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REPORT AND RECOMMENDATION

OF THE

PRESIDENT

TO THE

EXECUTIVE DIRECTORS

ON A

PROPOSED CREDIT

TO

ETHIOPIA

FOR

RANGELANDS DEVELOPMENT PROJECT

December 11, 1975

CURRENCY EQUIVALENTS

US$1.00	= 2.07 Ethiopian Dollars (Eth.$)
Eth. $1.00	= US$0.483
Eth. $ 1 million	= US$483,000

Government of Ethiopia
Fiscal Year

July 8 - July 7

INTERNATIONAL DEVELOPMENT ASSOCIATION

REPORT AND RECOMMENDATION OF THE PRESIDENT TO THE EXECUTIVE DIRECTORS ON A PROPOSED DEVELOPMENT CREDIT TO ETHIOPIA

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1. I submit the following report and recommendation on a proposed development credit to Ethiopia for the equivalent of US$27.0 million on standard IDA terms to help finance a rangelands development project. The proceeds of the credit would be passed on to the Livestock and Meat Board (LMB) under a Project Financing Agreement on terms and conditions approved by IDA. The African Development Fund (ADF) would participate through parallel financing of specific components of one of the sub-projects in an amount equivalent to 5.0 million African Development Fund Units of Account (about US$5.5 million).

PART I - THE ECONOMY

Introduction

2. A Bank economic mission visited Ethiopia in March 1975 and its Report (790a-ET, dated December 1, 1975) has been circulated. This Report was the subject of discussion with the Provisional Military Administrative Council (PMAC) in July. These discussions provided an opportunity to emphasize the Bank's interest in supporting the Government in its pursuit of more rapid and more equitable development, while making clear the Bank's view that these objectives could only be realized if certain critical policy issues were recognized and acted upon. In elaborating this theme it was emphasized that time was an essential element in the required approach; that whilst the political and administrative problems which confronted the Government as a consequence of dismantling the country's ancient feudal system were clearly enormous, nevertheless action to follow up on the broad reform measures which had been taken was essential.

3. Part I of the Economic Report summarizes the areas of concern upon which discussions with the Government concentrated. It covers problems of fiscal and public sector financial policy, agricultural pricing policy, the balance of payments problem, and the problem of over-extension of public management capacity. Whilst much more needs to be undertaken in respect of all these problems, the Government has moved rapidly on some of them and if the country continues along its present path the basis will be laid for more rapid economic and social development in Ethiopia in the future.

Basic Economic Situation

4. This prospect of a more rapid rate of development would, of course, be from a situation of desperate poverty. Ethiopia, with an annual per capita income of only US$86 in 1973, is classified by the UN as one of the 25 least developed countries of the world. The population is predominantly rural and depends heavily on agriculture for its livelihood. An estimated 85 to 90% of the people are subsistence farmers living in isolated rural villages. Most farming units are quite small; a recent survey in one province showed that 92% of the cultivated holdings were less than one hectare. Agricultural productivity is, in general, very low. Methods of cultivation used by most farmers have changed little over many centuries; the soils in many highland areas are seriously depleted from prolonged overgrazing and overcropping; and the systems of land tenure had not in general provided adequate incentives for investments which would raise farmers' productivity. The development of agriculture has been and continues to be constrained by the lack of transportation. As a consequence, there has been little or no improvement in rural living standards in recent years. Whilst the development of agriculture raises extremely difficult problems, the lack of other resources means that economic progress in Ethiopia will have to rest almost entirely on developing agriculture.

Economic and Social Objectives

5. The broad economic and social goals of the new Government include the abolition of poverty, the elimination of exploitation, the expansion of production to meet the basic needs of the people, a more equal distribution of economic benefits and a wider participation in the development process. The underlying development philosophy which Ethiopia has adopted in pursuit of its economic objectives is "Ethiopian Socialism." A number of specific reforms have been introduced in line with the Government's declaration on socialist economic policy. Various enterprises which had been owned or controlled by the aristocracy have been taken over by the state. On January 1, 1975, all financial institutions (banks, insurance companies and savings associations) were nationalized. In early February some 100 medium- and large-scale manufacturing and distributing firms were also nationalized: 72 were taken over entirely and the Government indicated it would acquire a majority interest in 29 others. The Government has stated that compensation will be paid to the former owners of nationalized firms, and it is currently establishing the machinery to handle claims swiftly or refer them to mutually agreeable arbitrators. Also in early February, a new Ministry of National Resources Development (MNRD) was established. This Ministry has been given wide-ranging authority to "encourage, promote, establish and operate public enterprises in agriculture, mining, industry, commerce and services." In March, the Government issued a proclamation "to provide for the ownership and control by the Government of the means of production." This decree specifies certain sectors of economic activity which may be undertaken only by government, others which may be undertaken jointly by government and foreign capital with majority government participation, and activities not reserved to state participation which may be undertaken by the private sector.

6. In March 1975, the PMAC issued the long-awaited rural land reform proclamation. (A subsequent decree provided for nationalization of urban lands.) The basic thrust of the reform has been nationalization of all rural land. In former tenant- and owner-cultivated areas, user rights of up to ten hectares have been allocated to each farm family. Former commercial farms have been turned over to smallholders or are being operated as cooperatives or state farms. There has been some opposition to the land reform decree, but the measure appears to have been accepted by the majority of the Ethiopian population, and the Government appears to be able to carry out development activities effectively in most parts of the country.

7. In outlining its development priorities the Government has indicated that it will give primary emphasis to agriculture and to narrowing the gap between rural and urban living standards. It is likely that new programs in land settlement, labor-intensive rural works, rural feeder roads, input supply credit, improved marketing and storage, and other services for small-scale producers will be introduced. The Government will probably devote more effort to development of cooperatives, a program which has lagged badly in the past, and may introduce collectivized cultivation in some areas. However, the specific measures which will be adopted to support future agricultural development are still in the process of formulation.

Economic Policy Issues

8. The most pressing economic problem now facing Ethiopia is a possible decline in 1975 agricultural production. In the short run, the land reform measures may result in some disruption in agricultural production because of supply problems for credit, work animals, implements, fertilizer, seeds and pesticides. These requirements are being met in some parts of the country under the Minimum Package Program, supported by IDA Credit 416, and comprehensive agricultural development projects including the Wolamo Agriculture Project (Credit 169) and Chilalo Agricultural Development Project, supported by the Swedish International Development Authority (SIDA). However, in large parts of the country, these requirements have traditionally been met by landlords, and such arrangements have been disrupted. In response to this problem the Government introduced, at short notice, an emergency tractor plowing and seed distribution program which received Bank Group support. As a further result of the land reform decree, Ethiopia also faces potential difficulties in maintaining output from the former commercial farms. Any significant shortfall in the output from these farms in the current year would be serious particularly if it were coupled with a decline in the marketed surplus from peasant agriculture. The Government does have some flexibility with the former commercial farms, however, since many that were producing export or non-food crops have been converted temporarily to producing additional food for domestic consumption. The magnitude of the potential production shortfall in the current year is impossible to predict. However, any reduction would be magnified since it follows two years of serious drought in 1972 and 1973 and only partial recovery in 1974, so that the overall food balance of the population is below the average of earlier years.

9. Secondly, the Government faces a major fiscal and public sector financial problem in part deriving from the impact of its economic reform measures on public sector revenues and expenditures and in part from the increase in expenditures on defense. A major problem facing the Government is the independence struggle in Eritrea. In early 1975, fighting broke out between the armed forces and the Eritrean Liberation Front with most of the fighting concentrated in and around the provincial capital of Asmara. Although current indications are that the fighting has subsided, guerilla activity continues in Eritrea and elsewhere, thus compelling the Government to divert scarce resources to military expenditures.

10. In each of FY73 and 74 a recurrent budget surplus of Eth$80-90 million was realized; in FY75 the recurrent budget was more or less in balance, but for FY76 the recurrent budget estimates just published indicate a deficit of Eth$46 million. With capital expenditure in FY76 estimated at Eth$432 million, the overall budget deficit will be Eth$478 million and a too rapid expansion of domestic borrowing could have serious inflationary consequences. It is therefore imperative that every effort be made to retain control over recurrent expenditure and at the same time increase revenue resources. During the last several months the Government has taken a number of steps to raise revenues including increased taxes on alcohol, alcohol products and tobacco products, a special drought-relief surtax on income above Eth$250 per month, and an export surtax, as well as stricter enforcement of collection of existing taxes. While these measures will have positive overall effect on revenues, they do not appear to be based on any comprehensive review of the fiscal situation; instead they have been somewhat ad hoc and unsystematic in nature. If the Government is to improve the effectiveness of the tax system in order to increase the share of the public sector in the total income stream, to finance a substantially larger public investment program with domestic resources, and to adapt its fiscal policy to reducing income inequality and poverty, then a thorough-going reform-oriented study of the entire fiscal system will be required.

11. Another important source of resource mobilization in the public sector is the parastatal enterprises. With the greatly expanded role of Government in the economy, and the expanded Government investment effort that will be called for in the future, it is vitally important that these enterprises should not only pay their own way but also generate a surplus for the public sector. Historically the aggregate savings rate in the economy has only been about 11-12% of GDP,and with relatively modest inflows of foreign private and public capital, this has permitted an investment rate of only 12-14%. If the rate of growth is to be increased significantly, investment must be raised. Since the Government has stressed increased self-reliance, it follows that emphasis must be given to raising a higher proportion of the required savings from within the country. In the public sector the prospects for greater savings and investment will depend on the profitability of government enterprises and on the budgetary position of the Central Government.

12. Whether the external financial situation will become a major constraint on development depends not only on the terms of trade which confront the country and on capital inflows, but also on the willingness of the Government to pursue an export-oriented development strategy. The immediate situation is that a reversal of the favorable balance of payments trend of recent years seems to be under way due to several factors. First, the export commodity price boom of 1972-74 has come to an end; the index of Ethiopia's export prices rose by 54% between the first quarter of 1972 and the first quarter of 1974, but by March 1975 it had dropped back to the early 1972 level. Second, the supply of some exports has been reduced. The new export surtax apparently had some disincentive effect on exports of certain commodities. Coffee berry disease reduced coffee production and exports in 1973/74 and 1974/75. The transfer of former commercial farms, many of which were producing export crops, to state control and the conversion of some to producing food for the domestic market will also reduce export volumes. Imports, on the other hand, rose by 40% in nominal terms in 1974 following three years of virtual stagnation, largely because of price increases for petroleum and related products. A further increase of this magnitude in 1975 is unlikely but some increase can be anticipated in light of increased development expenditures, higher military purchases and possible food shortages. When these factors are considered together, the prospect is for a sharply reduced balance of payments surplus in 1975 and a small deficit in 1976. Our projections of export and import prices indicate that the terms of trade index will decline only moderately over the next five years, from a base of 100 in 1974 to 95 in 1980. This projection is a conservative one since it is based on the commodity mix of exports in 1974. It therefore does not include such possibilities as the expansion of sugar exports, a shift to higher valued exports such as washed coffee, canned and frozen meat and meat products and canned vegetables and fruits, or the introduction of new exports such as cotton. There are also other export possibilities for Ethiopia beyond traditional primary products, including textiles and leather products. It is not certain, however, that the Government intends to follow an export-oriented development policy, particularly for the agricultural sector. It may choose to adopt an inward-looking agricultural policy and deliberately discourage agricultural exports, although to do so could have serious effects on the balance of payments.

