agencies in Latin America. This is perhaps one indication of their potential value.

Attempts to introduce social goals, in addition to explicitly economic considerations, into agricultural research planning is relatively new. DeCastro and Schuh used data from Brazil to demonstrate a preliminary model for assessing national research priorities in light of a country's factor endowments and socio-economic goals.

The model adopts the Hayami and Ruttan thesis that the task of research in promoting economically efficient growth is to introduce technical change which conserves relatively scarce factors of production. Using trends in relative factor prices in Brazil, DeCastro and Schuh show that even in landrich Brazil, research efficiency implied greater emphasis on land-augmenting technology. This includes, for instance, soil research to open problem lands to production or biological research to improve yields. The authors note that there is great regional variation within Brazil, however. In some parts of the country, a labor constraint is emerging which calls for a different technical choice.

Knowledge of what research is consistent with relative factor scarcities, still leaves the question of how to allocate research resources among commodities. In considering this issue, DeCastro and Schuh pose the question in terms of whether a nation wishes to favor the welfare of consumers or producers. Whether the benefit of technical change in particular commodities redounds to consumers or producers hinges primarily on the relationship between the demand and supply elasticities for the commodity. Crops with low relative demand elasticities (e.g., food grains, beans, manioc) distribute their benefits primarily to consumers in the form of lower food prices. Lowering the price of food grain also releases wages-good constraints and permits expansion of employment programs. However, as prices fall acreage may shift to other crops. Even labor intensive technical change in crops with low demand elasticities can be labor-displacing by releasing labor from that crop to other crops or to the non-farm sector. Crops with high relative demand elasticities (e.g., cotton, sugarcane, export crops or other crops where the producing region is a price taker) return most of the benefits of technical change to producers and thus can stimulate demand for labor and increase rural incomes.

DeCastro and Schuh state that research planners are faced with the task of striking a balance between the following trade-off. If their goal is to increase income and employment of agricultural labor, emphasis in research should be given to crops with high relative price elasticities of demand. If the goal is to increase consumer welfare, the research emphasis would be given to food grains and other crops with relatively low demand elasticities.

Mellor elaborated on these trade-offs in an analysis of research allocation and social goals based on Indian data. He argues for a sequence of agricultural policies to which research should be tied. First, emphasize increasing yields of food grains in productive areas of the country. This increases the supply of calories which conditions the health of the poor and increases grain supplies thus relaxing the wages good constraint to increased employment. Relaxation of the wages good constraint should be followed by employment programs to keep demand up. Otherwise, the incentive for increased production may diminish with falling prices.

As the wages good constraint is released, the secondstage strategy should be to promote food grain production in less productive regions and expand production of labor intensive crops. These are usually those with high relative demand elasticities. Promotion of labor intensive crops needs to be complemented with policies to encourage demand for them either through expansion of exports, raising domestic incomes, or subsidies.

The Mellor, DeCastro-Schuh papers and related discussion at the Conference illustrate several points about relating research resource allocation to social goals.

First, the models clearly indicate that the contribution of research and technical change to society's goals is dependent on other policies. Economic policies, such as the systematic reduction of product prices, can weaken the ability of research to contribute to growth or welfare goals. Distortion of input and product prices not only affects farmers decisions regarding use of inputs and choice of

commodities to produce. It also affects decisions regarding research priorities and hence the new technologies that will become available in the future.

By the same token, many social goals may be achieved more effectively through policies other than research. In some areas, for example, land reform may be necessary to achieve widespread participation in the gains from productivity growth. There was general agreement with Mellor's point that biological research represents an inefficient instrument for the solution of problems of rural income distribution. Over-reliance on it may be self-defeating both in generating improved technology and in achieving the desired goals. Yet, as Ulbricht insisted, the design of agricultural research strategies should not ignore the potential income distribution effects of technical change. Crawford noted that it should be the policy of international institutes to make a range of technical options available and not bias the technical innovation in a capital intensive direction. It was also pointed out that it may also be important to make available technologies which are less "management intensive."

The economic models of the type presented at the conference have a great deal of difficulty in accommodating multiple social goals. The definitions of welfare used in the models discussed above are relatively simple. A country's actual welfare is more complex. The fact is that development planning has only recently moved "beyond growth." It is still in an early stage of specifying what the various social goals of developing countries might be, yet alone understanding the relationships among them. However, clear articulation of goals is critical for making research choices. Consideration of research priorities must proceed from an understanding of what a country or region's goals are.

A second problem with such models is that, because of uncertainties about the production process for research, they are forced to make heroic assumptions about returns to research. Marginal returns to certain lines of research may be increasing while others may be declining. This would significantly affect the flow of benefits and condition research choices but is difficult to specify in advance. In addition, there are the difficulties in knowing research cost functions and the distribution of benefits flowing from research mentioned earlier.

These uncertainties are stubborn barriers to developing better tools for predicting the consequences of research choices on social welfare. Economic analysis at present only yields gross indications of the multiple consequences that are implicit in alternative research resource allocation decisions. More data on the appropriation of research benefits and on the research cost function as well as further theoretical development and empirical testing of models are needed to improve decision-making tools.

## Concluding Notes: Areas for Research

Viewing the Conference in retrospect raises the proverbial question of whether to measure how far one has come or how far one has to go. From the latter perspective, it is evident that we remain some distance from a full understanding of agricultural research and a fully convincing theory of technical change. The capacity of scientists to generate new technology outstrips our understanding of social and economic implications of technical change and our ability to provide guidance for policy makers.

Some areas in which further research is warranted are:

- (1) There is a general need for a more precise understanding of the sources of demand for technical change in agriculture. This includes further specification of the natural and institutional biases which condition processes by which technical change is induced. The need for more careful analysis of the incidence of benefits from technical change is particularly important for understanding more about the origin and nature of demand for agricultural technology and for the further development of allocative tools. Study of research "failures", such as the relative lack of pay-off to date from wheat research in Colombia, might also be instructive. There is also a need to study how the political/bureaucratic process impinges on research allocation and conditions the demand for technology.
- (2) More analysis of research cost functions and the production process for research is needed. One area for further inquiry is Evenson's hypothesis about the relative productivity of various levels of research skill in conjunction with different levels of research organization. The effort thus far has had to rely on a relatively weak data base. Although the results are consistent with economic principles regarding the productivity of scarce resources, they do counter some popular views about the relevance of simple adaptive research and low-level skills to LDC's.
- (3) There is need for further understanding of national and international diffusion of agricultural technology and scientific knowledge. The relationship between different types of technology-based and/or science-based research investments within a country or region to investments outside it needs to be examined more carefully. How does a country develop the capacity to take maximum advantage of research investments made elsewhere?
- (4) There is also need for research on elements of the technical change process which were not well covered at the conference. This includes the relationship between technology policy and economic policy, particularly price policies. It also includes the relationship between formal schooling (or literacy) and rates of technical change. Only a beginning has been made in quantifying the relationships between investment in research and investment in extension.

Despite these uncertainties, when one looks back at the distance travelled, it is clear that some big steps have been taken.

There have been strides forward in general understanding of how technical change is induced, in modelling the discovery process, and in mapping international diffusion processes for technology and scientific knowledge.

There is solid evidence that investment in national and international research has been highly productive. The social returns to agricultural research have been high relative to the alternative investments available to most poor countries. It is clear that investment in agricultural research

in developing countries by both national and international agencies should expand.

The Airlie House conference was something of a milestone in effective collaboration between natural and social scientists in analyzing the sources and consequences of technical change in agriculture. This collaboration has been evolving hesitantly in recent years. There is reason for confidence that it will continue and yield in the future better understanding of the central role of research and technical change in agricultural development.

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1818 H Street, N. W.
Washington, D. C. 20433

S. J. Webster Ministry of Overseas Development Eland House Stag Place London SW1E 5DH, England

A. M. Weisblat Research and Training Network Agricultural Development Council 630 Fifth Avenue New York, New York 10020

Delane Welsch The Rockefeller Foundation G.P.O. Box 2453 Bangkok, Thailand

F. R. Wittnebert Technical Development Department The Parker Pen Company Janesville, Wisconsin 53545

Sterling Wortman The Rockefeller Foundation 111 West 50th Street New York, New York 10020

Montague Yudelman International Bank for Reconstruction & Development 1818 H Street, N. W. Washington, D. C. 20433 This is one of a series of RTN Workshop Reports and Seminar Reports issued by The Agricultural Development Council, Inc.

of Proceedings

MINISTRY OF AGRICULTURE

HOPE GARDENS,

KINGSTON 6,

**JAMAICA** 

PLEASE QUOTE

REFERENCE No .\_\_\_

\_\_7th August,\_\_\_1975.

Mr. Michael Lejeune,
Deputy Executive Secretary
Consultative Group on International
Agricultural Research
1818 H Street, N.W.
Washington D.C. 20433
U.A.S.

0

Dear Mr. Lejeune,

In May 1974, I wrote to Mr. Oram, Chief Research Centre, F.A.O., Rome, requesting that he forward to me on a regular basis reports of meetings of TAC, and CGIAR and he kindly consented to putting my name on their mailing list. In the meanwhile I received a copy of a Summary of the proceedings of the Consultative Group Meeting held in November 1973, but no further reports have been sent to me.

I am now writing you on the recommendation of Mr. B. N. Webster to ask that you place my name on your mailing list for receipt of copies of reports of meetings of CGIAR.

Yours sincerely,

L. E. McLaren,

L. R. W.Lan

Chief Technical Officer.

Summan of Proceedings - Oct 174 Center Wich - July 174 Brochuse

> COMMUNICATIONS SECTION

1975 AUG 21 RM H: 59

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Doar Mr. Lejeune,

In May 1674, 2 vrote to 16., star, Chief Messeards. Centre, F.A.O., Romo, requesting that he forward to me on a recular lesis reports of meetings of M.C., and AT" and le kindly consented to sutting my news or their mailing list. In the meanwhile T received a copy of a Communy of the proceedings of the Consultative Group Meeting held in Movember 1973, but no further reports have been sent to me.

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Yours sincerely,

L. E. McLaren, Chief Focinical Officer.

1975 AUG 21 AM H: 59
COMMUNICATIONS
SECTION

TRITICALE
INDUSTRIES, INC. 2 E. CANTERBURY DRIVE, ARLINGTON HEIGHTS, ILLINOIS 60004 • (312) 253-7265

JAMES L. VETTER, Ph. D.
Vice President, Food Science and Technology

July 29, 1975

Mr. Daniel Ritchie
Consultative Group for
International Agricultural Research
International Development Association
World Bank
Room E-1039
1818 H Street, N.W.
Washington, D.C. 20433

Dear Dan:
I appreciate the time you took to meet with me last week and discuss

I appreciate the time you took to meet with me last week and discuss the Consultative Group activities in International Agricultural Research and our activities with triticale.

We believe that our company can play a vital role in commercializing the results of agricultural research sponsored by the Consultative Group. We are currently working with a number of foreign countries with the objective of growing, processing, and marketing triticale in these countries. As significant developments occur in our program, I will keep you advised. Meanwhile, if you have any questions or suggestions concerning our program, please don't hesitate to contact me.

Very truly yours.

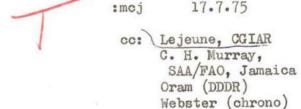
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WORLD BANK GROUP 23 1975

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Mr. J. Adler	E624	Mr. Krieger	B90
Mr. Alter	A907	Mr. Lari	D10
Mr. Bart	F718	Mr. Lejeune	E10
Mr. Baum	E1023	Mr. McNamara	E12
Mr. Bell	A613	Mr. Muller	N93
Mr. Benjenk	E723	Mr. North	D10
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Mrs. Hughes	D529		
Mr. Husain	A1136		
Mr. Kirmani	A610	Mr. Duloy	N23
Mr. Knapp	E1227	Mr. Merriam	E82



File

July 17, 1975

PR 3/10 Gen.

Dear Mr. McLaren:

With reference to your letter of June 16, 1975, I am pleased to enclose a copy of the Minutes of the 8th Meeting of the Technical Advisory Committee which was held in Washington, D.C., last July. A copy of the Report of the 9th Meeting, which was held last February, will be forwarded to you as soon as it has been cleared at the next TAC meeting.

I have made arrangements for your name to be added to our mailing list for all TAC Reports, but to ensure that you will receive all CGIAR reports, I advise you to write to:

Mr. Michael L. Lejeune Executive Secretary Consultative Group on International Agricultural Research 1818 H Street, N. W. Washington, D.C., 20433, U.S.A.

Yours sincerely,

B. N. Webster Deputy Executive Secretary Technical Advisory Committee

Enclosure

Mr. L. E. McLaren Chief Technical Officer Ministry of Agriculture Hope Gardens Kingston 6 Jamacia

SECTION COMMUNICATIONS

1975 JUL 23 AM 10: 07



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C. H. Murray,
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July 17, 1975

PR 3/10 Gen.

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Mr. Michael L. Lejeune Executive Secretary Consultative Group on International Agricultural Research 1818 H Street, N. W. Washington, D.C., 20433, U.S.A.

Yours sincerely,

B. W. Webster Deputy Executive Secretary Technical Advisory Committee

Enclosure

Mr. L. E. McLaren Chief Technical Officer Ministry of Agriculture Hope Gardens Kingston 6 Jemacia

COMMUNICATIONS SECTION

1975 JUL 23 AM 10: 07

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# UNIVERSITY OF CALIFORNIA, DAVIS

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SANTA BARBARA · SANTA CRUZ

COLLEGE OF AGRICULTURAL AND
ENVIRONMENTAL SCIENCES
AGRICULTURAL EXPERIMENT STATION
DEPARTMENT OF APPLIED BEHAVIORAL SCIENCES

DAVIS, CALIFORNIA 95616

July 16, 1975

Secretariat Consultative Group on International Ag. Research The World Bank Washington, D.C.

Gentlemen:

Please send me a copy of  $\underline{\text{International Research in}}$  Agriculture.

Sincerely,

Isao Fujimoto

Dood Fryn to

Lecturer

IF/jc

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Isao Fijimoto Lecturer

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ARGENTINA

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GUIANA

BRASIL

COLOMBIA

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# ROUTING SLIP

Date July 1, 1975

Recommendation

Signature

TO-	Name	- Room No
1	Mr. Lejeune, CGI	E1039
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4		
FOR		
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101	Action	Initialing
-		Initialing Preparing Reply
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REMARKS

Full Report

Information



# INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

# INTERNATIONAL DEVELOPMENT ASSOCIATION Cable Address - INDEVAS PARIS

EUROPEAN OFFICE: 66, AVENUE D'IÉNA, 75-PARIS 16<sup>8</sup> - FRANCE

Telephone : 723-54-21

30 giugno 1975

Dott. Giovanni Mingazzini Direzione Generale Affari Economici Ministero Affari Esteri-Ufficio VIII La Farnesina Roma

Caro Dott. Mingazzini,

rispondo alla sua del 14 giugno, pervenutaci solo il 24, relativa al Gruppo Consultivo di Ricerche Agricole Internazionali, GCRAI.

Nel settore agricolo la Banca patrocina due iniziative simili, nate in tempi diversi e per esigenze distinte ma ugualmente suscettibili di utile partecipazione italiana. La prima è il GCRAI indicato qui sopra. Questo Gruppo è sorto nel 1971. La sua natura è descritta nell'accluso comunicato dell'8 Dicembre 1971, diffuso per annunciare la costituzione del Gruppo. L'attività si è svolta finora in modo molto soddisfacente: varie ricerche sono state finanziate come descritto a pagina 62 della Relazione Annuale della Banca (acclusa). Vi è stata un po di corrispondenza per interessamento di questo ufficio allo scopo di vedere se era possibile trovare materia di collaborazione fra il Gruppo ed il nostro Istituto di Agricultura Tropicale di Firenze ma, a mia conoscenza, non si sono avuti risultati concreti. Ma credo che un più preciso studio della questione possa dare frutti. Secondo me, la presenza dell'Italia in qualche forma, sarebbe di reciproca utilità.

La seconda iniziativa consiste nel Gruppo Consultivo per gli Investimenti e la Produzione Alimentare. Esso è stato costituito per decisione della Conferenza Alimentare Mondiale tenutasi a Roma lo scorso autunno. Il Gruppo, aperto a tutti i paesi e istituti internazionali, è sotto il patronato della Banca, FAO e UNDP. Scopo del Gruppo è coordinare le politiche seguite in materia sia di investimenti per la produzione alimentare sia per la produzione stessa, in modo da accrescere la produzione utilizzando al massimo le risorse esistenti (comunicato stampa accluso). La prima riunione ufficiale del Gruppo si terrà il 21-23 luglio a Washington. La posizione dell'Italia non mi è nota.

