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DANISH DEVELOPMENT ASSISTANCE TO TANZANIA AND KENYA, 1962-1985:

ITS CONTRIBUTION TO AGRICULTURAL DEVELOPMENT

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By

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I. INTRODUCTION

This report reviews the roughly two decades of Danish official development assistance in support of agricultural development in Tanzania and Kenya, the two main African recipients of such assistance.1/ The work has been sponsored by Danida (the Danish International Development Agency) as part of a multidonor endeavor to examine the role of aid in agricultural and rural development in Africa under the auspices of the World Bank research project, "Managing Agricultural Development in Africa" (MADIA).

The overall objective of MADIA has been to study the link between policy and performance in the agricultural sectors of six African countries--Kenya, Malawi and Tanzania in the East and Cameroon, Senegal, and Nigeria in the West. These countries represent a diversity of resource endowments, policy orientations, and performance trends in both the growth and distribution of agricultural surplus. To this end, research has been conducted simultaneously in several areas: on the domestic policy environment

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The initial research for this report was carried out in Copenhagen at Danida headquarters (six weeks by both authors) and in Tanzania and Kenya (three weeks each by one author) in the summer and autumn of 1985. Interviews were conducted, project documentation reviewed, and a number of project sites visited. Following the delivery of the first draft to Danida in February 1986, additional interviews and information searches took place in Washington, DC. In all, about six person-months have gone into the study. In this revised report, we have attempted to incorporate helpful comments from Danida staff and from colleagues working on the MADIA study. We are also indebted to the many persons who gave of their time for interviews (see Annex V). The authors blame each other for any remaining errors.

1/ We have followed the OECD conventions in defining aid as official development assistance (ODA) which has a grant element of at least 25%. This encompasses all flows from Danida, which are full grant or "soft loans" with a grant element of 76-86%. It excludes export credits and other official flows such as equity contributed by the Danish Industrialization Fund for Developing Countries (IFU).

and agricultural performance in each of the six case countries; on the political factors within the countries that have affected policy choices; and on the role of foreign assistance on both the policy environment and agricultural performance.

Research into the first two areas is being sponsored by the World Bank and conducted by a team of World Bank staff members and consultants. Research into the third area, the role of foreign assistance, has been jointly sponsored by eight of the major donors to sub-Saharan Africa -- Denmark, the EEC, the Federal Republic of Germany, France, Sweden, the U.K., the U.S., and the World Bank -- and has been conducted by teams of researchers familiar with the workings of the various donor agencies.[2/]

The donor studies have set out to answer a set of common questions concerning aid to agricultural and rural development in those MADIA countries where each donor has been prominent: (1) How have the level and composition of aid evolved over time? (2) What has been the discernible impact of that aid? (3) What policy conclusions can be drawn from the analysis? The comparative nature of the research has fostered an approach somewhat different from what individual donor studies might otherwise take. In particular, research teams were asked to identify the extent to which a donor's impact could be traced to characteristics of the recipient countries, to the political and administrative context of the donor agency itself, and to the nature of its particular aid activities. In light of the considerable variation in scope of the different donor programs and of the studies

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2/ As is the case with the other two areas of the MADIA project, output from the comparative donor study is intended for final dissemination as a World Bank research publication, in this case as an edited volume of donor case studies entitled Aid to African Agriculture: A Review of Donor Experiences.

themselves,[3] each research team was encouraged to apply methods appropriate to its own study rather than to adopt a single methodological framework.

1. Objectives and Scope of the Danida Study

With a quarter or more of the total aid portfolio, agriculture has been the single most important sector in Kenya and Tanzanian to receive Danish aid over the past two decades (see figure 3, Chapter III). Danida has targeted a few main agricultural activities in each country, yet overall its support for agriculture has been quite diverse. Roughly 80 individual projects and programs cover a broad spectrum of crop and livestock activities, as well as various multisectoral and infrastructural activities closely related to agriculture.

Interestingly, neither Danida itself nor the Danish public considers Denmark an important source of support to agricultural development. Rather, Danish aid is heavily identified with support to social services, health, education, and water supply -- which together have rivaled agriculture in importance in both East African countries. The explanation for this difference in perception seems to lie in the different ways in which Danida has approached these two types of activities.

In the 1970s and 1980s, Danida's support for the social sectors was based on its evolving sectoral strategies. Increasingly these have included not only a set of guidelines on the types of assistance Danida considered most appropriate (such as preventative rather than curative health care) but also a concern with the way a particular project or program fit into the country's

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3/ The studies have entailed from one-half to four person-years of research time and from several weeks to many months of field work, depending on the size of the donor, the number of countries and programs covered, and the resources available to carry out the research.

overall plans for a sector (such as how a Danida-financed water supply program would mesh with the ministry's program and how the ministry's program might benefit from the Danida-financed activity).

In agriculture, by contrast, a sectoral perspective was lacking. The content of Danida's very diverse portfolio appears to have been determined through "niche-identification" -- that is, selecting specific target groups or target activities to support rather than through careful analysis and judgement about which activities would contribute most to the development of the sector. Even the informal guidelines on agricultural aid (which have focussed on the poorer, more marginal smallholders, including women) only partly account for the composition of that aid. Many activities seem not to have been screened through these glasses at all but instead to have been shaped by what the Danish economy had to offer in the way of technology or inputs. This is not to meant to suggest that Danida has an unusually ad hoc approach to development assistance; indeed, findings emerging from the other MADIA donor studies suggest that the "niche identification" approach is more the rule than the exception for most of the period under review.

In seeking to assess the contribution of Danish aid to a country's agricultural development this study takes a broader view of what kind of material is relevant. While the success of an individual project on its own terms (that is, in relation to its stated objectives, typically having to do with augmenting productive capacity or enhancing living standards in the target area) must certainly be a part of any assessment, a sectoral (and in some cases a macroeconomic) perspective is needed as well. The question is not only whether a project has succeeded on its own terms, but also whether it has been directed at some critical bottleneck or constraint -- be it institutional, technological, or financial. Thus, it is not inconceivable that an investment generally regarded as a success will be seen with other eyes by this study. A processing plant or an educational institution, for example, may come on-line in time and at the planned cost, but its output may be largely irrelevant for the country's development. Conversely, other investments falling short of their designers' expectations might nevertheless have been just the right effort at the right time. As a critique of Danida's efforts, this approach may seem unfair, precisely because past aid commitments have not usually been conceived of in sectoral terms. But the perspective is useful -- indeed, we would argue, essential -- in considering the future potential of aid flows to African countries.

This report, then, takes a broad view of the activities which Danida has supported in agriculture and closely related sectors. Projects are considered in terms of the type of activity they promote or the type of problem they address since the purpose is to draw some lessons from Danida's experience that go beyond the project level. For the most part, we confine our analysis to what might be considered the "strategic" aspects of project selection, design, and execution -- that is, the reasons for their selection, their appropriateness in light of sectoral and subsectoral characteristics, and their likely impact. We do not attempt to address specific implementation issues -- building delays, procurement problems, staff turnover. Nor do we consider whether the precise design of a project was the most effective means of achieving the desired end. Such questions, though extremely important, are better explored in individual project evaluations.

It is inherent in the nature of evaluations of multidimensional, and not easily quantifiable, processes like economic development that a great deal of judgment rests with the evaluators. This is perhaps even more the case when the scope of the study is as broad as it is here. We have therefore attempted to lay out as clearly as possible the premises on which we draw conclusions. The task presumes a deep understanding not only of the content of the Danida-financed activities, but also of the Tanzanian and Kenyan agricultural sectors and their significance in the respective economies. Although we feel we have done enough homework in each of these areas to attempt this task, we are well aware that we may have missed some important piece of information which might significantly change the tenor, or even the conclusions, of some parts of the analysis.

2. Organization of the Report

Chapter II provides an overview of the origins and build-up of the Danish aid program, the domestic constituencies that have shaped it and the administrative guidelines by which Danida operates. This discussion has two purposes. First, for these readers not familiar with Danish aid, it provides information which will help explain some of the intricacies of the agricultural portfolio (such as important distinctions between different parts of the aid budget); second, it lays out the context, and the constraints, which shaped what Danida can and cannot realistically hope to accomplish.

Chapter III briefly reviews Danida's overall aid programs in Kenya and Tanzania, with data on aggregate and intersectoral disbursements as well as on disbursements by category in the aid budget. The general evolution of the aid relationship between Denmark and the two countries is described, as is the content of aid to sectors other than agriculture.

Chapter IV is a detailed analysis of Danish aid to agriculture; the focus is on functional categories of assistance rather than on individual projects. Because this is the first time Danida's agricultural activities in the two countries have been evaluated jointly, we have aimed at a fairly comprehensive coverage of the range of activities included in the portfolios. The reader who is not interested in the details of this analysis can turn directly to Chapter V, which begins with a summary of the foregoing assessment and then draws policy conclusions which may have implications for further assistance to the agricultural sector.

II. BACKGROUND AND CONTEXT OF DANISH AID

To a large extent, Danish efforts to assist developing countries are an outgrowth of the political constellations supporting Danish aid. Political factors have determined not only the level but also the forms in which aid is allocated, its objectives, and the resource limitations that influence specific decisions on the content of aid projects. In addition, factors relating directly to the composition and scope of the aid agency, Danida, have a bearing on the character of Danish aid.

1. Aid Forms

Danish aid takes various forms. These categories are one of the basic organizing principles both for aid content and for aid administration. Total official development assistance is split between the two broad categories of aid, multilateral and bilateral, along the principle of 50/50. Within the bilateral budget, there is a 50/50 split between formally untied grant aid ("project aid" and "technical assistance" in Danida parlance) and formally tied soft loans (or "financial aid" or "state loans"). Both grants and loans are restricted to "less developed countries" as defined by UN standards based on per capita income. Since the early 1980s, financial aid has also included tied grants for Tanzania and Bangladesh, two of the main recipients of Danish aid, both of which qualify as "least developed countries" by UN standards. A portion of untied bilateral aid is reserved for joint Nordic projects, which are governed by the five Nordic countries together (Denmark, Sweden, Norway, Finland and Iceland) but are each administered on a day-to-day basis by one of the member countries. Within the multilateral allocation, Denmark has a group of projects known as multi-bi, which are administered by a specialized U.N. agency but draw upon earmarked Danish funds. Danish aid for 1984 gives a typical pattern of distribution by type. Untied grants account for 35% of all aid, or somewhat more than their formula share of 25%; Nordic projects took 5% of this, or 1.7% of total aid. Tied bilateral aid was nearly 22% of the total and multilateral aid was 43% -- 8% of which or 4% of total aid went to multi-bi projects.1/

Untied grants typically go to relatively small projects (from several hundred thousand to several million US dollars) with a large technical assistance component and a focus on agricultural or social sectors. Nordic projects share this basic orientation, though they tend to be somewhat larger in financial terms. The tied loans are usually substantially larger (in the range of US$ 10 million) and are geared toward the installation of Danish capital goods. Such projects are typically industrial or agro-industrial, though they may be civil engineering projects such as urban water systems. They make use of teams of Danish implementors, hired on contract through the private Danish firm that wins the contract for the content of the loan rather than as Danida technical assistance. Tied grants have consisted mainly of large shipments of commodities produced in Denmark, such as fertilizer. Multi-bi projects resemble the untied portfolio in size and scope.

2. Origins of Development Aid 2/

Three types of interests have shaped the overall profile of Denmark's aid allocations: foreign policy interests, philanthropic interests, and commercial interests, in that order of importance and arrival on the scene.3/

1/ Danida Annual Report for 1984.

2/ This section draws heavily on two historical reviews of the background to Danish aid, Klaus Joergensen's Hjaelp fra Danmark, Odense Univ. Press, 1977, and Hans Henrik Holm's Hvad Danmark Goer..., Forlaget Aarhus, Politica,

(i) Foreign Policy Interests

The impulse which led to Denmark's first contribution to international aid coffers in 1949 emanated directly from the United States. The beneficiary was the UN's Expanded Programs for Technical Assistance, (EPTA) which later evolved into the United Nations Development Program (UNDP). At the time Denmark was itself receiving aid through the Marshall Plan and the World Bank, and the contributions to EPTA did not amount to more that a tiny fraction of this inflow. The importance of the Danish contributions was solely as a symbolic political gesture.

This was at the beginning of the cold war. Through "burden-sharing," the U.S. managed to involve most of the western world, including Denmark, in a strategy of aiding the newly independent countries to prevent the spread of communism. At the same time, as minor power, Denmark felt it was serving its own security needs in strengthening the UN system as much as possible, as well as in strengthening its own position within that system.

In the early 1960s, as the newly independent countries proliferated and came to constitute a majority in the UN, Denmark sought to create a good image with the key newcomers. The aid process was seen as an appropriate channel for this kind of diplomacy. If Denmark's early interest in multilateral aid was partly a gesture to its western allies (in OECD and NATO), and partly a standard element in the global policy of small powers, its interest in bilateral aid grew out of the wish to establish direct diplomatic links to some new UN members.

1932. Interviews have helped to round out the discussion.

3/ These donor motives, other than development objectives, are explicitly acknowledged. Since there is sometimes a tendency to think otherwise, it is necessary to state that one cannot a priori conclude from the nature of the donor motives about the quality of effect as perceived by the recipients.

In addition, bilateral aid had the potential of engaging popular support through national identification with Danish efforts, and such support was needed to sustain a planned increase in multilateral aid.

Bilateral aid was also seen as a mechanism that could compensate for a specific diplomatic failure. In 1959, negotiations to establish a Nordic free trade community fell through and Denmark joined the European Free Trade Area (EFTA) leaving the traditionally strong Nordic sentiments disappointed. Once a bilateral assistance program had been decided on, it was seen as an ideal opportunity for Nordic cooperation. Moreover, it has been conventional diplomatic wisdom that united Nordic action on the international score would enhance the visibility and reputation of this group of countries.4/

(ii) The Philanthropic Interests

Philanthropic activities were not the invention of politicians or diplomats. The missionary work of the churches had always included many of the types of activities found in the portfolios of modern donor organizations. Various humanitarian organizations with roots in the interwar and postwar relief efforts were also active on the developing world. Non-governmental aid activities were not widely known, however, and certainly did not figure prominently in the Danish political consciousness of the 1940s and 1950s. This changed in the early 1960s when the foreign policy impetus coincided with the political consolidation of the welfare state. Among governmental leaders, a bilateral venture into official development assistance

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4/ In recent years, the original motive of Nordic cooperation has faded somewhat (in light of the failure of a series of joint Nordic initiatives), while the administrative experience with joint Nordic projects (which have admittedly been more cumbersome than bilateral ones) has begun to weigh heavily. There has been a tendency, therefore, for the Nordic projects to be distributed among the Nordic donors, with the lead agency (that is, the one responsible for administration) taking over on an individual basis.

was viewed as a natural extension of the state's policies of equity to the global arena.

To secure popular support for such a policy, the government mobilized the existing humanitarian organizations and integrated them into a massive national campaign to raise private funds for the benefit of the "the poor countries," to be matched by state funds. Rarely has a cause received stronger and broader support in Denmark from the whole range of public opinion-makers than this drive for aid to the Third World. In early 1962 all the political parties, radio and TV, most newspapers, the labor unions, the industrial organizations, the cooperative movement, churches, and a string of prominent people inundated the public with every conceivable pro-aid argument.

While the campaign, with its variety of (frequently inconsistent) arguments, may perhaps be faulted for "overkill," it certainly succeeded in placing the aid issue squarely in the Danish consciousness. What is more, since the preponderant appeal was to humanistic and Christian values, aid invariably became linked in the public mind to philanthropic motives--for better and for worse.

Politically this process climaxed in March 1962 when the parliament <u>unanimously</u> adopted "The Bill on Technical Cooperation with the Developing Countries," signaling the beginning of Denmark's commitment to bilateral aid. The broad parliamentary consensus that marked the passage of this legislation has more or less endured. Only two parties subsequently formed at the right and left extremities of the political spectrum have raised fundamental objections to the general aid policy. Even compared with other elements of Danish foreign policy such as security and trade, aid policy stands out as having an unusually broad political base. One reason is that even dormant interests were co-opted right from the outset.

(iii) The Commercial Interests

Among commercial groups, organized agriculture was initially the most active, probably since Danish agricultural expertise was assumed to be of special relevance to the developing countries. Though the initiative came from the state, agricultural interests enthusiastically provided technical assistance and equipment for model dairy and breeding farms, agro-processing and training. But when the performance of the early model farms proved disappointing (in part because they failed to generate demand for the export of grade cattle), the agricultural group turned their attention to multilateral programs, specifically the disposal of surplus produce through the World Food Program (WFP) -- mainly grains -- and through the European Economic Community (EEC) -- mainly dairy products. This multilateral solution has kept down the pressure for a bilateral food aid program, which Danida has resisted on grounds of concern that nonproject food aid would be a disincentive to agriculture in the recipient countries.[5/] In effect, Danida has dodged the question of the impact of food aid; the project-linked aid of the WFP is not inherently immune from causing disincentive effects, while food aid from the EEC typically comes in the bulk form which Danida has singled out as inherently suspect.

At the rhetorical level industry had always been given an important role to play in aid efforts, particularly through the tied state loans set up in the 1962 legislation. But organizations representing industry initially responded much less enthusiastically to the bilateral aid program than organizations representing agriculture. A partial explanation for this early reticence may be found in Denmark's own very late industrialization. Denmark

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5/ See, for example, Danida's 1981 Annual Report to DAC, p. 29.

is still a net importer of capital, and in the 1960s Danish industry had its hands full in following the market formations and opportunities in Europe. Doing business in the developing countries was of little interest. And it was certainly of no great appeal to industrialists that most discussion about aid focused on "idealistic" education and training projects.

Furthermore, despite the government's genuine concern from the outset to involve industry, its overall monetary policy worked against this intention. In an attempt to limit capital export, the government had set very high interest rates, making the tied state loans not particularly attractive to potential recipients.

The involvement of Danish industry remained insignificant until after 1966, when the loan conditions were substantially improved. This was triggered by strong criticism of the Danish aid level at DAC's Annual Aid Review in 1965, after the U.S. had shown growing concern about allied burden-sharing. At the time, state loans were the only conceivable channel for dramatically increasing disbursements, since the aid agency was already heavily constrained by the lack of manpower needed to administer regular project aid.

So it was again the foreign policy interests that led and, the commercial interests that followed. However, the appetite grew gradually with the eating, until in 1977 organized industry clamored publicly for a larger share of the aid disbursements.[6/] Times had changed, and with the general

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6/ In the booklet "Industri og U-landene" (Industriraadet, 1977). The main target of their complaints was multilateral aid (and particularly UNDP, of which Danida was a lead supporter), on the grounds that the international organizations were not awarding enough contracts to Danish suppliers. Recent (1981-85) data on Danish procurement success (i.e. share of procurement : share of capital contributions) indicate that this critique may no longer be as relevant, at least as regards the International Development Association recession in the developed world, Danish industry took the position that since help was needed on the home front, a greater share of aid should be tied.

(iv) Conclusion

The result of incorporating a broad range of interests into an aid constituency has meant that Denmark has been able to rise from one of DAC's worst performers in the mid-1960s to one of the best. Danish aid as a share of GDP reached the goal of 0.7% by 1978, and in March 1985 parliament passed a resolution asking government to steadily increase ODA from the current 0.77% to 1% by 1992. These increases have taken place despite a long period of general retrenchment in public expenditures. The philanthropic interests have overcome the government's occasional threats to make small cuts in the aid budget.

At least as remarkable as the level of Danish aid is the stability of its constituency. This has been achieved primarily by giving each of the three interests a major stake in one form of aid. Multilateral aid continues to secure a high profile for Danish foreign policy objectives in international fora, untied grant aid maintains its philanthropic momentum thanks to generous appropriations for educating the public about the work Danida is doing in recipient countries; and tied aid is linked to the commercial interests through procedures of project identification and procurement.

Just as important for the stability of the aid constituency as this division of "the aid kingdom" into three domains is the overlapping of these interests. Thus multilateral aid is also supported by a segment of philantropists who emphasize that "aid as a right" as an international corollary of domestic welfare policies; to them, multilateral aid supposedly

(IDA), where the ratio was 0.99. Comparable figures for U.N. organizations have not been available.

avoids the taint of commercial and political interests. Involvement of commercial interests in multilateral aid is more potential than real. Danish industry feels it has not in benefited sufficiently from the multilateral agencies' international tenders, where as agriculture has been content with the multilateral outlets for its surplus produce. The foreign policy interest may benefit from either the "philanthropic" or the "commercial" aid forms inasmuch as they are appreciated by the recipient.

Between the philanthropic and the commercial interests, however, there has traditionally been little love lost. The former attaches some degree of moral reprobation to the motives of the latter, and each questions the long-run viability and appropriateness of many of the other's pet projects. But the "official" spokesmen of the two sides 7/ rarely allow the controversy to be aired publicly for long. What seems to keep the debate from becoming too vitrulent is the perception that "one should not rock the shared boat too much"; the two groups have to sink or sail together. Often the internalization of this perception is enough to keep the debate within bounds. At other times a reminder from one's own or the other camp is necessary.

In short, a model that has the state acting as the extended arm of organized interests will not be very enlightening in tracing the origins of the Danish aid policy. On the contrary, it has been the state, or specifically its foreign policy concerns, that have identified, stimulated and

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7/ These "official" spokesmen are the members of Danida's Board, an advisory body to the Minister of Foreign Affairs which is comprised of representatives of the major Danish institutions that have an interest in aid policy. These institutions include the central organizations of industry, agriculture, and cooperatives, as well as professional, religious, and youth groups.

absorbed both the philanthropic and the commercial interests. However, these interests have taken on a life of their own and are now themselves full-fledged actors.

Untied project aid and tied state loans occupy very different positions in the public limelight. Untied project aid looms large in the public mind, whereas the tied state loan activities tend to have a low, behind-the-scenes profile. This can be seen readily in the public literature disseminated by Danida, such as annual reports; the untied project portfolio has high visibility, while the uses of state loans are mentioned in passing, and this only since the late 1970s.

3. Guiding Lights

Several principles have been important sources of inspiration for the content of Danish aid. The first is the orientation towards poverty alleviation. As a result of the broad-based philanthropic support for aid in Denmark, poverty alleviation came to dominate the thinking on aid allocations well before the basic needs approach was internationally embraced in the mid-1970s. For untied project aid, poverty alleviation has often been a sieve through which potential projects are run; more and more in the 1970s Danida sifted out the relatively well-off areas of a country when deciding which projects to fund. For state loans, intended to export Danish technology, a direct application of this principle to project selection would have put insurmountable obstacles in the way of disbursement, so the principle was to be applied instead to the selection of countries. The original intention that state loans would be directed to middle-income countries, and untied project aid to the poorest ones, was dismissed. In time, state loans went only to low-income countries (corresponding to those eligible for IDA credits).

The second guiding principle -- noninterference -- stems from Denmark's small-country status. The idea is that the recipient's priorities and strategies should shape the content of Danish aid. For untied project aid, however, the principle eroded fairly quickly for reasons both of practicality (since the poorer recipient countries were not in a position to meet Danish standards of project design and implementation) and of accountability to the Danish taxpayer (since Danida became increasingly concerned with monitoring the use of funds).

This lack of adherence to the principle of noninterference has been somewhat offset since the early 1970s however, by establishing the minimum level of project aid to go to the recipients over the coming four-year period. This practice, which increases the certainty of aid flows and so helps governments in their planning, has been well received.

In the case of state loans, what is known in Danida as the "folded-arm policy" generally persists to this day, though in less flagrant form than earlier. On the principle that it was up to recipients to decide what they wanted to use the loans for (within the bounds of what the Danish economy could offer), the aid agency was initially merely responsible for formalizing the agreement between the recipient government and the Danish suppliers, who did their own outreach work. Concern for the effectiveness of these loans has increased Danida's direct involvement in appraisal work over the years, particularly since the late 1970s. But a distinction is still maintained between untied projects and tied aid in the degree of monitoring which Danida provides, and indeed, in the degree of "ownership" it feels. State loan administrators will maintain, for instance, that Danida is not "legally responsible" for the implementation of these ventures, which are only rarely subject to an interim or expost evaluation.8/

The third guiding principle is more amorphous, arising as it does from the national self-image. It entails asking a question: what elements of Denmark's own development history could be tranferable to those to whom it is giving aid? There are two aspects to this question. The first relates to the types of know-how a donor has to offer, the second to its cultural heritage.

In the Danish case it is possible to identify a self-image stemming from two formative experiences in the nation's modern history, namely the agricultural-based grassroots movement in the latter part of the last century, and the industrial-based erection of the welfare state in the postwar period. Central to the Danes' perception of what has been the driving force in their own history has been the development of human capital--not surprising in a country with scant natural resources.

The paradigms which have emerged from this history have both a sectoral focus--on education, agricultural (and especially animal) production, and the development of social infrastructure--and a cultural focus on participatory processes. Channeling assistance through cooperatives, one of their own democratizing institutions, is favored, as is reliance on other local groups like village organizations.

8/ The establishment in the past decade of resident missions in several recipient countries, including Kenya, may be leading to a considerably more "hand on" approach to state loans, since both project identification and monitoring are made earier. The bulk of state loans are disbursed to countries without a large (or even any) Danida presence, however.

4. Aid Administration [9/]

In keeping with the initial foreign policy impetus for the bilateral aid program, Danish aid continues to be administered under the auspices of the Foreign Ministry.[10/] Danida is a separate administrative department; it comprised about one-fourth of total ministry staff in 1985. As with other bilateral agencies, this arrangement allows for a diplomatic override of the agency's professional judgment when a foreign policy interest is at stake. Thus, a specific aid commitment may sometimes be made at the political level (for example, during the visit of a head of state) before a technical assessment has been completed. Another ramification of Danida's position in the Foreign Ministry is that it is strongly inclined to avoid conflict. This is in keeping with what political scientists refer to as the "pilot fish" behavior of small powers such as Denmark. Such a posture runs directly counter to the use of policy conditionality in aid.[11/]

9/ In mid-1986 (subsequent to the period covered by this report) Danida underwent a structural reorganization based on recommendations of a commission established by the Foreign Minister. This section has not been updated to reflect those administrative changes (many of which would not be particularly meaningful to those not very familiar with Danida). The substantive implications which this reorganization may have in the future will be addressed in the final chapter.

10/ This was not a given from the outset. Other options had been creating an independent Ministry of Development Aid or charging other ministries with the responsibility. The Ministry of Religious Affairs in particular was consided, partly because its minister at the time (Bodil Koch) was keenly interested in the issues, and partly because the little practical experience Denmark could muster in this field lay with the missionary organizations.

11/ This by no means implies that Danish diplomats shy away from conflict. Given instructions or well defined guidelines they, like their international colleagues, will (in the words of one of them) "fight like scorpions". Aid policy however, is not an issue on which the Danish Ministry of Foreign Affairs would want to risk a confrontation with recipient governments.

Within Danida, the composition of the staff reflects a greater domination by regular foreign service officials than is the case in some other bilateral agencies, such as USAID. The first head of Danida (or the Secretariat for Technical Assistance, as it was then called) was an economist recruited from outside the Foreign Office. The idea that the Secretariat would recruit a permanent staff exempt from the ministry's standard job rotation system soon gave way, however, as the organization changed from being somewhat autonomous to a completely integrated part of the ministry. Since then virtually all managers have come from the ranks of the foreign service, with technical input on project design and implementation being provided by a corps of advisors from professional fields and administrative responsibilities handled by a corps of project officers ("special medarbejdere"). Gradually a few technical advisors have moved into managerial positions.

Aid forms have been the organizing principle. Within the sub-department for bilateral aid, untied project funds are handled by geographically-defined divisions, state loans by a single office.12/ Institutionally, the only link between these two aid forms at Danida headquarters is at the level of the head of bilateral aid; in practice, coordination is largely a matter of personal networks.13/ The presence of sizable resident missions in the main recipient countries should provide a

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12/ There is a separate office for technical assistance but since technical assistance is now almost exclusively associated with project aid, the office functions as a service unit for the project officers rather than as the administrator of a separate aid form.

13/ In the late 1970s, a representative from the state loan office did begin attending the annual meetings between Danida and the main recipients. Since Tanzania and Bangladesh became eligible for tied commodity aid instead of loans in the early 1980s, those funds have also been administered by the project officers rather than by the state loan personnel.

more formal opportunity for coordination of the various aid forms. But so far, probably too little authority has been decentralized to the missions for mission staff to play a coordinating role in selecting aid activities. To the extent that different forms of aid address the same subsector, however, some feedback does occur.[14/] Nordic project administration has until very recently taken place in a separate unit within one of the geographical divisions for project aid. Multi-bi projects are under that part of Danida which handles multilateral aid, and their coordination with bilateral projects is not institutionalized.

Two aspects of the staffing of Danida have important implications for of the aid portfolio. The first is that Danida has been chronically understaffed, with increases in staff lagging behind increases in the aid budget. Since unspent funds lapse at the end of each fiscal year, it has been necessary to find efficient methods of disbursing funds. Staff-intensity varies among the different offices. The Nordic projects unit has traditionally had the most staff in relation to disbursements, followed by the untied project divisions. The state loan office has been characterized as the most "disbursement efficient," though in recent years an emphasis on effectiveness has led to sizable increases in this office, which got by with a handful of staff until late in the 1970s.

The second and less often noted aspect of Danida's staff relates to the professions represented. A high proportion of managers and technical advisors have a background that emphasizes case work, the former in law and the latter in engineering. A natural outgrowth of this orientation is a focus

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14/ This would appear to characterize the evolution of the aid to Kenya's dairy industry, as discussed below.

on the project level rather than on the program, sectoral or macro level. The state loan office has a particularly strong concentration of engineers among its technical advisors. The social science fields, which have a more systemic orientation, are relatively underrepresented among the professional ranks, with only a handful of economists and anthropologists. Even their assignments have typically not been structured to emphasize sectoral or comprehensive lines of analysis. As a result, Danida has had very little in-house capacity to view its project activities from a sectoral or countrywide perspective.

Danida's knowledge base has of necessity been an eclectic one, with ideas for projects and programs coming from a range of international sources, including the experience of other donors (particularly the Nordic ones). Within Danida, institutionalization of feedback from its own project experience has only recently begun to be systematized with the establishment of an evaluation unit, which in addition to applying standards for evaluation reviews has been formalizing appraisal guidelines. The gradual decentralization to the resident missions in the four main recipient countries, a process begun in the late 1970s, is also affecting the knowledge stream. Not only has Danida gained more flexibility in responding to local requirements, it is better able to incorporate in its work the practical experiences of other donors.

5. Programming Parameters

Seen from the perspective of the administrators of Danish aid, the main pressure on them is to disburse ever-increasing amount of aid. This pressure is countered, and complicated, by a number of constraints. First among these is the external accountability requirement. Public reports from the state's Auditor General, in particular, have brought to light implementation problems, including those associated with state loans which had earlier been outside the scope of inquiry. In the case of unitied projects, this has led to pressures to increase the monitoring function of technical assistance and to build up implementing units, parallel to the regular government institutions, which can keep better accounts for the Danish taxpayer. In the case of state loans, the one accountability element which has always been present was a "brick and mortar" ("mur og nagelfast") rule, under which funds were not to go to items which had a resale potential like bulk commodities or freighters[15/]. A significant by-product of this rule has been the closing off of a wide range of potential uses of state loans. As noted above, since the early 1980s it has been relaxed for two of Denmark's main recipients, Tanzania and Bangladesh, on the grounds that the resident missions will be able to monitor the supply of commodities. But the position on commodity aid to other recipients remains negative, primarily on the grounds that it cannot be adequately monitored. [16/]

A second constraint is found in the written and unwritten rules of tying by source. The written rules are the basis for the division between the

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15/ An additional reason why financial assistance could not be used for freighters was the Danish shipping industry's fear that the emergence of an uncompetitive third-world commercial marine would bring many more protective restrictions to the international freight market. Since then financial assistance has on occasions been used for such nonthreatening vessels as ferries, training ships, and fishing inspection ships.

16/ Another justification for the "brick and mortar" rule has been more philosophical, the argument being that aid should be used to increase capital, not to subsidize recurrent costs or consumption. On these grounds, Tanzania and Bangladesh have been able to squeeze by because of their "poorest" country status (with the implication that the imports are additive, and hence a production stimulus). But the argument may be less weighty now than it was in the 1960s, when donors generally did not believe in recurrent cost finance. In recent years, Danida has been quite flexible on the recurrent cost issue when it was related to financial support.

state loans on the one hand and project and technical assistance aid on the other. Officially grants are fully untied, whereas loans typically have only the transport element untied (Denmark being an internationally competitive shipper). Tying has been justified traditionally with the argument that in its absence the former colonial powers would have had unfair advantages in getting business from the recipient countries. More recently Denmark has taken the position that it would untie all of its aid if other donors would do so.

Initially at least, the view was widely held that tying by source did not present a problem for recipients, Denmark's economy being diversified enough to offer a wide range of items. But a clash soon arose between the philanthropic interests (to some extent bolstered by the foreign policy interests, who were not immune to the heated international debates on tying in the late 1960s) and the commercial interests, the former holding that tying was morally repugnant if it involved considerable additional costs. This problem has been elegantly resolved by the enactment of the principle that tied aid can only be used for those items in which Denmark is more or less competitive internationally (though international competitive bidding is not in fact used to ascertain this). Unwittingly, this principle, combined with the "brick and mortar" rule mentioned above, had the effect of eliminating a large pool of those items in which the Danish economy did have an export capacity (Denmark being itself a net capital importer and a commodity and service exporter).

A further constriction of the potential basket of tied Danida activities stems from the personnel constraints in the administration of state loans. Two factors are at work here. First, Danida wants to involve firms that are experienced and can do the job with as little help from Danida as possible. Second, projects have to be large because the state loan office simply does not have time to piece together a lot of small projects if it is to keep the disbursement level up. As a result, the spoils of tying have in practice been limited to an elite group of no more than fifty export-oriented Danish firms, dealing mostly in state-of-the-art technology, which are big enough to design and implement entire large projects and which have the surplus to invest in exploratory field visits.

