

Agricultural Development Strategies in Ethiopia
1950-1970

by

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AGRICULTURAL DEVELOPMENT STRATEGIES IN ETHIOPIA
1950-1970*

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Introduction

In the past 20 years a number of bi-lateral as well as multilateral aid agencies have been involved in agricultural development programs in Ethiopia. Important among these has been the World Bank group, various agencies within the United Nations, the U.S.S.R., Czechoslovakia, Germany, Yugoslavia, The United Kingdom, The Netherlands, Norway, Denmark, Sweden, and U. S. aid agencies. In the following, an attempt is made to outline the agricultural development strategy pursued by the Ethiopian government and the various aid agencies during the 1950-1970 period. Since AID has provided a large part of the resources for activities in this area, major emphasis is placed on detailing its programs.^{1/} In addition, to tracing strategies, an attempt is also made to identify "success areas" as well as issues which have not been adequately treated. In conclusion, several alternative agricultural development strategies which might be considered during the 1970's by AID are briefly covered.

The documents and publications reviewed in preparing this paper are included in the bibliography (Appendix B). A number of individuals

*This study is part of the 1970 Summer Research Project sponsored by The Agency for International Development, Bureau for Program and Policy Coordination. Additional studies of Brazil, Turkey, India, Morocco, and the Dominican Republic were also included in the Research Project. Wayne Schutjer and Antonio Gayoso were responsible for the latter four studies.

**Much of the data and bibliography included in this paper were assembled by John Varley. His valuable assistance was much appreciated.

^{1/} AID is used to denote the Agency for International Development as well as predecessor agencies.

who have been associated with AID's program in Ethiopia provided the author with a good deal of background information.^{2/} Where possible, they have reviewed the description of strategy for accuracy; they may, however, not concur in all of the conclusions drawn.

Ethiopia's Agricultural Development Strategy, 1950-1970

Aside from possibly Nepal, Afghanistan, Bolivia, and several other small African countries, Ethiopia's agricultural sector in 1950 was probably the least developed of any country with which AID has worked. For all intents and purposes, there were no Ethiopian agricultural technicians, veterinarians, or medics in the country in the early 1950's. Aside from a few Europeans, there was little technical agricultural expertise available to mount any kind of development effort when AID began to assist Ethiopia in 1952; there were only five Ethiopians with agricultural college degrees located in the country. Rural education was essentially zero, there was no higher education in agriculture, no agricultural research facilities, rural transportation systems were very limited, the Ministry of Agriculture had a very restricted budget and set of activities, almost no institutional agricultural credit, no extension services, very poorly developed modern-input markets for agriculture, and very limited internal commercial markets for agricultural products.

Ninety percent of Ethiopia's exports in the early 1950's were made up by coffee, hides and skins, grains and pulses, oil seeds and oil seed products, plus other miscellaneous agricultural commodities [37].

A similar percentage of the population was also occupied in agriculture, but only a small portion of them were closely associated with the commercial market.

^{2/} Especially helpful in this regard were Michael Galli, Willard Meinecke, Eino Siira, Albert Slaughter and William Wayt.

During the 1950's, very little of Ethiopia's investment or operational expense budgets were aimed directly at agriculture. Funds were mainly committed to defense, improvement of the transportation systems, and urban education. Some important work, however, was done on desert locus and disease control, especially malaria, and this along with road improvement had a favorable impact on rural areas. Although not involving large amounts of funds, the government also gave strong support to developing higher educational facilities in agriculture through funding of two technical schools and an agricultural college. Additional support was also given to developing an extension service and some institutional agricultural credit capacity. Stress was also placed on encouraging large-scale, plantation-type farm operations under various forms of ownership and management. This was especially important in irrigated areas for cotton, rice, and sugar cane [42].

By most measures, the Ethiopian commitment to agricultural development during the 1950's was very modest. Agriculture received less than five percent of total public investment during this period. Agriculture was pretty much left to develop-as-it-will.

