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THIRD MEETING
JOINT COMMITTEE ON AGRICULTURAL RESEARCH
AND
DEVELOPMENT (JCARD)
March 17 - 18, 1983

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JOINT COMMITTEE ON AGRICULTURAL RESEARCH
and
DEVELOPMENT (JCARD)

of the

Board for International Food
and
Agricultural Development (BIFAD)

Third Meeting

Thursday, March 17, 1983 -- 1:00 to 5:00

Friday, March 18, 1983 -- 9:00 to 12:00

Holiday Inn
1850 N. Fort Myer Drive
Rosslyn, Virginia

Agenda

Thursday, March 17 - Jack Robins Presiding

| | | |
|------|---|--------------------|
| 1:00 | Call to Order | |
| | Announcements..... | John Stovall |
| 1:15 | Report of Executive Committee | |
| | <u>Panel Progress Reports</u> | |
| 1:30 | Communications | |
| 1:40 | CRSPs | |
| 1:50 | Orientation..... | Jean Weidemann |
| 2:00 | Contracting Issues..... | Ralph Smuckler |
| 3:00 | BREAK | |
| | <u>Utilizing the Private Sector in</u> <u>Developing Countries</u> | |
| 3:15 | Panel Discussion | |
| | - AID Strategy..... | Ed Harrell, PRE |
| | - Some LAC Examples..... | |
| | Comments..... | Roland Hendrickson |
| 5:00 | ADJOURN FOR THE DAY | |

Friday, March 18 - Hugh Fopenoe Presiding

9:00 - 12:00

- o Summary Critique of Title XII Seminars..... Fred Hutchinson

- o AID Agricultural Development Strategy
Objective: To review AID process for country,
regional, sector strategy formulation and to
provide feedback to regional bureaus on
elements of strategy, problems, issues.
 - Overview of Process for Formulating,
Implementing Strategy..... John Eriksson

 - Review of Major Elements of Regional
Strategy, Major Problems and Issues
 - AFR..... Dave Schaer
 - ASIA..... Al Hankins
 - LAC..... Scaff Brown
 - NE..... Dick Cobb

 - Discuss JCARD Mechanism for Interacting
with Regional Bureaus on Strategy and
Operational Matters

12:00 ADJOURN

Dr. Allen Christensen
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JOINT COMMITTEE ON AGRICULTURAL RESEARCH
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Panel Progress Reports

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1:40 CRSPs

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- Some LAC Examples.....
Comments..... Roland Hendrickson

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 - Discuss JCARD Mechanism for Interacting
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Operational Matters

12:00 ADJOURN



OFFICE OF THE DEAN OF INTERNATIONAL STUDIES AND PROGRAMS

7 February 1983

MEMORANDUM

TO: Dr. Hugh Popenoe
Dr. Frederick Hutchinson

FROM: Ralph H. Smuckler, Dean

SUBJECT: Contracting Modes under Title XII

Having reviewed the JRC document covering "Alternative Models and Approaches for Organizing U.S. Effort in International Research Programs" and talked with a number of individuals about current modes of contracting, there are a number of observations I might make which would be useful to JCARD. The first general comment is that the material developed by the Johnston subcommittee of JRC was relevant essentially to research activity. It was good as far as it went, but it covered only one part of Title XII contracting. It makes clear that there are all kinds of mechanisms available and in use for research contracts. This observation would also be true of general project contracting.

A second general observation is that in view of the delegation of authority to AID country Mission Directors, we may have a new situation which would benefit from BIFAD/JCARD attention. I have in mind the fact that for a number of decades the universities and AID/Washington have evolved procedures and standard contractual materials which are by and large incorporated into AID university contracts through negotiation. As the locus and responsibility for contracting with universities shifts to the office of the specific overseas Mission, there is a possibility that much of what has been established as standard in the past will no longer be used. Each Mission having been delegated authority may choose to negotiate in its own style through its own procedures and insist on management items which have a long history of negotiation. Therefore, one general question to be raised is: How much leeway does the individual AID Mission abroad have in establishing both procedures and content--aside from program substance--for its contracts with universities?

Page Two
Memorandum to
Hugh Popenoe
Frederick Hutchinson
7 February 1983

There are a number of other more specific questions, many of which would help clarify current status and permit more careful attention to the subject of Title XII contracting. These more specific questions are as follows:

1. What is the number of agreements (contracts, cooperative agreements, memoranda of understanding, etc.) which have been negotiated with universities since January 1, 1981. In addition, how many of each type have been negotiated and what is the dollar size of these contracts individually?
2. How many agreements have been developed and negotiated in the collaborative style? Which ones are they?
3. What is the number of country Mission negotiated contracts of all types? How many of these have been with universities?
4. What guidelines are now in the hands of contracting officers in the Missions abroad with respect to contracting--process and substance--with universities?

The information which could be provided in the responses to the above questions will be very useful. Even at this stage, however, it appears one might recommend that the information about the collaborative style of program development and contracting be brought forth and distributed widely to Missions abroad and to American universities, since this is preferred Title XII mode. And, secondly, guidelines might be developed by the BIFAD staff to be used by universities as they enter into contracting. This latter point relates to the fact that there are so many inexperienced university contractors now that it would be good to provide all with the basic information about items of importance to be included if projects are to work smoothly, such as, for example, consideration of the orientation and training period prior to departure for overseas service, necessary provisions for country clearance prior to international travel, necessity for coordinating staff on campus to back up the work of the project in the field, etc., etc.

djs

cc: Howard G. Grider/MSU
John Stovall/BIFAD

JCARD EXECUTIVE COMMITTEE MEETING DATES

March 31 (p.m.) or April 5

July 21 (Thursday)

September 28 (Wednesday)

JCARD MEETING DATES

March 17 - 18

(Thursday 17th, 9:00 a.m. thru Friday 18, 12:00 noon)

May 16 - 17

(Monday 16th, 1:00 p.m. thru Tuesday 17, 5:00 p.m.)

August 18 - 19

(Thursday 18th, 9:00 a.m. thru Friday 19th, 12:00 noon)

October 11 - 12

(Tuesday 11th, 1:00 p.m. thru Wednesday 12th, 5:00 p.m.)

November 30 - December 1

(Wednesday 30th, 1:00 p.m. thru Thursday 1st, 5:00 p.m.)

TENTATIVE BIFAD MEETING DATES

March 31 (Thursday)

June 2 (Thursday)

July 22 (Friday)

September 29 (Thursday)

December 2 (Friday)

UNCERTIFIED MINUTES

OF THE

D R A F TJOINT COMMITTEE ON AGRICULTURAL
RESEARCH AND DEVELOPMENT (JCARD)January 24-25, 1983

Holiday Inn, Rosslyn, Va.

January 24, 1983Announcements/Comments

The meeting was called to order at 1:10 p.m. by Co-Chairman John Robins (AID/S&T/FA). He introduced JCARD nominees who were not at the first meeting: Charles Hess (University of California at Davis), Roland Hendrickson (Pfizer-Agriculture Division) and Ernest Corley of U.S. Department of Agriculture. Robins announced that:

- o This session is the second quasi-official meeting since all of the JCARD nominees were not yet officially appointed.
- o William Judy is attending this meeting for David Schaer of Africa Bureau and Fred Olson attending for Robert Wildman of NOAA.
- o On the question raised at the last meeting about the status of members regarding parent organization: Non-Federal members were selected for their individual expertise, background and understanding of development problems. Federal members were appointed by virtue of their position. They are free to express individual views which may not necessarily represent the official position of the element of the Agency that they represent.