Spero che queste brevi note possano esserle utili per elaborare una base sulla quale prendere eventualmente contatto con le Segreterie dei due Gruppi che hanno entrambi sede a Washington, presso la Banca,

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1975 JUL -5 AN II: 43

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1975 JUL -5 AM II: 43
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e che sono diretti rispettivamente da Mr. Michael L. Lejeune e Mr. Edwin M. Martin.

Rimango comunque a sua disposizione per quanto altro possa occorrerla da qui. Con i migliori, cordiali saluti.

Vittorio Masoni Relazioni Estera

All.

Mr. Lejeune, CGIAR, Washington Mr. Martin, CGFPI, Washington

Italian Foreign Ministry inquiring about CGIAR and CGFPI. Our reply gives background of two groups.

Dear Bob,

I apologize for taking such a long time to answer your letter which I found when I returned from a trip to Canada.

For starters I enclose three copies of a brief statement about the Consultative Group on International Agricultural Research and three copies of a brochure which provides basic information about the programs of the international research centers the Group supports. Since this material was published several new members, including Saudi Arabia, have joined the Group. We areabout to establish a new center to cover the area from Morocco to Pakistan and I also enclose a brief note on it. It goes by the name of the International Center for Agricultural Research in the Dry Areas (ICARDA).

Thanks for the invitation to the Grain Research Conference on July 2. I regret I shall be in Europe at that time, so I shan't be able to come and I am afraid everyone else here will be fully occupied getting ready for our annual conference. We would, nevertheless, be very glad to receive any studies or other documents you could spare for us.

It was great to see you and Josie. We must not let it be so long again. Be sure to let me know when you are next in Washington.

As ever, (signed) Michael L. Lejeune

Michael L. Lejeune

Attachments

MichaelLlejeune:js/T

File - T



Save The Children Federation

National Office 48 Wilton Road Westport, Connecticut 06880 (203) 226-7271 (New York Tie-Line 584-4335) New York Office 345 East 46th Street New York, New York 10017 (212) 697-0264

June 18, 1975

Consultative Group on International Agriculture Research c/o World Bank 1818 H. Street, N.W. Washington, D.C. 20433

Gentlemen:

Will you kindly forward to me one copy of your booklet, International Research in Agriculture.

Your attention to this request is appreciated.

Sincerely,

J. Tracy atwood
G. Tracy Atwood

GTA:nf

### BOARD OF DIRECTORS

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# STATE OF INDIANA

EXECUTIVE DEPARTMENT
INDIANAPOLIS 46204

June 9, 1975

Mr. Machael L. Lejeune
INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT
1818 H Street, N.W.
Washington, D.C. 20433

Dear Mike:

It was just great to see you and Peggy at the reunion. It is astonishing how long its been. After Foxcroft vanished from our lives, there haven't been as many opportunities.

Intriguing indeed was the discussion with respect to your responsibilities in the way of agricultural development, research and improvement yield, and other important elements of the need to expand the availability of food. As I indicated, we are very much involved in a number of things where there might be a relationship, and since this is a specific responsibility of mine, I certainly relish the thought of establishing a closer relationship.

You promised to forward me some information relative the activities of the World Bank in this field. My associates and I would greatly appreciate the opportunity to review them, so I hope you haven't disappeared into Africa or Asia before telling someone to forward the material to me.

If it is possible that you might be interested in attending our Grain Research Conference on July 2, we'd certainly love to have you. I seem to remember having had some discussion with you about this and I hope the concept intrigued you enough that you or perhaps someone else from your staff might wish to look in on this one day event. To give you a bit of perspective I'm attaching a copy of our tentative agenda. As soon as the report is complete on the study which has been underway by a consultant for more than a year, I will certainly try to send you one since I think you will be intrigued by the threshold of opportunity which is suggested by this particular project. It might well be that the export of some of the concept to one of your research stations would provide a plus in your own programs.

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Mr. Michael L. Lejeune June 9, 1975 Page 2

When I'll next be getting to Washington I'm not just sure, but in the event you would be unable to attend our day of Grain Alcohol Research Review, you can expect me to be researching your own grain alcohol inventory at some near point.

Let me hear from you.

DOBERT D ORR

Lieutenant Governor

RDO:sjb

File J-May 30, 1975 Mr. E.M. Hutton Chief Division of Tropical Agronomy The Cunningham Laboratory Mill Road, St. Lucia ALD. 4067 Australia Dear Mr. Hutton: Mr. Yudelman has asked me to reply to your letter of May 21, 1975 concerning the translation into Spanish of the book "Tropical Pasture Research - Principles and Methods". We are calling this to the atvention of our colleagues in the appropriate operational Regions of the Bank and will be in further contact with you when we have more information. Sincerely yours, Don Stoops Livestock Advisor DStoops:mam cc: Messrs. Yudelman (with incoming) Fransen Coulter Goffin Sutherland

May 29, 1975.

1-15-2, Minami Kugahara, Ohts-ku, Tokyo, Japan, 145

Dear Sir,

I am an agricultural economist of Japan, studying international problems of agricultural economics.

I should be much obliged, if you would let me know about your organization CGIAR by sending as many data as possible (including "International Research in agriculture").

Hoping your co-operation,

Truly yours,

Dr. Tetsus YAMAGOUCHI
Prot. of Mihon University

tt

Secretary,

Consultative Group on Intern'l Agricultural Research

つぎに ここを # 6 Second fold here

差出人郵便番号住所氏名 Sender's name, address and postal code

Dr. Tetano YAMAGOUCHI LIOTEX 1-15-2, Minami Kugahara, Ohta-ku, Tokyo,

この郵便物には なにも入れたりはりつけたりすることができません Nothing may be contained in or attached to this letter.

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If available, I would appreciate receiving ..../ of the following publication (s): International Research in Heimsture ADDRESS: The International Rice Sincerely. Research Institute Manila Hotel, Manila, Philippines

Manila Hotel Manila, Philippines Consultative group Agricultural Research International VIA AIR MAIL 1818 H Street N.W. Washington, D.C. 20433 U.S. A.

# CSIRO

DIVISION OF TROPICAL AGRONOMY-THE CUNNINGHAM LABORATORY

MILL ROAD, ST. LUCIA, QLD. 4067. TELEPHONE 70 7121 (STD 072) TELEGRAMS TROPRESEARCH BRISBANE EMH/NHS: JM AIR MAIL

21st May, 1975.

Mr. M. Yudelman,
Director,
Agriculture & Rural Development,
World Bank,
1818 H Street, N.W.,
WASHINGTON. D.C. 20433

Dear Mr. Yudelman,

Recently I wrote to you about liaison between the Division of Tropical Agronomy and the various international agricultural research centres. Since then both Mr. J.K. Coulter and Mr. A.C. Wolf have been in touch with me and kindly given me an insight into how this liaison could be developed.

I want to raise another matter with you concerning the preparation of our book on philosophies and methods in pasture research. The book is entitled "Tropical Pasture Research - Principles and Methods", edited by N.H. Shaw and W.W. Bryan, and it will be published by the Commonwealth Bureau of Pastures and Field Crops, Hurley, England as their C.A.B. Bulletin 51. I expect that it will appear early in 1976. Some explanatory information about the contents of the book is attached.

My purpose in writing to you now is to seek your help in arranging for a Spanish language edition of this book. I have no doubt that this will prove to be a most valuable reference book for pasture scientists and administrators in the countries of Latin America, and its value would be increased tremendously if it were available in Spanish. The C.A.B. has agreed wholeheartedly with the idea but they cannot meet the additional costs from their normal sources of funds. I have therefore agreed to seek the extra money needed to cover the costs of translation, proof-reading and the extra printing.

A precise estimate of the funds required is not possible at this stage. However, based on some information from C.A.B., the cost might be \$U.S.12,000-13,000 if the translation is done in England. The costs would be much higher if the translation is done in Australia, but I have no idea of translation costs in any of the Latin American countries. I should stress that the C.A.B. estimates are designed simply to cover their costs and to allow for a selling price of no more than \$U.S.12.

I am sure that you will agree about the worth of this translation project and I am therefore hopeful that you may be able to help in providing the necessary funds. Such aid would, of course, be featured in the book. If you are unable to help financially I would very much appreciate any suggestions for other ways of achieving our objective.

Yours sincerely,

E.M. HUTTON CHIEF OF THE DIVISION



# TROPICAL PASTURE RESEARCH

PRINCIPLES AND METHODS

edited by

N. H. Shaw and W.W. Bryan
CSIRO Division of Tropical Agronomy
Cunningham Laboratory
Brisbane, Australia

BULLETIN 51

Commonwealth Bureau of Pastures and Field Crops; Hurley, Berkshire, England



COMMONWEALTH AGRICULTURAL BUREAUX

## \*Tropical Pasture Research - Principles and Methods\* Edited by N.H. Shaw and W.W. Bryan CAB Bulletin 51

'Some Concepts and Methods in Sub-tropical Pasture Research' which was published as CAB Bulletin 47 in 1964. The objective was not simply to bring Bulletin 47 up to date, but to undertake a complete revision of ideas, and to broaden the scope to make the book applicable to all tropical and sub-tropical environments where pasture improvement might be carried out. The book is specifically aimed at developing countries in the tropics and is written for the graduate with basic training in science or agricultural science who is relatively new to pasture research.

The authors are all research scientists of the CSIRO Divisions of Tropical Agronomy, Soils, and Mathematics and Statistics located at the Cumningham Laboratory in Brisbane, or at the Davies Laboratory in Townsville. We have drawn on our own research results and experiences, on published work from other countries and on knowledge gained by our own staff in visits to other parts of the tropics. At the outset we ask the two basic questions: whether pasture research should be undertaken at all, and if so how it should be organized. It is hoped that consideration of the factors involved in these questions will assist administrators and research workers alike in determining their overall approach to tropical pasture research.

Subsequent chapters deal with the assessment of the natural resources of climate, land and vegetation, and then with the various scientific disciplines that go to make up pasture research.

The chapter titles are listed on the attached copy of the table of contents. It is estimated that the text will total about 450 pages including references and index. There are 1200 references.

Foreword

List of Plates

List of Authors

Preface

- PLANNING AND ORGANIZING A PASTURE RESEARCH PROGRAMME
  by E.M. Hutton and E.F. Henzell
- 2. CLIMATE by A.W. Moore and J.S. Russell
- 3. LAND by R.F. Isbell and R.L. McCown
- NATURAL VEGETATION AND PASTURE RESEARCH by J.E. Coaldrake,
   J.C. Tothill and P. Gillard
- 5. PLANT INTRODUCTION by R.J. Williams, R.L. Burt and R.W. Strickland
- 6. PLANT NUTRITION AND SOIL FERTILITY by C.S. Andrew and I.F. Fergus
- 7. LEGUME BACTERIOLOGY by D.O. Norris and R.A. Date
- DEVELOPING AND TESTING NEW PASTURES by N.H. Shaw, R.M. Jones,
   L.A. Edye and W.W. Bryan
- 9. PASTURE EVALUATION BY GRAZING EXPERIMENTS by L.'t Mannetje,
  R.J. Jones and T.H. Stobbs
- 10. PASTURE MEASUREMENTS by N.H. Shaw, L.'t Mannetje, R.M. Jones and R.J. Jones
- 11. PHYSIOLOGY OF GROWTH AND CHEMICAL COMPOSITION by M.M. Ludlow
- 12. THE AGRONOMY AND ECOLOGY OF IMPROVED PASTURES by G.J. Leach,
  R.M. Jones and R.J. Jones
- 13. MEASURING THE NUTRITIVE VALUE OF PASTURE PLANTS by D.J. Minson,
  T.H. Stobbs, M.P. Hegarty and M.J. Playne
- 14. PLANT BREEDING AND GENETICS by R.A. Bray and E.M. Hutton
- STATISTICS AND PATTERN ANALYSIS IN PASTURE RESEARCH by R.L. Sandland, W.T. Williams and K.P. Haydock
- 16. SEED PRODUCTION, HARVESTING AND STORAGE by R.J. Jones and R. Roe
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#### THE AUTHORS

### Cunningham Laboratory, Mill Road, St. Lucia, Qld. 4067, Australia.

Division of Tropical Agronomy, C.S.I.R.O.

Andrew, C.S.

Ludlow, M.M.

Bray, R.A.

't Mannetje, L.

Bryan W.W.

Minson, D.J.

Coaldrake, J.E.

Norris, D.O.

Date, R.A.

Roe, R.

Hegarty, M.P.

Russell, J.S.

Henzell, E.F.

Shaw, N.H.

Hutton, E.M.

Stobbs, T.H.

Jones, R.J.

Strickland, R.W.

Jones, R.M.

Tothill, J.C.

Leach G.J.

Williams, R.J.

\* Now A.A. Heath & Partners, 131 Leichhardt

St., Qld. 4000. Australia

Division of Soils, C.S.I.R.O.

Fergus, I.F.

Moore, A.W.

Division of Mathematics and Statistics, C.S.I.R.O.

Haydock, K.P.

Sandland, R.L.

Davies Laboratory, Private Mail Bag, P.O. Townsville, Qld. 4810, Australia.

Division of Tropical Agronomy, C.S.I.R.O.

Burt, R.L.

McCown, R.L.

Edye, L.A.

Playne, M.J.

Gillard, P.

Williams, W.T.

Division of Soils, C.S.I.R.O.

Isbell, R.F.

#### NOTE

To: Mr. Michael L. Lejeune

Date: May 15, 1975

Subject: Letter from Dr. Hutton

Dear Mike:

Attacked is a letter from Dr. Hutton of Australia which I received and a copy of my reply for your information.

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#### INTER-AMERICAN DEVELOPMENT BANK WASHINGTON, D. C. 20577



CABLE ADDRESS

May 15, 1975.

Dr. E. M. Hutton Chief, Division of Tropical Agronomy Cunningham Laboratory Mill Road, St. Lucia Old 4067 Brisbane, Australia.

Dear Dr. Hutton:

This will acknowledge your letter of April 29, 1975 regarding visits of senior scientists from your institution visiting international centers under the Consultative Group on International Agricultural Research: IRRI, IITA, ICRISAT, CIAT, CIMMYT, ILCA.

I think that the centers concerned would welcome such visits if scheduled at a convenient time and if the financing could be arranged. Neither this Bank nor I has any jurisdiction in the matter. I suggest that you address your inquiry to

> Mr. Michael L. Lejeune Executive Secretary Consultative Group on International Agricultural Research International Bank for Reconstruction and Development 1818 H. Street N.W. Washington, D.C. USA

Perhaps you know Sir John Crawford of Australia. He is Chairman of a Technical Advisory Committee of the Consultative Group. He could advise you on the possibilities and arrangements for such visits.

I am taking the liberty of sending your letter to Mr. Lejeune together with a copy of my letter to you.

Sincerely yours,

Alfred C. Wolf

Program Advisor

2103

THE CUNNINGHAM LABORATORY

Division of Tropical Agronomy

MILL ROAD, ST. LUCIA, QLD. 4067. CABLES TROPRESEARCH BRISBANE.

EMH: JM 29th April, 1975.

Mr. Alfred Wolf, Program Advisor to the President, Inter-American Development Bank, 808 - 17th Street, N.W., WASHINGTON. D.C.

Dear Mr. Wolf,

Under separate cover I am sending you a copy of the last annual report of the Division of Tropical Agronomy which will give you an idea of the scope of our research in tropical pastures and crops.

Our Division's program and the ideas generated are proving of international interest as judged by the large number of scientists who visit us and the many requests we receive for help. The Division has become an acknowledged centre for genetic resources of a large range of tropical legumes and grasses so there are continual requests for seed of a number of these. Also our major research on legumes involving their nodulation, mineral nutrition, and integration into pasture and farming systems is well recognized and has created a lot of interest.

The visiting scientists come mainly from the tropics although a number are from temperate countries including U.S.A. and the U.K. They stay for short or extended periods and some do postgraduate degrees in association with our scientists. A number of our scientists visit tropical areas often on request by FAO, World Bank, etc. and give advice on pasture and crop programs.

It seems to us that it would be of mutual benefit if we were able to have closer liaison with the international agricultural research centres (or centre) with which you are associated. I understand that a consultative group of the international agricultural research centres meets at the various centres from time to time e.g. IRRI, IITA, ICRISAT, CIAT, CIMMYT, ILCA. Perhaps it would be possible for one of our senior scientists to be invited as an observer to some of the meetings you hold at these centres. I am sure that our scientists could contribute valuable ideas and suggestions to the research programs of most of the six centres enumerated.

