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CDSS AGRICULTURAL STRATEGY SUPPLEMENT

MALAWI

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in Cooperation With  
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## INTRODUCTION AND SUMMARY

- 1.1 This CDSS Supplement presents USAID/Malawi's strategy to assist the Government of Malawi in achieving agricultural and rural development. Although separate strategy statements will be prepared for health/population and energy for incorporation into the FY 1984 CDSS, the real purpose of the USAID strategy is to improve institutional capacity in Malawi and assist in providing the appropriately skilled manpower for the institutions. A goal of this magnitude is not achievable by one donor alone; therefore, USAID Malawi intends to limit its activities to long-term improvement in the productivity output of small holders through the provision of appropriate information, technology and health services.
- 1.2 The strategy is based on an analysis of the economy and particularly the organization and performance of the agricultural and rural sector. It begins with the recognition of two points:
- a) the main constraint on continued growth in Malawi's economy arises from the slow growth of output in the small holder subsector and the stagnation of exports originating in that subsector; and,
  - b) that growing levels of productivity and increases in the small holder sector are needed to stimulate demand for the production of labor intensive agricultural

inputs to increase production of essential consumer goods. The resulting growing market for non-agricultural locally-produced goods will lead to further employment and income gains in the economy, i.e., a multiplier effect. Not only is broad agricultural development crucial for food self-sufficiency and exports, it will raise the incomes of the rural poor as well. Increased agricultural production is also essential to the creation of nonfarm employment by creating a domestic market for nonfarm goods and services.

- 1.3 Current and past agricultural investments have had too little impact, not only on output but also on laying the foundation for long-term development. Valid strategies and appropriate priorities have been overwhelmed by the need to change some policies, a shortage of qualified staff, and general budgetary constraints. Agricultural development requires large amounts of resources, and their mobilization and effective utilization will only follow improved planning and increased implementation capacity. USAID's strategy addresses these constraints.
- 1.4 A.I.D.'s special capabilities lend well to strengthening Malawian agricultural institutions and training Malawians at all levels in technical and management fields needed to develop the knowledge base and management skills required for a transformation of the rural sector to a science-based small holder production sector.
- 1.5 The CDSS Agricultural Strategy which follows has been thought through with care. Short-term project specificity is stated. Long-term project specificity is being conceptualized within

the limits set by the strategy. The newness of the USAID Malawi Office requires continued dialogue with other donors and more in-depth discussions with Government. This approach takes time but it will be time well spent considering the bright prospects for success through a well developed program.

STATEMENT OF U.S.A.I.D.'s DEVELOPMENT ASSISTANCE STRATEGY

- 2.1 USAID will assist the Government in achieving its medium-term objectives as set forth in its 1981-85 development program. We are fully supportive of the Government's goal to improve productivity and incomes of the rural population and upgrade the social quality of life of the small holder. The population receiving the lowest 20% of the national income is USAID's target group. In developing our strategy, we have taken account of the immediate balance-of-payments and budget crisis of the Government, long-term constraints affecting the rural sector and implementation of the Government's strategy and AID's strengths and capabilities relative to those of the wide range of other donors operating in Malawi.<sup>1/</sup> AID's strategy has both short-term and long-term components.
- 2.2 In the short-term, USAID has neither intentions nor resources to make a major contribution to the Government's program to re-establish internal and external fiscal and balance-of-payments equilibrium. These efforts are receiving support from the World Bank and IMF. There is the need, however, to complement the work of the Bank and IMF by providing modest stabilizing grant assistance that will contribute to Malawi's ability to maintain self-sufficiency in staple food production.

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<sup>1/</sup> See Annex F for information on other donor's activities in Malawi

Through grant funds we can achieve the following:

- Provide agricultural inputs, small equipment and hand tools to upgrade the use of appropriate technology by the small holder;
- Assist the extension service to broaden the application of appropriate technology;
- Assist in financing maintenance of key farm to market roads;
- Assist in improving the distribution system for agricultural inputs and the collection of agricultural products.

2.3 The long-term component of our agricultural and rural strategy is made up of three interrelated, interactive, problem-oriented areas of assistance:

- Improve data collection and data analysis in order to make changes in policy and changes in implementation where needed;
- Upgrade delivery of services to support agricultural output growth and rural development;
- Help expand the growth of import substitution of processed agricultural commodities;
- Manpower Development.

2.4 As concerns the long-term, existing institutional capabilities for planning, reformulation of policy, collection and analysis of data are insufficient given the increasing demands on the public sector to sustain and expand programs that will achieve social and economic development objectives. In its generic form, "planning" is a continuous process of producing information needed for policy decisions, implementation, and evaluation. The offices and staff responsible for producing information constitute the "planning system". Policy-makers are important "users" of information as are implementing agencies. Collectively the decision maker, the planner and

the implementor form the political-administrative system. The existing information base in Malawi is relatively thin and therefore raises questions of reliability of information. In turn, the unreliability prevents the political-administrative system from making the best possible decision. We deem it essential, therefore, that USAID assist the Government establish an agricultural data collection system from which will come good information on crop yields and production needs. Once established, policy decisions about pricing, subsidies, optimum cropping combinations, farmer incentives and use of land for agricultural purposes may be derived from well founded facts. Over the next five years, we expect to develop projects of technical assistance, training and modest budgetary support to strengthen the Government's planning and policy decision making capacities. The major outputs will be:

- Expanded and improved data and information systems;
- Improved policy environment affecting the small holder;
- Better information linkage between planners and policy makers;
- Better trained Malawian planners and policy analysts.

2.5 Of additional concern in the long term is the need to develop improved delivery systems for small holders. We will focus on linking the outputs of agricultural research with extension packages based on a systematic approach. Included will be the development of new as well as improved crop varieties and the necessary extension service packages. We plan greater emphasis on crop diversification and multiple, multilevel,

and intercropping. This should be a natural outcome of the Agricultural Research Project now in implementation.