The rule that applies to grant aid, which is in principle untied, is an unwritten one. Practice does not, however, fully accord with principle. With some standard exceptions (like vehicles, which Denmark does not produce), any hardware that is needed preferably should be purchased in Denmark.17/ Items are not put up for international tender, but are located through the procurement officed based at Danida headquarters, which follows certain rules of thumb in deciding where to buy.18/ From a strategic point of view, what is more important than the possible variance with an internationally competitive price is the element of self-selection which accompanies project design; in fact, it is difficult to get a project with a substantial hardware component approved if the items needed are not produced (at a "reasonable" cost) in Denmark. The fact that this aid is legally untied means that aid administrators can win in a show-down, but not without jeopardizing a considerable amount of goodwill.

17/ In its 1982 and 1984 annual reports to DAC, Danida estimated that approximately 60% of all bilateral grant assistance was used to purchase Danish goods and services.

18/ The standard rule of thumb seems to be "plus or minus 15%". Danish tenders above 15% are not ruled out, but are considered politically quite uncomfortable.

The other unwritten rule of grant aid relates to the use of technical assistance. The policy that has evolved makes it quite difficult to hire outside of Denmark, or at most Scandinavia--with the obvious effect that projects (which typically have a technical assistance component) must be designed to conform to the Danish labor market. Among other things, this puts constraints on the type of agricultural projects Danida can approve, given the short supply of people trained in agricultural economists and crop specialists available to Danida (less so with people trained in the animal sciences).[19] The same tying principle essentially applies to fellowships, which must largely be used in Denmark.[20]

Finally, disbursements flows are constrained by the selection process for recipients. As noted, poverty criteria have been applied rather rigidly to determine which countries are eligible for state loans. This practice has eliminated the middle-income countries as recipients, yet the scope for transfer of Danish technology is likely to be greater in those countries than in the poorer countries, which generally have less of their own appraisal and financial analytical capacity.

19/ This shortage appears to stem from several factors: (1) a general lack of interest on the part of the agricultural organizations in promoting Danida contracts for their members (interest lying more in the competing activities of commercial agricultural projects in the Middle East through DANAGRO); (2) the limited output of people in these fields from the Royal Veterinary and Agricultural University (especially since a change in the educational program in the early 1970s); (3) healthy domestic demand for agricultural economists in the agricultural organizations; and (4) difficulties in getting a leave-of-absence from tenured employment. One of the reasons for supporting multi-bi projects such as FAO-administered projects in both Kenyan and Tanzanian agriculture - is to allow Danida to engage in an activity for which it might not be able to mobilize the necessary technical assistance domestically.

20/ A Tanzanian appropriation for third-country higher-level training, which is being phased out, was an exception.

For the administratively intensive untied grant aid, Danida has found it advantageous since the early 1970s to concentrate on a few recipients in order to consolidate its knowledge base. In addition to Tanzania and Kenya, India and Bangladesh are in this group. These countries, known as "main recipients," together receive more than half of all Danish bilateral aid. The considerations that led to to the inclusion of the two East African countries in this group, and the broad characteristics of the Danish aid portfolios in these countries, are the subject of the next chapter.

III. OVERVIEW OF DANISH AID TO TANZANIA AND KENYA

1. Country Selection

Though it would be stretching the language somewhat it is probably more correct to say that Tanzania and Kenya chose Denmark rather than vice versa. The two East African countries were among a larger pool of potential bilateral and recipients which Denmark approached aid in the beginning of the 1960s. Ghana had been at the top of this list, and Nigeria was another option. Neither of these worked out, as far as can be gleaned, because they simply did not take Denmark seriously as a donor, hardly responding to the official query. Tanzania, in contrast, responded with an elaborate project proposal (the Kibaha Educational Center) when approached about the possibility of a joint Scandinavian project, beginning a relationship to Denmark which would become increasingly amicable over the years.

The reasons for Kenya's selection were less clear-cut. A brush with a francophone country (a Red Cross hospital in Zaire) had convinced Danish aid administrators that a main recipient had to be anglophone. Scandinavian Airways (SAS) had opened up a flight connection to Nairobi. Jomo Kenyatta had attended a Danish international folk high-school, and Tom Mboya had toured Scandinavia on behalf of the Kenyan cooperative movement. Kenya joined Tanzania (and Uganda) in the partly Danish-inspired East African Community.[1/] Perhaps the most important reason, however, suggested by a several of the key actors at the time, is to be found at a more subliminal level. A Danish author, Karen Blixen (outside of Denmark better known as Isak

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1/ Kjeld Phillip, a prominent figure in Danish aid circles, was head of the commission which recommended the establishment of the Community.

Dinesen), had been one of many Danish settlers in Kenya, and had managed through some of her works to establish a sentimental bond (admittedly unilateral) between her wide readership and Kenya. Fittingly, the first Danish project in Kenya was the restoration of her former farm building and its conversion into a school for home economics teachers, Karen College.

A reference to figures on total disbursements to the two countries (figure 1) reveals the evolving profile of their aid relationship with Denmark. Until the early 1970s, both received much the same level of emphasis in the Danida portfolio. From 1973 on, Tanzania emerged as the favored sibling, receiving in some years more than twice as much aid as Kenya. In the early 1980s the large jump in Denmark's aid to Tanzania [2/] was in contrast to the already declining trend of most other major donors. But more recently, Denmark too has decreased its real aid disbursements to Tanzania. Aid to Kenya has shown a slower but steady increase in real disbursements since the relationship began.

The difference in the pattern of assistance to these two countries has a lot to do with the political basis of support for Danish aid in general. Tanzania's rhetoric on the primacy of welfare considerations meshed very well with the Danish philanthropic interest in aid; Nyerere himself came to be perceived as a kind of social democrat, not an unfortunate perception in the era of Social Democratic hegenomy in Denmark. Kenya, meanwhile, encountered what could almost be called public disapproval in the 1970s, with various groups in the philanthropic lobby actually suggesting that aid to Kenya be discontinued.[3/] The image problem stemmed from perceptions of Kenya as

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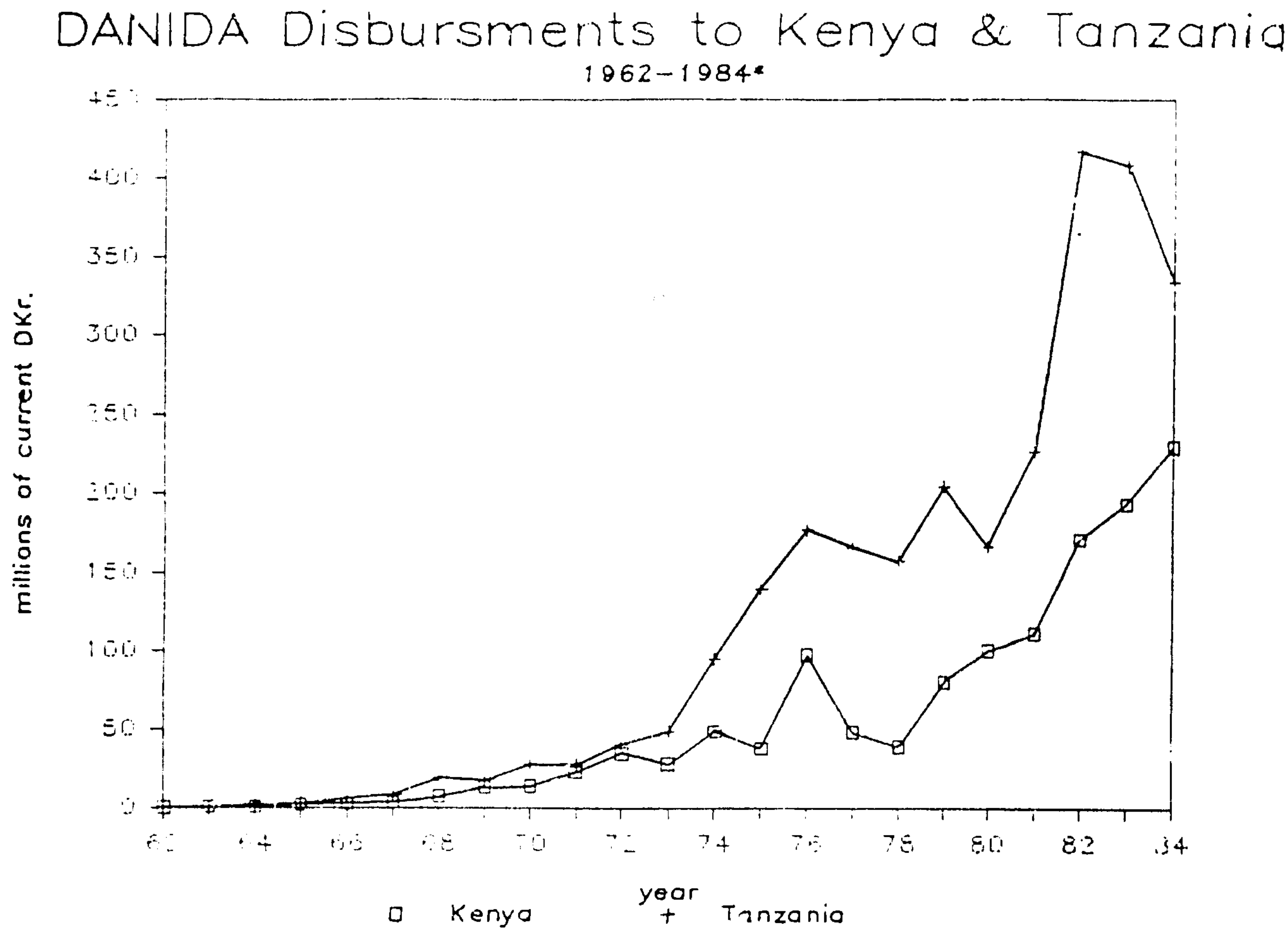
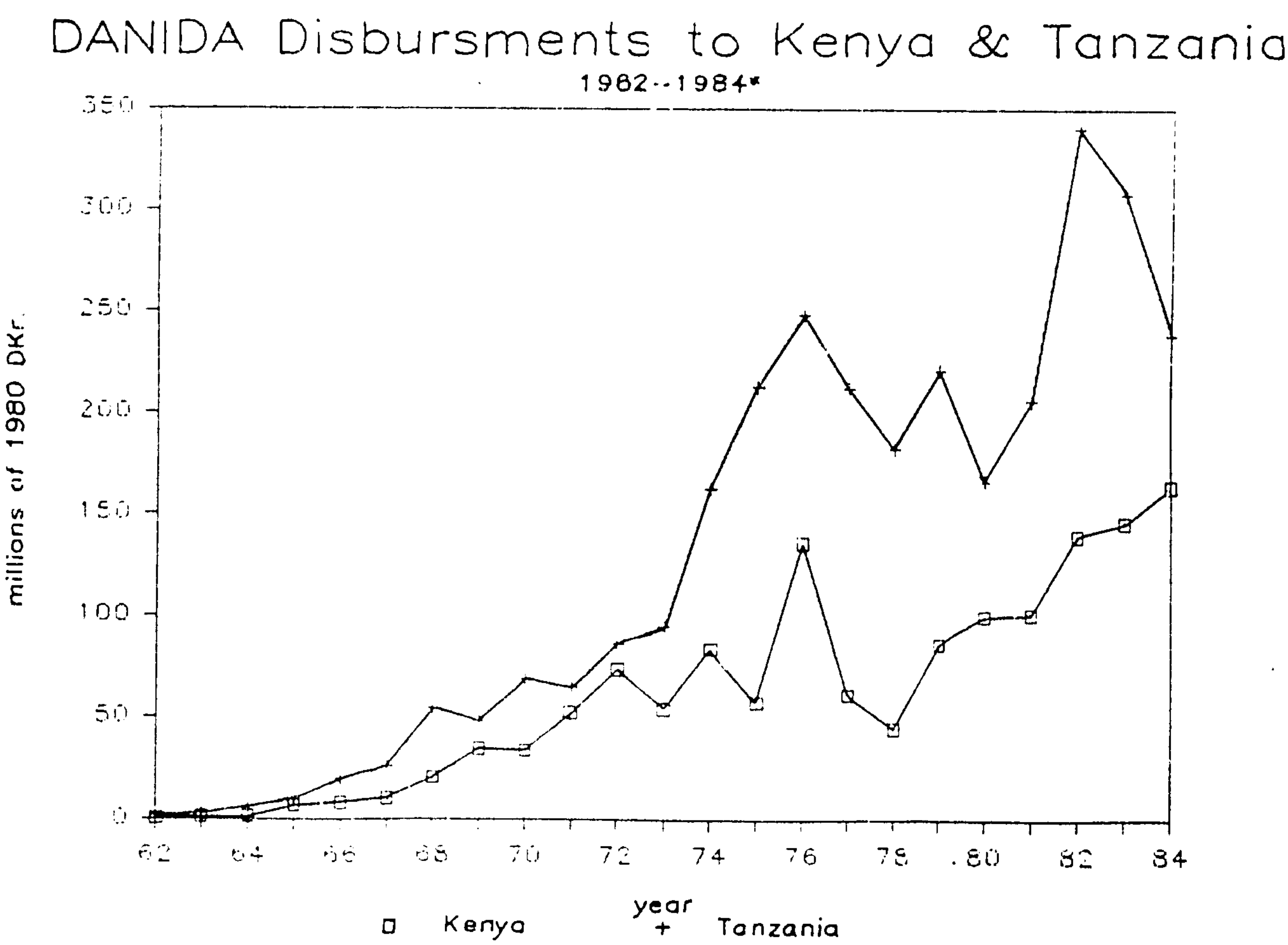
2/ The mustering of additional, quick-disbursing flows of commodities out of the tied aid budget accounted for most of this jump in aid.

3/ Among the groups taking this position were M.S. (Mellemfolkelige Samvirke), a grassroots organization which runs the Danish overseas volunteer program, and Danida's Council, a sounding board for the Foreign Minister on aid issues that includes groups and individuals with an interest in third world affairs.

Figure 1





*1978= 9 months (April-December)
**1984 approximately 10DKr.= 1 US$

an "affluent society," where the government and the upper classes were unconcerned with basic needs and poverty.

If trying to summarize the impact of these impulses and perceptions on the administration of aid to the two countries, one might think in terms of greater or lesser laissez faire regarding the precise use of Danish funds. The basic orientation of the Tanzanian government was regarded with approval, so it was entrusted with the most aid decisions. In Kenya, Danida took a more active role as the initiator of projects and the guardian of a focus on poverty. A concrete manifestation of this difference was the greater attention Danida paid to the selection of geographical areas and target groups in Kenya than in Tanzania.

In programming terms, the laissez faire quality of Danida's approach to Tanzania was heightened by the fact that Tanzania also became a major recipient of state loans during the 1970s. Danish industry benefited from the general goodwill toward the country, getting approvals for largely unscrutinized investments in industry (cement) and agroindustry (sugar). In Kenya, however, Danida was for a time reluctant to push for large state loan agreements because of some early experiences which went against the grain of Danish ethics. This difference is reflected in figure 2, which indicates the share of the various aid forms in total disbursements to the two countries.

Though still counted among the so-called friendly donors [4/] to Tanzania, Denmark has become more critical of the country's policy environment and more questioning about its use of aid funds since the early 1980s. It has also become explicitly concerned with addressing production problems--an area which Danida had relegated to the backseat in the 1970s, when its image was as a leading supporter of social infrastructure.

The deteriorating value of the Danish kroner in Tanzania (because domestic inflation has not been reflected in the greatly overvalued Tanzania Shilling)[5/] has made it far more expensive to fund activities in Tanzania than in Kenya. This is especially true of social-sector projects, where the local cost component is large. Though this consideration has yet to reach the level of public debate in Denmark, it could well lead to a more hard-nosed look at the allocation of funds for social service projects in Tanzania. In view of the generally waning "Tanzanaphilia" in Danish public opinion, Danes may begin to wonder whether one health clinic in Tanzania is worth as much as several comparable clinics in Kenya or in other recipient countries that have managed their exchange rates better.

4/ Tanzanians have coined this phrase to refer to the group of important bilateral donors whose aid has been on the softest terms and most in line with the Tanzanians' own sociopolitical philosophy.

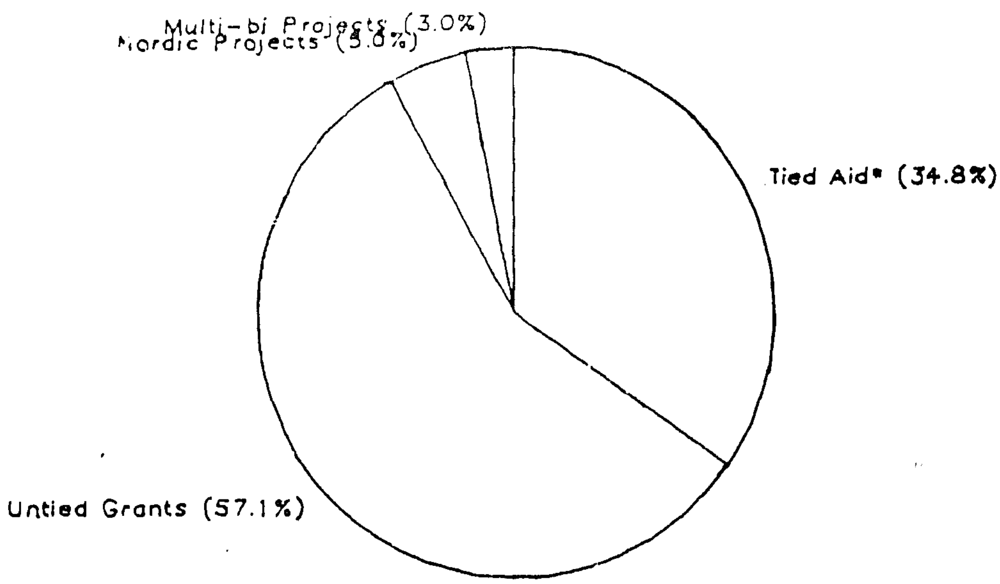
5/ In "Macroeconomic Shocks, Policies and Performance: a Comparative Study of Kenya, Malawi and Tanzania--1967 to 1984" (draft report for the MADIA study, July 1986), Yaw Ansu documents the progressive overvaluation of the TSh from 1972 to 1984, during which time the KSh broadly kept in bounds of its earlier real value (pp. 109-17; calculations based on purchasing power parity real exchange rates). Devaluations of the TSh since spring 1986 have partially redressed the imbalance, but the currency remains considerably overvalued in the opinion of most analysts.

Figure 2

Total Dk Aid to Tanzania by Form

1962-1984, constant 1980 DKr.

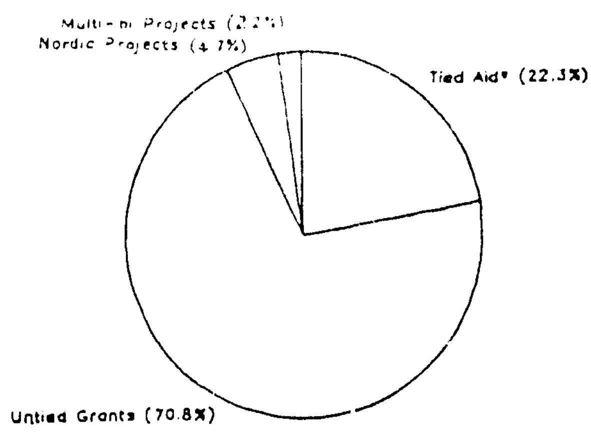
(total=2982 mil.)



Total Dk Aid to Kenya by Form

1962-1984, constant 1980 DKr.

(total=1415 mil.)



2. The Recipient View

Not surprisingly, Denmark has been a more important donor for Tanzania than for Kenya, not only because of the amount of aid disbursed (it has provided 6.9% of total ODA to Tanzania and ranked fifth among donors for the period 1970-84),6/ but also because of the strong signals it sent out of fundamental sympathy with Tanzanian ideals and approaches. As keen managers of their country's relations with different donors, Tanzanian officials were able to recognize the Danish enthusiasm for social infrastructure programs, and they let the Danes know that they looked to them for a major contribution in this area.

Denmark has been less significant in Kenya (ranking tenth among donors for 1970-84 with 4.9% of total ODA). As a result, Kenyan officials have a somewhat vaguer concept of what Danish aid might offer. The Kenyan government has always been amenable, however, to proposed poverty-oriented projects, attention to issues of regional distribution having been an important part of the official Kenyan platform since the early 1970s.

During the recent economic crisis, the two governments have reacted quite differently to Danish aid. The Kenyan officials interviewed indicated that overall fiscal management has constrained their acceptance of aid-financed loans, even on terms as soft as the Danish state loans (86% grant element). This may help to explain the slow pace with which Danida has been able to negotiate new loans, now that it has a renewed interest in building up a Kenyan loan portfolio.7/ But, the same expenditure rationalization program

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6/ See Annex IV for data on Denmark's relative importance in Tanzania and Kenya.

7/ Evidence of this interest is Danida's the financing of exploratory missions, such as the "Transfer of Danish Technology" disbursement listed in has led the Kenyans to welcome the addition of grant aid to items on the recurrent budget (such as maintenance). The Kenyans have praised the Danes for their flexible approach to this matter.

In Tanzania all aid is now on a full grant basis. Denmark (together with the other Nordic countries) has distinguished itself in not joining the pack of bilateral donors who put pressure on the Tanzanians for an agreement with the IMF. Yet, although Denmark has certainly been less harsh in its criticism of government policies than most other major donors, the fact that it has expressed any criticism has come as a surprise to the Tanzanians, who see this as the beginning of a more hard-line approach. Disappointment set in not only about a cutback in aid, which came about when Tanzania refused to rechannel some Danish project aid in support of imports, in conflict with its stated policy of structural adjustment (SAP), but also about Danish refusal to provide massive support to the sugar and cement industries without certain policy conditions.8/

3. Sectoral Patterns of Disbursement

Drawing on a detailed database on Danida disbursements, this section briefly describes the intersectoral composition of the aid portfolios to the two countries. For information on the way the database was constructed, the reader is referred to Annex I. Tables with some summary information on each project in the various sectors are found in Annexes II and III.

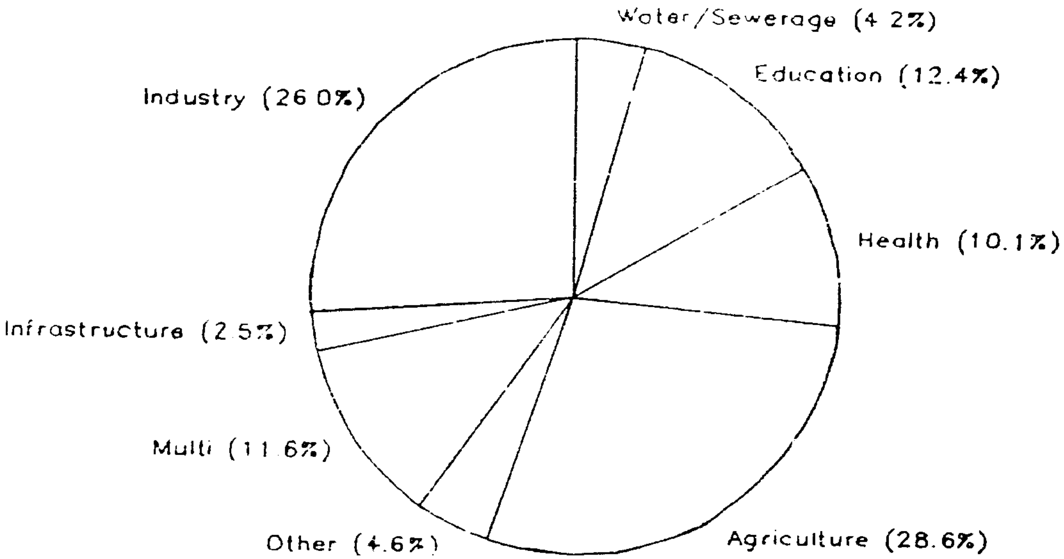
Annex III, Table 4.

8/ The case of sugar is discussed in the following chapter. As for cement, Tanzanians rejected the Danish proposal to support the concentration of production and finance the mothballing of one factory, again against the policy pronouncements of their own SAP. It appears that some agreement on this industry may have been reached recently.

Figure 3

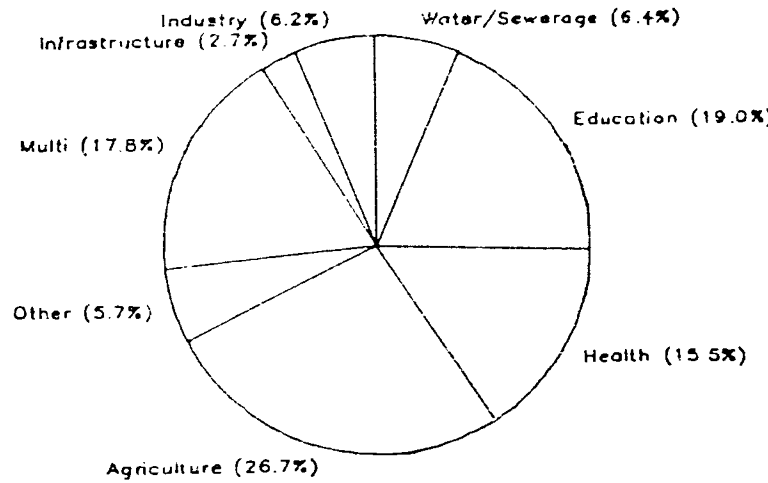
a) Total Dk Aid to Tanzania by Sector

1962–1984 totals, 1980 DKr.
(total=2982 mil.)



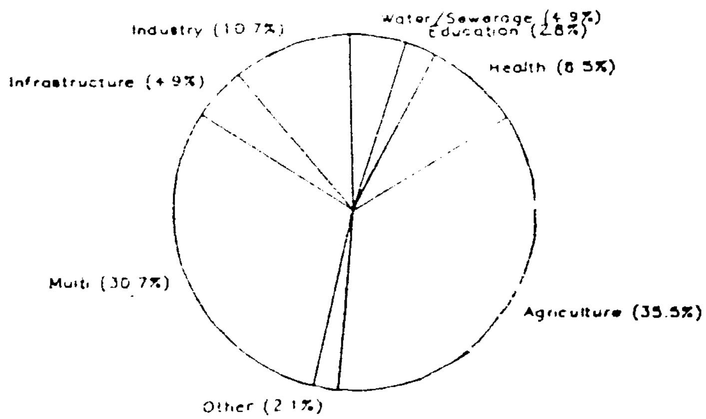
b) Untied Dk Aid to Tanzania by Secto

1962–1984 totals, 1980 DKr.
(total=1943 mil.)



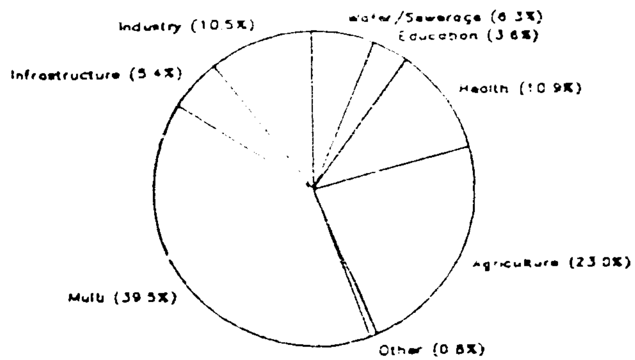
c) Total Dk Aid to Kenya by Sector

1962–1984 totals, 1980 DKr.
(total=1415 mil.)



d) Untied Dk Aid to Kenya by Sector

1962–1984 totals, 1980 DKr.
(total=1100 mil.)



The pie charts in figure 3 present the shares of real disbursements on a sectoral basis over the period 1962 to 1984. The charts on the right cover formally untied aid (also known as project or grant aid), and those on the left, total aid (including state loans and multi-bi activities). Both sides of the figure reveal the importance of agriculture in Danish assistance programs; the sector accounted for a quarter or more of each country's portfolio. But the charts also reveal some important distinctions. Those on the right, covering the "high profile" aid, might appear in very similar form in Danida annual reports and information brochures. Their sectoral breakdowns correspond fairly well to the type of agenda set out by the philanthropic proponents of aid: a focus on the rural poor through smallholder projects, and support to a range of social services. Indeed, in Tanzania the combined support to social services (health, education, and water) amounts to 41% of all spending.

The data in the left-hand charts are more likely to be of interest to the recipient countries and to the rest of the donor community, who have less reason to distinguish among aid types the way Denmark does. These pies are significantly larger: by 30% in Kenya and 50% in Tanzania. On the one hand, the apparent shift in the Kenyan portfolio toward agriculture and away from the multisectoral activities is somewhat deceptive, since many if not most of the multisectoral disbursements are directly related to agriculture (the largest two items in this category being technical assistance and a project known as the Rural Development Fund). On the other hand, the Tanzanian portfolio alters character completely when the loans are included: industry is on par with the social services, closely rivaling agriculture for first place. The difference hinges on the end uses of state loans in the two countries. In Kenya, they went almost exclusively to agro-processing.

Though this was also a facet of the Tanzanian loans, the primary focus was on industrial investments--specifically in cement.

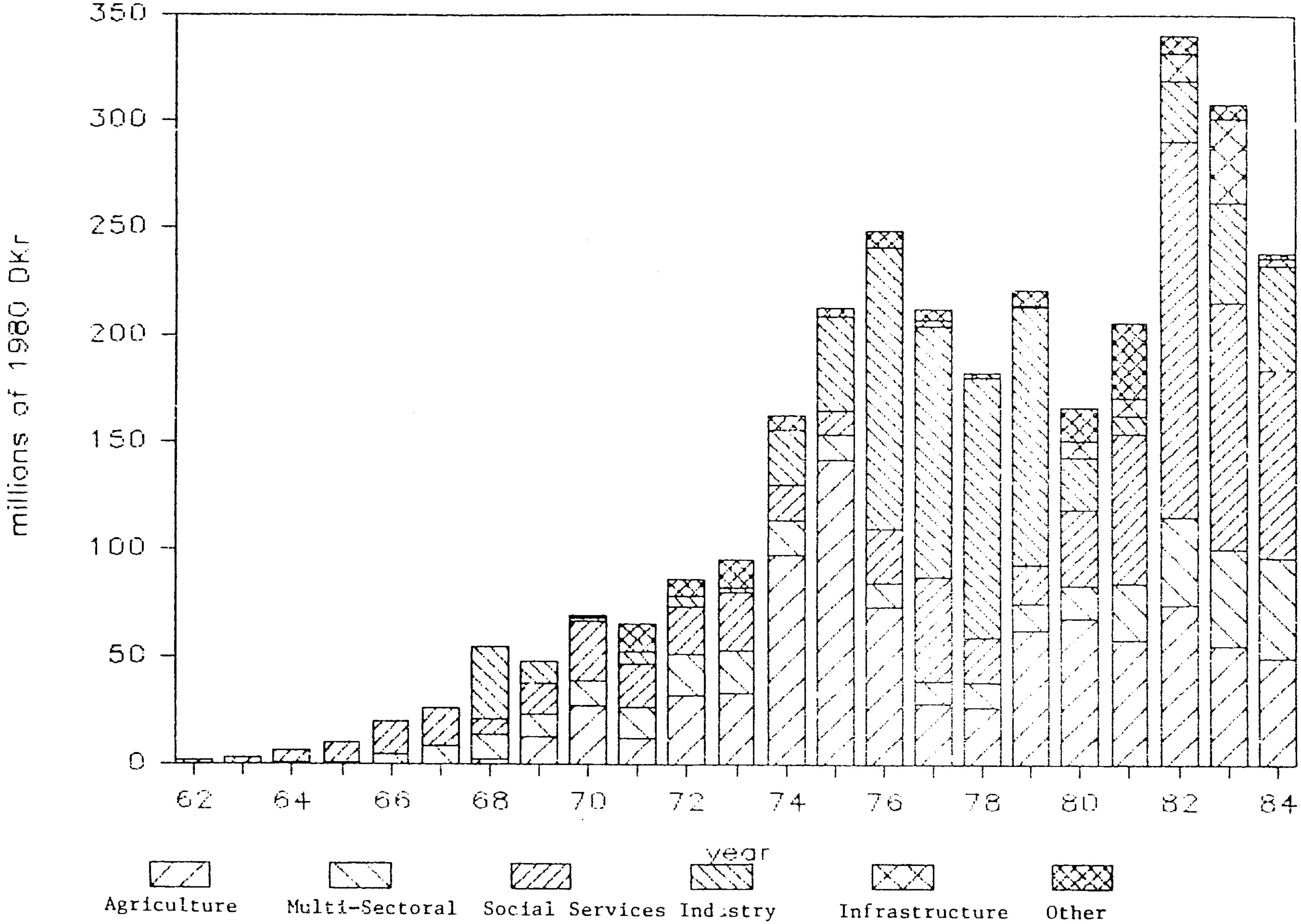
A noteworthy difference in the untied portfolios between the two countries is the share for multisectoral activities, which is a good proxy for the relative importance of technical assistance. In most years since the mid-1970s, the absolute number of technical assistance personnel has been higher in Kenya than in Tanzania (about 80 experts plus 65 volunteers in Kenya, about 70 experts plus 65 volunteers in Tanzania). In relative terms this is obviously a far more important element in the Kenyan profile. As late as early 1986, when the Kenyan government had given general indications that it intended to reduce the number of technical assistance personnel in the country, officials indicated that they did not want the amount of Danish technical assistance to decline. It is not known to what extent this position has changed since President Moi's speech in June 1986 calling for an escalation of that process.

Figures 4 and 5 show the sectoral breakdown of total aid to each country based on a time series. This highlights the preponderance of industry in Tanzania in the second half of the 1970s, and the more recent emphasis on social sectors (water supply and health--in particular through a large essential drugs program).