It is interesting to note the make-up of the industrial sector in Ethiopia during the early 1960's. Almost half of the manufacturing capacity developed to this point was related to food processing, another 40 percent was textiles and most of the remainder tied directly to processing other agricultural raw materials.

The First Ethiopian Five-Year Economic Development Plan covering the years 1957-61 stressed infrastructure and did little more than attempt to lay out a few general agricultural goals [27]. The Second Five-Year Plan covering 1962-63 to 1966-67 attempted some implementation in agriculture [26], and stressed two types of activities: (1) increasing

output through further encouragement of large-scale public, private, and cooperative farms, and (2) promotion of peasant agriculture through land reform, community development, extension, cooperatives, and credit. Over half of the proposed five-year investment budget (which was about \$100 million U. S.) was planned for large-scale farm activities. Cooperatives also received emphasis. Research, credit for large farmers, institutional development and technician training also received attention in the Plan. It should be noted in passing, however, that Ethiopia was only able to mobilize sufficient resources during the Second Five-Year Plan period to fund 42 percent of these planned expenditures in agriculture [81, p. 40].

During the late 1950's and 1960's several agricultural service institutions were initiated or strengthened. These included setting up the Awash Valley Authority, community development programs, agricultural cooperatives, various agricultural research facilities, an extension service, and an animal health school. A new Ministry of Land Reform, a Livestock Development Program, a Grain Corporation, and an Oilseeds Development Company were also formed during the mid-1960's [91, p. 16]. In addition, the Ministry of Agriculture was strengthened and decentralized. A switch was also made in tax structure for agriculture from land taxes to income taxes. A number of surveys were also begun, mainly by foreign contractors during the mid-1960's to start to sketch out a more comprehensive agricultural development strategy.

The Third Five-Year Plan covering the period 1969 through 1973 showed some sharpening of Ethiopia's agricultural development strategy [40, 4]. Major emphasis was placed in this Plan on raising the growth rate of agricultural output. Investment targets for agriculture were somewhat above those projected in the Second Plan, but if realized, they

will mean a more-than-doubling of actual expenditures. Roughly 11 percent of the investment budget was slated for agriculture.

The Third Five-Year Plan stressed concentration of activities for achieving output increase in agriculture. This included major emphasis on commercial agriculture, foreign capital, and private enterprise activities supporting government. In addition, settlement of new lands by Ethiopians via "homestead laws" were also stressed. To treat subsistence agriculture as well as commercial farms, a few strategically selected area development projects were to receive a concentration of effort. Stress was also placed on increasing production of specific commodities such as livestock in order to diversify and expand agricultural exports. Fundwise, about 60 percent of the capital expenditure in agriculture will be for commercial farms, another 10 percent for subsistence units and the remainder spent on general service activities.

AID's Agricultural Development Strategy

1951-1959

Technical cooperation between the U. S. and Ethiopia began on June 16, 1951, with the signing of a Point Four general agreement [67]. AID soon identified three areas on which to concentrate: agricultural education, general education, and health. Within these areas stress was placed on building a foundation of trained people upon which viable service institutions could later develop. Approximately one-half of AID's efforts and services during the early 1950's were directed at developing agricultural educational capacity in Ethiopia, and most of the remainder of the effort was directed at health improvement and general education. A small amount of resources was also put into the desert locus control program.

Over the period 1952 to 1960, AID spent an average of about one and a half million dollars per year on technical assistance to agriculture in Ethiopia. Almost all of this went into developing secondary agricultural educational facilities, higher education in agriculture, and some agricultural research capacity. In most cases, Ethiopian funds matched or exceeded the amounts of U. S. funds in these projects [38, p. 445].

A large part of AID's resources directed toward agricultural education went through a technical assistance contract with Oklahoma State University [67]. Initially, this included establishing an agricultural high school at Jimma (1952), but also included later development of an agricultural college at Alemaya (1956). Very close liaison was maintained between AID and the contractor during the first couple of years by having an individual serve as AID agricultural officer as well as head of the Oklahoma State group. Aside from a few activities with livestock, cooperatives, participant training for about 50 individuals (Appendix A, Table 4), and a few other miscellaneous agricultural technical assistance projects, the Oklahoma State project made up most of AID's agricultural program up until the mid-1960's.