13. Finally, it must be recognized that Ethiopia has faced, and still faces, serious constraints in manpower, resources and institutions although significant progress has been made in education, highways, power and telecommunications, and both intensive and extensive agricultural development programs have been launched successfully. A basis exists upon which the new Government can build an accelerated development effort, with emphasis on the rural areas. If such a program is undertaken, a substantially increased volume of foreign assistance will be needed. Foreign loans and credits

accounted for 33% of public capital expenditures in FY69-74. However, annual gross public capital inflows have been only about US$1.32 per capita over the past five years. Unlike many other African countries which were formerly dependent, Ethiopia has no traditional source of technical and financial assistance. Thus it is largely dependent on international organizations, and the Bank Group has been and is currently providing a relatively high level of assistance. During 1971-73, on average, the IBRD contributed 17.5% and IDA, 20.0% of gross disbursements of public medium- and long-term loans. This share is expected to increase substantially during the next few years as amounts disbursed under recently committed IDA credits rise. As of 1974, the IBRD share of total public debt outstanding and disbursed was 23.6% and the share of IDA was 19.4%. As for public debt service, the IBRD's share was 38.3% in that same year while IDA's share was 2.6%. IBRD's share of the outstanding debt is expected to decline to 15% by 1980 but, because of the relatively low levels of assistance expected from bilateral donors, IDA debt outstanding as a percent of outstanding external public debt is expected to rise to 35-45% by 1980 and debt service payments to the Bank Group will increase to approximately 40% of total public debt service by 1980. Because of Ethiopia's poverty, it is desirable that future inflows be provided to the greatest extent possible on concessionary terms. Furthermore, it is appropriate that external donors should finance a large proportion of the costs of projects, including local costs.

PART II - BANK GROUP OPERATIONS IN ETHIOPIA

14. Since 1950 Bank Group lending in Ethiopia has totalled US$369 million, comprised of 21 IDA credits totalling US$260 million and 12 Bank loans totalling US$109 million. The IFC has made five commitments in Ethiopia totalling US$15.7 million. One half of the amount of lending (US$177 million) was committed in the last three years. In addition to the substantial increase in the size of its operations in the last three years, the Bank Group has softened its terms to Ethiopia; since FY73 our entire lending has been on IDA terms.

15. Until the last 1960's we assisted the construction of trunk roads, power and telecommunication facilities. In the late 1960's, our program shifted in emphasis to agriculture and education, and in the past five years we have made nine credits for agricultural development totalling US$96.2 million and three credits for education totalling US$42.5 million. In addition, our last two road credits (332-ET in 1972 and 552-ET in 1975) have placed emphasis on the construction of agricultural roads. This program reflects the increased opportunity for agricultural lending brought about by improved sectoral knowledge, and the heavier emphasis on agriculture and education in the Government's priorities. This shift has been greatly assisted by the Bank's Regional Mission in Eastern Africa (RMEA), which has played a major role in project identification and preparation in the agricultural sector.

16. Using the rate of disbursements as a measure, the pace of implementation of Bank Group projects in Ethiopia is generally satisfactory. Implementation problems in the past were generally concerned with delays in effectiveness and in initiation of project works. Delays in effectiveness were largely caused by delays in parliamentary ratification, while delays in implementation related to slowness in initiating and completing start-up activities, such as appointments of consultants and project staff and the issuance of invitations to bid. As a result of the recent political changes some delays in construction works have been experienced as private contractors have been unwilling to bid owing to uncertainties, fears concerning possible nationalization and difficulty in obtaining finance from credit institutions. The operation of one Bank financed project (Humera Cr.188-ET) has been adversely affected due to interruption of movement of products from the project area to market outlets in Eritrea. On the other hand the political changes have resulted in much faster credit effectiveness and increased lending to smallholders. Additionally, there are substantial cost overruns on two Bank Group-financed projects -- (i) the Amibara Irrigation Project (Credit 418-ET), which has had to be substantially redesigned and now awaits arrangements to be made for US$17 million supplementary co-financing, and (ii) the Addis Ababa Water and Sewerage Project (Loan 818-ET), which experienced financial problems partially due to delays in the selection of the sewerage treatment plant site. (A US$5.5 million African Development Fund loan presently under consideration will hopefully alleviate the current financing gap.) It also appears that price escalations may necessitate cutbacks and restructuring of other projects. Annex II contains a summary of Bank loans, IDA credits, and IFC investments as of Sept.30, 1975 and notes on the execution of ongoing projects. In addition to its lending program the Bank is pursuing a number of activities to support the Government's development efforts including a continuing, open and frank dialogue on economic policy and the secondment of an advisor in project identification and preparation to the Planning Commission.

17. Because of the fundamental importance of agriculture we are, in preparing projects, emphasizing support for implementing the reforms which have been announced in the agricultural sector. Once the necessary measures have been taken to ensure satisfactory progress in this field, we will give increased attention to other sectors such as education where the Government is planning major investments to make education more relevant to development and more equitably available.

18. In the next 18 months, we plan to present for your consideration three agricultural projects, one of which will be a follow-up project, while the other two will break new ground. Included in the first category will be a second minimum package project and in the second category will be proposals for a grain storage and marketing project and a coffee improvement project. In view of our experience in the highway sector, and the institutional development that has occurred in that sector, we hope to submit proposals for our first highway sector credit in FY77. This will entail the Bank examing the proposed expenditure program for all classes of roads to ensure that the program is realistic in size (in terms of organizational, budgetary, manpower, and resource requirements) and reasonable in balance (as between different classes of roads, and between construction and maintenance expenditure). Before presenting each

of the above projects we shall take a careful look at the prospects for implementation and availability of local resources necessary for implementation.

PART III - LIVESTOCK IN ETHIOPIA

19. Prior to the recent drought, Ethiopia's vast livestock resources were the largest of any country in Africa and included an estimated 27 million cattle, 24 million sheep, 18 million goats, 7 million horses, mules and donkeys, and 1 million camels. The true dimensions of the losses attributable to the drought are not yet certain, but it is estimated that about 15% of the national herd was lost over a 3-year period in the rangelands areas. It is estimated that the herds should regenerate themselves over a 3- to 4-year period. Given the large domestic herds and the fact that over 50% of the country's land area is devoted to livestock production, the subsector makes a disproportionately small contribution to national production and to export earnings. In 1972, livestock products contributed about 29% of total agricultural output (beef - 10%, other meat - 5%, milk - 8%, hides and skins - 1%, and others - 5%). It is estimated that the total exports of livestock and livestock products through official trade channels from Ethiopia was about US$11.6 million in 1972, an increase of about 300% from 1968. In spite of this increase, however, the total quantity and value of exports were relatively low in relation to the existing potential. The major constraints to increased output are endemic diseases and an underdeveloped internal marketing system which depresses the prices paid to the producer. In addition uncontrolled grazing and stock breeding have denuded vast areas of rangeland. Another constraint is that cattle are traditionally viewed as a source of prestige and a hedge against future uncertainty rather than as a potential source of cash income; the nomadic owners in particular are most reluctant to sell an animal unless it is absolutely necessary.

Rangelands Areas

20. The Ethiopian rangelands cover some 500,000 km^2, or about 42% of the country's total land area. While no accurate figures are available, it is estimated that prior to the drought the rangelands areas contained a human population of 2.5 million, 5.5 million cattle (21% of the country's total), 4.5 million sheep (18%), 2.5 million goats (15%), and 1 million camels (10%). In addition to providing subsistence for the largely nomadic population, the rangelands provide the cultivated areas (highland) with livestock and livestock products, and they are presently the only areas with a net surplus of cattle for domestic consumption and export. The carrying capacity of the ranges is severely limited by the lack of adequate water facilities and by inefficient utilization of existing vegetation; consequently, the large increases in both the human and livestock population over the past five decades have contributed to a significant deterioration in the condition of the grazing areas. This situation has been aggravated by the recent drought, and by the increasing encroachment of settled farming in the most productive dry season pastures. The land reform proclamation recently issued by the Government specifically recognized the traditional rights of the nomadic pastoralists over the ranges. The future of these areas in the long run will depend most directly on the willingness of the livestock owners to limit the number of their animals and to institute a voluntary and comprehensive system of range use controls.

21. The ranges are informally divided into a number of grazing reserves, each controlled by a particular tribe; tribal agreements regulate the seasonal migrations of the nomadic livestock owners as they travel with their herds in search of water and grazing. The incomes of these nomads are low as compared with the national average. The annual per capita income in these areas is probably about Eth$60 (US$29).

22. The composition of the livestock herds in different range areas within Ethiopia varies with the ecology of the region and the traditions of the nomadic people living there. In the Southern Rangelands cattle comprise the greater proportion of the nomadic herds, and they are valued highly for both milk and meat production. Cows culled for age are sold for slaughter, and male cattle are sold mainly to finance major purchases such as food and clothes. In Jijigga where lower annual rainfall produces less favorable range conditions, cattle (although important) are greatly outnumbered by sheep and goats. The latter are kept in separate flocks looked after by the women; their milk comprises an important part of the family diet, and a limited number are sold to satisfy immediate cash needs. Camels are mainly used for transport, but they are more important in the drier areas of the lower Ogaden. In the northeast rangelands area, which is characterized by extremely arid semi-desert condition, camels are probably the most important type of livestock, as they are used for transport and traded for use in the Danakil salt trade; although larger in numbers, sheep and goats are somewhat less important to the nomadic economy. Very few cattle are found in the driest parts of the region.

Livestock Marketing

23. The domestic market for livestock is, by and large, relatively simple. LIvestock markets may be grouped into three categories:

(a) Primary markets, where stock enters the trade, and which are attended by any number of small dealers;

(b) Secondary markets, located in cropping areas on the route towards the final destination; and

(c) Terminal markets, located in the main consumption areas -- towns and cities, coffee-growing areas or industrial abattoirs.

24. Animals are normally traded by direct bargaining. In the smaller markets the buyers, apart from a few local butchers, are usually small livestock traders sometimes purchasing on behalf of bigger traders and sometimes purchasing with the sole objective of re-trading the stock in another market further down the stockroute. In a few markets, auctioneers have established themselves and operate on a tribal basis, but this method of selling is not widely practiced. Direct bargaining is also the rule in the bigger markets or near consumer centers where the buyers are predominantly butchers and butchers' agents. Sales of slaughter stock to the meat factories are sometimes made direct by the producer, but the more usual system is for the factory to support a few major traders who themselves buy at the bigger markets and have arrangements with smaller traders and agents at smaller markets. Municipalities

throughout the country charge a fee for the use of the "market," commonly between Eth$2.00 and Eth$3.00 per head for cattle and camels and Eth$0.30-Eth$0.40 for sheep and goats. The Livestock and Meat Board has arrangements for improved fee collection in the newly developing markets now being constructed under the IDA-assisted Second Livestock Development Project (Cr. (Cr. 365-ET) initiated in 1973. That project provides an integrated market and stockroute system in three important livestock producing areas of the country; it also includes provision for the construction of slaughter facilities, cattle transport and technical and administrative assistance. In the range areas the improved facilities are expected to lower marketing costs, improve competition and ultimately result in higher prices for local producers. Construction of project infrastructure is now beginning to get under way (see para. 55). The proposed Rangelands Development Project would, through the establishment of the ranches, the small-holder fattening programs and feedlot, introduce new and profitable market outlets for stockowners and thus improve competition in the livestock market. As a result, the existing network of markets and traders will be improved.

Government Livestock Services

25. The Livestock and Meat Board (LMB) is the institution primarily responsible for the development of the livestock industry. It was established in 1964 as an independent body to coordinate policy matters relating to livestock, poultry, meat, eggs, and by-products including hides and skins. The overall policy of LMB is determined by a Board of Directors chaired by the Director of the Department of Animal Resources in the Ministry of Agriculture, and the day-to-day operations are the responsibility of the General Manager. LMB has mainly been concerned with the licensing of exports, general monitoring and preparation of background studies for the livestock industry and development of a feed mix plant and a poultry industry. In addition, it has had primary responsibility for execution of the Second Livestock Project (see Para. 55). Recently, LMB has been given a broad range of additional responsibilities, including that of supervising 10 recently nationalized abattoirs. In order to concentrate all livestock production activities within one agency the Livestock Production Division of the Ministry of Agriculture has been transferred to LMB's control. Government is presently considering a plan for the reorganization of LMB which would consolidate the existing lines of responsibility and thus would better enable it to carry out its designated tasks.