Figure 4

DISBURSMENT TO TANZANIA BY SECTOR

1962-1984

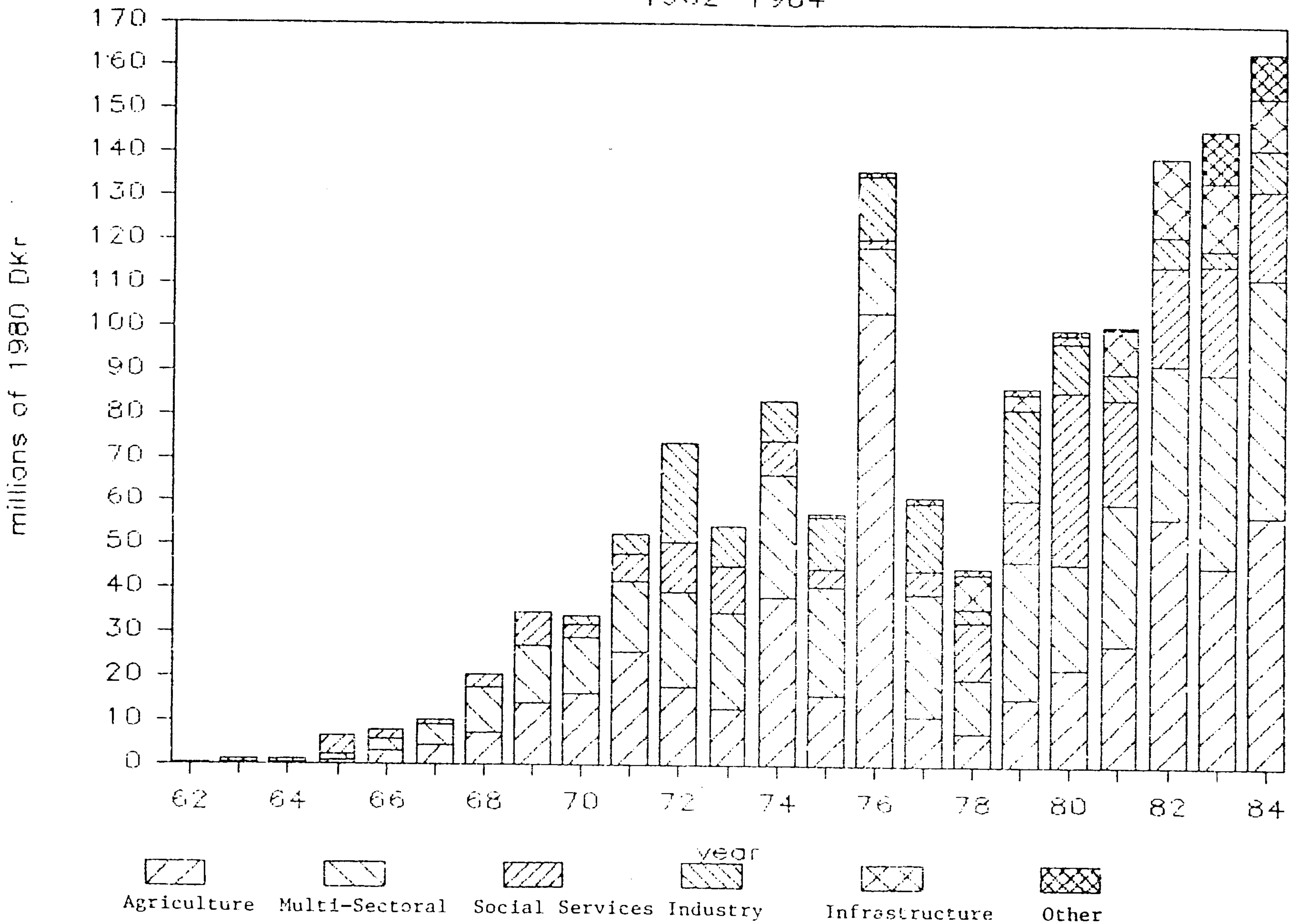


* 1978 = 9 months (April - December)

FIGURE 5

DISBURSMENTS TO KENYA BY SECTOR

1962–1984*



* 1978 = 9 months (April – December)

IV. PROFILE OF AID TO THE AGRICULTURAL SECTOR

1. Introduction

Looking at the aggregate figures as we did in the preceding chapter, one gets the impression that agriculture fares about the same in Tanzania as in Kenya. Scratching below the surface to look at the details of the two agricultural portfolios, however, one comes away with a very different impression. To be sure, there are some similarities at the level of individual project activities--a trait to be expected given Danida's small size and the prominence of the two East African neighbors in its overall program. But in many respects, the overall differences are pronounced.

Foremost among these is the pattern of intrasectoral allocations. Figures 6 and 7 summarize these patterns across the dimensions of product and function. Agricultural activities are grouped by their primary product focus: crops, livestock, or non-specific (a residual category for activities like credit or support to cooperatives which may not be exclusive to either of the former two categories). Within the product groups, the functional orientation reflects the aspect of the sector's development on which the activity focuses: production (which includes only activities directly aimed at increasing output)[1/], processing, financial transfers (not called "credit" because it includes financial support to banks' own on-lending capital), policy,administration and planning (including support to the development

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1/ In the Annex tables this category is further split, with an "input supply" subset.

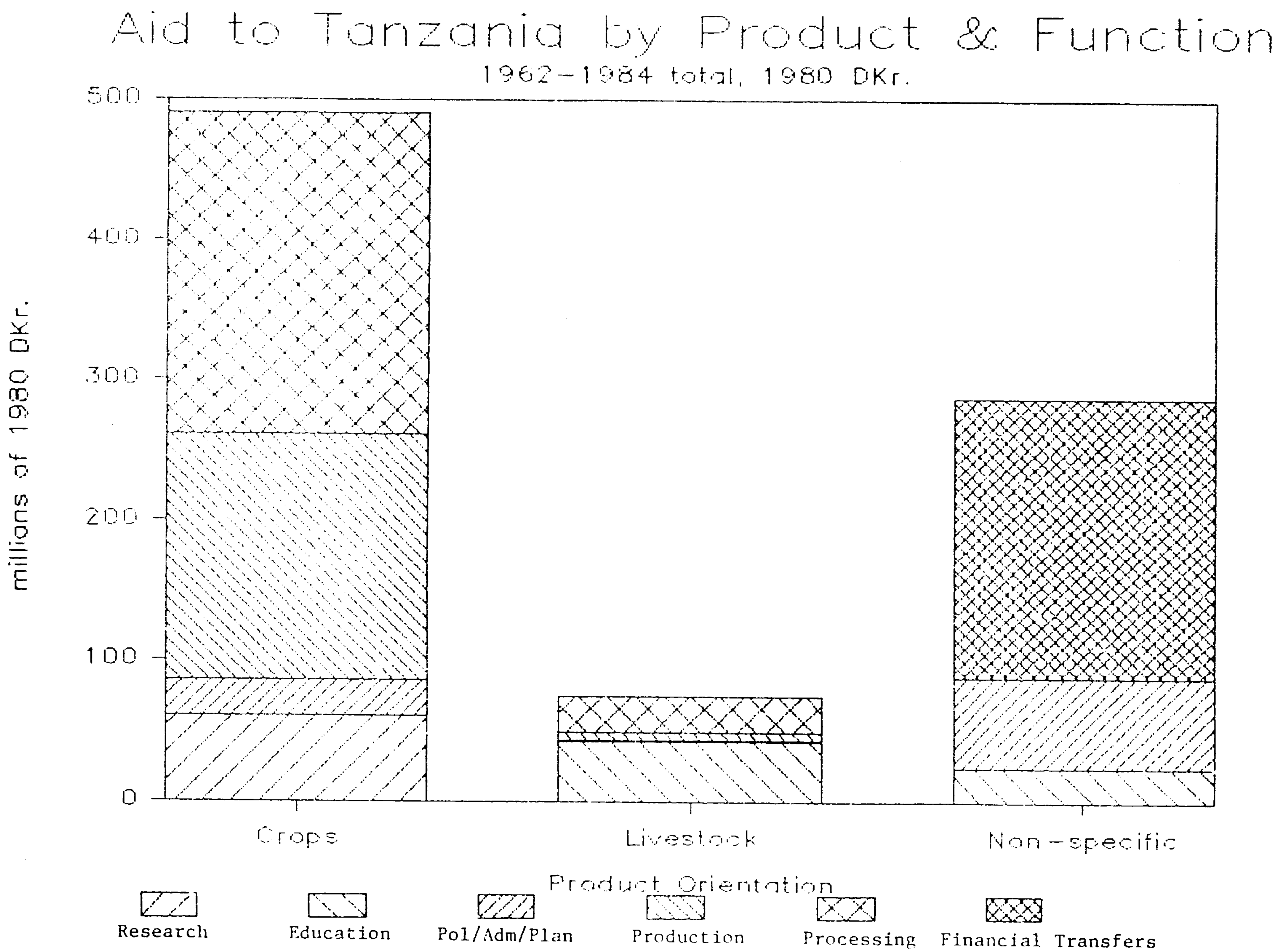
of institutions, like cooperatives, as well as to the planning and policy analysis capacity of recipient agencies), agricultural research, and agricultural education (at postsecondary institutions).

These categories are by no means the only way one might slice up the data ("extension", for example, often appears among functional breakdowns of agricultural aid), but given Danida's aid patterns they provide us with some workable aggregates. In comparing the two figures, the reader should note that the scales are different, reflecting the smaller overall size of the Kenyan program.

The first striking observation concerns the livestock sector. Livestock activities account for more than half of the total aid to Kenya, but only a tenth to Tanzania. Within the livestock area, there is also a difference in functional focus. By far the most funds in Kenya have gone to agro-processing (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.

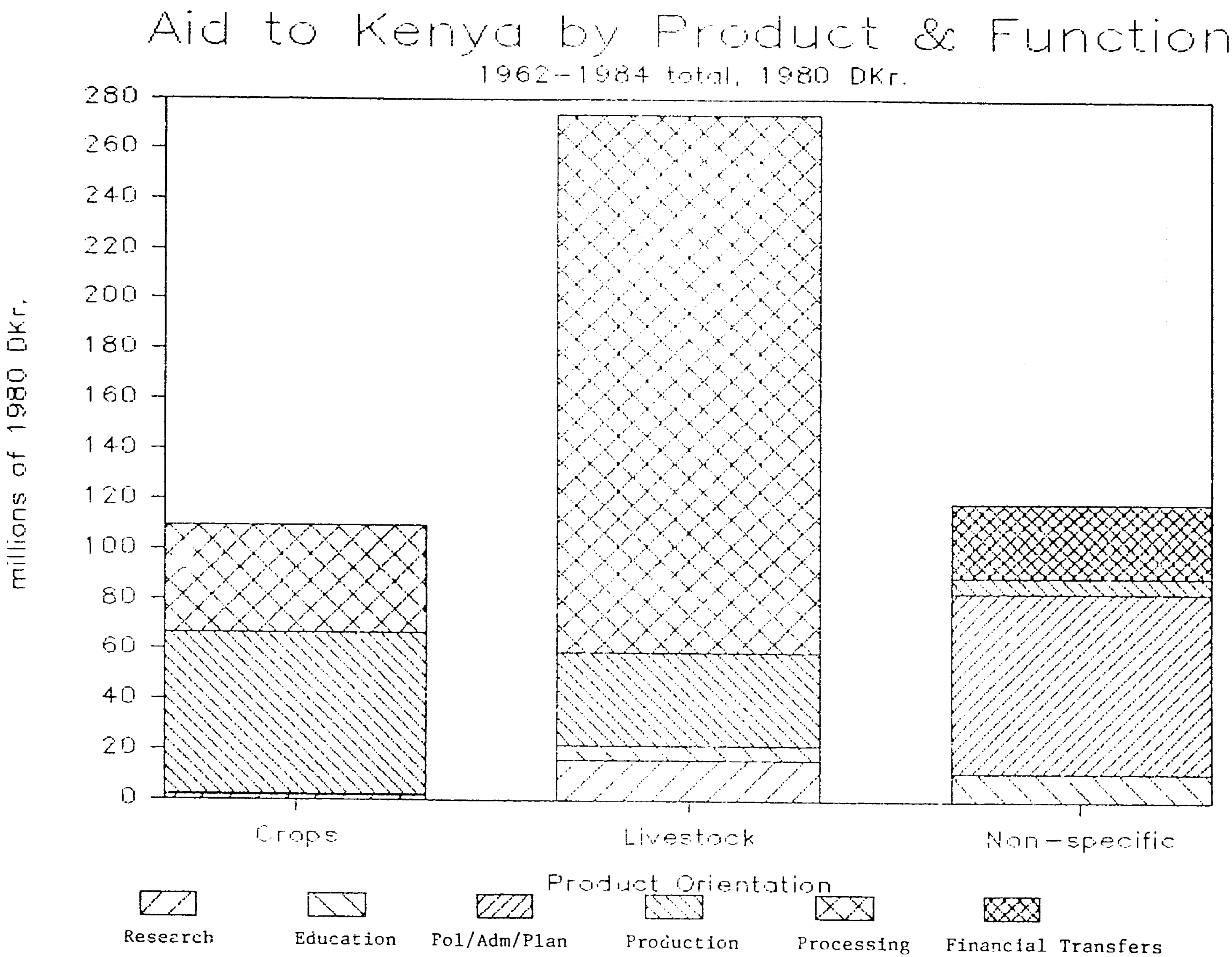
Crop activities clearly dominate the Tanzanian portfolio, consuming well over half of total resources. The functional orientation of both these and the nonspecific activities in the two countries is somewhat similar, with substsantial aid going to crop processing (sugar or grain), financial transfers (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.

FIGURE 6



Aid to Tanzania by Product & Function
1962-1984 total, 1980 DKr.
500
400
300
200
100
0
millions of 1980 DKr.
Crops
Livestock
Non-specific
Product Orientation
Research
Education
Pol/Adm/Plan
Production
Processing
Financial Transfers

FIGURE 7


Aid to Kenya by Product & Function
1962-1984 total, 1980 DKr.
millions of 1980 DKr.
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
Crops
Livestock
Non-specific
Product Orientation
Research
Education
Pol/Adm/Plan
Production
Processing
Financial Transfers

One needs to look beyond these functional aggregates, however, to get at another difference between the two country programs. Indeed, the far larger disbursements to Tanzanian crop and nonspecific activities mask the fact that the Kenyan program has required much greater administrative resources from Danida. Most of the Tanzanian program came in the form of "bulk aid"--large shipments of chemical inputs and large checks to the rural development bank. Even certain of the projects (like the above-named Nordic research project and the National Food Strategy project, which falls under the policy category) were more in the character of bulk aid from the standpoint of Danida's administrative input, since they involved little else than signing over checks and an occasional site visit or briefing. The Kenyan program has required much more regular on-the-ground presence. As we will argue, this has had some important consequences for aid effectiveness both at the level of individual activities and in the wider sense of giving Danida a better knowledge base from which to go forward with portfolio development.

It would appear that some of this difference in administrative intensity had more to do with Danish sensibilities regarding the two countries than any inherent differences in their need for close scrutiny. The reader will recall from chapter III that in the early 1970s Kenya came to be suspected in Danish pro-aid circles of "questionable motives" on the issue of income distribution. Danida's response was to concentrate increasingly on the poorer segments of the population; in practice, this added to the need to scrutinize the details of aid activities in Kenya. In contrast, Tanzania's overall policy framework (or at least its expressed goals) was considered fully appropriate from the standpoint of Danish concerns about target groups. This in turn probably led to greater confidence that Tanzanian allocation procedures would be appropriate as well.

Important as attitudes to the recipient countries were, certain characteristics of their agricultural sectors may have played a role in the selection of activities, and have certainly played a role in the relative effectiveness of these activities. For the purposes of the analysis which follows, it is useful to note two types of characteristics: those relating to the resource base, and those relating to the sectoral and macroeconomic environment. The first is of fundamental importance to the appropriateness of the means and objectives of aid interventions (for example, one must know what the resource constraints are for a particular target group in order to help raise its income earning potential). The second is essential not only in shaping the incentive structure for individual farmers, but also in determining the extent to which project assistance is a viable form of intervention under prevailing economic and institutional circumstances. These issues can only be summarized briefly here; for a fuller treatment the reader is referred, inter alia, to Part I of a companion paper from the MADIA study by Lele and Meyers entitled "Domestic Policies, Agricultural Performance and World Bank Assistance" (Draft, Feb. 1987).

Resource-Base Comparisons. Though Tanzania and Kenya are neighbors and grow many of the same crops (coffee, tea, cotton, pyrethrum, maize, wheat, rice, and sugar, among others), there are some striking differences in their resource bases. The primary distinction regards the availability of arable land. No precise comparisons can be made 2/, yet it seems clear that Kenya's land resource base is marked by far sharper dichotomies than Tanzania's. Comprising only a small portion (4.2%) of Kenya's total area, high-quality

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2/ The measurement tools have varied between the countries. On the whole there has been considerably more attention to measurement in Kenya, reflecting the fact that land resources are a more pressing constraint there.

land (zones I and II) nevertheless seems more abundant in that country than in Tanzania. These are the areas where high-value coffee, tea, dairying, and pyrethrum do best. In Kenya, such areas (and crops) have enjoyed dramatic increases in productivity and output since independence. They lie essentially in Central Province, and in the higher elevated and better watered portions of Eastern, Rift, Nyanza, and Western Provinces.3/ In Tanzania, high-quality land exists in pockets in the northeast near the Kenyan border (Moshi, Arusha), in parts of Kagera in the northwest, and in the Southern Highlands (portions of Mbeya region and Mbinga district). Dramatic growth also took place in these areas in Tanzania, in all the activities noted above except dairying, but it began to trail off by the early 1970s.

Tanzania has much vaster tracts of what is typically called medium-quality land (zones III and IV), suitable for rainfed annual cropping of various food crops, cotton, tobacco, and certain perennials like cashew and sisal. This type of land was in many respects the engine of growth in Tanzania in the 1950s and 1960s, when cotton, tobacco, and cashews registered impressive performance through expansion of the area under cultivation. In Kenya, nearly 60% of what has been classified as arable land, of about one-fourth of the total land area, is clearly marginal in character, that is semi-arid or arid, with considerable uncertainty for rainfed agriculture. Cash-cropping in the few medium-potential areas of Kenya (mostly cotton and cashew) never took off in the same way as in Tanzania. By the 1970s, however,

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3/ In Western and Rift Valley Provinces, the higher quality areas are distinguished by their rainfall patterns, although the soils are poorer, and less suitable to some of these export crops than they are to improved maize varieties.

the situation in Tanzania also took a turn for the worse, in some cases with quite dramatic declines in output.

It is more difficult to compare the dynamics of food crop production, given the high proportion allocated to subsistence or marketed through unofficial channels. Kenya's medium-potential areas (especially in Rift Valley) and high-potential, well-watered areas of Western Province experienced a dramatic increase in productivity with the introduction of hybrid maize in the mid-1960s. Tanzania's Southern Highland Regions (Mbeya, Rukwa, Ruvuma, and Iringa) have registered a more recent (since the mid 1970s) and as yet less complete revolution, probably of a more extensive character than in Kenya.

The livestock sectors of the two countries are also quite different, inasmuch as Kenya has had the resource base in the high potential areas to develop a very advanced, monetized dairy industry based on grade cattle, stall feeding, and regular purchases by the dairy cooperative network. In the Tanzanian highlands there are traces of a similar dairy economy, though on such a small scale that the output is essentially for the local market. Most of Tanzania's medium-potential agricultural areas are unsuitable for cattle because of tsetse infestation. In both countries, the bulk of cattle is kept in an entirely different economy: barely monetized indigenous herds being tended by pastoralist and agro-pastoralist groups in the semi-arid stretches of Kenya's Rift Valley, Eastern and Coast Provinces and of Tanzania's Central Plateau. So far little has been done in either country to draw these groups much further into the market economy.

Though much of the agricultural performance story sketched above may well be linked to the policy environment, the resource endowments themselves have certainly affected the options. In relation to future prospects, population factors will play an important role. The Tanzanian highlands are already quite densely populated and intensively farmed (albeit to some extent in crops which can be sold on unofficial markets where prices are higher), but there appears to be considerable potential for expansion at the extensive margin in many of the medium-quality areas. This may well be the only viable option at the moment for expanding production, since most of the improved technologies so far available have increased yields only marginally, typically at the expense of increasing risks. The stumbling block to expansion at the extensive margin is in part an administrative one, in that the present location of many villages prevents the farming population from moving out onto unutilized land.

In Kenya, population densities in the highlands are extreme, and population pressure has been pushing more and more cultivators on to the marginal soils for which there are few known technologies. Because of this severe land crunch, coupled with a population growth rate of about 4% per year, Kenyan officials have been gravely conscious of the need to create employment in the process of encouraging further growth.[4/]

The concentration of Kenyan land resources in a relatively small and for the most part contiguous portion of the country has not been without its advantages from an administrative and infrastructural standpoint. With most of its surplus-producing land spread out over a vast area, Tanzania's agricultural economy has suffered to a far greater extent from high transport costs and from breakdowns in the marketing and transport systems. Indeed, transport costs for moving maize from the main surplus areas in the Southern

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4/ Many would argue that this could include subdivision of the larger farms in the higher-potential areas that are relatively extensively farmed.

Highlands of Tanzania to the population centers have been nearly prohibitive, whereas in Kenya maize can be moved with relative ease, and at reasonable margins, from the surplus areas west of Nairobi to town. In addition to these natural advantages in Kenya, the colonial heritage left the country much better endowed with both physical and administrative infrastructure. This is attributable both to the important settler-based commercial farming economy of the colonial period and to the colonial government's strategy for coping with the state of emergency under Mau Mau during the 1950s, when it added substantially to the transportation network in smallholder areas, particularly in Central Province.

Sectoral and Macroeconomic Issues. Among the many issues that fall under this heading, we would draw the reader's attention to two related ones: the overall incentive structure facing smallholder farmers (centering on real producer price levels as they pertain at the farmgate); and, the predictability of institutions providing services to the agricultural sector. Both factors set the context in which donors try to operate. For a small donor like Danida, which has defined its role primarily in terms of project assistance, this sectoral environment has enormous impact on the likely chances for success. Yet precisely because such small donors have not perceived themselves to be in the business of offering sectoral policy advice, the policy environment has not been consistently assessed or understood.

Neither Kenya nor Tanzania has had an unequivocally positive structure of farm-related incentives across the full spectrum of commodities produced. Yet it appears clear that for many commodities (including coffee, tea, and dairy) the Kenyan government's policies relating to incentives have been geared toward allowing capital accumulation to take place at the farm level. By contrast, through a combination of explicit sectoral pricing policies and increasing implicit taxation through the rise in marketing margins over the 1970s, Tanzanian farmers witnessed steady declines in the real purchasing power of most commodities, with the exception of a group of inferior "drought" staples and legumes which enjoy high support prices, and of "preferred" staples like maize which began to have an attractive unofficial market price by the end of the decade. Dramatic nominal price adjustments during the 1980s could barely keep pace with Tanzania's official rate of inflation, however, and the extreme scarcities of consumer goods in the countryside made that index questionable in any event. Increasingly, only the remoter areas which enjoyed subsidized transport costs continued to find the official system offered "incentive prices" for commodities like maize. By the 1980s, moreover, the problem had taken on clear macroeconomic dimensions; exchange rate overvaluation meant government could not pay higher prices to farmers without running higher deficits to finance the marketing authorities.

A major part of the decline in incentives in Tanzania was related to the unpredictability of the marketing system rather than to the price setting process per se. A series of changes, first in reducing the scope of cooperatives, then in replacing them completely with parastatal marketing authorities, then partially reintroducing cooperatives in the early 1980s, had the result in most places of worsening, rather than improving, the certainty of marketing channels. During the 1970s, Tanzanian farmers were less and less able to count on timely transactions (while waiting time further reduced the real value of the commodities to producers). The Kenyan marketing system on the whole has appeared more stable from an institutional standpoint, but there are large parts of it for which similar stories of soaring marketing margins and increasingly delayed payments could be told -- most notably in cotton, but also in pyrethrum and cashews.

With respect to other institutions providing services to producers, the Kenyan system would appear to be the far more predictable one. Not only did Tanzania's farmers themselves go through a dramatic institutional reorganization with the villagization process of the mid 1970s; so did the officials whose job it was to interface with them. Since 1972, chains of command for Tanzanian extension officers have shifted from the Ministry of Agriculture to the Regional Development Director, in some cases to Crop Authorities, and then back to the Ministry. At one point additional officers (village managers) were appointed to serve thousands of villages. Retail trading has been affected first by the short-lived nationalization of the import business in the late 1960s, and subsequently by two campaigns to establish village shops (and close private ones) in 1976 and 1980.

On balance, it would appear quite clear that the Kenyan agricultural environment has been more conducive for the conduct of project assistance than has the Tanzanian environment. This is not to say that inappropriate types of project assistance would work in Kenya; but in Tanzania even "sound" projects would have a much harder time staying afloat in the midst of the institutional turbulence and the declining incentive structure, factors that were outside the influence of project managers. It also seems that the heightening macroeconomic crisis Tanzania has faced since the end of the 1970s has compounded the difficulties of project assistance. The business of living has put such extraordinary demands on government and parastatal officials that the capacity of their institutions has come under severe stress. Similar problems in Kenya with the onset of recession in the 1980s appear to pale by comparison.

Against this background, we now take a closer look at the components of Danida assistance to the two countries. We begin with a discussion of

Danida activities in the livestock area, as this seems to be one part of the portfolio where there has been a considerable amount of interaction among the various functional components, in the Kenyan case beginning to approach an integrated subsectoral strategy. This is followed by a discussion of the various crop-oriented and non-specific activities. Here we have focused on the functional orientation, since there are fewer interlinking strands from which to derive a subsectoral strategy in these cases. Because the type of activities occuring in the crop and non-specific categories are frequently similar, they are grouped together under the functional headings to facilitate the overall assessment Danida's experiences and capabilities in these areas. Finally, the chapter ends with a section on Danida's experiences in several areas outside the agricultural sector proper, but directly related to it: transportation infrastructure, industrial import support, and multisectoral activities. During the discussion of the agricultural portfolio, the reader may wish to refer back to Figures 6 and 7 periodically to get a sense of the relative and absolute size of the various activities.

2. Livestock Activities

(i) Overview

Livestock production holds a special significance in the Danes' economic development history, and has therefore loomed large in Denmark's self-appraisal of its aid potential. The main characteristics of present-day Danish agriculture were shaped in the second half of the last century. Livestock began to dominate the agricultural sector, when crashing international grain prices spurred Danish farmers to convert from grain to animal production. The change had widespread and long-lived economic, social and political ramifications. For decades, livestock farmers have been supported by an impressive research and extension system (as well as favorable prices), with the result that dairy and pork products continue to be major commodity exports.

Despite the Danish livestock industry's early disappointments in the aid business with dairy/breeding farms (noted above) it has managed to maintain a significant presence in Danida's agricultural activities, representing the bulk of technical assistance and administrative input. With a few small exceptions in poultry and pig rearing, livestock promotion through the aid program has centered on cattle.

This emphasis is reflected in the East African portfolios. We turn first to the composition of the Kenya program, which has been far more significant financially and has covered a wider range of functional activities than in Tanzania. (Figures 6 & 7) In contrast to some other donors in Kenya who have run large programs focusing on the development of the dryland, pastoral cattle economy, Danida has primarily focused on the development of the highland, grade cattle-based, dairy economy. There has been a two-pronged approach to this support.

(i) Financially most significant have been the periodic investments in dairy processing through state loans to the Kenyan Cooperative Creameries (KCC), the national dairy processing company.[5/] The combination of these loans plus several export credits for the same purpose have made Danida the dominant donor to KCC. KCC has also been the beneficiary of a number of fellowships for training in dairy management in Denmark.

5/ KCC is a sort of hybrid between a cooperative union and a private corporation, inasmuch as it is a corporation with cooperative societies as shareholders.

(ii) Activities grouped in the research, education and production categories have mainly been oriented toward improvements in smallholder dairy farmers' performance. So far the main focus has been on tick control, which has been approached through cattle dip rehabilitation projects in several districts and acaricide resistance research (acaricide being the active ingredient used in the cattle dips). More recently, this has been supplemented by some extension work in fodder crops.

The small education vote (technical assistance to the Naivasha Dairy School) has had a larger significance for Danida's program because it provided the link between these two branches of support to the dairy industry. Danida-affiliated agronomists working at the school were sparked to take a more active interest in the use of state loan funds to dairy processing. As a result Danida commissioned a Dairy Master Plan, which brought in more sectoral considerations to the appraisal of future investments with KCC.6/ The feedback process here is especially noteworthy because it is the only case in the two aid portfolios where we could identify active integration of project and state loan aid policy from an *ex ante* vantage point.

(iii) In addition, Danida has provided investments in meat processing which encompass the offtake of the dryland cattle economy. Modern butcheries have been provided both under a state loan in the mid 1970s (Halal Slaughterhouse, Ltd., outside of Nairobi) and under project aid in the early 1980s to eight publicly-managed district slaughterhouses. The project's objectives were primarily related to public hygiene rather than to stimulating

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6/ *Master Plan for the Dairy Industry in Kenya*, Report prepared for Danida by Cowiconsult, April 1979. The main implication for Danida's processing investments which emerged was that support should be confined to plants located in areas with an adequate production base.

the market in meat. Two hygienic issues were raised: the safety of meat quality for the consumers and the protection of the environment from the discharge.

The livestock program in Tanzania started out on a similar footing to the Kenyan one, with investments in dairy processing in Mara Region through a state loan (mostly in the early 1970s) and small dairy production support projects in Zanzibar and Coast Region. For reasons to be discussed, this type of activity did not gain the same momentum in Tanzania, however, with the result that the program shifted direction toward its present major focus on education. The large education vote is entirely in support of the establishment of a veterinary faculty at the Sokoine Agricultural University in Morogoro. Danida is the principal (if not sole) donor to this faculty, with responsibility for both the hardware and the establishment of a veterinary teaching staff.

(ii) Assessment

On the whole, Danida's Kenyan livestock experience appears to have had a more successful record and to continue to be more promising than the Tanzanian one. Within the Kenyan program, the support to the dairy economy appears to have had significant positive effects. By contrast, meat processing has had disappointing results. In Tanzania, Danida correctly recognized the limited scope for successes comparable to those in Kenya in the dairy sector. Yet it did not incorporate the implications of that finding (which relates to resource base differences in the two countries) into its subsequent strategy to assist in the development of a livestock health care program for Tanzania. The following discussion takes up each of these issues in turn.

The experiences related to the farmer-oriented part of the Kenyan dairy program have been extremely positive. Tick control measures in Uasin Gishu and Kericho, both districts with a high percentage of grade cattle, have taken almost instant effect. The majority of cattle diseases in these areas are tick-borne, and the benefits have clearly been felt by the local veterinarians. A very positive side of these projects have been the role of technical assistance personnel as catalysts in reestablishing well functioning dipping systems. The simultaneous support to the research system has been extremely important. The research stations provide laboratory services for testing arcaracide concentration, which is one of the crucial elements in monitoring the dip attendants' performance.

With regards to the future of Danish involvement in this area, it is worth mentioning the question of sustainability. The permanent impact of the chosen strategy of tick control rests on the upkeep of universal dipping. This in turn is a function of regular collection of the dipping levy and of securing a continuous high standard of dipping services. The dangers of the system breaking down, once established, are much greater for the mortality rates of cattle, than no system at all, since cattle lose their congenital resistance to the tick-borne diseases within a generation.

Recent developments in East Coast Fever prevention at the Kenyan-based International Laboratory for Research on Animal Diseases (ILRAD) point to a potentially far less expensive and more effective means of treating cattle for this devastating disease, which has been the primary target of the tick control measures. The method, known as "infect and treat" is based on infecting the cattle with a live serum and treating them before the infection becomes debilitating. After treatment, the cattle have an acquired immunity, so the method is required but once. As a result the method is not only less risky than dipping; it is far less costly (especially in foreign exchange), since standard dipping prevention requires cattle to be put through twice a week. If the early enthusiasm with this new method is warranted, Danida will clearly want to shift its veterinary activities over to this and only maintain some strategic dipping in order to control the secondary tick borne diseases.

Leaving the possibilities of alternative methods to dipping aside, the ultimate verdict on this project will depend on its ability to achieve self-sustainability. This is currently the projects Achilles' heel. The collection of the dipping fees is done centrally by the Ministry of Agriculture & Livestock Development which in turn gradually is supposed to take over from Danida the responsibility for financing the salaries of the locally employed project staff. Currently the Ministry seems unable to collect more than 50-60% of the fees, and is uninterested in taking on the new current expenditure obligations. If this situation does not change before the withdrawal of Danish support, this systemic transplantation will in effect have been rejected, rendering the program's impact at best temporary and at worst negative.

On the dairy processing side, Danish support to KCC has helped to increase greatly the company's collecting and processing capability. Though KCC has a fair share of problems, some imposed and some self-made, its significance to the sector in securing predictable outlets and immediate payment has created a stable environment for dairy production which must be the envy of most African countries. From a production plateau of 800-900 million litres a year in the 1960s, the output of the Kenyan dairy industry has risen steadily to around 1300 million litres by the mid 1980s.[7] Since Danida has been the industry's major supporter in this period (to the tune of over Dkr. 180 million Danish crowns for the loan-financed equipment alone), it would be reasonable to credit it with a correspondingly major share in the success.

As for the future, it is unclear whether there is the basis for more of the same type of investment, in line with recent Danida offers of additional state loans for dairy equipment. The industry seems to be fast approaching market constraints to disposing of its output. This is due in part to stagnating domestic demand, and in part to the closing off of two traditional export markets, Uganda (because of civil collapse) and the Gulf States (because of competition from the EEC).

The picture is less rosy for Danida's support to the meat economy. Halal Slaughterhouse was inaugurated in 1978 but only operated for a week or two before it was closed down by administrative fiat. What seems to have happened, as far as could be pieced together, was that the plant had been appropriated for private purposes. Once this was discovered, the plant's operation was then blocked by other interested parties. The facilities were left standing empty for six years before the drought of 1984 prompted the Kenyan government to request Danida to finance re-establishment in order to cope with the extraordinary drought-related offtake of cattle. So in August of 1984 the plant started operating again, this time as a branch of the Kenya Meat Commission (KMC), a parastatal corporation.

KMC's utilization of capacity at its other slaughtering facilities at Athi River and Mombasa does not allow for much optimism that the reestablishment will have turned this Danida investment from bad money into

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7/ Table 6 in "The Farm Gate Value of Kenya Milk Production, 1966-85," I.R. MacDonald, Background paper to the MADIA study, 1986.

good. In 1976, the last year KMC had a monopoly over beef sales to urban areas, its capacity utilization was 80%. Since 1977 utilization plummeted and has hovered in the twenties or thirties for every year except the extraordinary one of 1984. Low capacity utilization, a prime indicator of misinvestment, similarly mars the eight district slaughterhouses.