- 2.6 AID/Malawi will also be involved in the long term in AID's Southern African regional programs to the benefit of small holders. AID's support of improved regional transportation will reduce export and import costs and reduce Malawi's dependence on more distant markets and sources of supply. Donor supported regional educational institutions will provide more specialized training at lower costs and reduced trade barriers will allow Malawi farmers to take greater advantage of their comparative advantages in agricultural production.
- 2.7 Finally in the context of the long term, the expansion of import substitution of processed agricultural commodities is a natural outgrowth of expanded agricultural output. Malawi's small industrial base is made up largely of agro-industries and has enjoyed substantial growth over the past 15 years. Malawi's agro-industrial complex is primarily linked to parastatals. Such an arrangement lends well to a combination of commercial help from the U.S. private sector with the processing component and development assistance from AID and other donors with the production component. Although there are constraints to the expansion of agro-industries, there are also some quite favorable opportunities for both donor assistance and private investment. Some promising areas for agro-industrial development are listed below:
- Solvent extraction of oil seed (cotton and groundnuts);
  - Production of honey, beeswax and pollen for export;
  - Fresh fruit, vegetable and flower exports to the European winter market;

- Canned fruits, vegetables and fish;
- Aquaculture in the Central and Northern regions;
- Ice manufacturing and distribution for fish industry;
- Fish net production for the domestic and export market;
- Cattle, hog, poultry, and milk production and processing;
- Tanning and leather working;
- Production and export of tea seed and bwar bean oil;
- Production and export of macadamia nuts;
- Production and export of arabica coffee.

2.8 None of the above has a chance if we don't attend to the need for skilled manpower. As concerns agriculture development the greatest needs are in the following areas:

- Number and quality of performance of extension service agents;
- Middle and higher level agricultural managers;
- Agricultural planners, analysts, researchers, and college instructors.

Some of these manpower needs are covered under the on-going Agricultural Research Project. Other aspects of need will be folded into the USAID Manpower project.

2.9 As stated earlier, this is a plan, a strategy, not a commitment to undertake everything listed. Due to the need for much more dialogue with Government and other donors, we hesitate to offer specifics about project titles and approximate dollar values beyond that stated in the Annual Budget Submission. We do have a firm schedule for planning, designing projects and implementation which follows:

IMPLEMENTATION SCHEDULE OF USAID'S AGRICULTURAL STRATEGY

- 3.1      Fiscal Year 1981
- Continue implementation of the Agricultural Research Project
- Prepare Manpower PID
- Begin Manpower Project Paper
- 3.2      Fiscal Year 1982
- Continue implementation of the Agricultural Research Project
- Complete Manpower Project Paper
- Prepare Rural Sector Grant PID and Project Paper
- Begin implementation of Manpower and Rural Sector Grants
- 3.3      Fiscal Year 1983
- Continue implementation of the above
- Prepare Agri-business PID and Project Paper
- 3.4      Fiscal Year 1984
- Continue implementation of the above
- Prepare Rural Sector Roads PID and Project Paper
- Begin implementation of Agri-business
- 3.5      Fiscal Year 1985
- Continue implementation of the above
- Start implementation of Rural Sector Roads Project
- Prepare Project Paper for Ag. Research II
- 3.6      Fiscal Year 1986
- Continue implementation of the above
- Prepare Project Paper Agri-Business II

3.7

Fiscal Year 1987

Continue implementation of the above

Begin implementation Agri-Business II

## ANNEX A

Government of Malawi's Development Strategies, Policies and Programs

A.1 In very general terms, the Government of Malawi has followed a dual agricultural development strategy: one approach to the estate sector and another to small holders. On balance, the Government has supported the development of the estate sector without directly subsidizing either inputs or outputs. It has viewed the estates as the principal sources of foreign exchange earnings and, in general, has not attempted to substantially influence the prices of their exports. It has, however, attempted to keep the estates from competing with small holders and has exercised control over the prices of some estate products sold on the domestic market (e.g., sugar). To a large extent, the Government has relied on the estates to generate their own capital from reinvestment of earnings, borrowing from commercial banks, and attracting risk capital from foregoing investors. It has invested relatively little in infrastructure to support or promote estates. The estates usually are expected to finance their own educational and training activities, to fund their own land clearing and irrigation projects, and to provide a good deal of their own social services for employees. The actual wage rates paid by estates have usually been above the minimum daily wage rate of 25 tambalas set by the Government.

A.2 With respect to small holders, the Government's main objective appears to be to promote the production of food crops at least to the point of national self-sufficiency. It has tried to achieve this objective through pricing policies, extension programs, credit programs, integrated rural development programs, and more recently, through the National Rural Development Program (NRDP).

A.3 The Agricultural Development and Marketing Corporation (ADMARC) is virtually the sole buyer of small holder cotton, rice and tobacco and is the residual buyer of such crops as maize, groundnuts and cassava. The prices paid to farmers at ADMARC markets are fixed by ADMARC in consultation with the Government. They are intended to provide a "reasonable return", to the farmer while enabling ADMARC to earn surpluses to support national development programs. ADMARC has placed considerable emphasis on price stability and has gradually increased its prices over the years. This has shielded farmers from the price fluctuations of the international markets. ADMARC's prices for small holders' products in recent years have been set to "subsidize" food production and "tax" small holder production of export crops. Because of the high costs of transporting and handling exports and imports, there is a substantial difference between the "import parity" and the "export parity" prices of agricultural products in Malawi.<sup>1/</sup> The "export parity" price of maize in Lilongwe 1977, for example, was estimated by the World Bank to be K1.40<sup>2/</sup>

<sup>1/</sup> The "export parity" price is the world price of a commodity less transportation and other marketing costs. The "import parity" price is the world price plus transportation and other marketing costs.

<sup>2/</sup> One kwacha = \$1.11.

per 100 lb. bag. ADMARC's price was K2.30 per 100 lb. bag, over 64 percent above the export parity price. This was still substantially below the "import parity" price of maize, however. The situation was quite different in the case of groundnuts. The "export parity" price of groundnuts in Lilongwe in 1977 was estimated to be K24.00 per 100 lb. bag. ADMARC's producer price, on the other hand, was only K10.00 per bag, 40 percent of the "export parity" price. Similarly, small holders have been paid only a small share of the realized export earnings on tobacco and cotton, while rice prices have been supported at more favorable levels.

- A.4 Until 1977, Malawi's main small holder development activities were centered on four major integrated rural development projects. These four projects covered about one million people, nearly one-fifth of Malawi's rural population in the mid-1970's. The 1980 World Bank review of these projects suggests that they brought about substantial social and economic benefits through a general improvement of the quality of rural life as a result of new roads, health services, markets, water supplies, and training.
- A.5 The production impacts of the four projects have been, at best, mixed. There was no apparent increase in maize yields and some decline in groundnut yields for the Lilongwe Land Development Project (LLDP). Disease problems with groundnuts and high fertilizer prices and poor weather were considered in the case of corn to be responsible for much of the failure to achieve project goals.<sup>1/</sup>

<sup>1/</sup> USAID's recently initiated agricultural research project will address plant disease and other agronomic problems of small holder crops.