26. Overall responsibility for animal health services is vested in the Department of Veterinary Services within the Ministry of Agriculture. The veterinary staff now comprises 45 Ethiopian veterinarians, 40 expatriate veterinarians supplied under technical assistance, 250 animal health assistants and 700 trained vaccinators. These staff are, however, insufficient to give satisfactory veterinary cover throughout the country, and consequently the services supplied in many areas are at best rudimentary. The effectiveness of the staff is further hampered by lack of sufficient vehicles, veterinary supplies and other materials; another problem arises from the fact that a disproportionate number of trained staff are presently located in Addis Ababa and other urban centers.

PART IV - THE PROJECT

Introduction

27. A report entitled "Ethiopia - Appraisal of the Rangelands Development Project" (No. 854-ET) is being circulated separately. A credit and project summary is provided in Annex III. The project was appraised in the field in January-February 1975. Negotiations for the proposed IDA credit were held in Washington in October 1975. The Ethiopian delegation was led by Ato Kebede Temesgen, Head, Credit and Investment Department, Ministry of Finance.

Background

28. The proposed project would be the third Bank Group lending in the livestock sector in Ethiopia. The first project, the Addis Ababa Dairy Project, approved in 1971, aimed at expanding milk production in the Addis Ababa area, and the Second Livestock Project, approved in 1973, was for livestock development through integrated markets and stockroutes systems in three important livestock producing areas (see para 55). The proposed project, which would be the first large-scale range development project in Ethiopia, would make use of the stockroutes and markets developed under the second project in the Southern Rangelands and Jijigga areas.

Project Purpose

29. The proposed project would, over a five-year period, provide for the development and rehabilitation of three lowland range areas, i.e., the Southern Rangelands, Jijigga and the Northeast Rangelands, inhabited mostly by pastoralists engaged in extensive livestock production. In the short term the project would attempt to restructure the traditional system of extensive livestock production, in which animals are held as a source of subsistence, prestige and as a hedge against future uncertainty. Efficiency of the livestock industry would be improved through an offtake program of animal selection for fattening on a system of ranches, feedlots, smallholder and grazier fattening schemes which would increase incomes for the producers. One of the primary goals would be the eventual establishment of a comprehensive system of range use control under which the pastoralists would be encouraged to adjust their overall stock numbers to meet the carrying capacity of the ranges. Project services would be directed to all types of livestock available in the project areas.

Project Description

30. The project would consist of three separate sub-projects, each with its own organization structure. These sub-projects -- the Southern Rangelands, Jijigga and Northeast Rangelands Development Projects -- would each provide an integrated program of range management and veterinary services along with improved roads and water facilities. They would help lay the foundation for a sound future development of the livestock economy in the range areas. Specifically, the project would provide for:

(a) the institution of land planning and range management programs in conjunction with a program for the gradual control of livestock numbers;

(b) the establishment of a basic veterinary and livestock extension service designed to reach the nomadic pastoralists;

(c) construction of water facilities including both permanent and rainy season water ponds as well as a small number of boreholes and concrete water tanks; a limited water spreading program based on flash floods would be carried out in the Northeast Rangelands area;

(d) construction of trade roads and administrative access tracks;

(e) the development of fattening ranches and a feedlot (Southern Rangelands only) and smallholder fattening schemes;

(f) a program of trials and studies with emphasis on improved range use and grazing control practices;

(g) training of Project staff, livestock owners and tribal leaders; and

(h) provision of supplemental staff within LMB in order to improve its overall efficiency and to enable it to provide technical and administrative services to the three sub-project units.

Detailed Features

31. Range Management. A central element of the overall project strategy would be the development of a comprehensive range management program for each of the three sub-project areas. A range management department would be established within each of the three sub-projects to formulate and coordinate development in each area. It would be initially responsible for the development of both an overall land use plan and a detailed range management plan which would be introduced gradually and with the cooperation of the people involved.

32. The range management programs would pay particular attention to control of livestock numbers, the limitation of burning and tree-cutting, and the introduction of controlled grazing and closure of pastures including integration with the veterinary and the water development programs. In the Southern Rangelands project area the program would center around the establishment of four fattening ranches where improved range management techniques would be introduced in relatively concentrated areas, so that they could be adopted for extensive use by the nomads.

33. In the Jijigga area, the predominant Somali pastoralists are relatively sophisticated livestock herders who are able to exercise a high degree of control over range use. Hence, the range management program would draw up

in the first year a land use plan and zone the land into areas suitable for cultivation, rangeland, fodder reserves and for settlement. Dry season grazing reserves would be established based on both existing and new permanent watering points; these reserves would be selected by the groups themselves, and some agreements between LMB and the groups have already been signed. As part of an effort to involve the individual clans in range development, a system of range associations of stockholders would be established, as would two pilot fodder banks to serve as fodder reserve and test the efficacy of selected planting materials.

34. At present the Northeast Rangelands area offers a unique opportunity to institute improved range management practices at a time when the immediate control of numbers is not the most important consideration. With the large reduction in total livestock numbers due to the recent drought, the ranges are now able -- even with their greatly reduced carrying capacity -- to support the existing herds without undue pressure. This situation will not prevail for long, however, as it is estimated that within 10 years the herds will once again have been built up to their former levels. Here the program strategy is to make an inventory of each tribal grazing area to serve as a guide in the selection of range reserves. At full development some 15 dry season grazing reserves totalling about 8,000 km^2 would be established. All decisions with regard to the opening and closing of these reserves would be made by tribal authorities in cooperation with the Project Range Management Department. Eight fodder banks averaging 10 ha. in size to be used as fodder reserves in time of drought would also be established.

35. Veterinary Services. The primary objectives of the veterinary program would therefore be to develop the interest and capability on the part of the stockowners themselves to institute better disease controls adapted to their own needs and traditions. A comprehensive and intensive project veterinary extension service would be established in each of the three sub-project areas. The veterinary staff in each area would be headed by a senior veterinarian assisted by a junior veterinarian (in two of the three areas), animal health assistants (AHA's), vaccinators, and veterinary scouts. The veterinary scouts would be chosen from among the pastoralists and would live and work with them, reporting periodically to the field stations for instructions and supplies.

36. Water Development. Three types of water development would be provided for under the project -- boreholes, permanent water ponds with a capacity of 20,000 m^3 and rainy season surface catchment ponds with a capacity of about 6,000 m^3. The boreholes would be provided on the ranches and on grazing areas where surface water catchment is unsuitable due to high soil permeability. The large water ponds would be important for opening up new areas for dry weather grazing and smaller ponds to prolong the wet weather grazing for one or two months into the dry season before the stock must more on. No specific water development program would be undertaken by the project in the Northeast Rangelands area, as in those areas where sufficient grazing is available, there are enough wells and other water points available to meet current livestock needs. The Government has agreed to designate each sub-project unit as the water development authority for the purpose of coordinating all water development in their respective areas (Section 3.02 of the draft Development Credit Agreement).

37. Irrigation/Water Spreading. Water spreading for simple irrigation would be carried out within the Northeast Rangelands Project area on the basis of experience gained from similar activities supported under the IDA Drought Areas Rehabilitation Project. The program would involve the diversion of flood water under gravity to bunded plots of land; the irrigated sites would range from 5 to 500 hectares in size and would average about 100 hectares. It is expected that up to 2,000 Afar farmers would be allocated individual one-hectare plots by the end of the five-year project period. The main crops produced would be cotton, maize, sorghum and groundnuts. Livestock would be fattened on vegetation watered by surplus water from the irrigated sites. In addition to the water spreading program, provision would also be made for general hydrological studies and for two feasibility studies; the latter would include an investigation of the possibilities of irrigated crop development in the Teiru Depression.

38. Roads. The existing road network in the rangelands is insufficient to meet both the specific needs of the project and to sustain the long-term development of the area. Two immediate requirements are apparent:

(a) the creation of trade roads to open up the area for administrative and trade purposes; and

(b) the establishement of dry season feeder tracks to allow access for veterinary, extension and other Project staff and to facilitate communications on the ranges.

The estimated road program for the three sub-project areas is summarized as follows:

	Trade Roads	Feeder Tracks
	(km)	
Southern Rangelands	540	460
Jijigga	765	740
Northeast Rangelands	165	380
	1,470	1,580

In addition to the above construction and/or improvement program, which would be built by labor-intensive methods, provision would also be made under the Northeast Rangelands Project for a limited amount of transceiver radios to compensate for the particularly poor communications facilities in that area.

39. Ranches. Under the project provision would be made for the establishment of up to four 25,000 hectares fattening ranches in the central part of the Southern Rangelands area. By offering an even flow of animals both for possible fattening by the feedlot and by smallholders in the Awassa area, and for sale on local markets, they would be able to offer higher prices to local livestock owners. These higher prices and the active involvement of the stockowners in the ranching operation would provide a strong incentive to increase the present low offtake from the ranges, and would also result in a significant increase in the cash incomes of one of the poorest segments of the Ethiopian population.

40. A feedlot unit would be established to provide an intensive feeding regime at the Awassa Agro-Industrial Share Company (AAISC) farm in the Southern Rangelands area, which would provide a regular supply of high value meat for both export and local markets. This would in turn result in higher prices through the establishment of new outlet for quality meat. These higher prices would eventually accrue to the cattle owners, as up to 75% of the profits of the feedlot would be returned to the producers in the form of improved prices or as bonuses on cattle already sold.

41. Smallholder fattening programs would be undertaken in each of the three sub-project areas whereby livestock would be sold on credit to smallholders (after a small down payment) for fattening on crop residues and other fodder. Each program would be tailored to meet the specific conditions in that area. In the Northeast Rangelands area, credit would be provided to families now without any stock for purchase of animals for fattening on the ranges. A livestock marketing program would also be introduced to stimulate the volume of marketed offtake and to reduce the irregularity of supply that is presently a major constraint to the proper functioning of existing markets. Eight markets recently closed by tribal hostilities would be reopened and provided with perimeter fencing; a Project Marketing Unit (PMU) would be responsible for the initial functioning of these markets.

42. Trials and Studies. The project would include provision for a number of technical and socio-economic trials and studies both in order to provide immediate answers to technical problems and to assess the results achieved by the various project components so that these experiences can prove a guide to the development of similar projects either in Ethiopia or elsewhere in East Africa. Areas of investigation would include: improved range management techniques, the integration of arable farming with livestock production, use of enclosures, development of fodder banks, and range ecology. Socio-economic studies to estimate herd numbers and composition, offtake, migration patterns of nomadic livestock owners, and changing tribal structures and traditions would continue. Project evaluation would be carried out by special units within each of the three sub-project units.

43. Training. A program would be set up in each of the project areas to train both local project staff and to educate and integrate the various tribal groups in the development process. For this purpose, training centers would be established in each area under a project training officer, and provision would be made for a mobile training center. All senior project staff would be sent for short courses in their various fields, and a limited number of fellowships (both in East Africa and abroad) would be made available. Tribal elders would be brought to the training centers to familiarize them with the objectives of the project. Younger tribal members would be given 2-month courses to prepare them as veterinary scouts to serve as the first link of communication between the project and pastoralists. These veterinary scouts would be expected to disseminate project information, advise and assist tribal members in livestock vaccination, and serve as an example in implementing improved range management and grazing practices. They would periodically attend refresher courses at the project training centers. The training units would

prepare programs for, among others, the regular broadcasting station at Harar and for a new station to be established at Alemaya under the IDA-assisted Fourth Education Project.