The very different records of achievements of Danish support to the processing of two livestock products in the same country requires some explanation. Essentially it appears to rest with the differences in the natures of the dairy and meat products, which in turn have consequences for their transportation and storage requirements. Simply put, four legs and a metabolic system makes beef a self-propelling product, while the movement of milk in bulk from the major production areas to the urban consumers depends on the availability of technically fairly sophisticated and capital-intensive transportation and storage systems. Leaving aside local delivery 8/, there are not many degrees of freedom in the current technology for milk processing, while slaughtering technology varies widely. As a result, milk processing and packaging has to surpass certain minimum daily volumes to be economically viable 9/, while meat processing is much more divisible and flexible. This in turn has organizational consequences. Not nly do the technological conditions make a legal monopoly of milk processing more justifiable, but it also makes it sufficiently enforceable in practice.

Just the opposite holds true for meat processing. As publicly managed ventures (which must follow public policy on prices, health standards,

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8/ which only can absorb a portion of the current levels of milk production

9/ Currently the minimum for pasteurized milk is 20-30 ton/day = 2000 l/hour, and 250 ton/day for UHT milk.

etc.), the Danida-supported slaughterhouses do not have the flexibility to attract a good share of the market in competition with private butchers who can pay more for the quality animals than KMC and don't reject the sick ones as both the KMC and the district slaughterhouses are supposed to do.

Low capacity utilization of the slaughterhouses suggests that the investments have had little impact on the development of the meat market in Kenya. Furthermore, the analysis suggests that the public health objectives of the district slaughterhouses have failed to be realized. The experience of public slaughter authorities in establishing hygienic meat standards through rejection of animals "unfit for human consumption" is rather uniform. In such low income environments as those prevailing in most of Africa (including even Kenya's relatively well-off districts) meat quality control fails in one of two ways: by the compromising of meat inspectors or by the circumvention of the facilities themselves. Even attempts of destroying unhygenic meat by burying or colouring it have repeatedly proven in vain.

It does seem possible to achieve the intended impact on environmental hygiene through the use of slaughterhouses, but only if the actual slaughtering is left to private butchers, without imposing any quality restrictions on the meat. Hygienic standards for the meat itself can only be succesfully imposed when such standards correspond to consumer priorities. It seems there is no short cut from public campaigns and education on this matter. A differentiated system with an option for certifying the quality of the meat might be an intermediate solution, but success can not be more than partial until the fundamental problem of absolute poverty has been alleviated. In that sense we feel that the project has been premature and that the investment funds could have realized higher social returns elsewhere.

Turning now to the program in the Tanzanian dairy economy, we note that Danida did not follow up either the early production activities nor the investment in processing. In neither case were the results particularly favorable. Indeed the Mara dairy came under some criticism from a distributional standpoint. Processing capacity was installed in an environment where farm households' milk production was low to begin with and did not have a firm technological basis for increasing, with the result that the dairy's existence encouraged a transfer of milk consumption from rural children to urban adults.

The fact that an approach which has given positive feedback in Kenya rammed into such constraints in Tanzania is a symptom of the differences in the cattle economies in the two countries. The Danida dairy activities in Kenya were focused on the highland cattle economy, a highly monetized, grade cattle-based farming system which has a number of parallels to the modalities of European dairy farming. On the whole, the Tanzanian situation is closer to the other part of the Kenyan cattle economy characterized as pastoralism or agro-pastoralism, where the links with the money economy are limited, and where the stock are indigenous, range fed, and primarily viewed as a risk-absorbing device rather than an investment object.

Though Tanzania does have small pockets of highland areas where the climate is attractive for keeping grade cattle (such as the area around the Mara dairy plant) there are both infrastructural and institutional obstacles which put the country at a disadvantage vis a vis Kenya in experiencing a take-off. For one, Kenya has large contiguous areas suitable for dairy farming, which means it can realize scale economies in the provision of extension, veterinary, and marketing services as well as in processing. Secondly, the Kenyan dairy economy has a long heritage from the days of

European settler farming. By independence, KCC was already an extremely well-functioning institution. The transition towards servicing an industry which has become increasingly smallholder based has of course required a skillful maintenance and adjustment of this institution, but managing a transition is easier than starting from scratch.

Given the character of the Tanzanian cattle sector, the physical and curricular plans for the Morogoro Veterinary Faculty are surprisingly reminiscent of European veterinary schools. The Morogoro program has been designed to include virtually the full range of veterinary activities, including facilities for and training in surgery and anaesthesia of small animals. Danida's justification for financing the establishment of the Veterinary Faculty was the perception of an enormous untapped potential for animal production in Tanzania. The diagnosis itself would be difficult to challenge; it is harder to justify Danida's choice of means. Project documentation leaves this question largely unanswered. We venture that the project has resulted from a decisionmaking process driven more by the resources Denmark could offer than by an analytical review of the demands of the sector in question. Since Denmark for good reasons is proud of it's own level of veterinary services and education, Danida appears to have assumed (without much probing of the Tanzanian reality) that this system would provide an important remedy for the low productivity of the Tanzanian livestock sector.

It is clearly beyond the scope of this report to provide the kind of in-depth sectoral analysis which ought to have preceded the choice of a strategy for raising livestock productivity in Tanzania. Here we confine the analysis to indicating a number of constraints which seem far more vital to the productivity of the sector than the one Danida has chosen to tackle through the establishment of the Veterinary Faculty.

The perception that the Tanzanian livestock sector has considerably underutilized its potential stems mainly from discrepancies between estimations of the potential livestock carrying capacity and estimations of current livestock populations. One such assessment[10/] set the potential to 20 million livestock units, with an actual population equivalent to about 11 million units. Major sources of this discrepancy are poor distribution of water sources, absence of coordinated land use, and most significantly tsetse fly infestation. None of these factors can be adressed directly by the kinds of services veterinarians can provide.

We do not question that animal health, especially calf mortality, is a significant constraint on the productivity of the sector as well. But in light of the largely pastoral nature of the sector described above, intensive curative approaches to animal health will only cause a drain on the country's scarce resources. To be cost effective the main thrust of an animal health program in Tanzania will have to focus on preventative health care. Danida has already reached this conclusion for the human health sector, so it may just be a question of time before the four-legged health strategy catches up with the two-legged.

A number of professionals concerned with livestock productivity issues in semi-arid/arid, pastorally-based systems concur with this conclusion. For instance, the Veterinary Economics Research Unit at Reading University has for a number of years been concerned with assessing the

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10/ Jack Frankel, "The Role of Livestock", background paper to the Tanzania Agricultural Sector Report, World Bank, May, 1982.

economics of veterinary investments and treatment strategies for different livestock systems. Essentially their models show that preventative vaccines against pandemic diseases can pay, while just about every other kind of health care (including worm control) is at best marginal.

Research conducted at the International Livestock Centre for Africa (ILCA) based in Addis Abbaba, stresses the strategic importance of nutritional aspects of animal health as second only to the prevention of pandemics.11/ In view of such assessments, an animal health strategy based on curative treatment by veterinarians probably ranks about fourth or fifth among strategic priorities for the livestock sector in Tanzania.

This is not to suggest that the country does not need a well-trained veterinary manpower base. A small cadre with high level qualifications in basic veterinary sciences is a prerequisite for the articulation and enactment of a preventative strategy. In light of Tanzanian willingness to go along with the curative strategy implicit in the Danida project, it would appear that the cadre in question either does not exist or has not been in a position to articulate alternatives.12/ For the preventative strategy, it is quite unlikely that a full-scale veterinary faculty would have been the appropriate

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11/ In some Ethiopian and Kenyan pastoral areas, ILCA has been conducting on-site trial research on the types of crops which could supplement the nutritional intake of calfs, for instance. In the semi-arid zones which host the bulk of Tanzania's cattle, perennials would seem to be the most promising candidate to concentrate on.

12/ The fact that the Tanzanians did not object to using aid resources in this manner may also relate to the political implications of this project vis a vis a preventative strategy. Precisely because of their marginality, veterinary programs tend to imply relatively non-threatening, non-boatrocking kinds of measures. By contrast, preventive and nutritional measures typically would demand sweeping changes in land use or stocking policies, as well as considerable restructuring of the administrative machinery dealing with animal health care.

means to build up the necessary staff. Rather than an army of veterinarians, the manpower profile would include only a small elite corps of these doctors, with an army of non-academic trainees to trace and innoculate herds and work in a few serum-producing laboratories. One cannot help doubting the cost-effectiveness of locally producing this elite, vis a vis sending them to an appropriate institution outside of the country for advanced training.

Were the Faculty truly being built up in such a manner that it could produce an elite, strategically minded group of Tanzanian veterinarians, these cost considerations might be worth overlooking. Under such circumstances, the Faculty might even have the potential for developing into a regional center of excellence, with an intake of students from the rest of Southern and Eastern Africa, and with the potential to become cost efficient. Unfortunately, the institution-building component of the project raises serious doubts about the chances for a high quality teaching staff to emerge and run the program. The cooperating institution in this case is the Royal Veterinary and Agricultural University, which was expected both to provide the supplemental training in Denmark and to fill gaps in the early years of the teaching activities in Morogoro. In practice, it has been extremely difficult to find technical assistance personnel to teach in Morogoro, as the Royal Veterinary staff generally have been reluctant to go there for more than a few months at a time. An apparent problem of having short-term expatriate teaching staff is that the student research such professors encourage and supervise tends to be related to their own research agenda rather than one designed for, or determined by, long term national interests of the recipient country. This sheds an even dimmer light on the already somewhat non-committal program for training the Tanzanian staff, who are expected to earn their graduate degrees from Morogoro with supplemental training of no more than 18 months in Denmark.

In this respect, the objectives of the training program would appear to clash with a well-intentioned principle of Danish fellowship assistance. Since the late 1960s, the policy has been that Denmark does not issue higher degrees to recipients, out of concerns for a brain-drain and having the education address itself to recipient country conditions. In a highly technical field such as this one, where the recipient institution is still very weak, there's a high risk that Morogoro will end up with a semi-qualified staff.

If we assume that the Veterinary Faculty's existence is now a foregone conclusion[13/], Danida will need to address head-on the problem of how to secure a well-trained veterinary teaching staff. There would appear to be two alternative approaches to the problem. Either there will need to be a complete commitment to provide for full institutional support from the Danish base of expertise (the Royal Veterinary and Agricultural University), or else Danida will need to consider alternative sources of expertise from outside Denmark. Both alternatives have implications which are not easy to resolve.

In the first case, there would be a need to commit a core of Danish veterinary professionals to a medium-term (5 to 10 year) involvement in the build-up of a veterinary institution which will need to address significantly different health care problems than is the case in Denmark (or the Kenyan highlands, for that matter). This would involve a basic professional reorientation towards the modalities of African agro-pastoralism; it presupposes that Danida has such a commitment to the Tanzanian (and similar)

13/ The upgrading of the Morogoro campus to an independent university several years ago, as well as the fact that the bulk of investments have been taken in the facilities, suggest that this is the only politically realistic assumption to make.

livestock sector(s) that this kind of personnel can be enticed through the promise of career possibilities in the field for which there will not be much of a market back in Denmark.

In the second case, one runs into the informal tying obligations of Danish aid. There would be strong objections to Danida using its bilateral budget to engage an appropriate counterpart veterinary institution from another industrialized country (assuming such a one exists). In this case Danida would probably need to reach agreement with another donor institution to assume financing. It would be politically easier for Danida to finance another developing country institution which had the capabilities to interface with Morogoro.

Finally, now is the time to assess the utilization of the facilities at the Faculty in light of the type of manpower profile which a preventative strategy implies. It is possible that some of the teaching facilities could be used for the training of the lower-level manpower which would be an integral part of the strategy. Alternatively, it may be preferable to look into the possibilities of turning the Tanzanian Veterinary Faculty into a regional center of excellence on strategies for health care in semi-arid pastoral systems.[14/]

2. Administration, Policy and Planning

Danida has supported two types of activities under this functional heading. The first, which has constituted the bulk of this category, has been

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14/ We put these last thoughts on the table without having had the opportunity to look into the training alternatives in the region. The point is that the strategy needs to be assessed now on the basic of realistic, resource-conscious alternatives.

the joint Nordic support to the cooperative sectors in the two countries. The two Nordic Cooperative projects were the earliest agriculturally-oriented activities in Kenya and Tanzania, and have continued uninterrupted to the present.[15/] The basis of these projects has been Nordic technical assistance in various cooperative business skills. The second is a more recent initiative, to draw up and provide policy guidance for the implementation of a "National Food Strategy" in Tanzania. This is also based mainly on technical assistance, but of an international character, since it is a multi-bi project being run by FAO.

(i) Administration: The Cooperative Projects

In the same way that livestock provided the economic base for much of the development of Danish agriculture over the last century, cooperatives provided the institutional channel by which the farming population began to reap the economic, political and social benefits of growth. Agricultural and consumer cooperatives have similarly had a special place in the development history of the other Nordic countries. It is entirely fitting that the earliest agriculturally-oriented projects in both Tanzania and Kenya were aimed at cooperative development. Through a mutual show of interest between East African leaders and the Nordic donors, the two Cooperative Projects got underway, in 1967 in Kenya and in 1968 in Tanzania. The projects have been the hallmarks of Nordic presence in the two countries ever since.

15/ Though both projects have given some attention to non-agricultural cooperatives at times, their focus has been overwhelmingly on agriculture. For this reason we have not felt uncomfortable including them under the agricultural heading even though they have often appeared under a general "administration" category in Danida annual reports.

By the end of the 1960s, Denmark had assumed the administrative role for them both. In practice this has given Danida the relative weight in decisionmaking vis-à-vis the Nordic partners, though their approval would be required on important policy matters. The Nordic characteristic is perhaps seen most strongly in the political importance of the projects' continuity, which seems to have taken on a symbolic significance.16/ Indeed, the Tanzanian cooperative project has distinguished itself by such a strong staying power that it managed to persist throughout the six year period when there were no cooperatives in the country. In both countries, the only major category of support outside of technical assistance has been to finance the construction of Cooperative Colleges.

Projects with a history this long are difficult to assess in summary fashion. Not only have they gone through a series of permutations in successive phases; at various times they have consisted of multiple sub-components which have really been projects in their own right. Their joint Nordic nature (with its attendant need to keep all the donors informed) has resulted in a vast quantity of evaluation materials. So as not to miss the forest through the trees, the discussion here attempts to focus on some of the broader themes and issues which emerge from an historical review. In the process, some of the issues which have had prominence in project evaluation materials may be sidestepped, particularly when these relate more to specifics of project design rather than to broader strategic considerations.

16/ Though recently, in line with the general trend toward turning Nordic projects into bilateral ones, the Swedish development agency has declined to be involved in the upcoming renewal of the Kenyan project.

Project Overviews

It is helpful to begin with an overview of the conditions of cooperatives in the two countries when the projects began. By the mid-late 1960s, both the Tanzanian and Kenyan governments were in the process of coming to terms with cooperative sectors that had grown like weeds in the years following independence (1961 and 1963, respectively). The rapid proliferation had somewhat different origins in the two countries. In Tanzania, a powerful and successful grassroots cooperative movement had begun in coffee areas already before the Second World War and spread throughout cotton areas, and into some tobacco areas during the 1950s. The newly independent government latched on to the idea of cooperatives as an explicit policy instrument for removing the non-African (Asian and Arab) traders in the rest of the countryside, and urged the establishment of societies across the board. Local elites quickly responded to the call.

In Kenya, the colonial government's discouragement of smallholder cash cropping up until the post-War period had prevented the development of an early grassroots movement as in Tanzania. Then in the 1950s when government began an aggressive coffee campaign in the smallholder highland areas (especially Central Province), it in effect imposed the formation of cooperative societies in the coffee areas. The rationale was that cooperative pulperies were the only appropriate means for primary processing of the harvest.[17/] While the independent Kenyan government certainly seems to have looked favorably on the cooperative form (and unfavorably on the presence of non-African traders in the countryside), it did not have an explicit wholesale

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17/ Interestingly, while some cooperative pulping has taken place in Tanzanian coffee areas, much of this processing is done by individual smallholders before delivering the harvest.

reaction like its southern neighbor. The only area where it out-and-out imposed cooperatives was in the special case of group purchases of large farms[18/] Elsewhere, aspiring local elites seem to have caught on to the attractiveness of cooperatives as a basis for visibility in the new era of African-dominated politics, with the result that they sprung up everywhere.

The key substantive difference in treatment of the cooperatives in the two countries at this time seems to lie in the extent to which monopsony purchasing rights were granted to the societies. In Tanzania, once a cooperative society gained formal registration, it was vested with such rights over the surplus produce in the area. [19/] In Kenya, coffee and dairy societies got monopsonies, but it appears that other societies had to demonstrate that they could attract over half of the market (60%) before gaining similar status.

The net results of the proliferation were quite similar, though. Both countries had hundreds of societies and dozens of unions in financial shambles, with no reasonable system of accounts, and with staff and committees being blamed for (sometimes major) misappropriation of members' funds. Commissions were established to hear and assess grievances and make recommendations to government. In both cases, the recommendations centered on the need for regulatory action.

18/ The "cooperative settlement schemes", a type of cooperative that has continued to be quite distinct in character vis a vis the regular agricultural marketing cooperatives.

19/ The colonial tradition lay with the granting of monopsony rights, though it is probably safe to say that this was done with a somewhat greater assurance of a society's economic viability than was the case following independence.

Enter the Nordic Cooperative Projects. The projects started out with a two-pronged objective, which essentially has endured to the present: (i) to help government in its regulatory tasks; and (ii) to encourage the cooperatives to shape themselves up. The strategy consisted of sending dozens of Nordic cooperative experts to the two countries, to work both with the government departments responsible for oversight and with the cooperative management in advisory (and sometimes executive) roles, in the development of various unified financial systems and training materials. In Tanzania, considerable focus was placed from very early in the project on a more rudimentary kind of training of the membership on the subjects they needed to know in order to keep the cooperative honest; this also got underway in Kenya though at a somewhat slower pace. The magnitude of these early projects was quite striking. With on average about 50 advisors posted in Kenya, and another 30 or so in Tanzania each year by the early 1970s, the Nordic advisors clearly overshadowed the assorted technical assistance made available by other donors in this area.[20/]

In retrospect, several key premises about intervention in the cooperative system have been fundamental to the successes and failures which the projects have endured over the years. First, the African and Nordic governments shared the view that cooperatives were an inherently appropriate institutional form for the development of smallholder agricultural areas. Second, and relatedly, this view held irrespective of the economic base of the cooperative (or perhaps more accurately, there did not appear to be explicit consideration of the possibility that some agricultural areas did not have the

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20/ Towards the end of the decade, the number of advisors to the Kenyan project decreased to around 30, making the two projects roughly even in the amount of technical assistance.

level or type of surplus production which would be able to sustain a financially viable cooperative society or union.)

Third, there was a shared view that in the end it would pay off to prop up weak cooperatives (where, again, the source of weakness might be teething pains of a society which did have a substantial economic base, or might be the lack of such a base to begin with). Fourth, there was a shared belief in the need for external regulation by government. Both countries adopted a set of quite extensive regulatory mechanisms to be applied across the board, including the need for government countersigning of cooperative checks in Kenya and for government approval of cooperative staff appointments in Tanzania. From the Nordic perspective, such regulation was considered necessary until the "movements" in the two countries were mature enough to police themselves. This attitude reflected the donors' underlying objective to promote the process of democratization through the rise of independent cooperatives. It is doubtful that either African government fully embraced this view, though over the years the Kenyan system has certainly given more scope for independence than the Tanzanian one.21/

With these premises in hand, the projects were set to very similar tasks in the two countries. The combination of the national character of the projects and the belief that all cooperatives deserved support resulted in a dispersion of field advisors corresponding to the broad geographical coverage of the cooperatives themselves. In Tanzania, this meant posting an advisor at

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21/ In Kenya, there is for instance a reluctance to relax the regulations for the parts of the cooperative system which have become quite sophisticated. In Tanzania, the cooperatives which have been reintroduced in the early 1980s have built-in government and party control measures at the union management level which suggest that an independent movement is at best a long way off.

each of the nearly 20 regional cooperative unions rather than focusing on the traditional stronghold areas of the grassroots cooperative movement. In Kenya, similarly, it meant postings to each of the provinces, where advisors then worked to erect the district unions that government was keen on building. Advisors at headquarters worked on the development of uniform financial tools, starting with systems for basic accounting and for recording member transactions, and ultimately (in Kenya) a number of more sophisticated financial tools for banking, merchandising, financial planning, etc.

By the early 1970s, economic and political developments in the two African countries coupled with more finely tuned political objectives for Nordic aid to create some considerable divergences in the two projects. The record of cooperative performance was clearly a factor for all the governments concerned. In Kenya, the first phase of the project had corresponded to a period of healthy expansion in coffee, dairy and pyrethrum in Central and parts of Eastern and Nyanza Provinces. Cooperatives had been heavily involved in the expansion, and it appeared clear that the management practices of these cooperatives had benefitted substantially from the Nordic project's various inputs. By contrast, the cooperatives in most other parts of the country (which were based on different commodities) continued to perform very poorly.

The same was true of performance in the majority of non-traditional cooperative areas in Tanzania. But the Kenyan successes were not paralleled there. By this time, agricultural performance in the traditional areas was less spectacular than it had been in the 1950s and early 1960s. Moreover, one of the key targets of government regulatory action for financial abuses was the large, powerful cotton cooperative network, the Victoria Federation of Cooperative Unions.

The Kenyan and Tanzanian governments' responses to the experience diverged over the issue of whether cooperatives were the appropriate tool for further development efforts. In Kenya, the choice was to promote cooperatives more vigorously than before, especially in areas where agricultural growth had been lagging.22/ Tanzanian decisionmakers latched more onto the experiences of the weak societies and unions, and progressively began dismantling the system. This culminated in an all-points bulletin announcing the abolition of agricultural cooperatives in 1976.

Though this divergence promised to result in a very different set of cooperative policies in the two countries, there are two points of similarity in approach which should not go unnoticed. First, both governments maintained a "national" policy on the institutional form, which did not recognize the quite different levels of capabilities of cooperatives in different geographical areas. Second, both governments took care to maintain a channel by which to gain access to the farming population. In Kenya, the point of access for a range of development initiatives being planned (in particular credit schemes) would be the cooperative system. In Tanzania, the villagization program of the early 1970s had established village governments across the entire countryside by 1975, so the abolition of cooperatives in the following years did not leave an institutional hiatus.

Developments in the Nordic position since the late 1960s had favored more attention to poorer target groups, and by the early 1970s these sentiments were quite articulate regarding aid to Kenya. So the Kenyan

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22/ See, for instance, the discussion of government objectives for the cooperative sector in Ch. III of "Review and Assessment of Future Cooperative Development in Kenya and of Technical Assistance Requirements," Christian Michelsen Institute, Bergen, MArch 1976.

government's own intentions to focus increasingly on the less successful agricultural areas, and to use cooperatives as a development tool there, meshed well with the directions that the project probably would have had to promote on its own in any case. As noted in Ch. III, Tanzania's overall policy stance on equity issues meant that it was granted immunity from scrutiny on the target group issue. Indeed, the general wave of support for the country meant that strong Nordic feelings on cooperative principles could be overlooked (or overridden), so the project continued, despite the government's clear transgression of the by-laws of the International Cooperative Alliance in its 1976 action.

From this juncture, it is more appropriate to think of a shift in focus rather than a new project in the Kenyan case. System building activities continued, and field advisors continued to promote better management. There were, however, two distinct prongs in the field work. Though the general management support became focused on the weaker areas (and moved out of Central Province), support for one particular activity, the "union banking sections" continued to be concentrated in the coffee and dairy areas, precisely because these were the only areas which had been financially sound enough to meet the fairly stringent qualifications for entering the program.23/

The Tanzanian project on the other hand had to start afresh. The first objective agreed on was to provide technical assistance to help the

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23/ Data on manpower allocation from Appendix J in the March 1976 report cited in footnote 22. During this time period, there was also an issue within the project of the relative balance of advisors to Ministry headquarters and the field posts, which we don't go into here. In the late 1970s the project also had an unfortunate experience with diversification into non-agricultural cooperatives (fisheries, handicrafts, etc.), which was wound down fairly quicky once the poor results came in.

members of the new village structure take advantage of their organizational unit.[24/] By this plan, the Nordic project would work in unison with several other donors to train village level all-purpose technical advisors. But in 1978, before things got very far with this blueprint, government assigned people from all walks of life (ranging from drivers to regional agricultural officers) to become "village managers". When this new program took effect at a moment's notice, it displaced the original concept of training the village advisors before assigning them. Under the circumstances, the Nordic project took a fairly pragmatic approach of concentrating on village bookkeeper training, much along the lines of the earlier lower level training of cooperative staff and officials. The project developed teaching materials and a bookkeeping system for the villages, and ran its own courses and those of other donors' regional integrated projects.

By 1980, widespread dissatisfaction with the services being provided by the crop authorities which had replaced the marketing cooperatives prompted the Tanzanian government to consider reestablishing the cooperative form. This idea received substantial support from the Nordic project, whose strategic position of being the only cooperative project at the time meant it could provide on-the-ground support to the effort. Once the institutional and legal framework was worked out, the project shifted back into gear, and began posting technical staff to the unions and to government's regulatory arm at headquarters. A new element is a special foreign exchange credit account with the Cooperative and Rural Development Bank, set up in recognition of the

24/ The official designation of villages as "multi-purpose cooperative societies" offered some comfort to those who felt a cooperative project should be working with cooperatives.

inadequacy of government mechanisms to allocate foreign exchange to agricultural institutions.

Assessment

The more stable institutional environment in which the Kenyan project has operated over the years makes it easier to assess the strengths and weaknesses in a long term perspective. Whether for this reason or because of the generally greater scrutiny associated with Nordic aid activities in Kenya, evaluation materials on the Kenyan project appear to apply a harsher than usual, and more thorough, set of performance criteria to it. The following remarks draw heavily on these reports, as well as other recent work on Kenyan cooperatives.25/

There can be little doubt that the project can claim a major share of the glory for the progress registered in the management capabilities of the Kenyan coffee, dairy and pyrethrum societies and unions. As noted, these cooperatives got off to a somewhat haphazard start, and in the late 1960s it was really an open question whether many of them would survive their infancy. Though not without problems, they are on the whole an impressive, and quite sophisticated set of institutions, where membership participation is strong and active.

25/ Principal among these have been: "Review and Assessment of Future Cooperative Development in Kenya..." (Bergen, March 1976), "Report on Mid-Term Performance Evaluation of the Kenyan/Nordic Cooperative Development Program" (Nairobi, March 1982), "Assistance from the Nordic Countries to the Cooperative Sector in Kenya (Nairobi, March 1983), "Report of the Joint Kenyan/Nordic Appraisal Mission on Possible Future Support to Kenya's Cooperative Sector" (Nairobi, Feb. 1985), and "Kenya: Proposal for Cooperative Management Pilot Project", World Bank Nairobi office, Feb. 1985.

These cooperatives are also the beneficiaries of another major contribution of the Nordic project, the cooperative banking system. An early initiative of the project in Kenya was the establishment of a system within cooperatives for issuing production credit and holding members savings, through "union banking sections". The restrictions on credit were sufficiently stringent to ensure high repayment rates.[26/] Most of the finance was in turn provided by member savings in the personal bank accounts, which caught on like wildfire as soon as they were introduced, in no small part because the accounts could be established with a minimum deposit one-tenth the size required by the ordinary commercial banks. This union level system was in turn integrated with the services of the national level Cooperative Bank, which provided overall financial guidance and some of its own capital for the credit program, known as Cooperative Production Credit Scheme (CPCS).

The Nordic project has seen the cooperative banking system through a number of growing pains with sophisticated and forward-looking input. One of the more intractible issues has been ensuring a method to guarantee members' savings in the event of financial difficulties at the union level. The solution which has finally been reached, and which the project is providing substantial support to implementing, is to convert the union banking sections into societies in their own right. This solution has a number of attractions in addition to safeguarding the savings deposits; it makes possible a more general separation of the financial operations of cooperatives from their physical operations in crop and input handling. In light of the numerous difficulties which have endured in the financial management of many

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26/ The cooperative itself had to be on sound financial footing and as the borrowers had to be guaranteed by two other cooperative members.

cooperatives (relating to timely crop payments, among other things), putting bankers in charge of the finances should provide the structural basis for tightening up the system considerably.

Foresight also allowed the project to mitigate the effects of an even greater cooperative financial problem which has occurred. In the mid 1970s, government and a number of donors were eager to expand the cooperative credit program to serve greater numbers of farmers. Since a large part of the justification centered on making credit available to cooperative members which had not previously had access to CPCS funds, the programs typically required less stringent scrutiny of the borrowers, as well as softer terms. It is difficult to know what the Nordic donors thought of the new "special credit schemes" as a vehicle for reaching the poor. Bilateral support to one such scheme by Danida (to be discussed below) suggests that the precise mechanisms, rather than the principle itself, came under Nordic scrutiny. In any case, the project was quick to point out that the existing cooperative banking system had to be shielded from the risks of the new schemes, in light of the different set of criteria which were to be applied. In practice, this was indeed done, through the establishment of separate accounts for the special schemes within the Cooperative Bank. By this system, the Cooperative Bank did not assume risk on credit which was issued by other criteria.

As a result, the existing cooperative banking system was sheltered; the cooperatives which received credit from various of these schemes have been less fortunate. Credit was in many cases issued on a free-for-all basis, often without much consideration for the productive uses it might be put to. Repayment rates under many of the special schemes have been considerably below those of the CPCS, and in some cases so poor that there is little scope of recovering the bad debts. This has left the finances of the responsible cooperative societies and unions in a terrible state. Rather that provide a boost to the weaker agricultural areas, the credit program has been responsible for further weakening their cooperative institutions.

There is no apparent way of separating out the effects of the management advice and training provided to these cooperatives by the rdic project, which may have had some marginally positive effects in this interim. But the conclusion must still be drawn that after twenty years of working with cooperatives outside of the coffee/dairy belt, there is little to show for it.

Though much of the foregoing analysis is consistent with that found in recent evaluation materials on the Nordic project, this last conclusion differs in one important way. These reports 27/ have recognized the tremendous progress made in the coffee and dairy cooperatives in contrast with the rest of the system. But they have also assumed that the project's efforts have been concentrated on those success areas. Going back over the entire history of the project, one can identify only two respects in which the project can in fact be seen to have favored the successful areas. First, following the development of a simple overall bookkeeping system, the member transactions systems for coffee and dairy were the earliest systems to be developed. In light of the substantially higher level of transactions already occurring in these commodities, this was clearly the approach which could have the quickest payoff as well, but for those who seek a bias they may find one here. Second, as mentioned, the activities of the project's banking component tended to concentrate on these areas, precisely because their

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27/ Particularly the March 1983 evaluation, which seems to be the springboard for subsequent analysis.

banking systems were in the process of developing. In other respects, including the general support to management, the project clearly was concerned with shifting its focus toward the weaker areas, and away from the broader coverage it began with, already by the beginning of the 1970s.28/

This distinction is important because it raises some more fundamental issues than those raised so far by the Nordic donors about the viability of cooperatives as an institutional form in areas with weak agricultural bases. Nordic analysis of this issue has differed very little since the first project evaluation in 1969, and has consistently concluded that cooperatives are an appropriate development channel for areas with low agricultural surplus. The only variation on this basic belief has been the suggestion that in the truly marginal areas it might be appropriate to establish multi-purpose "pre-cooperatives" rather than more traditional marketing cooperatives.29/ None of the many evaluations consider the issues that arise for cooperative management when commodities are high bulk and low value (like maize and other food crops), grown over a more dispersed areas (under the more extensive farming practiced outside of the highlands generally), or have complicated and expensive processing requirements (like cotton and sugar). Nor do any of the evaluations appeal to the experiences with cooperatives dealing in such commodities elsewhere in the developing world.

28/ Even the first evaluation report, completed in 1969, stressed the importance of the project's helping the weaker areas through the development of marketing cooperatives. By the time of the second evaluation the project was being praised for concentrating the field advisors on more backward regions. (p. 83 in "Evaluation of the Nordic Project for Cooperative Assistance to Kenya, Second Progress Report" Feb. 1974).

29/ Though not stated, this probably referred to areas in Zones V and VI, where surplus production under rainfed conditions is extremely tentative. The recommendation was made in the 1983 evaluation report.

By no means do we mean to suggest that there is no scope for successful cooperative development outside of the few highland commodities where it has already secured its position. The relatively successful experiences with cotton cooperatives in the 1950s and 1960s in Tanzania, as well as the Kenyan's success with in dairy, which has more complicated processing requirements, suggest that there is major room for improvement in the Kenyan cotton industry with the cooperative form, for instance. This is indeed the commodity which the new phase of the Nordic project will concentrate on. This involvement is a landmark, because it represents the first time the project has gotten involved in sectoral policy issues of pricing and marketing which will be crucial to the cotton cooperatives' success.

But unless the Nordic donors openly begin to reassess the blanket assumption that cooperatives are a good thing everywhere, there are dangers that promotion will in the future again turn to areas where cooperatives do not stand a chance of doing well until there are major breakthroughs on the technological front, or considerable advances in the sophistication of the local population's business acumen. The assumption that propping up a weak cooperative will end well needs to be challenged by the two decades of experience. What benefits accrue to members in poor areas when cooperatives run higher overheads than private traders would be able to operate with? Can staff and members learn how to run sound cooperatives by working in financially unviable cooperatives being propped up by external means year after year? Is it any wonder that field survey after field survey reports that members are not inspired to use their cooperatives as a participatory development channel (which, after all, has been a primary goal of the Nordic project)?

Inasmuch as many of the geographic areas which received support by the Tanzanian Nordic project share th characteristics of the weaker agricultural areas of Kenya, these same issues apply there as well. The project's overall experiences in Tanzania are more difficult to assess as a continuum, though, because of the tumultuous institutional environment in which it operated. Just as assessment of the Kenyan project's effects on cooperatives which became mired in the credit program's difficulties are hard to sort out, it is difficult to assess the Tanzanian project's impact in the early years. Agricultural performance was waning, and the various reports from the time suggest that cooperative performance was declining even in some of the better off areas, as in cotton. There were clearly a range of policy factors, including price policy, which may have adversely affected cooperative accounts and efficiency. In light of the generally pro-regulatory approach of the Nordic project, it is interesting to note one common criticism centering on the process of regulation itself. In this view, the introduction of the Unified Cooperative Service (whereafter cooperative staff no longer could be hired and fired without government approval) took away membership control, thereby narrowing the scope for cooperative management's accountability to the members. At the minimum, it is a safe conjecture that the project was ineffective in its support to the dozen or so regional unions which had been government constructs, on the grounds that they not only lacked administrative capabilities but the very economic basis to sustain successful cooperative activities.