- A.6 In assessing the significance of these results one must keep in mind the magnitude of the programs that were part of the LLDP. The Government was devoting its best talent and investing millions of kwacha to carry out this project along with the three other integrated rural development projects. These were model projects. The World Bank's evaluation of the LLDP concluded that it was well managed and well received by farmers. Most project activities were carried out more or less on schedule and within their budgets. Nonetheless, they failed to substantially affect yields, achieve their fertilizer use targets, influence ADMARC's price policies, or anticipate and effectively deal with potential disease problems. This criticism of the project serves to highlight the magnitude of the job of attempting to increase yields of small holder crops.
- A.7 Cotton yields increased during the first phase of the Shire Valley Agricultural Development Project (1968-72). Livestock and fisheries activities were considered to be successful during the second phase but, except for rice, yield targets were not achieved for other crops. During this period production was affected by drought, unusually severe pest problems (especially mice), the expansion of cultivation of less suitable soils, and low cotton prices. In the absence of the project, yields may have fallen even more.
- A.8 Crop yields apparently increased somewhat in the case of the Karonga Rural Development Project. Fertilizer use, however, was lower than expected. This was partly due to an increase in fertilizer prices and partly due to ADMARC's failure to

deliver fertilizer on time. The main components of the Karonga project were the development of rainfed and irrigated rice, the increase of maize, cotton and groundnut acreages and yields and improvements in health facilities and lake transport. The emphasis on irrigation, livestock, health, and transport facilities was eventually reduced. Rice, maize and groundnut production were increased. Cotton production fell far short of projected targets. In terms of rainfed crop production, this project appears to have been the most successful of the four. This was partly due to the fact that it was possible to bring new land into production as well as increase yields.

A.9 Relatively little information is available to judge the performance of the Lakeshore Rural Development Project. The area is very similar in many respects to the Karonga area. An evaluation of the project in 1974 calculated the internal rate of return on investment to be 15 percent. Later estimates indicated that production of rice, cotton, groundnuts and maize increased. These increases were undoubtedly due in part to more land being brought into production.

A.10 There are several general conclusions that can be drawn from the four integrated rural development projects. First, irrigation schemes appear to have been much more costly and difficult to implement than was initially anticipated. Where irrigated projects were attempted they were generally not particularly successful. Second, the projects had more impact on yields in areas where new land could be brought into production than in areas where unused land was scarce.

This may have in part been due to the greater fertility of the new land brought into production. Differences in weather patterns and disease problems may have also played a role. The small impact on yields is not surprising when one considers that:

- a) there was a severe shortage of qualified staff, particularly at the farm extension level;
- b) a good deal of emphasis was placed on the use of fertilizers to increase yields but the ratio of fertilizers to output prices during the later years of the projects provided little incentive to use fertilizer even if it could be obtained at the right time; finally,
- c) there is little evidence that the extension agents had much to offer in the way of appropriate new varieties and agronomic practices.

Third that the farmers probably were more responsive to changes in relative prices than project planners had anticipated.

Thus, ADMARC's price policies were a significant factor in affecting the extent to which production targets for various crops were achieved.

A.11 Malawi's experience with large scale integrated rural development projects led the Government to conclude that extending this approach to the remainder of the country would be too costly and too slow. It, therefore, decided to undertake a National Rural Development Program (NRDP) that would try to cover the entire country. The NRDP aims to:

- a) increase the general level of Malawian small holder production, in particular the production of cash crops for export and for feeding the growing urban population;
- b) provide the inputs and services required to increase yields; and,
- c) preserving natural resources by encouraging soil conservation, conserving key watershed areas, and developing forestry resources.

To achieve these objectives, the Government is concentrating its efforts on increasing efficiency and expanding delivery systems with particular emphasis on agricultural services such as extension, input supply, marketing and credit. To this end, the Ministry of Agriculture and Natural Resources (MANR) has been restructured. The country has been divided into eight Agricultural Development Divisions (A.D.D.'s) and a management unit has been assigned to administer the activities in each of these units. The NRDP has not terminated the four integrated rural development programs. Rather, it has absorbed them into the national program and has changed their intensity and investment priorities. In general, the NRDP strategy is to give priority to investments expected to have an immediate impact on agriculture. Other investments which are either relatively more costly or have a less direct impact on production are given lower priority. The NRDP is to be implemented over a 20-year period through some 40 development project areas. Funding for many of these projects will be provided by international lending and development agencies.

The NRDP continues to focus government agricultural development activities on small holders. Its main emphasis is being given to the traditional small holder crops such as maize, groundnuts, tobacco, cotton and rice. Some emphasis is being placed on a national livestock program to focus first on cattle and then on goats. Some attention will be given to poultry. Relatively little is being given to hogs and sheep. It appears that considerable attention will be given to forestry activities. These include pulp wood, saw timber and fuel wood projects. Fishery development activities are likely to be limited in the early stages of the NRDP. At the farm level, great emphasis is to be placed on extension services and short and medium term credit to promote the use of new seed varieties, fertilizer and increased farm power by financing the purchase of oxen and ox-drawn equipment. It appears that the development of rural roads and markets are to be left primarily to organizations other than the Ministry of Agriculture. A few activities of the NRDP will benefit all of the A.D.D.'s or provide better information for central planners. These include an expanded national research program, a land use survey, a soils mapping project, and seed industry development activities. At the central level, some attention is also being given to the prospects for developing small rural industries, questions of appropriate technologies, and diversification of cropping patterns.

- A.12 In the face of acute underdevelopment, Government policy at independence was one of fiscal and monetary restraint, a deliberately slow process of "Africanization", investment

to favor growth, avoidance of capital-intensive and prestige-industrial projects, and incentives for private investment and economic activity, including foreign capital. Social services were assigned lower priority.

- A.13 The Statement of Development Policies 1971-80 maintained the early general development strategy, recognizing that the country has a generally favorable endowment of land and labor. While facing scarcity of capital, high level skills, and extractive resources, economic policy was to aim at self-sufficiency in food supplies as well as production of selected crops for export. The assumption was made that land productivity in subsistence agriculture would increase proportionately with population, and that sufficient land could be brought into production for export. The Agricultural Development and Marketing Corporation (ADMARC) was to maintain price stability and provide small holder agriculture with improved inputs (at cost or subsidized prices), processing, and marketing. Industrial policy was designed to promote the processing of local raw materials by labor-intensive industries, as long as they paid export-parity prices for their primary inputs. Capital-intensive industry was of no priority, unless it fulfilled an essential function and there was no choice of technology.