I hope you can give this suggestion some thought as I have no doubt that it would be of mutual benefit in the future to develop this liaison with my Division. The matter would of course be facilitated if the international agricultural research centres organization could provide travel funds etc. for our scientists to attend your meetings.

Looking forward to hearing from you.

Kind regards,

Yours sincerely,

E.M. HUTTON CHIEF OF THE DIVISION

## Please file.

"T

From the Editor of SPAN, c/o P.O. Box 32, Wayzgoose Drive, Derby, DE2 6XH, England
Telephone: Derby 31242

13th May 1975

Thank you very much for your letter of 1st May addressed to Mr Stevens and he has asked me to tell you that he is extremely grateful for your suggestions.

Dolores V. Caddy, (Mrs)
Assistant to Mr J. G. R. Stevens

SPAN is published by J. G. R. Stevens for Shell International Chemical Company Limited



## UNITED NATIONS DEVELOPMENT PROGRAMME



## PROGRAMME DES NATIONS UNIES POUR LE DEVELOPPEMENT

#### 866 UNITED NATIONS PLAZA NEW YORK, N.Y. 10017

TELEPHONE: 754-1234

CABLE ADDRESS: UNDEVPRO . NEW YORK

REFERENCE: PRO/301/CGIAR

12 May 1975

Dear Mike,

I am sending you herewith the copies of a letter from Dr. E.M. Hutton, Chief of the Division of Tropical Agronomy of CSIRO, of 29 April 1975, and my reply to him of today's date. I should be grateful if you could answer more specifically than I have done, his inquiry concerning CSIRO's interest in cooperation with the CGIAR and the Centres. It would appear that there is a communication gap within the CSIRO and it would seem to me that Sri John Crawford might assist in "narrowing" it.

With best personal regards.

Yours sincerely,

William T. Mashler

Director

Division for Global and Interregional Projects

Mr. Michael L. Lejeune Executive Secretary Consultative Group on International Agriculture Research 1818 H Street, N.W. Washington, D.C. 20433

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Yours minteerely.

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## UNITED NATIONS DEVELOPMENT PROGRAMME



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12 May 1975

Dear Dr. Hutton,

I wish to acknowledge with thanks the receipt of your letter of 29 April concerning CSIRO's interest in the Consultative Group on International Agricultural Research and the Agricultural Centres sponsored by it.

by the sponsors of the Group (FAO, IBRD and UNDP), how the Group functions and that amongst its members Australia is represented.

As for the meetings of the Consultative Group, I should point out that it has so far met only at the World Bank's headquarters in Washington where it is served by a small Secretariat. These meetings take place twice annually, usually in early August, when all Centres' Directors attend what is known as Centres Week and at which time they present and review their programmes with members of the Group. It meets again usually in late October or early November in executive session when formal pledges for existing and new programmes of centres are made.

I would therefore think that your interest would lie in attending the summer session of Centres Week and I am sending a copy of your letter to the Executive Secretary of the CGIAR, Mr. Michael Lejeune, with the request that he communicate with you concerning your desire to send an observer to that meeting and, possibly, other forms of cooperation with the work of the Centres.

Yours sincerely,

William T. Mashler Director

Division for Global and Interregional Projects

Dr. E.M. Hutton Chief, Division of Tropical Agronomy CSIRO Mill Road, St. Lucia, QLD. 4067 Australia UZZZZ

Division of Tropical Agronomy

THE CUNNINGHAM LABORATORY

MILL ROAD, ST. LUCIA, QLD. 4067. CABLES TROPRESEARCH BRISBANE.
EMH: JM 29th April, 1975.

Mr. William T. Mashler,
Director, Division for Global and
Inter-regional Projects,
UNDP,
866 United Nations Plaza,
NEW YORK. N.Y. 10017

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Looking forward to hearing from you.

Kind regards,

Yours sincerely,

E. G. Heite

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Dr. E. M. Hutton Chief, Division of Tropical Agronomy The Cunningham Laboratory Commonwealth Scientific & Industrial Research Organization

Mill Road St.Lucia QLD 4067 Brisbane AUSTRALIA

May 9, 1975

Dear Dr. Hutton:

Your letters of April 28 and 29 to Messrs. Yudelman and Baum have been referred to me.

Perhaps it would be useful for future liaison between your Division and our group if I gave you a brief outline of the way in which the system operates. The international centers listed by you are part of a group of 10 centers, the early ones of which were funded by the Ford and Rockefeller Foundations. Funding is now arranged through a group of donors (the Consultative Group for International Agricultural Research) consisting of governments, private agencies and United Nations agencies. This Group meets twice a year in Washington to consider the programs and budgets of the Centers and to pledge funds for their support.

The Group is advised by a Technical Advisory Committee of which Sir John Crawford is Chairman; this Committee advises on new initiatives which may be carried out by existing Centers or for which new Centers may be created. It also oversees the research policy of the Centers through a series of quinquennial reviews.

Each Center has a Board of Trustees which meets several times a year at the Center and examines the program and budget proposals of the management. Advisers may be intited to the program reviews and to visit at other times. In addition to these more formal meetings, donors often send scientists to visit a particular center to which they contribute. Australia, for example, now contributes to ICRISAT, IRRI, ILCA and ICARDA (the proposed new Middle East Center) and I imagine that Australian scientists will visit these centers.

In addition, of course, centers often invite scientists from organizations like yours to visit as consultants as part of a program review for instance. Some of the centers are very active in arranging joint programs with research organizations in developed countries whereby certain parts of a program can be executed in that country. Funds for these may come either from the Center's own budget or by way of bilateral funds from the government of the country concerned. I would think that CIAT would be the most appropriate Center for a joint exercise like this. As you no doubt know, they are working closely with the

International Board for Plant Genetic Resources to establish worldwide germ plasma collections of a number of species, including some of the fodder legumes.

I hope that this note will give you some insight into the working of the system. Please do not hesitate to write if you need additional information. The Centers, themselves, welcome any help that outside agencies can give them. I would also strongly suggest direct contact with Sir John Crawford, who has had a deep involvement in the system since the beginning.

Yours Sincerely,

John K. Coulter

Scientific Adviser

c.c. Sir John Crawford

JohnCoulter/ms/File T

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ADDRESS: STE ANNE DE BELLEVUE, QUE.



## MACDONALD CAMPUS of McGILL UNIVERSITY

POST OFFICE ADDRESS:

MACDONALD COLLEGE, QUE., CANADA

Agronomy Department HOA 1CO

Phoned counts

6 May 1975

Mr. Harold Graves
Consultative Group on International
Agricultural Research
International Bank for
Reconstruction and Development
Washington, D.C.

Dear Harold,

A short while ago I was approached by the Rotary Club of Montreal with respect to international Rotary meeting which will be held in Montreal late in June of this year. They were particularly anxious to have some local project which could have an impact at the international meeting. They were aware of the world food situation; they seem to have some concept that agriculture is associated with it, but they were not certain what might be done. In the course of conversation with them it turned out that they expect something in the order of 20,000 people to attend the convention. The participants will come from various countries of the world, including many from developing countries, and the Montreal club wished to give them something to take home.

I felt that some information on the international agricultural research network might not be inappropriate, and that if these people who are reasonably influential businessmen and professional people were well informed, they might have some impact on activities in their home countries. Thus, I suggested that a small brochure setting out a bit on the international agricultural research network might be their project, i.e., to publish and to distribute. They accepted this and the consequence is that I have written a short brochure which I enclose. Their proposal is to print about 10,000 copies and to distribute these to the participants. I have used some of the information in your

Mr. Harold Graves 6 May 1975

publication on international research in agriculture and I anticipate that the cover of the brochure will probably be based on the map which you include showing the locations of the various centres. Could I please have your reaction to this paper. Time is of the essence, so if possible you might even phone back with your comments. My telephone number is (514)-457-6580, extension 298.

Kindest regards.

Yours sincerely

¥

Howard A. Steppler Professor of Agronomy

HAS:mc Att.

## TO FEED MAN - AGRICULTURAL REVOLUTION Howard A. Steppler

Man changed from a hunter to a farmer when he first noticed that seeds which he had gathered to eat and dropped around his cave, sprouted and grew. In fact, it was probably a woman who "invented" agriculture!

Through the ages one can identify innovation in agriculture which resulted in improvement in man's capacity to produce food for himself. For example, in the eleventh century the plough with a share and rolling coulter was introduced to the United Kingdom; in the eighteenth century the Norfolk rotation was developed; while in the 1840's Justis von Liebig disproved the humus theory and firmly established agricultural chemistry and the role of plant nutrients. In 1843, at Rothamsted in England, the worldformalbalk famous Broadback field was laid down to study fertilizer and continuous wheat - this experiment is still continuing. Mendel's paper in genetics of 1865 was re-discovered in 1900 and established the basis for modern plant breeding.

The early innovations in agriculture were the product of observations and possibly even accident - as is the case of the discovery of drilling of wheat - rather than planned

experimentation to solve a problem. The experimental approach to agriculture dates from the early part of the nineteenth century and has steadily gained impetus, and probably has been most successful in the Land Grant College system of the United States.

There is, however, a great disparity in the agricultural research capacity between countries and, in particular, between the developed and the less developed countries of the world.

New agricultural technology is urgently needed if the world's rapidly growing population is to be fed.

The impact of the miracle wheats and rice introduced in many developing countries in the last decade has been termed the Green Revolution. The wheats made India nearly self-sufficient, while the rice did the same for the Philippines and several areas in the far east. These "miracle" crops are not the product of chance, but rather the result of carefully planned research carried on by a mere handful of scientists working in a different kind of agriculture research centre — the International Centre for Agricultural Research — a new concept developed jointly by the Ford and Rockefeller Foundations in the early 1960's.

The philosophy of the international centre is that it should be international in focus although of necessity

located within national boundaries; that the results of its research would be available to all countries; and that in addition to its research program it would develop strong linkages with national agencies and would conduct "training" programs for research scientists. The research program would be problem oriented.

Today (1975) there are eight international centres.

The first of these was developed by the Ford and Rockefeller

Foundations, but it soon became apparent that more funds and
a different administrative framework would be necessary in

order to finance adequately the growing international network.

In 1971 the World Bank, the F.A.O. of the United Nations, and
the U.N.D.P. sponsored the formation of the Consultative Group

for International Agricultural Research (CGIAR). The Group has
some 29 members, some of whom are bilateral aid agencies, some
are foundations, and some are governments with a deep concern
for agricultural development problems.

The international institutes are the following.

The International Rice Research Institute - IRRI.

P.O. Box 583, Manila, Philippines. This was the first international institute to be officially established, and celebrated its tenth anniversary in 1972. From its beginning the centre has been concerned solely with rice, although more recently

it has added the development of small-scale field equipment and cropping systems with rice. The dramatic impact of its first cultivar - IR8 - set the stage for the subsequent development of other international centres. IRRI's rice cultivars have changed the face of rice production in many of the countries of the world.

Centro Internacional de Majoriamiento de Maiz y Trigo -

CIMMYT. International Maize and Wheat Improvement Centre,
Londres 40, Mexico 6DF, Mexico. CIMMYT has the responsibility
for wheat and maize improvement, and more recently has
developed a program for Triticale, the new man-made cereal.
The short-stemmed wheats of CIMMYT, together with their rice
counterparts from IRRI, were responsible for the "Green
Revolution." CIMMYT materials are being used and tested in
over ninety countries of the world. In the period 1966-1972
CIMMYT wheats had been largely responsible for doubling wheat
production in India and Pakistan. Triticale - the laboratory
cross of wheat and rye - now being tested in five continents,

International Institute of Tropical Agriculture - IITA.

P.M.B. 5320, Ibadan, Nigeria. IITA has responsibility for the lowland tropics - the Guinean zone - of West Africa. While it

promises to be a new cereal of good nutritional value, in

many of the areas in which it is being tested.

Canada.

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has an ecological zone responsibility, it fulfils this by concentrating on a limited number of problems. Thus IITA carries programs on

- farming systems appropriate for the sub-humid tropics and with particular attention to lateratic soils
- rice and corn improvement
- grain legumes, especially the cowpea IITA has assumed world responsibility among the centres for this crop and has already achieved yields six times the African average
- root and tuber crops the yams and cassava

Centro Internacional de Agricultura Tropical - CIAT.

International Centre of Tropical Agriculture, Apartado Aereo 67-13, Cali, Colombia. CIAT, like IITA has responsibility for a "zone" - in this case the lowland tropics of Latin America. It, too, meets its "zonal" responsibility by concentrating on a limited number of problems, thus

- cassava (or manioc or yuca) CIAT has assumed the world responsibility among the institutions for this crop
- field beans again CIAT has assumed the world responsibility for this very important protein rich food crop
- maize and rice CIAT works closely with IRRI and CIMMYT, already some 95 percent of the irrigated rice area in Colombia is planted to improved cultivars

forese legues

- beef cattle here CIAT works closely with the Colombian research agency, ICA, to develop beef cattle systems for the vast llanos areas - the allic soils of Latin America
- swine CIAT has developed the technology to use locally produced feedstuffs for the production of swine

International Crops Research Institute for the SemiArid Tropics - ICRISAT. 1-11-256 Begumpet, Hyderabad 500016

A.P., India. ICRISAT is one of the newer centres with a zonal responsibility coupled with four crops, namely

- sorghum a very important human food crop in much of the
   drier regions of East Africa and India
- pearl millet a widespread crop used for food in south
  Asia and Africa where it performs well under adverse
  conditions
- pigeon peas an important grain legume crop in India and many other parts of the world where it furnishes essential protein to the low meat diet of the population
- chick peas another important grain legume crop able to produce in dry weather and widely grown in the near East and South and south-east Asia.
- farming systems ICRISAT is deeply concerned with the conservation and management of water and undertakes
   research into farming systems which optimize water use

El Centro Internacional de la Papa - CIP. International Potato Centre, Apartado 5969, Lima, Peru. This is a one-crop institute dealing solely with the potato. While relatively new, it already has distributed superior materials to some 31 countries and has an extensive cooperative inter-national program.

International Laboratory of Research on Animal Diseases

- ILRAD. P.O. Box 47543, Nairobi, Kenya. Animal diseases are
a particularly serious problem of the ruminants in the vast
areas south of the Sahara. ILRAD, which was founded in 1973,
will concentrate initially on two major diseases, Trypanosomiasis and East Coast fever. Control of these could affect
animal production in some thirty countries which lie within
the areas infested with the diseases.

International Livestock Centre for Africa - ILCA.

P.O. Box 5689, Addis Ababa, Ethiopia. ILCA is the newest of the centres having been formally formed in 1974. It will concern itself with the development of livestock systems for tropical Africa which at present has some 130 million cattle, 100 million sheep and 80 million goats. It will work closely with ILRAD to incorporate disease control into the systems.

Each centre has a commodity and/or a zonal responsibility to develop new technology appropriate for its mandate. However, in addition to the research responsibility, each centre has two other functions which are possibly even more important than the research.

Each centre has a training program. This program is designed to train researchers in the techniques and methods used by the centre in carrying out its research function.

These young scientists return to their home base and are well prepared to use the material from the centre and to adapt it to best use in their home country. For example, IRRI has completed some 700 man-years of such training since it started. Similar records have been developed by CIMMYT and are fast being achieved by the other centres.

Each centre has an "outreach" program which is designed to assist national programs to develop their capacity in those commodities, etc., in which the centre has competence.

Thus, CIMMYT has staff members located in some nine countries and carries consultation with as many as sixty countries per year.

The contribution which a centre can make to alleviating the world food shortage and in developing the agricultural capacity of the developing countries is dependent wholly on the responsiveness of the various national governments.

Agricultural planners and government policy makers in the

countries of the world must be made aware of the resources that are available to them in this network of international centres. They must ensure that young scientists have the opportunity to obtain training so essential to improve the agriculture of their country and that they have the facilities and the policy backing to achieve the change when they return to their home.

The international centres have been created to serve the needs of agriculture. Be sure that these resources are known in your country and used whenever appropriate.

Further information can be obtained by writing to the centre nearest to you or to the Consultative Group at

The Secretariat
The Consultative Group for International Agricultural
Research
The International Bank for Reconstruction and
Development
18th Street
Washington, D.C.
U.S.A.

1

Mr. J. G. R. Stevens c/o P.O. Box 32 Wayzgoose Drive Derby DE 2 6XH ENGLAND

May 1, 1975

Dear Mr. Stevens:

Thank you for your letter of April 23. I am pleased to learn you have invited Dr. Bernstein to write an introductory article for "Span", and I am sure he will produce a farst-rate piece.