Report of the Executive Committee Meeting--January 7, 1983

Robins reported the following items discussed by the Executive Committee:

- o The Ag Sector Council recommendations for JCARD's agenda were discussed:
 1. Performance criteria for Title XII projects
 2. Communications between AID and the universities
 3. Criteria for identifying Title XII projects
 4. AID budget
 5. Participant Training
- o JCARD's interaction with the university community was discussed and it was suggested that JCARD Co-Chairmen meet with Chairmen of Agricultural Divisions of NASULGC, CIAP and AASCU.
- o Communications - a panel was appointed with Jean Kearns as chairperson to review this problem and suggest remedies.
- o Contracting Modes - Ralph Smuckler will review material gathered by JRC/JCAD and recommend further action to be taken.
- o Incentive Study - being discussed at the Title XII Seminars and will await further discussion on that subject.
- o Strengthening Grants - A committee with Allen Christensen as chairman was appointed to review this activity and recommend future role of JCARD.
- o Criteria for Title XII projects - a panel was appointed with David Schaer as chairman to develop criteria.
- o Public understanding of Foreign Assistance - it was noted that a sub-committee of CIAP is concerned with this issue and JCARD will attempt to link up with this activity.
- o Evaluation of Title XII projects - Ag Sector Council will recommend a scope of work for this activity.

- o CRSP - An ad hoc panel with Rodney Foil as chairman will recommend what kind of future involvement JCARD should have in this program.
- o IARCs - A panel with James Johnston as chairman will pursue this activity.
- o Livestock Studies - Exploratory studies on Water Buffalo, African Swine Fever, and hemotropic diseases were initiated by JRC. The Executive Committee decided that no further action by JCARD was necessary and the Agency should respond to these studies.
- o The Executive Committee gave consideration to developing "Think Papers" in ag policy, private sector, and technology transfer.
- o The Consortia Study was discussed but no action recommended at this time.

Proposed Plan of Work for 1983: Stovall stated that the BIFAD Charter required JCARD to develop a comprehensive work plan in consultation with AID and the Board. The Executive Committee reviewed the various suggestions for activities and issues that were discussed at JCARD's first meeting and had the counsel of BIFAD Vice Chairman E.T. York. A proposed plan of work was developed which covers five major categories:

1. Development policies and strategies
2. Science and technology programs; vehicles and priorities
3. AID/university relationships
4. Training
5. Title XII institutions - internal processes and issues.

During discussion of the work plan the following suggestions were made:

- o Review of Country Development Strategy Statements (CDSS) should be included, since the CDSSs are an important factor in the assistance program. JCARD should become involved in these reviews with the

Regional Bureaus to get an understanding of the Total agency strategy.

- o Consider the role of women in development policy.
- o Follow-up on performance criteria for university personnel on AID overseas contracts -- could fit under Number 5 of the work plan.
- o Evaluation of Title XII projects is important--has visible momentum and fit under Number 3 or 5 of work plan.
- o Consider the public support for foreign assistance as an activity.

The JCARD Work Plan will be submitted to the Board at the BIFAD meeting on February 18, 1983.

International Agricultural Research Centers (IARCs)

Robins asked Dana Dalrymple (S&T/AGR) to give a presentation on this activity with special emphasis on the formula funding process.

Dalrymple stated that since 1972 AID has provided up to 25% of the total annual funding provided to the CGIAR and this formula funding policy has caused some concern to BIFAD and others in the Agency. AID's contribution to the CGIAR, and several other research centers, represent a major portion of the budget of the Office of Agriculture. Funds are also allocated in this office for the CRSP, contract research, technical assistance and other services.

The funds allocated to individual centers vary and do not follow the formula concept. Criteria for contribution to individual centers gives emphasis to merit and performance, age, location, mandate and availability of other funding.

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In addition to core contribution, the U.S. and other donors provide funding for special projects. AID funded nearly \$8 million in 1982 for special projects. Since these projects generally relate to an individual country the funds are provided by Regional Bureaus and/or Country Missions.

The key issues relating to the 25% question were presented in terms of the setting within AID and the advantages and disadvantages in terms of the mechanism and level.

Dalrymple gave a general history of AID's involvement and support of the CGIAR and a chronology of U.S. contributions to the system. There are 32 other donors to the CGIAR which include the World Bank, regional development banks, national and international organizations.

Co-Chairman Hugh Popenoe said the panel on IARCs recently appointed had been charged to do a policy analysis and to review the work of research centers in terms of relevance to AID needs; relationship to other research financed by AID; needs of development countries and linkage with U.S. universities.

The Panel listed the following questions/items on which they will focus:

1. Objective of AID Food and Agriculture assistance program and relationship with IARCs
2. AID Research and program priorities
3. Alternative ways of accomplishing the Research
4. Effectiveness of alternative modes, vehicles
5. Problem of allocating resources among alternatives

James Johnston stated that a better communication link is necessary between Regional Bureaus and the science and technology component. Since the CGIAR is an international complex system and AID's contribution is a crucial element of the system--if reduced would have world-wide impact.

Popenoe noted that evaluation guidelines were needed for this system and product/benefit from this system are important issues. A progress report on this activity will be given at the March meeting of JCARD.

Agricultural Policy and Development

Popenoe stated that Ed Schuh has had extensive experience in policy analysis in the U.S. and developing countries and asked him to report on this subject. Schuh said that there are high quality people doing policy analysis work and this work becomes controversial only when people have a tendency to become policy advocates. Therefore, it is important to analyze impact of policy without supporting or advocating it.

Schuh's points included:

1. Getting prices right is the key to adoption of new production technology -- the right incentives are needed. Policies affect relative prices and consideration has to be given to subsidies, or indirect taxes, and the parallel role of trade policy and exchange rate. (Dimension of trade policy level against agricultural sector/market.)
2. Role of factor prices in influencing technical change (labor vs. land).
3. "Shaping" distribution of income in a society is important.

4. On agricultural policy as an area for research Schuh said it was important to understand multi-disciplinary factors: generic issues, structure of economy--economic intelligence and a basic knowledge of the political process.

5. The following subject matter area needs to be considered:

a) price policy b) food policy c) income policy d) trade and exchange rate policy e) credit policy f) adjustment policy g) S&T policy h) resource policy i) investment policy, etc.

6. In developing institutional capacity for policy analysis in developing countries one has to consider the current country policy.

7. Human capital development calls for formal training in economics, political science, sociology, technology, on the job training in policy process.

8. On ways JCARD could assist AID and the universities in incorporating the "policy variable" in program and projects, Schuh suggested the following:

- a) Focus attention on importance of policy issues, clarify issues, bring together data on currency on part of ag sector.
- b) Help set standard for policy research and do not view policy work as controversial.
- c) Use of collaborative research
- d) Assist in standard training of people; and
- e) Stress the importance of developing institution capability.

In the discussion following the presentation it was noted that:

- o The Ministry of Agriculture is the key to development for making use of research.
- o Massive data collection is often involved.
- o With political institution separate from research policy one has to way balance of credibility.

The meeting was recessed at 5:10 p.m.

January 25, 1983

Co-chairman Popenoe called the meeting to order at 9:00 a.m. The minutes of the JCARD meeting held November 30-December 1, 1982 were approved.

Matching University resources to AID needs: problems and prospects -

Fred Hutchinson (Executive Director, BIFAD) stated that Administrator McPherson is interested in improving the matching process and the following mechanisms relate to this process: Consortia Study, Joint Enterprise Mode, Collaborative Research Support Program, Memorandum of Understanding, Strengthening Grants and the Registry of Institutional Resources (RIR).

The RIR, which was developed by BIFAD with plans of turning it over to the Agency, has continued to be operated by BIFAD with encouragement by the universities and AID. The RIR contains a useful bank of information and the universities are continuously encouraged to fill in and send in all parts of the RIR applications.

Hutchinson explained the present process of matching Title XII projects: requests for a certain project is sent by the Mission to the Regional Bureau and when that project is labeled Title XII is advertised in the BIFAD Briefs or by letters to Title XII officers with deadline date for submission of proposals. (This is not a competitive process.) He said there is a myth that "too many proposals" were being submitted/received for Title XII projects. He gave a summary of recent projects to refute this conception. Also, sometimes three or four universities collaborate on one proposal. It was understood that some universities negotiate better than others and the role of host country in the contracting process is an important factor.