1960-1970

During the 1960's AID continued to spend one to two million dollars per year in agricultural projects in Ethiopia (Appendix A, Table 2). Lack of adequate support and utilization of AID financed projects by the Ministry of Agriculture resulted, however, in a hiatus in a number of agricultural programs during the late 1950's and early part of the 1960's. Most of the technical programs, aside from the Oklahoma State projects were phased out, and no new projects started. Part of this was due to the failure of the Ethiopian government to adequately staff and man a half dozen agricultural research stations which AID had helped establish.

(These stations were largely financed with so-called "Richardson money".) It wasn't until 1963-64 that dialogue was again established between AID and the Ministry, and interest in new projects shown. A regional livestock development project, a grain storage project, an agricultural extension program, and a number of small studies on potential agricultural projects were the first activities started after ending of the impasse.

Sometime during the early 1960's pressure from Congress and some tension between the AID Mission and the Oklahoma State Contract team resulted in implementation of an accelerated schedule for phase out of the agricultural education program conducted by Oklahoma State. Although the agricultural college at Alemaya had only been functioning since 1956, a phase out date of 1966 was set. This was later extended to 1968 when the contract was terminated.

In 1965 a technical assistance project to provide agricultural advisory services to the Ministry of Agriculture and the Planning Commission was initiated. This had been aimed at increasing institutional capacity to form development projects, plan on a regular basis, and implement agricultural sector plans. About \$2 million has been spent through 1969 on this activity.

An evaluation of the AID country program in 1965 by Barnett and Clark suggested that AID stress agriculture and education in its future programs. They also emphasized the need to generate more information regarding the problems and possible projects in the agricultural sector. As a result of these suggestions, the Mission signed a \$1.2 million dollar contract with Stanford Research Institute (SRI) to do an extensive Agro-Industrial Sector survey covering the period 1967 to 1969.

Over 240 man-months of staff time went into the 20 studies published under the SRI contract [56]. The main objectives of the contract were to: (1) conduct a broad economic analysis of the agricultural sector, (2) help plan for a structural shift toward income producing activities in the agricultural sector, (3) select at least six potential agro-industrial projects, and (4) prepare implementation plans for these selected projects. The Mission essentially asked "where can we put our chips?"

Closely in step with IBRD recommendations, the Third-Year Plan, and and initial Mission thinking, SRI suggested the following strategy:

- 1) recognize agriculture as the base for national development,
- 2) emphasize increases in production,
- 3) geographically concentrate development efforts,
- 4) initially focus on short-term production gains,
- 5) direct most resources at medium-size to large farms,
- 6) use package of activities in concentrated efforts,
- 7) stress making supplies and services available within package,
- 8) continue efforts to expand infrastructure servicing agriculture, and
- 9) continue efforts to improve and expand agricultural service institutions.

In way of specific projects, SRI suggested the following eight for AID consideration:

- 1) Increase availability of farm inputs: farm machinery, livestock feed and forage, fertilizer, farm chemicals, improved crop seeds, and improved farm management.
- 2) Apply package program to several specific commodities and several geographical regions. Twelve geographic regions were suggested, and oil crops and cattle stressed.

- 3) Provide supplemental irrigation in six specific geographical regions.
- 4) Increase amount of institutional agricultural credit and channel it toward development projects (tied to 1, 2, and 3). Another special fund should be set up to begin to provide credit to small farmers.
- 5) Set up facilities for processing more agricultural products: solvent extraction of oil seeds, castor oil processing, and dry salting of cattle hides.
- 6) Improve the marketing and export programs for specific commodities: livestock, grains, pulses, and oilseeds.
- 7) Provide improved agricultural techniques and technology: expand agricultural research capacity and extension service.
- 8) Continue to provide more trained manpower to staff agricultural development machinery.

