

1' PN-ABP-992
19N 62243

REPORT ON "MEETING WITH POLICYMAKERS: MADIA AND AID EFFECTIVENESS" 1/

This report briefly summarizes the results of a conference held in Annapolis Maryland, April 6-9, 1987, attended by senior government officials from African countries in which MADIA studies have been undertaken, representatives of the eight donor agencies participating in the MADIA study,^{2/} and members of the research team (see Annex I for a list of attendees). The purpose of the conference was to review the preliminary findings of case studies by eight donors of aid effectiveness in the six MADIA countries and to begin to cull from these findings a number of cross-cutting observations concerning the problems as well as successes of aid assistance in these countries.^{3/} The presentation and discussion of the findings from individual case studies was organized around topical themes germane to the assistance of the donor whose experience was being reviewed during a given

1/ MADIA (Managing Agricultural Development in Africa) is a three part study being carried out in the Development Strategy Division, Development Research Department, World Bank. One component of the MADIA study, which was the focus of the conference summarized in this report, examines the effectiveness of two decades of donor assistance for agricultural development in Africa. A second component examines the relationship between domestic policies and agricultural performance in the six MADIA countries. The third component examines the politics of agricultural policy in these countries. A volume from each of the latter two components is scheduled for completion in the spring of 1988 and the fall of 1987, respectively.

2/ The six MADIA countries are Kenya, Malawi, and Tanzania in East Africa and Cameroon, Nigeria and Senegal in West Africa. Participating donors are The World Bank, USAID, ODA, EEC, the French, GTZ, DANIDA and SIDA.

3/ These case studies, once revised and edited, will be part of a volume to be produced in the fall of 1987 entitled Aid to African Agriculture: Lessons of Two Decades of Donor Experience. A list of the case study papers distributed for the conference is found in Annex III.

session; for example, the DANIDA paper focused on technology transfer by small donors and the French paper focused on export crop promotion.^{1/}

The conference was particularly useful in at least three respects. First, comparing the experience of various donors enabled participants to identify a number of common and often thorny problems snared by almost all donors. The comparisons also revealed the particular constraints faced by donors depending on their size, their overall development assistance objectives, and the constituency pressures to which they are subject. The insights that emerged from this comparative analysis of the ways in which donors pursue their individual objectives will help donors to examine and understand better their own individual programs and modes of operation and enable donors to improve their interaction with recipient countries and other donors.

A second particularly valuable component of the meetings was the contribution of senior government policymakers who commented on the various ways in which the differing, and sometimes conflicting, substantive interests and operational modes of donor programs impact on recipient country efforts to promote agricultural and rural development. Accommodating the varying agendas of donors and maximizing the benefits of divergent donors programs is a continual challenge for recipient countries. Providing specific examples of these donor-initiated difficulties should increase the sensitivity of donors

^{1/} Annex II lists the topics for each session of the agenda. While these topics were chosen because they have been central to the assistance of a given donor in the past, they do not necessarily represent the area of current or future concentration of assistance or preference by that donor.

to such difficulties and promote both better individual efforts and greater communication among donors.

A third set of insights is more specific to each donor. Here the focus is on the impact of individual donor programs, particularly explanations for the success achieved by donors in specific substantive areas, e.g., USAID in agricultural training, the earlier French expertise in promotion of export crop production, etc. This topic is addressed in considerable detail in each of the donor case studies.

Some Central Themes

Though structured around specific topical themes, the discussion was wide ranging and a brief report of this nature cannot summarize the discussion in a comprehensive manner (nor can it begin to capture the detail of the case studies). Nonetheless, a number of broad themes repeatedly surfaced throughout the discussion. Some of the more prominent of these are highlighted below.

1. Country Performance and Policies. A January 1986 meeting of MADIA researchers had examined, among other things, the question of how one could assess the effectiveness of donor assistance. Various researchers argued that different donors not only have different criteria with which to gauge the "success" of their aid, but they also use quite different assessment methodologies. Besides where more than one donor operated, it is difficult to attribute benefits to the programs of a single donor. Strict adherence to cost benefit analysis, it was argued, was not possible because of the fairly qualitative nature of some donor assistance objectives and the general lack of

reliable data. It was further argued that, in addition to the analytical and methodological problems involved, most donors did not have the resources to undertake a rigorous data-based analysis of the effect of their assistance programs in specific recipient countries. It was, however, agreed that it was essential that the aid effectiveness study as a whole have an overall analysis of the agricultural performance and policies of individual countries which could provide a context in which to review individual donor assistance programs.^{1/} This would be particularly useful given that the study had a long term (15 to 20 year) and a broad (sectoral) orientation.

The 1987 Annapolis meeting of policymakers therefore began with a presentation on the agricultural performance and policies of the six MADIA countries. The presentation also articulated a set of criteria, in the form of several questions, for evaluating the nature of that performance, namely: What has been the extent and nature of growth in each country, i.e., in terms of food and export crop and regional balance? To what extent has there been a reconciliation of growth with equity and what have been the tradeoffs between these two concerns? What have been the major sources of increased agricultural productivity in each country? And what has been the cost of this growth? In particular, how have domestic macroeconomic and sectoral (especially agricultural) policies influenced both the extent and nature of

^{1/} It should be noted parenthetically that the Bank, by virtue of its size, resources and staff skills, is uniquely suited to play a lead role in carrying out this kind of analysis of country performance and policies. Donors with fewer resources recognize that they are less able to undertake such analysis but are nonetheless keenly interested in obtaining it because it can be useful in planning their assistance programs especially when such analysis is available on a comparative and a long term basis.

agricultural growth? Lastly, what has been the relationship between the overall levels of aid flows and the nature and pattern of agricultural growth? Answers to these questions provided the general context in which to discuss the long term contributions of individual donors to agricultural growth in specific countries.^{1/} The analysis documented in a systematic way the fundamental importance of both domestic policies and the investment patterns of the recipient countries in explaining performance.

2. Aid Coordination. All agreed that aid coordination is in principle desirable to avoid overextension of recipient country resources (broadly defined) as well as to identify conflicts and overlap in donors' objectives. Some felt recipients should coordinate aid. However, recipient country participants stressed that the idea of aid coordination had originated from the donors and the objectives of aid coordination were often not adequately articulated and explained to the recipients. Its most useful function was seen by the recipients to be one of facilitating an exchange of information. However, the recipients expressed a concern about donors ganging up to push projects, programs, or macroeconomic and sectoral policies that the country feels are inappropriate, either in substance or in terms of the speed with which they are implemented. This is especially a problem where the more influential donors can affect the views of other donors, given that where conditionality is involved, this can affect overall aid flows. Moreover, if

^{1/} There was no attempt to attribute causality, at least in any strict sense, between the individual donor activities and country performance in light of the problems referred to above in assessing the impacts of donor programs.

not handled carefully, aid coordination can create additional bureaucratic burdens for recipients since coordination has substantial costs in terms of scarce managerial capacity. Also, where aid coordination efforts are in effect, there may be subtle pressures to ensure that each donor that is being "coordinated" has projects to fund. This can produce situations where the supply of good projects for funding is limited and less influential donors are allocated weaker projects whose benefits may not exceed their costs. Lastly, there are certain areas in which aid coordination should not be expected to apply -- security related activities, where aid is tied and driven by commercial interests, etc.

Ideally aid coordination is done by the recipient country and is focused on specific projects and sectoral or macroeconomic concerns on a continuing basis. However although it is the donors who are either more able analytically and/or more keen on grounds of principle to coordinate aid no one donor appears willing to take responsibility for ensuring that it happens. Nor is it always clear that donors have carefully thought through the mechanisms necessary to achieve effective coordination. Most importantly, aid coordination does not work in situations where the recipient country does not have the necessary economic management or the capacity; thus the importance of donor support for improving recipient country capacity for economic policy planning and implementation was stressed as being a necessary condition for achieving a reasonable macroeconomic context.

A subsidiary issue of the aid coordination issue concerns the idea of donor comparative advantage -- the idea that specific donors are much better at some kinds of projects or technical assistance than others. While it was generally agreed that the topic is important and merits further rigorous

thought and discussion, there was little consensus on the precise meaning of donor comparative advantage. Some participants argued that the idea of donor comparative advantage in the strict economic use of the term is not appropriate and one should instead speak of "areas of excellence" or simply in terms of areas of competence in which donors might concentrate. Moreover, if one combines the notion of donor preferences (perhaps deriving from constituency pressures) with that of donor technological superiority or economic efficiency, the resulting donor agendas may diverge rather substantially from that suggested by the classical economic notion of comparative advantage.

Thus, while the idea of donor comparative advantage proved to be conceptually somewhat elusive and was not defined to the satisfaction of all participants, there was nonetheless considerable debate throughout the conference concerning the virtues of greater donor specialization and division of labor as a means of improving the effectiveness of donor assistance. At the heart of this discussion was the thesis that it is useful for individual donors to base their programs on their own relative strengths and not to encourage recipients to dissipate resources on aid activities well beyond their absorptive capacity by promoting those activities in which the donor may not be particularly strong. An equally important corollary argument is that donors must attempt to transfer their special expertise to developing countries. Thus the concentration of donors should not only be on doing what they do well but also on teaching recipients the requisite skills involved.

The concern to maximize "excellence" among donors stemmed from the fact that MADIA studies indicate that donors have felt compelled to spread their efforts over a wide range of activities. Often their ability to

mobilize resources in the aggregate is dependent on their being active in (different) areas that appeal to various constituencies or their being responsive to changing "fads" over time (that may or may not correspond with the recipient country needs). By providing aid in many different areas, however, they fail to give the highest quality aid in any one area, including the areas in which individual donors have particular strengths. Thus, overextension of donor involvement beyond their planning and implementation capacities leads to investments that are marginal, resulting in misallocation of recipient country capital. This is particularly a problem where a given aid activity becomes popular among all donors (e.g., integrated rural development projects or, more recently, agricultural research) and all donors attempt to do the same thing.

The counter situation, namely one of greater donor specialization, is, however, not one that necessarily appeals to recipients. If donors did only what they did best, the donor in the area (e.g., dairy) would by definition be the "best". However, the donor concerned may not be willing to share its skills with the recipient, or may not be acceptable on other (e.g., political) grounds, etc., although this must also be balanced off against the current high information costs to recipients in assessing the quality of various donors' programs).^{1/}

It was also pointed out that, even where donors would like to emphasize their "areas of excellence", there are major constraints on their

^{1/} Against this background of an emphasis on specialization, the decline in the capacity of some donors to assist African countries in the areas of their traditional expertise was noted, e.g., the export crop expertise of the British and the French.

ability to concentrate on just areas in which they have comparative technical or economic expertise. These include the pressures noted above to provide a smorgasbord of activities that respond to the full range of the domestic constituency interests in donor countries and also political and economic constraints to developing expertise in certain areas (e.g., ones that compete with economic interests in donor countries).

3. Policy Conditionality. This area was again one in which strongly felt views were expressed. While all agreed that conditionality is valuable in enabling recipient countries to achieve certain policy reforms, recipient country representatives were also quite vocal in indicating some of the less attractive aspects of this process. These include the "faddish" nature of the policy advice^{1/} the problem of insufficient attention being given to the magnitude and pace of adjustment, inadequately specified objectives of reforms that are mandated (e.g., devaluation), calls for dismantling of old institutions or creation of new institutions without sufficiently detailed consideration of the consequences, etc.

Policy conditionality, it was argued, can only be successful to the extent that it can be implemented; thus the importance of agreement on a reasonable and flexible timetable and sound analysis and research on the means for implementation. Lastly, recipient country participants indicated that a real problem for the recipients has been the tendency of individual donors to

^{1/} One interesting query that was raised concerned the degree to which donors' policy conditions have contributed to policy instability.

add more, and sometimes conflicting, conditions on top of those stipulated by other donors. Aid coordination is essential to resolve this problem.

4. Equity Objectives. Given the donors' focus on basic human needs in the 1970s, discussion of attempts to achieve equity objectives was a prominent feature of the conference. In this area there was much variation in donor experience. For example, SIDA's program was described as one in which the primary objective was to express solidarity with the poor in low income countries largely through the provision in East Africa of subsidized public services, namely, rural water and rural health facilities. Yet such a clearly focused poverty orientation has not necessarily led to increased equity nor even to operational facilities. Sweden also appears to have been less concerned, at least in the past, than other donors with evaluating the economic efficiency of the aid it has provided.

The World Bank has consistently focused its lending on the problems of smallholder production. In the 1970s the leadership for smallholder development programs shifted from the "traditional" bilaterals with knowledge and experience of Africa to the World Bank. However, with the few notable exceptions of tea and coffee in Kenya, cotton in Cameroon and maize in West Africa, the Bank's programs in smallholder agriculture have in the main not been very successful. Not all this lack of success can be explained by policy failures in recipient countries. Fundamental technological and institutional problems have constrained success. Yet few viable solutions evolved in the 1970s.

It was also noted that from the recipients point of view the concept of equity is a particularly thorny one; there is always room for debate about

both the nature of the growth that will be generated and the appropriate balance and tradeoffs between that growth and equity. In this regard, there was much discussion, largely centered around World Bank programs, concerning the requirements of a smallholder production strategy versus an estate strategy. It was pointed out that governments have multiple objectives, including surplus generation, that they must balance in choosing between these two alternatives and the choice is rarely straightforward, especially where technological and institutional solutions for smallholder development are not readily apparent. There was also some disagreement about the extent to which governments are able to provide supporting services for the smallholder export crop sector in a way that is competitive with efficient provision of resources to the estate sector in a reasonably short time horizon. Yet in view of both the generally poor performance of the Bank's smallholder agriculture projects in MADIA countries and the diminished role of the traditional bilateral donors in this area, the source of needed innovative and experienced leadership for achieving increased smallholder production is uncertain. This is particularly worrisome given the lack (with the possible exception of the Kenya Tea Development Authority and CFDT) of strong organizational and institutional models on which to base a smallholder export crop strategy. Given the public goods nature of services in research, extension, roads, etc. which export crops require and the scale economies in their processing in which the private sector is not always able to participate, given the gestation lags in realizing production benefits from investments in them, there is a concern as to how smallholder export crop development will materialize, raising questions about the role the public sector would be required to play.

One variant on this theme of smallholder versus largeholder agriculture emerged in the comments of several participants regarding Francophone Africa. They suggested that the farmer with middle size holdings might be a potential innovator and "pioneer" in providing the lead for increased agricultural production.

5. Donor Constituencies. The influence of constituencies on both the substance and modes of operation of donor programs was a central theme in each of the case studies and was continually referred to throughout the conference. Constituencies present donors with a number of operational problems but they also are extremely useful allies in enabling donors to generate public support for preserving or increasing development assistance budgets. For example, the quite pluralistic German aid program receives support from a wide range of NGOs. Relatively little attention was given to strategic thinking about how to more effectively capitalize on this support, though a number of participants expressed interest in this topic. Some of the less desirable features of constituencies are the seemingly ever increasing variety of constituencies that urge that their particular concern -- environment, gender, etc. -- feature prominently in the assistance program. These pressures tend to fragment donor programs across wide ranges of program areas.

Perhaps the most pernicious form of constituency pressures is associated with tied aid. This takes a number of forms, one of which is technical assistance that is not of the highest quality. Donors appeared to have little hope for the abandonment of tied aid, preferring instead to emphasize

those instances in which tied aid had been directed to positive advantage. However, there do appear to be important differences between donors in the extent to which tied aid impinges on performance and program impact or determines the extent to which donors can become involved in given substantive areas.

Recipient country representatives voiced considerable concern about the negative impact of tied aid on their ability to obtain the most efficient forms of assistance, e.g., the consequences of inappropriate technology in terms of recurrent cost implications, high donor management contract costs, etc. It was argued that if aid tying occurred in areas in which the donors had the greatest comparative advantage or expertise this would likely be less of a problem. Instead the aid provided often serves as a vehicle for transferring surpluses of donor countries in the form of commodities, technical assistance, etc., without adequate regard to their quality or cost. Food aid was cited as the most obvious example.

6. Constraints Faced by Small Donors. Primary among these constraints is a limited capability (and/or reluctance) to consider the potential impact on donor interventions of sectoral, macro policy and institutional constraints in recipient countries. It was suggested that even small donor interventions inevitably influence recipient country policies and therefore small donors can ill afford to ignore the recipient country context. The issue of small donors' limited capacity to assess recipient country policies is complicated by the fact that they usually have a limited array of substantive expertise, frequently of a highly technical nature, to

offer recipient countries. For both of these reasons, the potential for a "mismatch" between the type of assistance that is offered and that which is either most needed and/or likely to be most effective is magnified, especially where the "target group" is the less privileged members of the rural sector. On the other hand, small donors have certain advantages such as not being encumbered by extensive bureaucratic procedures for project design and implementation. They also have greater flexibility and can adapt quickly to changing circumstances.

DANIDA's experience in Kenya indicates that a small donor's resource base is not entirely fixed and expertise can be cultivated over a sustained period, focused on a limited range of countries, and thereby made more compatible with recipient country requirements. The above considerations suggest that small donors, even more than others, need to take a long term, substantively (and probably geographically) very focused approach to providing assistance.

7. Problems of Very Large Donors. Very large donors with major amounts of resources to allocate, notably the World Bank, have an advantage in doing sectoral and macroeconomic analysis. On the other hand, precisely because the resources it has available are so large, there has been considerable lending pressure to allocate resources without sufficiently detailed analysis of the potential problems that might undermine the success of the type and the number of projects funded. In particular, in the past there has often not been adequate attention in agricultural projects to the agro-ecological conditions or organizational and implementational capacities

prevailing in project areas. Also, top down guidelines and global fashions have meant that there has been inadequate attention to the sequencing and phasing of investments to alleviate the most important constraints. Similar approaches have been applied across countries without adequate attention to individual country/regional variation. The Bank has also in general opted for short term results and has focused less on the long term objective of development of indigenous human and institutional capacity, particularly with respect to policy, planning, and implementation and agricultural research capacity.

8. Building Agricultural Research Capacity. There was considerable agreement that building agricultural research capacity is an important priority for achieving agricultural growth in Africa. USAID's achievements in providing training for a substantial number of African scientists and in building agricultural education institutions were noted but it was also noted that USAID has had less success in Africa than it has had in Asia in translating this training into effective national agricultural research systems. Cautions were, however, raised about the dangers of a major new donor emphasis on national agricultural research systems given the likely consequent problem of excessive and disjointed assistance. This area, even more than most others, calls for close scrutiny of donor comparative advantage and of strategic planning for carefully coordinated bilateral and multilateral efforts that concentrate resources on mutually agreed upon areas of highest priority from a long term perspective.

9. Decentralizing Donor Assistance Systems. The merits of having a permanent in-country donor presence were discussed in various contexts. A local donor presence was generally viewed as beneficial in that it allows for more informed and extensive dialogue on issues of importance to both the donor and recipient. However, it was also noted that where there are attempts to exercise strong central policy control and direction from donor agency headquarters, this can constrain the ability of the in-country representatives to maintain a program that has strong continuity and/or is flexible enough to be sufficiently responsive to host country concerns.^{1/} It was the opinion of one senior recipient country official with long experience in dealing with different donors that what matters most is not whether a donor official is resident in-country but whether the representative has sufficient delegated authority. Unless this is the case, meaningful dialogue with a donor is not possible.