In the discussion following--it was noted that because of the decentralization trend Mission Directors have authority to do more contracting in the field and can obligate funds for projects up to \$100,000. Therefore, it is important to be aware of the Agency Budget allocations for Title XII projects and that field personnel understand the cost element when negotiating for a contract and backstopping at universities is important.

Because further clarification from the point of view of Title XII universities and AID Staff as to the definition of Title XII activities is needed, Popenoe noted that a JCARD Panel had been appointed to develop a set of criteria for Title XII projects.

Training

Popenoe said that education and training are critical elements in the development process and various activities have been initiated to review the training efforts in the Agency. He asked Jean Weidemann (BIFAD Staff) to review current efforts aimed at strengthening participant training.

Weidemann said that because of rising costs of education and training an ad hoc committee on Study of Participant Training (with help from BIFAD Staff) has developed some proposals relating to experiments/modes that might lower costs and yet increase the effectiveness of participant training in agriculture. The experimentation cover:

1. Thesis research support in the IARCs
2. In-Country development of short courses
3. Training TSMS
4. Cooperative degree training
5. Country-level contracting for participant training

6. Career development for spouses of participants
7. Competitive grants program for collaborative research
in-country with former participants
8. Competitive fellowships

The Studies relate to: effective costs of training; basic data relating to flows of participants to the U.S., and sources of funding; explorations of alternative leveraging mechanisms; and assessment and follow-up of experimentation.

Dona Wolf (AID/OIT) said there is an increased focus on training in the Agency. Administrator McPherson had requested OIT to write a development training strategy paper. This paper has been circulated to AID offices and the field for comments--very few changes were expressed. The Administrator is pleased with the strategy paper and they are looking forward to implementing its recommendations. There is a new emphasis on general training as opposed to project specific training. She expressed concern regarding limited staffing for training/professional development officers in the Missions as well as AID/Washington. (Hopefully the staff in this area will be increased.)

Wolf said there is incomplete data in OIT concerning flows of foreign students in agriculture to U.S. universities. They are going back as far as possible to get accurate information relating to numbers/time/costs and need to look at a number of data bases.

In the discussion following it was noted that the training system needed to be assessed from standpoint of where did the people go after being

trained--most of them are not utilized in the system and a number of them do not return to their countries. Therefore, the utilization of trained people within institutions in public sector needed to be addressed. It was stated that some students do not return to their countries because of oppressed governments and OIT cannot become involved in the Human Rights area.

Also, it was stressed that as well as training people to talk to farmers--farmers should be trained to comprehend. Regarding manpower/cost, consideration could be given to capitalizing on collaboration with a university in another country. From the private sector viewpoint it was stated that most agriculture businesses around the world are interested in making a profit and natives of that country are hired to develop/run business so that training in financial management is an important area.

Technology Transfer

Popenoe said there is a renewed interest in AID re technology transfer in developing countries. He asked Douglas Caton/AID and Arthur Mosher, a consultant with long experience in this area to comment on this subject.

Caton said the incentive to use technology in agriculture needs to be further developed. There is still the question on how to develop an operating model; the people-research linkage factor and the assurance of farmers utilization. A national food system needs to be considered in terms of resource and policy to integrate the research and farmers. Info feedback to research, to policy, and outreach to donor community are important factors. Technology transfer is a process that matures

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into something, so that a framework has to be set for effective linkage between research extension and farmers. Education and training, sufficient funds and time/support from a long-term arrangement are important factors to consider in getting the farmers to understand and utilize the end product of research to solve an identified problem.

Mosher said he preferred to use the term extension instead of technology transfer because extension is an educational process that goes out to where the people live and help farmers do what needs to be done. The extension concept is alert to people's needs and contributes to human welfare. He said the mandate of extension is to help developing countries to become self-sufficient. Education and training in farm management and a rural system in support of national production goals are important factors. Also, one has to consider the local verification trials in developing countries since there is a majority of small farmers and they hesitate to gamble on new proposals.

In the discussion the following points were noted:

- o Social science is important--too much emphasis on technical orientation.
- o U.S. extension model cannot be used as a model for developing countries--has lost its relevancy.
- o Private voluntary agencies have good record in development activities--have knowledge on what exist out there, where to go, what to do. (Catholic Church has a good track record.)

- o In providing technical assistance to farmers, universities cannot compete with private sector--adult education plays an important role. (Education objective important in projects.)
- o Consider working with the Peace Corps in getting technology into rural areas.
- o Extension process seems to fall in a short time period and longer lead time is necessary to be effective. Technology transfer is trendy but social analysis implies what one can do or not do in developing countries.

Role of the Private Sector

Co-chairman Robins stated that because of the recent interest in the private sector role in developing countries, Ralph Smuckler had been asked to make a presentation in this area.

Smuckler presented a tentative outline of a discussion paper on "Universities, the Private Sector, and Title XII." He said the purpose of this exercise/study is to find new and better ways to assist developing countries. AID is committed to "enhancing the role and strength of free and competitive markets which stimulate private enterprise." Title XII institutions have had a cooperative and productive relationship with the private sector in the U.S. through research connections; by providing manpower for private sector; and through the cooperative extension service.

He said appropriate situations and mechanisms will be identified to facilitate university/private sector cooperation. He considered feedback to be important so that the best projects from the university perspective are those with research and teaching feedback potential.

Smuckler cited cases where in recent experience, university projects have strengthened the developing country private sector directly over short and long term span with special emphasis on projects that aided the farmers. Also, cases in which universities are cooperating on development projects with U.S. private sector companies were cited.

Issues relating to university sub-contracting with private sector and what processes should be encouraged that would lead to better university/U.S. private sector cooperation in behalf of developing countries and in line with universities purposes were also discussed.

Hutchinson said the process of linking universities with the private sector should be encouraged. There is a wealth of expertise in private companies that could be used in support of AID needs and linkage of university and private sector enables one to draw on the capabilities of the other.

Schuh said that a high percentage of agricultural research and development is being done by the private sector in developing countries because of the interest shown by these countries in the investment environment. Also the role of private sector in supplying modern input and new technology in

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agriculture such as seeds, fertilizer, equipment, etc. should be considered as well as the role of private firms in the non-farm sector relating to the physical infrastructure. Also, extension service provides and reinforces technical assistance efforts in the farm and non-farm sector relating to agricultural development and rural development. (The per capita income of rural people is an important factor.)

Roland Hendrickson said that when a private company goes into a foreign country and invest capital they want people who are able to handle the project from a profit standpoint. Once a project is in place they want to be sure that the activity continues. He also thought that the extension function is important in educating people regarding use of various products. (He noted that because of rules and regulations imposed by governments the trend for private industry in developing countries is to stay away from government, when possible.)

Research Priorities, Strategy Papers

Robins said research priorities report and strategy papers were sent to JCARD members for review and comments. AID JCARD members were involved in developing these papers. Some written comments had been received--he asked for any additional comments. They were:

- o Location of specific categories and topics in the research priorities paper -- related topics could have been more closely aligned.
- o Priorities are production oriented with very little about people of agriculture or farm families. Household, income process, and farm management are important factors.

- o On national food policy, exchange rates are important from policy standpoint and from social standpoint.
- o Social cultural factors are important and social influence concerns were not reflected in Executive Summary of the paper.

Robins said the papers were intended as guidance to AID offices and Missions to follow a better focus on the overall Agency program.

Some concern was expressed re lack of research attention to institution building element; little reference to Title XII or BIFAD; and more direction needed regarding role of private sector in the developing process.

Members were urged to mail any additional comments to John Stovall, BIFAD/S.

Meeting adjourned at 3:25 p.m.