I would endorse your suggestion that CIAT and CIMMYT would be good candidates for future articles. Other than IRRI and IITA, the anily other Center in the CGIAR system which is fully operative is the International Potato Center (CIP) in Peru. CIP has a rather unusual program. About a quarter of its research activity is undertaken on a contract basis by institutes and laboratories in developed countries. Most of the other Centers in the system are, as you know, still at a rather early stage of development. Should you wish to consider an article describing the establishment of a Center, I believe ICRISAT in India would be a worthy candidate.

We look forward to your forthcoming articles in "Span".

Sincerely yours,

(signed) Michael L. Lejeune

Michael L. Lejeune Executive Secretary

DanielRitchie/ms/File T

Mr. Theodore Hutchcroft
Programa Interamericano Para La Juventud Rural
Apartado 10307
San Jose
Costa Rica

May 1, 1975

Dear Mr. Hutchcroft:

Thank you very much for your letter of April 25, 1975 enquiring about possible positions with the various international agricultural research centers in the CGIAR system. The Secretariat of the CGIAR does not itself maintain information on employment opportunities within the system. Each Center is responsible for its own recruitment. Most of the Centers do of course have an information office and several of them are still at an early stage in their recruitment of staff. I am enclosing for your information a list of the Directors and addresses of the Centers currently in the system. I suggest you submit your Curriculum Vitae to the Centers directly for consideration. The Centers that are still in an early stage of development include ICRISAT, ILRAD and ILCA and I would expect that they would be the ones most likely to be looking for an information officer.

Sincerely yours,

(signed) Michael L. Lejeune

Michael L. Lejeune Executive Secretary

DanielRitchie/ms/ File T

Central Files

c/o Janet Potter 394 Franklin Road North Brunswick, N.J. 08902 29 April 1975

Agricultural Research The World Bank 1818 H Street NW Washinoton, D.C. 20433

Dear Sir:

I have been referred to your services by John Doolette, a member of CIMMYT working in Tunis, Tunisia. I wish to do some extensive research on the Green Revolution and its effect in Third World countries, particularly in Algeria, where I shall be living and working for the next year or more. I understand that the Consultative Group on International Agricultural Research has published some background material that may be of use in my studies. I hope to do a lot of research in-country, but I still need the basic information concerning the functioning of the Green Revolution system. Any information and publications you could supply me will be greatly appreciated.

Thank you for your assistance. This topic is of great interest to me.

Yours sincerely,

Tayle Hunt

Gayle Hunt (Miss)

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## 1975 MAY -5 PM 3: 00

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#### WORLD BANK GROUP

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THE CUNNINGHAM LABORATORY

MILL ROAD, ST. LUCIA, QLD. 4067. CABLES TROPRESEARCH BRISBANE.

EMH: JM 29th April, 1975.

Mr. M. Yudelman,
Director,
Agriculture & Rural Development,
World Bank,
1818 H Street, N.W.,
WASHINGTON. D.C. 20433

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Kind regards,

Yours sincerely,

E.M. HUTTON CHIEF OF THE DIVISION

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### AEROGRAMME BY AIR MAIL . PAR AVION

CSIRO

THE CUNNINGHAM LABORATORY



Mr	. M. Yudelman,
Di	rector,
Ag	riculture & Rural Development,
Wo	rld Bank,
18	18 H Street, N.W.,
WA	SHINGTON. D.C. 20433
	COUNTRY OF DESTINATION

Approved by Postmaster-General for acceptance as Aerogramme No. 2

"ARCHER" AEROGRAMME Regd. Trade Mark

SENDER'S NAME AND ADDRESS

DR. E.M. HUTTON

FROM: THE CUNNINGHAM LABORATORY, CSIRO,

MILL ROAD, ST. LUCIA, QUEENSLAND,

AUSTRALIA. 4067

POSTCODE

TO OPEN SLIT HERE FIRST

THE CUNNINGHAM LABORATORY

Division of Tropical Agronomy

MILL ROAD, ST. LUCIA, QLD. 4067. CABLES TROPRESEARCH BRISBANE.
EMH: JM 28th April, 1975.

Mr. Warren C. Baum, Vice President, Projects Staff, World Bank, 1818 H Street, N.W., WASHINGTON. D.C. 20433 me Jegumples droft orth

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Dear Mr. Baum,

Under separate cover I am sending you a copy of the last annual report of the Division of Tropical Agronomy which will give you an idea of the scope of our research in tropical pastures and crops.

Our Division's program and the ideas generated are proving of international interest as judged by the large number of scientists who visit us and the many requests we receive for help. The Division has become an acknowledged centre for genetic resources of a large range of tropical legumes and grasses so there are continual requests for seed of a number of these. Also our major research on legumes involving their nodulation, mineral nutrition, and integration into pasture and farming systems is well recognized and has created a lot of interest.

The visiting scientists come mainly from the tropics although a number are from temperate countries including U.S.A. and the U.K. They stay for short or extended periods and some do postgraduate degrees in association with our scientists. A number of our scientists visit tropical areas often on request by FAO, World Bank, etc. and give advice on pasture and crop programs.

It seems to us that it would be of mutual benefit if we were able to have closer liaison with the international agricultural research centres (or centre) with which you are associated. I understand that a consultative group of the international agricultural research centres meets at the various centres from time to time e.g. IRRI, IITA, ICRISAT, CIAT, CIMMYT, ILCA. Perhaps it would be possible for one of our senior scientists to be invited as an observer to some of the meetings you hold at these centres. I am sure that our scientists could contribute valuable ideas and suggestions to the research programs of most of the six centres enumerated. I hope you can give this suggestion some thought as I have no doubt that it would be of mutual benefit in the future to develop this liaison with my Division. The matter would of course be facilitated if the international agricultural research centres organization could provide travel funds etc. for our scientists to attend your meetings.

Looking forward to hearing from you.

Kind regards,

Yours sincerely,

E.M. HUTTON CHIEF OF THE DIVISION

C. S. Hutton

BY AIR MAIL

PAR AVION

#### CSIRO

RECEIVED THE CUNNINGHAM LABORATORY

1975 MAY -5 PM 3: 00

INCOMING MAIL Dr. Warren C. Baum,

Vice President, Projects Staff,

World Bank,

1818 H Street, N.W.,

WASHINGTON. D.C. 20433

Approved by Postmaster-General for acceptance as Aerogramme No. 2

COUNTRY OF DESTINATION

"ARCHER" AEROGRAMME Regd. Trade Mark

#### SENDER'S NAME AND ADDRESS

DR. E.M. HUTTON

FROM: THE CUNNINGHAM LABORATORY, CSIRO,

MILL ROAD, ST. LUCIA, QUEENSLAND,

AUSTRALIA. 4067

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Republic of the Philippines
PHILIPPINE COUNCIL FOR AGRICULTURAL RESEARCH
Los Baños, Laguna, Philippines
Tel. Nos. 2308 & 2465

28 April 1975

The Excutive Secretariat
Consultative Group on International
Agricultural Research
1818 H. Street, N. W.
Washington, D. C. 20433
U. S. A.

Dear Sir:

We acknowledge with gratitude the receipt of the following publications:

1. International Research in Agriculture - 1974 (2 copies)

 Animal Producation and Research in Tropical Africa, a report... March 1973

3. Seminar on Socio-Economic Research and Training in Agriculture: program and background paper, July 27-28, 1973.

4. International Potato Center Annual Report, 1973

5. West Africa Development Association Annual Reseach Report, July 1974

6. CIAT, Annual Report 1973

7. IATA Report 1972-73

8. International Laboratory for Research on Animal Diseases (ILRAD) a proposal, May, 1972

9. CIMMYT Review, 1974

10. ICRISAT, This is ICRISAT.

We are sure that our agricultural scientists and research staff will find these materials useful.

Thank you very much

Truly yours,

for MARINA E. BARILE

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#### Dear Sir:

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# **Record Removal Notice**



	national Agricultural Research [CGIAR] - G-12 - Internat 986 Correspondence - Volume 3	ional Board for Plant Genetic	Barcode No. 1762396
Document Date April 25, 1975	Document Type  Letter and resume		
Correspondents / Participants To: Mr. Michael Lejeund	e, Executive Secretary, CGIAR		
From: Theodore Hutcher	roft, Programa Interamericano para la Juventud R	ural	
Exception(s) Personal Information			
Additional Comments		accordance with The Wo	ove has/have been removed in orld Bank Policy on Access to can be found on the World Bank ebsite.
		Withdrawn by Shiri Alon	Date 22-Mar-16



Telephone: Derby 31242

23rd April 1975

1

Mr Michael L. Lejeune, Executive Secretary, Consultative Group on International Agricultural Research, 1818 H St., N.W., Washington D.C. 20433, USA.

Dear Mr Lejeune,

Thank you very much for your extremely helpful letter of 17th April. I have written to Dr Bernstein and am enclosing a copy of the letter.

As you kindly offer to be of further help in connection with the proposed series of articles on the agricultural research institutes, I wonder if you could let me know which ones you think are in the best stage of development for writing up in the course of the next year to 18 months? I have published articles on IITA and IRRI, so would prefer to consider some of the other institutes in the immediate future. I imagine that CIAT and CIMMYT would be strong candidates for early articles: can you confirm this and/or suggest others?

Yours sincerely,

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as you kindly offer to be of fither bely in connection of 8 the purpose a select of articles on the aminimistration rescent in acts to a worder if you could let be made which as you talk are in the both after a development for writing up in the course of the most year to be remarked. I have published exule armit and include the world pract to consider more of the other implicates in the immediate fature. I have the CIMPN would be assuming candidates for early article to any you confirm this and/or sucreet others?

Yours sincerely.

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15 JULIUS 15 JULIUM

Dr Joel Bernstein, 4620 North Park Avenue, Apartment 1507-W, Chevy Chase, Maryland, USA 20015.

Dear Dr Bernstein,

I have just received Mr Michael Lejeune's letter of 17th April telling me that you have very kindly offered to write an introductory article, for the November 1975 issue of 'Span', on the international agricultural research institutes.

I am extremely grateful to you for agreeing to undertake this article. As I understand that you have a copy of my letter of 31st January 1975 to Dr Yudelman, in which I set out the kind of thing I have in mind, there seems to be no point in my repeating the "brief" now. Perhaps I should add, however, that I would be glad to offer you a fee. Outside the USA I pay £45.00 sterling for an article of 1750 words with photographs; I realise that this is somewhat low by US standards, and would be glad to know whether you would consider it acceptable.

Perhaps you would be kind enough to confirm that you can let me have this article before the end of June; if you would care to send me a short synopsis, indicating your proposed approach, I would let you have any comments as quickly as possible.

I am enclosing a copy of our Notes for Authors; please may I draw your attention to the note about summaries.

Yours sincerely,

Dear Dr. Dow:

Thank you for your letter of March 26. As you know very well, a great deal of interest has been generated in the Sahel and any device which can bring the interested organizations together would be worthwhile.

Instead of every organization operating in every field, it would seem to me that you should try and choose particular organizations for given operations. I am thinking here of the International Livestock Center for Africa which is one of the international centers supported by us. This Center is, of course, interested in cattle and there might be some merit in asking it to take the leadership in this field. I could, of course, make suggestions for leadership in other aspects, but I am sure that different organizations will have different views on this. However, I would be very interested to learn of further developments in this region.

With best regards,

Sincerely yours,

John K. Coulter

Dr. M. G. C. McDonald Dow Deputy Director Board on Science and Technology for International Development National Academy of Sciences National Research Council 2101 Constitution Avenue Washington, D. C. 20418 Corp. Fain moon man.

April 22, 1975

Dear Mr. Hannah:

In response to your letter of March 17, 1975 addressed to Mr. McNamara, please find enclosed a brief progress report prepared by the Secretariat of the Consultative Group on International Agricultural Research (CGIAR), on current agricultural research and training activities being undertaken by various international research centers supported by the CGIAR. I hope this information will be useful to you in the preparation of the overall progress report on the implementation of resolutions of the World Food Conference, to be submitted to the first meeting of the World Food Council this June.

The progress report on the Consultative Group on Food Production and Investment (CGFPI) is being sent to you directly by Mr. Martin.

Sincerely yours,

Encl.

Mahmud Burney
Deputy Special Representative for
United Nations Organizations

Mr. John A. Kannah Executive Director World Food Council C/o FAO Via delle Terme di Caracalla 00100 Rome, Italy

cc: Mr. Hoffman

Mr. Grenfell

Mr. Martin

Mr. Ritchie

MB:mmcd

Dr. P. J. Dart
Soil Microbiology Dept.,
Rothamsted Experimental Station
Harpenden
Herts. AL5 2JQ
ENGLAND

April 21, 1975

Dear Dr. Dart:

Thank you for your letter of February 12, 1975 requesting literature on the Consultative Group on International Agricultural Research (CGIAR).

I am sending by separate mail six copies of the brochure describing the work of the Consultative Group and booklets describing the centers sponsored by the Group and their individual research programs.

Although we do not often publish information on agricultural research, we would be glad to include you on our mailing list for documents pertaining to the Consultative Group. You may want also to write directly to the centers sponsored by the Group (see attached list) for general literature on agricultural research.

In addition, I would suggest contacting the Food and Agriculture Organization (FAO) for publications on agricultural research that would be useful to your library. Hereis FAO's address: Via delle Terme di Caracalla, Rome 0100, Italy.

Sincerely yours,

Carlos B. Gavino Consultative Group Secretariat

CarlosBGavino/ms/File T

12 FIELDSIDE, Long WITTEN HAM, OXFORDSHIRE, ENGLAND, 18th. Opril 1975. Beas Sins, I have seen a booklet butilled " Intronational Research lutilled durishational periods in agriculture which discribes the work of the Consultative Groups on durinational agric Research, and would very much like to obtain a copy.

Squaltwal advise to a civil agricultural advise to a civil and consultational advises to a civil engineer-g firm which carries
our irrigation which in the
tropics, and I am also study-g
for an MSe degree in tropical Egriculture. The booklet would be of tremedous interest to grateful of you could send me a copy if it is still in print (published in 1974), will happy to semit the Your faith fully Affluckling NR. H. J. McKilligAN.

TO OPEN SLIT HERE

1875 APR 29 AM 11: 30

SENDER'S NAME AND ADDRESS (PLEASE SHOW YOUR POSTCODE)

H.J. MCKILLIGAN,

12 FIELDSIDE,

LONG WITTENHAM,

OXFORDSHIRE,

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ENGLAND

AN AIR LEFTER SHOULD
NOT CONTAIN ANY ENCLOSURE;
IF HOOS IT MAY BE SURCHARGED
OR SENT BY ORDINARY MAIL

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Group on Submatical agric. Lesewell,

World Bank, [Centres],

1818 H Street N.W.,

WASHINGTON D.C.

20433 U.S.A.

Doctors Sartorius and Kisselmann
Deutsche Gesellschaft fur Technische Zusammenarbeit
(GTZ) GmbH

6236 Eschborn 1 bei Frankfurt/M Germany

April 18, 1975

Dear Sirs:

Thank you for your letter to Mr. Cheek of March 3, 1975 regarding your request for additional brochures of the Consultative Group on International Agricultural Research (CGIAR).

We are pleased to hear that our brochure has created wide interest and we have the pleasure of sending by separate mail, 30 copies each of the English, French and Spanish versions of the brochure.

The brochure can be ordered by individual readers (of your agricultural publication) by submitting a written request to the Secretariat of the Consultative Group on International Agricultural Research.

Sincerely yours,

Carlos B. Gavino Consultative Group Secretariat

CarlosBGavino/ms/File T

Ms. Marina E. Barile, Librarian
Republic of the Philippines
Philippine Council for Agricultural Research
Los Banos
Laguna
PHILIPPINES

April 18, 1975

Dear Ms. Barile:

Thank you for your letter of February 3, 1975 proposing exchange of publications between the Philippine Council for Agricultural Research (PCAR) and the Consultative Group on International Agricultural Research (CGIAR).

Since the CGIAR Secretariat is not itself a repository of documents on agricultural research, you may wish to send materials to the CG Centers.

I am sending by separate mail the following:

- CGIAR brochures (2) describing the work of the Consultative Group and the research centers sponsored by the Group.
- 2. Annual Reports/Scientific Reviews of the research centers (8).
- 3. Background paper on the Socio-Economic Research Seminar sponsored by the CGIAR in July, 1973.
- 4. List of Center Directors from whom publications on agricultural research could be obtained directly.