Perhaps surprisingly, the interim period when the project operated in the absence of a cooperative system appears to have been a relatively positive experience. Two factors relating to the project's focus, on village bookkeeper training, lead to this conclusion. First, there was (and remains) a dire lack of basic accounting skills in rural Tanzania. Second, villages, once established, were a fait accompli. From their inception, they were charged with a number of tasks requiring the use of such skills. This was particularly true once the cooperatives were abolished. The parastatal structure which replaced the regional unions and primary societies relied on the villages' ability to serve as self-managing buying points. As a result, the project probably helped prevent an even worse decline in peasants' exchange relations under the parastatal marketing system than would have otherwise been the case. In addition, of course, people acquiring the training were in the position to provide other useful functions in their villages, and in the wider economy.30/ In all likelihood, there would be substantial benefits from continuing this type of training, since the demand for these highly fungible skills in the rural economy has certainly not been exhausted in the short time the project was engaged in it. From the perspective of the broader socio-economic goals of the Nordic donors, such activities may provide one of the most direct channels to empowering the rural population in a country where the institutional policies and structures have tended to constrict rather than widen their opportunities.

The new project which has emerged to serve the new cooperatives is too young to assess by any other criteria than objectives. From the beginning, the Nordic project has been supportive of the reintroduction of independent, voluntary cooperatives. It is likely that the project had some influence on the fact that the final wording on the new cooperative

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30/ "The Evaluation of the Kigoma Rural Development Project" (Loft, Hanak and Ndyesnobola, Economic Research Bureau, Univ. of Dar es Salaam, 1982) found for instance that a large number of bookkeepers had found work in a range of regional activities, both private and public.

legislation conforms to the international principles on voluntary membership. In today's Tanzania, the substantive significance of this particular point is doubtful, since cooperatives have been granted monopsony purchasing rights, for members' and non-members' produce alike. There are, however, very real battles being waged between the reemergent movement (which until now has mainly consisted of unions and societies in former cooperative stronghold areas) and the Party structure over the question of the movement's independence of the Party's political monopoly at village as well as national level.31/

Though this struggle will need to be waged among its domestic participants, it is significant that the tenor of the new Nordic project reflects a greater independence from the will of the central Tanzanian authorities than the project of old. The distinct break with the earlier pattern of blindly following Tanzanian government priorities is seen in the regional selectivity of the project. On the grounds that one should first see whether the cooperative structure can work in the regions where cooperatives traditionally had performed better, it is confining support to the seven regions where the old movement is trying to regain a footing. These are also the areas where it is hoped that there will be quicker potential for production response to the new institutional forms for marketing and input distribution.

In view of the chronic problems the Nordic projects have experienced in both Kenya and Tanzania in supporting weaker agricultural areas, this type

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31/ The directives given in the Party's April 1985 "Implementation of the decision taken by NEC on production-oriented rural cooperatives" will in the judgement of the cooperatives (which we share) not only deprive them of their autonomy and self-administration but also destroy their prospects for economic viability.

of selectivity provides an interesting contrast to the typical project pattern of pressing on in the face of adversity. In light of our comments above on this issue in the Kenyan case, we find the change to be a positive one. The issues raised above are still very relevant in the Tanzanian case, however. The choice to initially focus this project on the relatively stronger agricultural areas was the result of a great deal of footwork by a few individuals who had substantial background in Tanzanian agriculture. It was not the result of an institutional learning process on the part of Danida or the Nordic group based on past experience. Indeed, stronger winds could easily have blown in the direction of providing support to the entire national system, as per the official Tanzanian request Unless more in-depth analysis of the likely conditions for successful development of agricultural marketing cooperatives is conducted by Danida and its Nordic partners, it is altogether possible that the next round of Tanzanian requests to extend the project will be met with a positive response. Indications of the "blanket" approach that coop ratives are inherently suitable institutions have surfaced, for instance, in Danida's discussions with the Tanzanians concerning another project recently approved to provide inputs to the four Southern Highland regions. In view of the fact that several of these regions did not begin to register any considerable grain surpluses until their (government-imposed) cooperatives were abolished and replaced by the National Milling Corporation in the mid 1970s does not suggest that they will be in the position to successfully manage the movements of these grains and the input trade at the low margins which are absolutely essential when one is dealing with such low value crops.

As for prospects for the project as currently constituted, much will depend on the institutional outcomes concerning the independence of the movement. In the best of cases the project may have the scope to carry out the democratization objective, as well as an economic one of helping to revive crop marketing structures. It would be natural, perhaps, for the project to move into revival of membership training (which had been a casualty of the 1976 abolition), and to support the interests of the Cooperative College to have an independent research budget with which to do empirical studies on cooperative-related issues. What seems obvious at this juncture is that if the Party wins the current battle, the socio-economic objectives and main legitimization of the project will have gone down the drain.

One final note relates to some potential problems of the interaction of cooperative leadership and the donor community. Cooperative management shows signs of wanting to get into a range of production activities which are uncertain from the economic standpoint, like the takeover of large farms. In this respect, the fact that the Nordic project does not have a monopoly in supporting the cooperatives is important. Given the likelihood that other donors will want to put money into relatively better cooperatives (with the risk of overcommitting them, as was part of the problem in the last round) this is a juncture at which donor coordination on support to the movement is extremely important.

(ii) Policy and Planning: the National Food Strategy Project

Denmark financed the formulation of the Tanzania National Food Strategy in the early 1980s as a gesture of support to the World Food Council's broader initiative in this area. The project consisted of a number of short-term technical assistance personnel attached to the Ministry of Agriculture and was managed by FAO as a multi-bi activity. The original idea of the initiative, whereby the consultants would help organize seminars and workshops for Tanzanian officials to write up their own strategy--fell completely by the wayside when it was discovered that there was not any strong institutional demand for the activity within the Tanzanian civil service.

Instead, the FAO team was extended for many months, and ended up with the responsibility for writing the full report itself. Of the various reports produced on the agricultural sector in the early 1980s,[32/] the National Food Strategy report is far and away the least analytical, and is too uncritical of sources and consistency of statistics to be useful as a data repository (one of its potential contributions in the absence of policy analytical content.)

On the wave of this activity, Danida then agreed to provide follow-up financing of about Dkr 10 million, again through the multi-bi budget, for FAO to establish a Food Strategy Coordination Cell in the Tanzanian Ministry of Agriculture. The ostensible rationale for the cell was to provide a concentration of technical assistance staff to help "implement" the food strategy by providing guidance on food-related issues in planning at the national level. In practice, the cell has assumed the role of a project design center, with the objective to help government attract donor funds for food crop projects (along the lines of export crop packages devised for donor financing over the several preceding years).

In our view, the project itself suffers from a basic design flaw, which raise doubts about its prospects for positively affecting the food crop sector. The idea that Tanzania could benefit from some external support to supplement local analytical capacity in the Ministry of Agriculture is one few analysts would dispute. Similarly, the linkage of this technical assistance to the objective of improving food availability has a strong conceptual appeal

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32/ Including one by the World Bank, one by the Swedish aid agency and the government's own National Agricultural Policy report and white paper.

for many who've been concerned by the increasing trend of food imports, coupled with high population growth rates and limited technological progress. The problem enters when these valid concerns are not assessed in light of the particular constraints facing Tanzanian agriculture and the specific institutional environment in which agricultural policy is made.

Based on an assessment of the factors which have contributed to decline and stagnation in Tanzanian agriculture over the last decade and a half, it would be difficult to conclude that new project investments would generate the highest (or even high) returns in the food crop sector vis a vis a number of other measures. In fact, experience suggests that a number of policy issues relating to the level of incentives and the stability of the institutional environment will need to be sorted out before project assistance is likely to be of much relevance. 33/ Improved policy analysis, on such questions as the effects of pricing, marketing, research and technology dissemination policies, will be an essential part of the process of helping Tanzanian policymakers improve the production environment. Technical assistance, combined with longer term development of Tanzanian capabilities to conduct this kind of analysis, could thus provide high returns. This is indeed borne out by the experience of several analytical bureaus currently operating in the Ministry of Agriculture. 34/ It is therefore unfortunate that

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33/ The World Bank's Tanzania Agricultural Sector Report (Aug. 1983) found negative returns to government and donor investments in a number of crop activities over the 1970s, which could be attributed to the range of disincentives caused by sectoral and macroeconomic policies, for instance. (see especially Ch. II)

34/ Marketing Development Bureau (which conducts the annual price review and monitors open market prices of foodstuffs), Project Planning and Monitoring Bureau (which has mainly focused on monitoring issues including financial performance of various parastatal agencies), and the Early Warning/Crop Monitoring Unit (which has analyzed historical the Food Strategy funds did not go towards providing incremental assistance to the analytical capacity of any of these three task-oriented bureaus or the regular Ministry staff, where it could have been far more relevant to the problems at hand.

4. Production

Danida has had two modalities for directly production-oriented assistance: (i) smallholder oriented projects, and (ii) bulk deliveries of chemical inputs. The project aid has been mainly a phenomenon of the Kenyan portfolio, and associated with a high level of administrative and technical assistance support. The bulk aid accounts for close to 70% of the Dkr. 265 million allocated to production in the two countries up to 1984; it has in turn mainly been directed at Tanzania. 35/ It follows that quite different issues are raised by the two types of aid.

(i) Production-oriented projects

In keeping with Danida's focus on poorer target groups in Kenya, the projects there have been directed toward more, less developed agricultural areas. To a large extent, these overlap with the areas formally defined as "marginal" by rainfall classifications, but it also encompasses some areas with medium potential which are geographically more remote, as in Western Kenya. As background to the discussion, it is important to bear in mind that

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rainfall patterns and conducted projections of crop production based on such information).

35/ One sizable non-input disbursement to Tanzania--Dkr. 37 million for irrigation equipment to the Mtibwa sugar estate under a state loan--is neither a project nor commodity aid. It is most appropriately viewed in conjunction with the major investments in sugar processing, discussed below.

these areas (particularly the dryer parts) on the whole have made very little agricultural progress, despite considerable attention via various donor-assisted projects since the mid-late 1970s. Danida has pursued two very different approaches to the problem of low farm productivity: (i) encouraging the adoption of existing technological packages (especially chemical inputs), and, more recently (ii) focusing on the management of soil and water resources to improve the natural resource base.

The first approach lies behind the Farm Inputs Supply Scheme (FISS), in operation since the mid-1970s. FISS is one of the special credit schemes mentioned above in the discussion of cooperatives. Its objective is to increase farmers' output levels by improving their access to technology. Essentially, it has been doing this by subsidizing the establishment of cooperative distribution mechanisms for various farm inputs and other rural amenities in a wide range of less developed agricultural areas of Kenya. Once FISS stores are established, credit for the purchase of commodities is issued to the cooperative societies, who in turn onlend or make cash sales to members. The project is heavily staffed with technical assistance, on the whole has been well managed, and has had a high (but falling) level of recovery compared to most of the special credit schemes.[36/]

In this respect, it can be seen that Danida was sensitive to the risk questions which have marred other donors efforts under various of the special credit schemes which were based on individual credit and little additional management input. At the minimum, FISS will not have the kinds of negative effects on the financial positions of weak cooperatives which credit schemes

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36/ Recovery was as high as 90% for many years, with a dip in more recent years to as low as 60%.

like the World Bank's IADP have had throughout the western cotton-growing areas. But there are some grounds for doubt about whether FISS will have had much of a positive impact beyond the project period itself. These doubts stem from the project's conceptual framework.

Underlying the project design is the basic supply-side philosophy that if inputs are made available to farmers, they will develop a taste for the practice of using them. This thinking has provided the justification in a number of places in the developing world for subsidizing the introduction of a new technology, on the supposition that once the benefits are made clear to the farmers, they will be willing to pay the full price and the subsidy can be withdrawn. The FISS idea is somewhat different, though, inasmuch as the technology it offers is not new to Kenyan farmers [37/]; the inputs have merely not been stocked in local stores prior to the project's entry into distribution. The justification thus hinges on an assumption of failures in the retail markets: until a certain level of input demand had been attained in an area, high marketing overheads would present a barrier both to stocking by private shopkeepers and to utilization by those farmers who could afford the inputs at the lower price available with scale economies in marketing.

The evaluations conducted by Danida on FISS do not look explicitly at the validity of these assumptions as borne out by project experience.[38/] Available indicators raise doubts, however. The experiences seem to vary over the spectrum of project areas. In the dryer areas, the project appears to

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37/ Indeed, the basic innovation for maize has been around since the mid-1960s.

38/ The following discussion of experiences draws from interviews and several reports: "Midterm Evaluation Report of FISS, Phase II" (Jan. 1982), "FISS Impact Study" (Feb. 1984) and "Evaluation of FISS" (April 1984).

have been far more popular for the provision of building materials than for inputs. One obvious implication is that farmers have declined the use of high risk chemical inputs in areas with highly unreliable rainfall patterns. At the other extreme, in the areas with relatively high agricultural potential, the project proved to be largely redundant, inasmuch as shops already existed to meet input demands. For the areas in the middle, it appears that the program may have added to input usage in the short term. But while the stores established by FISS are running with a small surplus on their operating costs, the inputs continue to need heavy subsidization by the project, despite the higher turnover. This suggests that it will not be profitable for these farmers to continue to use inputs when they return to their market price. Project management is likewise continually dependent on the presence of technical assistance.

As part of the credit unification program currently being implemented by the Cooperative Bank (CBK), the FISS program is being incorporated directly into the CBK administrative system. In principle, this would allow for a continuation of the project beyond the lifetime of Danida involvement. In light of the heavy subsidies which appear to be a prerequisite for the program, we would venture that all traces of this project (with the exception of the store buildings) will be gone within a season or two after Danida's retirement. As noted, this is certainly a better outcome than some of the other special credit schemes, but it suggests that some other approach is needed for finding solutions to the productivity problems of low income agriculture in Kenya.

One such alternative can be seen in Danida's projects in several of the marginal districts (Garissa, Mutumo, Taita and Taveta). These are area-based irrigation, water and soil management projects. The oldest of these, the Garissa Irrigation Cluster project, is based on more traditional pumping-from-river technology. The Mutumo project introduced a prototype to which Danida seems to attach quite some hopes, as evidenced by a similar design for the most recent Taita/Taveta project.39/ The central core of its technology is entrapment of precipitation before it runs off the soil, so that it can be stored in sub-surface or other natural reservoirs. The approach to technology dissemination represents an important departure from that of the large-scale area-based development projects of other donors in the second half of the 1970s. Rather than working from a blue-print, the project has adopted a learning process approach to expansion and development of project activities. Organizationally, it is based on the identification of catchment areas and the establishment of self-help groups.

So far the water management aspect of the activities has generated more enthusiasm among the participants than the afforestation activities. It is too early to assess the productive impact and especially the cost effectiveness of this project, but in principle the approach is exciting because as opposed to the standard credit/input type of production project, this has the potential of being an effective means for reaching poorer smallholders in marginal areas. Insofar as it augments the local resource base directly under the producers control in a risk-reducing direction, it has advantages over the input/credit schemes, which augment the uncontrollable risk factors such as weather, pests, etc. with the risks of unpredictable

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39/ See "Mutumo Soil and Water Conservation Programme, Review Mission Report", March 1984; "Taita-Taveta District Development Programme, Appraisal Report," Feb. 1985; and on the technology itself, Nissen-Pedersen, Erik, Rain Catchment and Water Supply in Rural Africa: A Manual, Hodder and Stoughton, London: 1982.

timing of input supply and of severe crop failures in the event of inadequate rainfall.

The absence of any comparable production activities in the Tanzanian portfolio stands out by contrast. Since the early 1980s, however, Danida has been discussing the possibilities of an analog to the Kenyan FISS project in the Mbeya region of Tanzania. Since this is still at the appraisal stage, it is premature to comment on implementation experience, but it may be of interest to consider the project's premises briefly in light of some broader considerations pertaining to input use in the country.

The input supply project came about as an outgrowth of a multisectoral regional development plan for Mbeya which Danida had financed. By the time the plan was drawn up in 1982, Danida did not think it wise to finance the resulting proposals (see below), but had in the meantime developed interest both in the region itself and in the idea of doing a more explicitly agricultural-oriented investment in light of the country's agricultural crisis. The project's concept of focusing on distribution networks is similar to the FISS project. In this case, however, the target area is one of the country's most productive regions, with at least some areas highly suited to the increased adoption of chemical inputs. Mbeya falls into the FISS-type framework by virtue of its relative remoteness. But the reasons for below-potential adoption of inputs are complicated both by sectoral policies and by the overall economic conditions in Tanzania to a far greater extent than in Kenya, rendering it even more difficult to sort out the appropriate role (if any) for project-type assistance.

Overall availability in Tanzania of the principle input, inorganic fertilizers, has been considerably constrained for a number of years by a combination of very high cost domestic production of fertilizers and insufficient import levels.[40/] Domestic distribution has in turn been hampered by a very restrictive publicly run system whereby only a very limited number of retail outlets have been available (under 20 on the entire mainland). Finally, the pricing system for fertilizers has been distorted, on the one hand in order to subsidize the higher cost domestic production of fertilizers vis a vis imports, and on the other (up to 1984) to eliminate the transport costs (thereby subsidizing more remote areas vis a vis those at closer distance to the coast). In the past couple of years, moreover, the price relationships have altered substantially: the combination of recent devaluations and the lifting of the transport subsidy has led to a roughly four-fold nominal increase in fertilizer prices since 1984.

In this overall context, it might well be premature to conclude that specific project interventions would be the appropriate means to increase the availability of fertilizers to the farmers of Mbeya (or indeed any other high potential region). Measures to improve the sectoral policy framework, so that fertilizers can flow more freely throughout the system, and so that farmers do not end up paying well over the international price for domestically produced fertilizers, would appear to be the more immediate steps needed. If, with such changes, the Southern Highlands farmers are still unable to get the inputs they could profitably be using, there are strong possibilities that the lowering of transportation costs (through investments in upgrading the road and rail network and vehicle stock) would be more appropriate, inasmuch as this would also work towards lowering the extremely high costs of transporting surplus produce out of the area.

40/ A fuller discussion of the evolution of fertilizer (and other input) policies and their impact is found in Chapter V of the Tanzania Agricultural Sector Report (World Bank, 1983).

(ii) Bulk input supply

The types of sectoral and macroeconomic policy issues concerning input supply raised in the preceding paragraph have come up somewhat more explicitly in the context of Danida's bulk input supply program. As noted, Tanzania has been the main beneficiary of this assistance, both for fertilizers and for coffee pesticides produced in Denmark. The import support began in 1979 for Tanzania, and has continued as a major portion of the annual disbursements since then. The initial allocations were made as part of the regular grant aid program--a quick response to the rapid deterioration in the foreign exchange situation. More recently, the "tied grant" budget has been used, as Tanzania qualified by virtue of its joint status as least developed country and main Danida recipient for a special allocation of state loan monies to commodity aid. Bulk input supply to Kenya was by contrast a phenomenon limited to the drought-induced crisis of 1984. In support of a food supply recovery, fertilizers were provided for two seasons, but have since been stopped (despite Kenyan requests for continuation) because Danida considers Kenya too well-off to qualify for commodity aid.[41/]

It follows the established pattern that in the bulk input supply operations, Danida has seemed to show more concern for the end uses and distribution mechanisms in Kenya than in Tanzania. In Kenya, Danida expressed particular concern that the fertilizers go to smallholder producers and not estates, and took pains to monitor the fertilizer it supplied from port to end

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41/ Recall Danida's rationale on commodity aid discussed in Ch. II. The idea that aid should be capital-generating prevented the acceptance of any regular commodity aid until the late 1970s. Since then, only the poorest countries could qualify, since in these cases, additionality of the resources could be assumed. But because of monitoring concerns, only poorest, main recipients have in fact qualified (i.e. Tanzania and Bangladesh).

user. Even if Danida's inputs added to total available supplies,[42] their share was still marginal vis a vis a more fungible total supply, so it is hardly likely that this monitoring changed the aggregate distribution pattern in any way.

In the Tanzanian case, there's no doubt that the Danish grants have added to the total amount of fertilizer and pesticides available, foreign exchange being as scarce as it is. It is possible that the inputs are not additional by the full amount, however, insofar as allocations of domestic foreign exchange resources may be influenced by the availability of donor supplies. In the case of the coffee producers, for instance, the Treasury has used the alibi of donor support to withhold access to foreign exchange which rightfully was theirs under the "export retention scheme".[43] The result is an almost complete dependence of the coffee industry on donor funds. This renews questions about the Tanzanian government's ability to set priorities in favor of agriculture, especially bearing in mind that a lack of such priorities vis a vis foreign exchange allocation was a major factor in the sector's deterioration over the 1970s.

Danida's monitoring on Tanzanian inputs indicates an immediate absorption of <u>all inputs which arrive on time</u>. But Danida (like most other donors in this area) has been only mildly concerned with the Tanzanian input distribution policy, which is subject to the fairly major problems raised

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42/ In light of the importance of the outcome for continued fertilizer supplies (see footnote 41), the question of whether the inputs were additional or were simply freeing up foreign exchange for other uses was a subject of considerable debate within Danida and in Kenya.

43/ A scheme introduced several years ago to guarantee industries producing exports a percentage of their earnings in foreign exchange to apply to their import needs.

above. On a bilateral basis, in the context of negotiations on the continued supply of fertilizers, Danida has made some recommendations to government on the liberalization of input retailing. Over the course of 1985 and 1986, Danida also indicated a willingness to stand by a multilateral effort (led by the International Fund for Agricultural Development, with World Bank support) both to promote donor coordination on input supply and to promote some specific domestic policy changes aimed at loosening up the distribution network. Inasmuch as Danida-financed shipments were not made contingent on policy changes in either of these cases, it is fair to conclude that for practical purposes Danida found the status quo to be an acceptable institutional and policy framework.

It would be unreasonable to expect Danida singlehandedly to spearhead policy dialogue with government in the input supply area, given the many donors involved in bulk input support. As we argued above, however, it does not seem to be the most appropriate sequencing of events to promote project assistance for improvement or input supply in a particular region in the absence of a number of policy and institutional changes in the overall distribution framework in the country. The overwhelming importance of donor assistance to the total supply of inputs to Tanzania does put the donors <u>collectively</u> in a position to have a more serious discussion with the Tanzanian government about improving the policy context in which inputs are distributed. At the very minimum, there are some compelling reasons for coordinating the donors' own input supply programs as regards not only timing but also types of fertilizer and area destination. Danida (and other input donors) will need to develop greater conviction that these issues are worth addressing, given the Tanzanians' extreme reluctance to allow donors to do anything jointly on this issue beyond a joint pledging session. Ironically, perhaps, Danida's relative lack of ongoing agricultural activities in the field (with the partial exception of the cooperative project) puts the agency at a disadvantage for gaining this conviction by experiencing the field level effects of the current system.

In the longer term, the supply of Danish fertilizers raises some questions in the context of the consideration being given to shifting over to denser types of fertilizer as a way of cutting down on transport costs. Under the current usage patterns in Tanzania, the standard types provided by Danida are appropriate. If Tanzanian farmers accept the adoption of the denser varieties (a switch which is not without adjustment costs, given that it will involve greater labor for application), Danida will not be an appropriate donor, given the lack of production of these varieties in Denmark.

5. Crop Processing

Both Kenya and Tanzania have had substantial portions of their crop-related activities in processing, mainly through the state loan portfolios. Investments are concentrated in two activities--sugar extraction and grain storage. By virtue of its much larger program in sugar, total processing investments in Tanzania have outweighed those in Kenya. The experiences in the two countries raise similar questions concerning the appropriate uses of state loan-supplied technology.

(i) Support to the Sugar Industry

Danida has been one of the three leading donors to the Tanzanian sugar industry, along with the World Bank and the Netherlands. 44/ The

44/ In current terms Dkr. 167 million for equipment including the Mtibwa history of the sugar program is somewhat unusual, in that this is one of the rare occasions where Danish commercial investments preceded involvement through the aid program (in contrast to former colonial powers, for whom the sequence was quite common). The origins go back to the interwar period, when one of Denmark's leading shipping magnates (A.P. Moeller) was persuaded by a fellow traveller on a sea voyage to consider investing in an estate in northern Tanganyika. The site chosen was considered suitable for sugar production, and the Tanganyika Planting Company (TPC) he established there soon attained a prominence in the country's sugar sector which has endured to the present.

TPC was initially supplied with non-Danish milling equipment, but in the early 1960s it began to employ a prototype of a new technology for cane processing developed by the leading Danish beet sugar processor, De Danske Sukkerfabrikker (DDS). The technology was evolved from the method normally used for processing beet sugar, known as diffusion. This collaboration was the key link in subsequent Danida involvement. In the late 1960s, DDS supplied a cane diffuser to the Ramisi estate in Kenya's Coast Province, and in the mid 1970s another major investment in diffusion was made to the publicly-owned Kilombero estates in Tanzania, in collaboration with the World Bank which financed the cane production part of the project. At around the same time, irrigation equipment was also supplied to the Mtibwa estate in Tanzania (also in the public sector). All of these investments were made under the state loan budget. Seen in conjunction with the continuing new investments in the still privately-owned TPC, Denmark was a major participant

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irrigation equipment along with processing equipment (diffusers) to Kilombero and Tanganyika Planting Company plus Dkr 20.5 million for a sugar management contract.

in the general expansion taking place in the Tanzanian sugar industry in the 1970s.

By the late 1970s, the management of TPC's parent firm in Denmark wanted to divest from the sugar estate, following a protracted period in which TPC was being starved of the foreign exchange allocations it needed to maintain its capital stock. Danida got involved to smooth the transition of government takeover, by agreeing both to finance a management contract for the initial period of public control and to provide some new equipment (mainly spares).

Though this sequence of events may give the impression of a logical progression in Danida's sugar policy, in fact there was no an ex ante sense of sectoral involvement on Danida's part. Rather, Danida first became sectorally concerned with its role in sugar in 1981, in the aftermath of the investments it made. In that year, Denmark joined Holland in the World Bank initiative to take a unified donor approach to the rehabilitation of the sugar industry. By this time the industry had fallen into a general decline because of a combination of factors including the lack of foreign exchange for maintenance activities, and a number of production and processing shortfalls attributable to poor management. The donors signed a joint aide memoire requesting certain changes in government's sugar policies, principal among which to cease plans for further expansion into new estates until performance on the existing ones improved considerably. At that time, there was an implicit (if not explicit) understanding that these donors would be willing to put in the funds to help consolidate the estates in which they had already invested. Danida fully expected to come up with substantial additional financing to this end, until the World Bank changed its position over the course of the following two years. Further analysis on the agricultural sector by the Bank led to the conclusion that sugar was not a priority area for scarce rehabilitation funds,[45/] and the Danes followed the Bank's lead and closed the books on sugar in Tanzania.

In assessing the Danida involvement in sugar, one would wish to go beyond the general information that exists on the decline of the Tanzanian sugar sector since the mid 1970s to look specifically at the Danish investments. Very little information exists in Danida on the implementation of the sugar investments, however, as they came at a time when state loans were subject to little or no monitoring. Nor did this information gap improve with the advent of the joint donor initiative, since Danida largely left the analytical work to the World Bank, which in turn focused on overall performance issues rather than those specifically related to individual donor investments. From a number of interviews with experts in the sugar sector[46/], we have tried to put together some pieces which suggest there are grounds for concern with the specific nature of Danida involvement. The issue at hand is the choice of technology for sugar processing.

On today's technological shelf there are basically three different viable options for the processing of cane sugar: (i) open-pan sulphitation (OPS), (ii) the vacuum pan (VP), and (i) diffusion. For the purposes at hand, it shall suffice to indicate some principal distinctions among these techniques.

45/ In light of other, more structural problems in agriculture (such as the entire management system under agricultural parastatals) and estimates that other crop enterprises had a higher net foreign exchange earnings/savings content than sugar.

46/ Including former expatriate managers of the Danish estate, representatives from the Danish equipment suppliers, and sugar specialists familiar with the Tanzanian industry.

The generic difference between the OPS and the VP technologies lies in how the extracted cane juice is boiled to evaporate the water and begin the crystallization, and 's indicated by their names. The technique using open pans must necessarily operate under atmospheric pressure and therefore endure boiling temperatures above 100 degrees Celsius, which has a number of drawbacks for the recovery of sucrose and control of crystal formation. The vacuum pans allow boiling at considerably lower temperatures. It was the introduction of vacuum pans in the early nineteenth century which spurred the development of large scale production of todays table sugar. Not until a century later (ca. 1925) did the OPS technology first diverge from the traditional Indian "khandsari" technology with the introduction of small centrifuges to separate the crystal sugar from the remaining molasses. But OPS couldn't be considered an economically viable technology before the development of some rather recent innovations, the screw expeller and the shell furnace.[47/] VP and OPS technologies also differ considerably in their scale requirements: the VP requiring a large-scale throughput of cane to be efficient (at least 2,500 tonnes cane/day), and the OPS being able to operate under small-scale throughput conditions (60 - 150 tonnes cane/day).

The diffusion technique generically distinguishes itself from the two others by the way it extracts the sucrose from the cane. While the OPS and the VP rely on mechanically crushing the cellulose cells containing the suc-ose, the diffusion technique extracts it through a leaching process. This principle was developed for the processing of sugar beet, where it is the dominant processing mode. As noted above, its transfer to cane processing is

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47/ For a recent evaluation of the OPS technology see Raphael Kaplinsky, Sugar Processing: The Development of a Third World Technology, Intermediate Technology Publications, 1984.

claimed to have been engineered by the Danish company DDS, whose prototype diffuser was installed at the TPC estate in Tanzania in the early 1960s. Though there are some small-scale versions of this technology currently available, (see footnote 48) the basic diffusion technology corresponds in scale to the throughput requirements of the VP processing technique.

The three available technologies represent very different configurations in terms of potential output and required proportions of factors of production such as labour, capital and management. From a given quantity of cane the diffusion technique may in principle extract 5 to 6% more sugar than VP which in turn leads OPS by at least 10%. However under certain conditions, the small-scale OPS requires less than one quarter the investment of the large-scale VP alternative, and provides over six times the total employment, for a given output of sugar.

By contrast, what distinguishes diffusion from VP is not so much its capital intensity as much as its management intensity. Although diffusion is mechanically simpler than the traditional VP milling technology, its tolerance margin for unsteady production is much lower and the consequences of a production stop much costlier (because of re-start time and losses due to fermentation).48/

48/ This characteristic refers to the large scale diffusers operating in cane processing since the 1960s. It does not necessarily apply to the recent and potentially significant diminution of the diffusion technology which DDS has pioneered over the past decade. While the small-scale diffusion plant is as dependent on stability of the production and processing environment as it's older and bigger brothers, the much smaller scale of operation could imply that the control of the throughput would be correspondingly easier. This small scale diffusion technology is now also being marketed by the French (Sofreco) and the Dutch (Stork-Werkspoor) but has not been included as a viable technology in the above discussion because it doesn't have a track-record yet in Africa. Danida has financed one such plant in Bangladesh which might be interesting to monitor for future references.

Matching the technological options with the conditions of potential recipient countries cannot, in all fairness, be done abstractly in a few lines. Nevertheless, anyone who has been exposed to the unpredictable production environment prevailing in many LDCs in general, and in Tanzania over the last decade in particular, would draw the intuitive conclusion that the diffusion technique would have no more than the slimmest chance of success. A choice between OPS and VP technologies would today be somewhat less transparent, depending as it does on a multitude of variables, including scale of production, national price policies and the state of infrastructure. Geographically concentrated, high volume production of sugar definitely favours VP technology. Yet a number of other considerations which to differing degrees correspond to the situations in Tanzania and Kenya point in the opposite direction. Such considerations include the abundancy of labour vis-a-vis capital, the feasibility of extensive vs. intensive cane cultivation, and the scarcity of foreign exchange.

It is clear that consideration of the various options in sugar processing technology is a very real and important step in making investment decisions, in some contrast to the situation in the dairy industry where there is basically only one technology available for industrial processing. For the provision of Danish tied aid, however, choice of technology in sugar is a non-issue since Denmark can only deliver the diffusion technique.

In view of the stop-and-go nature of the Tanzanian economy over the last decade or so, it is not surprising that the performance of the technology has been dismal. Under the obtaining conditions management could not concern itself with maximising extraction rates; its full attention and ability was required just to ensure that any extraction took place at all. As a result, diffusion technology has basically been put out of commission. In the one

Kenyan estate receiving a Danish diffuser, the technology was never employed, at least initially because the cane production was too low to keep the equipment in operation.[49/] At TPC in Tanzania (a private estate which continued to have a high presence of the expatriate management and professional staff during the relevant period), the diffuser was found to be too sophisticated, and was eventually abandonned. The Kilombero estates, which have been subject to far worse management difficulties, have not been able to cope with diffusion either.

It is significant that not a trace of this lesson seems to have been imprinted in Danida's institutional memory. Danida closed the book on sugar in Tanzania for macro-economic reasons. But because it has never conducted a technological evaluation of the sugar investments, there are no grounds for qualms against providing the same technology in the future should the same or another recepient request it at a more propitious time. Though this lesson has been registered by the company which developed and provided the technology, it would be too much to expect a commercial firm to decline a contract of similar magnitude were it offered in the future.

This institutionally-induced amnesia is essentially a function of tied aid's dependency on the donor's given technological shelf, combined with the contractually legitimized absence of monitoring. It takes two to tango, though. Had the donor been a country like Holland, Belgium or France which could offer both diffusers and traditional milling technologies from their shelves, it is still quite possible that the recipient would have favored diffusers.[50/] Tanzanian (and other African) politicians have frequently

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49/ Information supplied by DDS.

50/ For instance, both Malawi and Zaire installed Belgian diffusers in the 1970s.

exhibited an abhorrence for choosing any but the most sophisticated technology for fear of "going a step backward in development". In a sense, while the production in Tanzania (and much of Africa) is not yet predictable enough to utilize the most sophisticated equipment, the political environment is not yet sophisticated enough to accept this fact.