Given the extension of transport infrastructure prior to 1971, the new priority was to insure its optimal use and the operation of least-cost services linked to expected developments in the directly productive sectors (e.g., servicing agricultural project areas).

Social services were again assigned a relatively low priority. The principal aim of educational policy was to increase the number of qualified technical, administrative and professional workers. That of health policy was to maintain existing treatment facilities, a relatively low level of expenditures on preventive measures, and a substantial increase in low cost housing, which was expected to contribute to disease prevention.

Recognition of the effects of uneven development by region and by sector was the basis for the establishment of an incomes policy of keeping wage increases in line with increases in productivity, and avoiding actions that could widen urban/rural income differentials. The transfer of the capital city from Zomba, in the South, to Lilongwe in the Central Region was expected to spur development away from the South.

Achievements have been substantial. The overall rate of economic growth between 1964 and 1979 compares favorably to that in countries at a similar stage of development, which generally averages lower than 4 percent per year. This growth was accompanied by the balancing of the revenue account of the national budget in 1971/73, which permitted the elimination of British budgetary support.

- A.14 Notwithstanding its achievements, the Malawian economy has suffered serious shocks since 1978. A severe deterioration in its external term of trade and sharply rising costs of transport for both exports and imports have led to unusually deep balance of payments difficulties. Its fiscal position has also weakened considerably. In response, the government

has reduced real government expenditures, raised taxes and prices of public service, and controlled private sector credit.

A.15 While a primary cause of the current crisis is the deterioration of the country's international terms of trade, the crisis has also revealed several underlying problems in the economy: lack of diversification of estate exports, slow growth of small holder production, and underfunding of recurrent expenditures.

A.16 The Government has formulated a medium-term program for 1981-85 that establishes the following objectives:<sup>1/</sup>

- a real annual growth rate of 4-8 percent, reflecting average growth rates for small holders of 5.0 percent per year, for estates 2-9 percent, for manufacturing 7.5 percent, and 4.1 percent for the rest of the economy;
- increased diversification of export earnings through faster small holder export crop growth, new small holder and estate crops, and agro-business development; and,
- improvement in internal and external trade balances.

A.17 Sectoral allocation of public investment for the five-year program indicates an increase from 18 to 22 percent over the previous five years going to agriculture, and an increase for social services. The bulk of agricultural investment will be directed toward implementation of the NRDP. Through its social investments, the Government plans to make considerable progress in alleviating its immediate skilled manpower constraints while extending cost-effective social services to the extent possible with available financial resources.

<sup>1/</sup> Government of Malawi, Economic Report 1981, Office of the President & Cabinet, Economic Planning Division, Budget Document No. 4, Government Printer, Zomba, Malawi, 1981

- A.18 Government plans and programs, therefore, will continue to place great emphasis on improving conditions in the small holder subsector, but actual achievements in the past have lagged far behind the rhetoric. The problem has been less with intentions than with implementation. Improvements in small holder productivity and incomes will come through effective research, extension, credit and service institutions, adequate infrastructure investments, efficient marketing systems, and appropriate economic and social incentives. A whole range of policies and programs that complement and support each other are required. If some policies are inconsistent or inadequate, the "positive" effects of other policies and programs and the "negative" effects of the incorrect or missing policies may be minimized. Success in dealing with these complex interactions among resources, production practices, policies, and the social-cultural characteristics of the small holder population, is the key to increasing productivity, meeting domestic food needs, and generating exportable surpluses.
- A.19 During the 1980's, the GOM will need to attack the underlying structural weaknesses in the economy that have become so painfully obvious during the present economic crisis. The economy's main "engine of growth" in the 70's was export production by the estates, primarily tea and tobacco. That pattern will not continue in the 80's; several factors will constrain further growth of estate production of tea and tobacco. International prices are unlikely to be as favorable. Fuel wood use is outstripping available supplies. Little land suitable for tea production remains unused. Credit

restrictions and lack of managerial talent, while more short-run in nature, are also limiting output. Through credit, price and other policies, the GOM should encourage the estate subsector to fully utilize its land by diversifying into new export crops. At the same time, the Government should review its policies to determine if appropriate types and levels of taxes (mainly land and income) are in place to mobilize financial resources to support its overall rural development program.

It would be unfortunate if estate production of food and export crops were allowed to divert attention and resources away from the small holder subsector. What should it be like to live and work in areas by 1990 or 2000? What reasonable goals can be reached in terms of:

- Nutrition and access to basic social services?
- Levels of productivity and income?
- Production services?

A.20 A major increase in the productivity of small holder households is the only viable basis for substantial improvement in their living standards. For this to happen, the following are needed.

- An improved policy environment affecting small holders and providing adequate incentives to produce and market more;
- Services that help small holders grow more, market more and earn more, starting with the resources they already have;
- Enlarged opportunities for small-scale non-agricultural production in rural areas;
- Increased supply of basic production and consumption goods; and,

-- Continued priority of government funding for essential infrastructure and primary health care, primary education and nonformal schooling, and water.

In turn, a broad-based improvement in rural areas will lead to maximum linkage to urban production through the processing of raw agricultural products and provision of inputs and consumer goods to the growing rural market. Thus, small holder production is the key not only to expanded production and exports but to growth of the economy as a whole.

A.21 The GOM's approach is absolutely in the right direction, much more so than the approach of most other Sub-Saharan African countries to their development. The question now is more about what is holding back its implementation? What is required to achieve the rural transformation that is envisaged? What kinds of output increases and income improvements are possible? What kinds of service packages are necessary to attain them? How can policies and investments be chosen to accelerate rural and overall economic growth?

## ANNEX B

Important Aspects of the Malawian Economy Bearing on  
Choice of Strategy

- B.1 At Independence, Malawi -- landlocked, with deficient infrastructure and largely undeveloped human resources -- had a long way to go to attain its overall objective for economic and social development -- a higher standard of living for all its people.
- B.2 Malawi can be characterized as a market-oriented economy with strong government intervention through monetary and fiscal policies, price and trade controls, regulatory activities, and direct participation of public statutory agencies and parastatal enterprises. Private enterprise and foreign investment are welcomed and afforded considerable government support and incentives.
- B.3 The GOM's development strategy has emphasized basic infrastructure to support the production sectors. Transportation and communication improvements have absorbed by far the largest share of public investment. Because of this strategy and because of an acute shortage of recurrent budget resources, social investments in education, health, housing, and water have represented a relatively low share of government capital expenditures. Recently, however, the GOM has stepped up its investments in education and health, which now account

for more than 80 percent of Government outlays for basic needs.