The AID Mission is apparently in agreement with the SRI recommendations. A \$5 million agricultural sector loan in 1969 was the first step in implementing some of SRI's recommendations [7]. This loan is aimed at providing about one-third of the Ethiopian budgeting resources for agriculture during FY 1971. It will enable the Ethiopian Government to contribute its share of local currency in a number of foreign-sponsored projects in agriculture. Specifically, the counterpart will be used for extending the cadastral surveying by the Ministry of Land Reform and Administration, help finance feeder roads and bridge building to support regional development projects, and help expand agricultural credit. In addition, local currency costs of several AID-financed agricultural projects will be financed with this loan or subsequent sector loans: the Shashamane Farm Development project, the Ada Farm Development project, and the Borkenna Valley project.

AID has also moved to fund two area development projects. The Shashamane project would provide supervised credit plus other inputs

as part of a package to approximately 140 medium-to-large-size farmers [6]. The Ada project is a similar packaged approach except work will be concentrated in a traditional small farming area.

Looking back over AID's 18 years of activities in Ethiopia shows that, as of mid 1969, about 30 percent of the technical assistance programs have been in agriculture (\$26.7 million of \$91.8 million total) [47]. In total, between 15 and 20 percent of AID's assistance has gone into agriculture [Appendix A, Table 2]. There has been very little local currency available from PL 480 sales to finance local costs (Appendix, A Table 3), and only recently have loans been appropriate in the agricultural sector. Almost 250 individuals have been sponsored by AID to receive participant training in agriculture (Appendix A, Table 4).

The Mission has moved through several strategy phases with regard to agriculture. Until about 1964 almost all of the efforts went into training technicians and professionals in areas related to agriculture. This included creating from scratch higher agricultural training facilities, plus adding in some research and extension capacity. By 1970 the agricultural school at Jimma was well established and had graduated almost 1,000 students. Likewise, the agricultural college at Alemaya was well under way and had graduated about 500. Rudiment of an extension service had been established and some 100 agents were in the field working.

From 1964 until very recently AID placed more emphasis on strengthening the Ministry of Agriculture, plus developing some training capacity. In addition, surveys of the agricultural situation were stressed so that projects with significant absorptive capacity could be identified.

It now appears that AID's strategy is entering a third phase. Sufficient institutional capacity has been created so that some capital resources can now be introduced into agriculture (Appendix A, Table 1). The sector loan and the regional development project loans are indications of this capacity.

United Nations Activities

Several agencies associated with the United Nations have been active in rural Ethiopia during the past 20 years. UNICEF, for example, has assisted school lunch programs in Ethiopia for a number of years. WHO has been connected with the malaria control program in Ethiopia since the early 1950's. FAO has also been heavily involved in various agricultural programs in Ethiopia and provided technical assistance in a number of areas. Among the topics covered by this technical assistance were: increasing coffee production, school vegetable gardening, processing of hides and skins, forestry, fisheries, desert locust control, agricultural administrating, research, various types of crop production, livestock and milk production, land reform, and agricultural statistics [38].

In the past ten years, under the United Nations Development Programme, FAO has spent about \$6.5 million dollars financing the development of three agricultural research institutions, surveys of the Awash Valley, helping to strengthen the Awash Valley Authority, and setting up a school for training animal health assistants (Appendix A, Table 6). The main emphasis of FAO's programs the past few years has been on developing the agricultural research capacity in Ethiopia and also helping to strengthen regional development activities in the Awash Valley area.

The World Bank Group

Since 1950 the World Bank Group has, as in their worldwide program, stressed improvements in transportation, communication, power, and industry in Ethiopia. From 1950 through 1970 IBRD, IDA, and IFC lent Ethiopia \$145.9 million (Appendix A, Table 5). About \$55 million of this was for roads, \$6 million for industry, \$14 million for communications, \$47 million for power, \$7 million for education, and about \$19 million for agriculturally related projects.