You also may wish to write to the Food and Agriculture Organization (FAO) for publications useful to your library. Here is FAO's address: Food and Agriculture Organization, Via delle Terme di Caracalla, Rome 0100, Italy.

Sincerely yours.

Carlos B. Gavino Consultative Group Secretariat

CarlosBGavino/ms/T

April 17, 1975

Mr. J. C. R. Stevens c/o P.O. Box 32, Wayzgoosa Drive Derby DE2 6XH ENGLAND

Dear Mr. Stevens:

I am writing in response to your letters of 31st January to Dr. Yudelman and of 18th March to Mr. Cheek. I apologise for not responding sooner but I have been out of the country.

I think Dr. Joel Bernstein would be the best person to write the introductory article on the Consultative Group on International Agricultural Research that you have in mind for the Bovember issue of "Span". Dr. Bernstein has been intimately involved in the CCIAR since its beginning. As Assistant Administrator of the United States Agency for International Development and head of its Bureau of Technical Assistance, from which he has recently retired, he represented the United States at the meetings of the CGIAR and took a very active interest in its affairs.

I have spoken to Dr. Bernstein and he would be interested in doing an article for you. I have given him a copy of your letter to Dr. Yudelman and a copy of "Span". I suggest you get in touch with him direct. His address is:

4620 North Park Avenue Apartment 1507-W Chevy Chase, Maryland U.S.A. 20015

If we here in the Secretariat can be of any further help to you with regard to the series of articles on the research Centers and programs supported by the CGIAR, please let us know.

Sincerely,

(signed) Michael L. Lejeune

Michael L. Lejeune Executive Secretary

cc: Dr. Joel Bernstein Mr. Yudelman

April 17,1975

Dear Joel:

I enclose a copy of my letter to J. G. R. Stevens as well as a copy of his letter to Monty Yudelman and of "Span".

If we can be of any help to you in this, give me a call. Very best wishes,

Yours sincerely,

(signed) Michael L. Lejeune

Michael L. Lejeune Executive Secretary

Dr. Joel Bernstein 4920 North Park Avenue Apartment 1507-W Chevy Chase, Maryland 20015

Enclosures

MLLejeune: ia

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Dear Ray:

Thank you for your letter of February 17. I regret the long delay in replying, but I have been on one of my usual jaunts.

This seems a pretty useful document and I think that I will be able to make considerable use of it in the future. We are very short of this type of material in the Bank and this helps keep me up to date.

Hopefully you will drop by and see us if you have an opportunity to pass through Washington.

With best regards,

Yours sincerely,

John K. Coulter

Dr. R. M. Lawton Ministry of Overseas Development Land Resources Division Tolworth Tower Surbiton Surrey KT6 7DY England

JKCoulter:apm

Mr. Tjaart K. Glas
Department of Agronomy
Plant Science Building
Colorado State University
Fort Collins, Colorado, 80523

April 9, 1975

Dear Mr. Glas:

Thank you for your letter of April 2, 1975 regarding possibilities for post-doctoral research at the international agricultural research centers sponsored by the CGIAR.

Most of the centers do offer opportunities for such research activity, and each center is responsible for the recruitment of qualified candidates for its own program. I am pleased to enclose a list of the Directors and addresses of the international agricultural research centers currently in the system, and I would encourage you to submit your qualifications to those centers whose research programs might be of interest to you.

Thank you for your interest in the activities of the CGIAR system.

Sincerely yours,

Daniel Ritchie

Deputy Executive Secretary

DanielRitchie/ms/T

Mr. Arthur Parrish LDC Economic Research Department Louis Dreyfus Corporation One State Street Plaza New York, N.Y. 10004

April 7, 1975

Dear Mr. Parrish:

Thank you for your letter of April 1, 1975 enquiring whether the Consultative Group on International Agricultural Research maintains published papers on agricultural research which might be available to the public.

The Secretariat of the CGIAR does not itself publish or serve as a repository of information on international agricultural research activities. Our essential purpose is to help mobilize, allocate and administer funds in support of such research. I am pleased to enclose for your information a brochure describing the purposes, structure and operations of the CGIAR and the autonomous international research and training programs which it supports.

Sincerely yours,

Daniel Ritchie

Deputy Executive Secretary

Dear Professor Hawkes:

I am replying to your letter of 21st February which has already been acknowledged by Mr. Cheek. Unfortunately, we have run out of copies of the booklet, but a reprint will be available soon and we shall let you have additional copies.

Of course you are well aware of the work of the Centers through your contacts with CIP, but should you want more details of the programs of the other Centers, I would suggest you contact them for copies of their Annual Reports; these are usually pretty comprehensive documents.

Yours sincerely,

for

John K. Coulter

Professor J. G. Hawkes
Department of Botany
The University of Birmingham
P. O. Box 363
Birmingham B15 2TT
England

JKCOULTER: apm

Juli T

April 4, 1975

Dear Dr. Duncan:

Thank you for your letter of February 5 which has been acknow-ledged by Mr. Cheek. The international centers are interested in having direct contact with research centers in the developed countries and there are a number of instances where cooperative programs are being carried out. It may be worthwhile contacting the directors of the international centers (a list is enclosed) asking them if there are any areas of mutual interest.

With best regards,

Yours sincerely,

John K. Coulter

Enclosure

Professor A. A. Duncan Center Director Agricultural Research and Education Center 18905 S.W. 280th Street Homestead, Florida 33030

JKCoulter:apm



## **Record Removal Notice**



		~
	ational Agricultural Research [CGIAR] - G-12 - International Board for Plant Ge 86 Correspondence - Volume 3	enetic Barcode No. 1762396
Oocument Date April 2, 1975	Document Type  Letter and resume	
Correspondents / Participants To: Secretariat of the CGI	IAR	
From: Tjaart K. Glas, Col	2000-2003/2005	
Subject / Title Possibilities in internation	nal agricultural research centers.	
exception(s) Personal Information		
Additional Comments	accordance Information	e) identified above has/have been removed in e with The World Bank Policy on Access to n. This Policy can be found on the World Ban Information website.
	Withdraw	
	Shiri Alo	n 22-Mar-16

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April 2, 1975

Mr. Muncie

Harold Graves

Annual Report Draft: CGIAR Activities

Here is a draft for the Annual Report describing the activities of the Consultative Group on International Agricultural Research.

Incidentally (or perhaps not incidentally), the CGIAR Secretariat thinks it would be unfortunate if, in the flush of welcoming the new CGFPI, the Annual Report pushed CGIAR too far into the background. In the general introduction you are mulling over, as part of the background of CGFPI, perhaps it would be appropriate to refer to the successful operation of the country consultative groups and the CGIAR — or to bring a mention of CGIAR into the front section in some other way.

Attachment

HGraves : apm

April 1, 1975

Consultative Group on International
Agricultural Research of the
Agriculture and Rural Development
Department
c/o The World Bank
1818 H Street, N. W.
Washington, D. C. 20433

Dear Sirs:

After reading the article on "Bank Group Activity" (page 6 of the <u>Finance & Development</u>, 3/75, Vol. 12, No. 1), I was curious as to whether or not your particular research group maintains regularly published papers that might be made available to people such as myself, outside of the World Bank personnel.

I am director of agricultural research for the Louis Dreyfus Corporation in New York City, and in this capacity am constantly seeking new sources of information.

Any help in this regard will be most appreciated.

Cuthen Canes L

Arthur Parrish

LDC Economic Research Department



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Mr. Michael L. Lejeune, CGIAR Secretariat

April 1, 1975

Carlos B. Gavino, CGIAR Secretariat

CGIAR Brochure

- 1. In reply to your memorandum of March 14, 1975 (copy attached) on the CGIAR brochures, neither the Secretariat nor the Publications Department of the Bank has sent any brochures to the Bank's overseas offices.
- 2. On the matter of inventory, we have the following number of brochures "in-house":

a. Secretariat - 400 copies (English)
b. Publications Dept. - 100 copies (English)
200 copies (French)
200 copies (Spanish)

In addition, UNDP is printing 10,000 more copies of the English version (see your memorandum to files dated March 13, 1975.)

- 3. From day to day, the Secretariat receives requests for brochures (1 2 copies) which we accommodate immediately. On occasions, however, we get a large request, which we normally refer to UNDP in New York, unless we have a large "in-house" inventory.
- 4. Present outstanding requests for the brochures are 30 copies in English, French and Spanish for the German Agency for Technical Cooperation, Ltd. and 140 copies in English and Spanish and 90 in French for the Economic Development Institute (EDI) for its supplementary libraries throughout the world.

c.c. Mr. Daniel Ritchie

T

### NATIONAL ACADEMY OF SCIENCES

#### NATIONAL RESEARCH COUNCIL

2101 Constitution Avenue Washington, D.C. 20418

COMMISSION ON INTERNATIONAL RELATIONS

March 26, 1975

Mr. John Coulter
CGIAR Secretariat
International Bank for Reconstruction
and Development (IBRD)
1818 H Street, N.W.
Washington, D.C. 20433

Dear Mr. Coulter:

Attached is a brief outline of a proposal to convene an organizational meeting concerning the collection of information about the impact of the recent severe drought in the Sahel. This is purely exploratory at this stage to determine interest in the idea and whether there may be other parallel efforts in progress.

I would appreciate any comments or suggestions you might care to make.

Sincerely,

M.G.C. McDonald Dow

Deputy Director

Judich Portoz

Board on Science and Technology for International Development

Attachment

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1975 MAR 28 APH 1: 44

COMMUNICATIONS SECTION

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# **Record Removal Notice**



File Title Consultative Group on Internation Resources [IBPGR] - 1984/1986	nal Agricultural Research [CGIAR] - G-12 - Internationa Correspondence - Volume 3	al Board for Plant Genetic	Barcode No. 1762396	
Document Date March 26, 1975	Outline (attachment)			
Correspondents / Participants To: Mr. John Coulter, CGIA	R Secretariat			
From: M.G.C. McDonald Do	ow, Deputy Director, National Academy of Scien	nces		
Sahel.		*		
xception(s) Information Provided by Membe	r Countries or Third Parties in Confidence			
dditional Comments		accordance with The Information. This Poli	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.	
		Withdrawn by	Date	
		Shiri Alon	22-Mar-16	

March 24, 1975

Miss Marjorie Banks
Regional Representative
United Nations Association of Central New York
127 E. Onondaga Street,
Syracuse
New York 13202

Dear Miss Banks:

This is in response to your letter of March 11. As it happens, Dr. Edwin Oyer, the Director of International Programs at the College of Agriculture at Cornell, is well acquainted with the work sponsored by the Consultative Group on International Agricultural Research, and is in a position to advise students directly about whether and where their training might be used in this work.

We are expecting that our printer will soon send us copies of a brochure describing the Group, and when he does, we will send you a copy for your reference library. In the meantime, I am sending you a list of the addresses of the research programs being sponsored by the Group.

Sincerely yours,

Harold Graves

HGraves/ms/File: T

Attachment

cc. Mrs Bonstun

#### CENTER DIRECTORS

Dr. H. R. Albrecht
Director General
International Institute of
Tropical Agriculture (IITA)
P.O. Box 5320
Ibadan
Nigeria

Dr. Nyle C. Brady
Director
International Rice Research
Institute (IRRI)
P.O. Box 583
Manila
Philippines

Mr. Jacques Diouf
zecutive Secretary
West African Rice Development
Association (WARDA)
E.J. Roye Memorial Building
P.O. Box 1019
Monrovia
Liberia

Dr. R. W. Cummings
Director
International Crops Research Institute
for the Semi-Arid Tropics (ICRISAT)
1-11-256, Begumpet
Hyderabad 16

r. John L. Nickel
Director General
Centro Internacional de
Agricultura Tropical (CIAT)
Apartado Aereo 67-13.
Cali
Colombia

Mr. Haldore Hanson
Director General
International Maize and Wheat
Improvement Center (CIMMYT)
Londres 40
Mexico 6, D.F.

Dr. Richard L. Sawyer Director General International Potato Center (CIP) Apartado 5969 Lima Peru -

Dr. James B. Hemson
Director
International Laboratory for Research
on Animal Diseases (TLRAD)
P.O. Box 47543
Nairebi
Kenya

Dr. Jean Pagot
Director
International Livestock Center
for Africa (ILCA)
P.O. Box 5689
Addis Ababa,
Ethiopia

Mr. Richard H. Demuth\*
Chairman - International Board for
Plant Genetic Resources
c/o Surrey, Karasik & Morse
1156 15th Street, N.W.
Washington, D.C. 20005

Mr. R.J. Pichel\*
Secretary, Genes Board
Plant Production and Protection Division
Agriculture Department
Food and Agriculture Organization of
the United Nations
Via delle Terme di Caracalla
Rome 00100 ITALY

\*There is no Center Director as such for the Genes Board. Decisions are made by Messrs. Demuth and Pichel.



### Span

J. G. R. Stevens c/o P.O. Box 32, Wayzgoose Drive, Derby, DE2 6XH, England

Telephone: Derby 31242

18th March 1975

Mr Bruce M. Cheek,
Deputy Executive Secretary,
Consultative Group on International Agricultural Research,
1818 H St., N.W.,
Washington, D.C.,
USA.

Dear Mr Cheek,

Thank you for your letter of 11th February in reply to my letter to Mr Yudelman about a series of articles which I hope to publish on the international agricultural research institutes.

I should be very pleased to hear from Mr Lejeune as soon as possible, with a view to discussing an introductory article for publication later this year (please refer to paragraph no. 5 of my letter to Mr Yudelman).

Thank you for the list of the institutes.

Yours sincerely,



## OF THE UNITED STATES OF AMERICA

VIENTIANE I AOS

Consultative Group on International Agriculture Research c/o World Bank Wahington, D.C. 20433

March 14, 1975 Ban Houei Sai, Laos

Door Siris!

Please send a copy of your booklet on "International Research in Agriculture" 1974 to me at the address below.

Thank you,

Cary E. Alex USAID/AREA APO S.F., Calif. 96352



## EMBASSY OF THE UNITED STATES OF AMERICA

MEASTACK - 666

U.S. AID MISSION TO LAGS

Consultative Group on International Agriculture Research c/o World Bank Wahington, D.C. 20433

March 14, 1975 Ban Monei 8 1, Laos

Don Sin.

Flease send a copy of your booklet on "International Research in Acriculture" 1974 to me at the address below.

Thank you,

Carv \*. Alex USAID/ARRA APO S.F., Callf. 96352

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March 14, 1975

Mr. Carlos Gavino

Michael L. Lejeune

(signed) Michael L. Lejeune

CGIAR Brochure

Could you please check the facts and let me know how many copies of the brochure we have sent to our various overseas offices (e.g., Nairobi, Addis Ababa, Khartoum, Dar es Salaam, Lusaka, Kinshasa, Lagos, Abidjan, Delhi, Dacca, Islamabad, Teheran, Caracas, Tokyo, Paris, London, Ouagadougou)? In particular, what are the figures for the distribution of the French and Spanish versions to our offices, particularly the offices in French and Spanish-speaking countries?

MLLejeune:ia

File T

### OFFICE MEMORANDUM

TO: Files

DATE: March 13, 1975

history

FROM: Michael L. Lejeune

SUBJECT: Brochure

Mr. Mashler telephoned me today to say that they had decided to reprint the English version of the CGIAR brochure. They would print another 10,000 copies. The cost - \$6,900 - would be met out of funds at Mr.Mashler's disposal. He did not expect the other two co-sponsors to contribute.

He noted that the draw down of the French version was slow. He wondered whether the distribution was taking place effectively.

cc: Messrs. Graves Ritchie

Gavino

MLLejeune:ia

File T





#### UNITED NATIONS ASSOCIATION OF CENTRAL NEW YORK

a chapter of the United Nations Association of the U.S.A.

March 11, 1975

Mr. Harold Graves c/o World Bank 1818 South H Street, N.W. Washington, D. C. 20433

Dear Mr. Graves,

Our United Nations Association of Central New York includes the Ithaca area where Cornell University is located. We have received inquiries from graduate students there in the College of Agriculture who want to know where their training in agricultural research might be used.

We would appreciate some information for reference use about the work of the Consultative Group on International Agricultural Research.

Thank you for any information you may be able to send to us.

Sincerely your,

Marjorie Banks

Regional Representative

arjone

UNA-CNY

MB/mr



## Clark University WORCESTER, MASSACHUSETTS 01610

INTERNATIONAL DEVELOPMENT AND SOCIAL CHANGE

March 10, 1975

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

Dear Sirs:

Could you please send us a copy of INTERNATIONAL RESEARCH IN AGRICULTURE for our Program in International Development.