- B.4 Malawi achieved an average real growth rate in GDP of 6.1 percent per year during the 1971-80 decade. This growth rate decelerated in 1979; growth was practically zero in 1980. Continuing high population growth of 2.6-2.9 per year and a rapid acceleration in net factor payments abroad at the end of the decade reduced average annual real GNP growth per capita to 3.0-3.3 percent for the decade of the 70's. This growth performance resulted in a GNP of U.S. \$223 per person in 1980 prices (K203).
- B.5 Malawi remains a relatively poor country. Its overall progress, while impressive in percentage terms, started at a very low base. Although the level of capital and recurrent resources allocated to basic social services has not been high in comparison to many other LDC's, the basic needs of the population have been met better than the average for the other countries in the region.
- B.6 A basic structure for formal and nonformal education is now in place. However, the expansion of this system to reach more of the population will require more resources. Health status and life expectancy are about average for sub-Saharan Africa. The incidence of illness and death is much higher in rural areas than in urban areas, however. Average annual calorie availabilities slightly exceed requirements on a national basis, but there is substantial malnutrition concentrated in rural children and at certain seasons of the year.

- B.7 There are spaces in secondary school for only about 10 percent of those who qualify. Although capital expenditures for secondary and higher education absorbed a high proportion of educational investments in the 1970's, there is a continued shortage of skilled labor, professional workers, technicians, and managers. To compensate for this, Malawi relies heavily on expatriate personnel.
- B.8 Malawi is heavily dependent on imports of manufactured intermediate, capital, and consumer goods. Imports as a percentage of GDP ranged from 31-37 percent during the 70's, showing a persistent tendency to increase and requiring severe government restraints at the end of the decade.
- B.9 Agricultural products account for almost all exports. Exports are concentrated in tobacco, tea, and sugar. Little progress in diversifying exports has occurred.
- B.10 Agriculture is the most important sector of the Malawian economy, accounting for 43 percent of GDP in (1979). Agricultural output was 50 percent of GDP in 1970, so agricultural growth has been less rapid than growth for the economy as a whole. Increases in agricultural output were led by tobacco, tea and sugar; production of groundnuts and cotton increased considerably less than anticipated.
- B.11 Malawi's wage/employment policy has successfully limited the rural-urban gap, moderated wage/price inflation, and provided incentives for labor-intensive production. As a result, the economy has been relatively successful in

generating jobs at the lower end of the pay scale. The urban population, however, remains a relatively small proportion of the total.

- B.12 Available estimates are that the total labor force grew from 2.1 to 2.7 million between 1968 and 1977. While formal sector wage employment generally expanded at least proportionally to the growth of sectorial output, the formal urban labor force only accounted for 7 percent of the total by 1977. This means that the bulk of the labor force as well as the new workers added each year are absorbed in rural agricultural or non-agricultural production. Continued high fertility and a young population insure that the labor force will grow rapidly for the rest of this century.
- B.13 Little arable land remains uncultivated in Malawi. The best available estimate is that only 38 percent of the total land area is suitable for cultivation. In the past decade, output growth has resulted largely from expansion in the total area cultivated. By the end of the decade, 36 percent of Malawi's land area was under cultivation, meaning that the available arable land is nearly fully cultivated and the possibilities of further expansion in area are consequently limited.

## ANNEX C

Organization and Performance of the Agricultural,  
Forestry, and Fishery Sectors

- C.1 Without doubt, agriculture is the dominant sector of the Malawian economy. It directly contributes 43 percent of GDP (1979). It produces enough food to make the country basically self-sufficient. It provides raw materials for the bulk of Malawian industry. It accounts for well over 90 percent of the country's exports. Lastly, it directly provides employment and the main means of livelihood for the 90 percent or more of the population that lives in rural areas, and indirectly for much of the urban population. For the foreseeable future as in the past, Malawi's economy will be rural-based.
- C.2 Malawi's agricultural production comes from two subsectors-- small holder agriculture and estate agriculture. The small holder subsector accounts for over 85 percent of all agricultural production and largely meets the country's demand for food staples (maize, beans, groundnuts, sweet potatoes and rice) while providing agricultural raw materials for domestic industry and some export surplus (cotton, groundnuts, and fire-cured tobacco). The export surplus from this subsector accounted for 31 percent of all agricultural exports in 1977. Because a large segment of small holders still live basically in a subsistence economy and data on their land area, production

and consumption are deficient, it is difficult to measure the past growth of the subsector. It is estimated, however, that small holder output has been increasing at some three percent or so per year in real terms, only slightly higher than the subsector's rate of population growth.

C.3 Much of the output of small holders is used for consumption on the farm where it is produced or in the local area.

However, some domestic foodcrops are sold for the national market (primarily to ADMARC), and small holders produce fire-cured tobacco, groundnuts, cotton and rice for export. Reliable data on home-consumed production and local sales do not exist.

C.4 The Agricultural Development and Marketing Corporation (ADMARC) is responsible for marketing small holder crops and has a monopoly on the purchase of all cotton and tobacco grown by small holders. Small holders can dispose of their surplus of food crops through local and district markets or sales to private buyers at the farmgate. Generally, ADMARC acts as a residual buyer of the basic food crops such as maize, groundnuts, and cassava. It then resells these products in urban markets or deficit rural areas. With the exception of rice, there has been no discernible tendency for crop sales to ADMARC to increase during the 70's. Although varying from year to year, groundnut, tobacco, and cotton sales to ADMARC have stagnated, while maize sales have varied with crop conditions.

C.5 Possible constraints on output in the small holder subsector include:

- a) Transfer of good quality land to estates;
- b) Insufficiently remunerative prices set by ADMARC, especially for cotton and groundnuts;
- c) Limitations on small holder participation in the production of high-value export crops (tea, tobacco, sugar); and,
- d) Lack of information, inputs, and services required to increase yields on small holder crops.

C.6 Agricultural estates are believed to control about 490,000 hectares of land, most of it suitable for cultivation. This amount of estate land represents 17 percent of total land now thought to be utilized by small holders. As of March 1979, there were 1,108 estates of which 524 produced flue-cured tobacco, 556 burley tobacco, 26 tea and 2 sugar. Together, these estates produced 15 percent of total agricultural output, and accounted for 70 percent of agricultural exports in 1978. The output performance of the estate subsector has been spectacular. Its output has expanded at around 17 percent per year in real terms since 1968.