Project Execution

44. Overall direction of the project would be carried out by the Livestock and Meat Board, which would also have ultimate responsibility for project implementation. The LMB is executing the IDA-assisted Second Livestock Project and in spite of personnel and organizational problems, has developed into a sound organization. Each of the three sub-projects would have a separate organizational unit based at a headquarter within the individual project areas. These units -- the Southern Rangelands Development Unit (SORDU), the Jijigga Rangelands Development Unit (JIRDU), and the Northeast Rangelands Development Unit (NERDU) -- would each be under the direction of a project manager directly responsible to the head of LMB's Rangelands Development Department. Additional staff would include heads of the Finance and Administration, Range Management, Veterinary Services and the Technical Service Division, a chief accountant, a procurement officer and other supporting personnel. Provision would also be included for housing, vehicles and equipment. Each sub-project would have its own bank account, and would oversee its own accounting, disbursement, procurement and personnel activities; where necessary these services would be supplemented by a number of central services to be provided by LMB. LMB has agreed to establish separate accounts for each of the sub-project units and to make quarterly deposits in these accounts of adequate funds to cover estimated project expenditures for the ensuing quarter. The initial deposit of funds adequate for the first quarter of the project implementation period starting January 1, 1976 would be a condition of effectiveness of the credit (Section 5.01(c) of the draft Development Credit Agreement and Section 2.02(b) of the draft Project Agreement). A condition of disbursement for any of the three sub-projects taken individually would be that the Project Manager, the Senior Range Management Officer, the Senior Financial Officer, and the Senior Veterinarian have been recruited with qualifications, experience and terms and conditions of employment satisfactory to IDA (paragraph 4(ii) of Schedule 1 to the draft Development Credit Agreement).

45. Additional staff would be provided under the project to help enable the Livestock and Meat Board to successfully undertake overall responsibility for the implementation of this project. First, a rangelands development department would be established within LMB to coordinate the activities of all three sub-projects, and to provide administrative and technical assistance to them. Staff provided for this department would include: an internationally recruited department head, a range management officer, a personnel officer, a water engineer, a sociologist and a mass media and training specialist. LMB has agreed to recruit two experts internationally for the posts of technical managers, one each for project management and veterinary services in the Rangelands Development Department to assist the department head (who will also be the Project Director) in effectively supervising the sub-project units and providing any technical and managerial back-up that the units might require. Secondly, LMB would also provide certain other financial and procurement services to the three range projects; in order to supply this capability and to

improve the overall efficiency of LMB, supplemental staff would be provided within the Finance Department. These staff would include an internationally recruited financial controller, an internal auditor, two accountants, as well as a senior procurement officer and one junior procurement officer. A limited amount of supporting staff and some equipment and vehicles would also be provided. Funds would also be provided for the construction of a second veterinary laboratory building at Debre Zeit in order to allow this facility to expand its production of vaccines as well as its diagnostic services. Finally, provision would be made for funds to support the continued preparation of future project within the livestock sector by LMB.

46. The Government has agreed that the Ministry of Public Works would delegate authority to LMB to approve plans and provide for the construction of structures up to a limit of Eth$20,000 per unit and would make arrangements satisfactory to the Association to reduce delays on the approval of plans and execution of works for all other project construction (Section 3.03 of the draft Development Credit Agreement).

47. In early 1975 the Government had introduced export duties on meat and live animals at a level which could adversely affect prices to producers and hinder project execution. These duties have now been withdrawn. With regard to price control imposed by the Government on meat and live animals, current levels are reasonable. The Government has agreed that in taking any measures or adopting any regulations concerning production and marketing of livestock, it shall pay due consideration to the need to continue to increase production and stimulate the sale of livestock (Section 3.04 of the draft Development Credit Agreement).

Project Cost and Financing

48. Total project cost including taxes and duties (about $0.3 million) is estimated at US$42.9 million of which US$14.0 million or about 33% would represent foreign exchange requirements. A summary of the cost estimates is contained in Annex III. Costs have been estimated at prices prevailing at the time of appraisal plus estimated price escalation to December 1975. In addition, a physical contingency of 10% and a cumulative price contingency of 10% per annum have been included in all project costs. Since about 70% of the goods and services to be procured under the project will be domestically produced, the expected inflation rate for Ethiopia has been used to estimate the price contingencies. Total (physical plus price) contingencies represent 46.6% of the total base cost of this project and are considered to be adequate.

49. The finance of project costs would be the share in the following amount and proportions:

	US$ million	%
IDA	27.0	63
ADF	5.5	13
Government	10.5	24
	43.0	100

The proposed IDA credit would be on standard terms to Government. This would cover about US$11.1 million of the total foreign exchange costs (US$14.0 million) and about 54% of local costs, or about 63% of total project costs. The proposed African Development Fund (ADF) contribution would total 5.0 million African Development Bank Units of Account (about US$5.5 million); this would finance the remaining US$2.9 million of the project's foreign exchange costs and US$2.6 million of local cost. ADF financing would be concentrated on the Southern Rangelands and would finance up to 76% of the costs of the ranches, the feedlot, the smallholder fattening program and specified roads. Together the ADF and the IDA contributions would finance 76% of total project costs. The remaining 24% would be contributed by the Government; this would be offset to the extent that project costs include about US$0.3 million in taxes and duties. The ADF, IDA and Government contributions would be channeled by the Government directly to LMB as grant.

Procurement

50. Procurement of vehicles and road construction equipment would be subject to international competitive bidding according to IDA guidelines; orders would be bulked whenever possible and placed through LMB's Procurement Division acting as the agent for all three sub-projects. In order to facilitate the early operations of the project, provision would be made for the purchase of up to 15 vehicles through normal commercial channels in accordance with the Government's usual procurement procedures which are satisfactory to the Association. The buildings and structures to be constructed under the project would be required at scattered locations over the three range areas and would be procured through force account or local contractors. Various items of veterinary equipment, medicines, chemicals and fertilizer would also be required in small amounts at scattered locations and at varying times throughout the project period. Therefore, as they would not be suitable for either international or local competitive bidding, procurement of these items would be through normal commercial channels in accordance with the Government's usual procedures.

Disbursement

51. The proceeds of the credit would be disbursed over five years after credit effectiveness on the basis of:

(a) 100% of the foreign or 76% of the total costs of vehicles and technical assistance; and

(b) 76% of the costs of all other items financed by IDA.

Disbursements against (a) would be fully documented. Disbursements against (b) would be made against statements of expenditure certified by the Project Manager; these would be kept by LMB and made available to IDA for inspection. ADF parallel financing of the Southern Rangelands ranches, feedlot, smallholder fattening

and road construction components would be subject to similar arrangements. The IDA credit would provide up to US$500,000 in retroactive financing to cover project expenditures for salaries and other administrative costs and for vehicles, equipment and furniture incurred from July 1, 1975 to the date of the Credit Agreement (paragraph 4(i) of Schedule 1 to the draft Development Credit Agreement).

Economic Benefits and Justification

52. The project would provide basic infrastructure such as roads and water facilities as well as veterinary and extension services in areas which had previously received little, if any, direct Government assistance. Through the restructuring of the traditional system of extensive livestock production, the project would increase the presently low marketed offtake from the ranges and would raise the value of marketed livestock production; this would result in increased cash incomes for the producers, thereby integrating them more fully into the market economy. Finally, the improved animal husbandry practices and fattening components would increase exports of live animals and would provide an even flow of quality meat both for export and for sale on local markets. The overall economic rate of return for the project over 20 years is estimated at 24%. Even under very unfavorable circumstances -- 25% increase in cost and 25% reduction in benefits -- the economic rate of return of the project would not fall under 12%.

53. The main quantifiable benefits stemming from the project would be a substantial increase in marketed livestock and crop production; at full development (Year 7), the value of this incremental production is estimated at US$11.2 million annually. Foreign exchange earnings would be increased by higher exports of live animals, as well as opening new markets for the export of chilled and frozen meat. In addition, it will increase family income of pastoralists by about 40%. The project would also have a number of additional benefits which are more difficult to quantify. These would include: (a) better nutrition for about 100,000 pastoral families through increased milk production; (b) more sanitary and more accessible water supplies for about the same number of pastoral families; (c) greater safeguard against future droughts, thus reducing the extent of both human and livestock deaths as well as the required level of Government expenditures for future relief programs; and (d) rationalization and modernization of the traditional livestock sector to safeguard the potential for livestock production of Ethiopia's rangelands, thus laying the basis for further development of the livestock industry.

Risks

54. The major risks facing the project would be the ability of LMB to simultaneously manage, staff and implement three large sub-projects (in addition to the ongoing second livestock project), and the willingness of the pastoralists to accept changes in traditional livestock management practices and to institute grazing and water controls. Regarding the size and the scope of the project in the context of LMB's capabilities, one solution would have been to curtail

individual components or postpone one of the three sub-projects; another solution might have been to reduce the area covered by the project. Both of these alternatives would, however, be self-defeating. The scope of the individual components was greatly reduced and the project simplified in the course of appraisal, and as many activities are interdependent, any further reductions would endanger the effectiveness of the entire effort. It was also felt that the activities in each area should be initiated at basically the same time, for unless these developments were undertaken more or less simultaneously and were each of sufficient size, there was a real danger that in times of stress the pastoralists would inundate those areas which offered improved water, veterinary and other services.

55. With regard to prospects for timely project execution by LMB, it is recognized that the implementation of the second livestock project (which incidentally is the first development project to be undertaken by LMB) is about a year behind schedule. This is mainly because of start-up delays, delays in approval of plans and specifications by the Ministry of Public Works and Housing and slow execution of works by contractors who had difficulties in obtaining advance of funds from the banks. The second livestock project which included stockroutes and construction of markets and slaughter houses in widely dispersed locations over almost the whole country, all planned and supervised from LMB headquarters in Addis Ababa, is also facing the problem of cost overrun. The Government and the LMB are taking measures to expedite implementation of the second livestock project and recently improvements in the capacity and confidence of LMB to confront the problems and to make suitable restructuring and rephasing of works in light of the estimated cost overrun have been evident. In the proposed project, LMB's capability would be adequately strengthened through the provision of key supporting staff and the proposed reorganization of LMB should enhance its operative efficiency. The delegation of powers from the Ministry of Public Works and Housing to LMB regarding approval of plans and execution of works which the Government has agreed to would reduce implementation delays. Moreover, three separate sub-project units would be established located within the sub-project areas, and these units would be self-contained with separate staff and accounts, and procurement and disbursement arrangements. Management and technical back-up by LMB headquarters and provision of a number of central services by LMB headquarters along with the decentralized set-up of sub-project entities should lead to efficient and timely execution of the project.

56. The project would involve a further risk in that it would require a conservative pastoral people to institute substantial changes in their traditional practices. In fact, without these changes, the rangelands would continue to deteriorate as a result of overgrazing and other poor livestock management practices. Considerable efforts would be made to involve the tribal authorities in the development effort, and the ability of the project management to ensure their active cooperation would be of prime importance to the success of the project. Overall, the risks associated with the project are relatively large, but in the long term they are substantially outweighed by the significant benefits to be achieved.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

57. The draft Development Credit Agreement between Ethiopia and the Association, the draft Project Agreement between the Association and the Livestock and Meat Board, the recommendation of the Committee provided for under Article V, Section 1 (d) of the Articles of Agreement, and the text of a draft resolution approving the proposed development credit are being distributed to the Executive Directors separately.

58. The draft Development Credit Agreement follows the normal pattern of agreements for agricultural livestock projects, taking into account the particular features of the project as described in earlier paragraphs of this report. Special conditions for the effectiveness of the Development Credit Agreement are that the Project Financing Agreement between Ethiopia and LMB has been signed, and deposits of funds adequate to cover the expenditures for the first quarter of the project implementation period starting January 1, 1976 have been made in each of the sub-project accounts.