JCARD MEETING

January 24, 1983

Attendance

| <u>Name</u> | <u>MEMBERS</u> | <u>Affiliation</u> |
|------------------------------------|----------------|---------------------------------------|
| Hugh Popenoe | | University of Florida |
| Ralph Smuckler | | Michigan State University |
| Charles Hess | | Univ. of California/Davis |
| Allen Christensen | | Calif. State Polytechnic Univ./Pomona |
| Francille Firebaugh | | Ohio State University |
| Jean R. Kearns | | CID/University of Arizona |
| Frederick Humphries | | Tennessee State University |
| Rodney Foil | | Mississippi State University |
| G. Edward Schuh | | University of Minnesota |
| Roland Hendrickson | | Pfizer Inc. |
| James Johnston | | Rockefeller Foundation |
| John S. Robins | | AID/S&T/FA |
| Albert (Scaff) Brown | | AID/LAC/DR/RD |
| William H. Judy (for David Schaer) | | AID/AFR/TR/ARD |
| Allen Hankins | | AID/ASIA/TR |
| Leland Voth (for Richard Cobb) | | AID/NE/TECH/AD |
| Ernest Corley | | USDA/OICD |
| Fred Olson (for Robert Wildman) | | NOAA/Dept. of Commerce |
| Hugh Dwelley | | AID/M/SER/CM |

OTHERS

| | |
|----------------|----------------|
| Margaret Fahs | NASULGC |
| Alice Skelsey | Consultant |
| Robert Bertram | S&I, AGR/CGIAR |
| M. Rechigl | AID/SCI |
| H.C. Wiggin | AID/AFR/TR/ARD |
| Dana Dalrymple | S&T/AGR |

BIFAD Staff

Fred Hutchinson
John Stovall
Jean Weidemann
W. Fred Johnson
Mary Lester

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JCARD MEETING

January 25, 1983

Attendance

| <u>Name</u> | <u>MEMBERS</u> | <u>Affiliation</u> |
|--|----------------|---------------------------------------|
| Hugh Popenoe | | University of Florida |
| Ralph Smuckler | | Michigan State University |
| Charles Hess | | Univ. of California/Davis |
| Allen Christensen | | Calif. State Polytechnic Univ./Pomona |
| Francille Firebaugh | | Ohio State University |
| Jean R. Kearns | | CID/University of Arizona |
| Frederick Humphries | | Tennessee State University |
| Rodney Foil | | Mississippi State University |
| G. Edward Schuh | | University of Minnesota |
| Roland Hendrickson | | Pfizer Inc. |
| John S. Robins | | AID/S&T/FA |
| Wayne R. Nilsestuen (for "Scaff"Brown) | | AID/LAC/DR/RD |
| Ryland Ho'mes (for David Schaer) | | AID/AFR/TR/ARD |
| Allen Hankins | | AID/ASIA/TR |
| Leland Voth (for Richard Cobb) | | AID/NE/TECH/AD |
| Ernest Corley | | USDA/OICD |
| Fred Olson (for Robert Wildman) | | NOAA/Dept. of Commerce |
| Hugh Dwelley | | AID/M/SER/CM |
| Douglas Caton | | AID/PPC/PDPR/RD |

OTHERS

| | |
|-------------------|---------------------------|
| James Cowan | NASULGC |
| Arthur Mosher | Consultant |
| Malcolm S. Novins | AID/AFR/TR (Agribusiness) |
| Dona Wolf | AID/S&T/IT |
| Thomas Ball | AID/S&T/IT |
| Dave Winkelmann | USDA/OICD/IT |
| Yvonne Williams | Tuskegee Institute |
| Mort Darwin | AID/SER/CM |

BIFAD Staff

Jean Weidemann
Fred Hutchinson
John Stovall
W. Fred Johnson
John C. Rothberg
Michelle Rucker
Elizabeth Ravnholt-Zipser
Jiryis Oweis
Myron Smith

A JCARD PROGRAM OF WORK FOR 1983

JCARD is required by its charter to develop a comprehensive work plan which is responsive to current and projected needs of BIFAD, AID and Title XII institutions. This program of work is to be developed each year in consultation with the Board and the AID staff.

In response to that charge JCARD developed a plan for 1983 based on its assessment of the priorities of the Title XII institutions, AID needs and the Board's new agenda.

Background

At its first meeting November 30 - December 1, 1982 JCARD reviewed the major activities of its predecessor committees, the JRC and JCAD, and discussed the recommendations of those two committees for activities that should be carried on by the new committee. During this discussion we also considered the Board's discussion about items that should receive priority by JCARD and the views of individual members.

Following the first meeting of JCARD, the Agriculture Sector Council, which includes all but one of the AID members of JCARD, discussed and prioritized JCARD agenda items from the perspective of AID.

On January 7, 1983 the JCARD Executive Committee reviewed the various suggestions for activities and issues and had the benefit of the counsel of the Vice Chairman, Dr. E. T. York. He shared with the Executive Committee the main elements of new BIFAD agenda under development and emphasized the importance of the JCARD program of work being consistent with BIFAD's agenda.

A draft of this plan was discussed and modified at the second JCARD meeting, January 24, 1983.

In developing the program of work the Executive Committee felt it was important to consider the relationship between JCARD and the Ag Sector Council. The over-lapping membership offers a unique opportunity for these two bodies to work together in furtherance of the overall purpose of JCARD.

The Executive Committee was cognizant of the desires expressed by JCARD members that the plan adopted should provide maximum flexibility for the agenda of the new committee to evolve over time and to allow for changing priorities and emerging operational problems not foreseen at this time. Therefore, the assumption is that this plan provides only guidance and can be modified as appropriate.

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The Proposed Plan

In laying out the plan we found it useful to build around a few broad categories of activities which taken together encompass the total scope of work for JCARD. We, therefore, propose five categories which can serve as a framework for planning and for assessing accomplishments. They also may be useful in establishing panels or sub-groups to divide up the work of JCARD.

The following are the five major categories of activities which we suggest as components of the JCARD program of work for 1983.

1. Development Policies and Strategies

We take it as our responsibility to review AID's development policies and strategies in light of overall foreign assistance objectives and to give both AID and the Board the benefit of our assessment of the appropriateness of the strategies and whether or not there are alternative approaches that should be considered or weakness that should be rectified. We plan to review and discuss the various AID policy and strategy papers relating to food and agriculture and make our comments or concerns known to AID and the Board.

We plan to monitor the development of Regional and Country Strategy Papers and conduct reviews or express concerns as appropriate. We will ask the Regional Bureaus representatives on JCARD to report on issues relating to CDSSs and give other members an opportunity to make suggestions. This interaction should be useful in resolving concerns and hopefully improving strategies for development. We will give special attention to the role of Women in Development and look for opportunities to strengthen that role.

2. Science and Technology Programs, Vehicles and Priorities

Science and technology is one of the principal means by which foreign assistance objectives can be achieved. AID has undertaken a more vigorous effort to support the identification, transfer and adaptation of existing appropriate technologies as well as carrying out food and agriculture research and the application of improved technologies to improve food production and consumption in developing countries.

The membership of JCARD is uniquely structured with representation from AID and the university community to address a number of operational problems that relate to science and technology. It can help identify the most important contributions that science and

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technology can make toward removing the constraints to developing. It can suggest priorities for allocating the scarce resources in science and technology and it can assist in more fully utilizing the scientific expertise in U.S. universities and suggest ways and means whereby international agricultural research centers and other research activities can be better linked.

Our major activity planned for 1983 is a review of the International Agriculture Research Centers. This review will include an assessment of AID's policy with respect to centers, how the work at the centers relate to other centrally-funded research and how the centers programs relate to the needs of AID missions. We will also be giving attention to a process by which BIFAD can participate in center reviews in the future. A panel has been established to assist JCARD in carrying out this important assignment given to us by BIFAD and AID.

Another panel of JCARD will be charged with reviewing the Collaborative Research Support Program and making recommendations as to what role JCARD should play with respect to this program and the process by which it should do it.