10. The Role of Food Aid. Since a number of donors, notably USAID and the EEC, provide substantial amounts of food aid assistance, there was considerable interest in this topic and the substantive argument, namely that countries pursuing equitable growth-oriented agricultural policies may experience more rapid demand for food in relation to the supply they can

^{1/} It was suggested that an interesting empirical question would be to investigate the experiences of the decentralized versus centralized donor management styles to assess their potential lessons for aid effectiveness.

generate in the short and medium run and that this might be an important justification for food aid. The viewpoints expressed essentially divided into two perspectives. The dominant one was one of staunch resistance to the use of food aid. It stressed the detrimental effects of food aid (dependency, price distortion effects, the inevitability of donor constituency interests outweighing recipient country concerns, the hidden costs of food aid, diversion of donor and recipient country attention away from the more "fundamental" problems of population growth and how to increase agricultural production, etc.). Proponents of the counter view argued that, while admittedly fraught with potential problems, food aid is an undeniable reality and therefore must, and can, be managed intelligently with the objective of achieving maximum development impact. Besides, food aid may be no worse than any other form of aid in creating dependency.

11. Integrated Rural Development in Retrospect. Given the involvement of almost all donors in integrated rural development (IRD) projects in the 1970s, there were recurring references throughout the conference to experience with IRD projects. The prevailing view of most donors appeared to be that this experience has been negative. Indeed with respect to the concern with equity noted earlier, perhaps the feature most held in common by almost all donors was their generally unsuccessful efforts to promote regional equity via integrated rural development projects frequently located in marginal areas. Several pleas were, however, made that before this aggregate experience becomes conventional wisdom, there is a need to be somewhat more discriminating in reflecting on the varieties of this experience in order to better appreciate the lessons that have been (or could

be) learned. One case study indicated that experience with IRD has been varied and that not all IRD efforts have been "poorly planned" or "overly ambitious".

12. Export Crops. Concern was voiced over the generally deteriorating performance of export crops in MADIA countries (with the exception of tea and coffee in Kenya and cotton in West Africa). Apart from the price incentives which were being corrected in many countries this led in turn to discussion of the role played by both Britain and France in the colonial era in significantly increasing export crop production through the effective organization of research and delivery systems (indeed, the French contribution in Francophone Africa was reviewed in detail in one of the case studies). Some participants argued for a renewed emphasis on the part of these ex-colonial donors on rebuilding past expertise that would hopefully result in improved export crop performance (especially in light of the concerns mentioned under point 4 above with respect to the current lack of clear technical leadership in this area). Other commentators were less certain that this proposition is viable in light of the many complicating circumstances of the current world commodity markets, existing multilateral programs and private sector activities in the export crop sector. Nor, it was argued, is such a stance sufficiently sensitive to the extreme pressures that recipient countries and donors are under to focus on improving food crop production (Kenya and to a lesser extent Cameroon were cited as the two MADIA countries that have been able to increase (some) smallholder export crop production while not harming the performance of food crop production).

13. Technology Development and Transfer. Discussion of this topic involved a twofold emphasis. The first centered on the need, mentioned above, to substantially increase the capacity of recipient country agricultural research systems. A second emphasis pertained to the widespread problem donor programs have encountered in attempting to increase smallholder agricultural production. Here the emphasis was on a call for greater attempts to reflect on-farm constraints in the development of agricultural technologies rather than rely on a simplistic transfer of technologies from experiment stations. Despite general agreement in principal concerning this objective, however, there were few concrete suggestions on how it can be most effectively achieved.

Potential Next Steps

Next steps will conclude the MADIA study's synthesis and disseminate its results. In view of the fact that the case studies and the conference had chronicled a number of development assistance fads that donors had subscribed to and then as quickly abandoned, one bit of concluding advice offered for synthesizing the study's results related to the fundamental importance of discriminating between donor mistakes that are unavoidable as a result of a learning process, and mistakes that donors have continued to repeat due to the systemic constraints. It was stressed that it is essential to examine why they continue to repeat mistakes as well as how to avoid or minimize similar mistakes in the future. It is especially important to build on the lessons of success, of which there are a fair number.

Future activities will concentrate on a systematic effort to synthesize and make available more broadly the wide range of important

insights that emerged from the studies of aid effectiveness.^{1/} The main thrust of this effort will involve attempts to pull these insights together, both in the final versions of the case studies and in the synthesis volume, to carefully differentiate and articulate these insights and to more fully explore their implications for future donor activities. The possibility was also mentioned of holding additional seminars in selected donor and recipient country settings to achieve further refinement and/or elaboration of some the more important ideas articulated at the conference.

Two such types of future meetings are possible. The first could be held in recipient countries and would focus on discussion of the study's findings on agricultural performance and policies. A second set of meetings could take place in donor countries and would examine specific questions regarding donor assistance (several expressions of interest in the latter type of meeting have already been received since the Annapolis conference).

^{1/} It is important to emphasize that this brief report only touches on some of the more prominent issues raised at the meeting and to a lesser extent on the case studies. It does not attempt to present any conclusions of the study. These issues will be explored in greater detail in the final synthesis volume and, in particular, the extensive evidence from the case studies will be used to make more definitive judgments about these issues with respect to aid effectiveness. A number of other topics were discussed at the meeting, e.g., the many different ways donors have of attempting to assess the impact of their programs, the various quite diverse categories of aid provided by different donors, the comparative experience of donors in attempting to transfer analytical skills, etc. The final volume will also explore these topics in the process of presenting conclusions about aid effectiveness.

PARTICIPANTS

MEETING WITH POLICYMAKERS: MADIA AND AID EFFECTIVENESS
April 6-9, 1987, Annapolis, Maryland

POLICYMAKERS

Mr. Jean Baneth
Director, Economic Analysis and Projections Department
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Andrew Bennett
Chief Natural Resources Advisor
ODA
Eland House
Stag Place
London SW1E 5DH
United Kingdom

Mr. Claude Blanchi
Assistant Director
Agriculture and Rural Development Department
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Peter Branner
Division Chief
DANIDA
Asiatisk Plads 2
1448 Copenhagen K
Denmark

Mr. Wilfred Candler
Senior Economist, Europe, Middle East and North Africa,
Agriculture Division,
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Gerald Cashion
Social Science Advisor
Africa Bureau
Room 2941, USAID
2200 C St. NW
Washington, DC 20523
United States

Mr. Xavier de la Renaudiere
Director, Special Office for African Affairs
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Ronald Duncan
Chief, Commodity Studies and Projections Division
Economic Analysis and Projections Department
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Dag Ehrenpreis
Director of Planning
SIDA
S-105 25 Stockholm
Sweden

Mr. Peter Gisle
Resident Representative
The World Bank
Boite Postale 1128
Yaounde
Cameroon

Mr. Tariq Husain
Senior Economist, Western Africa
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Francis Idachaba
Professor, University of Ibadan
Department of Agricultural Economics
Ibadan
Nigeria



Mr. Gregory Ingram
Director, Development Research Department
S-10-045
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Joseph Kanga
Director of Planning & Studies
Ministry of Agriculture
Yaounde
Cameroon

Mr. Benjamin King
Acting Vice President, Economics Research Staff
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Alexander R. Love
Acting Assistant Administrator for Africa
Africa Bureau
Room 2941, USAID
2200 C St. NW
Washington, DC 20523
United States

Mr. John Malone
Economic Development Institute
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Harris Mule
Permanent Secretary, Ministry of Finance (Retired)
c/o The World Bank
P.O. Box 30577
Nairobi
Kenya

Mr. Jean Nemo
Deputy Director, Development Policy
Ministry of Cooperation
20 Rue Monsieur
75007 Paris
France

Mr. Stephen O'Brien
Chief Economist, Western Africa
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Donald Pickering
Senior Agricultural Advisor, Western Africa
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mrs. Christa Raabe
Evaluation Unit, Ministry of Economic Cooperation
Referat 230
Karl Marx Strasse 4-6
5300 Bonn 12
Federal Republic of Germany

Mr. Yves Rovani
Director General, Operations Evaluation Department
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Famara Ibrahima Sagna
Ministre du Developpement Rural
Building Administratif
Avenue Roume
Dakar, Senegal

Mr. Keith Sherper
Director, Office of Technical Resources, Africa Bureau
Room 2941, USAID
2200 C St. NW
Washington, DC 20523
United States

Mr. Alfred Upindi
Permanent Secretary, Economic and Planning Division
Office of the President and Cabinet
Lilongwe
Malawi

Mr. Andre van Haeverbeke
Head, Sectoral Policies Development Department
EEC
200 Rue de la Loi
B-1049, Brussels
Belgium

Mr. Marcus Winter
Assistant Director, Office of Technical Resources
Africa Bureau
Room 2941, USAID
2200 C St. NW
Washington, DC 20523
United States

RESEARCHERS

Donor Study Teams

Mr. Dirk Dijkerman
Africa Bureau
Room 2941, USAID
2200 C St. NW
Washington, DC 20523
United States

Mr. Hannan Ezekiel
Research Fellow and Coordinator, Food Aid Policy Research Area
International Food Policy Research Institute
1776 Mass. Ave. NW
Washington, DC 20036
United States

Mr. Claude Freud
Ministry of Cooperation
Direction du Developpement
20 Rue Monsieur
Paris
France

Ms. Ellen Hanak
Consultant, Development Strategy Division
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Christian Heimple
Deutsches Ubersee-Institut
Neuer Jungfernstieg 21
200 Hamburg 36
Federal Republic of Germany

Mr. Allan Hoben
Director, African Studies Center, Boston University
Boston, Mass. 02215
United States

25

Mr. John Howell
Deputy Director, Overseas Development Institute
Regents College
Regents Park
London NW1 4NS
United Kingdom

Mr. William Jaeger
Special Office on Africa
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Bruce Johnston
Food Research Institute, Stanford University
Stanford, CA 94305
United States

Mr. Walter Kennes
Development Department
EEC
Rue de la Loi 200
B-1049 Brussels
Belgium

Mrs. Uma Lele
Chief, Development Strategy Division and MADIA Director
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. John Mellor
Director, International Food Policy Research Institute
International Food Policy Research Institute
1776 Mass. Ave. NW
Washington, DC 20036
United States.

Mr. Marian Radetzki
(starting June 1, 1987):
Institute for International Economic Studies
University of Stockholm
Sweden

or
(until May 31, 1987)
Colorado School of Mines
Minerals Economics Dept.
Golden, Colorado 80401

26'

Other MADIA Study Team Members

Mr. Vishva Bindlish, Consultant*
Development Strategy Division
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Balu Bumb, Consultant*
Development Strategy Division
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Sidi Jammeh, Consultant*
Development Strategy Division
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Dayanatha Jha, Consultant
Development Strategy Division and Research Fellow
International Food Policy Research Institute
1776 Mass. Ave. NW
Washington, DC 20036
United States

Mr. Jonathan Kydd, Consultant*
Development Strategy Division and Lecturer, Wye College
University of London
Ashford
Kent TN25 5AH
England
United Kingdom

Mr. L. Richard Meyers*
Development Strategy Division
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Mr. Douglas Nelson, Consultant
Development Strategy Division
The World Bank
1818 H St. NW
Washington, DC 20433 .
United States

Mr. Essama Nssah, Consultant
Development Strategy Division
and Dean
University of Yaounde
Yaounde
Cameroon

Mr. Joseph Ntangi, Consultant*
Development Strategy Division
and Professor, University of Yaounde
Yaounde, Cameroon

Mr. Ademola Oyejide, Consultant*
Development Strategy Division
and Professor, University of Ibadan
Ibadan, Nigeria

Mr. C. G. Ranade*
Development Strategy Division
The World Bank
1818 H St. NW
Washington, DC 20433
United States

Research Support Staff, Development Strategy Division
The World Bank
1818 H St. NW
Washington, DC 20433

Ms. Maria Cancian
Meeting Coordinator

Mr. Arjun Janah

Ms. Linda Nunes-Schrag

Mr. Ranga Prasad

Mr. Pierre Seka

Mr. Jan Sundgren

Secretary to the Meeting

Ms. Kim Tran

MANAGING AGRICULTURAL DEVELOPMENT IN AFRICA U.S. ASSISTANCE

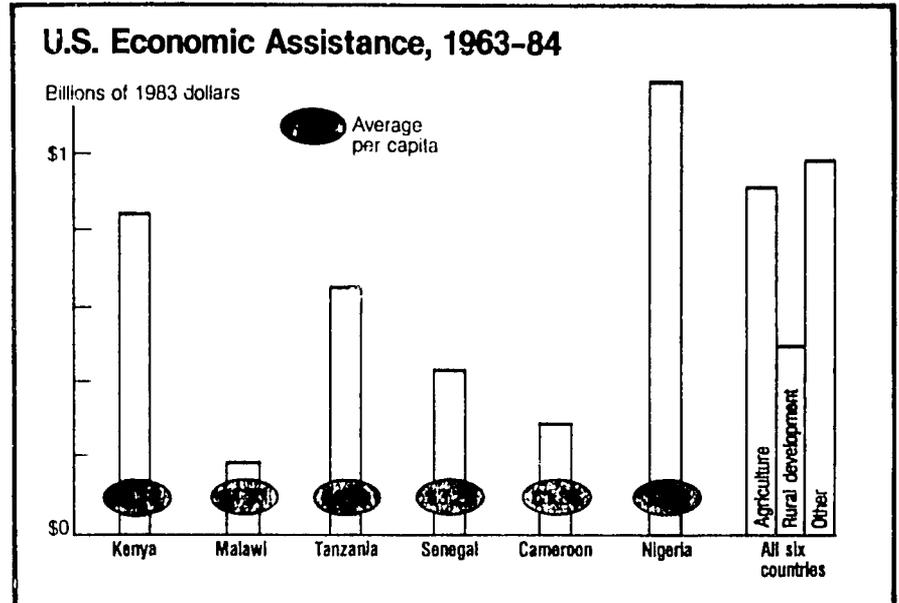
What has been the content of AID assistance and how have its priorities changed over time? What factors have influenced the content of AID's program? What has been the impact of AID assistance? How can policymakers increase AID's effectiveness?

The MADIA study has attempted to assess the contributions of AID's activities not only to project success but to the achievement of long-run goals. It is based on detailed analysis and comparisons from the six MADIA countries and suggests generalizations that take account of the richness and variation of the conditions and experiences in those countries. The study draws on a wide range of documents and extensive interviews with AID employees, contractors, and government officials and other residents in the study's countries. It tries to understand how AID's activities have been shaped by its environment, both in Washington and overseas. And it places AID programs in a broader historical and foreign policy setting.

During 1963-84 U.S. assistance for the six countries was nearly \$3.6 billion in 1983 dollars. Of this total, \$900 million was for agriculture, \$520 million for rural development (other than agriculture). The remainder included development assistance in other sectors, P.L. 480 food aid, Economic Support Funds, and Peace Corps.

Although AID has maintained a broad focus on smallholder agriculture and food crops throughout the period, there have been large fluctuations in country funding and sectoral emphases. These variations correspond to changes in U.S. foreign policy concerns, which reflected Congressional or Administration policy changes and lessons of experience with African development.

U.S. economic assistance for the six MADIA countries and for Sub-Saharan Africa in general has been modest, reflecting limited foreign policy interests in the region. It represented only 5% of all U.S. aid before 1978, and it has risen to more than 10% only in recent years, primarily because of increases in food aid and the Economic Support Fund.



AID programs have also been modest in comparison with total donor assistance.

It is impossible to document the impact of AID assistance on agricultural and rural development for three reasons: the limited scope of AID programs, the problems of measurement and attribution, and the political and economic factors that have swamped all development efforts in the countries under review. The study therefore relied on observable intermediate outputs that are necessary though not sufficient for attaining sustained increases in production, achieving higher incomes, and improving the well being of the rural population.

Judged in these terms, the evidence suggests that AID has contributed measurably and significantly to the accumulation of knowledge, skills, and competence of individuals in all six countries. It has contributed to physical capital accumulation, especially transport, in all countries except Senegal. But there have been severe problems with maintenance and recurrent costs in Kenya and especially in Tanzania. AID's contribution to social capital accumulation, economically useful knowledge, and institution building has been mixed, often only partially effective, and occasionally counterproductive. Weaknesses in promoting institutional development in

African countries have clearly been a major shortcoming of donor assistance in Sub-Saharan Africa. AID's efforts appear to have been relatively successful in human capital formation and in establishing faculties of agriculture and other postsecondary educational institutions.

Was the activity an appropriate part of a balanced strategy in relation to the host country's needs, resources, and institutional capacity? Was the country situation favorable in terms of the policy environment, the timing and sequencing of activities, and the commitment of the country's political leaders to the objectives of the project or program? How appropriate were U.S. experience, technical expertise, and institutional models for the host country's needs and context? Did AID have or was it able to obtain the institutional capacity to plan and implement the activities necessary for the success of this type of program under host country conditions? The answers explain much about the pattern of success or failure.

AID's assistance to institution-building for agricultural education, clearly an essential component of a balanced strategy, has been impressive in Nigeria, substantial in Kenya, and significant (though intermittent) in Malawi and Tanzania. A major effort to build the first land grant university in franco-

phone West Africa has been launched in Cameroon. In addition, participant training has been an important feature of most agricultural projects. This comparative success is related to the strength of American land grant universities. Special contracting arrangements have enabled AID to draw on the universities for the design and implementation of projects, especially in the 1960s, and to sustain their support for many years. Institution-building is a long-term process; sustained support is crucial to permit the U.S. land grant model to be modified to fit African conditions and to ensure that the investment in education strengthens the host country's capacity for agricultural research.

The effectiveness of AID's assistance to agricultural education and training was limited in some instances by the insufficient relevance of training in the United States to conditions in Africa. More generally, investments in higher agricultural education have had limited impact on agricultural development because the complementary investments in developing effective national agricultural research systems have not yet been made.

AID's assistance for agricultural research was meager (only 2.3%). In retrospect it appears that there are many reasons for this neglect, including "technological optimism" leading to an extension bias, the New Directions policy emphasis of the 1970s, the view of African leaders and donor policymakers alike that research was too slow, AID's difficulty in adopting a long-term time frame, and the opposition by American farmers' interest groups. Other reasons for the lack of success in agricultural research include inappropriate assumptions about African farming systems and the limited familiarity with many African staple crops.

Despite the formidable difficulties, the current situation is encouraging. In recent years the Agency has started major agricultural research programs in Cameroon, Malawi, and Kenya that incorporate lessons from prior experience. In addition, the Africa Bureau's new (1985) agricultural research strategy paper is in many ways exemplary. It incorporates lessons from earlier failures, is

well attuned to the needs and capacities of various nations, and outlines a coherent approach.

Over the past 25 years, AID has allocated a substantial portion of its funds in the MADIA countries for activities intended to affect agricultural production directly. These activities have often been based on technology transfers, and they have relied on extension workers to transmit information to farmers about specific farming methods and inputs. These extension-based production activities have nearly all been judged unsuccessful by AID. Evidence from the six country studies indicates convincingly that they were based on incorrect, overoptimistic assumptions about the benefits and appropriateness of proposed technical solutions. They also failed to take adequate account of local economic, social, and institutional issues.