If there is any charge for the publication, please bill us at the above address.

Sincerely,

Joan M' Grath

Mrs. Joan McGrath Secretary, International Development Program

Carred Jawaie.
Send her two cepties to change.

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Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH German Agency for Technical Cooperation, Ltd.
Office Allemand de la Coopération Technique, S.A.R.L. Carlos Sociedad Alemana de Cooperación Técnica, Ltda.

Mr. Bruce M. Cheek Deputy Executive Secretary Consultative Group on

International Agricultural Research

1818 H St., N.W.

Washington, D.C. 20433 USA

6236 ESCHBORN 1 bei Frankfurt/M. Stuttgarter Straße 10 – Postfach 5180 Telegramm-Anschrift: GERMATEC

Telex: 417405 GTZ Telefon: (0 6196) 401-1 Durchwahl: 401- 511

Bearbeiter: Dr. Kisselmann/me

Zeichen: 13

Bitte bei jedem Schriftwechsel angeben

3rd March, 1975

Dear Mister Cheek,

we thank you very much for your kind letter of January, 29 th, addressed to Dr. Lampe and also for the 50 copies of the CGIAR brochure. Due to the wide interest this book has awoked, we would be much obliged to you if you could send us 30 additional copies of the english edition and 30 copies each of the french and spanish editions.

We shall shortly be publishing a review of the CGIAR brochure in one of our agricultural periodicals. For the information of any interested readers we would like to know from you exactly how the brochure can be ordered by individuals interested in it.

May we thank you in advance for your kind co-operation and remain,

yours faithfully

DEUTSCHE GESELLSCHAFT FÜR TECHNISCHE ZUSAMMENARBEIT

(GTZ) GmbH

- and busy

i.V. Dr. Sartorius i.V. Dr. Kisselmann

se pe 1 Notional Cassava Centre FARTS, Umudike, Umuarhia. 1/3/75 Dear Dr. Coulter, I am miting this to await your seturn, to Thank you for the wonderfu sportunty of meeting ym duving ymo recent vasit to Migenia.
I have also mitten to David Lang noing the adolpers you provided requesting any information he may have As discussed with ym, This is d subject of the intmost importance to the welfare of a large part of Migenia, and is en area where dramatic changes can be brought about in the welfare of the people. Government is Keen to do sometring - but is not some what to do I shall be grateful for any information, advice or help you can give,







1039

DR. J. K. COULTER,
INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT,
1818 H STREET, N.W.

WASHINGTON DC 20433 USA.

Sender's name and address.

MR. W.N.O. EZEILO

MATIONAL CASSAVA CENTRE,

UMUDIKE

PMB 1006, UMUAHIA

MIGERIA

AN AIR LETTER SHOULD NOT CONTAIN ANY ENCLOSURE; IF IT DOES IT WILL BE SURCHARGED OR SENT BY ORDINARY MAIL

Do not fold beyond this line.

I bole forward to heaving from you at your learning convenience in for your most walnute ideas on the transfer of technology to oural people.

Walter Ezerlo

**ASSOCIATION** 

INTERNATIONAL FINANCE CORPORATION

## OUTGOING WIRE

TO:

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DEVCENTMERO
P.O.BOX 105055

BEIRUT

DATE:

FEBRUARY 27, 1975

CLASS OF

SERVICE:

LT

(3454)

COUNTRY:

LEBANON

TEXT: Cable No.: PEDAM

WOULD APPRECIATE IF YOU COULD PROVIDE CGIAR SECRETARIAT WITH THIRTY

COPIES ARABIC TEXT OF CGIAR BROCHURE

(IMPORTANT: See Secretaries Guide for preparing form)

REGARDS

CHEEK INTBAFRAD

AUTHORIZED BY:

AUTHORIZED BY:

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ORIGINAL (File Copy)

Checked for Dispatch:

PAO/smrb 24.2.75

Files

c.c. Crawford (Canberra)
Lejeume (Washington, D.C.)
Yriart (DDD)
Webster (DDDR)

Oram (Chron.)

PR 3/3 General UN 5/39

24 February 1975

Dear Mr. Gollong,

Thank you for your letter of 3 February addressed to Mr. Webster of my office.

I think the most useful and succinct description of the work of the Consultative Group on International Agricultural Research is contained in the brochure which I am enclosing herewith, which was prepared by UNDP in collaboration with the other two Co-Sponsors. This describes the system as a whole as of 1974, and I also enclose copies of the initial report of the Consultative Group which outlines the terms of reference of the Group itself and of the Technical Advisory Committee, for which FAO provides the Secretariat.

We have a great deal more information and would be pleased to help in any way we can should you wish your consultants to visit FAO. On the other hand, the Secretariat of the Consultative Group in Washington, which is located in the World Bank, could probably give you most of the documentation more quickly than we could send it from Rome, and I am sure that you would find initial discussions with them fruitful. We would be pleased to supplement this with technical information and a personal evaluation based on our own experience if your consultant visits Rome.

Yours sincerely,

P.A. Cram Executive Secretary Technical Advisory Committee

Mr. Paul B.W. Gollong
Senior Scientific Affairs Officer MCOMME MVII OMIL
Office for Science and Technology 2 LEB 58 bM 2: 18
Wew Work, N.Y. 10017
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PAO/smrb 24.2.75

c.c. Crawford (Canberra)
Lejeune (Washington, D.C.)

Triart (DDD)
Webster (DDDR)

Oram (Chron.)

24 February 1975

Dear Mr. Gollong,

UN 5/39

PR 3/3 General

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Yours sincerely,

P.A. Cram Executive Secretary Technical Advisory Committee

Senior Scientific Affairs Officer INCOMING MAIR OHIL Office for Science and Technology LEB 58 bM 2: 19

New Mork, N.T. 10017

U.S.A.



# The University of Birmingham

DEPARTMENT OF BOTANY

The University of Birmingham, P.O. Box 363, Birmingham B15 2TT Telephone 021-472 1301

Mason Professor of Botany: J G Hawkes Sc D

Dr. John K. Coultar, Scientific Advisor to CGIAR, Secretariat, World Bank 118H Street NW, Washington DC 20433, U.S.A.

21st February, 1975.

Dear Dr. Coultar,

I have just been reading with considerable interest the booklet entitled "International Research in Agriculture" which was published by CGIAR in 1974. You will see from the enclosed course leaflet that we are very much involved in training students to play a role in genetic resources at Birmingham. Since we train something like 12 students per year and would like them to be aware of the detailed network of International Crop Centres world-wide and of the work in progress, I wonder whether it might be possible for you kindly to let me have enough copies to supply one each to members of my teaching staff as well as past and present students. I am afraid that this would amount to about 50 copies, but any number less than that would be most acceptable also.

With apologies for troubling you on this matter.

Yours sincerely,

Professor J.G. Hawkes

V. Co. Have

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# The University of Birmingham

#### DEPARTMENT OF BOTANY

The University of Birmingham, P.O. Box 363, Birmingham B15 2TT Telephone 021-472 1301

Mason Professor of Botany: J G Hawkes Sc D

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With apologies for troubling you on this matter.

Yours sincerely,

Professor J.G. Hawkes

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Dr. U. J. Grant
Visiting Fellow in Plant Breeding &
International Agriculture
New York State College of Agriculture & Life Sciences
Department of Plant Breeding & Biometry
252 Emerson Hall
Ithaca, N.Y. 14853

Dear Jerry:

I was glad to have your letter of February 13 and to know that you have settled in at Cornell. We shall want to keep in touch with you on our work program.

A list of participants in Centers Week is attached. On the matter of research institutions in Europe, I am asking John Coulter to reply to you. He is away until late March and will then write you, particularly re the UK ones.

With best wishes,

Sincerely,

Bruce M. Cheek Deputy Executive Secretary

c.c. Coulter (with copy incoming)

BMCheek/ms/

Mr. Charles Weiss, Science and Technology
Adviser

Bruce M. Cheek, CGIAR Secretariat,

Status Report on Technology - February 10 draft

1. I refer to page 7 on the CGIAR where I would suggest the following for paragraph 25:

The Consultative Group on International Agricultural Research (CGIAR), which the Bank chairs, marshals funds for international agricultural research institutes concerned with improving food crop and livestock production. The 31 members of the Consultative Group include 21 donors which are governments, private foundations and international agencies. The FAO and the UNDP join with the Bank as co-sponsors. The CGIAR Secretariat is drawn from Bank staff and is responsible for the operation of the Group, including the annual review of the programs and budgets of the institutes. A Technical Advisory Committee, with a Secretariat in the FAO in Rome, reviews the scientific programs of the institutes and recommends to the CGIAR on needs for new programs or avenues of research. Donor members have pledged some \$48 million for CY 1975. The institutes or programs sponsored by the CGIAR are as follows:

- Maize and Wheat Improvement Center, Mexico (CIMMYT).
- International Rice Research Institute, Manila, Philippines (IRRI)
- International Center for Tropical Agriculture, Cali, Colombia (CIAT)
- International Institute for Tropical Agriculture, Ibadan, Nigeria (IITA)
- International Potato Center, Peru (CIP)
- International Institute for Crop Research on the Semi-Arid Tropics, Hyderabad, India (ICRISAT)
- International L boratory for Research on Animal Diseases (ILRAD), Kenya
- International Livestock Center for Africa (ILCA), Ethiopia
- International Board for Plant Genetic Resources, Rome.
- Field Testing Program of the West African Rice Development Association, Liberia (WARDA)

BMCheek: amn



# 

MINISTRY OF OVERSEAS DEVELOPMENT

## **Land Resources Division**

Tolworth Tower Surbiton Surrey KT6 7DY England

Dr J K Coulter
International Bank for
Reconstruction and
Development
1818 H Street
Washington DC
United States of America

Your reference

Our reference L/1/9/1 Date

17 February 1975

Dear John

STATE OF KNOWLEDGE REPORTS

I enclose a draft copy of the above reports and would appreciate your comments please.

Hope all is well with you.

Best wishes

Yours sincerely

,

R M Lawton



## 

MINISTRY OF OVERSEAS DEVELOPMENT

Land Resources Division

Tolworth Tower Surbiton Surrey KT6 7DY England

Dr J K Coulter
International Bank for
Reconstruction and
Development
1818 H Street
Washington DC
United States of America

Your reference

Our reference L/1/9/1 Date 17 February 1975

2

Dear John

STATE OF KNOWLEDGE REPORTS

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Hope all is well with you.

Best wishes

Yours sincerely

Ramy Lustin

R M Lawton



## New York State College of Agriculture and Life Sciences a Statutory College of the State University Cornell University

特

Department of Plant Breeding and Biometry 252 Emerson Hall, Ithaca, N. Y. 14850, 3 Telephone: 607-256-2180

February 13, 1975

Mr. Bruce M. Check 7800 Inverton Road Annandale, Virginia 22003

Dear Bruce:

We are now in residence at Cornell University. If there is any way in which I could be of service to you in the Consultative Group office I will be very happy to do so.

I expect to spend some time in Europe during June, July and August. I would appreciate receiving an up-to-date list of those people who participate in the International Centers week. I would also appreciate your suggestions of Institutions I should visit, particularly in Britain.

Best wishes,

Sincerely,

U. J. Grant (CM)

U. J. Grant
Visiting Fellow in Plant Breeding &
International Agriculture

UJG:ch



The Secretariat,
Consultative Group on International
Agricultural Research,
International Bank for Acconstruction &
Development,
1818H Street N.W.,
Washington DC 20433,
U.S.A.

Dear Sirs,

We have links with some of the International Institutes in our work - through personal contact and a U.K. Overseas Development Administration Research Grant. As a consequence we have many inquiries about the background to the Institutes and the Consultative Group. I would be grateful for a copy of any literature you may have available, in particular, the booklet "International Research in Agriculture, 1974", and booklets describing the International Institutes and their programmes individually. Six copies of the general booklet would be appreciated. Our library and myself would also like to be on the mailing list for any reports, literature etc. available on International Agricultural Research as sponsored by the C.G.

Thanking you.

Yours sincerely,

P. J. Dart.

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1975 FEB 19 AM II: 35
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TO OPEN SLIT HERE

## SENDER'S NAME AND ADDRESS (PLEASE SHOW YOUR POSTCODE)

Dr. P. J. Dart,

Soil Microbiology Dept.,

Rothamsted Experimental Station,

Harpenden, Herts. AL5 2JQ.,

U.K.

AN AIR LETTER SHOULD

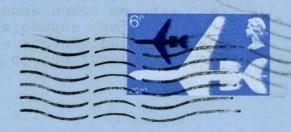
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OR SENT BY ORDINARY MAIL

SECOND FOLD HERE





The Secretariat,

Consultative Group on International
Agricultural Research,
International Bank for Reconstruction &
Development,
1818H Street N.W.,

Washington DC 20433,

U.S.A.



## UNIVERSITY OF FLORIDA

# /

#### INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

HOMESTEAD, FLORIDA 33030

AGRICULTURAL RESEARCH AND EDUCATION CENTER, HOMESTEAD 18905 S.W. 280TH STREET TELEPHONE: 305-247-4624

February 5, 1975

Dr. John K. Coulter
Consultative Group on
International Agricultural Research
1818 H. St. NW
Washington, D. C. 20433

Dear Dr. Coulter:

While I am new to the sub tropics I am not completely new in my personal interests and activities in international agricultural development having designed and worked with the University of Minnesota horticultural project in Morocco for a couple of years before moving South.

It has seemed to me that agricultural scientists have done well in identification of researchable problem areas in the Third World countries. Establishment of research priorities and staffing requirements have been most impressive, comprehensive and well thought out. However, I feel that much of what has been planned and attempted has failed to take adequately into account the human aspects of agricultural development, that is the attitude and behavioral changes that are part and parcel of self perpetuating research and development. Perhaps some of this is what we call the "land grant philosophy".

I feel very strongly that for the short run exportation of "bundles of technology" will be beneficial, but that for the long run we can make the greatest contributions to greater stability of production of adequate food supplies by helping to train people for the sort of self perpetuating, diverse technological infrastructure upon which rests the agriculture of developed countries. It means training not only experimentalists but also extension specialists, teachers and technicians at all levels.

I feel that this Agricultural Research and Education Center at Homestead, as the only University supported subtropical research and education center in continental USA is in a unique position to make a contribution to the development of people. This could include Americans who aspire to employment in similar areas around the world and those who come from abroad for graduate study at American universities.

EQUAL OPPORTUNITY EMPLOYER

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Page 2 February 5, 1975

Our faculty here at Homestead hold Graduate School appointments with the University of Florida and could work in collaboration with graduate advisors there or with those at other U.S. universities that have cooperative arrangements with agriculturally underdeveloped tropical countries to train experimentalists and others.

This is to create an awareness at your level that this resource exists in continental US and that the faculty here are willing to participate and help in any way they can. We would very much appreciate your thoughts on these matters and any suggestions you may care to offer on how we should proceed to become more actively involved.

Cordially,

A. A. DUNCAN

Professor (Horticulturist)

Center Director

AAD:er



Republic of the Philippines
PHILIPPINE COUNCIL FOR AGRICULTURAL RESEARCH
Los Barios, Laguna
Tel. Nos. 2308; 2269; 2375

3 February 1975

Consultative Group on
International Agri'l. Research
18 H St., N.W.
Washington D.C. 10433
U.S.A.

Dear Sir/Madam.

The Philippine Council for Arricultural Research (PCAP) propose an exchange of publications on agriculture and its related field. Inclosed is a sample of our publications and attached is a list of publications we are offering for exchange.

Through this exchange of publications, we envision a wider and more effective dissemination of information to further enhance agricultural development throughout the world.

We will appreciate it very much if you could also update us on your available publication on arriculture forestry fisheries and socio-economics.

Arain, our sincere thanks and high hopes for your cooperation in facilitating our international transfer of information.

Very truly yours

Marina & Barile

Librarian



begins of the Poliphines.
Part through COUNCH, FOR AGRICOLPURAL RESISTANCES.
Let Gener, Largina.
Let Nov. 1989, 1989, 2315.

Consultative Group on International Agri'l. Preserving In H St., N.M. Washington C.C. 10433

Done Sith Controls.

The Philippin Council for Amfaulturel Pescarch (UCAP) propose an exclored of tablications on a midulture and its related field, Inclosed is a smalle of our nullications and attached is a list of publications as are affault for ambure.

more this explanes of sublications to envision a filer and more effective discendiation of information to further enhance are cultural development the moral.