(ii) Grain storage investments

Grain storage investments consist of two main components: construction of the storage facilities, and supply of mechanical equipment to dry and monitor the moisture of stored grain. The important role of grain storage as part of the livestock economy in Denmark has made this a logical component of Danish assistance to developing countries. It has been part of Danida's portfolio in both Kenya and Tanzania, from the state loan budget in the former and the project budget in the latter. The experiences have been more mixed than in the case of sugar.

In Tanzania, Danida aimed to build 28 grain silos, as a component in Tanzania's food security program implemented in cooperation with FAO. The idea was initiated by the bumper harvest in 1977 and the facilities were planned to be completed by 1979 or earlier. It took to the mid-1980s before they all were completed; since construction they have been marred by extremely low utilization rates.

Among the interviewees, this project is considered one of the biggest failures in the recent agricultural portfolio. Apart from implementation problems at every step, the consensus on the reasons for this project's failure center on the fact that the need for stores was never documented and that the National Milling Corporation's capacity to manage them was never assessed.

Based on the utilization criterion, the Kenyan experience to date has been more positive. Danida has provided support to two large-scale storage facilities in surplus maize areas of the Rift Valley (drying equipment in Nakuru and a 40,000 tonne silo and drying equipment in Eldoret), and in normal years the stores have been in full use. Danida also has imminent plans to begin construction of its largest facility to date--a 90,000 tonne silo complex in Nairobi. The need assessment in this latter case is based on an in-depth consultant's study for the Kenyan government in 1982 on storage requirements to meet projected import levels for the remainder of the century.51/

The obvious primary objective of grain storage facilities is to enhance the reliability of the country's supply lines. Key variables determining the extent to which this objective is met are the geographical location of facilities, the managerial requirements imposed by the particular type of storage facility, and of course the institutional conditions of the grain marketing system itself (as between private or publicly dominated marketing, for instance). In the Tanzanian case, the underutilization of facilities may well lie with this third factor. The parastatal agency entrusted with the management of the facilities became increasingly peripheral vis a vis the thriving parallel trade in grain in most parts of the country by the time the stores were built. In the Kenyan case, there is no reason to

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51/ The initial study was "Grain Handling, Storage and Marketing Project, Final Report", MacDonald, Wagner, Priddle Pty. Ltd., October 1982. The Danida investment at Nairobi is based on a the report "Reappraisal of the Proposed NCPB Grain Silo, Nairobi," by the Danish firm Ramboell and Hanneman, April 1983.

suspect this type of problem, since the Rift Valley silos are located in major surplus producing areas where the official procurement levels tend to be quite high except in times of extreme production shortfalls. Similarly, the impending Nairobi facility is intended to primarily serve as the storage point for the high projected tonnages of imports, which are managed by the public marketing agency. This agency, the National Cereals and Produce Board, has displayed a considerably higher level of management ability over the more complex storage facilities than its Tanzanian counterpart, moreover. This suggests that the use of relatively sophisticated Danish mechanical equipment does not present an obstacle to the reliability of the system in the Kenyan case.

Within meeting this primary objective, however, there would appear to be a relatively wide range of technological options for storage which have implications both for capital costs and labor usage. One main distinction is between the use of in-sack and bulk storage. A second is among several grades of storage facilities given the use of bulk storage. The rule of thumb on capital, labor, and management inputs goes essentially like this. In-sack storage (which is suited to more rudimentary horizontal structures) will tend to be the most labor-intensive. The degree of capital-intensity of the various bulk options is positively correlated with the degree of management-intensity, going from simple horizontal structures which have only tarpaulin covers, to smaller scale vertical structures with some temperature control requirements, to the larger scale facilities which are quite sensitive to the mechanical control of moisture (a problem which increases with scale, given the higher condensation occuring with higher volumes).

The flexibility to choose among these options varies according to the speed and volumes of grain which must be handled. At the moment, the Kenyan grain (and especially maize) handling system is primarily based on the use of sacks, from the farmgate to the millers at consumption centers. While this system has not presented major obstacles to the movement of domestically produced grain, it has begun to hamper the handling of the growing level of imports considerably.[52/] The obstacle to bag handling of imports lies in the congestion it causes at the port if grain (now typically shipped in bulk containers) is not moved quickly enough. On this basis, a major conversion to bulk handling of imports has been planned, of which the Danida-financed Nairobi facility is an integral part.

The studies dealing with the port-related handling issues do not however go into any detail on the question of appropriate technological choice for up-country storage. Conversion of the entire transportation network to accomodate bulk handling is obviously a much larger investment issue than converting the rail system between the Mombasa port and Nairobi. Moreover, if bulk handling is not necessary, the dispersion effects of greater employment of unskilled labor is an obvious matter for consideration in an economy facing employment problems. Even if bulk handling is the most appropriate option, moreover, it is not apparent that throughput of the system requires the use of the speedier, but higher cost vertical facilities.[53/] While it may well be the case that the choice made by Danida for Eldoret (a vertical silo, following the standard blueprint appropriate for a Danish wholesale grain company) is the most appropriate, this has never been assessed.[54/]

52/ This is a relatively new problem, as Kenya was not a regular importer of maize prior to 1980.

53/ These judgments depend on how many times the facilities are used annually; for 2-3 throughputs per year, a horizontal, tarpaulin-covered structure is considered adequate by many storage experts.

Because the critical Danish input in grain storage (the mechanical grain drying equipment) is fairly flexible to scale and design of the storage facilities, the issue of appropriate technology is not as limiting here as it was in the case of sugar, where diffusion was the only option available from Denmark. A more in-depth consideration of the technological options is therefore only likely to enhance the development impact of Danish state loan aid in this sector, not constrict its usage.

6. Financial Transfers to Development Banks

Both Tanzania and Kenya have development banks with a primary focus on the rural economy. In Tanzania, this bank went for many years by the name Tanzania Rural Development Bank (TRDB), but has recently been renamed the Cooperative and Rural Development Bank (hereafter referred to as CRDB). The Kenyan counterpart is the Cooperative Bank of Kenya (CBK). They have had similar objectives of providing a range of financial services in that part of the rural economy which would not be particularly attractive to the regular commercial banking system. In practice, the CRDB has had a wider scope of activities than the CBK because the Kenyan cooperatives have had responsibility for much of the credit-related work in the field, whereas CRDB has had full responsibility for credit down to the village level.

Both banks have enjoyed a considerable reputation for professionalism, which accounts for the fact that they both became saddled

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54/ The lack of analysis of alternatives as regards capital costs of facilities was subsequently raised in a consultant's evaluation of the Eldoret silo, "Project Evaluation Report for Silo Project in Eldoret, Kenya", M. Bregnbaek, May 1983. As it happens, any possible advantages of a vertical model are foregone in the Eldoret case up to the present. Because the conversion investments in the railways system have yet to be made, the grain from the silo has to be bagged before shipment anyway.

with substantial administrative burdens as the implementing agencies for a myriad of donor-financed credit projects. Of the two, the Tanzanian bank appears to have been somewhat less sheltered from the deleterious effects of the many unsuccessful credit programs, in that political directives have frequently overridden its collection attempts.[55/]

Denmark has been a benefactor to both banks. CRDB in particular has been one of its largest single recipient institutions, receiving sizeable capital grants annually since the early 1970s. Support to the capital budget of the CBK began in 1976, on a far smaller scale.[56/] Any similarity in the two programs ends here, however, where we meet the distinction between the bulk character of the Tanzanian portfolio and the more administratively intensive Kenyan one.

The origins of the support to CRDB appear to stem from a stamp of good health by the World Bank (which subsequently used it as agent for a number of its input credit activities), and a joint Nordic review early in the 1970s. For close to a decade, Danida stayed virtually out of CRDB's sphere of influence, providing no technical assistance and being content to receive quarterly reports on the bank's activities.[57/] Such an administratively efficient disbursement mechanism was unique among the programs in Danida's

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55/ As in Kenya, the repayment for seasonal credit is collected as a deduction from crop payments to borrowers. In the Tanzanian case, the crop parastatals responsible for handing over these funds to CRDB were frequently remiss. In addition, it was not uncommon for them to continue to make in-kind input credit available to farmers with outstanding debts to CRDB. See Ch. V in the World Bank's Tanzania Agricultural Sector Report (Aug. 1983).

56/ The Tanzanian bank received over Dkr. 165 million through 1984. The Kenyan bank received Dkr. 28 million to its capital budget, plus technical assistance.

57/ A team of Danish researchers was affiliated with the CRDB in the late 1970s, but their work was only peripherally related to CRDB operations.

main recipient countries during the 1970s. As a result, CRDB provided a channel for undisbursed funds from the entire Danida project budget at the end of each fiscal year.[58/]

Danida's remoteness from the on-the-ground problems of the CRDB over this period is reflected in the fact that it did not even safeguard the bank's access to the foreign currency which was being transferred to Tanzania on its behalf. As we have noted, foreign exchange allocation became an increasingly important issue in Tanzanian agriculture from the mid 1970s, given the progressive overall shortage of foreign exchange and the centralized methods of allocation which tended to underrate agricultural sector requests.

This practice was modified somewhat in 1980, whereafter about one-third of the total allocation has been reserved for CRDB in foreign currency. At this juncture Danida also began to take some interest in CRDB's use of funds, by requiring the approval of purchases from the foreign currency portion (in line with the informal tying concerns facing the aid administration). Given the substantial overvaluation of the Tanzanian Shilling, the remaining two-thirds of the Danish kroner disbursed to Tanzania under this vote has continued to be a subsidy to the central government, which can use the funds as it sees fit.

Danish support to the Cooperative Bank of Kenya was a logical outgrowth of Danida involvement in the cooperative sector through both the Nordic Cooperative Project and the Farm Inputs Supply Scheme. As such, Danida had a clearer sense both of the CBK's needs and of its own abilities to meet these. Part of the capital support has been earmarked to specific activities

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58/ With the introduction of commodity aid and similar financial transfer possibilities in the other main recipient countries in recent years, this residual aspect has gradually disappeared.

in coffee and dairy (for cooperative societies' rehabilitation of primary processing and transportation facilities, respectively), with the remainder entering the bank's own capital budget. These funds have been accompanied by a handful of Danish financial advisors throughout the project period.

To the best of our knowledge, the capital support has been a useful increment to the CBK's lending activities. Inasmuch as liquidity constraints do not appear to be paramount for the bank's activities, however, the project's real strong point is the nature of technical assistance it has provided. As the Kenyan cooperative banking system gains in sophistication (with, among other things, the development of the union banking system which was discussed above), the tools of the financial officers will need to grow correspondingly. Over the years the Danish advisors have filled a felt need on the part of the Kenyan staff for on-the-job training in the use of more refined investment analysis as well as general banking practices. More recently, the advisory staff has been in a pivotal position with regards to the major rationalization exercise CBK has been undergoing in order to create a unified credit scheme out of the somewhat chaotic institutional apparatus which got built up during the era of special credit schemes in the second half of the 1970s.

In the Tanzanian case, Danida's support has not been distinct from the general activities of CRDB, so it is appropriate to assess aid effectiveness within this overall context. As noted, CRDB has been a relatively sound institution, with the basic mechanisms for assessing loan worthiness well in hand. In this respect, it is not surprising that CRDB was an attractive conduit for Danida's resources. While it's possible that Danish technical assistance could have had some positive effects (as for instance in giving Danida an earlier sense of the magnitude of the foreign exchange scarcity), it is also quite likely that such advisors could have had little impact on the more political nature of the CRDB's financial problems vis a vis other parastatal institutions.

In retrospect, however, it is appropriate to question the basic orientation of this financial transfer in the Tanzanian case. Credit certainly does not stand out as a principal constraint to agricultural potential vis a vis the range of incentive problems which have been facing producers since the 1970s. Indeed, the common perception that rural producers are short of funds (and hence need credit) is more often than not a misperception relating to the fact that there has been very little available on cash terms in rural Tanzania since the mid 1970s. This goes for seasonal inputs (for which, as noted earlier, there have been under 20 retail institutions on the entire mainland), and it goes for a range of investment items like oxplows, mills, bicycles, and corrugated iron sheeting. Here one can draw a distinction from the Kenyan situation, where the basic institutions in the agricultural sector appear to be more or less in working order, and where the retail markets can meet the demands of those who have cash. Under such conditions, it can make a lot of difference to refine at the margin the capacity to assess creditworthiness of potential investments, so that loan officers can serve more fully as economic advisers to agricultural producers.

7. Crop Research

Danida has had only marginal involvement in crop-related research. The only project of any endurance has been a joint Nordic activity in Tanzania, which has been under the day-to-day administration of Finland. Nordic support to the Uyole Agricultural Center began in 1968, when the Center was established much along the lines of a similar Nordic enclave project which predated it, the Kibaha Education Center. The Uyole Center has aimed to do a number of outreach/training activities in addition to research on Southern Highland agricultural problems. Since the late 1970s it has been a separate parastatal, falling outside the regular budgetting procedures and to some extent the regular programming and policy setting for the Ministry of Agriculture's national research system.

As the regular national system went into considerable decay over the 1970s, Uyole distinguished itself in the far disproportional levels of financing available compared to all other research stations.[59/] Despite this fact, it has not been able to function appreciably better than the less privileged stations.[60/] The multiple performance problems seem to stem from the Center's lack of focus among its multi-faceted agenda, besides large amounts of the budget going to activities totally peripheral to either the research or outreach perspective, like a production farm. As of 1985, the project was converted to the Finnish bilateral budget, marking the end of Danish involvement.

8. Agricultural Education

Danida has been among the donors supporting the agricultural faculties in both Kenya and Tanzania (Egerton College and the Agricultural Faculty at Sokoine University, respectively, mainly in the early 1970s). In the Kenyan case, this appears to have been largely (if not wholely) in the form of hardware (buildings and supplies). In Tanzania, technical assistance

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59/ See Tanzania Agricultural Sector Report, World Bank, August 1983, Ch. II.

60/ "Uyole Agricultural Center, Planning of Phase III", Report on proposed Nordic participation. Sept. 1981.

to the teaching faculty was also provided.[61/] While it likely that this support has made some positive contributions to the two institutions, it is noteworthy that neither activity has been the subject of much attention in Danida's own assessment of its portfolios. In the Tanzanian case, it may therefore come as some surprise that the American aid agency ceased its much more comprehensive support program to the agricultural faculty in Morogoro with a clear conscience because it assumed Danida was taking over with support of similar magnitude and scope.[62/] We note this not as a criticism of Danida, but rather as a classic type of problem in "aid coordination" when donors do not have clear, in-depth understanding about what each other are doing in the same area.

9. Other Activities Related to Agricultural Development

Outside of the agricultural sector proper, Danida has financed a number of activities which have aimed to have a direct bearing on agricultural performance. Here we note briefly the major ones in transportation infrastructure, multisectoral aid, and import support to Tanzanian industries.

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61 It was in fact through this route that Danida got interested in its more major involvement in the Veterinary Faculty discussed above.

62/ This program is discussed in a companion paper from the MADIA study by Dirk Dijkerman, Agricultural Development in East Africa" An Assessment of A.I.D. Assistance to Tanzania, Dec. 1986. The American program preceding Danida's involvement was more comprehensive in the sense that it involved institutional twinning between an American university and the Morogoro faculty, whereby local staff training was complemented by specific gap-filling technical assistance to the teaching faculty. In the Danida case the technical assistance program was more ad hoc in nature.

(i) Support to Transportation Infrastructure 63/

Danida has been among the donors to explicitly recognize the linkages between transportation investments and agricultural production in its portfolio and future plans. So far the main thrust of support to the transportation sector has been through labor-intensive rural road building projects in both countries. In Kenya, Danida has been an important donor in the ILO-inspired Rural Access Roads Program (RARP) since 1977.64/ The experience has been extremely successful with regards to establishing a form of organization by which dirt/gravel roads can be constructed through labor-intensive methods. In addition to facilitating rural trade, the 7,500 km. all-weather roads established under the program (through some 60,000 man-years in total) have boosted purchasing power in the 26 districts where they have been constructed by virtue of the employment generated.

The real long-term significance for the agricultural sector however will depend on how and to what extent the financial and organizational problems of access road maintenance are solved. For a transitional period of three years from 1985, Danida is among the donors which will continue to provide support to what will henceforth be a maintenance program. The fact that the roads are situated in relatively more productive districts increases the probability for political pressures that the maintenance problems be resolved in the longer term.

63/ Tables 3 in Annex II and III.

64/ In addition to Danida evaluation materials on the program, the discussion draws from Jens Mueller, "Veje til Kenyas Landdistrikter", article appearing in Danida's journal Udvikling in 1985, and J.J. Veen, The Rural Access Roads Programme, Geneva, ILO, 1980.

In Tanzania, the labor-intensive feeder roads program is in Ruvuma Region in the Southern Highlands. Unlike the RARP, which is administered by the Kenyan Ministry of Works, this project is administered directly by ILO, which was again the source of inspiration for the project idea. As a result, this project shares the same basic scope of providing temporary wage employment in rural areas. There is however an important difference in the two projects' prospects of benefitting agricultural production in their respective areas. While the RARP is posed to make a real contribution to agricultural production, the Ruvuma project would appear to have at best negligible chances for such positive impact. The difference lies in quite different resource endowments of the areas in which the project activities are taking place.

With the opening up of marketing outlets by the National Milling Corporation in the mid 1970s, monetized agricultural production soared in Ruvuma, a region whose remoteness had hitherto confined it to be a labor reserve area for estate agriculture and for mining in Southern Africa. In light of Ruvuma's abundance of agricultural land, the factor most likely to constrain the expansion of production would be the manual labour available during the peak farming seasons. In this context, a labour intensive feeder roads program poses a real risk of having a negative impact on agricultural output unless it is very cautious both in identifying the labour peaks of the farming systems in question and in designing the project to require unskilled labour only in the trough (slack) periods. Without a detailed knowledge of these farming systems, it is not possible to determine apriori where exactly the labour peaks are, since they are an aggregate of the labour requirements not only of a range of different crops, (the mix of which often varies significantly within short distances), but also of various non-farming demands on the available labour resources, which may vary from location to location.

The original appraisal document for the Ruvuma project 65/ does pay lip service to the problem of avoiding adverse effects on agriculture, but it was not until three years after project inception in late 1980 that an actual survey on labour utilization was carried out. It took another two years before the survey concluded that the project had only had adverse effects on agriculture in one of the region's three districts.66/ Although the methodology applied was not revealed in the text, its basic premises appear to have been too uninformed to allow any confidence in the conclusion.67/ In an earlier aggregate evaluation of the ILO/UNDP Special Public Works Programme in various parts of Tanzania, there is however a reference to the effect that 30% of a sample of the work-force employed in Ruvuma reported an adverse effect on their agriculture.68/ The report downplays this finding with the argument that participation by farmers in the project led them to hire substitute labor to work on their farms, without recognizing that this hired labour would otherwise be working their own land somewhere else.

Not only do the various project documents fail to alleviate concerns about the probability of the project having negative effects on agriculture;

65/ "Labour Intensive Rural Public Works Programme under ILO/DANIDA Multilateral Aid Programme for Ruvuma Region," 1979.

66/ Joint UNDP/ILO Evaluation of Project URT/77/033: "Support to a Special Labour-Intensive Works Programme in the Arusha, Dodoma, Rukwa and Ruvuma Regions - Tanzania", 1985.

67/ The study measured effective labor surplus as total available time minus time spent in on and off-farm production. Anyone with even a vague idea of non-monetized rural life in Africa would realize that there are a whole range of "non-productive" activities which are vital for the economy's reproduction and therefore have to be taken into account when estimating "surplus" labor.

68/ "Evaluation of a Tanzanian Special Public Works Programme, Full Report," UNDP, Dar es Salaam/Geneva, Jan. 1983.

they do not provide any substantive evidence or argument that the roads themselves would have a net positive impact on agriculture. Though this is asserted, scattered evidence from the project's own evaluation materials put this in some doubt. For instance, the 1984 Evaluation Report quotes a traffic flow on some of the improved roads to be less than 10 vehichles a week. If the project was meant to address a marketing and input constraint on agriculture, one might have expected an analysis of whether lack of fuel, lorries, spare parts, storage, or payment, etc., have not been more important constraints than the roads themselves, or whether alternative logistical systems (e.g. bicycles/local storage/all weather trunk roads) might not have been more appropriate for the purpose.

In short, the project approach chosen by ILO in Ruvuma appears to be less the result of a careful resource assesment and informed strategizing than it is a reflection of the implementing agency's preoccupation with logging the wage hours it has created. By contrast, population density or land shortage (typically an inverse indicator of year-round surplus labour) was an explicit criterion for the allocation of RARP activities in Kenya. Thus projects of similar type may have very dissimilar effects depending on the resource context in which they are set.

Another important transportation activity in Tanzania has been focused exclusively on facilitating traffic on Tanzania's several large lakes. At the time of field work in fall 1985, the Danida mission's assessment was that there hadn't been any noticeable increases in goods traffic, which was the intention, but vast increases in passenger traffic. One can hypothesize that this was because the state-owned ferries have had a limited pull in relation to the demand for commodity transport services, since so much of the agricultural surplus has been going through black market channels, which cannot openly use official modes of transportation. It is possible that the situation is changing with the more recent relaxations in government's attitude to the unofficial trade, though for the purposes of larger scale shipments through private channels there is likely to be less tolerance than for the smaller-scale movements of foodstuffs which have been condoned in policy changes over the last two years.

In recognition of the importance of infrastructural bottlenecks to Tanzania's agricultural sector, and of its own limited options in expanding the direct agricultural program in the country, Danida commissioned a comprehensive transportation study in 1985 to identify possible areas for future financing in infrastructural projects. The results of this study are beginning to become available, and (assuming the study has been well executed) are likely to be of great value not only to future Danida activities in this sector, but also to the planning of other donor investments. In the selection process, it will be important to identify areas of intervention which are "market-neutral" if the support should facilitate the important private internal trade in agricultural commodities.

(ii) Industrial Import Support 69/

This broader view of how to support agriculture under crisis conditions can also be seen in the trend since 1979 toward increasing import to Tanzania. The large share of chemical inputs in the portfolio of the agricultural sector proper was noted earlier. The other major areas of support have been in the soap industry (through the importation of technical fat) and beginning in 1985, to the local engineering/smithing industry (through the

69/ Table 4 in Annex II.

importation of steel plates and rods). In both cases, the intention has been to support production of end-products which will have a positive impact on rural producers.

In the case of the soap industry inputs, care was taken to provide the quality of fat which could only be used to make the low-grade washing soap which wouldn't be absorbed by higher-income urban dwellers. Monitoring as of early 1985 found the soap (albeit still at high prices) in shops in distant villages, many of which hadn't seen the commodity for years. Since soap is among the basic commodities in high demand in the countryside, this aid falls under the category of support to "incentive goods" which has received considerable donor attention since the onset of the economic crisis in Tanzania.

The intention behind the steel imports was to alleviate bottlenecks in production and repair of infrastructural items (e.g. vehicles) and production inputs (like hoes, plows) Informal reports from late 1986 suggest that this objective has been at least partially thwarted by the type of steel sent. The steel rods have apparently been soaked up by the local construction business, a booming activity in which many urban dwellers are putting their resources to hedge against inflation in the face of low official incomes. The experience suggests that more care will need to be put into the selection of types of commodities (as was done in the case of soap), with an eye for the probability of the end-products' destination.

On the whole, one should view this type of import support as a creative and potentially positive response to a range of constraints regarding aid to Tanzania: (i) rampant shortages of most items because of the scarcity of foreign exchange; (ii) the near impossibility of running successful project-type operations in support of agriculture in the context of both the economic crisis itself and the policy environment in which projects must operate; (iii) the formal and informal restrictions on Danish aid which would make pure financial transfers more difficult to provide than Danish-based commodities; and (iv) the Tanzanians' own inability up to the present to make clear priorities in their import patterns in favor of consolidating agricultural performance (vis a vis completing various industrial investments, continuing to push for a move toward the new capital in Dodoma, etc.).

It is important to note, however, that this type of aid essentially sidesteps some fundamental questions relating to the overall soundness of the government's trade and industrial policies. A recent study by the World Bank 70/ which surveyed over 100 Tanzanian industrial enterprises concluded that the sector is marred by a high number of firms who produce a negative value added. This conclusion holds, moreover, irrespective of the level of capacity utilization of a number of such firms. The principal cause of this situation has been a protracted period of overvalued currency, whereunder industrial imports have been extremely underpriced (and hence distortionary). This has been compounded by the administrative allocation procedure for foreign exchange, which has not been able to take into account the relative efficiency of resource use of the various firms requesting access to imports. These performance problems were found to occur in both privately and publicly managed enterprises. Moreover, considerable variation was found among firms within the same industry.

The only way to sort out fully which firms are financially viable and which are not would be to get the exchange rate to its market value; a second best would be to dismantle the administrative allocation machinery for

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70/ Tanzania Industry: A Sector in Crisis, Report #6357-TZ, Nov. 1986.

foreign currency in favor of a managed auction of at least part of the available resources, drawing from the experience of Zambia, Nigeria and some other African countries experimenting with currency reform. In the absence of such measures (which so far have not gone over with Tanzanian authorities) donors providing support to individual industries really need to conduct economic and financial analysis of the firm's viability if they want to ensure that they are not bolstering up firms which have no longer run chance of making it in an economy with a healthier macro-economic environment. This should particularly be the case if the donor's ultimate objective is to help satisfy effective demand for commodities in the agricultural sector. Indeed, it may well be more appropriate, depending on the industry concerned, to sidestep the Tanzanian industrial capacity altogether and directly provide the final products involved.

(iii) Multisectoral Activities 71/

Though there has not been an explicit set of agriculturally related objectives for Danida's multisectoral activities, several of them have relevance to the topic of the present study. In Kenya, the large multisectoral project known as the Rural Development Fund appears to have scope for addressing some of the poverty issues which Danida has been less successful meeting through more traditional input and marketing support activities. In Tanzania, the activities have so far been confined to planning exercises, and it is in all likelihood a blessing that Danida did not get into the financing of these plans, in view of the poor performance record

71/ Tables 2 in Annex II and III.

of area-based multisectoral projects financed by various other donors since the mid 1970s.

The Kenyan Rural Development Fund (RDF) has been one of the oldest and largest Danida project activities in the country. 72/ The program was a Kenyan government initiative to which a number of external donors also provide support. It is built on the idea of making small capital grants available to local development project initiatives, and in the recent context of the "District Focus" in Kenya is seen in particular as a potentially powerful instrument of decentralization. The Danish role has grown gradually over the project's course in response to concerns that inadequate mechanisms had been established for screening project feasibility. Danish technical assistance has come to serve an important advisory role in this process.

While many of the RDF's projects fall outside the scope of this inquiry (water pumps, clinics, handicrafts, to name a few), a good portion of the funds have gone to small-scale crop and livestock operations (e.g. poultry farms, irrigation, horticulture, cattle dips) as well as to infrastructural activities which in some cases can be presumed to facilitate commercial aspects of agriculture. A recent socio-economic impact study by the Norwegian-based Christian Michelsen Institute 73/ concludes convincingly that RDF has developed into an efficient and unique instrument for aid to underprivileged groups scattered all over the country. What is more, in the process it has strengthened the government's administrative capacity, in

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72/ With over Dkr. 100 million disbursed between 1974 and 1984.

73/ "Kenya's Rural Development Fund: A Study of its Socio-Economic Impact", Christian Michelsen Institute (DERAP), Bergen, Norway, August 1985.

effect coming to act as a successful pilot project for testing administrative reforms in decentralized rural development.

Whereas this innovative effect may prove to have long term, but as yet unfathomable consequences, the immediate impact of the project on agriculture is more limited. The project is merely allowing funds to be allocated to small, local niches which would be missed with more stringently sectorally-based projects. The cost-effectiveness of the approach is as yet inconclusive, but it is not inconceivable that it may turn out positive if the long learning period is discarded as a sunk cost.

In Tanzania, Denmark financed the preparation of two regional integrated development project (in Tanzanian parlance RIDEP) plans, first of Kagera (formerly West Lake) in the early 1970s, and later of Mbeya in the early 1980s. Uncharacteristic of major donors to Tanzania during the 1970s' wave of RIDEP financing, Danida chose to finance neither project. In the Kagera instance, the Tanzanian officials broke practice by declining to request Danish follow-up financing, presumably because the plan's proposals' went against the grain of the regional administration's own ideas about the region's development (including such questions as allocation of land between state farms and land-scarce smallholders).

The Mbeya RIDEP plan was drawn up by an FAO rather than a Danish team. While Denmark was probably never expected to finance the whole range of items which the plan drew up, there was clearly an understanding that it might come in with some project support. In light of the rapidly deteriorating economic conditions in the country, Danida (like the other donors) didn't pursue the RIDEP model. There does continue to be a desire to come up with something to finance in Mbeya region, however, viz. the attempts to design an input supply project (see above).

V. POLICY CONCLUSIONS

The purpose of this final chapter is to draw conclusions from the assessment of past experiences which may be relevant to Danida's future activities in support of East African agriculture. The chapter begins with a summary of the more detailed discussion of the aid portfolios in Chapter IV. These findings are then viewed in light of Danida's institutional determinants, as presented in Chapter II. Against this background, the chapter suggests policy changes which could facilitate a better linkage between the needs of the recipient countries' agricultural sectors and the resource endowments from which the donor can provide assistance.

1. Assessing the East African Portfolios

The preceeding chapter profiled Danish activities in support of agriculture according to the product and functional orientation of the aid, and drew conclusions about their effectiveness from the perspective of the sectoral environment in the recipient countries. Here these findings are summarized from the perspective of the donor's resource management. Danida has engaged in four distinct categories of resource transfers, each with somewhat different implications for the effectiveness of aid activities: (1) transfer of Danish capital goods (hardware); (2) transfer of Danish commodities; (3) transfer of Danish know-how (software); and (4) transfer of international know-how through Danish financing. The first category broadly encompasses the tied state loan program (and some project aid), the second the more recent shift to import support (whether formally tied or untied), the third the majority of project aid, and the fourth the contracting out to UN agencies through multi-bi projects.

Reducing the level of specificity to only four categories raises the level of abstraction correspondingly. While the discussion continues to focus on activities related to agriculture, the validity of the generalizations made will at times transcend sectoral bounds to include the wider aid portfolio.

(i) Transfer of Danish Technology

The opportunities for Danish investments in Tanzania and Kenya using tied state loans have been rather unsatisfactory. The problems are of several types (1) limited capacity of the recipient country to determine which investments in industry and agroindustry are needed; (2) erratic production environments, which make running and maintaining sophisticated Danish equipment difficult; and (3) inappropriate factor intensity of the investments.

It is widely recognized in Danida that the first type of problem led to misplaced investments in the expansion of the Tanzanian cement industry. Tanzanian officials were either unable or unwilling to base their financing requests on realistic projections of demand and cost, with the result that many millions of Danish kroner have gone into cement factories that can keep running only with large subsidies from foreign donors. Slaughterhouse investments in Kenya appear to fall into the same category since the economy can not not readily absorb them.

The second type of problem has been witnessed in Tanzania in the case of sugar equipment which falls into disuse because of its lack of robustness in the production environment. To run well, this equipment requires a much more stable production environment than Tanzanian conditions can provide.

The question of appropriate factor intensity is relevant in the case of grain storage facilities in Kenya. These have a clear capital-intensive bias, entirely appropriate to the Danish economy but at least questionable in the Kenyan economy, where employment of a growing labor force may be one of the most pressing economic issues facing the country.1/ Only in the case of investments in dairy processing in Kenya does there appear to have been a clearly positive role for Danish state-of-the-art capital goods.

This mediocre experience, in the two African countries where Darida has had the greatest opportunity to understand the economic context in which its investment decisions were being made, raises concern about state loan investments in the rest of sub-Saharan Africa (with the possible exception of a country like Zimbabwe, which has a substantial domestic analytical capability). Danida cannot assume that these countries are able to determine what types of capital investments their economies can manage: and yet Danida does not have the resources to make these judgments for or in conjunction with them. It is true that the state loan office has undergone a substantial upgrading in project appraisal capacity since the late 1970s, but the discrete investment's rate of return remains the main focus. The means for assessing the viability of investments in the sectoral and macroeconomic context--that is from a strategic point of view--do not rest with Danida.

(ii) Trarsfers of Danish Commodities

On the whole the experience with commodity aid has been far more positive than that with capital goods export even though Denmark's specialized

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1/ Danida has explicitly recognized this problem in other parts of its portfolio, such as the Rural Access Roads Programme.

product mix does not readily lend itself to appropriate import support to a third world economy. Provided that informed product identification can take place and that a suitable channel is found, this type of aid can be an extremely helpful form of "crisis aid." In Tanzania, in fact, it may be a superior form of support to agriculture than a blank check to the Ministry of Finance, since the government has not yet sorted out its priorities for allocating scarce foreign exchange. Identifying the appropriate commodities obviously requires Danida to have a strategic sense of the economy's (and agriculture's) needs, and of the internal channels by which the commodities in question are allocated. The instances of import support to the Tanzanian soap industry show extreme sensitivity to both of these questions. The experience with steel imports has apparently been less positive because the pattern of demand for the steel types offered was less carefully assessed. In the case of support for chemical agricultural inputs, which has become a regular part of the Tanzanian portfolio and has also occurred briefly in Kenya, policy questions concerning the internal distribution need to be addressed to improve the effectiveness of the aid. Since many donors supply inputs in bulk, Danida will have to continue to show a willingness to join together with major suppliers in discussing policy reform with government officials.

To increase the potential of commodity aid, we would like to see the market open to a wider basket of Danish commodities. Two fairly rigid procedures of aid administration would need to relaxed for this to occur. First, present inhibitions on the application of tying by and large prevent Denmark from providing commodities which are not viable commercial exports. Second, Danida practice is to send only production inputs; yet in a country such as Tanzania, where many industrial enterprises are not financially viable, it may benefit the intended recipients in the agricultural sector more to provide finished commodities than to subsidize their domestic production with Danish intermediate inputs. Were these two procedures relaxed, it would give Danida the potential to draw from a number of "home goods" such as consumer durables (bicycles, batteries, and so on) which could play an important role in import support.