The pattern of success and failure shows that AID has difficulty designing and implementing projects that:

- Assume it will be possible to transfer American technologies and organizational forms directly to rural African populations.

- Assume it will be easy to alter existing institutional patterns, including those established during the colonial period.

- Depend on extensive logistical support, the timely procurement of commodities, or American-made equipment that cannot be serviced by existing facilities.

- Entail complex management and depend for their functioning on outputs of other planned projects, rely on inputs to be provided by ministries not responsible for the project's implementation, or require substantially better interministerial coordination than already exists.

AID's difficulties with projects that rest on these assumptions have been exacerbated by procedures and organizational incentives that encourage its employees to focus on designing projects and obligating funds rather than on implementation, monitoring, and evaluation. Increasingly complex budgeting, design, and contracting requirements—and continuing adverse criticism at home—have forced AID missions to de-

vote much of their energy to responding to the Washington bureaucracy and solving AID's problems rather than those of the host country. Under these circumstances, it has been difficult for AID's technical personnel to remain current in their field of expertise.

Ultimately, many of these constraining problems reflect the lack of political support for foreign aid and the Agency's consequent dependence for support on a variety of special interest groups with differing agendas. They also lead to excessive "micro-management" by Congress. These problems have been recognized by managers at AID and by members of Congress, and there are grounds for cautious optimism that ways will be found to address them.

The effectiveness of AID's assistance has also been constrained by a lack of continuity in carrying out institution-building activities that require a patient, error-embracing, and flexible approach. Indeed, AID programs in Africa generally have been characterized by much less stability in focus and policy than its earlier and larger programs in other geographic regions.

Recognition of these limitations should not obscure AID's strengths. The MADIA study supports the view that AID's unique overseas missions give it a comparative advantage in implementing projects, working collaboratively with host-country counterparts, and in coordinating the efforts of AID and other donors with those of the host country. The mission system also allows its field staff considerable flexibility in marshaling or redeploying resources in response to changing circumstances, unforeseen difficulties, or unexpected opportunities.

Documenting the strengths of AID's mission presence is difficult because many of its achievements are the result of informal contacts, friendship, and patient persuasion. It is clear, however, that this informal process—reinforced by seminars, conferences, and visits to the United States or to other developing nations—has significantly altered the attitudes of officials in each of the six countries toward higher agricultural education, research, health, and population.

MANAGING AGRICULTURAL DEVELOPMENT IN AFRICA

U.K. ASSISTANCE

Bilateral UK aid to African agriculture takes six main forms, with more overlap than statistical presentations suggest (see the chart).

Project aid is financial aid—now on grant terms—for capital expenditures. In aggregate, around 70% of such aid involves procurement from the UK, but for some smallholder agricultural projects in Africa this figure has been as low as 30%.

Manpower aid involves long-term personnel and consultants provided under technical cooperation. In the agricultural sector this aid has become increasingly clustered around ODA projects. In the 1970s it was more widely spread, as the main form of manpower was salary supplementation to government posts held by UK nationals.

Training aid consists primarily of awards for professional training in UK agricultural education institutions.

Commercial investments of the Commonwealth Development Corporation (CDC) in agriculture are part of UK aid flows: the terms of its loans (or fixed dividends on equity invested) are concessional and ultimately financed by the UK Treasury. The CDC also provides manpower aid through management contracts.

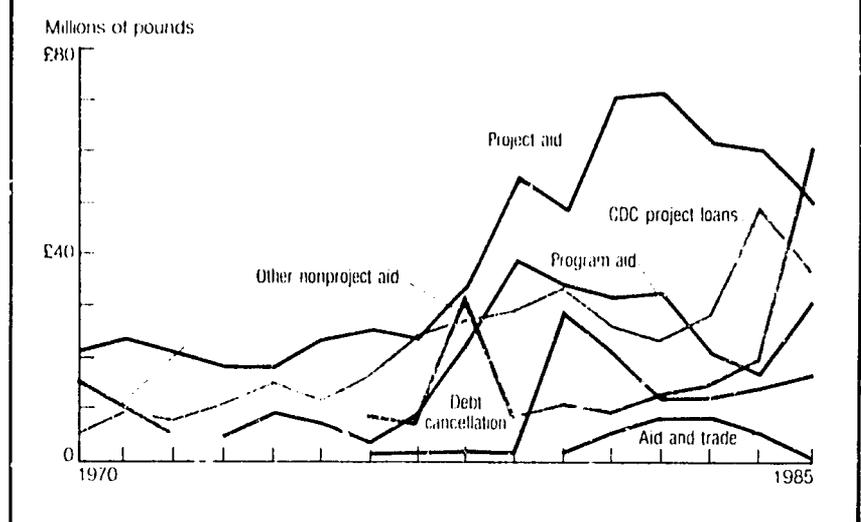
Program aid provides, in effect, budgetary support currently through financing inputs. It is similar to other non-project aid—such as debt cancellation, (post independence) budgetary aid, and disaster relief—in that there is not an easily monitored result. In recent years, however, program aid has had a more specific agricultural focus, linked as it is to agricultural policy reform and to specific farm inputs.

Grant support to agricultural research services in the UK which assist national and international agricultural institutions is for ODA's scientific units (particularly the Tropical Development and Research Institute) as well as for research in the universities and elsewhere.

Trends in UK Aid

The share of UK aid disbursed multilaterally increased from well under 10%

U.K. Financial Assistance to Sub-Saharan Africa, 1970-85



in the early 1970s to around 45% in the mid-1980s. This long-term shrinkage in the share of the bilateral aid program has been accompanied since 1979 by an average annual decline in real terms of 3.7% in the aid program as a whole.

Since the late 1970s there has been a more explicit focus on the commercial benefits of UK aid (and the large bulk of sales under the Aid-Trade Provision have been outside Sub-Saharan Africa). But the share of bilateral aid to Sub-Saharan Africa has increased from the average of 25% in the early 1970s to 40% in the 1980s.

Of this allocation, project aid has diminished with the increasing emphasis on nonproject aid. And of the project aid in Africa, agriculture has been squeezed by a growth in support for the power sector.

The CDC commitments in African agriculture have also declined substantially since the second half of the 1970s, although the CDC has continued a relatively even course of new investment in the nonagricultural sector. But the most striking feature of the trends in direct UK support for African agriculture is in manpower, where the number of long-term staff overseas declined from 740 in 1972 to 458 in 1977 to 154 in 1985. Less dramatically, the number of UK-based scientific officers has also declined.

Technical cooperation allocations as a whole do not reflect this shift, partly because the cost of officers overseas has risen but also because the number of UK training awards has been largely maintained in agriculture.

Agricultural Aid Priorities

Interpreting the data to establish revealed ODA priorities is not straightforward. On the one hand, there has been an increase in multilateral aid to institutions (such as the World Bank and the EEC) which have given emphasis to African agriculture. There has also been an increase in program aid linked to policy reforms designed to assist the farm sector. On the other hand, bilateral project allocations to agriculture have decreased substantially in size and number. Manpower aid is much diminished, support for UK research services had been reduced, and CDC investment has weakened.

Even so, a number of general trends can be seen in UK agricultural aid over the last 15 to 20 years.

- Despite a strong colonial legacy of export crop research and services, there has been a low level of direct ODA investment in export crops on the grounds that either the CDC or the industries concerned should be given responsibility.

• since the early 1970s, there has been a withdrawal from budgetary aid and support for supplemented officers in agricultural service and, up to the end of the 1970s, a stronger emphasis on relatively short-term projects with UK technical advisers.

• There has been a move in the late 1970s and 1980s into larger area-based programs in several subsectors simultaneously.

• In the mid-1980s there has been emphasis on program aid at the expense of new project aid commitments.

Apart from these trends, a review of the country evidence reveals five main priorities on both the form of agricultural aid and on the specific sectors of agriculture supported by ODA.

• Program aid linked to policy reform.

- Integrated rural development.
- Agricultural technical services.
- Agricultural research.
- Smallholder export crop authorities.

It is also clear from the country evidence that some of the more strident critics of UK agricultural aid (such as the NGOs and the environment lobbies) are wrong in claiming that British aid is particularly supportive of mechanized farming, modern irrigation, export crops, and the use of imported chemicals, vaccines, and fertilizers. All these elements figure in the 15 years of aid investigated, but there is no evident bias. Even the recent program aid for agricultural procurement relate to well-established demand for imported inputs temporarily constrained by foreign exchange shortages rather than effects of market penetration of new technologies.

Impact on Institutions

ODA's current interests in institution-building are in some respects inadequate as far as they apply to African agriculture. In ODA's view, inadequate public sector management can be remedied by selected support in training and capital and manpower aid.

ODA's strengths in institution-building are unlikely to be in areas where political and commercial interests impinge on performance, and they have been ineffective at national level generally. ODA lacks the leverage (and possibly the will) to influence directly the trading position of public agencies or

major resource allocation decisions. Yet ODA's record shows significant achievements in institution-building in more narrow and specialized areas involving technical and research skills.

Impact on Policy

The overall impression is of an ad hoc, incremental approach to agricultural aid, with a strong demand-led element, rationalized (rather than determined) in occasional country policy papers. There is also evidence that the demand element is often strongly influenced by recipient government priorities agreed with the World Bank and other donors.

Particularly in the 1980s this attachment to the World Bank was deliberate and reflected both confidence in the Bank's much larger professional input into agricultural planning and attachment to the case for donor coordination over nationally agreed on strategies (such as in Malawi and in Kenya). Where there is rather less confidence (as in the Burra Scheme in Kenya), Bank support is still likely to influence ODA agricultural aid policy decisions. The confidence in European (EDF) aid execution in the agricultural sector is much lower, although there has been a major diversion of UK aid finance to the EEC over the past decade. There has been little development of aid collaboration and coordination as a consequence. Examples of where UK aid (as opposed to no aid or aid from an alternative donor) has been most influential are in the more specialized and technically based areas of agriculture: cotton research in Tanzania and Malawi; smallholder tea extension and processing in Kenya and Malawi; land-use planning and conservation work in Kenya and Tanzania; animal health services in Malawi and Kenya; and seed production and quality control in Malawi and Tanzania.

Constraints on Effectiveness

The effectiveness of UK agricultural aid has been constrained in three main ways. Domestic agricultural policies have been detrimental to projects: in some cases prices regulated by government have posed a disincentive to production (cotton in Tanzania) or public marketing organizations have been allowed to trade inefficiently (seed in Ma-

lawi or livestock in Kenya). But the more widespread constraints have been the inability or unwillingness of governments to provide appropriate budgetary and staff resources to activities where ODA has committed resources. This is a particular constraint in such areas as research and pest and disease control, where staff and equipment costs are such a major feature of recurrent expenditures.

There are also constraints on the aid program itself. Although there are some instances of UK procurement leading to long delays and inappropriate technology, the practice of aid-tying is not generally damaging to ODA agricultural projects. And local cost provisions have been considerably more generous than in other sectors. Nonetheless, the general bias of the aid program toward the commercial returns of aid to the UK has meant a significant bias in spending toward UK-procured infrastructural investment, notably transport and power, which have little direct benefit to agriculture. In agriculture, there is also a bias toward factory, roads, and warehouse construction, reducing smaller, service-oriented programs in areas of proven UK competence.

The administration of ODA's agricultural aid has also occasionally acted as a constraint to aid-effectiveness. Difficulties in integrated rural development projects have been caused where technical directions are often unclear and further confused by conflicting views of ODA advisers. This vacillation in aid administration also extends to more straightforward construction projects, and, in this case, it is largely explained by the reluctance of ODA to cease disbursements even where serious questions are raised about performance (grain storage in Tanzania is one of the more obvious examples). But in the more complex and long-term projects to assist low-income farming, the frequent periods of ODA vacillation are not entirely blameworthy. Caution and skepticism are natural traits in what remains an experienced cadre of professionals who tend to resist the pressures for rapid aid disbursement. In at least two instances in this study (Kenya Livestock and Mtwara-Lindi) such caution has been vindicated by subsequent poor project performance.

22

Since the early 1970s, Sweden's aid to all developing countries has accounted for more than 0.75% of its gnp. Sweden has been a prominent donor to Kenya and Tanzania, with around 10% of its aid spent there. Swedish assistance has also accounted for significant shares of the two countries' gnp (see the chart).

Since the mid-1970s, these aid flows have all been grants, and earlier loans have been written off. The share of tied aid has been low, but it grew to about 20% of the total in the 1980s. A striking allocational feature is the very high proportion of aid expended on subsidized public service.

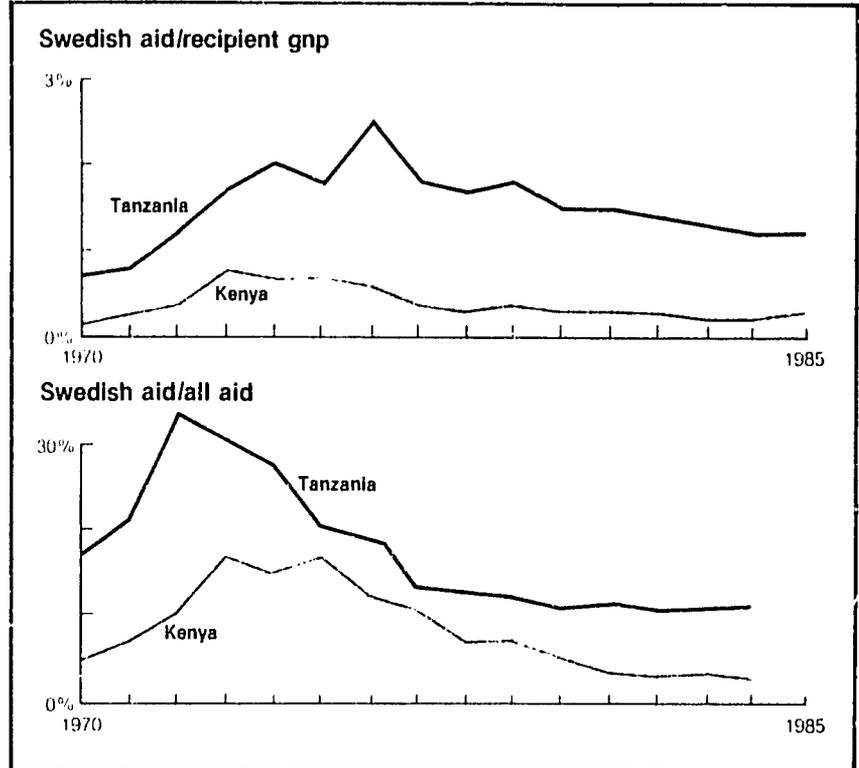
Solidarity with poor people in low-income countries—and the belief that Swedish experience is relevant for development—are the basic reasons for Sweden's aid, and the promotion of resource growth and equality have been the basic objectives. But commercial considerations have also played a role. Aid has been viewed basically as support to the buildup of physical or human capital, which would yield permanent returns after the foreign support was discontinued. A distinguishing characteristic of Sweden's approach to aid has been a reluctance to interfere in the recipients' macroeconomic policies.

Evaluation of past efforts has only lately played an important role in Sweden's aid endeavors. So the feedback from earlier experiences has been weak.

Sweden's perceptions of Tanzania's policies as more equity-oriented than Kenya's explain the different treatment of the two countries. Tanzania received much more aid and had a greater freedom in determining its use. In Kenya active Swedish involvement in sectoral allocation was considered necessary to assure the desired poverty orientation. But no serious effort has been made to verify whether Swedish perceptions truly reflect the two countries' development profiles.

Rural Water Supply

Rural water supply has been an important component in Swedish aid. Until the mid-1980s, 20% of the disburse-



ments to Kenya and 13% of those to Tanzania, were for this purpose. Sweden was an initiator and, for some time, the major financier of these activities.

In Kenya the rural water program has been plagued by differences of opinion between donor and recipient about the mechanics of water distribution. Flat charges and the combination of individual and communal taps in one system led to excessive private use, and little water reached the communal points that were to serve the poor. The charges imposed were grossly inadequate to maintain and operate the systems. And since the government did not provide the needed funds, decay of the installations was fast and widespread.

These negative experiences led to consecutive shifts of the Swedish contributions to the rural water program. In 1980, new construction was sharply curtailed, and funds were redirected towards operation and maintenance. After 1984, support for the nationwide program was replaced by geographical-ly focused ventures with considerable technical and social experimentation to

encourage local involvement.

In Tanzania, Swedish aid initially played a central role in the conceptualization and planning of the national rural water supply, with many donors participating in its subsequent execution. The program proved financially overambitious and was technically misconceived. The recurrent costs for operating and maintaining the installations were beyond the central government's means, but no arrangement had been made for the donors or the consumers of water to cover these costs. The physical and human inputs required to operate the predominantly piped, diesel-driven systems were not available in the country. So, a large part of the installations has functioned erratically or not at all.

In the 1980s the focus of the Swedish effort shifted from the nationwide to the local level in a few regions around Lake Victoria. As in the recent program for Kenya, there is substantial experimentation to develop systems that, once established, could operate without outside support.

Rural Health Systems

Swedish thinking had a significant impact on the design and implementation of the rural health structure in the two countries. But the financial support in this area has been less than that in rural water—both in Sweden's aid budgets and in the overall recipient activity.

In Kenya the construction of rural health facilities has absorbed about half of the Swedish contributions for this purpose, and there were extended delays in completion. In the 1980s, there has been a shift toward financing recurrent and operating costs and providing management and other software, prompted by the observation that national funds for these purposes were wanting.

With hindsight, both the Kenyan government and the donors agree that simpler systems, emphasizing preventive instead of curative medicine, would have been more affordable and cost effective. Despite sizable Swedish and Danish support of recurrent costs, some two-thirds of the rural health centers lack equipment and supplies essential for their operation.

In Tanzania a major proportion of Sweden's commitment has been to build and equip 125 health centers in an ambitious nationwide program. This program has been wrought with difficulties similar to those in Kenya. Delays in execution and cost overruns have been severe. Recurrent funds have been grossly inadequate, and the decay of installations is serious. In the 1980s a majority of the units has lacked essential supplies, and ongoing operations have relied on DANIDA and UNICEF for essential drugs. Apparently, the rural health system that had been established was beyond Tanzania's means.

Soil Conservation and Forest Development

Swedish aid has been instrumental in launching a broad program of soil conservation in Kenya's hilly areas with high agricultural potential. The purpose is to terrace the land and to plant grass and trees, so as to prevent soil erosion. The technical and financial assistance

has since the mid-1970s been integrated with the national agricultural extension program. Key characteristics of the program include the use of simple tools and heavy reliance on the labor of farmers who own the land.

Although the financial support from Sweden has been small, about half the farms requiring conservation measures had been cared for by the mid-1980s. This outcome suggests a high rate of achievement, but questions remain about sustainability. Recent studies suggest that farmers are less ready to undertake the follow-up work needed to avoid soil degradation.

Sweden has contributed substantially to Tanzania's forest development. Until the mid-1970s, when it was realized that the industrial forest capacity vastly exceeded the forest industries' foreseeable needs, most of the resources were used for expanding existing industrial forest plantations. The program then shifted toward establishing small mobile saw mills to increase the demand for the plantation output—and toward providing technical assistance to the forest industry. Since about 1980, village afforestation has been a further important component of Sweden's aid.