59. I am satisfied that the proposed development credit would comply with the Articles of Agreement of the Association.

PART VI - RECOMMENDATION

60. I recommend that the Executive Directors approve the proposed credit.

Robert S. McNamara
President

Washington, D.C.
December 11, 1975

COUNTRY DATA-ETHIOPIA

AREA
1,221,900 km 2

POPULATION
25.9 million (mid-1972)

DENSITY
.. Per km2of arable land

SOCIAL INDICATORS

	Ethiopia 1960	Ethiopia 1970	Reference Countries: Somalia 1970	Sudan 1970	Kenya* 1970
GNP PER CAPITA US$ (ATLAS BASIS) /1	40	80 /a	80 /a	120 /a	170 /a
DEMOGRAPHIC					
Crude birth rate (per thousand)	..	46 /a,a,aj	46 /b,aa	49 /e	48 /b,aa
Crude death rate (per thousand)	..	25 /a,a,aj	24 /b,aa	18 /e	18 /b,aa
Infant mortality rate (per thousand live births)	84 /c,d	..	..	..	55 /e
Life expectancy at birth (years)	..	39 /b	40	48 /e	49 /k
Gross reproduction rate /2	..	2.9 /b	3.0 /b,aa	3.4 /b	3.4 /b
Population growth rate /3	1.6	2.2 /ah	2.4 /ah	2.8 /ah	3.2 /ah
Population growth rate - urban	5 /f	5 /f	..	5 /g	7 /h,i
Age structure (percent)					
0-14	41 /e	45 /e,j	46 /e	45 /e	48 /k
15-64	54 /e	51 /e,j,l	52 /e	52 /e	48 /k
65 and over	5 /e	4 /e,j,m	2 /e	3 /e	4 /k
Age dependency ratio /4	0.9 /e	1.0 /n	0.9 /e	0.9 /o	1.1 /k
Economic dependency ratio /4	1.0 /e	1.2 /o	1.2	1.7	1.4
Urban population as percent of total	6 /f	11 /d,ak	..	13 /g	10 /i,k
Family planning: No. of acceptors cumulative (thous.)	..	..	..	..	..
No. of users (% of married women)	..	..	..	..	..
EMPLOYMENT					
Total labor force (thousands)	9,700 /e	11,300 /e	1,100 /e	7,100 /o,p	5,100 /k,p
Percentage employed in agriculture	88 /e	85 /e	80 /e	80 /e	90 /k,p
Percentage unemployed	..	..	20 /r	..	..
INCOME DISTRIBUTION					
Percent of national income received by highest 5%	..	..	..	..	..
Percent of national income received by highest 20%	..	..	..	..	..
Percent of national income received by lowest 20%	..	..	..	..	..
Percent of national income received by lowest 40%	..	..	..	..	..
DISTRIBUTION OF LAND OWNERSHIP					
% owned by top 10% of owners	..	..	..	..	..
% owned by smallest 10% of owners	..	..	..	..	..
HEALTH AND NUTRITION					
Population per physician	..	72,140 /j	21,140	12,660 /j	6,550 /j,s
Population per nursing person	..	11,600 /j	3,690	1,930 /j	3,700 /j
Population per hospital bed	3,000 /v,w	3,030	570	1,040 /x	810
Per capita calorie supply as % of requirements /5	88	92	77	91	101
Per capita protein supply, total (grams per day) /6	66	69	57	63	71
Of which, animal and pulse	24 /y	25	27 /z	24 /z	29
Death rate 1-4 years /7	..	..	..	..	2 /z
EDUCATION					
Adjusted /8 primary school enrollment ratio	8	16 /k	10	25 /k	67
Adjusted /8 secondary school enrollment ratio	1	4 /k	4	9 /k	9 /u
Years of schooling provided, first and second level	12	12	12	12	13
Vocational enrollment as % of sec. school enrollment	20	5 /k	5 /ab	1 /k	2
Adult literacy rate %	..	7 /j,ac,ad	5 /j,ac,ad	19 /ad	30 /j,ac,ad
HOUSING					
Average No. of persons per room (urban)	2.7 /v,ae	..	..	2.5 /z	..
Percent of occupied units without piped water	26 /v,ae,ai	..	..	36 /r,t,z	..
Access to electricity (as % of total population)	58 /v,ae,af	..	..	26 /r,z	..
Percent of rural population connected to electricity	..	..	..	..	..
CONSUMPTION					
Radio receivers per 1000 population	4 /ag	7 /a	20 /a	80 /a	48 /a,e
Passenger cars per 1000 population	1 /c	1 /k	2	2	9 /a
Electric power consumption (kwh p.c.)	6 /v	23 /a	14 /a	15 /a	78 /a
Newsprint consumption p.c. kg per year	..	0.1 /a	0.07 /a	0.1 /a	0.5 /a

Notes: Figures refer either to the latest periods or to the latest years. Latest periods refer in principle to the years 1956-60 or 1966-70; the latest years in principle to 1960 and 1970.

/1 The Per Capita GNP estimate is at market prices for years other than 1960, calculated by the same conversion technique as the 1972 World Bank Atlas.

/2 Average number of daughters per woman of reproductive age.

/3 Population growth rates are for the decades ending in 1960 and 1970.

/4 Ratio of population under 15 and 65 and over to population of ages 15-64 for age dependency ratio and to labor force of ages 15-64 for economic dependency ratio.

/5 FAO reference standards represent physiological requirements for normal activity and health, taking account of environmental temperature, body weights, and distribution by age and sex of national populations.

/6 Protein standards (requirements) for all countries as established by USDA Economic Research Service provide for a minimum allowance of 60 grams of total protein per day, and 20 grams of animal and pulse protein, of which 10 grams should be animal protein. These standards are somewhat lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey.

/7 Some studies have suggested that crude death rates of children ages 1 through 4 may be used as a first approximation index of malnutrition.

/8 Percentage enrolled of corresponding population of school age as defined for each country.

/a 1972; /b 1965-70; /c 1963; /d Estimate based on first round of the National Sample Survey; /e Estimate; /f Urban population defined as Addis Ababa, Asmara, towns and market centers; /g Sixty-eight towns; /h 1962-69; /i 2,000 or more inhabitants; /j 1971; /k 1969; /l 15-59 years; /m 60 years and over; /n Ratio of population under 15 and 60 and over to those in age 15-59; /o Population under 15 and 60 and over; /p Labor force in age bracket 15-59; /q 1968; /r Urban only; /s Number on the register, not all working in the country; /t Inside or outside; /u Including teacher training at the third level; /v 1961; /w Including maternity hospital beds; /x Government only; /y 1961-63; /z 1964-66; /aa U.N. estimate; /ab Public education only, excludes private vocational schools; /ac Over 15 years; /ad Definition unknown; /ae Addis Ababa only; /af Percentage of dwellings with electrical lighting; /ag 1959; /ah 1960-72; /ai Inside only; /aj 1969-70. /ak 19[illegible].

* Kenya has been selected as an objective country because it is a neighboring developing country somewhat further up the income scale than Ethiopia with similar ecological conditions.

ETHIOPIA

ECONOMIC DEVELOPMENT DATA
(Amounts in millions of U.S. dollars)

NATIONAL ACCOUNTS	Actual 1968	Actual 1971	Actual 1974	Projected 1975	Projected 1976	Projected 1980	1968-1975	1971-1976	1975-1980	1971-1980	1968	1971	1980
	IN CONSTANT 1973 Prices & Exchange Rates						Average Annual Growth Rates				As Percent of GDY		
Gross Domestic Product	2052.5	2331.6	2465.3	2525.4	2633.7	3229.5	3.0	1.7	5.0	3.7	100.3	102.0	101.3
Gains from Terms of Trade (+)	- 6.7	- 45.0	- 31.9	- 46.6	- 34.5	- 41.9	.	.	.	.	- 0.3	- 2.0	- 1.3
Gross Domestic Income	2045.8	2286.6	2433.3	2478.8	2599.1	3187.6	2.8	2.6	5.1	3.8	100.0	100.0	100.0
Import (incl. NFS) 1/	266.3	287.0	257.0	263.6	279.2	371.3	-0.2	-0.5	7.0	2.9	12.9	12.3	11.5
Exports " (import capacity)	-229.0	-281.5	-266.9	-247.5	-264.3	-306.9	1.2	1.2	4.4	1.0	11.2	12.3	9.6
Resource Gap	- 37.3	- 5.5	9.9	- 16.1	- 14.9	- 64.4					1.8	0.2	2.0
Consumption Expenditures	1812.9	2087.1	2183.5	2244.9	2334.0	2723.1	3.1	2.2	4.0	3.0	88.6	91.3	85.4
Investment " (incl. stocks)	281.3	286.2	240.0	250.0	280.0	528.9	-1.7	-0.5	16.2	7.1	13.7	12.5	16.6
Domestic Savings	244.0	280.7	249.9	233.9	265.1	464.5	-0.6	-1.0	14.7	5.8	11.9	12.3	14.6
National Savings	228.4	232.5	281.9	263.0	271.1	473.6	2.1	3.1	12.5	8.2	11.2	10.2	14.9

MERCHANDISE TRADE	Annual Data at Current Prices 1969	1970	1971	1972	1973	1974	As Percent of Total 1969	1971	1974
Imports									
Capital goods	51.7	56.9	64.0	72.7	65.3	47.7	33.3	34.1	16.3
Intermediate goods (excl. fuels)	33.5	39.5	43.4	39.6	56.6	77.2	21.6	23.1	26.3
Fuels and related materials of which: Petroleum	11.0	13.4	17.4	13.8	21.6	57.6	0.7	9.2	19.6
Consumption goods & Misc.	58.8	61.8	62.7	61.1	74.1	110.8	37.9	33.4	37.8
Total Merch. Imports (cif)	155.3	171.6	187.5	187.2	217.6	293.3	100.0	100.0	100.0
Exports									
Primary products (excl. fuels)	107.6	108.5	113.5	152.4	219.3	230.8	90.3	89.5	83.7
Fuels and related materials of which: Petroleum	1.1	1.4	1.7	1.6	2.2	7.4	0.9	1.3	2.7
Manufactured goods (Other Exps)	10.5	12.4	11.6	13.8	23.1	37.6	8.8	9.1	13.6
Total Merch. Exports (fob)	119.2	122.3	126.8	167.8	244.6	275.8	100.0	100.0	100.0
Tourism and Border Trade	..	..	..	..	..	..			

Merchandise Trade Indices	1968	1971	1974	1975	1977	1980	1968-75	1975-80	1971-80
	1973 = 100								
Export Price Index	70.0	77.4	127.9	132.9	166.2	200.1	9.6	8.5	11.2
Import Price Index	93.8	100.2	143.2	157.9	184.9	227.4	7.7	7.6	9.3
Terms of Trade Index	74.6	77.2	89.3	84.2	90.0	88.0	1.7	0.9	1.4
Exports Volume Index	84.7	80.8	85.9	84.6	89.3	100.3	0.0	3.5	2.2

VALUE ADDED BY SECTOR	Annual Data at 1960-61 Ethiopian $ 1963/64	1965/66	1967/68	1969/70	1971/72	Average Annual Growth Rates 1963/64 - 1971/72	As Percent of Total 1963/64	1967/68	1971/72
Agriculture	1608.9	1684.4	1754.2	1833.3	1936.8	1.9	60.7	54.8	51.5
Industry and Mining	358.9	438.8	500.9	541.1	621.0	5.6	13.5	15.7	16.5
Service	684.5	832.7	944.9	1071.1	1204.1	5.8	25.8	29.5	32.0
Total	2652.3	2955.9	3200.0	3445.5	3761.9	3.5	100.0	100.0	100.0

PUBLIC FINANCE (Central Government)	Annual Data in Current Ethiopian $ 1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1968/69 - 1973/74	As Percent of GDP 1968/69	1971/72	1973/74
Current Receipts	396.6	429.1	466.0	494.7	556.8	618.1	9.2	9.6	10.3	12.2
Current Expenditures	362.0	384.0	405.5	434.4	476.7	528.5	7.8	8.7	9.0	10.4
Budgetary Savings	34.6	45.1	60.5	60.3	80.1	89.6	21.0	0.8	1.3	1.8
Other Public Sector	-	-	-	-	-	-	-	-	-	-
Public Sector Investment	64.7	92.0	111.5	125.9	129.9	..	..	1.5	2.6	..