We will appreciate it very such if you could also undate us on your available publication on a releature forestry fisheries on secto-conomiss.

Armin cur sincere thriffs and bigh horse for your conservation in facilitating our intermetional transfer of inferration

MELLA MATTA ADMIN

Librarian

VI

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1975 FEB 10 AM 10: 35
INCOMING MAIL UNIT

POSTAL ADDRESS -- ADRESSE POSTALE: UNITED NATIONS, N.Y. 10017
CABLE ADDRESS -- ADRESSE TELEGRAPHIQUE: UNATIONS NEWYORK

REFERENCE

3 February 1975

Dear Mr. Webster,

At the suggestion of Mr. R. C. Desai of this office, I am writing to you on the following matter.

The Committee on Science and Technology for Development at its second session, proposed eight draft resolutions for adoption by ECOSOC, including draft resolution IV, Implementation of the World Plan of Action for the Application of Science and Technology for Development (E/5473). ECOSOC adopted this resolution at its fifty-seventh session ((1900 (LVII)). Copies of the relevant pages, 8 and 9, of the official record of the session (E/5570) are enclosed. May I call your attention to part III of the resolution, Implementation of Research, which requests the Secretary-General to take the necessary action, including the establishment of consultative groups or other such machinery, for accomplishing this purpose.

At its eighteenth session, the ACC Sub-Committee on Science and Technology reviewed the draft resolutions proposed by the Committee on Science and Technology for Development for adoption by ECOSOC and, in the instance of the question of consultative groups, the possibility of establishing a group or similar mechanism on industrial research was envisaged (CO-ORDINATION/R.1050). It was agreed that such effort should, of course, take into account the participation of UNIDO, UNDP, IBRD, WAITRO, OECD/DAC and other competent bodies.

In initiating this project, this office will wish to draw on the successful experience of FAO and its co-sponsors of the Consultative Group on International Agricultural Research. Thus, we would be grateful if you could send us such published information as you may have on the Group. Subsequently, we may wish to send the consultant we will engage for the project to your organization to hold personal, detailed discussions with you and your associates so that we may enjoy the fullest benefit from the experience you have gained on the subject.

Sincerely yours.

Paul B. W. Gollong Senior Scientific Affairs Officer Office for Science and Technology

Mr. B. N. Webster
Agricultural Research Officer
Research Development Centre
Development Department
FAO
Via delle Terme di Caracalla
Rome, ITALY

and further elaborate the world programme mentioned in paragraph I above and to transmit it to the Economic and Social Council for the purpose of its implementation.

1919th plenary meeting 1 August 1974

1839 (LVR). Mobilization of public opinion in relation to the World Plan of Action for the Application of Science and Technology to Development and the regional plans

The Economic and Social Council,

Recalling paragraphs 9 and 10 of its resolution 1823 (LV) of 10 August 1973 on the World Plan of Action for the Application of Science and Technology to Development,

Recognizing the need for Member States to have a deep understanding of the role of science and technology and its impact on national development,

Aware of the urgent need for mobilizing opinion on the objectives and measures of the World Plan of Action and the regional plans in solving the specific problems of developing countries,

Convinced that a favourable public opinion at the national, regional and global levels will encourage Governments to take the necessary steps to implement the various parts of the World Plan of Action and the regional plans,

Aware of the limited resources of the United Nations at the disposal of the Secretary-General,

Taking note of the progress report of the Secretary-General.26

1 Urges Governments and the organizations concerned within the United Nations system to effect without delay a wide exposure of the World Plan of Action for the Application of Science and Technology to Development and the regional plans to the technological conmunity of developed and developing countries by conflucting intensive campaigns through the use of appropriate mass media and, inter alia, by way of meeting or seminars on a national and regional basis;

2. Requests that the views and recommendations residting from the meetings and seminars referred to in paragraph I above be taken into account in the process of review and appraisal outlined in section I of its resolution 1823 (LV);

3 Requests the Secretary-General to make available to Governments of Member States the views and recommendations resulting from such seminars and meetings;

4. Further requests the Secretary-General to report on the progress achieved and the shortfalls, if any, encountered in the process of the implementation of the present resolution to the Committee on Science and Technology for Development at its third session.

1919th plenary meeting 1 August 1974 The Economic and Social Council,

Recalling General Assembly resolutions 1944 (XVIII) of 11 December 1963 and 2318 (XXII) of 15 December 1967 and, in particular, the relevant provisions of General Assembly resolutions 3201 (S-VI) and 3202 (S-VI) of 1 May 1974 concerning the Declaration and the Programme of Action on the Establishment of a New International Economic Order, and Council resolutions 4155 (XLI) of 5 August 1966, 1638 (LI) of 30 July 1971 and 1717 (LIII) of 28 July 1972,

Reaffirming Council resolution 1823 (LV) of 10 August 1973.

Noting the progress report of the Secretary-General on the World Plan of Action for the Application of Science and Technology to Development and the regional plans, <sup>26</sup>

Noting with interest and appreciation the regional plans of action for the application of science and technology to development prepared by the Economic Commission for Africa, 27 the Economic Commission for Asia and the Far East, 28 the Economic Commission for Latin America 29 and the Economic Commission for Western Asia, 30

Recognizing the urgent need to build up an indigenous and autonomous science and technology capacity in the developing countries,

Considering that the World Plan of Action and the regional plans should be kept under continuous review,

Convinced that the research activities on problems of developing countries, described in the World Plan of Action for the Application of Science and Technology to Development <sup>31</sup> as well as those in national and regional plans, should be actively and vigorously pursued,

- 1. Reiterates the importance of the World Plan of Action for the Application of Science and Technology to Development as a valuable set of guidelines and broad programmes suggested to Governments subject to their own individual priorities established in their national development plans;
- 2. Urges Governments and the regional economic commissions to continue giving full attention to the World Plan of Action and the regional plans as aids to the selection and preparation, by decision-makers and the scientific and technological community, of specific projects relevant to the needs of their countries;

<sup>1900 (</sup>LVII). Implementation of the World Plan of Action for the Application of Science and Technology to Development

<sup>26</sup> Ibid.

<sup>&</sup>lt;sup>27</sup> United Nations publication, Saies No. E.73.II.K.3.

<sup>28</sup> E/CN.11/1071.

<sup>29</sup> E/CN.12/966.

<sup>30</sup> ESOB/HR/73/4/Rev.1.

<sup>31</sup> See United Nations publication, Sales No. E.71.II.A.18.

<sup>25</sup> E/C.8/19.

## REVIEW AND APPRAISAL

3. Invites the Advisory Committee on the Application of Science and Technology to Development, in close co-operation with the agencies and organizations of the United Nations system concerned, to keep the World Plan of Action and the regional plans under periodic review and appraisal and, in the light of new developments, to prepare new areas of topics of research and development for incorporation in the World Plan of Action and/or the regional plans, bearing in mind the need for integrate I economic and social research as an important factor in the setting of priorities in the field of science and technology, and to present its conclusions and recommen lations to the Committee on Science and Technology for Development;

II

## SCIENCE AND TECHNOLOGY CAPACITY

- 4. Requests the Secretary-General to consult with the organizations of the United Nations system on ways and means of identifying the existing gaps in the institutional cientific infrastructure at the national, regional and glot al levels and on the measures that would be required to strengthen this infrastructure for the implementa ion of the research and policy measures contained in the World Plan of Action; use should be made of surve s already undertaken by organizations of the United Nations system, and especially the United Nations Educational, Scientific and Cultural Organization, on existing scientific and technological institutions;
- 5. In ites the international financing organizations, particula ly the United Nations Development Programme, the International Bank for Reconstruction and Development and the regional development banks, as well as developed countries, in close consultation with developing countries and at their specific request, to provide them with ways and means of supporting their efforts to implement specific infrastructural projects for research and development;
- 6. Requests the organizations of the United Nations system concerned to continue to develop flexible programmes for assistance to the developing countries, at their request, in keeping their existing scientific and technological infrastructure operational;
- 7. Requests the Secretary-General, in co-operation with the United Nations Educational, Scientific and Cultural Organization and the other agencies and organizations concerned, to report to the Economic and Social Council, through the Committee on Science and Technology for Development, on the progress made with action to strengthen the scientific and technological capacities of developing countries;

#### IMPLEMENTATION OF RESEARCH

- 8. Requests the Secretary-General to take all necessary action, in close consultation with the international financing organizations, particularly the United Nations Development Programme, the International Bank for Reconstruction and Development and the regional development banks, and with the specialized agencies, the International Atomic Energy Agency and the regional economic commissions, and with interested Member States, for the establishment at the regional and/or global level, as may be required, of consultative groups or other such machinery aimed at achieving rapid progress in areas scheduled for research and for the application of existing knowledge, as identified in the World Plan of Action;
- 9. Invites the international financing organizations and developed countries to consider contributing financially to these consultative groups or other machinery;

IV

#### NATIONAL SCIENCE POLICIES

- 10. Urges on all Governments the importance of drafting and implementing national science and technology policies and of giving high priority to the establishment of at least one centre for providing advisory services in the field of science and technology policy in each region and requests the Secretary-General, in co-operation with other international organizations, both inside and outside the United Nations system, to promote effective assistance in this field and in particular to strengthen such activities at the regional level;
- 11. Requests the Secretary-General to report on the progress made in the implementation of the present resolution to the Economic and Social Council at its fifty-ninth session and to the Committee on Science and Technology for Development at its third session.

1919th plenary meeting 1 Augus: 1974

# 1901 (LVII). Quantification of scientific and technological activities related to development

The Economic and Social Council,

Recalling its resolution 1822 (LV) of 10 August 1973, in which it requested the Secretary-General to convene an intergovernmental group of experts on the quantification of scientific and technological activities related to development and to present its report to the Committee on Science and Technology for Development at its second session,



Telephone: Derby 31242

31st January 1975

Files T

Dr M. Yudelman, World Bank, 1818 H Street NW, WASHINGTON DC 20433, U. S. A.

Dear Dr Yudelman,

I would like to publish a series of articles in 'Span' on the international agricultural research institutes. I did, in fact, publish an article on IITA after I had visited Ibadan in 1972, and am enclosing a copy of the issue containing this article (pages 127 - 129), which I wrote myself.

What I should now like to do would be to start off in the November 1975 issue with an introductory article on the background and development of the institutes, and the philosophy behind their creation, and then publish an article on an individual institute in each issue after that ('Span' is published three times a year, in March, July and November).

Professor Hugh Bunting suggested that I should ask your advice about a suitable author for the first article, and I should certainly be grateful if you could tell me the best person to approach. I understand that the Secretariat of the Consultative Group on International Agricultural Research is in the World Bank.

If you are able to recommend an author, and wish to give him advance notice of my request, you may care to tell him that I should like to receive an article by 16th June 1975. A suitable length would be 1750 words, with photographs of some of the institutes. A summary of 200 words would be required for translation into French, German and Spanish. I would be prepared to offer the author a fee which I would discuss with him.

Finally, if such a thing is available, I wonder if I could be sent a directory of the international agricultural research institutes, with the names of Directors and information officers.

Yours sincerely,

# RECEIVED 1975 FEB -7 AM 10: 59 INCOMING MAIL UNIT

Mr. Donald Fowler, Secretary's

Bruce M. Cheek, CGIAR Secretariat

Board Circulation of CGIAR Brochure

- 1. I refer to our recent talk on the circulation to Board members of the brochure of the Consultative Group. We would like the distribution to occur before the Board considers the paper on 1975 Bank financing for the international agricultural research centers on February 18 or 25. The circulation of the brochure should also be independent of any reference to the upcoming Board paper; it is an information item which the EDs would in any event receive.
- 2. I have discussed with Mr. Lejeune the number of copies, taking into account that the brochure was first distributed at the World Food Conference in November and is going out on a world-wide basis through the centers and the regional offices of the UNDP and FAO. Accordingly, we should like to send two copies to each Executive Director for the use of his office. On this basis, I am arranging for Mr. Cirillo to receive some 40 copies.
- 3. With respect to a covering note, we would suggest that it run some= what along the following lines:

Attached for the information of Executive Directors are two copies of the brochure which the co-sponsors of the Consultative Group on International Agricultural Research. (UNDP, FAO and the Bank) have recently issued on the work of the international agricultural research network sponsored by the Group. The brochure was first released at the World Food Conference and is being given wide circulation through the regional offices of UNDP and FAO and through the international centers.

Enquiries on the work of the CGIAR may be directed to its Secretariat. The Executive Secretary is Mr. Michael L. Lejeune (extn. 3592); the Deputy Secretary is Mr. Bruce M. Cheek (extn. 3454).

Rupert Nelson P. O. Box 29 Chiang Mai, Thailand January 29, 1975

Consultative Group On International Agricultural Research World Bank Washington, D.C.

Dear Sirs:

I would appreciate receiving a copy of the book, International Research In Agriculture, printed in 1974. This describes the work being done at the various international research centers in tropical regions around the world.

I am an agricultural advisor with the American Baptist Mission in Thailand, and am using plant material from some of the international research centers. If you have a permanent mailing list to receive publications I would like to be put on your list also.

Sincerely,

Ruper Welson Rupert Nelson

# จดหมาย อากาศ AEROGRAMME



32 33

Consultative Group On International Agricultural
Research

World Bank

Washington, D.C.

U. S. A.

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LO THIS AIR LETTER WILL BE SENT BY SURFACE MAIL

PANYTH HTYNA FI

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



January 29, 1975

Dear Professor Duncan:

Thank you for your letter of January 22nd which has been referred to me. As the Scientific Adviser in the Secretariat of the Consultative Group, I can perhaps help you in making contacts at the various Centers.

However, I would be grateful for further information on your ideas or proposals for further participation in agriculture in the developing world.

I enclose a copy of the Centers' brochure.

Sincerely yours,

John K. Coulter

Enclosure

Professor A. A. Duncan Institute of Food and Agricultural Sciences University of Florida Homestead, Florida 33030

yellon

Dr. K. Lampe
HAl
Deutsche Gesellschaft für
Technische Zusammenarbeit (GTZ) GmbH
6236 Eschborn 1 bei Frankfürt/M
Stuttgarter Straße 10 - Postfach 5180
GERMANY

January 29, 1975

Dear Dr. Lampe:

We are happy to send you 50 copies of the CGIAR brochure (English) as you have requested in your letter of December 30, 1974.

As you know, the CGIAR brochure is also printed in French and Spanish. Do let us know if you need copies of the brochure in either or both these languages.

Sincerely yours,

Bruce M. Cheek

Deputy Executive Secretary

CGIAR

January 29, 1975 Mr. A. Suleiman Permanent Secretary Federal Ministry of Agriculture and Natural Resources P.M.B. 12613 Lagos NIGERIA Dear Mr. Suleiman: Mr. Humayum Mirza, Chief of The World Bank Resident Mission in Nigeria, has passed on to us your request for a copy of the report of the Animal Health and Production Task Force that visited Nigeria in June, 1972. Attached herewith is the abovementioned report that you have requested. Sincerely, Bruce M. Cheek Deputy Executive Secretariat CGIAR с,с, мжххжжихжихмижхим Mr. Humayun Mirza, Nigeria (without attachment) BMCheek/CG/ms

January 28, 1975 Dear Mr. Holdridge: Mr. Byrnes of CIAT has told me of your interest in the Consultative Group on International Agricultural Research and the system of research centers it sponsors. I am enclosing for your information a brief note which will give you some background on the CGIAR and a brochure which will tell you about the principal activities which it supports. I should be glad to answer any questions you may have. Yours sincerely, Michael L. Lejeune Executive Secretary Mr. S. Archie Holdridge Farm Editor, Harford Courant 23 Fort Path Road Madison, Connecticut 06443 Enclosures MLLejeune: ia



## CENTRO INTERNACIONAL DE AGRICULTURA TROPICAL

TC-042-75 January 20, 1975

Mr. Michael Lejeune
Secretariat
Consultative Group on International
Agricultural Research
International Bank for Reconstruction
and Development
1818 H Street, N. W.
Washington, D. C. 20433

Dear Mr. Lejeune:

Mr. Holdridge, farm editor, Hartford Courant, visited CIAT this past week and he is interested in learning more about the CGIAR and the other centers.

Please send him whatever informational materials you have available, including the joint booklet if it has now been released.

Many thanks.

His address: Mr. S. Archie Holdridge

Farm Editor, Hartford Courant

23 Fort Path Road Madison, Conn. 06443

Sincerely,

Francis C. Byrnes

Leader

Training and Communication

cee.