No demand analysis had been done before launching the effort to expand industrial plantations, and that part of the program was clearly misconceived. The investments in mobile saw mills were useful in that they helped to rectify the imbalance created by earlier aid.

The impact of Sweden's technical assistance to the forest industries is unclear. Since 1983, these industries have become increasingly profitable, but indigenous Tanzanian management reforms rather than foreign advice may have been instrumental in this turnaround. The village afforestation support is too early to evaluate, but the low survival rate of the communal plantings that dominate the effort casts some doubt on the current structure of this endeavor.

Input on Development

Evaluating the development impact of aid is a very difficult task, especially because the effects of foreign resources often cannot be separated from those of

domestic resources. The results hinge also on the measuring rod chosen to determine whether aid has done well or not.

The costs for achieving the physical outputs yielded by the projects appear to be exceedingly high. Contributing to this unfavorable benefit-cost ratio have been problems of execution—extended delays and cost overruns. More serious, the unavailability of recurrent finance has led to severe malfunctions and physical decay in large parts of the rural water and rural health facilities that dominate the Swedish efforts studied. A likely reason for this difficulty is that the projects as conceived were beyond the means of the Kenyan and Tanzanian societies. Insufficient attention to the macroeconomic context of projects undoubtedly contributed to map appropriate project design.

Although the physical outputs from the projects appear meager, one must also consider the valuable lessons that the recipient and donor have learned. The shifts in emphasis in many projects, suggest an improved understanding of the socioeconomic environment, and efforts to adapt to it. SIDA has probably been more pragmatic than other donors in giving up its perception of aid as support to investments only—and in providing resources for recurrent costs where this was essential for project viability.

One important lesson is that the poverty orientation of an aid program is no guarantee of improved equity. Active measures to reach the poor are usually required. Another lesson is that intensive popular involvement is a necessary precondition for the success of broadly-based programs for public social services.

A third lesson is that donors need much more understanding of the macroeconomic and macrosocial setting in recipient countries to design aid appropriately. The macroeconomic setting should not only be understood; it should also be reasonably sound. SIDA has learned in recent years that its involvement in rectifying misconceived macroeconomic policies may be a precondition for its aid to function at all. These lessons point to the longer term challenge of improving the effectiveness of Sweden's aid.

12/4

MANAGING AGRICULTURAL DEVELOPMENT IN AFRICA

WORLD BANK ASSISTANCE

Kenya, Tanzania, Malawi, Nigeria, Cameroon and Senegal have 40% of the population in Sub-Saharan Africa and more than 50% of the gnp. During 1963 to 1986 they received \$5.4 billion in IBRD loans and \$3.1 billion in IDA credits, of which 37% of IBRD loans and 31% of IDA credits were allocated to the agricultural and rural sector through 128 project operations, nine structural or sectoral adjustment loans, and five technical assistance projects. And from 1970 to 1984 they received 44% of the Bank's total resource transfers and 33% of its official development assistance in Sub-Saharan Africa.

In reviewing the Bank's involvement, each country study reviewed Bank advice on: 1) macroeconomic issues directly pertaining to the development of agriculture, 2) the agricultural sector, and 3) individual lending operations. The studies describe the interaction between the Bank and recipient in each area, trace the evolution of the advice given, and establish the relationship of advice to lending. They also relate the advice and lending to the recipient's endowments, agricultural policies, and expenditures. In addition, the studies assess how far, how fast, and how well the Bank and the government have learned lessons from their joint experience.

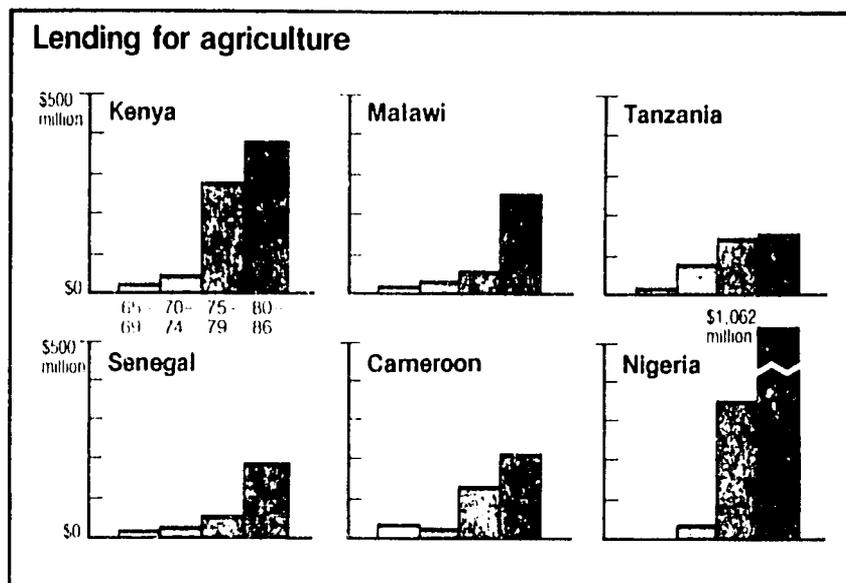
Country Performance

Three sets of factors explain differences in country performance:

- *Natural resources and political and institutional endowments.* Kenya, Tanzania, and Cameroon have more favorable endowments than Malawi and Senegal.

- *Macroeconomic and sectoral policies:* Kenya, Malawi, and Cameroon have had more favorable macropolicies than Senegal, Nigeria, and Tanzania.

- *Stable and predictable country policies and institutions:* Nigeria was the most politically unstable, experiencing frequent changes in policy initiatives and senior personnel responsible for agricultural policy; Tanzania and Senegal, though politically stable, had the most unstable institutional environment for the smallholder sector.



Malawi, Kenya, and Cameroon did well on growth in the 1970s; Nigeria, Tanzania, and Senegal did poorly. Thus the relative importance of policies and natural resource endowments differs in explaining performance. For instance, Tanzania's poor policies led to stagnation even with favorable resource endowments. In Malawi growth was rapid even with a poor resource base. In Senegal the resource endowment (rainfall and production variability) appears to have caused policy and institutional instability.

Tanzania, the most equity-oriented, could not sustain its equity policies. Kenya achieved more in equity than did Malawi and Tanzania.

Malawi did the least well on equity; Tanzania, Senegal, and Nigeria the least well on growth.

Bank Performance

Broad policy initiatives from the top and such external factors as the international economic environment of the 1970s greatly influenced the Bank's approaches to development assistance—more than did country-specific constraints, the Bank's rich operational experience, and the knowledge of its highly qualified technical staff. This influence is evident in the lending experience during three periods.

Investment. The 1970s were charac-

terized by an "investment approach" to smallholder development. Rapid growth in project lending followed Robert McNamara's Nairobi speech in 1973 and the guideline that 25% of lending should go to agriculture and rural development. Complex projects of marginal economic value taxed the limited planning and implementing capacity of governments. This was particularly unfortunate in that agriculture is a poor direct absorber of capital in the early stages of development, and its ability to use capital efficiently is highly dependent on complementary development of other sectors, especially the infrastructure and education sectors.

There was a mutuality of interest between the Bank's resource transfers to poverty-oriented projects and the recipient government's sociopolitical objectives for, say, regional income distribution or food self-sufficiency. Governments were less concerned about building their long-term institutional and human capital base to absorb large capital transfers.

This investment approach had relatively little impact in achieving equitable growth except where policies and institutions were favorable (see the box).

Adjustment. By the early 1980s external shocks to African countries—droughts, oil price changes, recessions

in their export markets, and border problems with neighboring countries—combined with indiscriminate growth in public spending to cause macroeconomic difficulties and project implementation problems. These led the Bank to focus on policy reforms: exchange rate adjustments (Tanzania and Nigeria), control of government expenditure (Tanzania, Malawi, and Senegal), abolition of subsidies and increased cost recovery (Malawi, Nigeria, and Senegal), and privatization (Kenya, Tanzania, Nigeria, Senegal, and Malawi). Because Cameroon had pursued a moderate economic and political course, it required no major structural reforms.

Adjustment with Growth. In the mid-1980s the Bank moved toward a more judicious blend of policy reforms and investments. There is now greater recognition that modernizing smallholder agriculture requires appropriate policies and investments involving a complex network. This network includes 1) national capacity for agricultural research and extension; 2) competitive and responsive markets for inputs, outputs, and other factors, and 3) price incentives and a stable institutional environment.

Bank Policy for Africa

The lessons from the study suggest that to achieve the requirements of modernizing smallholder agriculture in Africa, the Bank will need to do more:

- To understand the social, political, and ethnic factors that influence government motives.
- To assess the microeconomic factors that influence producer decisions.
- To address the risks and uncertainties of international markets—risks and uncertainties that have been inadequately reflected in the Bank's policy advice and investments.
- To determine how best to advise countries with a strong comparative advantage in primary commodities that have poor prospects in the global market.
- To think of development in the long term (15 to 20 years) rather than the medium term (two to five year).

The Bank also needs to recognize its

The Bank's Main Contributions

Developing strategies that focus on smallholder agriculture. The Bank's support for the development of smallholder agriculture has been unwavering since Robert McNamara's Nairobi speech in the early 1970s. The Bank has emphasized in each country the central importance of the smallholder sector for overall economic development, contributed to mobilizing resources of recipient countries and other donors for investment in this sector, and articulated policies necessary for its development. For example, Nigeria experienced considerable political and policy instability and gave priority to large-scale irrigation and mechanized farming in the 1970s. But the Bank upheld the interests of smallholder agriculture and helped weld it to Nigeria's agricultural strategy. Malawi and Cameroon gave priority to the estate and plantation sectors in the early 1970s, and here too the Bank shifted the focus of its assistance to the smallholder sector.

Contributing to growth through project investments. The Bank did much to span the growth of smallholder tea and coffee production during the early stages in Kenya. It financed smallholder tea production in the 1960s and coffee and tea processing facilities in the 1970s. Similarly, the first credit project in Kenya contributed to the growth of smallholder dairying. In Cameroon—in addition to developing smallholder cotton, coffee, and foodcrops through the Plaine des M'bo project—the Bank played an important role in dissuading the government from investing in large-scale mechanized rice production.

In Nigeria the Bank's agricultural development projects in Northern Nigeria contributed to the growth in production of

maize and cowpeas, foodcrops for which profitable technical packages exist. The Bank also transferred technology for low-cost surface irrigation by drawing on its irrigation experience in South Asia (Nigeria's capacity for small-scale irrigation remains to be developed). And the Bank played an important role in beginning to develop local capabilities in project preparation, appraisal, and supervision.

Contributing to policy reform. The macroeconomic difficulties of the late 1970s led the Bank to change its focus from project lending to structural adjustment lending. This shift has allowed the Bank to focus on improving the policy framework in Malawi—revising the taxation that was adversely affecting the smallholder agricultural sector, in which the Bank had invested during the 1970s.

In Tanzania the Bank's economic and sector work and its focus on policy-based lending identified the discrimination against the smallholder sector arising from the overvaluation of the exchange rate—and the bias of public spending toward industry and social services at the cost of agriculture.

In Kenya the Bank's emphasis on sectoral reform led to effective analysis of input distribution problems and to the reforms needed to improve their supply to the smallholder sector. This emphasis also helped improve planning and budgeting in the Ministry of Agriculture. Similar reforms are now being introduced in the rest of the governmental ministries.

Building capacity. The Bank's recent focus on national research systems is fostering a shift in research activities toward developing technologies for small-scale farmers.

exceptional comparative advantage in working with African governments to formulate long-term development strategies for countries and to mobilize international and domestic resources that fulfill the requirements of modernizing smallholder agriculture. The Bank should thus encourage other donors to play up to their (frequently unrealized) comparative advantage in, say, developing export-crop institutions (the French

and the British) or training nationals and developing agricultural research capabilities for foodcrops (the Americans).

Donors could then establish centers of excellence that are more responsive to the needs of recipient countries. This would enable them to improve the quality of their interventions and to resist pressures from constituencies at home to provide widely divergent forms of assistance.

MANAGING AGRICULTURAL DEVELOPMENT IN AFRICA

DANISH ASSISTANCE

Development assistance has an unusually broad base of support in Danish society, with the result that Denmark is one of the top performers in the level and terms of its assistance. Danish aid as a share of gdp reached the Development Assistance Committee goal of 0.7% in 1978, and there is political backing for reaching the 1% goal by the early 1990s.

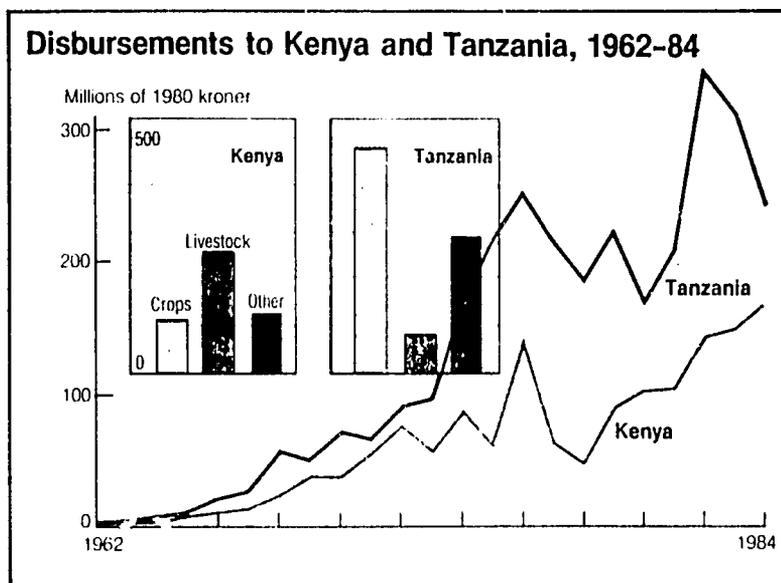
A bit over half the bilateral aid falls under the category of "untied project aid" and is on a full-grant basis; the rest comprises tied, interest-free "state loans." The administration of these two forms of aid is distinct, and the untied project aid consumes much more of Danida's administrative resources per kroner disbursed than the state loans.

One guiding principle of assistance has been poverty alleviation. For untied agricultural project aid, this principle has often been applied through the selection of geographical areas and target groups in countries. For state loans, intended to export Danish technology, this principle has been applied through the selection of countries, which must be in the low-income category by UN standards for per capita income.

Another guiding principle has been the matching of resources in the Danish economy with the composition of the aid portfolio: that is, tying. In Denmark, tying is somewhat atypical in that it is supposed to be used for items in which Denmark is more or less competitive internationally. This poses some problems for portfolio selection. Because the Danish economy is small and its resource base differs from that of recipient countries, there are few instances of direct compatibility between the areas in which Denmark excels and in which low-income recipients can clearly benefit. State loans have generally been for state-of-the-art technology exports in industry and agroindustry. Most of the hardware and technical assistance under untied project aid is also tied to Danish suppliers.

Flows to Tanzania and Kenya

Tanzania and Kenya have been two of Denmark's four main recipients. Dis-



bursements to the two countries reveal the evolving profile of their aid relationship with Denmark (see the chart). Until the early 1970s, both received much the same emphasis in Danida's portfolio. From 1973 on, Tanzania emerged as favored, in some years receiving more than twice as much aid as Kenya. In the early 1980s the large jump in Denmark's aid to Tanzania was counter to the already declining trend of most other major donors. But more recently, Denmark has also decreased its real aid disbursements to Tanzania. Aid to Kenya has shown a slower but steady increase in real disbursements.

Aid to Agriculture

Agriculture, with a quarter or more of the aid portfolio, has been the most important sector to receive Danish aid in Kenya and Tanzania over the past two decades. Although Danida has targeted a few main agricultural activities in each country, its support for agriculture has been diverse. Roughly 80 projects and programs cover a broad spectrum of crop and livestock activities, as well as various multisectoral and infrastructural activities closely related to agriculture.

The composition of aid in the agricultural sectors of the two countries reveals some striking differences (see the chart).

Livestock activities account for more than half the aid to Kenya, but only a tenth to Tanzania. Within livestock, there is also a difference in functional focus. By far the most funds in Kenya have gone to agroprocessing (in the dairy and meat industries), with sizable amounts to promoting smallholder production and research. In Tanzania there has also been some processing investment (again in dairy), but the more important activity has been education, specifically support for a veterinary faculty at the agricultural university.

Crop activities clearly dominate the Tanzanian portfolio, consuming well over half the total. The functional orientation of these and the nonspecific activities in the two countries is somewhat similar, with substantial aid going to crop processing (sugar or grain), financial transfers (to the smallholders' development banks), administration (principally to the renowned Nordic Cooperative Projects), production (especially input supply), and education (support to each country's principal agricultural faculty). Tanzania also received a fair amount of support for crop-related research through a Nordic project administered by Finland.

Behind these functional aggregates lies another important difference. The far larger disbursements to Tanzanian

crop and nonspecific activities mask the fact that the Kenyan program has required much more regular on-the-ground presence by Danida. Most of the Tanzanian program came as "bulk aid"—large shipments of chemical inputs and large checks to the rural development bank. This pattern seems to have arisen from a greater correspondence between Tanzanian and Danish objectives about target groups, which led to greater confidence that Tanzanian allocation procedures would be appropriate.

On the whole, the successes have been considerably more positive in Kenya than in Tanzania.

In Tanzania the bookkeeper training element of the Nordic Cooperative Project is a clear contribution in an otherwise lackluster portfolio. Commodity aid for chemical inputs and soap seems to have been appropriate "crisis aid," and has undoubtedly had some short-term impact in stemming economic deterioration. And the new Cooperative Project is set up to have a substantial impact, which will depend on the outcome of policy debates the Tanzanian government.

In Kenya the multifaceted support to the production, research, processing, and marketing aspects of the dairy sector might top the list. But the coffee and pyrethrum cooperatives have certainly benefited as much as the dairy cooperatives from the Nordic Project's strengthening of their general management systems. Another cornerstone has been Danida's support to the Cooperative Bank's staff development and to the strengthening of its operational procedures. While fertilizer aid to Kenya must also be regarded as a well-timed helping hand, area-specific projects for soil and water management may have a longer term impact. And the Rural Access Roads Program and the Rural Development Fund have in different ways contributed to the country's rural infrastructure.

There are several reasons for the different success rates. In Kenya's dairy sector, Danish investment in milk processing came to fruition because all the other favorable features were already in place. More generally, however, the successes have related to an adequate as-

essment of the resource base in the recipient country. The more laissez-faire attitude to the precise use of Danish funds in Tanzania also meant that critical resource assessments fell by the wayside. In Kenya, the greater institutional and resource assessment was a spillover from the more critical scrutiny of the feasibility of alleviating poverty.

It is probable, however, that Danida could not have successfully replicated in Tanzania the approach it took in Kenya. The systemic weaknesses in the Tanzanian policy and institutional environment can only be addressed more directly through policy conditionality, a task for which a small donor like Danida is not well equipped.

Policy Conclusions

Danida has engaged in four types of resource transfers, with mixed results.