CURRENT EXPENDITURE DETAILS (As % Total Current Expend.)	Actual 1970/71	1971/72	1972/73	1973/74	Revised Estimate 1974/75
Education	19.0	19.7	20.4	20.4	19.6
Other Social Services	7.2	7.0	7.6	7.4	9.1
Agriculture	2.8	2.9	2.9	2.8	3.2
Other Economic Services	8.8	8.1	8.8	10.9	12.0
Administration and Defense	53.6	53.0	50.6	49.0	46.0
Other	8.6	9.2	9.7	9.5	10.1
Total Current Expenditures	100.0	100.0	100.0	100.0	100.0

SELECTED INDICATORS (Calculated from 3-year averaged data)	1960-1965	1965-1970	1970-1975	1973-1978
Average ICOR	2.30	3.22	2.94	2.88
Import Elasticity	2.68	0.31	1.05	1.00
Marginal Domestic Savings Rate	0.07	0.20	0.13	0.08
Marginal National Savings Rate	0.08	0.18	0.15	0.09

DETAIL ON PUBLIC SECTOR INVESTMENT PROGRAM	US $ million At end 1969 P and ER First Plan (1968/69 - 1972/73)	% of Total
Social Sectors	46.6	22.3
Agriculture	25.3	12.1
Industry and Mining	24.5	11.7
Power		
Transport and communications	83.5	39.9
Other	29.2	14.0
Total Expenditures	209.2	100.0

FINANCING		
Public Sector Savings	73.8	42.2
Program aid counterpart	-	-
Foreign Project Aid	101.2	57.8
Total Financing	175.0	100.0

LABOR FORCE AND OUTPUT PER WORKER	Total Labor Force: In Millions 19	19	% of Total 19	19	19 - Growth Rate	Value Added Per Worker (19 - Prices & Exc. Rates): In U.S. Dollars 19	19	Percent of Average 19	19	19 - Growth Rate
Agriculture	..	..	..	..	..	..	..	..	..	..
Industry	..	..	..	..	..	..	..	..	..	..
Service										
Total										

. not applicable
.. not available
- nil or negligible
-- less than half the smallest unit shown

1/ Exports adjusted for Terms of Trade

EA1DB
December 10, 1975

ETHIOPIA

BALANCE OF PAYMENTS, EXTERNAL ASSISTANCE AND DEBT
(Amounts in millions of U.S. dollars at current prices)

	Actual 1970	Actual 1971	Actual 1972	Actual 1973	Estimated 1974	Projected 1975	Projected 1976	Projected 1977	Projected 1978	Projected 1979	Projected 1980	Avg. Annual Growth Rate 1970-1980
SUMMARY BALANCE OF PAYMENTS												
Exports (incl. NFS)	180.3	191.3	247.5	347.7	382.1	390.8	453.5	516.3	581.8	637.8	697.9	14.5
Imports (incl. NFS)	212.2	232.1	235.0	278.7	368.0	416.2	479.0	553.3	647.3	740.5	844.4	14.8
Resource Balance (X-M)	-31.9	-40.8	12.5	69.0	14.1	-25.4	-25.5	-37.0	-65.5	-102.7	-146.5	-16.5
Interest (net)	- 1.5	- 4.5	- 6.1	- 2.9	9.5	16.6	16.8	16.9	17.2	17.8	17.9	29.2
Direct Investment Income	- 5.4	- 7.2	-13.1	-17.2	-20.6	-20.8	-18.0	-15.0	-12.0	-10.0	- 10.0	- 6.4
Workers' Remittance	-	-	-	-	-	-	-	-	-	-	-	-
Current Transfers (net)	8.0	9.0	17.6	28.4	52.1	43.4	10.0	10.0	10.0	10.0	10.0	2.3
Balance on Current Accounts	-30.8	-43.5	11.0	77.3	55.1	13.8	-16.8	-25.0	-50.3	-84.9	-128.5	-15.4
Private Direct Investment	3.8	5.7	9.7	31.4	29.1	12.1	5.0	5.0	5.0	5.0	5.0	2.8
Official Capital Grants	-	-	-	-	-	-	-	-	-	-	-	
Public M&LT Loans												
Disbursements	22.1	41.1	33.2	37.5	36.0	93.4	83.9	89.9	91.8	102.1	114.8	17.9
-Repayments	-15.4	-14.7	-13.6	-14.2	-13.9	-14.2	-15.8	-17.7	-16.3	-16.5	- 15.2	0.1
Net Disbursements	6.8	26.4	19.7	23.3	22.2	79.2	68.1	72.2	75.5	87.6	99.7	30.8
Other M&LT Loans												
Disbursements	3.0	4.0	5.3	2.4	1.9	1.0	0.5	0.0	0.0	0.0	0.0	0.0
-Repayments	-1.5	-1.8	-2.4	-2.8	-1.9	-2.5	-2.5	-2.5	-2.3	-2.1	-2.0	- 2.9
Net Disbursements	1.5	2.2	2.9	-0.4	0.0	-1.5	-2.0	-2.5	-2.3	-2.1	-2.0	- 8.8
Capital Transactions n.e.i.	1.8	2.5	-6.0	-26.2	-15.0							
Change in Net Reserves	-16.9	-6.7	37.3	105.4	91.4							
GRANT AND LOAN COMMITMENTS												
Official Grants & Grant-like	11.4	11.3	14.9	14.2								
Public M&LT Loans												
IBRD	-	-	10.8	-								
IDA	3.1	13.9	34.3	53.0								
Other	-	-	-	-								
Other Multilateral	-	-	-	-								
Governments	8.6	26.9	17.3	26.7								
Suppliers	1.3	0.7	-	0.1								
Financial Institutions	3.0	5.0	-	6.0								
Bonds	-	-	-	-								
Public Loans n.e.i.	-	-	-	-								
Total Public M&LT Loans	16.0	46.5	62.4	85.8								

EXTERNAL DEBT	Actual Debt Outstanding on Dec. 31,1973 Disbursed Only	Percent
World Bank	67.4	26.3
IDA	45.5	17.7
Other Multilateral	-	-
Governments	112.6	43.9
Suppliers	1.2	0.5
Financial Institutions	29.8	11.6
Bonds	-	-
Public Debts n.e.i	-	-
Total Public M&LT Debt	256.5	100.0
Other M&LT Debts	-	-
Short-term Debt (disb. only)	-	-

DEBT AND DEBT SERVICE	Actual 1970	Actual 1971	Actual 1972	Actual 1973	Estimated 1974
Public Debt Out. & Disbursed	169.0	204.9	226.9	256.5	282.2
Interest on Public Debt	6.2	7.0	8.1	8.9	9.8
Repayments on Public Debt	14.8	13.2	13.3	13.0	11.6
Total Public Debt Service	21.0	20.2	21.4	21.9	21.4
Other Debt Service (net)	-	-	-	-	-
Total Debt Service (net)	21.0	20.2	21.4	21.9	21.4
Burden on Export Earnings (%)					
Public Debt Service	11.6	10.6	8.6	6.3	5.6
Total Debt Service	11.6	10.6	8.6	6.3	5.6
TDS+Direct Invest. Inc.	14.5	14.3	13.9	11.2	11.0
Average Terms of Public Debt					
Int. as % Prior Year DO&D	4.0	4.1	4.0	3.9	3.8
Amort. as % Prior Year DO&D	9.5	7.8	6.5	5.7	4.5
IBRD Debt Out. & Disbursed	47.4	57.1	64.2	67.4	66.5
" as % Public Debt O&D	28.0	27.9	28.3	26.3	23.6
" as % Public Debt Service	27.1	28.7	29.0	34.2	38.3
IDA Debt Out. & Disbursed	22.7	26.4	33.2	45.5	54.7
" as % Public Debt O&D	13.4	12.9	14.6	17.7	19.4
" as % Public Debt Service	0.7	0.9	1.3	2.3	2.6

. not applicable
.. not available
... not available separately but included in total

e staff estimate
- nil or negligible
-- less than half the smallest unit shown

EAIDB
December 10, 1975

EXTERNAL ASSISTANCE AND NET PRIVATE CAPITAL INFLOW TO ETHIOPIA

Gross Public Loan Disbursements by Source, 1962-1973

(US $ millions)

	Total 1962 to 1965	1966	1967	1968	1969	1970	1971	1972	1973	Percentages 1962-1965	1966-1969	1970-1973
IBRD	14.3	7.8	6.4	4.8	6.8	5.6	12.5	9.4	6.0	17.7	24.6	25.6
IDA	5.8	2.7	2.6	4.1	4.4	2.8	3.7	4.5	8.6	7.2	13.2	15.0
USA	43.4	5.2	4.6	9.3	7.8	5.7	15.7	9.5	10.6	53.7	25.7	31.7
USSR	5.9	3.7	3.8	1.8	0.7	-	0.3	-	-	7.3	9.5	0.2
Germany	3.4	-	2.0	0.2	0.6	1.4	3.8	3.8	3.8	4.2	2.7	9.8
Sweden	0.8	-	-	-	1.6	1.0	1.9	2.0	1.4	1.0	1.5	4.8
Italy	0.7	-	1.1	4.3	5.0	2.0	4.3	0.7	-	0.9	9.9	5.3
Yugoslavia	4.0	0.4	0.6	0.1	0.2	0.1	-	-	-	5.0	1.2	-
United Kingdom	-	-	-	-	-	-	-	0.6	2.0	-	-	2.0
Netherlands	-	10.9	-	-	-	-	-	-	-	-	10.4	-
Other	2.4	0.4	-	0.3	0.7	2.4	1.9	2.0	1.1	3.0	1.3	5.7
TOTAL	80.8	31.1	21.1	24.9	27.7	20.9	44.0	32.5	33.5	100.0	100.0	100.0

Gross Public Loan Capital Inflow by Sector, 1962-1973

(US $ millions)

Communications and Power	59.5	22.4	12.9	8.0	12.2	8.4	26.2	21.0	16.9	73.6	53.0	55.4
Industry	13.8	3.6	4.5	4.9	1.5	2.4	2.1	2.0	1.6	17.1	13.8	6.2
Agriculture	0.3	0.1	0.2	-	-	0.3	8.7	4.7	6.7	0.4	0.3	15.6
Health	0.8	0.5	1.5	5.9	8.6	3.8	2.9	1.6	1.5	1.0	15.7	7.5
Education	0.4	-	0.4	2.4	2.2	1.2	0.8	1.6	4.0	0.5	4.8	5.8
DFC	3.0	0.1	-	0.7	1.8	4.2	3.2	0.5	2.1	3.7	2.5	7.6
Other	3.0	4.4	1.6	3.1	1.4	0.6	0.2	1.0	0.7	3.7	10.0	1.9
TOTAL	80.8	31.1	21.1	24.9	27.7	20.9	44.0	32.5	33.5	100.0	100.0	100.0

Net Private Capital Inflow 1965-1973

(US $ millions)

1965	1966	1967	1968	1969	1970	1971	1972	1973	Total 1965-69	Total 1970-73
10.4	6.4	2.8	6.4	-2.0	11.2	14.6	13.2	19.6	24.0	58.6