Several JCARD members are involved in the AID research priority setting exercise in process. The full JCARD membership will be

given an opportunity to review and comment on that report and to monitor any follow up to that report.

JCARD will also review the difficult problems involved in getting technology used or adopted and determine if we can assist AID and Title XII institutions in this area.

3. AID/University Relationships

A major purpose of BIFAD, and consequently JCARD, is to assist AID and the university community in making a better match between AID needs and university resources. Although much progress has been made in recent years in developing new instruments and mechanisms for improving this matching process, problems persists. And because "matching" is a continuous process, constant attention is required. JCARD is uniquely structured, with representatives of the university community and AID, to help solve some of these problems and we will endeavor to do so during 1983 in several areas.

A JCARD member has been assigned to review the various problems associated with contracting and to recommend to the Executive Committee what JCARD might do to make the system work better.

"Inadequate communications" between universities and AID has been identified as a constraint to better "matching". We have asked a panel to review the various communication vehicles and to identify communication needs and information flows and recommend ways of improving them.

We are asking a panel to review existing criteria and develop a recommended set of criteria for identifying Title XII projects. If we are successful in reaching agreement on these criteria, AID/university relationships should be improved.

Issues relating to the Evaluation of Title XII projects is recognized as an important area in which JCARD has responsibility. We will be studying this complex set of issues to determine how we can exercise this responsibility.

4. Training

The importance of education and training in the development process has long been recognized and the pay off from investment in training and education has been well documented. The AID Administrator has reemphasized the importance of participant

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training in bilateral assistance programs and the BIFAD analysis of the FY 1984 budget included a strong recommendation to increase the use of participant training in mission programs.

Title XII institutions have long been the mainstay to AID training programs and they have a legitimate interest in the implementation of AID policy with respect to participant training. Thus, JCARD with its membership composition is uniquely capable of assisting both the universities and AID in strengthening this program. JCARD should be able to address such areas as: location of training, type of training, alternative strategies for supporting training, costs associated with training, improvement of management of training programs and the role of women in training programs.

During the year JCARD will review the various activities in AID and the universities aimed at improving participant training. We will then attempt to define the major issues relating to training, identify the most serious problems that must be solved before progress can be made and devise a plan of action to solve those problems.

5. Title XII Institutions - Internal Processes and Issues

Title XII legislation recognized the necessity of developing and maintaining strong institutions with the capabilities to respond to AID's needs and the legislation provided for special programs to enhance that capability.

JCARD recognizes its responsibility to comment on the response capability of those Title XII institutions. We should be able to make recommendations to AID as to how they can best provide support that will enhance the institutional capability, we should be able to recognize weaknesses in the institutions and prescribe remedial action.

JCARD will be establishing a panel to review the Strengthening Grant Program with the aim of determining in what way JCARD might contribute to it. Based on that review a decision will be made as to what continuing involvement JCARD will have with the Strengthening Grant Program.

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The Executive Committee of JCARD reviewed a study of Title XII financial and non-financial incentives with a great deal of interest. This study made a number of suggestions for removing disincentives and strengthening existing incentives. We recognize that steps are being taken by AID and the universities to overcome some of these problems and we will be watching closely these developments.

The Executive Committee has also reviewed the study on consortia which makes a number of recommendations for improving this organizational form as a vehicle for mobilizing the university resources. We will also be alert for opportunities for JCARD to make contributions in this area.

Finally, we will be giving attention to the question of how universities can better link with the private sector to take advantage of opportunities because of AID's emphasis on the private sector as a tool for development.

Resources

To a large extent JCARD progress toward this program of work during the coming year will be determined by the amount of resources that can be mobilized to support these efforts. Although Agency and university staff are generally willing and able to take time from busy schedules to work on these important problems, tight budgets limit the amount of travel and other expenses associated with such work. In addition, almost all of these activities require staff work that is timely and of a high quality.

At the present time JCARD is dependent on BIFAD to provide travel and consulting expenses and staff work. Although the Executive Director of BIFAD has indicated his willingness to respond to the needs of JCARD, no specific dollar amounts or time has been committed. It is clear however, that the program of work laid out for 1983 will require considerably more resources than currently available. Therefore, the full implementation of this plan will be dependent on additional staff and budget.

01/21/83

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DRAFT

AFRICA'S AGRICULTURAL CRISIS AND AID AFRICA BUREAU'S RESPONSE

February 1983

AFRICA BUREAU

AGENCY FOR INTERNATIONAL DEVELOPMENT

AFRICA'S AGRICULTURAL CRISIS AND AID AFRICA BUREAU'S RESPONSE

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AFRICA'S AGRICULTURAL CRISIS AND AID AFRICA BUREAU'S RESPONSE

SUMMARY

Although agriculture is of paramount importance to African economies and people, its performance has been dismal. Over the past two decades, per capita food production has declined, creating growing dependence on food aid. Increasingly, African countries must use scarce foreign exchange for food imports, rather than for other pressing development needs.

The reasons for agriculture's poor performance in Africa have been elaborated in several recent papers. In general, sub-Saharan Africa lacks:

- 1) government policies that provide incentives for increasing agricultural production;
- 2) the basic institutions needed to sustain agricultural development;
- 3) farmer-acceptable technologies for increasing agricultural production;
- 4) trained personnel to implement agricultural development efforts;
- 5) the infrastructure required to support a major expansion in agricultural development; and,
- 6) solutions to the unique problem posed by the climate and tropical soils of Africa.

Donors, government officials and international organizations have exchanged ideas and considered ways to achieve improvements in African agriculture. On some issues there is general agreement. On others, there has been considerable controversy. The Africa Bureau's current perspective and its program of action have evolved from this dialogue.

The Africa Bureau believes that agricultural policies for Africa should:

- 1) Recognize that the agricultural sector is the principal source for growth and expansion in most African economies over the next 10 to 20 years.
- 2) Attempt to achieve a reliable food supply through a blend of food production, food import and export crops.
- 3) Create incentives for increased production, and opportunities for increased farm income, using a series of interrelated and mutually supportive policies.
- 4) Make efficient use of both public and private sectors in agricultural development. Basic institutions for research, extension and training are predominantly in the public sector; secondary institutions, for marketing, processing and storage, can utilize private sector involvement.
- 5) Focus on small farmers and farm families who are beginning to move into the market economy. This group has the managerial skill, entrepreneurship and supportive human and financial resources to maximize investment returns.
- 6) Give priority to creating farmer-acceptable technology by supporting basic institutions for research, training and extension. As a second priority, attention must be directed to infrastructures and to institutions for marketing, credit, transportation, storage and processing.

- 7) Emphasize a farming systems approach to research, so that smallholder farmers can be directly involved in the research process and their needs can determine the research agenda.
- 8) Recognize that production and integrated rural development programs require economically viable farmer-acceptable production packages and effective management. Without these, such programs are not sustainable.
- 9) Recognize that rapid solutions are unlikely. Training research scientists, developing technological breakthroughs and fostering viable rural cooperatives require long time periods. Some efforts will not have major payoffs until the twenty-first century.

In its work in African agriculture, the Africa Bureau of the Agency for International Development has two objectives: 1) to establish reliable sources of food, through improvements in production, marketing, storage and processing systems; and 2) to facilitate the growth and expansion of the agricultural sector, thus improving the general welfare and economic well-being of the population.

In the fall of 1981, the Africa Bureau developed a Food Sector Assistance Strategy. This strategy is being implemented through four program areas which focus attention on: policy environment; basic institutions; technology transfer; and private sector.

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In the area of policy environment the Africa Bureau:

- o is encouraging donors to participate in policy dialogues with African countries;
- o has several commodity import programs and PL-480 Title III programs that are tied to specific policy issues;
- o is increasing projects to develop the capability of African governments to collect data for planning and policy analysis.