Of course, in an ideal world, Danida would be able to provide whatever commodities it identified as essential to agricultural recovery and purchase them by international tender. But if we assume that tied Danish commodity aid adds to the total amount of imported resources, then more expensive Danish commodity support (appropriately identified) would still be better than none, and *might well have a greater economic impact in the recipient country* than those Danish products which are internationally competitive. It should be noted that this principle is already well-established in the case of subsidized Danish agricultural commodities channeled through the food aid programs of the EEC and the World Food Program.

Our enthusiasm for the potentials of commodity aid does not extend to those countries which are not main recipients of Danish aid, however. In these cases, the state loan office's policy not to move into commodity aid is probably a sound one. Their reluctance is based on the grounds that the absence of a Danida mission in the country would make the transfer impossible to monitor (in line with perceived accountability requirements). We see the issue less as one of monitoring, though, than of Danida's ability to appropriately identify the economy's needs. With proper identification, monitoring is necessary only to verify, not to steer, the domestic allocation of the goods in question.

(iii) Transfer of Danish Know-How

In Denmark it is a common perception that technical assistance is one of the strengths the country has to offer, and this is certainly reflected in the composition of many projects reviewed in this study. Evaluations of the effectiveness of technical assistance can include a range of factors beyond those we consider.2/ Happily, there seem to be no cultural barrier to close cooperation between Danish technical assistance personnel and personnel in East Africa. The effectiveness of technical assistance-based projects, therefore, has depended on how good the match is between the abilities of the Danish personnel and the needs of the recipient economy. That this match is not always satisfactory is detected in a review of the three main types of projects which have as a primary aim the transfer of knowledge: livestock, financial management, and engineering.

The potential for Danish livestock expertise to have a positive impact is greater in Kenya than in Tanzania. In Kenya, there has been a very positive interaction in the area of cattle disease control, and there are signs that incipient work in fodder development can also have a good payoff. In Tanzania, the investments in veterinary medicine education seem fraught with problems. The difference in the effectiveness of these aid interventions hinges on the differing function of cattle in the two economies. The Kenyan case more closely approaches the conditions of European livestock rearing, while the Tanzanian case still largely conforms to the pattern of a tropical subsistence economy with livestock as a savings and insurance device. Unless

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2/ These include recruitment procedures, duration of assignments, and other personnel management factors, many of which will be addressed in the context of a separate evaluation of technical assistance recently commissioned by Danida.

some expertise in the management of the latter type of livestock sector is acquired, the future contribution of Denmark in this area will remain limited.

A number of Danish projects concerned with financial management have had important advisory components. Danish experts in this field have been able to provide organizational advice adapted to a range of institutional forms. But the success of the intervention has depended on a correct assessment of the need for or relevance of this type of input in the context of a particular project. In Tanzania, this type of aid was channeled through the cooperative project. In all likelihood, most of the advisors to the regional cooperatives up to 1976 when cooperatives were abolished made very little difference because they were placed in nonviable institutions. In Kenya, those aspects of the cooperative project that focused on marginal areas had similar problems, with the result that expensive advice was sown on barren ground. In contrast, the support given to economically viable cooperative activities in the two countries seems to have constituted an important Danish/Nordic contribution. This has been most visible in Kenya, where institutional stability has allowed the project to provide sustained support to management practices in higher potential cooperative societies and unions, and to the development of a cooperative banking system. In Tanzania, policy instability eroded the earlier years' effective support to the cooperatives in highly productive areas. Village bookkeeper training which began subsequently seems to have been less susceptible to the turbulent institutional environment, and hence more successful. Though the evaluation material on the Kenyan Farm Inputs Supply Scheme does not provide adequate information to draw firm conclusions, it would appear that this project, run with a core team of financial advisors, fell into the same pitfall as the cooperative project in Kenya, of using an inappropriate mechanism for assisting marginal producers.

Advisors to the Cooperative Bank of Kenya, in contrast, have proved highly valuable in helping to develop that institution along sound financial principles.

While Danish capital goods exports have a fairly restrictive technology, the engineering sector itself has shown the capacity to be flexible, if not neutral, on the question of technology transfer. The usefulness of the Danish contribution in this regard has depended on Danida's ability to define the appropriate parameters for engineers to do their work. Two examples of successful infrastructural activities have been the Rural Access Roads Program in Kenya and the Rural Water Supply (Southern Highlands) project in Tanzania. In the roads program, the project design specified the use of a labor intensive technology for road construction; an appropriate method was then developed and executed by the project engineers. In the water project, project specifications took into account the likelihood that recurrent foreign exchange would be scarce and therefore stipulated that the schemes should be based on gravity-drawn rather than pump-drawn sources. This contrasts with the less successful donor-financed schemes in Tanzania in the early 1970s, when engineers, given a free hand, leaned toward schemes using diesel pump technology (which typically has lower initial establishment costs).[3/]

(iv) Transfer of International Know-How through Danish Financing

By now Danida has a well established practice to transfer project responsibilities to UN agencies when it is not in a position to muster the

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3/ The Swedish aid agency played an important role in the design of the Danish project by sharing its bad experiences with the earlier model.

required expertise domestically. The record raises questions about the extent to which this practice is desirable. In direct agricultural activities, experience suggests that a project may suffer if the FAO (or WFC) is responsible for defining the task at hand (as in the Grain Storage project, the National Food Strategy Report, and the Food Strategy Coordination Cell in Tanzania).4/ This is not to say that FAO cannot be counted as a partner in any agricultural project implementation. But the successful examples of FAO involvement seem to occur either where the specified task is fully technical in nature (such as the Early Warning/Crop Monitoring Unit in Tanzania and some other African countries,) or where FAO is merely acting as an agent for another donor that has full specifying and supervisory responsibility (as when it served as an agent for the World Bank in Tanzania's Marketing Development Bureau). The lesson seems to be that FAO cannot be expected to take a critical (or any) stand on policy questions because of the nature of the organization itself.

The case of ILO is somewhat different. That agency slants any project it gets involved in toward the generation of employment -- which is not the same as the expansion of production. In Kenya, where Danida and other donors followed ILO's lead in the Rural Access Roads Programme, this happened to be an appropriate policy bias.5/ In Tanzania, the ILO-Danida intervention in feeder roads in Ruvuma region appears to be less appropriate (at least in the form administered), because the region is not faced with similar constraints to the gainful employment of its labor in agriculture.

4/ A similar experience appears to have been registered in an FAO-inspired grain storage program in Senegal which received another European donor's funding.

5/ Indeed, the 1972 ILO report on Kenya was the first one to publicize the growing problem of under- and unemployment in that country.

These examples serve to illustrate that the problems encountered in making Danish aid in support of agriculture effective cannot necessarily be solved by farming the activities out to the specialized agencies. This is not to suggest that such cooperation is undesirable under all circumstances, but rather that Danida will need to assess carefully the capabilities of each agency to do the work it does not feel it can do itself.

Comparison of the East African Experiences. To conclude this section, it is useful to compare the impact of these various resource transfers on the two East African recipients. In each of the four categories, it was possible to identify successes as well as failures. Grouping the successes by country, one finds a striking imbalance in favor of Kenya's portfolio, the smaller of the two.

In Tanzania the bookkeeper training element of the cooperative project lights up like a gem in an ashen project landscape. 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. Finally the new Cooperative Project is set up to have a substantial potential impact, which will depend on the outcome of policy debates within the Tanzanian government.

The successes in Kenya, however, are many more. The multifaceted support to the production, research, processing, and marketing aspects of the dairy sector might top the list, but certainly the coffee and the pyrethum cooperatives have benefited as much as the dairy cooperatives from the Nordic Project's strengthening of their general management systems. Another cornerstone in the country's cooperative edifice has been laid by 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 have had a longer term impact. The Rural Access Roads Program and the Rural Development Fund have in different ways contributed to the country's rural infrastructure. Although it is premature to give a final verdict on the more integrated approach being carried out in Mutomo, Taita, and Taveta, the preliminary results and the flexible learning approach to harnessing locally controlled resources leaves ample room for optimism.

The reason for the different success rates in the two countries may be attributed to historical factors. In considering Kenya's dairy sector, it is appropriate to recall the truism that nothing breeds success like success. The climatic conditions, genetic resources, organisational and spatial forms of production and marketing, price incentives, credit availability, and not least the "see, but not touch" policy of the colonial era [6/] had resulted in one of the few striking examples of successful livestock development in tropical Africa.[7/] In other words, the Danish investment in milk processing came to fruition because of all the features that were already in place.

An adequate assessment of the resource base was an important element in Danida's dairy investments, as it has been in other successful interventions. But why does one find more of this in the Kenya than in the Tanzania portfolio? An historical irony seems to be at play, having to do with the interaction between the donor -- Denmark -- and the political systems

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6/ As described by Philip Raikes in his book, Livestock Development and Policies in East Africa, Uppsala, Scandinavian Institute for African Studies, 1982.

7/ Kenya's unusual success is contrasted with other experiences on the continent in Hans E. Jahnke, Livestock Production Systems and Livestock Development in Tropical Africa, Kieler Wissenschaftsverlag VAUK, 1982.

of the two recipient states. As noted earlier, Danida's dissimilar perceptions of the policy framework in the two countries led to different approaches to project identification. The Tanzanian government's basic orientation was seen to fit with Danida's own poverty focus. This led to a more laissez faire attitude to the precise use of Danish funds, meaning that critical resource assessment fell by the wayside. In Kenya, meanwhile, Danida took a more selective approach, seeing itself as the initiator and guardian of a poverty focus through its project activities. Greater institutional and resource assessment was a spillover effect from the more critical scrutiny of the feasibility of alleviating poverty.

Denmark's "compensatory" reaction pattern was compounded by operational necessities stemming from the different structures of the two economies. The broader the scope and the more centralized the implementation of a recipient country's policies, the less the scope for a donor to get involved in niche identification or area specific interventions. Though both Kenya and Tanzania have had their share of blanket policies that are insensitive to the specific conditions of different areas (as, for instance, in cooperative policy), Tanzania clearly surpasses Kenya in the extent of centralized decisionmaking and detailed intervention into the workings of the agricultural economy down to the farm level. Even if Danida had wanted to, it could not have replicated successfully in Tanzania the case-by-case scrutiny of Kenyan projects. The systemic weaknesses in the Tanzanian policy and institutional environment can only be addressed more directly through policy conditionality, a task for which Danida is not well equipped.

To conclude this summary, we would highlight the basically supply-side nature of Danish aid to East African agriculture up to the present. To a large extent, its contours have been shaped by Denmark's own domestic and international concerns whether cultural, economic or political. Seen from the perspective of maintaining a comprehensive aid constituency and of increasing real aid levels, the Danish aid policies may be regarded as something of a masterpiece. The record with regard to aid effectivenes is somewhat more spotty, however. When aid has been effective, it has met at least three conditions on the demand side: it has corresponded to the needs of the intended beneficiaries, added an incremental but critical resource to a local constellation of otherwise underutilized factors of production, and been in confluence with the national policies of the recipient country.

More often than not at least one of these conditions was absent. Making aid to agriculture more effective would therefore require a better fit between the resource base of the donor and the needs of the recipient. This in turn requires, first, a better identification of the demand situation; second, a realization that the donor's resource base is not a totally fixed parameter but can itself be developed to respond to the identified needs; and thi-d, a restructuring of some of the types of aid to ensure better delivery.

2. Towards More Effective Aid to Agriculture: Some Contradictions and Resolutions

Some of the obstacles to effective agricultural aid are shared by all donor and recipient governments; they arise because understanding of the developmental process has been embryonic or incomplete. But in addition there are some institutional constraints to greater aid effectiveness which are particular to the Danish methods of aid allocation. (Some of these may be relevant for other donor agencies as well, though not necessarily in the same form or with the same weight.) These constraints arise from contradictions inherent in the various objectives or motivations which have shaped the overall aid policy. Chapter II laid out the three constituency-generated objectives of Danish aid related to foreign policy, philanthrophic and commercial interests. Since these motives at times clash not only with each other but also with the primary objective of development itself, it is necessary to define a fourth interest that allows a conceptual separation of the development objective from the constituency-generated ones. In this discussion the term "professionalism" will refer to an exclusive concern with the "demand side" of the aid alogorithm, completely detatched from any cultural, political or commercial determinants on the "supply side".[8/] To avoid misunderstandings it should be stressed that "professionalism" has nothing to do with "the folded arms policy" of old whereby requests from recipient governments were taken as synonymous with the "demand side". A "professional" analysis cannot disregard recipient government policy, but will assess whether it coincides or conflicts with the self-perceived interests of the target population in the targeted agricultural system.

The most significant contradictions among these four types of interests originate in one of three ways: among different interests outside the aid agency, among different interests inside the agency as represented by different personnel groups or organizational cultures, and internalized in the value system of the individual staff members. These are discussed in turn.

The first contradiction lies in the longstanding conflict between the commercial and philanthropic interests over the allocational procedures for the tied aid portfolio. As was noted earlier, the originally intended recipients of state loans were the middle-income countries. Under popular

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8/ This is clearly an "ideal" in the Weberian sense, hopefully as analytically useful as it is empirically empty!

pressure to make all aid poverty-oriented, this soon gave way to a policy that only low-income countries could have access to these funds. In effect this was a compromise by which the volume of aid benefiting Danish industry was maintained while its outlets were curtailed. The compromise has greatly handicapped the search for appropriate uses of Danish state loans. It also necessitates more work on Danida's since these recipients often have gaps in analytical capacity that the agency must (or ought to) fill.

In the case of the main recipient countries, we have already pointed to one possible modification in the procedures which could heighten aid effectiveness while at the same time helping to keep disbursements up--namely, the extended use of tied commodity aid. At the same time, we have raised questions about the advisability of Danida's continued promotion of regular capital export loans to countries elsewhere in Africa, on the grounds that neither Danida nor the recipients have the capacity to analyze adequately the macroeconomic and sectoral context in which the investments will take place.

The institutional mechanisms by which the Danish capital exporter and the recipient government identify and agree on a Danida-financed state loan contract tend to bias the resulting investments in the direction of oversophistication, overcapacity and/or overprice. Of the three involved parties, Danida has the least vested interest in such an outcome. But Danida seems also to have the least manpower invested prior to the signing of the contract. The representatives of the recipient government tend to choose the most "modern" option (since modernity is associated with development in the minds of many). Needless to say, a private contractor would tend to see it in his interest to secure the largest possible contract.

Ironically, the commercial interests are only making the best out of a bad situation. Economically, the direct export of sophisticated capital goods through the aid budget to countries as poor as most of the African recipients acts as a one-time financial shot in the arm for the contractor involved. One would need the purchasing power of at least a middle-income country to promote an industry's long-term interest in evolving steady self-capitalizing markets for Danish equipment. The recent opening of the Chinese market to Danish state loans should help considerably in alleviating disbursement problems. But since the pressure to disburse is bound to persist, it would be worth considering lifting the per capita income limit of eligibility.[9/] By extending the list of eligible countries to those able to use Danish technology more effectively, both the recipients and the Danes would be ahead.

The second contradiction lies between the growing professionalism of the aid administration and the foreign policy environment which permeates its modes of operation. The foreign policy platform has made Danida conflict-avoiding. Yet in order to increase the effectiveness of some aid activities, Danida will need to get involved in ensuring that recipient country policies are conducive to development. With some hesitation, the agency has gotten its feet wet on conditionality in the Tanzanian case (over cement); and the experience has been painful for relations between the two countries. Tanzanian disappointment with the Scandinavians, and above all with Denmark, is summed up neatly in the remark of one senior government official, "The Scandinavians think the Pope has moved to Washington."

9/ Taxpayers' objections that middle-income countries should not get such concessional loans could be accommodated by charging modest interest rates since there is wide latitude before the loans would cease to qualify as official development assistance.

In achieving the foreign policy objective of gaining good will through bilateral aid, a generous aid portfolio carries with it the danger of putting the donor in a hostage position. Denmark can only maintain full good will if it does not raise any questions. But project identification and design, and the effective use of import support, are bound to suffer from following the course of least resistance.

The constraints posed by the foreign policy environment on the development of professionalism may well have been the most serious long-term impediment to the effective use of the untied aid. Since the Foreign Ministry subsumed Danida upon the retirement of the agency's first director in the late 1960s, this tension has gradually been rising until it finally resulted in a major administrative review, completed in early 1986. The resulting recommendations did indeed call for greater structural autonomy for Danida. On this particular point, however, it seems as if the philanthrophic lobby coalesced with the foreign policy interests to secure less rather than more autonomy for Danida.

More important than altering Danida's location within the public administration network is adopting certain recommendations concerning personnel policies and operational procedures. If carried out, they are likely to have significant long-run consequences for the agency's organisational culture. Several of the most important changes are: (1) a longer minimum time commitment (six years) for diplomats wanting to serve in the agency, (2) greater accessibility to management positions for technical advisors, (3) greater emphasis on the functions of the resident missions, for example by raising the mission chief's rank to that of division chief, and (4) a virtually new emphasis on country studies, strategies and planning, which would provide specific enough guidance to allow for an effective decentralization of decisionmaking to the missions and to provide foreign service officers with much more operational instructions than hitherto.

These recommendations, if followed, would represent a major leap forward in stimulating professionalism within Danida. Essentially they would resolve the contradiction between professionalism and the foreign policy interests by professionalizing the agency's personnel and modes of operation, not by detaching it from its mother lode.

The third contradiction lies not so much in the competing interests of different groups of people as in an incongruence of values or perceptions within the people shaping the content of Danish aid. This internalized contradiction between professional and philantropic objectives may be summed up more broadly as a tension between the "Marshall Aid paradigm" and the "Albert Schweitzer syndrome." The first approach seeks to achieve the growth-oriented, catalytic effect of America's postwar aid to Europe, where the goals were set in terms of GNP growth and the litmus test was that the aid made itself superfluous after a short time. The second approach aims to alleviate human suffering and uplift human dignity as ends in and of themselves.

To varying degrees, all western aid agencies have devoted attention to meshing these two strands of thought--the widely endorsed Basic Needs Strategy of the mid-1970s being the most explicit push to integrate the two. Our point here is not that there need be an incongruence, but that the present course has led to decreased effectiveness in meeting either objective.

In the Danida portfolio, the incongruence expresses itself in two ways, depending on whether the activities are oriented primarily toward production or in the social services. In the first category, which includes the agricultural sector, we have found several examples of the Albert Schweitzer syndrome having a muting effect on productivity increases. In the second category, although we have not examined the social service portfolio in detail, it does seem that elements of the Marshall Aid paradigm have had disruptive consequences in the design of welfare-enhancing activities.

To elaborate, it appears that some agricultural projects which have had an explicit poverty orientation--and thereby focused on marginal producers--have not proved to be either replicable or sustainable. Support to marginal cooperative societies and to the Farm Inputs Supply Scheme (FISS) in Danida's Kenya portfolio are cases in point. The Christian Michelsen Institute arrives at the same conclusion in their evaluation of Kenya's Rural Development Fund, when they observe that "the widespread belief that the promotion of production-oriented projects is a convenient shortcut for uplifting the rural poor, seems to be based on unrealistic assumptions."10/.

Moreover, it is likely that one could have done more for the same money to address the welfare concerns of these population groups had one not attempted to focus directly on production increases. A single female head of household in a semi-arid area of Kenya is much less likely to be helped by the purchase of a subsidized plow from a FISS project store than by health and education programs which increase the likelihood of her children's survival and their chances for gainful off-farm employment. Moreover, production-oriented projects designed to uplift the rural poor frequently tend to increase their dependence on external resources and conditions beyond their control. This highlights the importance of selecting appropriate technologies and methods for reaching poor farmers. One of the main reasons why we are optimistic about Danida's approach in Mutomo, Taita and Taveta is precisely

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10/ Page 70 in "Kenya's Rural Development Fund: A Study of its Socio-Economic Impact," August 1985.

because it focuses on developing resources which are under the control of the producers themselves.

As noted, social service projects weigh heavily in Danida's East African portfolio, particularly in Tanzania. The problem with these investments has to do with the time frame; the Marshall Aid litmus test still appears to be applied. For Danida, the ideal social project is one which local authorities can take over after the initial aid-financed capital investment.

In the recent crisis situation in Tanzania, Danida has been extremely flexible in assuming the recurrent costs of the programs in both health and education (the former through drug supply and the latter through a large school maintenance program). It has yet to make explicit the long-term commitment which involvement in the country's social services implies, however. To be effective, Danida (or another donor) might need to be in the health sector for up to two decades, during which time institutions can be built up and resources made available. Short of this, a stop-gap intervention to provide essential drugs for a few years can only temporarily postpone the time when the clinics are empty. More broadly, the implication is that if one wishes to emphasize welfare objectives in the aid program (an option which we do not take issue with), a long-term commitment to--and perhaps even adoption of--a sector may be essential.

To summarize, while the level and stability of Danish aid depend on maintaining the existing broad, three-legged basis in domestic interests, the effectiveness of that aid in attaining the overreaching objective of development depends on a higher degree of disentanglement of these interests. This boils down to balancing these interests in the overall portfolio, but generally not in the design of individual projects or programs.

ANNEXES

ANNEX I

A Note on the Use of Statistics

In constructing statistics to show the sectoral and intrasectoral allocations of Danish aid to the two countries, we have found it useful to make some departures from Danida's own reporting system. Danida aggregations by sector (as for instance in the annual reports) have not followed consistent categorization over time (e.g. in the distinction between agriculture and ag/rural development); moreover, they have typically excluded the end uses of state loans, and have only sometimes included multi-bi projects. The identification of a project with a sector has often been made according to the project's function, rather than according to its sectoral target in the economy--as for instance in a number of sectoral training projects which might appear in Danida reports under the heading education; or the cooperative projects which would be categorized as support to planning and administration rather than to agriculture. On the grounds that their earmarking by Danida qualifies them as relevant statements on bilateral aid intentions, all multi-bi projects to the countries have been included in the data even though they have fallen under the multi-lateral budget since 1979.

In an attempt to build a consistent data file, we have therefore classified each type of disbursement (including regular projects, state loans and multi-bi activities) first by its sectoral orientation, whereby for instance only non-specific formal education activities are classified under the education sector, while nurses training or support to a veterinary school are classified under health and agriculture respectively. To maintain the capacity for the data to indicate the (rather large) focus of Danish projects on education/training activities, those training projects outside of formal education indicate this under a separate "function" heading. Within the agricultural sector, each activity is broken down according to its product orientation (crop, livestock, and non-specific), and also by a range of primary functions the appropriation intends to serve (research, education, production [and a subset of which, input supply], processing, financial transfers, and policy/administration/planning). The sectoral heading "multi-sectoral" refers to those activities which cut across sectors, such as the Rural Development Fund in Kenya, or to those allocations which could not be disaggregated by sector, such as the expenditures on technical assistance. The "Other" heading captures residual activities.

To calculate real disbursements, the data have been deflated by the official GDP deflators for Denmark (source: International Financial Statistics). This was considered more appropriate than a wholesale index, given the importance of technical assistance in the total.

Annex II - Table 1

TANZANIA AGRICULTURAL SECTOR ACTIVITIES: 1962-1984

DANIDA JOURNAL #	ACTIVITY	PRODUCT ORIENTATION	FUNCTIONAL ORIENTATION	DISBURSEMENT thru 1984 (M cur. DKr)	AID FORM	TIME SPAN	COMMENTS
104.TANZ. 120	Insecticide/Pesticides (coffee)	Crop	Input supply	5.756	grant	1981	Import Support
104.TANZ. 131	Agricultural Chemicals	Crop	Input supply	41.043	grant	1981-83	Import Support
104.027.TANZ. 1	Fertilizer import	Crop	Input supply	11.467	loan	1984	Tied grant
104.TANZ. 113	Insecticides (coffee)	Crop	Input supply	39.970	grant	1979-81	Import Support
n.a.	Fertilizer Import	Crop	Input supply	0.500	multi-bi	1969-70	Adm. by FAO
---	Insecticide import (coffee)	Crop	Input supply	44.[illegible]	loan	1983-84	Import Support
104.TANZ. 123	Mills	Crop	Pol/adm/plan	0.020	grant	1981-82	Feasibility study
104.FAO. 105	Food Strategy Coordn. Cell	Crop	Pol/adm/plan	1.219	multi-bi	1983-present	Adm. by FAO
104.FAO. 105	Nat. food strategy project	Crop	Pol/adm/plan	4.960	multi-bi	1980-84	Adm. by FAO
---	Management of Sugar estate (TPC)	Crop	Pol/adm/plan	20.500	loan	1980-82	
104.TANZ. 122	FIS, (Farm Input Supply) Ridep, Mbeya	Crop	Pol/adm/plan	0.097	grant	1981-present	Feasibility study
104.TANZ. 78	Soil Improvement	Crop	Pol/adm/plan	0.352	grant	1977-81	
104.TANZ. 92	Construction of 28 Grainstorages	Crop	Processing	37.238	grant	1978-84	
---	Sugar factory Equipment (Kilombero)	Crop	Processing	121.313	loan	1970-84	Intermittent Disbursement
---	Sugar Factory Equipment (TPC)	Crop	Processing	8.827	loan	1983-84	
---	Irrigation Equipment (sugar,Mtibwa)	Crop	Production	36.698	loan	1976-77	
104.TANZ. 12	Inst. of Plant Pathology	Crop	Research	0.019	grant	1962-71	Danish-based institute
104.TANZ. 72	National Rodent Control Project	Crop	Research	7.290	grant	1977-present	
104.TANZ. 6	Uyole Agricultural Center	Crop	Research	38.685	grant(Nordic)	1969-84	From 1985 Finnish project
104.TANZ. 65	UDSM, Veterinary Fac.	Livestock	Education	49.375	grant	1977-present	
104.1 2/1-1	Training in Dairy Tech.	Livestock	Education	0.732	multi-bi	1983-present	Adm. by FAO
---	Project Design, Mara Dairy	Livestock	Pol/adm/plan	0.200	loan	1970	
104.TANZ. 23	Pig and Poultry Dev.	Livestock	Pol/adm/plan	0.167	grant	1972-73	
---	Dairy Equipment (Mara)	Livestock	Processing	11.367	loan	1969-83	Intermittent disbursement
104.TANZ. 70	Tick Control, Zanzibar/Pemba	Livestock	Production	1.007	grant	1977-82	
104.TANZ. 55	Dairy Dev., Zanzibar	Livestock	Production	1.765	grant	1974-80	
104.TANZ. 5a	Dairy and Poultry Dev. in Kibaha	Livestock	Production	1.022	grant	1972	
104.TANZ. 25	Dairy Ind. Dev.	Livestock	Production	0.107	grant	1972-74	
104.TANZ. 10d	University of DSM, Ag. Faculty	Non-specific	Education	17.255	grant	1971-present	
104.TANZ. 21	TRDB	Non-specific	Financial transf.	165.426	grant	1972-present	
104.TANZ. 4	Nordic Cooperative Project	Non-specific	Pol/adm/plan	53.560	grant(Nordic)	1968-present	Total project Dkr. 141M thru 1983
			TOTAL:	723.018			

Annex II – Table 2

TANZANIA MULTI-SECTORAL ACTIVITIES: 1962-84

DANIDA JOURNAL #	ACTIVITY	FUNCTIONAL ORIENTATION	DISBURSEMENT thru 1984 (M cur Dkr)	AID FORM	TIME SPAN	COMMENTS
104.FAO. 77	RIDEP, Mbeya (planning)		8.077	multi-bi	1981-84	Adm. by FAO
	DANIDA experts +	--	185.345	grant		
	Danish Volunteers	---	104.407	grant		
	Fellowships	---	10.560	grant		
104.TANZ. 28	Regional Dev. Fund	Financial transf.	6.000	grant	1972-74	
104.TANZ. 56	Planning, Mara Region	Pol/adm/plan	0.016	grant	1974-75	
104.TANZ. 50	Planning West Lake Region	Pol/adm/plan	0.662	grant	1973-74	
		TOTAL:	315.067			

Note that before 1982, most project-associated technical assistance was included in the regular project budget.

Annex II– Table 3

TANZANIA INFRASTRUCTURE SECTOR ACTIVITIES: 1962-84

DANIDA JOURNAL #	ACTIVITY	DISBURSEMENT thru 1984 (M cur. Dkr)	AID FORM	TIME SPAN	COMMENTS
104.TANZ. 116	TRC-Marine	17.436	grant	1980-present	
104.TANZ. 79	Road Improvement, Kitulo	2.818	grant	1977-83	
---	Railway Wagons (import)	30.818	loan	1983	
104.ILO. 16	Labour Int. Public Works (Ruvuma)	2.916	multi-bi	1983-present	Adm. by ILO
104.TANZ. 87	Labour Int. Public Works (Ruvuma)	37.960	grant	1980-83	Adm. by ILO
104.TANZ. 106	Habours Authority	0.115	grant	1979	
	TOTAL:	92.063			

Annex II- Table 4

TANZANIA INDUSTRY SECTOR ACTIVITIES: 1962-84

DANIDA JOURNAL #	ACTIVITY	FUNCTIONAL ORIENTATION	DISBURSEMENT thru 1984 (M cur. Dkr)	AID FORM	TIME SPAN	COMMENTS
---	Mngt.of cement factories (Tanga & Mbeya)		19.526	loan	1980	
---	Cement Factory Equipment		464.278	loan	1968-83	
104.TANZ. 14	Mapping out of Technical Education		0.127	grant		Feasibility study
104.TANZ. 53	Small Scale Industrial Dev. Fund	---	0.117	grant	1976-77	
104.027.TANZ. 2	Technical fat & fertilizer	---	49.805	loan	1984	Tied grant, not split bet. 2 items
n.a.	Workers education Programme	Education	4.365	multi-bi	1973-78	Adm. by ILO
104.TANZ. 97	Saruji Training Institute (cement)	Education	15.734	grant	1979-present	
104.TANZ. 64	Dodoma Vocational Training Center	Education	12.797	grant	1978-84	
104.TANZ. 63	Vocational training, West Lake	Education	0.002	grant	1976	
104.TANZ. 58	Technical Training Schools	Education	8.908	grant	1974-81	
104.TANZ. 20e	AZIMIO Industrial Training Center	Education	7.366	grant	1971-80	
---	Saruji Training Institute (cement)	Education	1.989	loan	1983	
104.TANZ. 113	Technical Fat (soap industry)	Input supply	80.953	grant	1981-84	Import support
		TOTAL:	665.967			

Annex II- Table 5

TANZANIA HEALTH SECTOR ACTIVITIES: 1962-84

DANIDA JOURNAL #	ACTIVITY	FUNCTIONAL ORIENTATION	DISBURSEMENT thru 1984 (M cur. Dkr)	AID FORM	TIME SPAN	COMMENTS
104.TANZ. 39	Plaque, diagnosis unit	--	0.005	grant	1974-75	Feasibility study
104.TANZ. 95	Health Centers, Zanzibar	---	30.276	grant	1980-84	
104.TANZ. 84	Health Centers (DSM)	---	8.747	grant	1977-present	
104.TANZ. 83	Psychiatric Programme	---	11.623	grant	1980-84	
104.TANZ. 74	Vaccination Programme	---	26.621	grant	1977-present	
104.TANZ. 37	River Blindness, Central Path.Lab.	---	2.514	grant	1975-82	
104.TANZ. 36B	Workshop for hospital Equipment	---	0.924	grant	1973-77	
104.TANZ. 33	District Hospital, Bariadi	---	2.510	grant	1973-76	
104.TANZ. 31	District Hospital, Bagamoyo	---	2.533	grant	1973-80	
104.TANZ. 19	Bilharziosis,preliminary investig.	---	0.004	grant	1973	Feasibility study
104.TANZ. 15	Nyakahanga Hospital	---	1.469	grant	1972-77	
104.TANZ. 128	Film about Handicapped	---	0.100	grant	1981-82	
104.TANZ. 118-137	Essential Drug Supply (bi-lat)	---	137.619	grant	1980-84	Adm. by UNICEF, import support
104.TANZ. 118	Essential Drug Supply (multi-bi-lat)	---	84.362	multi-bi	1983	UNICEF,import sup.
104.TANZ. 117	Health Programme,Zanzibar	---	1.926	grant	1980-present	
104.TANZ. 115	Production of intravenous liquids	---	9.165	grant	1980-84	
104.TANZ. 101	Dental Services	---	5.912	grant	1980-84	
104.TANZ. 76	UDSM, Pharmaceutic Equipment	Education	1.672	grant	1977-81	
104.TANZ. 35	Medical Assistance Schools	Education	7.338	grant	1972-81	
104.TANZ. 33	Health, auxiliary school, Mpwapwa	Education	2.429	grant	1973-76	
104.TANZ. 32	Health, auxiliary school Ngudu	Education	9.030	grant	1973-82	
		TOTAL:	346.779			

Annex II – Table 6

TANZANIA FORMAL EDUCATION ACTIVITIES: 1962–84

DANIDA JOURNAL #	ACTIVITY	DISBURSEMENT thru 1984 (M cur. DKr)	AID FORM	TIME SPAN	COMMENTS
104.TANZ. 10a	UDSM, Research Programme	0.700	grant	1967-72	
104.TANZ. 108	School Maintenance	32.443	grant	1981-present	100M commitment from 1985
104.TANZ. 67	Teachers Training College , Kasulu	22.012	grant	1977-84	
p3.TANZ. 3e	University of DSM	8.540	grant	1966-72	
104.TANZ. 13	Institute of Development Management	21.923	grant(Nordic)	1972-83	From 1984 Norad Project
104.TANZ. 27	Public Libraries	12.834	grant	1973-84	
104.TANZ. 10i	UDSM, Cooperative research	0.037	grant	1962-71	
104.TANZ. 52	Primary Schools	2.500	grant	1973	
104.TANZ. 10f	UDSM, Research Programme	0.684	grant	1968-73	
104.TANZ. 110	Assist.to Educ.sect.(IDA co-finans)	33.505	grant	1981-present	(Adm. IDA) 7th Education Project
104.TANZ. 10c	UDSM, Buildings & TA	0.953	grant	1968-70	
104.TANZ. 30	Teachers Training School, Monduli	14.607	grant	1974-83	
104.TANZ. 10b	UDSM, Books	1.011	grant	1967-70	
104.TANZ. 29E	Planning Unit, Min of Education	20.528	grant	1973-present	
104.TANZ. 9	Teacher Training School, Iringa	15.075	grant	1969-74	
104.TANZ. 51	Adult Education	2.500	grant	1973	
104.TANZ. 5	Kibaha Education Center	17.627	grant	1962-73	
104.TANZ. 69	Technical training Fund	4.311	grant	1977-present	
104.TANZ. 89	Secondary Girls Schools	50.158	grant	1978-present	
104.TANZ. 68	Primary Teacher Cont. Education	19.024	grant	1977-present	
104.TANZ. 3	Secondary Schools	5.050	grant	1970-71	
	TOTALS:	286.022			

Annex II – Table 7

TANZANIA SECTORAL EDUCATION/TRAINING: 1962-84 *

DANIDA JOURNAL #	ACTIVITY	SECTOR	DISBURSEMENT thru 1984 (M cur. DKr)	AID FORM	TIME SPAN	COMMENTS
104.TANZ. 65	UDSM, Veterinary Fac.	Agriculture	49.375	grant	1977-present	
104.TANZ. 100	University of DSM, Ag. Faculty	Agriculture	17.255	grant	1971-present	
104.I 2/1-1	Training in Dairy Tech.	Agriculture	0.732	multi-bi	1983-present	Adm. by FAO
104.TANZ. 76	UDSM, Pharmaceutic Equipment	Health	1.672	grant	1977-81	
104.TANZ. 35	Medical Assistance Schools	Health	7.338	grant	1972-81	
104.TANZ. 33	Health, auxiliary school, Mpwapwa	Health	2.429	grant	1973-76	
104.TANZ. 32	Health, auxiliary school Ngudu	Health	9.030	grant	1973-82	
n.a.	Workers education Programme	Industry	4.365	multi-bi	1973-78	Adm. by ILO
104.TANZ. 97	Saruji Training Institute (cement)	Industry	15.734	grant	1979-present	
104.TANZ. 64	Dodoma Vocational Training Center	Industry	12.797	grant	1978-84	
104.TANZ. 63	Vocational training, West Lake	Industry	0.002	grant	1976	
104.TANZ. 58	Technical Training Schools	Industry	8.908	grant	1974-81	
104.TANZ. 20e	AZIMIO Industrial Training Center	Industry	7.366	grant	1971-80	
---	Saruji Training Institute (cement)	Industry	1.989	loan	1983	
104.TANZ. 75	Mweka College of Wildlife	Other	13.378	grant	1977-present	
104.TANZ. 71	Ardhi - Institute	Other	9.684	grant	1977-84	
104.TANZ. 2	Audivisual Project	Other	5.753	grant	1968-80	
		TOTAL:	167.807			

* Note that these activities are also listed in the tables covering their sectoral orientation.