There is little doubt that the road building program has had an important impact on the rural area. Partly as a result of IBRD's investments in transportation, the total all-weather primary roads in Ethiopia increased from 1,600 miles in 1957 to 12,000 miles in 1969 [42, p. 14]. Despite this progress, it has been estimated that 80 percent of the rural people in Ethiopia still live more than five miles from even a dry weather road [42, p. B-6].

Aside from investments in roads, the World Bank has also directed some money toward expanding agricultural credit in 1961. IFC has lent some money to private cotton and sugar operations. Within the past couple of years IDA has also financed two rural development projects; the first in Wolamo and the second in Humera. The first project includes transfer of three thousand families into new settlement areas along with enlargement and improvement of farming operations in a small farm area of about six thousand farm families [73, p. 99-98]. The second project is a new area development program including road building, bridge building, providing culinary water supplies, and developing a demonstration farm [44].

The World Bank's agricultural development strategy is fairly clearly stated in a 1967 study [42]. It is stressed here that highest development priority should be given to agriculture. They also argue strongly for concentrating resources and efforts on a few major activities. The two regional development projects financed by IDA were explicit expressions of this concentration approach. While stressing the need for increases in output mainly through large farms, mechanization and irrigation, IBRD's reports, suprisingly, also emphasizes the need for more attention to land reform.

Other Development Activities

As mentioned earlier a number of countries have bi-lateral assistance programs with Ethiopia which treat agricultural problems to some extent. Several of these are organized around various types of loans or small technical assistance activities. In each case, the objectives of these projects are rather limited and are, therefore, not detailed because of their modest impact on overall development.

One project funded by the Swedish government, however, does merit mention. It is the Chilalo Agricultural Development Unit (CADU) started in September, 1967 [73, pp. 93-96]. It has been taken as the prototype for similar area development activities now being funded by The World Bank and AID. CADU uses a package approach to agricultural development. Activities are confined to a specific agricultural area including about 73 thousand families. Some applied research, extension, credit, cooperative development and model farms are included in the package. The major thrust in the activities, however, appears to be through supervised credit.

Current Agricultural Situation in Ethiopia

Despite little attention from the Ethiopian Government during the past few years, substantial progress has been experienced in agriculture. In the last ten years agricultural output has increased by about one-fourth: a rate of increase at least equal to population and income-growth. As a result, there has been little pressure on product prices. Agriculture still provides raw material for over half of the industrial capacity, employs 80 to 90 percent of the population, and agricultural exports make up more than three-fourths of total exports. A major part of the increase in agricultural output to date, however, has come from expanding into new areas. Scientific techniques have had little impact on increasing yields.

The institutional capacity to service agriculture has also been substantially increased. Two technical schools and a college of agriculture, almost wholly staffed by Ethiopians, are now turning out a small stream of badly needed agricultural technicians. The Ministry of Agriculture and the Ministry of Land Reform are both becoming involved in development activities. The bases for a national agricultural research and extension systems have also been laid. A good deal of capacity to treat locus problems, animal diseases, and malaria has also been developed.

Considering Ethiopia's starting point 20 years ago, progress in agriculture has been substantial, but in absolute or comparative terms the agricultural sector still has a tremendous way to go. A comparison with Colombia--a country of size, population, geography, and agricultural economy similar to Ethiopia--shows how far Ethiopia's agricultural sector has yet to go. Colombia, for example, has about ten colleges of agriculture, but Ethiopia has only one. Colombia has almost 4,000 students enrolled in these colleges and Ethiopia has only 200 to 300. Colombia has

an institutional agricultural credit loan portfolio worth in excess of \$400 million while Ethiopia has less than \$5 million. Colombia has over ten times as many extension agents as Ethiopia. A supervised credit program in Colombia which services 30 to 40 thousand farmers has almost half as much funds in its loan portfolio as Ethiopia plans on spending in five years on agricultural development. Colombia has about 70 thousand miles of all-weather road and Ethiopia only 20 thousand. The value of agricultural exports from Colombia are five times that of Ethiopia. Clearly Ethiopia has a long way to go to reach the modest level of development achieved by Colombia.