C.7 Except for occasional shortages due to poor harvests and inadequate storage facilities, Malawi has maintained self-sufficiency in maize and other basic foods production. The high population growth rate, the limited amount of arable land not already in production, and the slow rate of increase in maize yields suggest that maintaining this self-sufficiency will be increasingly difficult in the future. Moreover, due primarily to poverty-based nutritional deficiencies, there is considerable need for raising per capita consumption

of basic foods among the rural population.

- C.8 The largest amount of unused or underutilized agricultural land is in the Northern Region. Bringing this land into full production will require major investments in rural roads. In the Southern Region, there is reason to believe that the arable land is being "overutilized" in the sense that fallow periods have been shortened, less productive land is being brought into production, soil erosion is increasingly evident, and average yields have tended to remain constant or decline.
- C.9. Population growth is 2.6 percent or more per year and is unlikely to fall significantly in the near future. If anything, the rate of growth may rise to 3 percent or more per year before a fall in the birth rate begins. If growth rates by district continue in the 1966-77 pattern, and use of cultivable land is intensified by reducing the ratio of fallow to cultivated land, the supply of arable land for the country as a whole will be fully utilized before 1990. This would happen earliest in the Southern Region, next in the Central Region, and finally in the Northern Region. Significant population movement would be necessary to redistribute the larger population over the available land. Indeed, some such movement is already taking place.
- C.10 Projections based on a "subsistence requirement" of from 2 to 2.5 ha per family, made up of a mixture of crops and fallow, show that total national requirements of cultivable land would reach 4.0 to 4.7 million hectares by the year 2000, which is 50 percent or more in excess of all but the most optimistic estimates of the area available. As a result

of these trends,

- 1) farms will tend to grow smaller;
- 2) land more distant from roads and services, more subject to erosion, and more limited by poor soils and/or low rainfall, will be brought into production;
- 3) reduction in land in short-term fallow in the cropping systems will occur which will lower yields without compensating use of chemical or organic fertilizers and more effective fertility conservation practices.

All these imply a decline in output per person, an increase in underemployment, and lower levels of living for the small holder population. Since the possibility that the growing rural population can be absorbed by nonfarm jobs is nil, the only alternative for raising productivity and incomes of small holders is to increase productivity, output and incomes on the available land. This is the greatest problem facing the small holder subsector in the next 20 years. Its solution will require a "green revolution" in Malawi--delivering to small farmers the information and inputs that will help them to steadily increase yields per hectare or adopt higher valued crops, i.e., new technology that is productivity-increasing and largely land-saving and labor-using rather than labor-substituting.

C.11 Thus, on all counts, raising yields and value of output per hectare for small holders is the logical approach not only to maintaining food self-sufficiency but also to increasing employment and incomes. As yet, no consistent widespread improvement in yields has been achieved; area expansion has been the main source of growth of small holder output. To raise yields, farmers will need to purchase better seeds, fertilizer, and other chemicals, as well as utilize improved

cultural practices. Labor inputs for cultivation practices and harvesting will rise. Credit will be required. Risks may increase. Assured market outlets for surplus food crops and crops grown for sale will be needed.

- C.12 Basic foodcrops are presently produced in large part by human labor, using simple hand tools. The use of animal power is limited and mechanization is almost nonexistent. Production depends on rainfall, which is variable from year to year. Fertilizer use is low. The use of higher yielding varieties lags behind the adoption rate in other parts of the developing world. These patterns reflect the subsistence nature of food production, the heavy participation of women and children in the production of food, the timing of soil preparation and planting where the ground is difficult to work by hand until the rains begin, and the need to maintain soil fertility using shifting cultivation and/or rotation-fallow systems.
- C.13 Around 50 percent of Malawi's total land area is classified as forest land. About 20 percent of the forest land consists of national parks and game reserves, 20 percent is forest reserves and protected hill slopes, and 60 percent is natural woodland. The forest reserves are administered by the Forestry Department of MANR as protected government land. At present, around 700,000 hectares of indigenous forests are classified as reserves or protected hill slopes and about 72,500 hectares are exotic forest reserve plantations. In addition, some 258,000 hectares of indigenous forests are proposed to be added to the reserves bringing the total areas under forest

reserves to around 1 million hectares. Altogether, around 3.0 million hectares of natural woodland, which is considered unsuitable for agricultural development, is available for forestry development

C.14 The role played by the forestry subsector in the Malawi economy is understated, since official statistics do not adequately reflect the important contributions made by the indigenous forest resource in providing nontraded fuelwood and building poles to the rural population and the tobacco estates. In 1978, the forestry subsector accounted for only three percent of the agricultural GDP (current prices). Its contribution to government revenue is small, primarily because 98 percent of consumption is free, and the royalties levied for commercial purposes are nominal. Fuelwood, building poles, and minor forest products are essential to meeting the rural population's energy and domestic needs and constitute an essentially underdeveloped resource which can be harnessed for productive purposes. Rising fossil fuel prices and the desirability of minimizing dependence on such energy sources, coupled with the relatively high cost of developing alternative sources of energy (e.g., electricity), have led the government to favor developing Malawi's forest resources to strengthen the country's energy resource base. At present rates, the demand for fuelwood and poles is expected to double in 25 years, while existing supplies will have virtually disappeared, even in areas where at present there are substantial surpluses. Based on projected supply and demand through the end of the century, a large-scale tree planting program, particularly

in the natural woodland areas, will be necessary to meet projected demand.

- C.15 Fish is the most important source of animal protein in Malawi. Although not consistently consumed by everyone because of distribution difficulties, on the average it is the major source of protein by far for consumers. Per capita annual consumption in 1973 amounted to 14.4 kilos, 3.6 times as much as all other types of meat consumed per capita. There is some indication that annual per capita consumption of fish is falling. Total fish production in Malawi has remained relatively constant in recent years while population has grown.
- C.16 Future demand for fish in Malawi is expected to grow substantially based on population and income growth, consumer desire for fish compared to other protein products, and because the lower price of fish in comparison to other protein sources. A conservative annual demand increase for fish would be 2.6 percent, the estimated rate of population growth. Income growth per capita of 4.0 percent per year, with an income elasticity of demand for fish of 0.6, and the population growth factor would combine to make the rate of increase in the demand for fish at least 5.0 percent per year and probably higher. This increased demand, when coupled with the lack of an upward supply trend in fish output since 1970, is certain to create pressure on fish and other animal protein prices. In fact, given that the livestock economy of Malawi is not very dynamic, the above supply-demand trends for fish, unless reversed, will progressively create a protein scarcity in the country that will be felt most severely by the poor

who depend on fish as a cheap source of protein and who have little access to--or effective demand for--other sources of animal protein. Thus, there is a strong case for preserving all fish harvested in Malawi, for harvesting all natural fisheries up to their sustainable yield, and for producing as much additional fish as economically feasible via fish farming.