(1) *The transfer of Danish capital goods (mainly through state loans) has been least positive.* Only in the dairy processing investments in Kenya does there appear to have been a clearly positive role for Danish state-of-the-art technology. Elsewhere, investments have been faulty for one or more of three reasons. First, they have been unsuited to the demand conditions in the country (as for instance in slaughterhouse investments in Kenya). Second, they are too sophisticated to work well in the production environment (sugar processing in Tanzania). Third, they require the application of inappropriate factor intensities in view of the factor proportions in the recipient economy (grain storage facilities in Kenya).

(2) *The transfer of Danish commodities through import support has been more positive* even though Denmark's specialized product mix does not readily lend itself to appropriate import support to developing economies. If product identification can be informed and suitable distribution channels found, import support can be an extremely helpful form of "crisis aid." This has been demonstrated by the supplies of chemicals to the soap industry and of fertilizers and pesticides to agricultural producers in Tanzania. To increase the potential of commodity aid, the study recommends widening the basket of commodities that can be provided—

both by allowing for the provision of final (and not just intermediate) products and by relaxing the restriction that the commodities should be internationally competitive.

(3) *The transfer of Danish "know-how" has been an important part of the aid portfolio,* through the ample provision of technical assistance in project work. The effectiveness of such projects has depended on the match between the abilities of the Danish personnel and the needs of the recipient economy. In Kenya, Danish livestock specialists have contributed to the dairy subsector. By contrast, the investments in veterinary medicine education in Tanzania seem fraught with problems, because the livestock economy there has a range of constraints that do not correspond to the training of Danish livestock specialists.

Projects concerned with financial management have also had important advisory components. Here the success of the intervention has not depended so much on the appropriateness of the skill base (which has proven flexible) but on how appropriate such projects were for attaining the desired objectives. For instance, management support to economically viable cooperatives has been extremely valuable, as has support to the development of Kenya's cooperative banking system. But the various attempts to alleviate poverty by boosting the cooperatives in weak agricultural areas, have proven largely unsuccessful.

(4) *There are questions about Danida's well-established practice of transferring project responsibilities to UN agencies* when it is not in a position to muster the required expertise domestically. Danida will need to assess carefully the capabilities of each agency to take on these tasks.

The MADIA study concludes that making Danish aid to agriculture more effective will require a better fit between the resource base of the donor and the needs of the recipient. This fit requires a better identification of demand, a realization that the donor's resource base is not fixed (but can be developed to respond to the identified needs), and a restructuring of some aid to ensure better delivery. Recommendations in each area are discussed in more detail in the full report on the study.

MANAGING AGRICULTURAL DEVELOPMENT IN AFRICA

FOOD AID

Food aid to developing countries originates in food surpluses in developed countries (and is additional to assistance in other forms). But using today's large surpluses to provide food aid is justified only if it can be used to promote humanitarian and developmental objectives in the recipient countries. Attention here is focused on a few salient results from case studies of four donors and four recipients of food aid. The donors are Canada, the United States, the World Food Program, and the European Economic Community. The recipients are Kenya and Tanzania in East Africa and Senegal and Cameroon in West Africa.

Developing countries need food aid to deal with such emergencies as droughts. But they may also need food aid when there is no emergency, just a continuation of conspiring trends. First, there may be a gap between a country's needs and the aggregate supply of food at some reasonable level of prices. Second, there may be an additional gap between the minimum needs of poorer people and the quantities of food they can buy at those prices.

The effective demand for food in developing countries grows because of the growth of population and per capita incomes. Since the poor spend a large part of additional income on food, the impact of increases in per capita income tends to be strong in developing countries, particularly if the distribution of income becomes more equitable. Given fragile soils, traditional technologies, and other characteristics, developing countries may not be able to increase their production of food fast enough to meet their growing effective demand for food. The capacity to bring in commercial imports to fill this gap may also be limited. Food aid helps to fill the remaining gap. It also releases foreign exchange for other important purposes and helps to prevent increases in domestic food prices. It thus provides an important resource to promote development and equity. (The foregoing relationships hold in most developing countries.)

Demand-based Requirements

In a study of 87 developing countries,

1. Food Aid Requirements

	1980	1985	1990
<i>Kenya</i>			
Food aid requirements ('000 tonnes)	58	777	1,745
Population (millions)	16.8	20.6	25.4
Requirements per capita (kilograms)	34.5	37.7	68.7
<i>Tanzania</i>			
Food aid requirements ('000 tonnes)	172	526	1,001
Population (millions)	18.9	22.5	27.0
Requirements per capita (kilograms)	9.1	23.4	37.1
<i>Senegal</i>			
Food aid requirements ('000 tonnes)	0	78	348
Population (millions)	5.7	6.5	7.5
Requirements per capita (kilograms)	0	11.9	46.4
<i>Cameroon</i>			
Food aid requirements ('000 tonnes)	206	305	429
Population (millions)	8.6	9.7	11.1
Requirements per capita (kilograms)	24.0	31.4	38.9

Sources: Hannan Ezekiel, *Medium-term Estimates of Food Aid Needs*, International Food Policy Research Institute, April 1986; World Bank, *World Development Report*, 1986.

future demand-based food aid requirements have been estimated by projecting long-term trend rates of growth of per capita gnp and food production (accepting medium-variant UN projections of population and FAO estimates of income elasticities of the demand for food and projecting average commercial cereal imports for a base period [1977-82] at the rate of growth of per capita gnp). The estimates are subject to differences in the reliability of the underlying data in different countries and uncertainties about how past trends are likely to continue. (See Table 1.)

The estimated growth in Kenya's food aid requirements—from 58,000 tons in 1980 to 1.7 million tons in 1990 is faster than that in Tanzania's—from 172,000 tons to 1 million tons. This difference is primarily due to differences between the growth rates of population and per capita income in the two countries (Table 2). The projected population growth rate of 4.3% a year for Kenya is 16% higher than that for Tanzania—3.7%. The rate of growth of per capita gnp of 2.1% for Kenya is 3.5

times Tanzania's rate of 0.6%. Kenya's faster growth of estimated demand-based food aid requirements thus reflects its success in achieving a much higher rate of income growth and therefore in creating a much higher demand for food than that of Tanzania. Kenya's demand is also much higher than its food production.

Implications for Development Strategy

In countries with rapid population growth and a large part of the population dependent on agriculture, an agriculture-oriented and employment-oriented development strategy is needed to increase per capita incomes at a reasonable pace. Since the poor spend a large part of any additional income on food, the demand for food is likely to rise rapidly with such a strategy. Even if domestic food production also increases rapidly, the import gap and the volume of food aid for market sale that could be used to fill it would both tend to be large.

Macroeconomic policies, administrative systems, and institutional structures

2. Average annual percentage growth rates

	Population, 80-90	Gnp per capita, 65-84	Major food crop production, 80-90
Kenya	4.3	2.1	1.8
Tanzania	3.7	0.6	2.4
Senegal	2.7	-0.5	0.0
Cameroon	2.6	2.9	2.5

Sources: Same as for Table 1.

should all favor the broad-based rural development that such a strategy would involve. But if the large volume of food aid needed for that strategy is not forthcoming, the pace of development could be adversely affected.

The food-aid estimates suggest that developments along these lines are already occurring in Kenya and could be pushed even further if additional food aid were available. In this sense, Kenya could absorb these added quantities of food aid. Tanzania's slower growth would result in a slower growth of demand for food. So, it could not absorb as much food aid through the market as Kenya.

Additional Need-Based Requirements

The foregoing estimates of food aid requirements are demand-based. They do not cover additional need-based requirements, for which there are no estimates. Because the more rapid rise in demand-based requirements in Kenya than in Tanzania is due primarily to Kenya's much higher rate of growth in per capita, it would be reasonable to assume that the additional food requirements to meet the minimum nutritional requirements of the poor are likely to be relatively smaller in Kenya than in Tanzania. So, if minimum nutritional requirements are to be met, more feeding and income transfer projects will be needed in Tanzania than in Kenya.

Feeding projects are difficult to organize and to target. When these projects try to target individual family members considered to be particularly vulnerable, intrafamily adjustments in consumption often defeat the purpose of targeting. This problem suggests that what is needed is some way of increasing the real incomes of poor families. In general, incomes can best be increased by

employment programs, which tend to be self-targeting. Only the poor would be willing to work as unskilled laborers—usually on construction projects—for low wages.

Employment-oriented projects aimed at immediately increasing the real incomes of poor families can create assets that in turn can raise levels of employment and income in the long run or add to long-term social welfare. This reasoning justifies the adoption of an employment-oriented rural infrastructure program supported by food aid. Food aid could cover the additional consumption of workers resulting from the additional income they earn in such projects. Workers do need to buy other things and other expenses have to be incurred on such projects if they are to play a useful long-term role in the economy.

A survey of a small selection of World Food Program projects in Senegal and Tanzania shows that food costs range from 12% to 34% of the total costs of projects. How can the remaining costs of projects be covered? One possible source of finance is money generated from the sale of the food provided as aid to meet demand-based requirements. Tanzania, with smaller demand-based food aid requirements would be able to generate less funds than Kenya, though its need for employment-oriented projects and the urgency of the need for infrastructure are both likely to be greater.

Food-Aid Strategy

Feeding programs and rural infrastructure projects require a strong administrative and institutional structure. The fact that Tanzania has not been able to organize itself to achieve gnp per capita growth of more than 0.6% a year—under conditions that were generally more favorable than those in Ken-

ya—suggests weaknesses in its administrative and institutional structure as well as in its macroeconomic policies and overall development strategy.

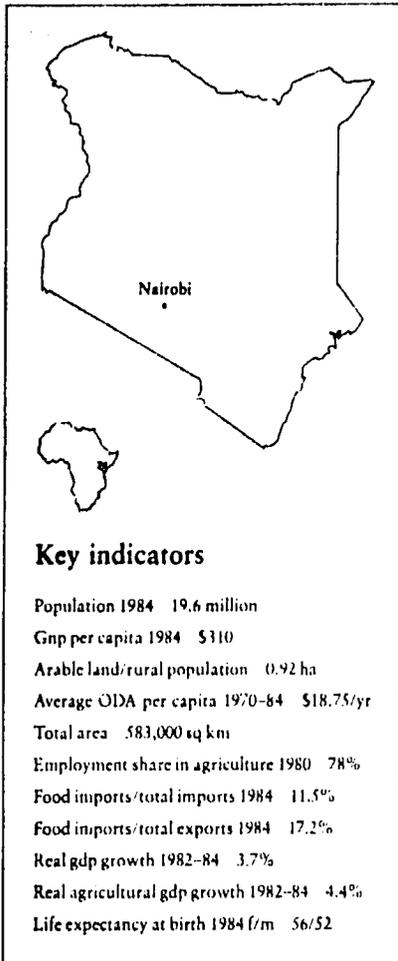
It has been pointed out that Tanzania's purposeful dismantling of its historical institutional base and its experimenting with many new institutional arrangements greatly destabilized the environment for smallholder production. The greater need for feeding and rural employment-oriented infrastructure projects thus appears to coincide with greater weaknesses in a country's capacity to implement them. But such capacity need not remain weak. It can be strengthened and enlarged in the process of implementing an appropriate program of such projects, particularly if efforts to do this are part of a wider effort to accelerate economic development.

Rural infrastructure is crucial in increasing agricultural output, employment, and income. Infrastructure's role in reducing costs of agricultural production is particularly important when the prices of imported food have fallen sharply and may remain low for some time. Food aid—by supporting a program of rural infrastructure and helping to build the necessary institutional structure and administrative apparatus—can play an important role in promoting development.

If the food aid needed to meet demand-based requirements at any particular growth rate is not made fully available to a developing country, its development could slow down. Moreover, a developing country could speed its development through an employment-oriented strategy and through improvements in macroeconomic policies, administrative systems, and institutions if it could obtain the additional food aid that it would then need. Suitable food-aid-supported rural infrastructure projects could support such a strategy. They could bring about urgently needed improvements in nutrition among vulnerable sections of the population while helping to promote further increases in income growth rates.

Developing countries thus need to develop a food aid strategy as well as a development strategy into which food aid can be properly fitted. And donors can use the food aid they provide to support such a program as an important way of promoting development in the countries they assist.

MANAGING AGRICULTURAL DEVELOPMENT IN AFRICA HIGHLIGHTS FROM KENYA



- Kenya has done more than the other MADIA countries in reconciling growth with equity—this, despite its general image as a capitalist country unconcerned with equity. It used the base of institutions it inherited at independence to broaden the benefits to a large number of smallholders.

- With a peaceful transition of power in 1979, Kenya has enjoyed a stable political system since independence. And unlike the other countries, Kenya's politicians have slanted agricultural policies in favor of smallholders. (Rights to land and to grow export crops were at the center of the independence struggle).

Macroeconomic and Agricultural Performance

- There has been a strong interaction between agricultural growth and gdp growth. Gdp grew at the impressive rate of 7.8% a year until about 1973 and agricultural gdp at 5.4%. After the first oil shock, gdp growth slowed to about 5% a year and agriculture to 4%. Kenya maintained its robust growth after the second oil shock at about 4.3% a year during 1979-81.

- Agriculture was at the center of that overall performance. It did far better in

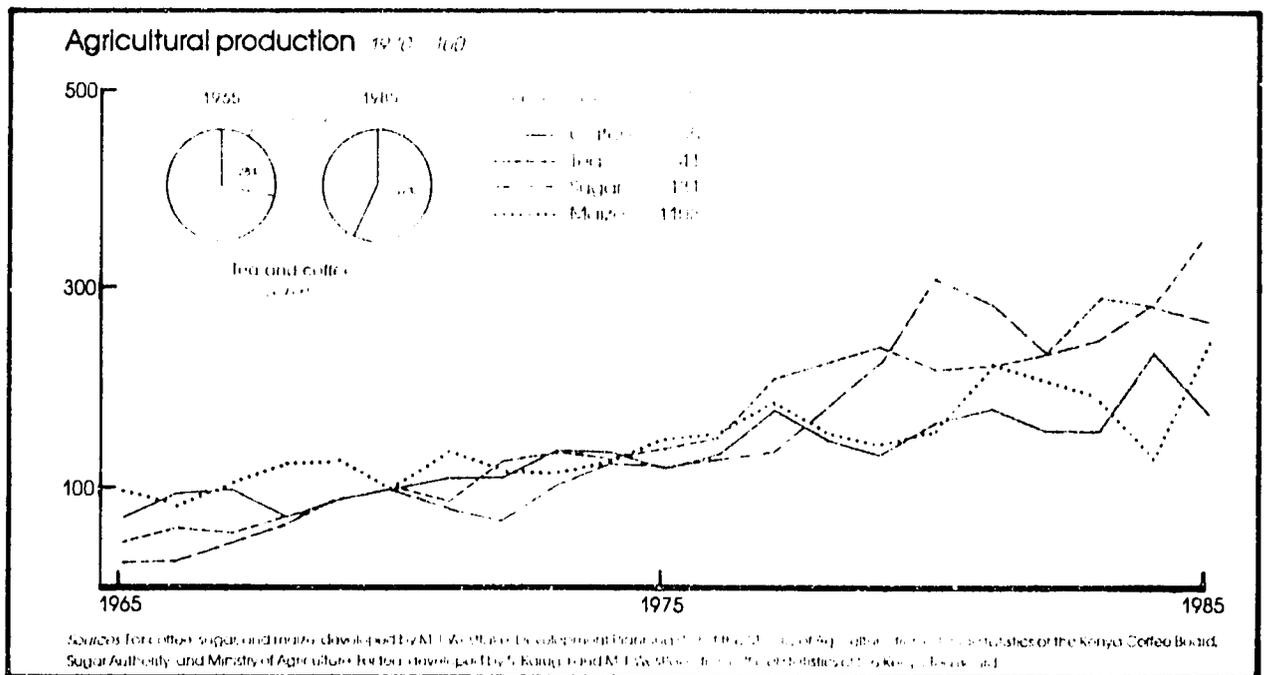
Kenya (growing 1.5% a year during 1979-81) than in Malawi (-3.9%) and Tanzania (-1.0%). Kenya also experienced greater external shocks from terms of trade changes, higher interest payments, and changes in import demand.

- Land pressure is greater in Kenya than in Tanzania, with 0.9 hectares per rural inhabitant compared with 2.7 hectares in Tanzania. Much of the population and most of the high-value, labor-intensive production is in or near the former White Highlands, which receive reliable rainfall. Population pressure is nevertheless increasing in the less productive semiarid areas.

Policy Environment

- Kenya's success in agriculture is explained mainly by its generally conducive macroeconomic and agricultural policies. Its exchange rate was frequently adjusted to avoid overvaluation. Its investment rate was high and relatively stable, rising from 22% of gdp in 1967-73 to 27% in 1979 (following the coffee boom) and returning to 21% in 1982.

- Kenya's investment rate in agriculture was similar to Malawi's but much



46

higher than Tanzania's. Kenya invested more of its revenue in transport than did Tanzania, and its broad road network has been critical for developing small-holder cash crops.

- Kenya has a highly effective system of agricultural research for tea and coffee—and more effective systems than its neighbors for input supplies, agricultural extension, and marketing. Also important, the institutional environment for crop production has been fairly stable in Kenya (more so than in Tanzania, which experimented with many forms of rural institutions).

- Kenya's social spending has been larger than Malawi's and as a result of the greater investment in primary and secondary education, the gap between Kenya and the other countries in human capital base has been widening.

- Also in sharp contrast to both Tanzania and Malawi, Kenya passed on near-international prices of tea and coffee to smallholder producers. From 1970 to 1984 coffee producers received an average of 94% of the international price, and tea producers 80%, compared with 43% for coffee in Tanzania and 25% for smallholder tobacco in Malawi.

Average annual percentage growth in volume, 1970-85

Export:

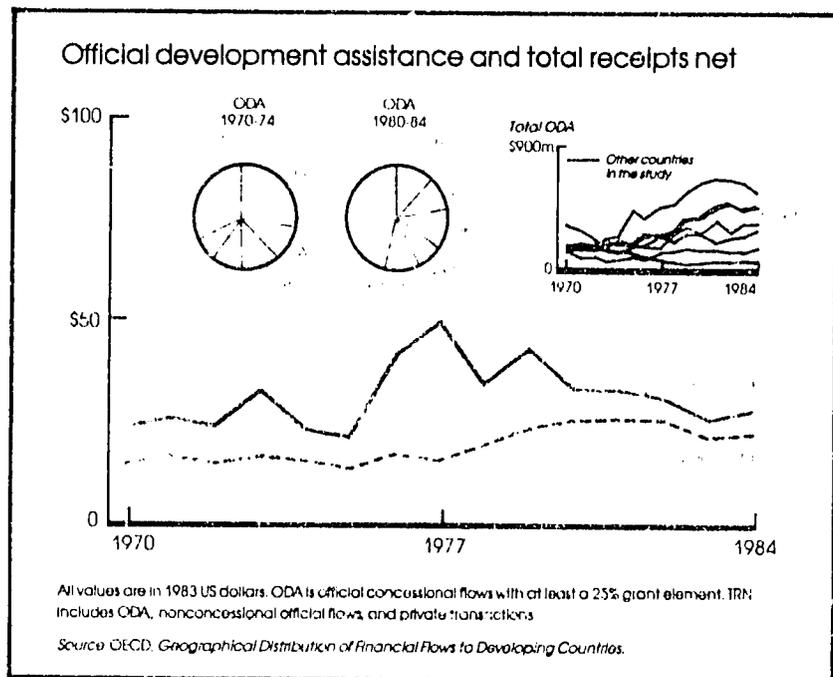
Coffee	3.8
Tea	7.5
Horticultural crops	12.7

Production

Coffee: smallholder	6.0
estate	1.0
Tea: smallholder	13.5
estate	5.5
Sugar: smallholder	16.9
estate	5.3
Dairying: smallholder	8.5
large farm	0.0
Rice: smallholder	2.8
Cotton: smallholder	4.9

Food

Maize production	3.9
-Purchases	2.4
-Sales	9.2
-Net sales	-6.8
Imports	6.4
Food aid	43.1



World Bank Assistance

- The Bank has provided \$2 billion in commitments to Kenya, of which a third has gone to the agricultural and rural sector in 29 operations. After Robert McNamara's Nairobi speech in 1973, the amount going to agriculture and rural development increased sharply—from \$40 million in 1970-74 to \$257 million in 1975-79.