Since Ethiopia's principal export is coffee it will be very difficult under current International Coffee Council arrangements to significantly expand coffee exports [74]. Major increases in exports of other agricultural commodities, likewise, do not appear to be very promising. It seems clear that Ethiopia will need to develop flexibility in its agricultural exports so as to sell a-dab-of-this and a-bit-of-that. Non-agricultural exports such as potash may have to provide most of the increasing need for foreign exchange.

Over the years Ethiopia has imported very little in the way of food. Agricultural imports have shown some increase over the past few years, but still total less than \$10 million per year. There is, therefore, only limited possibilities to follow an import substitution program with respect to agricultural development. Most of the increase in output must be absorbed by increases in internally generated demands.

Ethiopia appears to be heavily committed to a regional development strategy with emphasis on production and commercial agriculture. Only secondary consideration is being given to equity issues.

Future AID Considerations

General Considerations

Ethiopia will likely need foreign assistance in its agricultural programs for at least another 20 years. While a few problems have been eased, others loom large. It is very likely, for example, that population growth soon will show a sharp upturn. Judging from the experience in other countries, a doubling of the rate of population increase is very possible. Problems of rural education, employment, and land tenure are being hardly scratched currently. It is also apparent that present development strategy will have little fallout among rural poor. The bulk of the development resources are aimed at increasing output on fairly large units. This may be a desirable short-term strategy, but serious thought must be given to how far to push this economic polarization. Also, with such a small proportion of the rural economy presently commercialized, significant increases in output may put a good deal of pressure on the marketing infrastructure as well as prices.

Some Specific Considerations

1) What emphasis should AID place on institution building activities?

A number of AID Missions have sharply downgraded the emphasis on institution building in favor of development loans, sector loans, and program loans in the past ten years. While Ethiopia now has some absorptive capacity for capital assistance, it still has a long way to go to create a minimal set of agricultural service institutions. For example, AID has initiated institution building contracts with colleges of agriculture in other developing countries which have had much more institutional muscle than Ethiopia's agricultural college had when AID began to phase out. In retrospect, it seems clear that the termination of the

Oklahoma State University contract was a mistake. Along with a handful of other universities (e.g., North Carolina in Peru, Purdue in Brazil, Ohio State in India, and Michigan State in Nigeria), Oklahoma State made an extremely heavy commitment to this project. They had strong university administration support, sent first-line people to participate, and had developed a good deal of on-campus support for the program. While it was probably time for the Ethiopians to assume the responsibility for running the college this could have been accomplished by redefining OSU's contract to a more mature type relationship. Joint research, exchange of professors, exchange of graduate students, and a community-of-scholars approach could have been included in this new relationship. A continuing relationship could have provided a good bit of academic synergism as well as applied research support which both the government and AID will badly need to treat emerging problem areas.

It is not clear if AID was premature in terminating the contract, or if Oklahoma State failed to grasp the opportunity to change to a more mature relationship. In either case, an opportunity was lost.

2) Is sufficient attention being paid to building a base which will facilitate possible future land reform programs? Evolutionary land reform is much easier to carry out if land ownership records are rather complete, if a good bit of information is available describing tenure conditions, and if substantial institutional capacity is available. If significant amounts of land reform are to be carried out in the next 20 years, more resources must soon be directed toward building this base.

3) Should AID begin to raise the population growth issue? As with land reform, population control efforts have a long gestation period. Would it be appropriate for AID to begin directing attention at this topic so that some appropriate programs might be started in the next 20

years?

4) When will it be appropriate for AID to begin to stress equity, income distribution, and rural poverty rather than mainly output increases? Export potential and import substitution possibilities for Ethiopian agricultural commodities appear to be quite limited. At the same time, the internal market for agricultural products will likely turn out to be very thin. Broader participation in the market plus formation of a much deeper effective demand via increasing incomes will be necessary to soak up substantial increases in output. In the very near future, AID should begin stressing the need to expand this effective demand.