## ANNEX D

Agricultural Manpower Development

- D.1 A shortage of skilled manpower is one of the main constraints to Malawi's agricultural development. Manpower training is needed in Malawi at all levels from the farmer to the extension agent to his/her supervisor to the higher echelons of Government. This training can take place in Malawi, third countries or in the United States and it can last as long as a short extension meeting to several years of postgraduate training. Agricultural training in Malawi is provided at several types of sites. The highest levels of training are offered at Bunda College and Colby College the latter of which will be merged with the soon to be established Natural Resources College at Likuni. Farmers are trained at residential training centers in the various agricultural development districts as well as in the villages. Short courses can be offered anywhere there is a sizable meeting room.
- D.2 The following areas are of greatest need of manpower development and will be the focus of AID's manpower development program in Malawi.

1) NRDP Extension Workers

Malawi has an acute shortage of agricultural extension officers and agents, so much so that many extension project areas cannot be manned. In addition, many of the established officers and agents need upgrading by inservice training. Bunda College and the Natural Resources College are or will be the major source of new technical officers and assistants while the experienced ones can receive inservice training at either the colleges or the residential training centers. Both groups need to know about the latest research findings, production packages and technologies as well as extension methods and techniques. These extension agents will in turn train the grass roots agricultural workers, farmers, rural craftsmen and women.

2) Middle and Higher Level Management, Skilled Workers and Special Training

Malawi has a general shortage of middle and higher level agricultural managers and skilled workers both in the public and private sector as reflected in the relatively large number of expatriates working in Malawi. Many of the best agricultural managers and technicians in the public sector have been drawn to the private sector by higher salaries. These

key people are needed to ensure the smooth functioning of the Ministry of Agriculture, N.R.D.P. and agro-business firms.

Middle and higher level agricultural managers have traditionally graduated from one of Malawi's agricultural colleges and this can be expected to continue. AID will help support their training through its support of these colleges and through support of short courses and seminars.

A special effort will be made to help recruit and train students in accounting and agricultural mechanics. Accountants in particular are in short supply. They are essential for efficient financial management both in the Ministry and in the N.R.D.P. districts.

Malawi is in need of skilled manpower in several agricultural specialties including produce processing and marketing, fishing technology and processing, and rural market operations.

Short- and medium-term courses would be sufficient to train them for the most part. Such students can be trained on scholarships in Asia and Africa. This would help bring new points of view to Malawi at about one-third the cost of similar training in the United States.

3) Agricultural Planners, Farming Systems Analysts, Agricultural Researchers and College Instructors

Malawi has a great need for Malawian agricultural planners, farming systems analysts, agricultural researchers and college instructors. Excellent training in these areas at the graduate level is offered by several U.S. land-grant colleges. AID will help finance training for students in these areas in the U.S. or third countries whichever is the most cost effective and appropriate. AID is currently financing graduate studies in the U.S. for 21 students selected to participate in Malawi's agricultural research program.

4) Strengthening Malawi's Agricultural Colleges

Bunda and Colby Colleges (Natural Resources College) are the key institutions in Malawi's agricultural manpower development program. Because of the need to develop and maintain their quality in this important work, AID will continue to support and strengthen them in appropriate ways in coordination with other donors. AID's support will be based on well thought out long-range plans to be developed by these institutions.

## ANNEX E

Agro-Industrial Opportunities and Constraints

E.1 Malawi has a free market orientated economy. Its small industrial base, made up largely of agro-industries, has enjoyed substantial growth over the past 15 years, averaging 10-12 percent per annum in this period. Outside of tobacco and tea processing, most of the agro-industries have only 1-3 firms. A large portion of the firms in the agro-industrial complex have linkages to Malawi's major parastatals: Malawi Development Corporation (MDC), Press (Holdings) Ltd., Import and Export Company of Malawi (IMEXCO), Agricultural Development and Marketing Corporation (ADMARC), and Industrial Development Bank (INDEBANK).

E.2 There are several important constraints on private investment in Malawi's agro-industries. The most important of these are listed below.

1) Price Controls

The Government of Malawi exercises price controls over many food products at the retail level. This limits potential profits in the related agro-industries especially in inflationary periods.

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\* Most of the information in this section was drawn from World Bank documents.

2) Taxes

Malawi is not as generous as many less developed countries in granting tax holidays to new investors, though the Government does provide some investment tax incentives.

3) Licensing Requirements

All new investment in Malawi must be licensed. Licenses are required to avoid construction of undersized plants, encourage regional decentralization and prevent a potentially heavy drain on foreign exchange.

4) Small Domestic Market

Malawi is a relatively small country (6 million) with a relatively low per capita gross national product (U.S. \$223). As a result, there is relatively little purchasing power in Malawi for new agro-industrial products.

5) High Transportation Costs

Malawi is landlocked and thus depends on neighboring countries for handling its imports and exports. Its closest ports are in Mozambique which due to congestion, delays and inefficiencies are especially high cost. As a result, goods imported into Malawi are relatively expensive and exported goods must bare high transport costs.

6) Lack of Access to Neighboring Markets

Malawi lacks access to markets in neighboring countries because of political considerations.

7) Shortage of Industrial Skills

Malawi has a shortage of African engineers and managerial talent; thus, for the present, Malawian firms must rely heavily on expatriates for these types of skills.

E.3 Although there are constraints to expansion of agro-industries in Malawi, there are also some favorable opportunities for such investments there. USAID encourages agro-industrial investment in Malawi by Malawian, third country and U.S. investors where profit opportunities are favorable, especially when they earn foreign exchange for Malawi, generate employment, increase the demand for agricultural production and use surplus agricultural products. Some promising areas for agro-industrial investments in Malawi are listed below.