In the area of basic institutions, the Africa Bureau:

- o places major emphasis on agricultural research, providing direct funding to national and local institutions that are related to production;
- o has established common themes, to give priority to areas of institutional assistance.

In the area of technology transfer, the Africa Bureau:

- o is funding major research projects in nine African countries;
- o is supporting several regional research efforts, including a multinational effort in support of Cooperation for Development in Africa (CDA).

In the private sector, the Africa Bureau:

- o works with African governments to encourage the public sector investment and policy decisions necessary to improve private sector investment opportunities.

AFRICA'S AGRICULTURAL CRISIS AND AID AFRICA BUREAU'S RESPONSE

INTRODUCTION

The poor performance of the agricultural sector in sub-Saharan Africa is well known. A World Bank report issued in 1981 calls the problem a crisis.^{1/} A recent article by Eicher in the Fall 1982 issue of Foreign Affairs notes: "The most intractable food problem facing the world in the 1980s is the food and hunger crisis in sub-Saharan Africa."^{2/} Similar cries of alarm about the African food situation have been heard from the Food and Agriculture Organization, (FAO)^{3/} the Organization of African Unity (OAU),^{4/} the World Food Council,^{5/} and the U.S. Department of Agriculture (USDA).^{6/}

Agriculture accounts for 30 to 60 percent of the gross domestic product of African economies. Between 70 and 90 percent of the population of African countries depend on agriculture for livelihood and sustenance. Except for those few countries with mineral resources, agriculture is the primary source of foreign exchange.

While agriculture has paramount importance to African economies and people, its performance has been dismal. All available data on African

agriculture demonstrate that yields per acre for cereals and other food crops are the lowest of any region in the world. Since 1960, growth in aggregate food production has averaged less than two percent per annum. Over the past two decades, per capita food production has steadily declined. This decline has occurred in spite of increased external and national investment in the agricultural sector. Official Development Assistance (ODA) received by sub-Saharan countries almost tripled during the 1970s. The result of this declining per capita production has been growing dependence on food aid and increasing use of scarce foreign exchange for food imports rather than for other pressing development needs.

II. CAUSES OF THE AGRICULTURAL CRISIS

A closer examination of the present African agricultural situation indicates some of the causes of this poor performance. These include: domestic policy inadequacies; lack of basic institutions; the absence of farmer-acceptable technologies; lack of trained personnel; inadequate infrastructure; and difficult physical and climatic conditions. These factors are discussed below.

1. Government Policies

The World Bank report, Accelerated Development in Sub-Saharan Africa, notes three areas in which domestic policy inadequacies have played a critical role in the development of the present agricultural crisis. First, trade and

exchange policies have overprotected industry, held back agriculture, and absorbed too much administrative capacity. Second, African governments have neglected administrative constraints in mobilizing and managing resources for development. Many governments have created large state production and marketing organizations that are incapable of performing their assigned tasks. Finally, African governments have, in general, not established policies which provide a range of incentive structures for increasing agricultural production. Rather, policies reflect a consistent bias against agriculture, in price, tax, exchange rate and investment policies.

2. Institutions

Sub-Saharan Africa does not have the basic institutions required to sustain agricultural development. In his recent Foreign Affairs article, Eicher notes that the colonial powers in Africa had no interest in investing in basic institutions to create human capital, to research food crops, or to strengthen internal market linkages. In the twenty year post-independence era, little effort has been made by African governments to correct this situation.

3. Technology

Lack of viable research institutions in most sub-Saharan countries has resulted in a dearth of farmer-acceptable technology needed to increase agricultural production and productivity. The USDA report, Food Problems and Prospects in Sub-Saharan Africa, notes that with the single exception of corn, "African agriculture has probably been less affected by technological change in the past twenty years than agriculture on any other continent."^{7/} Eicher

and Baker also note that "there are few areas in Africa where there are proven food crop packages ready for farm-level adoption."^{8/}

4. Trained Personnel

Inadequacy of training institutions for Africans has meant that there is not enough qualified human capital to carry out a sustainable agricultural development effort in most African countries. The colonial experience is partly responsible for this. As Eicher indicates, in the pre-independence period "between 1952 and 1963, only four university graduates in agriculture were trained in francophone Africa and 150 in English-speaking Africa."^{9/} Since independence, African governments have done little to correct this situation. Eicher cites the example of the University of Dakar, which was established in 1957, but which did not establish a National School for Agriculture until 1979. "That university-level teaching of agriculture was not initiated until 1979, 29 years after independence, reflects an enduring colonial legacy as well as the government's ambivalence about agriculture's role in national development."^{10/} The lack of trained human capital, ranging from farmers to senior administrators and scientists, is a major factor in the present agricultural crisis.

5. Infrastructure

Not only do most African countries lack the necessary basic institutions for research, training, extension, and marketing, but they also lack adequate infrastructure to support a major expansion in agricultural development. Examples of constraints due to inadequate infrastructure abound. Abundant

harvests rot in the fields because storage facilities are lacking or transportation to market is unavailable. Locally produced food crops cannot be sold competitively in many major African urban centers because inadequate roads result in very high transportation costs.

6. Physical Environment and Climate

While Africa has some highly fertile and productive areas, such as the Kenya Highlands, much of African agriculture takes place in regions of difficult physical and climatic conditions. The arid lands of the Sahel and the lateritic soils of the coastal and central tropics of Africa present unusually difficult physical environments for agricultural production. Irrigation will be of some help in the Sahel but, given the limitations of infrastructure and institutional resources, irrigation will be a very long-term answer to the problem. The tropical soils of Africa present a number of unique problems that have not yet been properly addressed.

III. THE AFRICA BUREAU'S PERSPECTIVE ON AFRICA'S AGRICULTURAL CRISIS

Donors, government officials and international organizations have exchanged ideas and considered ways to achieve improvements in African agriculture. On some issues there is general agreement. On others, there has been considerable controversy. The Africa Bureau's current perspective and its program of action have evolved from this dialogue.

1. Importance of Agricultural Sector

The Africa Bureau believes that agricultural policies for Africa should recognize that the agricultural sector is the principal source for growth and expansion in most African economies over the next ten to twenty years.

While most African leaders recognize the value of agriculture in terms of food and export crops, some do not recognize the importance of agriculture in their overall economies. Eicher, in looking at agricultural policies of African political leaders since independence, finds that most of these political leaders "gave low priority to agriculture. African leaders tended to view agriculture as a 'backward' sector which could provide surpluses -- in the form of taxes and labor -- to finance industrial and urban development, and thought agricultural development would simply reinforce dependency."^{11/}

The Africa Bureau believes that the agricultural sector is the principal source for growth and expansion in most African economies over the next ten to twenty years. As the World Bank indicates, "agricultural output is the single most important determinant of overall economic growth and its sluggish record of recent years is the principal factor underlying the poor performance of the countries of the (African) region."^{12/}

Economic growth is not the only issue. Welfare and equity must also be considerations. The nutritional and economic well-being of both urban and rural populations depends on a reliable supply of low cost food and on income to purchase and use the food. In addition, investment by farmers in

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increasing the productive capability of their farms depends on their having an income base for such investment. Improving the agricultural sector will have an overall developmental impact on general welfare and the economy.

2. Food Self-Sufficiency

The Africa Bureau believes that agricultural policies for Africa should encourage the production of both food and export crops and should seek to discover what blend of food production, imports and exports, can best achieve growth and equity objectives.