5) Should agriculture begin providing more of the resources for its own development? In the next few years a good deal of attention might be directed toward ways of mobilizing capital out of, and for the agricultural sector. Serious study of appropriate taxing techniques for agriculture should soon be undertaken. Some of the output increases must be mobilized to fuel the general development process. In addition, attention might be directed toward incentives and institutions to help mobilize voluntary savings in the rural area. These, in turn, could be used to finance part of the growing credit needs.

6) Does Ethiopia have the institutional capacity to manage a significant agricultural credit program? AID has placed little emphasis on building agricultural credit capacity. Should this receive emphasis in the near future?

7) Are problems of coordination and planning in the agricultural sector going to become more important now that more emphasis is being placed on this sector? To this point there has been rather loose but cordial coordination between aid agencies. There were so many needs in

agriculture that each agency could work largely independently and still make important contributions. With an apparent step-up in resources flowing into agriculture this may not hold true in the future.

Would it be worthwhile to start thinking about a more formal arrangement to coordinate development plans by aid agencies?

APPENDIX A

Table 1: AID Financed Agricultural Projects In Ethiopia As Of June 30, 1969

Project Title	Expenditures		Fiscal Year Span
	Grant	Loan	
	(\$000)		
Agriculture Education and Research	14,266		1954-1971
Agriculture -- General Support	300		1958-1965
Farm Machinery	193		1955-1963
Livestock Improvement	362		1958-1962
Crop Production, Processing, and Marketing	337		1958-1965
Agricultural Improvement Center	16		1957-1960
Agricultural and Mechanical Arts College	111		1952-1954
Coffee Development	38		1957-1960
Veterinary Assistance Training	10		1955-1960
Fisheries Development	26		1957-1960
Agricultural Productivity and Education	1,636		1957-1966
Agricultural School Construction	149		1959-1964
Fumigation Demonstration	21		1960-1961
Dairy Cattle Import	34		1960-1961
Zula Plain Survey	28		1961-1966
Agricultural Cooperative Service	2,708		1958-1962
Grain Storage	25		1965-1968
Plant Protection	287		1965-1969
Agro-Industrial Sector Survey	1,240		1966-1969
Technical Assistance Supporting Activity	544		
Agriculture Advisory Services	2,010		1965-1972
National Range Development	2,486	4,000	1965-1972
Agriculture Extension Services	216		1966-1972
Agricultural Sector Loan		5,000	1970-1972
Shashamanne Farm Development	1,093	2,125	1970-1972
Ada District Development	687	1,000	1971-1972
Borkenna Valley		1,600	1971-1972
TOTAL	\$28,823	\$13,725	

Source: Agency for International Development, Office of Controller, reports published under number W-253, various issues. This includes reports on both technical and capital assistance. Additional AID loan documents were also utilized.

APPENDIX A

Table 2: Yearly Obligations and Expenditures for Projects in Ethiopia Financed by AID, Total and for Agriculture, Fiscal Years 1961 Through 1969.

<u>Fiscal Year</u>	<u>Annual Obligations</u>			<u>Annual Expenditures</u>		
	<u>Total</u>	<u>Agriculture</u>	<u>Percent Agric.</u>	<u>Total</u>	<u>Agriculture</u>	<u>Percent Agric.</u>
Before & through						
1961	42,956	13,131	31%	35,322	11,802	33%
1962	6,291	2,736	43%	7,111	1,894	27%
1963	5,695	1,127	20%	5,347	982	18%
1964	37,466	662	2%	31,287	1,552	5%
1965	5,736	1,122	20%	6,628	1,154	17%
1966	27,204	755	3%	6,092	1,308	21%
1967	8,116	3,049	38%	8,026	1,461	18%
1968	19,450	1,064	5%	8,443	1,665	20%
1969	<u>5,038</u>	<u>801</u>	<u>16%</u>	<u>10,315</u>	<u>1,398</u>	<u>14%</u>
Total	157,952	24,447	15%	118,571	23,216	20%

Source: Agency for International Development, Office of Controller, reports published under number W-253, various issues. This includes reports on both technical and capital assistance.