COMMUNICATIONS SECTION

1975 JAN 24 AM 11: 50



## CENTRO INTERNACIONAL DE AGRICULTURA TROPICAL

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His address: Mr. S. Archie Holdridge Farm Editor, Hartford Courant 23 Fort Path Road

Madison, Conn. 06443

Sincerely,

Francis C. Byrnes Leader

Training and Communication

CGG.

COMMUNICATIONS

1975 JAN 24 AM 11: 50

Mr. John A. King, Office-V.P., Projects

January 15, 1975

Bruce M. Cheek, C.G.I.A.R.

Information on Bank-U.N. Operational Relations

- 1. In response to your memorandum of December 19, 1974 on the above subject, I enclose a new draft text for the portion of the Bank paper relating to the CGIAR.
- 2. The section on "Fertilizer Study" could well have a reference: "The CGIAR, through its Technical Advisory Committee, is also making a study of how best to stimulate and support research on chemical fertilizers developed especially for plants growing in tropical areas, as well as on other aspects of plant nutrition including organic fertilizers and biological fixation of nitrogen."
- 3. I take it that the CGIAR section is the only one that will refer specifically to cooperation with UNDP.
- 4. I also note that the UNDP section does not begin in the same way as the FAO section, that is, with a cross-reference paragraph to other forms of cooperation with FAO mentioned in the paper (page 7, old text). Perhaps there could be a similar paragraph for UNDP?

Attachment

BMCheek/ms

# The Consultative Group on International Agricultural Research (CGIAR)

The Bank, FAC and the UNDP are co-sponsors of the CGIAR which was organized in 1971 to mobilize long-term financial support for international agricultural research from international agencies, governments and private sources. The CGIAR now has 31 members. 1/

The United Nations Environmental Program joined the Group in November 1974. Annual contributions to the research programs sponsored by the Group have increased from \$15 million in 1972 to \$48 million for 1975.

The Programs supported by the Group all have international governing bodies and international staffs. The Group believes that the concentration of highly skilled staffs in international centers of excellence, appropriately linked to national research and production systems, offers an effective way of developing much-needed new technologies and greatly increasing agricultural output and farm income. More than 3.500 staff, including some 240 senior scientists, are now at work in international programs supported by the Group. Their research and training activities, which are designed to increase the quantity and improve the quality of good production in developing countries, encompass crops and animals which account for three-quarters of the food supply of developing countries and for a still higher proportion of their protein intake.

The particular programs sponsored by the Group are:

The International Maize and Wheat Improvement Center, based on Mexico;

The International Crops Research Institute for the Semi-Arid Tropics, based on India; it deals with the development of systems of farming in semi-arid zones and with developing improved varieties of groundnuts, sorghum, millet, chick peas and pigeon peas;

The International Rice Research Institute, based on the Philippines.

The International Institute of Tropical Agriculture, based on Nigeria and dealing with the development of farming systems for the humid tropics as well as with cassava, cow peas, soy beans and local adaptations of internationally developed strains of maize and rice;

1/ The present membership comprises, in addition to the co-sponsors, 14 governments, three regional development banks, the United Nations Engironmental Program, the Commission of the European Communities, three private foundations and the International Development Research Center, an independent Canadian organization. The five major developing regions of the world (Africa; Asia and the Far East; Latin America; Middle East; and Southern and Eastern Europe) participate through representatives designated for a two-year term by the membership of FAO.

The International Livestock Center for Africa, based on Ethiopia, dealing particularly with systems of cattle production:

The International Laboratory for Remearch on Animal Diseases, based on Kenya and studying two parasitic diseases which are lethal to cattle in sub-Saharan African;

The International Center of Tropical Agriculture, based on Colombia and dealing with the development of farming systems for the humid tropics of the Western Hemisphere as well as with cassava, field beans, local adaptations of maize and rice, and production systems for cattle and swine;

The International Potato Center, based on Peru;

The West African Rice Development Association;

The International Board for Plant Genetic Resources, with headquarters in Rome, which seeks to stimulate and coordinate the collection and exchange of materials of potential interest to plant breeders in the developing countries:

At its October 1974 meeting, following two years of study, the Consultative Group also decided to set about establishing a Center for agricultural research for the dry areas extending across North Africa and the Middle East to Pakistan. The program of the Center will be concerned with three main topics: (1) crop improvement, emphasizing barley and durum wheat, but including some work on broad beans, lentils and certain other crops; (2) soil and water management, embracing both rainfed and irrigated agriculture; and (3) animal production systems, with emphasis on sheep husbandry and nutrition. The establishment of this program would round out the world-wide network of research activities sponsored by the Consultative Group.

The Bank acts as Chairman of the CGIAR and also provides its secretariat. The Consultative Group is assisted by a Technical Advisory Committee (TAC), composed of scientists from the developed and developing countries, for which FAO provides the secretariat. TAC advises the Group, in both the technical and socio-economic spheres, on the main priorities and gaps in agricultural research related to developing countries. It recommends and organizes feasibility studies looking toward the establishment of new research efforts, and it makes recommendations to the Group concerning the acceptance of additional programs, either of existing centers or in the form of new institutions. TAC also advises the Group on the effectiveness of programs already in being.

Both FAO and the UNDP are represented on all sub-committees of the Consultative Group. The FAO also provides the secretariat for the International Board for Plant Genetic Resources.

January 14, 1975

Mr. Wynne Thorne Utah State University Agricultural Experiment Station Logan, Utah 84322

Dear Mr. Thorpe:

In response to your letter of November 25, 1974 to Mr. Harold Graves, I am sending herewith five copies of the brochure on the Consultative Group on International Agricultural Research.

Sincerely,

Carlos B. Cavino

CBGavinn:sdo'c

January 13, 1975

Mr. Carl E. Joplin
Pestology Centre
Biological Sciences Department
Simon Preser University
Burnaby 2, British Columbia
Canada

Dear Mr. Joplin,

I refer to your letter of October 7, 1974 regarding information for your thesis on grain legume production. I am attaching a brochure describing the work of the Consultative Group on International Agricultural Research. Also attached is the Technical Advisory Group (TAC) Priorities Paper for international agricultural research.

The Asian Vegetable Research and Development Center in Taiwan is not an institute sponsored by the Group. The address is P.O. Box 42, Shanhna Tainan, Taiwan (741), Republic of China.

There are no new institutes concerned with grain legumes that are being planned; however, two centers are currently expanding their research on cowpess and field beans:

- a) The International Institute for Tropical Agriculture (IITA) based in Nigeria research on cowpeas
- b) The International Institute for Tropical Agriculture (CIAT) based in Colombia research on field beans

We hope that the above information is helpful in preparation of your thesis.

Sincerely,

Carlos B. Gavino

Attachment CGGavino sdo'c

January 10, 1975

Mr. I. P. M. Cargill

Michael L. Lejeune

CGIAR

- As background for your Tuesday lunch I attach three documents. The first is a memorandum giving a general description of the CGIAR system. A point you may wish to note is that the Technical Advisory Committee referred to in paragraph 4 is chaired by Sir John Crawford. His influence on the scientific programs of the system is strong and helps to ensure that they are objective and stick to our purpose. The second is a memorandum dated November 12 on the proposed research center for the dry areas which would be based on the region from Morocco to Pakistan, including Sudan. As mentioned at the top of page 2 we plan to have the headquarters in Lebanon (with a closely related station in Syria) with satellite or associated centers of research in two different ecological areas. The present thinking is to have these in Iran and Algeria respectively, but if for any reason it turns out to be impracticable to have stations in these two countries there are alternatives such as Turkey and Tunisia, which would satisfy the ecological requirements. The third is a brochure about the existing centers. This contains more detail than you need for the present purpose but you might like to scan it sometime.
- 2. As I said, our objective is to get Iran, Saudi Arabia and Kuwait to join the Consultative Group and contribute finance for its program in general (and not solely for the proposed Middle East Center) in time to support the progra gram for calendar 1976. In practice, this means coming to a Consultative Group meeting in July, at least as observers, and again to a pledging meeting in November as contributing members.

Attachments

MLLejeune: ia

Incoming Original January 8, 1975

Permanent Secretary
Federal Ministry of Agriculture
and Natural Resources
P.M.B. 12613
Lagos.

## Attention: Mr. A. Suleiman

Dear Mr. Suleiman:

# Re: Animal Health and Production Task Force

Thank you for your letter AGR.427/S.6/C.2/233 of December 27, 1974 requesting a copy of the report of the Animal Health and Production Task Force that visited Nigeria in June, 1972 which I have passed on to our headquarters for necessary action.

Yours sincerely,

Humayun Mirza Chief of Mission

cc: Mr. F. Povey, Division Chief, WAIDA
Mr. M. Lejeune, Executive Secretary, Consultative Group
on International Agricultural Research

COMMUNICATIONS SECTION



Incoming Original

January 8, 1975

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on International Agricultural Research

SECTION SECTIONS

1975 JAN 15 PM 3: 28





#### RESEARCH BRANCH

Plant Science Section Research Station Lethbridge, Alberta, Canada TlJ 4B1

Your file Votre référence

Our file Notre référence

January 6, 1975

Mr. Bruce M. Cheek
Deputy Executive Secretary
Consultative Group on
International Agricultural Research
1818 H Street, N. W.
WASHINGTON, D. C. 20433
U. S. A.

Dear Mr. Cheek

Thank you for your letter of September 27, 1974 which was a reply to my earlier letter. Your information was very helpful in the preparation of my article "The Prevailing Potato", which was published in the November-December 1974 issue of the Agrologist, a journal of the Agricultural Institute of Canada.

I am enclosing five reprints of the article for the Consultative Group's file.

Sincerely yours

Miklos S. Kaldy Food Scientist

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Tr. Brace T. Choe'
Departy Executive Secretary
Consultative Group on
Titerostional Acticultural Beneared
1818 P Street, N. W.
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Sincerdly vours

Miklos S. Kaldy Food Scientist

PSK/IVb enel FROM 13 PM 2:09

# The Prevailing Potato

Renewed research efforts enhance potato nutrition and adaptability

## by Miklos S. Kaldy

Down through history, the unassuming potato has quietly provided a reliable source of nourishment for a substantial segment of

the world's population.

It is popularly known that the potato is rich in carbohydrates needed for energy. Moreover, it has long been known — though less widely recognized - that the potato is one of the best vegetable sources of pro-tein and Vitamin C. It even offers useful amounts of thiamine and niacin which are important in a balanced diet.

It is not surprising then that the growing shortage of food for global requirements has focused renewed

attention on the potato.
In January 1971, this interest materialized in the establishment of the International Potato Center (Centro Internacional de la Papa, or CIP) at La Molina, Lima, Peru.

CIP aims both to catalyze and to conduct research for potato improvement. It is attempting to develop widely adaptable, highly nutritious potatoes whose use can be promoted in developing countries of tropical and temperate regions.

Research at the Center will emphasize disease resistance, productivity, wider adaptability, nutritional value - particularly protein quality - and simple processing



Rural scene near Cuzco at an elevation of about 11,000 feet. Potato field is in the foreground and village in the background.

techniques for countries where resources are limited.

Work is well underway to tap the large reserves of potentially valuable genetic material in the Andean region and to accumulate a world germ plasm collection.

The parent stock of the white (Irish) potato originated in the Andean highlands in South America. Among the countries of this area, the largest number of wild and cultivated potato genotypes are in Peru. It is ironical that most of the improvement of the potato in the past has been achieved in countries other than those from which it originated and in which it is still a staple of the daily diet.

The International Potato Center is one of the network of centers funded by the Consultative Group on International Agricultural Research (see inset). The main purpose of the Consultative Group is to give financial support to international agricultural research institutions that undertake to increase the quantity and improve the quality of food production in developing countries.

Dr. Kaldy is a Food Scientist at the Agriculture Canada Research Station, Lethbridge. He was invited to participate in the Potato Quality Planning Conference at the International Potato Center in La Molina, Lima, Peru, 26-30 November 1973.

### International Centers Supported by the Consultative Group

6 Now in Operation

-International Maize and Wheat Improvement Center (Centro Internacional de Mejoramiento de Maiz y Trigo, or CIMMYT), Mexico

- International Rice Research Institute (IRRI),

Philippines -International Center for Tropical Agriculture (Centro Internacional de Agricultura Tropical, or CIAT), Colombia

- International Institute for Tropical Agriculture (IITA), Nigeria

- International Potato Center (Centro Internacional de la Papa, or CIP), Peru

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

3 Being established

- International Laboratory for Research on Animal Diseases (ILRAD), Kenya

- International Livestock Center for Africa (ILCA),

- International Board for Plant Genetic Resources,

#### Members of the Consultative Group (29)

- World Bank (Chairman)

- cosponsors: Food and Agriculture Organization (FAO) and United Nations Development Programme (UNDP)

- 13 governments: Australia, Belgium, Canada, Denmark, France, Germany, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom, and United States

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- International Institute for Tropical Agriculture (IITA), Nigeria

- International Potato Center (Centro Internacional de la Papa, or CIP), Peru

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Renewed research efforts enhance potato nutrition and adaptability

## by Miklos S. Kaldy

Down through history, the unassuming potato has quietly provided a reliable source of nourishment for a substantial segment of

the world's population.

It is popularly known that the potato is rich in carbohydrates needed for energy. Moreover, it has long been known - though less widely recognized - that the potato is one of the best vegetable sources of pro-tein and Vitamin C. It even offers useful amounts of thiamine and niacin which are important in a balanced diet.

It is not surprising then that the growing shortage of food for global requirements has focused renewed

attention on the potato. In January 1971, this interest materialized in the establishment of the International Potato Center (Centro Internacional de la Papa, or CIP) at La Molina, Lima, Peru.

CIP aims both to catalyze and to conduct research for potato improvement. It is attempting to develop widely adaptable, highly nutritious potatoes whose use can be promoted in developing countries of tropical and temperate regions.

Research at the Center will emphasize disease resistance, productivity, wider adaptability, nutritional value - particularly protein quality - and simple processing



Rural scene near Cuzco at an elevation of about 11,000 feet. Potato field is in the foreground and village in the background.

techniques for countries where resources are limited.

Work is well underway to tap the large reserves of potentially valuable genetic material in the Andean region and to accumulate a world germ plasm collection.

The parent stock of the white (Irish) potato originated in the Andean highlands in South America. Among the countries of this area, the largest number of wild and cultivated potato genotypes are in Peru. It is ironical that most of the improvement of the potato in the past has been achieved in countries other than those from which it originated and in which it is still a staple of the daily diet.

The International Potato Center is one of the network of centers funded by the Consultative Group on International Agricultural Research (see inset). The main purpose of the Consultative Group is to give financial support to international agricultural research institutions that undertake to increase the quantity and improve the quality of food production in developing countries.

Dr. Kaldy is a Food Scientist at the Agriculture Canada Research Station, Lethbridge. He was invited to participate in the Potato Quality Planning Conference at the International Potato Center in La Molina, Lima, Peru, 26-30 November 1973.

### International Centers Supported by the Consultative Group

6 Now in Operation

-International Maize and Wheat Improvement Center (Centro Internacional de Mejoramiento de Maiz y Trigo, or CIMMYT), Mexico

- International Rice Research Institute (IRRI), Philippines

-International Center for Tropical Agriculture (Centro Internacional de Agricultura Tropical, or CIAT), Colombia

- International Institute for Tropical Agriculture (IITA), Nigeria

- International Potato Center (Centro Internacional de la Papa, or CIP), Peru

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

3 Being established

International Laboratory for Research on Animal Diseases (ILRAD), Kenya

- International Livestock Center for Africa (ILCA), Ethiopia

-International Board for Plant Genetic Resources.

#### Members of the Consultative Group (29)

- World Bank (Chairman)

- cosponsors: Food and Agriculture Organization (FAO) and United Nations Development Programme (UNDP)

 13 governments: Australia, Belgium, Canada, Denmark, France, Germany, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom, and United States

- 3 regional development banks: African, Asian and

Inter-American

- Commission of the European Communities -3 private foundations: Ford, Rockefeller, and

Kellogg -International Development Research Centre, an

independent Canadian organization

- the 5 major developing regions of the world participate in the Consultative Group through representatives appointed for a two-year term by the members of the FAO

January 3, 1975/2 Mr. Abdlatif Y. Al-Hamad Director General Kuwait Fund for Arab Economic Development KINGALE Huwait Dear Abdlatif, I have already written you about the Consultative Group on International Agricultural Research and this is just to enclose a copy of that letter and further copies of the papers and brochure I sent you. Sincerely, Kigad, Balan Lijan Michael L. Lejeune Executive Secretary Enclosures MLLejeune:sdo'c