For many African governments, the issue of export vs. food crops is closely linked to the issue of self-sufficiency and self-reliance. The World Bank Report is often criticized by African advocates for supporting export crops at the expense of food crops. Many cite the report's comment that "even if export crop output were to grow at the expense of food production, it is not necessarily bad."^{13/} These proponents of self-sufficiency usually ignore the subsequent paragraphs of the report which say that "empirical evidence does not support the hypothesis that expanding export production leads to declines in food production."^{14/} The Bank finds that "countries that have been doing well in cash crop production have also been among the most successful in expanding food production."^{15/}

Both the CILSS (Comite Permanent Inter-Etats de Lutte contra la Secheresse dans le Sahel) and the Lagos Plan of Action stress the goal of food self-sufficiency and economic self-reliance. Slogans about food self-sufficiency

may be emotionally and politically appealing. Nevertheless, the Africa Bureau believes there is an ample body of evidence, including the recent study by McIntire^{16/} and works cited in the World Bank report, to show that self-sufficiency as a goal is economically unsound. As Eicher notes, "African states, donors, and economic advisors should jettison the ambiguous slogans about food self-sufficiency."^{17/} Such slogans "offer little help in answering the key question -- what blend of food production, food imports and export crops should be pursued to achieve both growth and equity objectives?"^{18/}

3. Incentives for Agricultural Production

The Africa Bureau believes that agricultural policies for Africa should create incentives for increased production and opportunities for increased farm income. Without incentives, farmers will not put forth the efforts and take the risks necessary to increase agricultural production.

Some African governments feel that adverse weather, declining world markets and political upheaval are major causes of their declining agricultural output. The Africa Bureau takes these problems seriously, but believes that both climatic and political adversity tend to be relatively short-lived and area specific and do not explain the general long-term decline in agricultural production in Africa. As far as world market prices are concerned, the World Bank report notes that "past trends in the terms of trade cannot explain the slow economic growth of Africa in the 1970s because for most countries --

mineral exporters being the main exception -- the terms of trade were favorable or neutral."^{19/}

The World Bank report points out that "trade and exchange rate policy is the heart of the failure to provide adequate incentives for agricultural production."^{20/} Through selected trade restrictions and duties, most African trade policies are biased heavily against imports. This bias adversely affects agriculture by forcing farmers to purchase high cost locally produced inputs, and by increasing costs of imported consumer goods to rural people. At the same time, these countries usually have overvalued exchange rates which undervalue export crops. This undervaluation holds down prices paid to farmers for their goods, reduces export possibilities, and allows the possibility of importing cheap food, further reducing incentives for farm production.

In addition, pricing policies have introduced a systematic bias against agriculture. Eicher notes that "numerous empirical studies across the continent have provided conclusive evidence that many countries (both capitalist and socialist) are pursuing negative pricing policies which dampen incentives to produce food and export crops and encourage black market operations. A simple but powerful conclusion emerges from this experience -- African states must overhaul the incentive structure for farmers and adopt increased farm income as an important goal of social policy in the 1980s."^{21/}

African governments, when faced with this type of recommendation often

counter with a response, such as that seen in the Organization of African Unity/African Development Bank (OAU/ADB) assessment of the World Bank Report, that raising farm gate prices will have little effect on increased production because "it is doubtful that the required increase in productivity could be achieved in view of the limited scope of application of inputs and technology to rain-fed agriculture."^{22/} Viewed from a static perspective, this comment is correct (see section 6), but it misses the point. Development of Africa's agriculture cannot be accomplished through any single approach. Rather, it will be accomplished through a matrix of interrelated and mutually supportive approaches of which a proper incentive structure, created through macroeconomic policies, has to be one.

4. Public vs. Private Sector

The Africa Bureau believes that agricultural policies for Africa should make efficient use of both public and private sectors in agricultural development.

This issue has received great attention as a result of the World Bank report. The Bank's report notes that the dearth of managerial skills has been one of the important factors in the poor performance of the agricultural sector. At the same time, as the Secretariats of the OAU and ADB point out, most African states "have had the perception that rapid economic development could only come through very strong intervention and leadership from the public sector."^{23/} But, as Eicher states, such an intervention, particularly in agriculture, "requires a vast amount of information, and

managerial and administrative skills, in order to cope with the vagaries of weather, seasonal bottlenecks, and the need for on the spot, decision making authority."^{24/} These managerial and administrative skills are in very limited supply.

At the same time, there are major managerial resources in Africa which are not being adequately tapped for the development process. For example, the World Bank report notes that "all evidence points to the fact that smallholders are outstanding managers of their own resources -- their land and capital, fertilizer and water."^{25/} Further, "African farmers can 'manage' the use of resources in the agricultural sector ... if the price, tax and subsidy structures are providing adequate and appropriate incentives, and input and output markets are efficiently operated and organized."^{26/} It is in this latter area, of efficiently operated markets, that many African governments have been particularly weak.

The indigenous African trader and entrepreneur is also unrecognized as a source of managerial skills to support agricultural and economic development. Many African governments have recognized, at least in theory, the potential importance of the smallholder to agricultural development, but few have recognized the value of the indigenous private traders and entrepreneurs for the same development purposes. As noted by the Secretariats of the OAU and ADB, the view of African governments is that "the ordinary person (in Africa) looks to government to take initiative and to lead the way"^{27/} in development. In fact, it is the feeling of these Secretariats that the

emphasis on the private sector in the World Bank report "gives rise to the feeling (however faint) that ideological inclinations might have dominated the analysis."^{28/}

The plea of the Secretariats of the OAU and ADB, that "a more practical goal of policy would be to make the public sector more efficient and more development-oriented, rather than to reduce its size,"^{29/} misses two important points. First, it does not indicate what incentive is to motivate this increased efficiency and development orientation. Second, it does not recognize the dire financial straits in which most African countries now find themselves, a financial situation exacerbated by the drain on the budget of overblown governmental and parastatal organizations.

The Africa Bureau agrees with Eicher that too many governmental marketing and other agricultural supportive organizations "have been plagued with overstaffing, corruption, mismanagement and high marketing cost."^{30/} The incentive to efficiency can come from competition. As pointed out in the World Bank report, "the best way to increase competition is to encourage private trading. In fact, private traders now handle trading activity almost everywhere, but often in semi-legality. Legalization and encouragement of private trade would reduce cost and uncertainties in the market environment."^{31/}

The important question for African governments, donors, and other interested parties is not whether to use public sector or private sector, but

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rather what are the proper roles of both the public and the private sector in agricultural development. Some vital roles, such as research, extension and training, (basic institutions) lie predominantly in the public sector. Other roles, such as marketing, processing and storage (secondary institutions), provide important private sector opportunities.

The Africa Bureau encourages foreign private enterprise to invest in and support African development. At the same time, the Africa Bureau recognizes that "in general, inadequate infrastructure and technical constraints presently limit the scope for foreign private investors."^{32/} The history of foreign private investment in African agriculture has not been good. Many of the constraints that limit general agricultural growth also limit foreign private investment. Public sector investment in infrastructure, human capital and basic institutions, plus policies encouraging private investment, will help remove some of the private sector constraints. As Eicher says, "public sector investments can either facilitate or destroy the conditions for private African capitalists to function in a market-oriented economy."^{33/}

5. Recipients of Assistance

The Africa Bureau believes that agricultural policies for Africa should focus on small farmers and farm families who are beginning to move into the market economy. This group has the managerial skill, entrepreneurship and supportive human and financial resources to maximize investment returns.

In agriculture, the Africa Bureau maintains a focus on emerging commercial smallholder farmers and their families. In the agricultural sector, this group of Africans can provide the highest return on development investment and the quickest way to alleviate rural poverty and national hunger. They are small farmers. In Malawi, for example, these farmers have farms averaging about 2.5 hectares, and net cash farm income of about 35 dollars per annum. But, they have shown managerial skill and entrepreneurship. They also have the necessary basic supportive resources, or links to those resources, to maximize investment returns. As a group, they can be identified by several characteristics. They are part of the poor majority, but they are beginning to move into the market economy. They are, in general, investing in their farm units and would be known in extension terminology as the innovators of their farming communities. If there is decentralization of local government or an active cooperative movement in their area, it is likely that they are part of the local governmental or cooperative leadership.