APPENDIX A

Table 3: Value of U. S. Agricultural Exports to Ethiopia Under P.L. 480, Mutual Security Act, and Commercial Sales, 1954-55 to 1968-69.

(In Thousands of Dollars)

<u>PL 480 Shipments</u>		\$16,300
Sales for foreign currencies	\$800	
Dollar sales	\$6,000	
Donation to government	\$6,500	
Donation to private	\$2,600	
Barter	\$400	
<u>Mutual Security</u>		\$2,400
Total under specific government programs		\$18,700
<u>U. S. commercial agricultural exports to</u>		
<u>Ethiopia</u>		\$13,700
<u>Total U. S. Agricultural exports to Ethiopia</u>		\$32,400

Source: The White House, "Annual Report on Activities under Public Law 480: Food for Peace," in draft form, dated June 18, 1970.

APPENDIX A

Table 4: A.I.D. Financed Participant Trainees From Ethiopia, Total and in Agriculture 1950-1969*.

Years	Total	Agriculture	
		No.	% of Total
Prior to 1958	89	9	10%
1958	84	18	21%
1959	106	29	27%
1960	82	20	24%
1961	121	18	15%
1962	98	12	12%
1963	53	19	36%
1964	89	31	35%
1965	124	8	7%
1966	161	22	14%
1967	145	20	14%
1968	128	26	20%
1969	<u>116</u>	<u>16</u>	<u>14%</u>
Total	1,396	248	18%

*By Fiscal Year arrival in country of training

Source: Agency for International Development Office of International Training, 'Report on Participant Training, (W-141) published annually. Agency for International Development, Statistics and Reports Division, 'Operation Reports' (W-129) published annually.

APPENDIX A

Table 5: World Bank Group Loans to Ethiopia 1950-1970

<u>Purpose</u>	<u>Year</u>	<u>Amount in Millions of Dollars</u>		
		<u>IBRD</u>	<u>IDA</u>	<u>IFC</u>
Road	1950	5.0		
Industry	1950	2.0		
Communications	1951	1.5		
Roads	1957	15.0		
*Ag. & Ind.	1961	2.0		
Communications	1962	2.9		
Roads	1963		13.5	
Power	1964	23.5		
*Cotton Company	1964			2.5
Communications	1965	4.8		
Pulp and Paper	1965			1.0
Education	1966		7.2	
*Sugar Company	1967			9.0
Roads	1968	13.5		
Roads	1968		7.7	
Communications	1969	4.5		
Power	1969	23.1		
*Cotton Company	1969			.6
*Ag. Dev. Project (Wolamo)	1969		3.5	
*Ag. Dev. Project (Humera)	1970		3.1	
Subtotal		97.8	35.0	13.1
TOTAL				\$145.9

*Principally agricultural

Source: International Bank for Reconstruction and Development (IBRD) Statement of Loans - March 31, 1970, unpublished report put out IBRD, also various other World Bank group annual reports.

APPENDIX A

Table 6: Food and Agriculture Organization Agricultural Development Projects in Ethiopia 1960-1970

Project	Year Initiated	Funds Earmarked (U. S. dollars)
Survey of the Awash River Basin	1960	930,100
School for Animal Health Assistance I	1960	623,100
Institute of Agricultural Research	1965	2,093,800
Awash Valley Authority	1965	655,200
School for Animal Health Assistants II	1968	991,500
Development of Awash Valley	1970	<u>1,218,900</u>
TOTAL		\$6,512,600

Source: United Nations Development Programme (UNDP), 'Projects in The Special Fund Component' (as of June 30, 1970) UNDP, DP/SF/Report Series B, No. 10, pp. 27-28.

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