- Then, after a combination of macroeconomic difficulties and problems in project implementation led to the cancellation of a number of projects and a shift of the Bank's focus from project lending to macroeconomic and sectoral reform. The share going to agriculture declined from 35% in 1975-79 to 17% in 1980-86.

- The project portfolio in the 1970s did not adequately reflect the emphasis of the Bank's economic and sector work, nor was it based on a clearly articulated strategy of agricultural development. It included a wide variety of projects including group farming, large scale irrigation, sugar production, livestock, fisheries, integrated rural development, semiarid area development, and so on. Because of poor design, many did not meet the poverty mandate and had negative rates of return. Compare that experience with Bank-financed projects for smallholders in tea and coffee and

for agricultural credit for smallholder dairying. These have been clear successes, with economic rates of return ranging from 15% to 40%.

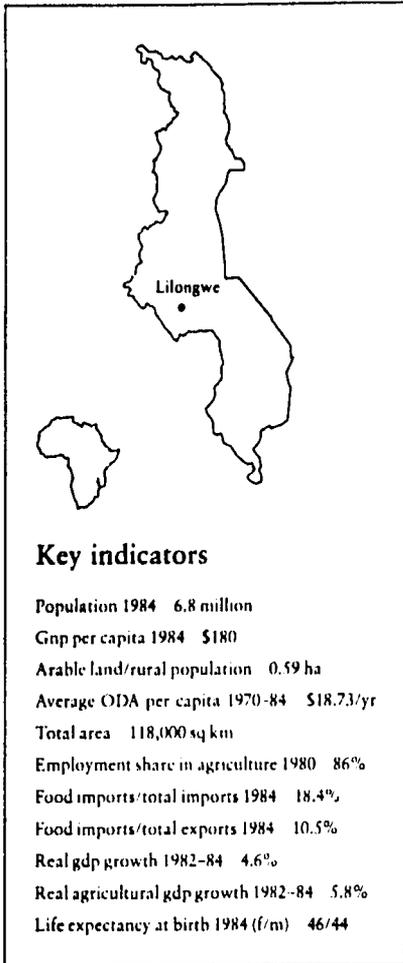
- The Bank had moreover, adopted a policy of not financing the expansion of tea and coffee production, but of assisting tea-producing countries only with the processing and intensification of their existing production. Paradoxically, the Bank's processing projects played an important positive role in expanding the smallholder area under cultivation. But smallholder yields did not increase as the Bank had wished.

- Given Kenya's clear comparative advantage in tea and coffee and the government's policy to expand their production (against Bank advice), the Bank needs to reconsider its policy stance on the future development of these crops.

- Given Kenya's generally favorable macroeconomic management, the focus of the Bank's structural adjustment dialogue in the 1980s has been on liberalizing markets—reforming parastatals, improving land tenure, strengthening the planning and budgeting capacity of the Ministry of Agriculture, and improving agricultural research, extension, and credit system. These efforts address fundamental problems that limited the success of projects in the 1970s.

48

MANAGING AGRICULTURAL DEVELOPMENT IN AFRICA HIGHLIGHTS FROM MALAWI



- Malawi launched the strongest pursuit of growth of the MADIA countries and, despite its poor resource base, achieved the fastest growth in the 1970s. Malawi's performance nevertheless raises questions about tradeoffs between growth and equity, for its record on equity is among the poorest of the countries in the study.

- Under the stable leadership of President Banda, Malawi's impressive growth in agriculture and trade has come mainly from the estate sector, which produces tobacco, tea, and sugar. Smallholders participated little in that growth, a fact masked until the end of the 1970s because of Malawi's excellent macroeconomic performance.

Macroeconomic and Agricultural Performance

- Of the study's countries, Malawi has the poorest resource base (next to Senegal) and the lowest per capita income. It is also the only landlocked country of the six. The recent closure of the Ncala and Beira ports in Mozambique has increased Malawi's internal transport costs by \$30 million, or 2% of gdp. This problem is particularly pressing given the high share of trade in gdp,

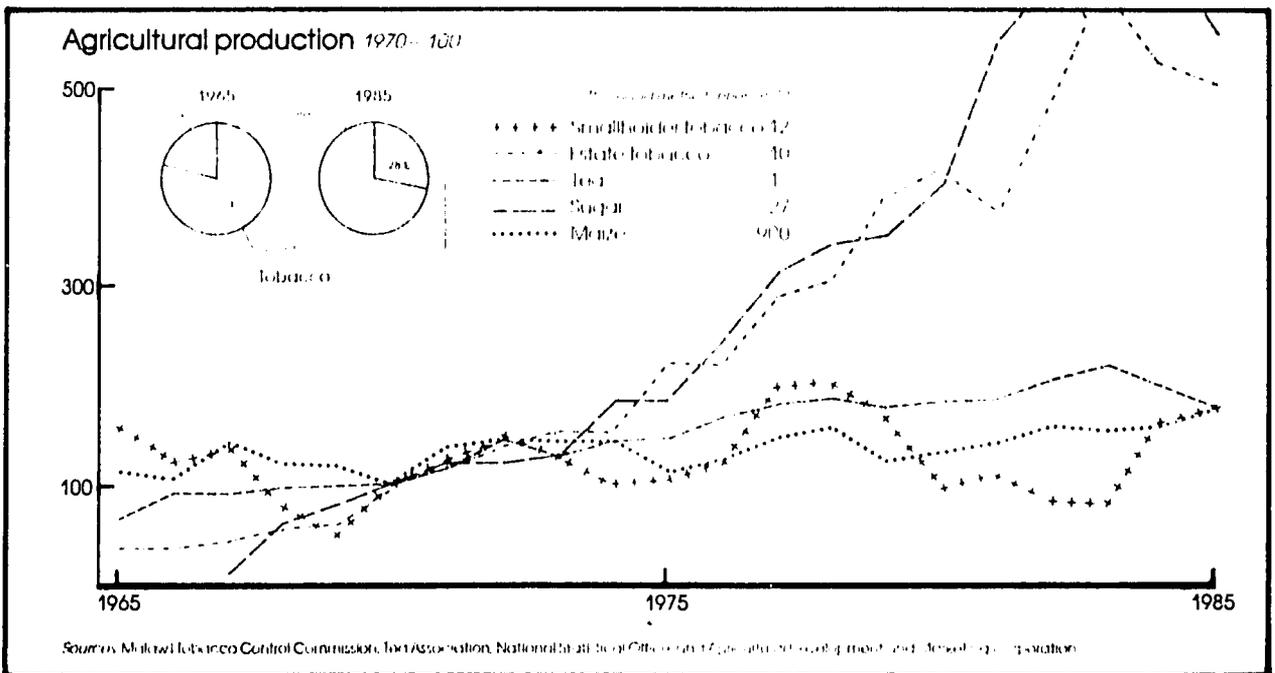
up from 50% in 1965 to about 60% in 1984.

- Before the first oil shock, Malawi's economy was growing at 4.6% a year, agriculture at 2.8%. After the shock, the economy and agriculture continued to move more or less in step—a bit faster during 1974-78, at negative rates during 1979-81, and back roughly to their rate before the first oil shock during 1982-86. About 85% of employment is in agriculture, and about 90% of the value of trade is from agriculture.

- Throughout the period, the production of smallholders has been constrained by the lack of technical change. About 90% of smallholders cultivate land by using hand hoes and traditional varieties of seeds. The production of most smallholder crops (cotton, groundnuts, and rice) has declined.

Policy Environment

- Malawi has avoided an overvalued currency through regular adjustments of the nominal exchange rate. Moreover, Malawi has enjoyed fiscal surpluses as a percentage of gdp, 2.4 percent in 1967-73 and 0.7% during 1982-86. Inflation has also been declining, from 12.5% to 5.4%.

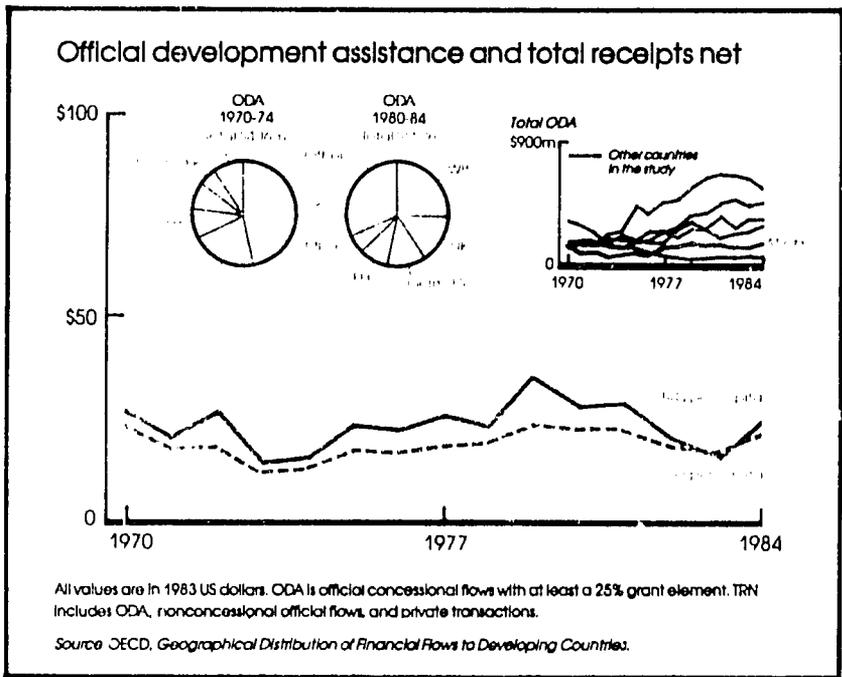


- The excellent macroeconomic performance has been colored by the small gains in social welfare. Malawi's share of social spending is lower than Kenya's and Tanzania's and has declined over time. Malawi also has a very high infant mortality rate, few physicians, a weak record in education, and one of the lowest life expectancies.

- Agricultural policies for land, export crops, and producer pricing have created a dual agricultural sector—a burgeoning estate sector and a stagnant smallholder sector (with 1.1 million households).

- The management inefficiencies associated with the rapid growth of estates in the 1970s led to low yields and poor debt repayment. They also led to underused land: less than 20 percent of the leasehold land is cultivated—this in a country where land pressure has been growing, particularly in the south.

- Malawi's institutions have, however, been generally well run, and many well-trained Malawians have taken over



Average annual percentage growth in volume, 1970-85	
Exports	
Tobacco: burley	14.1
Tobacco: flue-cured	9.2
Tea	5.2
Sugar	28.1
Groundnuts	-13.2
Cotton	-12.5
Production	
Tea: estate	4.5
Tobacco	
-Smallholder	0.3
-Estate: burley	15.4
-Estate: flue-cured	10.4
Sugar: estate	14.7
Rice: smallholder	-2.7
Groundnuts: smallholder	-7.2
Cotton: smallholder	1.1
Food	
Maize production	1.5
-Purchases	19.1
-Sales	23.7
-Net sales	4.6
Imports	3.1
Food aid	28.6

agricultural management and, increasingly, policymaking. Nor has Malawi suffered Kenya's and Tanzania's problems of time-consuming procedures, failures to plan and implement, uncertain timing, poor performance by professional staff, and day-to-day undermining of technical ministries for political reasons. Malawi has also escaped the shortages of foreign exchange, imported inputs, and spare parts in the smallholder sector that have plagued other countries.

- The macroeconomic reforms Malawi has pursued in the course of structural adjustment include a doubling of producer prices for smallholder crops, a reduction in public expenditures, and increased effort at cost recovery, including the abolition of subsidies. There has also been greater emphasis on agricultural research and fertilizer use on smallholder crops.

World Bank Assistance

- The Bank's lending to Malawi has amounted to \$660 million, of which 26% has gone to the agricultural and rural sector. Unlike in Kenya and Tanzania, where much Bank lending went to agricultural parastatals for processing, all of the Bank projects in Malawi in the 1970s (involving \$220 million) were for smallholder production through integrated rural development and national agricultural projects.

But as in other African countries, these projects suffered from technological optimism and depended on financial resources and on planning and implementing capacities well beyond Malawi's reach.

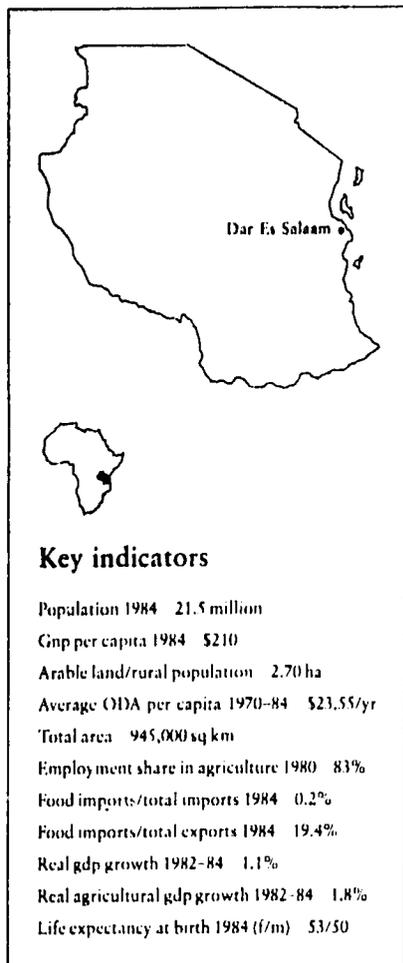
- The Bank and other donors, distracted by Malawi's growth, overlooked the way smallholders were being discriminated against by land policies, producer pricing, controlled licensing, and limited access to credit. The competition between the estate and smallholder sectors was not fully recognized by the Bank until the late 1970s, when Malawi's macroeconomic difficulties and the limited impact of Bank projects became evident.

- Malawi's relatively favorable macroeconomic and administrative environment may partly explain why seven agricultural projects audited by Bank in Malawi have all had positive rates of return. (In contrast, seven of ten projects in Tanzania and three of seven in Kenya had negative returns.)

- Through three structural adjustment loans in the 1980s, the Bank has focused on the reform of producer incentives and on the diversification and efficiency of estate production. The Bank also approved a fertilizer loan for the smallholder sector in 1983 and an agricultural research project in 1985. Both are aimed at addressing technological constraints in the smallholder sector.

44

MANAGING AGRICULTURAL DEVELOPMENT IN AFRICA HIGHLIGHTS FROM TANZANIA



- Tanzania's pursuit of equity has been the most vigorous of the six countries in the MADIA study. Under the stable leadership of Julius Nyerere, Tanzania also stressed traditional values more than most other developing countries.

- Widespread interest in Tanzania's approach was translated into aid. Tanzania has received more aid than Kenya and Malawi (a peak of \$621 million in 1983). It has also received more aid per person (\$35 in 1981) and per dollar of gdp (10% on average during 1970-84).

Agricultural Performance

- Tanzania's agriculture grew at 6% a year in the 1960s as roads were built, the cultivated area was expanded, and marketing systems were developed for sisal, cotton, cashews, wheat, and rice. But it has been stagnant since the early 1970s. Unlike most countries, Tanzania had its share of agriculture increase (from 41% of gdp in 1967-73 to 52% in 1982-84) and its share of industry decrease (from 12% to 10%).

- The production of export crops (cotton, sisal, and cashews) also retreated because of the overvalued exchange rate. Smallholders responded to the declining incentives for export crops by falling back on more subsistence farming. But even

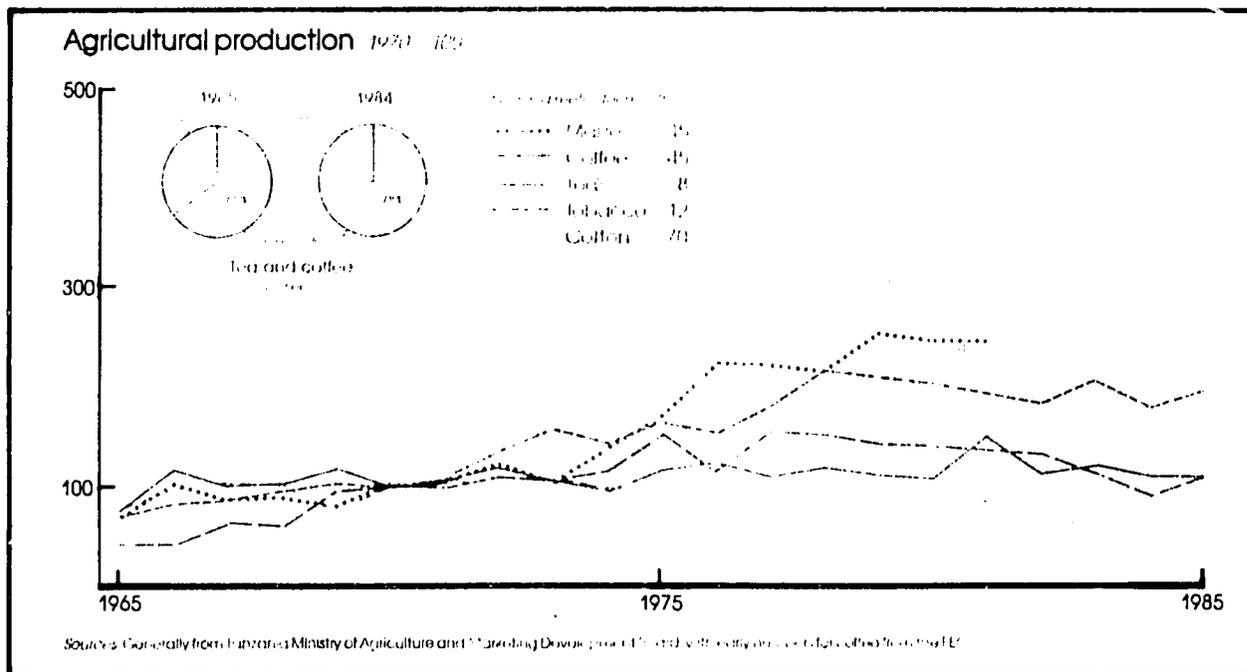
traditional food crops did poorly. By the end of the 1970s only a tenth of the area under maize used improved seed, compared with more than half in Kenya.

- Tanzania's endowment in some ways is less favorable than that of its neighbors. For example, it inherited much poorer physical and institutional infrastructure at independence than Kenya did, and that (along with the sparsely distributed population) has made transport costs high. But Tanzania has also enjoyed some advantages. Its (mostly medium quality) cultivable land of 2.7 hectares per rural inhabitant is three times the amount in Kenya and 4.5 times that in Malawi.