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Table 8

TANZANIA WATER/SEWERAGE SECTOR ACTIVITIES: 1962-84

DANIDA JOURNAL #	ACTIVITY	DISBURSEMENT thru 1984 (M cur. DKr)	AID FORM	TIME SPAN	COMMENTS
104.TANZ. 119	Coordination of Reg. Water Plans	0.694	grant	1981-present	
104.TANZ. 73	Water Supply, Bagamoyo	5.969	grant	1977-82	
104.TANZ. 86	Water Master Plan & Supply	139.071	grant	1978-present	
	TOTAL:	145.734			

Annex II- Table 9

TANZANIA OTHER SECTOR ACTIVITIES (including energy): 1962-84

DANIDA JOURNAL #	ACTIVITY	FUNCTIONAL ORIENTATION	DISBURSEMENT thru 1984 (M cur. Dkr)	AID FORM	TIME SPAN	COMMENTS
104.TANZ. 132	Food Aid		24.989	grant	1981-82	
104.ILO.	Manpower and empl. planning		4.363	multi-bi	1981-82	Adm. by ILO
	Hotel Design (Mt. Meru)		5.281	loan	1971-77	
F3.TANZ. 57	Retail Trade Group	---	0.012	grant	1962-71	
104.TANZ. 98	UWT- Womens Project	---	1.355	grant	1978-84	
104.TANZ. 80	Electricity, Njombe	---	15.235	grant	1977-83	Energy sector
104.TANZ. 62	Construction of Houses for Experts	---	4.499	grant	1976-84	
104.TANZ. 22	Film about History of Civilization	---	0.042	grant	1972	
104.TANZ. 18	DVTC- Arusha	---	7.565	grant	1972-80	Training of Danish Volunteers
104.TANZ. 114	Mini-projects (selected at missions)	---	0.358	grant	1980-present	Maximum is 100.000 dkr p.a.
104.TANZ. 107	Electricity, Babati	---	4.770	grant	1978-83	Energy sector
104.TANZ. 102	Electricity, Kondoa	---	4.857	grant	1978-83	Energy Sector
104.TANZ. 1	Unspecified disbursements	---	0.632	grant	1981-present	
	Hotel equip.& furnish.(Mt.Meru)	---	8.520	loan	1971-78	
104.TANZ. 66	Sector study (unspecific jr.no. # 66)	----	0.046	grant	1980-81	No description found
104.TANZ. 75	Mweka College of Wildlife	Education	13.378	grant	1977-present	
104.TANZ. 71	Ardhi - Institute	Education	9.684	grant	1977-84	
104.TANZ. 2	Audivisual Project	Education	5.753	grant	1968-80	
104.TANZ. 99	Engineers to the Regional Authorities	Pol/adm/plan	4.803	grant	1977-present	
104.TANZ. 17	Miombo Wildlife Research Center	Research	2.239	grant	1970-79	
		TOTAL:	118.381			

Annex III– Table 1

KENYA AGRICULTURAL SECTOR ACTIVITIES: 1962-84

DANIDA JOURNAL #	ACTIVITY	PRODUCT ORIENTATION	FUNCTIONAL ORIENTATION	DISBURSEMENT thru 1984 (M cur. DKr)	AID FORM	TIME SPAN	COMMENTS
104. KEN 14	Narosurra farm	Crop	Education	0.209	grant	1968-71	
104.KEN. 106	Fertilizer import	Crop	Input Supply	32.088	grant	1984	
104.KEN. 23	Farm Input Supply Scheme	Crop	Input Supply	41.938	grant	1973-present	Under Min. of Coops. Dev.
---	Sugar Factory Equipment	Crop	Processing	3.590	loan	1969-1971	Associated Sugar Company
---	Cereals Drying Equipment	Crop	Processing	10.048	loan	1975-1980	National Cereal Produce Board
---	Cornflakes Industry	Crop	Processing	0.856	loan	1972	
---	Grain Storage (Silo)	Crop	Processing	23.622	loan	1981-present	National Cereal Produce Board
n.a.	Agronomic and Cultural Trials of Wheat	Crop	Research	0.700	multi-bi	1970-74	Adm. by FAO
104. KEN 11	Naivasha Dairy School	Livestock	Education	1.614	grant	1969-76	
104.KEN. 16	Animal Health Institute, library	Livestock	Education	0.314	grant	1970-71	
n.a.	National Dairy Training Programme	Livestock	Education	2.826	grant	1983-present	No project description available
---	Sewage Treatment Plant(slaughter house)	Livestock	Processing	0.500	loan	1976	Halal Meat Products Ltd.
---	Slaughterhouse Equipment	Livestock	Processing	6.153	loan	1974	Halal Meat Products, Ltd.
104.KEN. 57	Slaughterhouses	Livestock	Processing	8.389	grant	1979-1984	
104.KEN. 100	Kenya Cooperative Creameries	Livestock	Processing	0.203	grant	1982-83	Feasibility Study for state loan
---	Dairy Equipment (KCC)	Livestock	Processing	183.517	loan	1971-84	Intermittent
104.KEN. 15	Meat Technology Project	Livestock	Processing	0.114	grant	1962-71	
104. KEN 3 & 54	Pig breeding project	Livestock	Production	3.273	grant	1968-78	
104.KEN. 56e	Tick Control (Kericho & Uasin Gichu)	Livestock	Production	13.310	grant	1977-present	
104. KEN 2	Tick control	Livestock	Production	9.831	grant	1969-77	
104.FAO. 110	Tick Research laboratory	Livestock	Research	2.236	multi-bi	1983-present	(Adm. by FAO)
104.KEN. 101	Tick Research Laboratory	Livestock	Research	0.046	grant	1984-present	
n.a.	Veterinary Laboratory & Clinic	Livestock	Research	8.356	multi-bi	1972-79	Adm. by FAO
n.a.	Egerton Agricultural College	Non-specific	Education	4.599	multi-bi	1969-76	Adm. by FAO
104.KEN. 53	Cooperative Bank of Kenya	Non-specific	Financial Transf.	28.746	grant	1976-present	Min. of Coop. Dev.
n.a.	Ag. Dev. Kinango Plateau	Non-specific	Pol/adm/plan	0.024	grant	1977	No project description available
104.KEN. 34	Rural Land Survey (equipment)	Non-specific	Pol/adm/plan	2.700	grant	1974	
104.KEN. 4e	Nordic Cooperative project	Non-specific	Pol/adm/plan	42.236	grant(Nordic)	1964-present	
104.KEN. 89	Mutomo Soil and Water Project	Non-specific	Production	8.468	grant	1981-present	
104.KEN. 90	Garissa Cluster Irrigation	Non-specific	Production	0.015	grant	1984-present	
			TOTAL:	440.471			

Annex III – Table 2

KENYA MULTI-SECTORAL ACTIVITIES: 1962-84

DANIDA JOURNAL #	ACTIVITY	FUNCTIONAL ORIENTATION	DISBURSEMENT thru 1984 (M cur. DKr)	AID FORM	TIME SPAN
	DANIDA experts *	---	169.479	grant	
	Fellowships	---	6.573	grant	
	Danish Volunteers	---	122.307	grant	
104.KEN. 30	Rural Development Fund	Financial Transf.	89.387	grant	1974-present
		TOTAL:	387.746		

* Note that before 1982, most project-associated technical assistance was included in the regular project budget.

Annex III – Table 3

KENYA INFRASTRUCTURE SECTOR ACTIVITIES: 1962-84

DANIDA JOURNAL #	ACTIVITY	FUNCTIONAL ORIENTATION	DISBURSEMENT thru 1984 (M cur. DKr)	AID FORM	TIME SPAN
104.KEN. 58	Rural Access Roads	---	63.190	grant	1977-present
n.a.	Training maint. of rd. cnstr. machin.	Education	4.082	grant	1980-present
104.KEN. 81	Road Tax Study	---	2.269	grant	1980-83
---	Aerodrome facilities		12.631	Loan	1983-84
		TOTAL:	82.172		

Annex III - Table 4

KENYA INDUSTRY SECTOR ACTIVITIES: 1962-84

DANIDA JOURNAL #	ACTIVITY	FUNCTIONAL ORIENTATION	DISBURSEMENT thru 1984 (M cur. DKr)	AID FORM	TIME SPAN	COMMENTS
104.KEN. 92	Transfer of Danish Technology		0.107	grant	1980-83	Feasibility studies for state loans
104.KEN. 21	Import of generators and tools		0.028	grant	1972	
104.KEN. 27	Workshops/Eldoret	---	1.214	grant	1974-1978	
104.KEN. 17	Rural Industrial Development Centres	---	9.914	grant	1972-1977	
---	Printing Equipment	---	0.853	loan	1970-1971	Tape Converters Ltd.
---	Cement Factory Equipment	---	29.196	loan	1972-present	East African Portland Cement Co.
104.KEN. 7k	E.African Industrial res org., Lab. Equi	---	0.126	grant	1971-72	
n.a.	Workers Education	Education	2.418	multi-bi	1981-83	(Adm. by ILO)
104.KEN. 26	Artisan School, Mombasa	Education	21.064	grant	1974-present	
104.KEN. 84	Rift Valley Inst. of Science & Tech.	Education	3.707	grant	1980-present	
104.KEN. 66	Muranga Technical College	Education	3.318	grant	1978-82	
104.KEN. 39	Kirinyaga Technology Institute	Education	2.274	grant	1976-79	
104.KEN. 33	Village Polytechnics	Education	4.588	grant	1974-present	
104.KEN. 68	Kiambu Institute of Science & Technology	Education	0.931	grant	1978-83	
104.KEN. 8e	Artisan School, Kisumo	Education	19.643	grant	1971-present	
104.KEN.63	Western College of Arts and Technology	Education	3.182	grant	1977-84	
104.KEN. 74	Harambee Inst. of Technology	Education	14.732	grant	1979-present	
104.KEN. 29	Muranga Technical College	Education	2.918	grant	1973-78	
104.KEN. 80	Technical education	Education	0.048	grant	1979-80	
		TOTAL:	120.261			

Annex III- Table 5

KENYA HEALTH SECTOR ACTIVITIES: 1962-84

DANIDA JOURNAL #	ACTIVITY	FUNCTIONAL ORIENTATION	DISBURSEMENT thru 1984 (M cur. Dkr)	AID FORM	TIME SPAN
104.KEN. 91	Integr. Rural Health & Family Planning		11.352	grant	1983
104.KEN. 24	Rural Health Services	---	30.325	grant	1973-80
104.KEN. 9	Mercy Hospital	---	0.962	grant	1969-71
104.KEN. 69	Vaccination Programme	---	26.669	grant	1978-present
104.KEN. 55	Planning Unit, Min. of Health	---	2.381	grant	1976-present
104.KEN. 52	Management Team, Min. of Health	---	3.850	grant	1976-83
104.KEN. 87	Rural Medical Supply	---	1.078	grant	1980-present
104.KEN. 18	AMREF, Flying Doctors	---	19.432	grant	1972-82
104.KEN. 91e	Mother-Child Health Centers	Education	5.958	grant	1984-present
104.KEN. 24	Nursing School, Eldoret	Education	2.866	grant	1973-80
104.KEN. 50	Egerton College, Food Science	Education	3.439	grant	1977-82
104.KEN. 93	Education of Personnel for Handicapped	Education	3.287	grant	1981-present
104.KEN. 79	Family Life Training Centres	Education	9.603	grant	1979-present
		TOTAL:	121.201		

Table 6

KENYA FORMAL EDUCATION ACTIVITIES - 1962-84

DANIDA JOURNAL #	ACTIVITY	DISBURSEMENT thru 1984 (M cur. Dkr)	AID FORM	TIME SPAN	COMMENTS
104.KEN. 103a	National Youth Service	6.152	grant	1979-84	
104.KEN. 7i	University of Nairobi. IDS.	0.638	grant	1971-75	
P3.KEN. 111	Starehe Boys Center	0.550	grant	1967-68	
---	Kenya Youth Service, books	0.024	grant	1962-71	
104.KEN. 7a	University of Nairobi, Campus Planning	0.918	grant	1968-70	
P3. KEN. 156	Teachers delegation	0.015	grant	1962-71	
104.KEN. 7g	University of Nairobi, Correspd. Course	1.628	grant	1969-73	
104.KEN. 81	Public Libraries	0.058	grant	1981	
104.KEN. 6	Karen College	3.508	grant	1963-72	Named for Karen Blixen
104.KEN. 7h	University of Nairobi,Architect Faculty	4.273	grant	1970-73	
104.KEN. 7f	University of Nairobi, jrnl. training	1.112	grant	1970-74	
104.KEN. 7L	Regional Planning,(Univer. of Nairobi)	1.000	grant	1976-84	
	TOTAL:	19.876			

Annex III- Table 7

KENYA SECTORAL EDUCATION/TRAINING ACTIVITIES: 1962-84 **

DANIDA JOURNAL #	ACTIVITY	SECTOR	PRODUCT ORIENTATION	DISBURSEMENT thru 1984 (M cur. Dkr)	AID FORM	TIME SPAN	COMMENTS
104. KEN 14	Narosurra farm	Agriculture	Crop	0.209	grant	1968-71	
n.a.	National Dairy Training Programme	Agriculture	Livestock	2.826	grant	1983-present	No project description available
104.KEN. 16	Animal Health Institute,library	Agriculture	Livestock	0.314	grant	1970-71	
104. KEN 11	Naivasha Dairy School	Agriculture	Livestock	1.614	grant	1969-76	
n.a.	Egerton Agricultural College	Agriculture	Non-specific	4.599	multi-bi	1969-76	Adm. by FAO
104.KEN. 91e	Mother-Child Health Centers	Health		5.958	grant	1984-present	
104.KEN. 93	Education of Personnel for Handicapped	Health		3.287	grant	1981-present	
104.KEN. 50	Egerton College, Food Science	Health		3.438	grant	1977-82	
104.KEN. 79	Family Life Training Centres	Health		9.603	grant	1979-present	
104.KEN. 24	Nursing School, Eldoret	Health		2.866	grant	1973-80	
104.KEN. 33	Village Polytechnics	Industry		4.588	grant	1974-present	
104.KEN. 80	Technical education	Industry		0.048	grant	1979-80	
104.KEN. 74	Harambee Inst. of Technology	Industry		14.732	grant	1979-present	
104.KEN. 26	Artisan School, Mombasa	Industry		21.064	grant	1974-present	
104.KEN.63	Western College of Arts and Technology	Industry		3.182	grant	1977-84	
104.KEN. 39	Kirinyaga Technology Institute	Industry		2.274	grant	1976-79	
104.KEN. 8e	Artisan School, Kisumu	Industry		19.643	grant	1971-present	
104.KEN. 68	Kiambu Institute of Science & Technology	Industry		0.931	grant	1978-83	
104.KEN. 84	Rift Valley Inst. of Science & Tech.	Industry		3.707	grant	1980-present	
104.KEN. 29	Muranga Technical College	Industry		2.918	grant	1973-78	
104.KEN. 66	Muranga Technical College	Industry		3.318	grant	1978-82	
n.a.	Workers Education	Industry		2.418	multi-bi	1981-83	(Adm. by ILO)
n.a.	Training in maint. of rd. cnstr. machin.	Infrastructure		4.082	grant	1980-present	
			TOTAL:	117.619			

* Note that these activities are also listed in the tables covering their sectoral orientation.

Annex III- Table 8

KENYA WATER SECTOR ACTIVITIES:1962-84

DANIDA JOURNAL #	ACTIVITY	DISBURSEMENT thru 1984 (M cur. Dkr)	AID FORM	TIME SPAN	COMMENTS
104.KEN. 37	Rural Sewerage (district towns)	38.916	grant	1974-84	
n.a.	Water Supply	0.597	grant	1972	Adm. by UNICEF
104.KEN. 51	Rural Water Supply (Aguthi)	30.691	grant	1977-present	
104.KEN. 71	Water Supply (Rift Valley)	1.919	grant	1979-82	
	TOTAL:	72.123			

Table 9

KENYA OTHER SECTOR ACTIVITIES (including Energy sector): 1962-84

DANIDA JOURNAL #	ACTIVITY	DISBURSEMENT thru 1984 (M cur. DKr)	AID FORM	TIME SPAN	COMMENTS
104.KEN. 22	District Planning	4.874	grant	1975-81	
104.KEN. 61	Woman bureau	1.121	grant	1978-present	
104.KEN. 98	Afforestation	0.064	grant	1982-84	
---	Coin Telephones	25.839	Loan	1983-84	
	Unspecified Disbursements	0.467	grant		---
104.KEN. 60	Miniprojects (selected at mission)	0.597	grant	1980-present	Max. 100,000 Dkr p.a.
104.KEN. 38	Import of Rotor pump	0.015	grant	1975	
	Coin Telephone (local costs)	3.328	Loan	1983-84	
104.KEN. 95	Wind Power, Turkana	0.265	grant	1981-84	Energy sector
104.KEN. 73	Rural Electrification Fund	0.032	grant	1980-83	Energy sector
	TOTAL:	36.602			

Annex 4: Top Ten Donors of Official Development Assistance to Tanzania and Kenya, 1970-84
(OECD source, in 1983 U.S. $)

TANZANIA: TOP TEN DONORS OF ODA, 1970-1984
Millions of 1983 U.S. Dollars

RANK	DONORS	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	Total	Percentage of Total ODA for Period: 70-74	75-79	80-84	70-84
1	- Sweden	20.2	28.4	40.0	65.3	54.1	70.5	72.2	74.3	70.6	97.4	71.3	72.9	73.6	69.3	53.2	938.3	22.6	17.0	10.9	14.8
2	- World Bank	27.1	21.5	6.5	6.1	9.2	24.9	40.0	51.5	38.8	49.0	42.6	76.0	95.6	63.8	53.8	605.0	7.6	8.9	10.7	9.6
3	- Germany, F. R.	11.2	15.9	15.6	18.3	20.7	40.7	20.5	38.3	60.9	79.0	68.0	52.2	57.0	36.3	48.2	590.5	8.7	10.8	8.4	9.4
4	- Netherlands	3.7	4.0	9.6	14.6	17.5	27.1	38.6	59.9	56.0	76.7	76.0	66.4	54.6	34.5	39.2	576.8	5.3	11.3	8.7	9.1
5	- Denmark	9.2	11.1	11.1	15.8	29.4	33.8	27.4	45.3	41.4	39.3	29.4	31.3	38.6	49.4	30.5	433.3	8.2	8.2	5.5	6.9
6	- Norway	4.0	7.7	8.5	14.6	17.5	24.5	28.3	33.2	33.6	34.7	68.4	33.2	50.3	54.9	44.8	426.9	5.6	6.4	7.4	6.8
7	- Canada	7.0	13.5	14.0	77.5	51.1	45.6	23.4	17.5	31.9	28.3	17.7	25.9	34.1	33.9	23.9	392.0	11.6	6.6	4.4	6.2
8	- United States	25.9	26.5	16.9	18.3	16.2	47.0	46.2	38.8	11.6	9.9	25.6	28.6	23.3	20.0	21.3	382.0	11.7	7.4	3.8	6.1
9	- United Kingdom	8.6	10.3	6.8	4.3	3.2	16.5	9.7	13.3	20.5	44.6	64.8	52.2	39.4	45.5	20.2	361.7	3.6	4.3	7.4	5.7
10	- E. E. C.	-	-	-	-	-	21.4	8.8	13.7	21.9	23.9	22.9	38.7	29.1	27.1	30.8	242.5	0.6	4.1	4.8	3.8
	TOP TEN DONORS	117.9	139.0	128.6	178.3	221.9	354.0	318.6	379.8	392.7	452.6	460.3	452.5	492.9	473.7	374.0	4945.5	84.6	84.4	72.1	78.4
	OTHER	29.7	26.0	19.6	25.4	41.7	67.1	54.8	60.2	74.4	99.3	187.9	184.6	169.1	197.0	165.8	1365.3	15.4	15.6	27.9	21.6
	GRAND TOTAL	147.6	165.0	148.2	203.7	262.8	421.1	373.4	440.0	466.6	581.9	640.4	659.0	662.0	620.7	539.8	6310.8	100.0	100.0	100.0	100.0

KENYA: TOP TEN DONORS OF ODA, 1970-1984
Millions of 1983 U.S. Dollars

RANK	DONORS	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	Total	Percentage of Total ODA for Period: 70-74	75-79	80-84	70-84
1	- United Kingdom	67.7	54.9	57.9	42.8	38.3	19.9	40.3	18.5	45.0	47.1	35.7	56.8	45.0	37.2	38.0	643.3	28.5	13.6	10.3	15.2
2	- Germany, F. R.	14.1	15.1	12.1	18.3	24.9	28.5	18.7	22.8	44.1	67.6	31.1	39.1	28.7	43.1	36.3	444.9	9.3	14.6	8.6	10.5
3	- United States	17.3	26.5	12.1	8.1	17.0	10.0	18.2	15.5	17.1	15.8	35.6	73.4	50.8	76.0	45.6	429.5	9.0	5.8	13.3	10.2
4	- World Bank	19.0	8.2	14.3	29.8	18.0	9.4	18.7	22.6	18.0	23.8	45.8	16.0	83.4	19.8	35.2	402.2	9.9	7.5	10.6	9.5
5	- Netherlands	5.2	9.3	13.6	15.7	15.2	15.2	25.4	18.0	26.7	27.4	43.4	35.9	53.2	30.2	24.3	357.7	7.0	6.7	9.0	8.5
6	- Sweden	5.1	9.5	10.6	24.5	28.3	26.9	31.2	23.3	15.7	24.1	25.9	13.8	14.3	15.7	13.7	293.3	9.9	9.0	4.0	6.9
7	- Japan	3.2	4.5	2.2	4.7	4.5	10.3	17.9	6.2	11.3	34.4	24.5	24.0	18.7	52.1	29.6	247.5	2.1	6.5	7.1	5.9
8	- Norway	7.5	0.0	9.0	8.7	9.7	13.2	12.4	16.3	14.5	19.0	19.3	19.5	23.0	22.2	19.5	222.3	4.7	6.1	5.0	5.3
9	- Canada	5.8	6.9	5.6	4.9	7.4	9.5	14.3	9.8	6.3	9.0	8.8	34.3	38.4	21.3	27.5	213.8	3.8	3.9	6.3	5.1
10	- Denmark	4.0	8.8	13.3	8.5	9.3	12.8	13.3	15.7	16.1	16.6	16.5	15.2	20.6	16.5	10.9	205.0	4.7	6.0	4.2	4.9
	TOP TEN DONORS	151.9	147.7	158.6	174.0	172.3	155.8	205.3	168.7	209.9	294.9	306.5	331.2	375.4	334.0	283.2	3458.5	88.9	82.5	78.4	81.8
	OTHER	14.1	31.8	16.0	20.1	16.0	38.3	20.8	41.7	62.4	61.9	55.6	95.1	95.0	68.1	133.1	767.0	11.1	17.5	21.6	18.2
	GRAND TOTAL	166.0	179.6	174.6	194.1	196.3	184.2	226.2	210.3	272.3	346.8	362.1	426.3	470.3	402.1	416.3	4225.5	100	100	100	100

- Source: - Tables 2.3b and 2.1b in Maria Cancian, "Aid Allocations to Cameroon, Kenya, Malawi, Nigeria Senegal, and Tanzania: A review of the OECD Databases, Part One: Geographical Distribution of Flows" (draft, January 1987; a report from the MADIA project).

Note: Discrepancies may appear between the total annual figures for Danish aid in these tables and those found elsewhere in the report because for the OECD database Danish aid is put in U.S. dollar terms based on annual average exchange rates, and then deflated by an international deflator, whereas other figures in the report remain in D.Kr and are deflated by Danish indices (see Annex 1).

ANNEX V
LIST OF PERSONS INTERVIEWED

IN DENMARK: (June to October, 1985) (in chronological order)

Kjeld Phillip, Chairman of Board of IFU, (Industrial Fund for Developing Countries) former chairman and member of DANIDA's Board

Chresten Pedersen, technical advisor (agriculturalist), DANIDA

Knud Erik Svendsen, Director, Center for Development Research

Kirsten Wiinblad, chief of technical assistance division, Danida

Ole Moelgaard Andersen, deputy chief of East Africa projects division, former mission chief in Tanzania 1982-84)

Niels Julius Lassen, ambassador to Zimbabwe (formerly chief of East Africa projects division, Danida)

Georg Lemke, head of section for Nordic Cooperative projects, Danida

Harild Nielsen, chief of state loan division, Danida

Poul Kryger, former chief of state loan division, Danida

Olav Storm, lecturer and course manager, Jutland Institute of Technology

Sven Enarsson, team leader of Nordic Cooperative Project in Kenya (adviser on project from 1970-77)

Uffe Torm, project officer, Danish Lutheran Relief Service (Folkekirkens Noedhjaelp), (former member of Danida's Board)

Jens Lund, technical advisor to the Noakhali rural development project, formerly agricultural manager of Tanganyika Planting Company

Klaus Winkel, chief of evaluation unit, Danida (formerly mission chief in Tanzania, 1980-82)

Ove Munch, chairman, Federation of Danish Industries (member of Danida's Board)

Carl Thompsen, professor, Royal Veterinary and Agricultural University, Copenhagen (vice chairman of Danida's Board)

Jes Boeje Moeller, chief of Africa section, state loans division, Danida

Johannes Dahl Hansen, deputy chief of division for mulit-lateral projects with UN family, Danida

Birgitte Thygesen, project officer in multi-bi projects section, Danida

Anders Serup Rasmussen, technical advisor (economics), East Africa projects division Danida (since country economist, Danida mission, Dar es Salaam)

Peter Branner, chief, East Africa projects division, Danida

Philip Raikes, research fellow, Center for Development Research (consultant to Danida on agricultural projects)

Jannik Boesen, senior research fellow, Center for Development Research (consultant to Danida on regional planning and water projects)

Erik Boel, lecturer, Institute for Public Administration and Political Science, Aarhus University

Kaj Bruun, director of development cooperation bureau, Royal Veterinary and Agricultural University, Copenhagen

Ole Therkildsen, research fellow, Center for Development Research, (consultant to Danida/Unicef on water and essential drug supply projects)

Barbara Steenstrup, project officer, Kenya Nordic Cooperative Project, Danida

Palle Johnsen, field advisor to Farm Inputs Supply Project (Eastern Province) Kenya

Niels Bonnerup, project leader, Farm Inputs Supply Project, Kenya

Joris Oldewelt, team member, Socio-Economic Evaluation of Rural Development Fund (Christian Michelsens Institute)

Susanne Esbjoern, project officer (social sectors), East Africa projects division, Danida

Niels P. Soerensen, technical advisor, Danida (formerly in charge of East Africa projects, state loan division)

Boerge Sommer, technical advisor (health projects), Danida

Jacob Grosen, economist, Danish Ministry of Agriculture (formerly Danida technical assistant to Tanzanian Ministry of Agriculture)

Jens Annebjerg, private consultant, (technical consultant to Danida on Kenya Cooperative Creameries)

Hans Christian Leleur, anthropologist, Aarhus University

IN KENYA: (August - September 1985)

G. N. Gicheru, Department of External Aid, Ministry of Finance

A. Birgen, Chairman, Kenya Grain Growers Cooperative Union

Joseph Maiyo, farmer, 10 ha., 6 cows 3 heifers

Solomon Sogok, farmer, 7 ha., 7 cows, 8 heifers

Plant Manager, KCC Eldoret Plant, (former Danida stipend with JTI)

Charles Clift, FEC Delegation to Kenya

John Carlsen, Rural Development Fund advisor, Ministry of Finance

Klaus Nyholm, Danida mission leader

J. Gatheru, Deputy Director, Agricultural Extension and Soil Conservation, Ministry of Agriculture and Livestock Development (MOALD)

Kevin Cleaver, Deputy Chief, Agriculture Division, World Bank Resident Mission

Mr. Githae, Deputy Secretary, MOALD

Palle Johst, aid consellor, Danida Mission

Mr. Edagwa, Assistant Commissioner for Cooperative Development, Ministry of Cooperative Development

Apollo Njonjo, Director of Research, Business and Economic Research Ltd.

H. P. Hansen, credit advisor to the Cooperative Development Bank

N. Kjoelsen, team leader of Taita Taveta soil improvement project

Jeff Mwangi, Chief of Rural Access Roads Programme, Ministry of Transport and Communications

Jason Kimbui, General Manager, Cooperative Bank of Kenya

Mr. Ngaruru, Managing Director, Kenya Cooperative Creameries

John Karanja, Director of Planning, Ministry of Agriculture

Danish Volunteer (agriculturalist) technical advisor to Garissa Irrigation Cluster project

IN TANZANIA: (September 1985):

C.N. Keenja, Deputy Principal Secretary to the Prime Minister

Verner Jensen, project coordinator, Nordic Cooperative Project

Salvatore Rugumisa, Economic advisor to the Prime Minister

O. Klastrup, Project leader of Danida project in support of the Veterinary Faculty at Morogoro

B. Bengtsson, Director of Operations, Tanzania Saruji Corporation

Knud Kjaer Nielsen, Danida mission leader

William Lyakurwa, Director of Research and Planning, Board of External Trade

Vincent Mrisho, Assistant Commissioner, Planning and Marketing, Ministry of Agriculture

Mr. Makundi, Director of Planning, Ministry of Water and Energy

Mr. Mahuwi, Principal, Moshi Cooperative College

Elizabeth Minde, Senior Tutor in Cooperative Law, Moshi Cooperative College

Brian Van Arkadie, policy advisor to Tanzanian government (co-author of Second Five Year Plan and head of Secretariat for Structural Adjustment Program)

Collin Page, Factory Manager, Tanganyika Planting Company (TPC)

Awadh Said Mtezo, Chief Chemical Engineer, TPC (participant in Danida fellowship program in course for middle managers)

Lucien Msambichaka, Director, Economic Research Bureau, Univ. of Dar es Salaam (UDSM)

Nguyuru Lipumba, Economist, Dept. of Economics, UDSM

Robert Mabele, Economist, Economic Research Bureau, UDSM

Enos Bukuku, Economist, Dept. of Economics, UDSM

A. Semboja, Economist, Economic Research Bureau, UDSM

Mr. Kipokole, Chief Economist, Ministry of Finance

Urban Johnson, Resident Representative, UNICEF

S. Odunga, Commissioner for Economic Policy, Ministry of Planning and Economic Development (Devplan)

T. Kimolo, Acting Commissioner for Sectoral Planning (Devplan)

G. Chiseanga, Commissioner for Programming, Budget and Control, Devplan

M.T. Kibwana, Commissioner of External Finance, Ministry of Finance

H. Porvali, financial advisor, Ministry of Finance

J. Johnston, team leader, Food Strategy Implementation Cell, Ministry of Agriculture

Bjarne Jensen, FAO advisor, Food Strategy Implementation Cell, Ministry of Agriculture

Captain Frohn, director of Tanzania Railway Corporation Marine Division

Birger Fredericksson, aid consellor, Danida mission

Joergen Pallesen, aid consellor (Nordic Cooperative Project), Danida mission

Joergen Lerborg, aid consellor, Danida mission

IN WASHINGTON, DC: (March 1985 - March 1986)

Allan Hannover, chief engineer, De Danske Sukkerfabrikker

Visti Andersson, sales manager, De Danske Sukkerfabrikker

Caspar Warnaars, senior agronomist, East and Southern Africa Projects Dept., World Bank

Niels Hobolt Jensen, Danish Turnkey Dairies

Poul Eriksen, president, DanProject

Noel Cossins, pastoral research unit, ILCA

Charles Bolduc, project officer, East and Southern Africa Projects Dept., World Bank

Samir Bhatia, storage expert, Europe, Middle East and North Africa Projects Dept., World Bank

Viggo Nedergaard Jensen, Nordic Executive Director's office, World Bank

Svend Hertel, labor-intensive works advisor, World Bank