STATUS OF BANK GROUP OPERATIONS IN ETHIOPIA

A. STATEMENT OF BANK LOANS AND IDA CREDITS
(As of September 30, 1975)

Loan or Credit Number	Year	Borrower	Purpose		Amount (US$ Million) (less cancellation) Bank	IDA	Undisbursed
Ten loans fully disbursed					93.3		
Three credits fully disbursed						28.4	
605-ET	1969	BTE/2	Telecommunications IV		4.5		0.6
169-ET	1969	Ethiopia	Wolamo Agriculture			3.5	-
188-ET	1970	Ethiopia	Humera Agriculture			3.1	0.2
243-ET	1971	Ethiopia	Education II			9.5	4.0
269-ET	1971	Ethiopia	Dairy			4.4	2.8
818-ET	1972	AAWSA/3	Addis Ababa Water Supply & Sewerage		10.8		5.7
290-ET	1972	Ethiopia	Coffee Processing			6.3	5.1
304-ET	1972	Ethiopia	Agricultural & Industrial Development Bank			11.0	3.7
332-ET	1972	Ethiopia	Highways V			17.0	12.6
365-ET	1973	Ethiopia	Livestock II			5.0	4.2
416-ET	1973	Ethiopia	Agric. Minimum Package			21.0	16.3
417-ET	1973	Ethiopia	Education III			10.0	10.0
418-ET	1973	Ethiopia	Amibara Irrigation			17.0	15.8
453-ET	1974	Ethiopia	Telecommunications V			21.4	20.6
485-ET	1974	Ethiopia	Drought Areas Rehabilitation			10.0	9.3
486-ET	1974	Ethiopia	Wolamo Agriculture II			12.0	12.0
516-ET	1974	Ethiopia	Lower Adiabo			9.5	9.1
552-ET	1975	Ethiopia	Highways VI			32.0	32.0
553-ET	1975	Ethiopia	Education IV			23.0	23.0
554-ET	1975	Ethiopia	Telecommunications V			16.0	16.0
	Total				108.6	260.1	
	of which has been repaid				33.6	0.3	
	Total now outstanding				75.0	259.8	
	Amount sold			6.0			
	of which has been repaid			6.0	-	-	
	Total now held by Bank and IDA (prior to exchange adjustments)				75.0	259.8	
	Total undisbursed				6.3	196.7	203.0

1/ Ethiopian Electric Light and Power Authority
2/ Board of Telecommunications of Ethiopia
3/ Addis Ababa Water Supply and Sewerage Authority

ETHIOPIA

B. STATEMENT OF IFC INVESTMENTS
(As of September 30, 1975)

Year	Obligor	Type of Business	US$ Million Amount Loan	Equity	Total
1965	Cotton Company of Ethiopia I	Textiles	1.5	1.0	2.5
1966	Ethiopia Pulp and Paper Co.	Paper		1.9	1.9
1968	HVA Metahara	Sugar	5.5	3.5	9.0
1970	Cotton Company of Ethiopia II	Textiles	0.4	0.2	0.6
1973	Cotton Company of Ethiopia III	Textiles	1.5	0.2	1.7
	Total Gross Commitments		8.9	6.8	15.7
	less cancellations, terminations, repayments and sales		4.5	3.1	7.6
	Total Commitments now held by IFC		4.4	3.7	8.1
	Total Undisbursed		-	-	-

C. PROJECTS IN EXECUTION - ETHIOPIA[1/]

Ln. No. 605 Telecommunications IV Project; US$4.5 million Loan of June 3, 1969; Date of Effectiveness: September 2, 1969; Closing Date: December 31, 1973, postponed to December 31, 1974 and subsequently to December 31, 1975.

SIDA is providing joint financing of $4.5 million equivalent to finance part of the foreign exchange cost. Overall progress has been reasonably on target. However, installation of three microwave routes were not accomplished until mid-1975, about one and one-half years behind schedule; these routes are now being tested for acceptance. The delays were mainly due to difficulty in obtaining suitable consultants to work on the survey of these routes and labor strikes in supplier's country.

Cr. No. 169 Wolamo Agriculture Development Project; US$3.5 million Credit of November 26, 1969; Date of Effectiveness: April 28, 1970; Closing Date: June 30, 1976.

Project was completed 18 months ahead of schedule. While crop yields and farm income are above appraisal estimates, livestock development made slow progress and did not reach anticipated targets.

Cr. No. 188 Humera Agriculture Project; US$3.1 million Credit of May 28, 1970; Date of Effectiveness: September 30, 1970; Closing Date: December 31, 1973, postponed to December 31, 1974 and then to December 31, 1975.

The project is behind appraisal completion schedule by about one year, due mainly to delays in procurement of heavy road construction equipment and delays in installation of the Humera water system, which had to be undertaken by force account construction due to non-availability of contractors. Consultants' study on the second phase project was submitted to the Government in February 1974. Only about $200,000 remain undisbursed. The project is located near the Eritrean border and the current unrest and fighting in Eritrea has adversely affected the movement of surplus agricultural produce to Eritrean ports and caused disruption of the project road construction and agricultural research programs. Agricultural extension work is proceeding satisfactorily.

Cr. No. 243 Education II Project; US$9.5 million Credit of May 6, 1971; Date of Effectiveness: August 26, 1971; Closing Date: June 30, 1976.

Project implementation is progressing satisfactorily. During second semester 1974, 21 civil works contracts were awarded. The Academy of Pedagogy and its teachers institute is in use, 9 project institutions are about to be handed over, the remaining are scheduled for completion by last semester 1975, six months before the closing date. Furniture and equipment procurements are on schedule, some supplementary equipment will be ordered soon. Technical assistance is progressing and the manpower study has been extended by three

1/ These notes are designed to inform the Executive Directors regarding the progress of projects in execution, and in particular to report any problems which are being encountered, and the action being taken to remedy them. They should be read in this sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

man-years to 7½ man-years. Currently a cost overrun of about US$2.8 million may be expected. However, bilateral assistance may cover part of the overrun. The Project Unit is updating the costing and the next supervision mission will be paying special attention to it.

Cr. No. 269 Addis Ababa Dairy Development Project; US$4.4 million Credit of August 30, 1971; Date of Effectiveness: May 1, 1972; Closing Date: December 31, 1977

The project was reviewed in September of this year and most of the recommendations made by the October 1974 supervision mission are being implemented. The main remaining constraints are the appointment of an adequate number of permanent senior Project staff and the standstill of the credit program for dairy farm development which has not yet been reformulated by the Agricultural and Industrial Development Bank following the Land Reform Law of April 29, 1975.

Cr. No. 290 Coffee Processing Project; US$6.3 million Credit of March 20, 1972; Date of Effectiveness: December 15, 1972; Closing Date: December 31, 1977

Physical execution of major project components is about 24 months behind schedule due to delays in Credit effectiveness, procurement of road construction equipment and start of construction of coffee washing stations. Road construction started in December 1974 and is now progressing well. Project execution is now accelerating.

Ln. No. 818 Addis Ababa Water Supply and Sewerage Project; US$10.8 million Loan of May 2, 1972; Date of Effectiveness: September 8, 1972; Closing Date: September 30, 1977.

Progress on the water supply component has improved significantly in recent months and completion may be ahead of schedule. Sewerage construction will begin at least one year late, due first to delays in design and acquisition of sewage treatment plant site, and then to financial constraints. Estimated cost overruns now total about US$10 million (70%) over the appraisal estimates, including about US$6 million of foreign exchange costs, because of unanticipated increases in the cost of all goods and services. Including requirements for funds outside the project, a total financing gap of US$13 million has developed for AAWSA of which US$6 million would be filled by an expected African Development Fund loan in this year to cover the foreign exchange cost of sewerage. The balance of the overrun will have to be met by additional internal cash generation, and probably some government assistance. Government action on a substantial tariff increase is being urged by the Bank.

Cr. No. 304 Agricultural and Industrial Development Bank Project; US$11.0 million Credit of May 10, 1972; Date of Effectiveness: October 25, 1972; Closing Date: December 31, 1976.

The funds originally allocated to the industrial portion of the credit have been fully committed and $1.4 million have been reallocated to the industrial portion from the agricultural portion which has proceeded more slowly. An additional $1.5 million has been reallocated to finance an Emergency Tractor Ploughing and Seed Distribution Program. The World Bank has recently signed a Project Agreement as Executing Agency for a UNDP project to provide a financial advisor to AIDB for two years to advise in the planning, organization and control of its financial operations.

Cr. No. 332 Fifth Highway Project; US$17.0 million Credit of September 29, 1972; Date of Effectiveness: July 24, 1973; Closing Date: December 31, 1976.

The four feeder road contracts are progressing satisfactorily. One successful Ethiopian contractor has received an equipment loan financed under the project from the Agricultural and Industrial Development Bank. The Government is being reminded of its obligations to control vehicle axle loads.

Cr. No. 365 Second Livestock Project; US$5.0 million Credit of April 2, 1973; Date of Effectiveness: August 24, 1973; Closing Date: July 15, 1977.

The construction program of the project is more than one year behind schedule mainly due to problems with private contractors, whose activities and willingness to bid for contracts have been hampered by uncertainty and reduced access to the credit institutions. The project is now seeking IDA approval for the establishment of a construction unit and the execution of project constructions under force account. The project is also suffering from a cost overrun problem, and a revised development program has been approved. Funds, however, will be exhausted early in calendar year 1977 and it is now recommended that funds for completion of this program should be included in the next livestock development project.

Cr. No. 416 Agricultural Minimum Package Project: US$21.0 million Credit of July 5, 1973; Date of Effectiveness: April 15, 1974; Closing Date: September 30, 1977.

Project implementation has gone well, and has exceeded targets for establishment of minimum package areas. Participation of tenant farmers has, however, been lower than anticipated and is being studied. The increased price of fertilizer poses a serious threat to the program. For this year, the Government has obtained bilateral financing which will assist in the procurement of fertilizer and make possible a subsidy in the fertilizer price to the small farmers.

Cr. No. 417 Third Education Project; US$10.0 million Credit of July 5, 1973; Date of Effectiveness: August 30, 1974; Closing Date: December 31, 1978.

The contract for the design, the preparation of bidding and contract documents and supervision during construction of the University Science Center was signed in February 1975; the consultants have established their office in Addis Ababa and designs have started. Most site surveys have been completed. Sketch plans for the Science Curriculum Development Center and for the Educational Materials Production Center have been approved and preparation of bidding and contract documents for these institutions have commenced. Designs for the agricultural institutions under the project is about to commence. Draft furniture and equipment lists and bidding documents are under preparation. The Government is considering deletion of the Ethiopian Orthodox Church Development Commission's Training Center from the project. The Project Manager has initiated a working party to oversee and coordinate technical assistance implementation. Disbursement applications can be expected soon.

Cr. No. 418 Amibara Irrigation Project; US$17.0 million Credit of July 5, 1973; Date of Effectiveness; August 30, 1974; Closing Date: March 31, 1979.

The 14 months delay in credit effectiveness was mainly caused by a delay in parliamentary ratification of the credit. Meanwhile, project consultants estimated a 3-4 times increase in project costs, and questions were raised whether the project was still financially feasible and economically viable. Consultants had prepared alternative proposals, and an IDA mission visited Ethiopia in February 1975 to examine the alternative ways of constructing project works and implementing the project. A follow-up study comparing a basic gravity irrigation scheme with a pump scheme for the project area was completed by project consultants in May. This showed the gravity irrigation to be a more practical alternative to pump irrigation. However, this leaves a financing gap of about US$17 million. Other financing agencies have been approached to fill the gap and a mission for the appraisal of the redesigned project is planned for early 1976.

Cr. No. 453 Telecommunications V Project (First Tranche); US$21.4 million Credit of January 17, 1974; Date of Effectiveness: August 23, 1974; Closing Date: June 30, 1979.

The project is approximately six months behind schedule due to initial delays resulting from labor disturbances in Ethiopia, but progress is now satisfactory.

Cr. No. 485 Drought Areas Rehabilitation Project; US$10 million Credit of June 26, 1974; Date of Effectiveness: November 7, 1974; Closing Date: September 30, 1977.

The project is beginning to pick up speed and two more sub-projects (making a total of four out of eight) have been approved by the Commission's Project Review Group (PRG) and three more are under preparation. The preparation of the eighth sub-project -- rural roads -- is being complicated by the Ethiopian Highway Authority (EHA) insistence on higher minimum rural road standards with consequently higher construction costs than the Association can accept; attempts to resolve this matter are being made.