Policy Environment

- The main causes of Tanzania's agricultural decline have been its macroeconomic and sectoral policies. The Basic Industries Strategy, adopted in 1975, diverted investments to the industrial sector, whose share in the budget went up from less than 10% to 24% in the second half of the 1970s. The share of agriculture, meanwhile, declined from 36% to 11%.

- The centerpiece of government policy was villagization—moving some 10 to 13 million people into nuclear villages between 1972 and 1975 and disrupting



45

production patterns.

- Because of these policies, Tanzanian agriculture continues to suffer from inadequate infrastructure—and one of the lowest scores for miles of road per capita in Africa. Government spending on transport decreased from 18% to 6% of the budget between 1972 and 1983, far lower than the shares in Kenya and Malawi (11% in 1983). Private trucking also dwindled in the 1970s.

- The instability of agricultural marketing policies has also hurt production. In 1976 all the marketing cooperatives were abolished and replaced by parastatal crop authorities, and the prices of more than 1,000 goods were controlled. After the parastatals incurred enormous losses, cooperatives were reintroduced in 1982, and there was some privatization of agricultural trade in 1985.

Tanzania has been cushioned more than Kenya and Malawi were from external shocks to terms-of-trade changes, oil price increases, higher interest payments, and declines in import demand. It nevertheless suffered more from the breakup of the East African community

—given its lack of access to transport and research services.

World Bank Assistance

- The Bank supported Tanzania's socialist experiment in the 1970s with an assistance program that was one of its largest per person. Although the Bank expressed concern about the need to exploit the most obvious productive potential for maintaining agricultural growth, it was for the most part uncritical of Tanzania's policies. Except for advocating moderation in the shift to industrialization, the Bank was similarly uncritical of the government's sectoral priorities. Only in 1982 did the Bank recommend that the commitment to agriculture be increased.

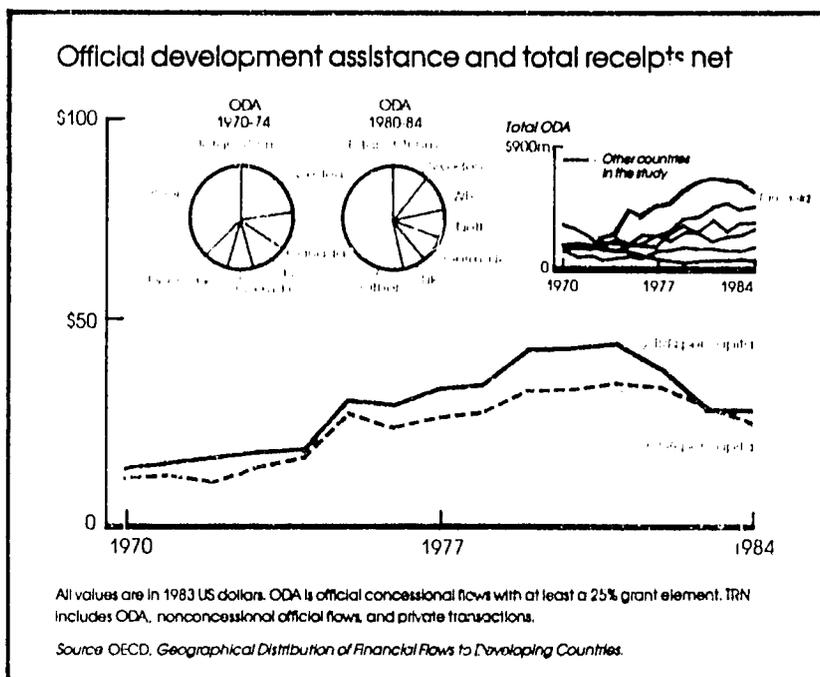
- From 1970 to 1984, the World Bank was the second largest donor (after Sweden) to Tanzania, with (mainly IDA) commitments to agriculture of \$371 million through 25 operations. The Bank's lending to agriculture increased rapidly after Robert McNamara's Nairobi speech in 1973. But its commitment to industry has also been extraordinarily high (20% of the total), reinforcing Tanzania's flawed industrialization policies (In Kenya the share of Bank lending to industry was 1% and in Malawi 5%.)

- Agricultural lending has gone mainly to regional integrated development projects and to parastatals processing export crops.

- The regional projects, providing agricultural and social services to low-income rural populations, were too complex in design, and they overloaded Tanzania's limited capacities in planning, finance, and implementation. The parastatal projects, established to increase processing capacity, failed to realize positive rates of return due to the decline in export crop production. (Of the study's countries, Tanzania has had the most projects with negative rates of returns.)

- In 1982 the Bank approved an export rehabilitation credit of \$50 million and financed an advisory group for a program of structural adjustment. But the government's proposed program fell far short of the adjustment required. As a result, Bank lending since 1982 has included no projects in the rural-agricultural sector and no structural adjustment loans. Instead, the Bank's focus has been on transport and utilities.

- The government has plans to halt the practice of confining imported goods to specific parastatals, adopt minimum increases for producer prices, and further liberalize the grain trade. In addition, it has recently extended to some nonparastatal organizations the power to export crops and to import and distribute inputs. This prompted the Bank in November 1986 to approve an IDA credit of US\$50 million and a special African Facility loan of \$46 million for multisector rehabilitation.



Average annual percentage growth in volume, 1970–85

Exports

Coffee	0.8
Cloves	-2.7
Tobacco	-4.7
Cotton	-2.3
Sisal	-5.9
Cashewnuts	-6.8
Tea	1.9

Production

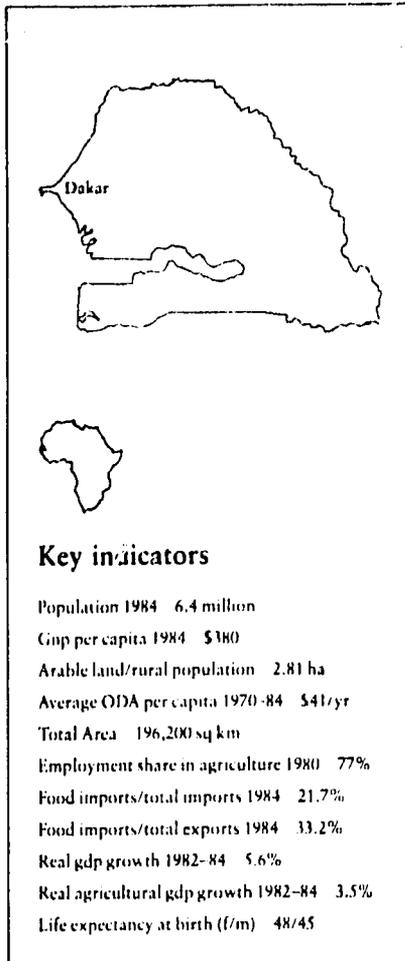
Coffee: smallholder	2.3
Coffee: estate	-4.1
Tea: smallholder	13.7
Tea: estate	1.0
Tobacco: smallholder	-4.8
Tobacco: estate	-7.5
Sugar	0.8
Cotton: smallholder	1.6

Food

Maize production	2.1
-Purchases	1.1
-Sales	1.9
-Net sales	0.8
Imports	3.0
Food aid	23.5

46

MANAGING AGRICULTURAL DEVELOPMENT IN AFRICA HIGHLIGHTS FROM SENEGAL



- Senegal has had a stable and a democratic political system, but it also features a high degree of state control and unstable agricultural institutions.

- Of the MADIA countries, it has the least favorable natural resource endowments and the most external assistance per capita. The share of official development assistance in government spending averaged about 42% during 1970-84, nearly twice that in Cameroon (23%) and Kenya (22%).

Macroeconomic and Agricultural Performance

- Senegal's macroeconomic performance has been poorer than that of the other MADIA countries. Since 1960 the growth of gdp has been slower than that of the population, so real per capita incomes have declined.

- The economy maintained a reasonable balance between gdp and total spending until 1975, but then public and private consumption rose while gdp stagnated or declined. Senegal's savings ratio has thus deteriorated and is low relative to that of the other MADIA countries. And after 1975 the government used a major part of foreign bor-

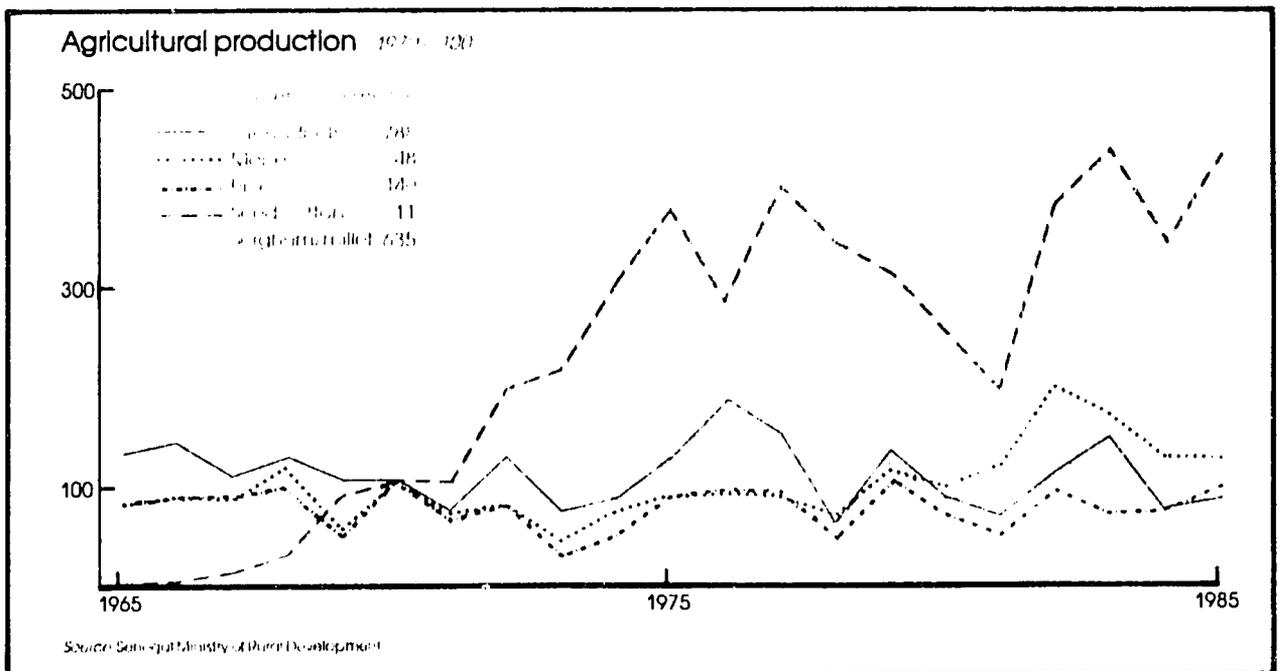
rowings to support consumption rather than investment.

- During 1970-84 agriculture grew at only 0.5% a year, but this poor performance did not affect gdp growth much because agriculture's share in gdp declined from 24% in the early 1960s to 11% in the early 1980s.

- Senegal's export performance has also been poor. Agricultural exports dominate trade but their share in total exports has been declining from about 70% in 1967-73 to 40% in 1984. Their composition has also changed. Groundnuts accounted for 53% in the early 1970s, but only 11% in 1986. In contrast, the share of fisheries has been rising, reaching 25% in 1986.

- Since 1970 the country has had eight droughts and five years of untimely, poorly distributed rainfall. Production of the main crops—groundnuts (the major source of income for more than 2 million farm families) and millet-sorghums—has been stagnant. That of maize, cotton, and rice has been better, but they occupy only 6% of the cultivated areas.

- The groundnut basin contains about two-thirds of the population and three-quarters of the cultivated area but



has little surplus land. Farmers in the Casamance and Eastern Senegal mainly grow rainfed rice and cotton, while those in the Fleuve region grows rice and a few high-value crops, like tomato and sugarcane. These regions have substantial surplus land not yet under cultivation, but salinity is a problem in the Fleuve and Casamance regions.

Policy Environment

- Senegal's agricultural institutions have been in flux for 20 years. A new agency was created in 1966 to replace the original input distribution agency, and in 1971 it took over the export crop marketing board as well. It grew into an agricultural monopoly by the mid-1970s and was finally liquidated in 1980. Yet another agency was then established to provide input distribution services, but it too was dissolved in 1985.

- Adding to the confusion, a plethora of rural development agencies were established in the 1970s with the support of donors. As the donors began to withdraw their support around 1984, the government instituted a phased program to reduce the size and functions of these agencies.

- Donors have also pressed for higher producer prices for groundnuts and cereals, tariffs on rice imports, the removal of fertilizer subsidies, and the priva-

tization of input distribution and marketing.

World Bank Assistance

- Bank lending to Senegal has amounted to \$655 million, of which about 21% went to agriculture and the rural sector in the form of 14 loans and credits for projects. This lending also includes two loans and a credit worth \$124 million in support of structural adjustment in the early 1980s.

- Agricultural project lending increased sharply between 1974 and 1979, when it was largely replaced by structural adjustment lending intended to mitigate Senegal's macroeconomic problems.

- The Bank has had a three-pronged strategy for agriculture. First, it has three projects in the groundnut basin to increase the production of groundnuts and millet-sorghums, mostly emphasizing agricultural credit and extension. Second, it has five projects in Casamance and Eastern Senegal for land settlement and the development of upland rice production, maize, millets, groundnuts, and cotton. Third, it is supporting small-to-medium-scale irrigated rice in the Fleuve. In addition, an agricultural research project was financed in 1981.

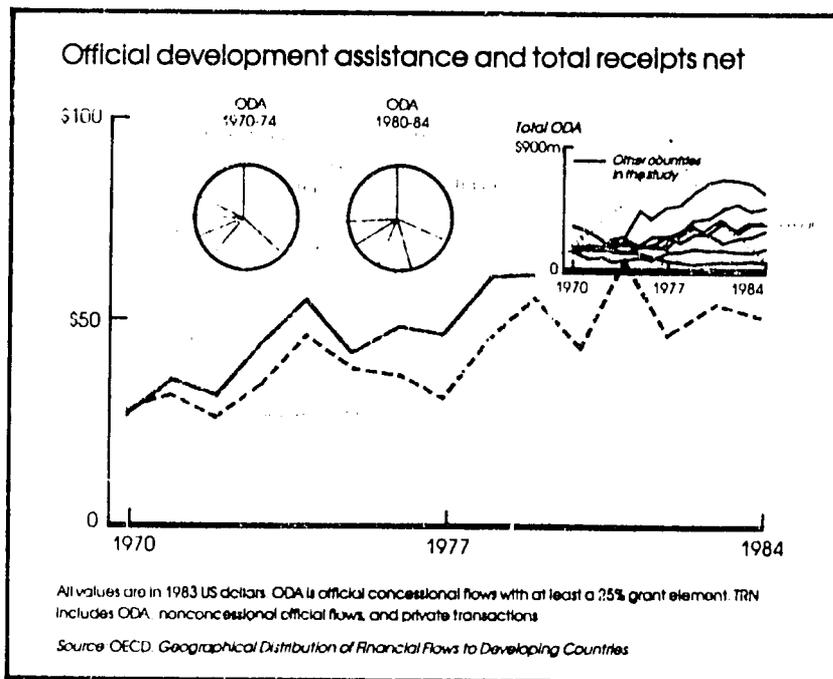
- Projects in the groundnut basin have had limited success due to droughts, the lack of technology, and

other institutional and financial problems. (But groundnut production would have been worse without them.)

- Bank projects for cotton and maize production have done well in Casamance and Eastern Senegal, but those for rainfed rice have not (rice production in Casamance fell 2% a year during 1970-84). Cotton got off to a good start with assistance from the French agency for cotton research, development, and marketing in Africa, which deserves much of the credit.

- The small-scale irrigation projects in the Fleuve have not performed well due to design problems, salinity, and poor maintenance. But unlike farmers in the groundnut basin and Casamance, those in the Fleuve have already adopted modern rice technology. Yields per hectare are five tons in Senegal compared with three tons in the Punjab in India.

- Under the first structural adjustment program, the government made progress in meeting the targets for public savings, external debt, and the finances of parastatal organizations. But the second tranche of this loan was canceled due to slow progress. A second structural adjustment program was approved in 1985 with goals similar to those of the first, but with a longer perspective.



Average annual percentage growth in volume, 1970-85

Exports

Groundnut oil (crude)	3.0
Groundnut cake	6.1
Groundnut oil (refined)	20.8
Shell groundnuts	8.1
Cotton	n.a.

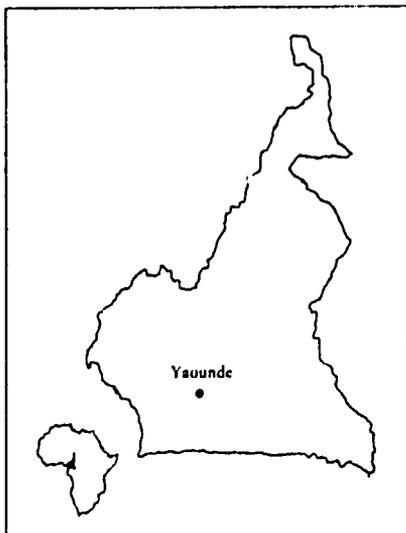
Production

Groundnuts	0.4
Cotton	6.8
Millet-Sorghum	0.2
Maize	5.6
Rice	1.3

Food

Rice imports	7.3
Wheat imports	0.5
Sugar imports	-6.8

MANAGING AGRICULTURAL DEVELOPMENT IN AFRICA HIGHLIGHTS FROM CAMEROON



Key indicators

Population 1984	9.9 million
Gnp per capita 1984	\$800
Arable land/rural population	2.63 ha
Average ODA per capita 1970-84	\$22.00/yr
Total area	475,400 sq km
Employment share in agriculture 1980	83%
Food imports/total imports 1984	12%
Food imports/total exports 1984	15.8%
Real gdp growth 1982-84	5.2%
Real agricultural gdp growth 1982-84	-1.6%
Life expectancy at birth (f/m) 1984	56/53

• Cameroon managed its transition from an agricultural economy to one in which oil plays a significant role with few disruptive shocks. Unlike Nigeria, it has enjoyed a sustained period of political, economic, and social stability. And despite the oil boom, its agricultural policies have also been more stable and predictable.

• Agriculture has been important in Cameroon's economic development, accounting for 33% of gdp, 84% of employment, and 87% of export earnings during 1974-78. Since the oil boom in 1978 the importance of agriculture has diminished, but it still accounts for 23% of gdp, 74% of employment, and 27% of export earnings.

• With oil revenues expected to decline in the intermediate future, Cameroon's prospects will depend more on the performance of agriculture, which in turn will depend on smallholder agriculture. Compared with other countries in Africa, Cameroon has been late in addressing smallholder issues and developing smallholder programs.