6. Strengthening Institutions and Creating Viable Technologies

The Africa Bureau believes that agricultural policies for Africa should give priority to creating farmer-acceptable technologies by supporting basic institutions for research, training and extension. As a second priority, attention must be directed to infrastructures and to institutions for marketing.

As noted earlier, much of African agriculture suffers from inadequacies of technology, infrastructure, institutions and financial and human resources.

All these are required for a significant increase in agricultural production and productivity. Given this situation, donor and African governments' highest priority in agriculture development should be the strengthening and creation of the basic institutions and technology to support agricultural growth. There is general agreement on this point among donors and most African governments.

In tackling the vicious cycle of constraints affecting African agriculture, the Africa Bureau strongly believes that priority must be given to generating technology by supporting basic institutions. Without a viable base of farmer-acceptable technology in the form of production packages, there is extremely limited opportunity for the success of any other type of development efforts. Research is needed to create and adapt this basic farmer-oriented technology. Training is needed to support that research both at the research station and at the farm level. And an information/extension system is needed to link the farmer with the technology.

Other supportive elements are also needed. Secondary infrastructures and institutions of marketing, credit, transportation, storage, and processing, are required in order to reap the rewards of increased production and income from technology. But the demand for these secondary elements develops when the basic institutions begin to produce the appropriate stream of technology. The Africa Bureau's specific intervention in a country will depend on the status of the basic institutions supporting agriculture within that country. As these institutions are developed, through donor and host country efforts,

Africa Bureau programs and projects will move into the secondary supportive institutions.

7. Farming Systems Approach

The Africa Bureau believes that agricultural policies for Africa should emphasize a farming systems approach to research so that smallholder farmers can be directly involved in the research process and their needs can determine the research agenda.

There has been much written about the failure of the Green Revolution to transfer to Africa. The USDA report shows that there are large differences between Asian and African agriculture. Cropping patterns, irrigation, infrastructure and physical/institutional endowment are major causes of the lack of technological transfer in Africa. Eicher points out that "African farming systems are extremely complex and that the development of suitable technical packages requires location-specific research by multidisciplinary research teams."

Technology for African agriculture must meet three interrelated requirements. First, it should save scarce resources in the production system. In many cases in Africa the scarce resource is labor. Second, it should be usable within the context of the African smallholder. Technology supporting large-scale mechanization of agriculture at this time would be suspect. Finally, technology needs to be directed towards increasing the efficiency, (lowering the cost) of the food and crop production systems. In economic terms,

technology needs to provide the African farmer with the possibility of moving to different production functions.

The best way to meet these requirements is to assure that the smallholder farmer is directly involved in the research process. Needs of smallholder farmers should be the basis used to establish the research agenda. For this reason, the Africa Bureau strongly supports a farming system approach to research.

Institutions that support African agricultural and economic growth must also be responsive to African farmers and other rural people. Given the scarcity of human and financial resources, these institutions must be as efficient as possible. The best way to assure that this efficiency and responsiveness occurs is to make sure that farmers and other clients of these institutions participate, to the maximum extent possible, in determining the direction and course of these institutions.

8. Production and Integrated Rural Development Programs

The Africa Bureau believes that production and integrated rural development programs require economically viable farmer-acceptable production packages and effective management. Without these, such programs are not sustainable.

Production and integrated rural development programs have traditionally been supported by African governments and donors as a means to mobilize resources to directly deal with the African food problem. Supporters of these programs commonly assume Africa has surplus land and cheap labor, and these resources can be the basis of programs designed to produce more food quickly. Often, integrated rural development programs are also accompanied by elaborate credit programs and subsidized inputs to encourage farmers to participate.

Unfortunately, the success of most production and integrated rural development programs has been very limited in Africa. There are several reasons for this failure. First, these programs often falsely assume the availability of the required technology. In too many cases this technology does not exist. Second, when the program ends, the resources that were focussed on a single locality or effort disperse throughout the country. Without these extra resources, the programs are not sustainable. Third, production and integrated rural development programs are seldom economically viable. Costs of production are usually very high. As Eicher points out, production programs "consume scarce high-level manpower, perpetuate recurrent cost problems, and create a credibility problem for both African policymakers and international donors".^{34/}

9. Time Schedule for Change

The Africa Bureau believes that agricultural policies for Africa should recognize that rapid solutions are unlikely.

Eicher points out that it "takes 10 to 15 years of training and experience beyond high school to develop a research scientist".^{35/} Technological breakthroughs such as hybrid corn occurred only after some 30 years of effort. It can take two to three generations of farm families before a rural cooperative becomes viable. With these long time periods between the initiation of an effort and its final achievement, Africa Bureau will need to program its resources along several tracks at the same time. Some of these efforts will be aimed at maximizing short-term opportunities. But others, such as irrigation, will probably not have major payoffs until well into the next century.

IV. THE AFRICA BUREAU'S RESPONSE: PROGRAMS FOR CHANGE

In its work in African agriculture, the Africa Bureau has two objectives: 1) to establish reliable sources of food, through improvements in production, marketing, storage and processing systems; and 2) to facilitate the growth and expansion of the agricultural sector, thus improving the general welfare and economic well-being of the population.

In the fall of 1981, the Africa Bureau developed its Food Sector Assistance Strategy. This strategy is being implemented through program areas which focus attention on: policy environment; basic institutions; technology transfer; and private sector.

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1. Policy Environment

As a relatively small bilateral donor in most countries where it operates, the Africa Bureau has limited leverage for effecting direct policy changes. However, the Bureau is acting in three areas to effect changes in policy environments. First, the Africa Bureau is actively encouraging multinational and other interested bilateral donors to participate in policy dialogues with African countries. Second, the Africa Bureau has several commodity import programs (CIP) and PL480 Title III programs that are tied to specific policy issues. Finally, the Africa Bureau is undertaking a major increase in projects to develop the capabilities of African governments to collect data for planning and policy analysis. Currently there are ongoing or planned policy/planning projects in 16 of the 32 countries that the Africa Bureau works with in sub-Saharan Africa.

2. Basic Institutions

In building basic institutions to support agriculture, the Africa Bureau provides direct funding to national and local institutions that are related to production. Major emphasis is placed on agricultural research. Providing training at all levels and improving extension/information systems are also important.

In order to focus institutional assistance on areas of greatest need, a number of common themes have been identified. In order of priority they are:

- a. Farming system approach to applied research
- b. Commodity research

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- c. Agricultural sector planning/policy analysis
- d. Agribusiness development
- e. Water management
- f. Pest management
- g. Agro-forestry
- h. Livestock development

3. Technology Transfer

The Africa Bureau is funding major research projects in nine African countries. In addition, the Africa Bureau is supporting several regional research efforts. The most important of these is a multinational effort in support of Cooperation for Development in Africa (CDA). CDA is a coordinating mechanism of the seven major members of the Organization for Economic Cooperation and Development (OECD) with programs in Africa; West Germany, France, Britain, Belgium, Canada, Italy and the United States. CDA's purposes include the provision of regional support on critical issues of African development. The U.S. has lead responsibility for agricultural research. The Africa Bureau is making a major effort on the CDA agricultural research initiative with an initial investment of \$50 million. Other regional efforts in research by the Africa Bureau are programs with SADCC (Southern African Development Co-ordination Conference) in Southern Africa and a program with CIMMYT (International Maize and Wheat Improvement Center) on farming system research in Eastern Africa.

4. The Private Sector

The Africa Bureau recognizes that inadequate infrastructure and technical constraints presently limit possibilities for foreign private investors. Nevertheless, the Africa Bureau encourages foreign private enterprise to invest in and support African agricultural development. The Bureau will continue to work with African governments to make the public sector investment and policy decisions necessary to improve investment opportunities.

In the meantime, there are great numbers of opportunities for indigenous private sector initiatives through new investments and through legalization of many existing private sector activities in the agricultural economy. The Africa Bureau foresees particularly good use of the private sector in the areas of input supply, marketing of commodities, transportation, and storage and processing of agricultural goods.

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