Cr. No. 486 Second Wolamo Agricultural Development Project; US$12.0 million Credit of June 26, 1974; Date of Effectiveness: June 4, 1975; Closing Date: June 30, 1980.

Project execution started in July 1975 on a reduced budget, since local funds were limited. Most key staff have recently resigned as a consequence of junior staff unrest. Project Director and Deputy Director are now replaced and recruitment of other key staff is under way.

Cr. No. 516 Lower Adiabo Development Project: US$9.5 million Credit of October 18, 1974; Date of Effectiveness: February 5, 1975; Closing Date: June 30, 1980.

The credit became effective February 5, 1975, but Government failed to supply adequate funds to implement the project; nevertheless, most of the key staff have been recruited, good progress has been made with land planning, a training course for agricultural extension agents has been started and some loans for the purchase of work oxen have been made to erstwhile landless peasants recently granted farms under the new land reform procedures. Project activities will complement the Land Reform Program started under Proclamation No. 31 of 1975. Law and order prevails in the project area.

Cr. No. 552 Sixth Highway Project: US$32.0 million Credit of June 4, 1975; Date of Effectiveness: August 15, 1975; Closing Date: December 31, 1979.

Cr. No. 553 Fourth Education Project, US$23.0 million Credit of June 4, 1975; Date of Effectiveness: August 6, 1975: Closing Date: December 31, 1981.

Cr. No. 554 Fifth Telecommunication Project (Second Tranche); US$16.0 million Credit of June 4, 1975; Date of Effectiveness: August 26, 1975; Closing Date: June 30, 1980.

ETHIOPIA - RANGELANDS DEVELOPMENT PROJECT

CREDIT AND PROJECT SUMMARY

BORROWER:	Ethiopia
BENEFICIARY:	Livestock and Meat Board (LMB)
AMOUNT:	US$27.0 million equivalent
TERMS:	Standard
PROJECT DESCRIPTION:	The project would, over a five year period, provide for the development and rehabilitation of three lowland range areas inhabited mostly by nomadic pastoralists engaged in traditional extensive livestock grazing and production. These traditional practices would be restructured into an effective livestock industry by the establishment in each of the three sub-project areas -- the Southern Rangelands, Jijigga and the Northeast Rangelands -- of individual range management development units, providing integrated programs of range management, veterinary services, improved roads and water facilities. Specifically, the Project would provide for:

(a) the institution of land planning and range management programs in conjunction with a program for the gradual control of livestock numbers;
(b) the establishment of a basic veterinary and livestock extension service designed to reach the nomadic pastoralists;
(c) construction of water facilities including both permanent and rainy season water ponds as well as a small number of boreholes and concrete water tanks; a limited water spreading program would be carried out in the Northeast Rangelands area;
(d) construction of trade roads and feeder tracks;
(e) the development of fattening ranches and a feedlot (Southern Rangelands only) and smallholder fattening schemes;

f) a program of trials and studies with emphasis on improved range use and grazing control practices;
g) training of Project staff, livestock owners and tribal leaders; and
h) provision of supplemental staff within LMB in order to improve its overall efficiency and to enable it to provide technical and administrative services as well as staff for the three sub-project units.

ESTIMATED COSTS:

Total project cost is estimated at US$42.9 million with a foreign exchange component of US$14.0 million or 33%. Taxes and duties on project items are estimated at US$300,000. Project costs are summarized on page 4 by major components.

FINANCING PLAN:

	US$ million	%
IDA	27.0	63
ADF	5.5	13
Government	10.5	24
	43.0	100

The proposed ADF contribution would parallel finance up to 76% of the costs of the ranches, the feedlot, the smallholder fattening program and specified roads in the Southern Rangelands sub-project.

ESTIMATED DISBURSEMENTS:

	(US$ millions)	
Fiscal Year	Annual	Cumulative
1977	2.55	2.55
1978	6.70	9.25
1979	6.30	15.55
1980	6.00	21.55
1981	5.45	27.00

PROCUREMENT ARRANGEMENTS:

Procurement of vehicles would be through normal IDA international competitive bidding, with the exception of up to fifteen vehicles purchased through normal commercial channels, to facilitate early operation. Since project buildings and structures will necessarily be scattered over the three range areas, structures would be built by force account or by local contractors hired by LMB, while all project

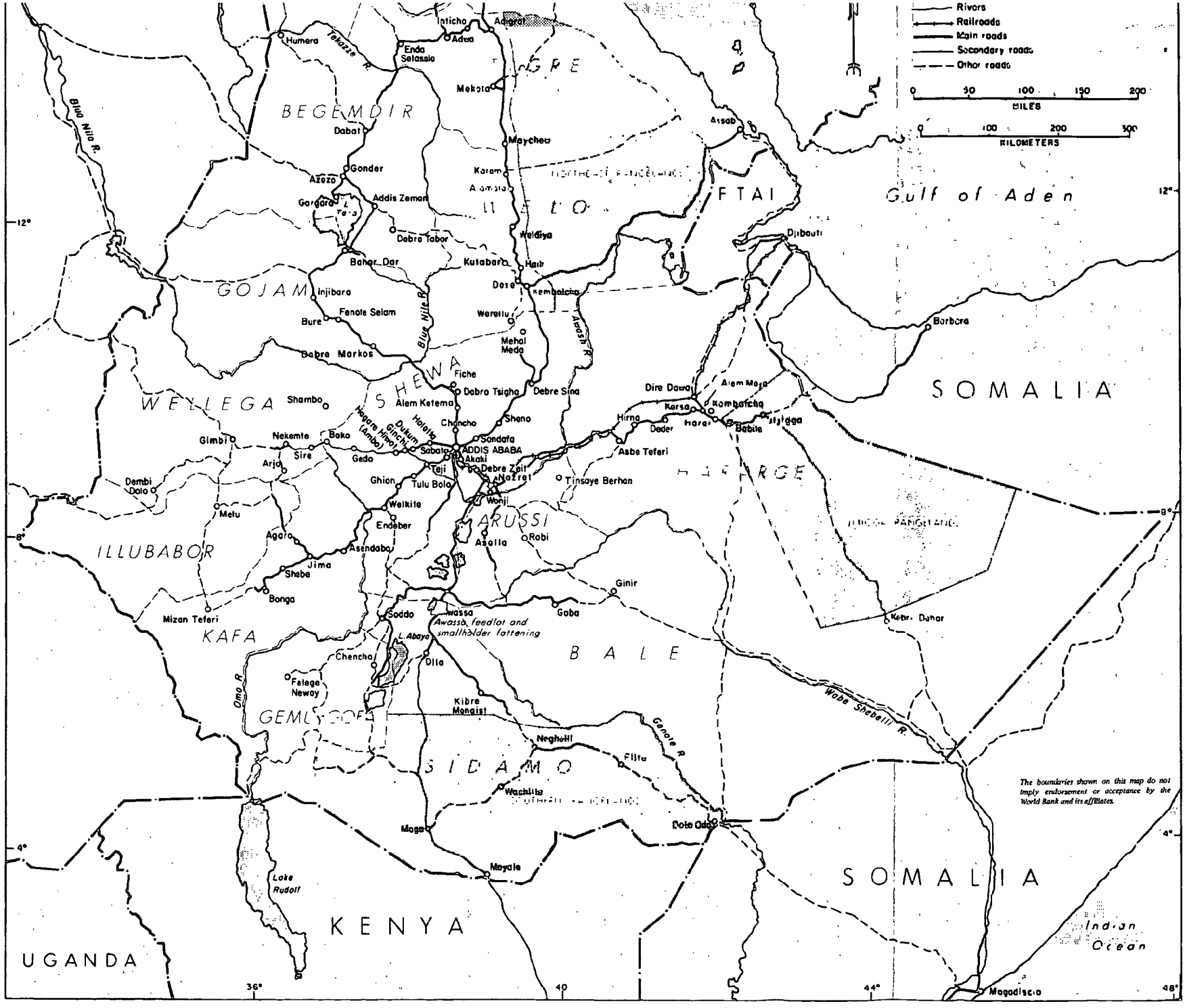
headquarters buildings and senior staff housing would be constructed using normal government procedures. Various items of veterinary equipment, medicines, chemicals and fertilizers would be purchased through normal commercial channels, since the small amounts involved, needed at scattered locations at varying times, make these items unsuitable for international competitive bidding.

TECHNICAL ASSISTANCE: Fourteen internationally recruited experts for project execution. (Over half are expected to be Ethiopians.)

RATE OF RETURN: 24 percent

APPRAISAL REPORT: Report No. 854a-ET dated November 21, 1975, Eastern Africa Projects Department, Agricultural Credit and Livestock Division.

	Southern Rangelands	Jijigga	Northeast Rangelands	Total	Foreign Exchange
	US$'000				%
Range Management	777	929	666	2,372	35
Veterinary Services	1,738	1,690	1,042	4,469	38
Water	1,111	440	-	1,551	53
Irrigation/Water Spreading	-	-	3,105	3,105	39
Ranches	2,023	-	-	2,023	27
Feedlot	1,019	-	-	1,019	30
Smallholder Fattening	816	1,457	-	2,273	25
Marketing and Grazier Scheme	-	-	436	436	15
Roads	2,451	989	553	3,993	29
Training	593	514	273	1,380	50
Trials and Studies	519	703	156	1,377	36
Services and Supplies	-	-	306	306	35
Project Administration	1,260	1,242	1,171	3,674	22
LMB Rangeland Development Dept.	418	423	419	1,260	38
Base Cost	12,727	8,387	8,128	29,241	34
Contingencies					
Physical (10% per annum)	1,272	838	813	2,924	34
Price (10% p.a. compounded)	4,611	2,985	3,096	10,691	30
Total Project Cost	18,609	12,210	12,037	42,856	33


Rivers
Railroads
Main roads
Secondary roads
Other roads
0 50 100 150 200
MILES
0 100 200 300
KILOMETERS
Gulf of Aden
Indian Ocean
SOMALIA
SOMALIA
KENYA
UGANDA
ERITREA
BEGEMDIR
GOJAM
WELLEGA
SHEWA
ILLUBABOR
KAFA
GEMU GOFA
SIDAMO
BALE
HARERGE
ARUSSI
DANAKIL
ISSA
AFAR
Humera
Tekezze R.
Blue Nile R.
Inticho
Adigrat
Adwa
Enda Selassie
Mekele
Dabat
Gonder
Azezo
Gorgora
L. Tana
Addis Zemen
Dabre Tabor
Bahar Dar
Maychew
Karam
Weldiya
Kutabera
Hair
Dese
Kembolcha
Injibara
Fenote Selam
Bure
Dabre Markos
Werelu
Mehal Meda
Blue Nile R.
Awash R.
Fiche
Dabro Tsigha
Debre Sina
Alem Ketema
Chancho
Sheno
Sondafa
Shambo
Nekemte
Bako
Gimbi
Sire
Arjo
Gedo
Hagare Hiwot (Ambo)
Gincho
Dukum
Holota
Sabata
ADDIS ABABA
Akaki
Teji
Debre Zeit
Nazret
Tinsaye Berhan
Ghion
Tulu Bolo
Welkite
Endeber
Woji
Asella
Robi
Dembi Dolo
Metu
Agaro
Asendabo
Jima
Shabe
Bonga
Mizan Teferi
Soddo
Wassa
Awassa, feedlot and smallholder fattening
L. Abaya
Chencha
Dila
Gaba
Ginir
Felege Neway
Omo R.
Kibre Mengist
Neghelli
Genale R.
Filtu
Wabe Shebelli R.
Wachitta
Moga
Moyale
Lake Rudolf
Dire Dawa
Kersa
Hirna
Deder
Harar
Alem Maya
Rombarcha
Babile
Jijiga
Asbe Teferi
Assab
Djibouti
Berbera
Kebr. Dahar
Dolo Odo
Mogadiscio
12°
8°
4°
36°
40
44°
48°
The boundaries shown on this map do not imply endorsement or acceptance by the World Bank and its affiliates.