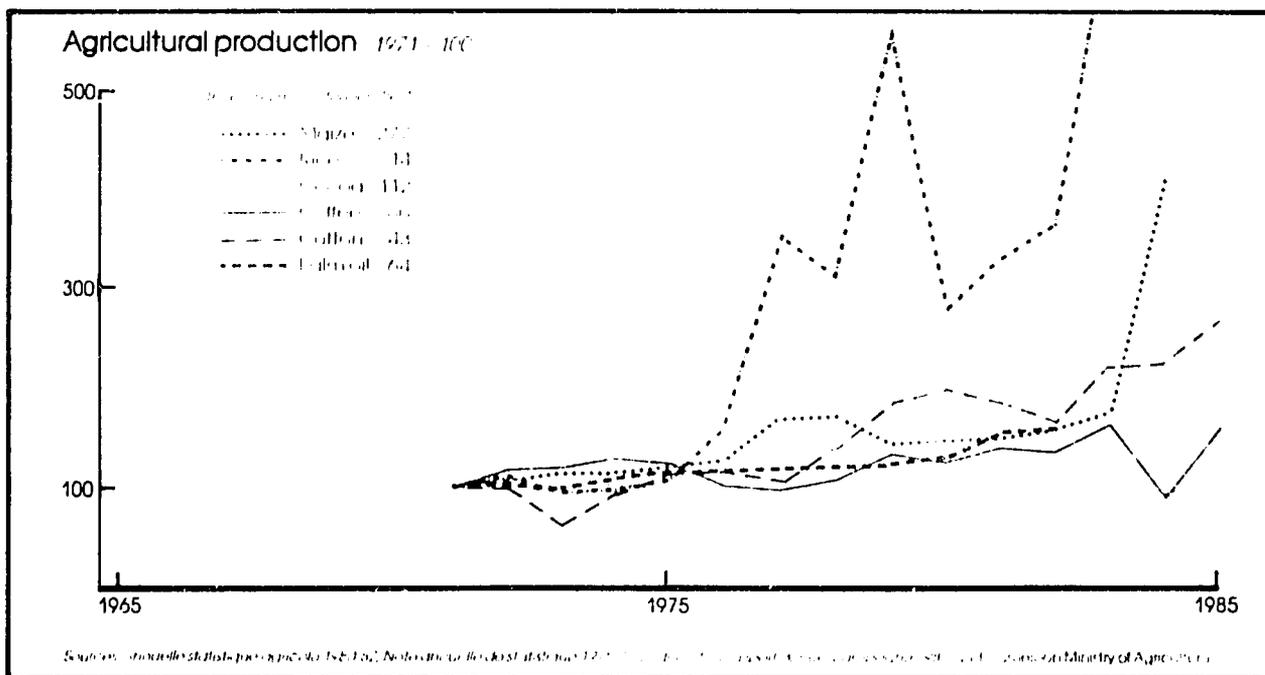
Agricultural Performance

• Among the countries in the study, Cameroon is in the middle in its agricul-

tural performance. Cameroon's public investment in the agricultural sector has strongly favored estates over smallholders, who account for 93% of agricultural output.

• Of the investments in crop development under the second, third, and fourth plans, well over half was allocated to the estate sector (72%, 52%, and 62%). Price regulations have also been targeted mainly toward the traded crops (cocoa, coffee, cotton, and rubber on the export side; rice and palm oil on the import side). This has left traditional food crops to evolve with few investments and price controls. And due to a growing effective demand for food and changes in relative profitability, food-crops have fared better than export crops.

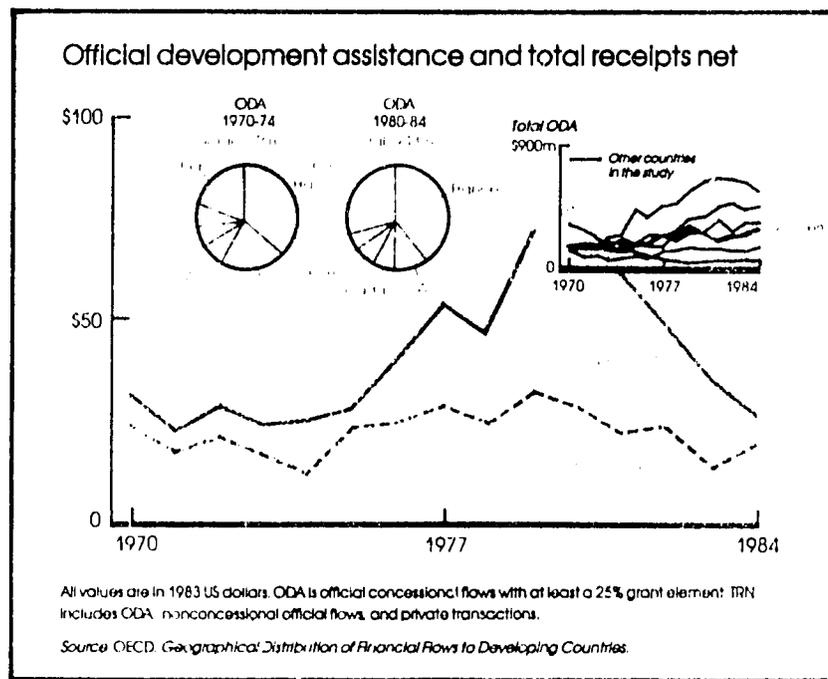
• Among the export crops, cotton has fared well, with its production growing at an average annual rate of 8.3% during 1971-85. But this growth has merely made it possible to return to the 1960s levels of cotton production. Much of the regained ground is due to the high quality of research and reliability of extension credit and input supply services. During 1971-78 the area planted in cotton was halved, as



technological improvements doubled yields. Increases in production during 1978-85 can be attributed to increases in the area of cotton planting.

- Cocoa production has been stagnant, though there were some years of sporadic increases and others of sharp decreases. The major problems are aging trees, blackpod disease, unreliable input supplies, high labor costs, poor farming practices, and an inadequate planting program. Comparisons with the Ivory Coast, which has been successful with cocoa, show that the main difference between the two countries is in the government's commitment to cocoa development.

- Coffee production increased only 1.7% a year during 1971-85. The growing output of robusta offset declines in the output of arabica, under competition from maize. Arabica yields, about half of those in Kenya, have been dropping steadily as a result of a failure to replace aging plantations, the emphasis on food crop production, the lack of an



effective disease control program, and inefficiencies associated with fertilizer delivery systems. In addition, the tax on coffee in Cameroon is high.

- Rice production has been growing 16.5% a year due to the excellent technical assistance extended to the paddy farmers. Technically, rice production in Cameroon has been efficient, and the yields are good. But the economics of rice cultivation have been questionable due to low international prices.

- Maize has been growing steadily at 4.1% a year. Its price in relation to coffee, lower labor requirements, and high yields in the volcanic areas where coffee is traditionally grown make it more attractive to cultivate than coffee.

World Bank Assistance

- Much of the Bank's early lending financed projects in the estate sector (palm oil and rubber). The Bank's early economic and sector reports, however, stressed the importance of smallholder development to Cameroonian agriculture and highlighted the major constraints on agricultural production. To deal with these constraints, the Bank recommended in 1974 that its investment program focus almost exclusively on the smallholder sector.

- Of the Bank's lending of \$1 billion to Cameroon, loans to agriculture amounted to \$395 million for 23 projects. Of this amount, 22% went to the estate sector, 40% to smallholders, 23% to projects involving both estates and smallholders (much of it to the estate sector), and 15% to smallholder-oriented projects in livestock, forestry, and research.

- The most successful Bank-financed projects are those in cotton cultivation. Other projects have either been technically or economically less successful. And along with other donors, the Bank's project lending reinforced the role of development companies, thereby continuing the cleavage in responsibilities between the Ministry of Agriculture and the numerous development companies.

- Recently, the Bank's economic reports have once again highlighted the growing importance of the agricultural sector, and its project lending has involved investment in agriculture research. The Bank's dialogue is constrained, however, by the government's desire to receive IDA rather than IBRD finances for agriculture and its reluctance to change radically its policies and institutions.

Average annual percentage growth in volume, 1971-84/85

Exports

Smallholder crops	
Cocoa	0.4
Coffee (robusta)	3.2
Coffee (arabica)	0.5
Cotton	4.6
Estate	
Rubber	-5.9
Palm oil	6.6

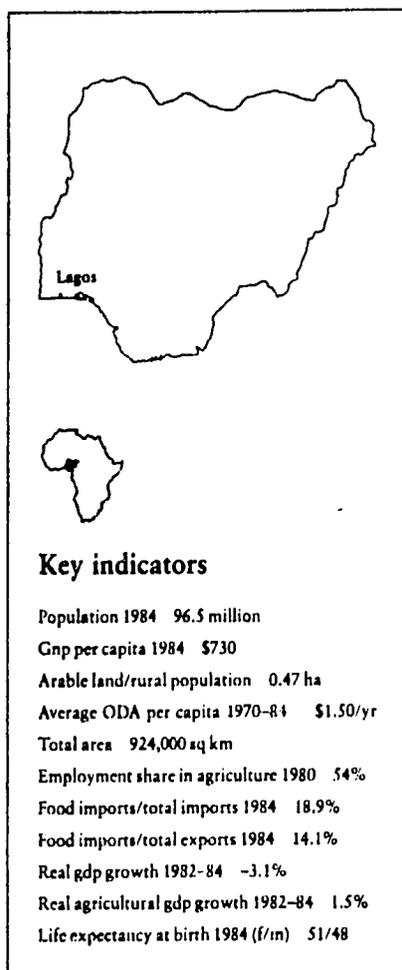
Production

Smallholder crops	
Cocoa	0.2
Coffee (robusta)	3.2
Coffee (arabica)	-3.1
Cotton	8.3
Estate crops	
Rubber	2.7
Palm oil	4.2

Food

Production	
Maize	4.1
Millet & sorghum	1.3
Rice	16.5
Imports	6.1
Aid	4.1

MANAGING AGRICULTURAL DEVELOPMENT IN AFRICA HIGHLIGHTS FROM NIGERIA



- Three things distinguish Nigeria, the largest Sub-Saharan African country in gdp and population, from the five other countries in the MADIA study. The first is the sharp decline in the share of agriculture in gdp, due to the oil boom. The second is its political instability and the structure of government, whereby the states retain primary responsibility for agriculture. The third is the dominant role of the World Bank in assistance to the country's agriculture.

- Between 1965 and 1985 Nigeria had six coups, four years of civilian rule, and two-and-a-half years of civil war. Such frequent political changes, and the associated administrative changes, have disrupted agricultural policy and programs and deprived policymakers of the possibilities of learning-by-doing.

Macroeconomic and Agricultural Performance

- Agriculture's share in Nigeria's gdp fell from about 60% in the early 1960s to less than 25% in the early 1980s. Its share of employment fell less, from 75% to 55%. Largely accounting for this marked shift in economic structure was the oil boom of the 1970s.

- Nigeria's oil boom affected the

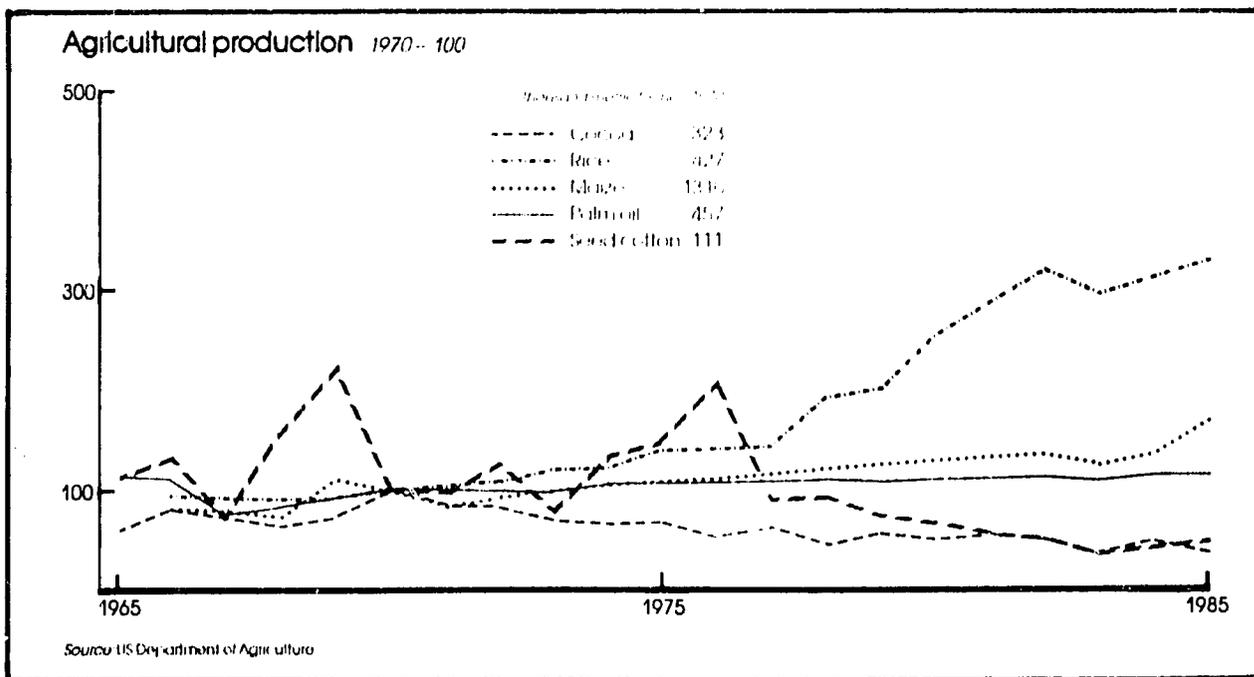
structure of trade. The share of exports in tradable output rose from 32% in the early 1960s to 73% in the early 1980s. But agriculture's share in merchandise exports fell from 81% to 3%, while imports of major commodities increased sharply. Nigeria's oil boom also lessened the political will to rehabilitate and replant trees crops.

- Government spending, having increased 15 times in the 1970s, accounted for 30% of gdp in 1980. Agriculture received only about 3% of the increased spending.

- The performance of both food and export crops was poorer in the 1970s than in the 1960s (but a big improvement is reported after 1983). The production of most food crops stagnated or grew moderately, while that of most export crops (cocoa, groundnuts, cotton, and rubber) declined. Only for maize and rice was there appreciable growth, and even that was from a low base.

Policy Environment

- Because of the changing priorities of successive regimes and the oil boom's weakening of political will, Nigeria's agricultural policies lacked continuity and stability.



- True, the marketing boards were reformed, the Nigerian Agricultural Bank was established, and great emphasis was placed on increasing food production and attaining self-sufficiency in food in the 1970s. But the policy instruments were economically dubious (large-scale mechanized farms and irrigation schemes), unsustainable (Operation Feed the Nation), or changed too frequently and starved of funds (the national research system).

- In the early 1980s the Nigerian fourth plan put greater emphasis on smallholders, along the lines of the Bank's agricultural development projects. In practice, however, the large irrigation schemes received relatively more funding.

- Macroeconomic policies also adversely affected the structure of agricultural incentives, and the growth of agricultural exports. The overvalued naira and the resulting wage escalations created a double squeeze on agricultural exports—low real producer prices and high real wage costs.

- Since 1985 the exchange rate has been moved closer to the market rate, the commodity boards have been abolished, and the fertilizer subsidies have begun to be phased out. In addition, negotiations are in progress for debt rescheduling. These changes, together

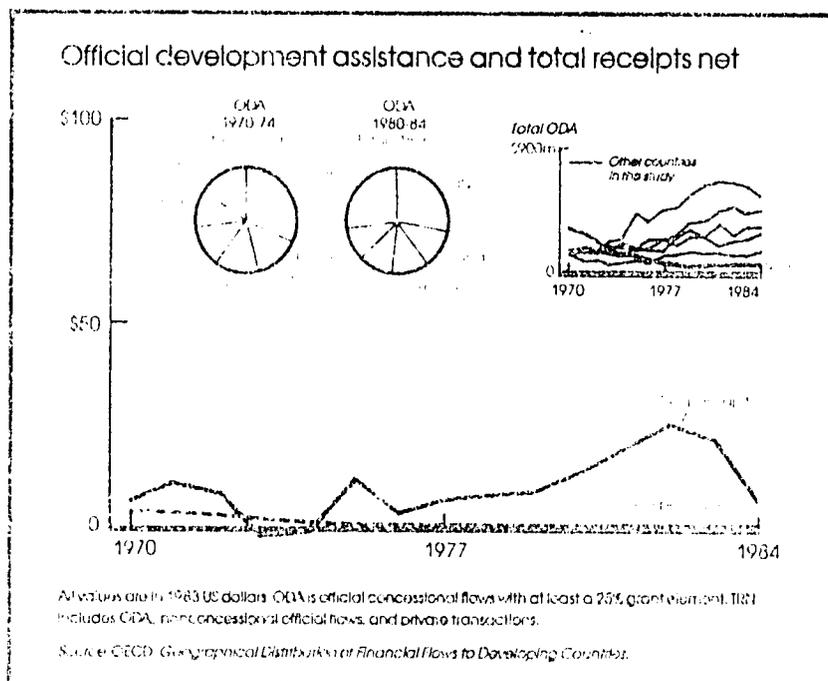
Average annual percentage growth in volume

Production 1970-83

	FAO	USDA
Millet	0.4	0.4
Sorghum	0.1	0.6
Yams	1.9	2.2
Cassava	1.3	1.9
Maize	6.1	4.0
Rice	10.5	10.1
Pulses	4.7	-1.0
Cocoa	-4.9	-5.5
Groundnuts	-3.2	2.2
Cotton	-6.1	-8.8

Imports 1975-84

Wheat	15.2
Rice	46.7
Maize	48.3
All grains	18.9
Sugar	20.0



with good harvests in the last two years, have had some good results.

World Bank Assistance

- The Bank, as the only major donor to Nigeria's agriculture, focused its assistance on countering the effects of the oil boom on agriculture. Half its lending of \$2.9 billion was for agriculture, and most of it was for crop production. In October 1986 the Bank approved a trade policy reform loan of \$452 million.

- Little lending was for agriculture and rural development before 1974. But after Robert McNamara's Nairobi speech, the share to agricultural and rural development rose to more than 60% over the rest of the 1970s and into the 1980s (far more than the typical share of about 25% for most other countries). The greater part of this increased funding went to the production of food and annual crops.

- Of the commitments of \$1.4 billion for agriculture and rural development, about two-thirds (66%) were for agricultural development projects centering on food and annual crops, and 17% were for fertilizer imports, mainly in support of food and annual crops. Only 9% of the commitments went for tree crops and only 4% for livestock and

forestry. There was no lending for agricultural research or for farm credit.

- The Bank's three main contributions to Nigerian agriculture have been 1) the continuity and stability of its investments and policy, 2) the direction of funds to smallholder agriculture, and 3) the transfer of small-scale irrigation technology from South Asia.

- In contrast to the Nigerian push for large mechanized farms and irrigation schemes in the 1970s, the Bank initiated its agricultural development projects in the north by integrating extension, rural roads, and input supply systems for smallholders. The demand for these projects grew because the first three raised agricultural output. But later such projects have been less successful in increasing crop output, because of funding shortages, inadequate research, and weak price supports.

- The Bank's recent efforts have focused on structural adjustments through reforming trade policy, removing fertilizer subsidies, and making fertilizer and other operations commercial. And with many policy distortions now being removed, the Bank is focusing on export promotion by financing cocoa and palm oil projects.

52