- 1) Solvent extraction of oil seeds (cotton seed & groundnuts);
- 2) Production of honey, beeswax and pollen for export;
- 3) Fresh fruit, vegetable and flower exports to the European winter market;
- 4) Canned fruits, vegetables and fish (if can costs can be reduced);
- 5) Aquaculture in the Central and Northern regions;
- 6) Ice manufacturing and distribution for the fish industry;
- 7) Fish net production for the domestic and export market;

- 8) Cattle, hog, poultry and milk production and processing (if price controls are relaxed).
- 9) Tanning and leather working;
- 10) Production and export of tea seed and bwar bean oil;
- 11) Production and export of macadamia nuts;
- 12) Production and export of arabica coffee.

## ANNEX F

Development Assistance by Other Donors

Malawi receives considerable technical assistance (\$44 million, 1980) and grants, loans and reimbursements for capital assistance (\$146 million, 1980). Malawi's technical assistance is received in many areas, but the education sector receives the largest share (26.6%) followed by agriculture (20.4%) and health (11.3%) (Table 1).

Table 1

Malawi: Externally Financed Technical Assistance, 1980\*

Sector	\$000	Percent
General development issues, policy and planning	4,386	10.0
Natural resources	2,461	5.6
Agricultural, forestry & fisheries	8,986	20.4
Industry	2,026	4.6
Transport & communications	3,756	8.5
International trade & development finance	670	1.5
Population	135	0.3
Human settlement	3,162	7.2
Health	4,978	11.3
Education	11,707	26.6
Employment	367	0.8

Humanitarian aid and relief	712	1.6
Social conditions & equity	164	0.4
Culture	440	1.0
Science & technology	91	0.2
<b>TOTAL</b>	<b>44,041</b>	<b>100.0</b>

\*Percentages calculated on available amounts.

Source: UNDP, Office of the Resident Representative,  
Development Assistance to Malawi, Annual  
Report for 1980, Lilongwe, 1981.

Malawi's 38 agricultural sector technical assistance projects are listed in Table 2 below. USAID's agricultural research project is one of the largest among these.

Table 2

Malawi: Externally Financed Agricultural Pre-Investment and Technical  
Assistance Projects and Activities, 1980\*

Project/Activity (Title)	Source of Assistance	Assistance Committed for 1980 (Total commitment if known) \$	Duration of Total Project Begin-End Dates	Nature of Assistance and Location
Veterinary Science Training MLW/71/001	UNDP/FAO	<u>30,484</u> ( 126,419)	1972-1981	Training of Malawians abroad in Veterinary Science.
Fishery Expansion MLW/75/019 Phase III	UNDP/FAO	<u>303,566</u> (1,869,284)	1977-1981	Assistance in Management & Develop- ment of fishery & commercial fish farming, together with the plan- ning & execution of a programme of stock assessment exploitation & utilization of fish. The project also comprises a training component. Lake Malawi area.
Livestock Development MLW/75/020-Phase III	UNDP/FAO	<u>74,235</u>	1977-1980	Assistance in expanding milk production & processing facili- ties, beef production & assistance in the control & eradication of animal disease throughout the country. Training of counterparts abroad is also provided.
Nutrition Studies Unit at Bunda College MLW/77/008	UNDP/FAO	<u>5,306</u> ( 46,740)	1978-1981	Provision of one expert in the nutrition field. Equipment is also provided. Bunda College of Agriculture (University of Malawi).

Abbreviations used in this report are found in Table 4

Source: UNDP, Office of the Resident Representative, Development Assistance to Malawi,  
Annual Report for 1980, Lilongwe, 1981.

Table 2  
(Continued)

Malawi: Externally Financed Agricultural Pre-Investment and Technical Assistance Projects and Activities, 1980\*

Project/Activity (Title)	Source of Assistance	Assistance Committed for 1980 (Total commitment if known) \$	Duration of Total Project Begin-End Dates	Nature of Assistance and Location
Assistance to Bunda College LW/77/009	UNDP/FAO	<u>602,144</u> (4,218,165)	1977-1984	Provision of Lecturers/Professors in different fields, fellowships as well as equipment. Bunda College of Agriculture (University of Malawi).
Review of the Movement Storage of the Malawian Grain Storage LW/78/001	UNDP/FAO	<u>9,450</u> ( 48,416)	1978-1980	Assistance in the preparation of a technical report containing recommendations to future national storage expansion and financial implications.
Study of the Access to the Chambe Basin LW/78/002	UNDP/FAO	<u>6,416</u> ( 42,314)	1978-1980	Assistance in the location of a forest access road (15 KM.) which will facilitate the evacuation of forestry essentially timber products of the Chambe Basin in the Mulanje Mountain.
Establishment of Tobacco Research and Development Organization LW/79/001	UNDP/FAO	<u>82,628</u> ( 922,269)	1979-1984	Assistance in setting up a National Tobacco Research Organization through the provision of experts and fellowships for training.
East Coast Fever Immunization & Epidemiology CP/MLW/8901	FAO/TCP	<u>75,000</u> ( 100,000)	1979-1980	Provision of two experts, Epizootiologist & Protozoologist. Equipment is also provided. Ministry of Agriculture & Natural Resources. (Veterinary Dept.)

Table 2  
(Continued)

Malawi: Externally Financed Agricultural Pre-Investment and Technical  
Assistance Projects and Activities, 1980\*

Project/Activity (Title)	Source of Assistance	Assistance Committed for 1980 (Total commitment if known) \$	Duration of Total Project Begin-End Dates	Nature of Assistance and Location
Regular Programme	FAO	(not available)	(ongoing)	Short term fellowships for seminars, workshops, etc.
East Coast Fever Immunization TCP/MLW/018 (DEN)	DANIDA/FAO	<u>550,000</u> (1,391,800)	1980-1983	National programme for East Coast Fever Immunization. Provision of 4 experts, one associate expert/consultants, administrative support, personnel equipment, running costs and training. Dept. of Animal Health & Industry, Lilongwe.
Assistance for Malawi Young Pioneers & Natural Resources Training Institutes TFP/MLW/228/II	WFP	<u>274,950</u> (1,012,500)	1973-1980	Supplementary feeding for MYP Training Bases & Settlement schemes, throughout the country.
Forestry Development on the Viphya Plateau TFP/MLW/2145/Exp.	WFP	<u>88,427</u> (2,455,700) :	1979-1982	Supplementary feeding of between 3,000-4,000 forestry workers and their dependants. Viphya Plateau (Northern Region).

Table 2  
(Continued)

Malawi: Externally Financed Agricultural Pre-Investment and Technical Assistance Projects and Activities, 1980\*

Project/Activity (Title)	Source of Assistance	Assistance Committed for 1980 (Total commitment if known) \$	Duration of Total Project Begin-End Dates	Nature of Assistance and Location
Development of Dairy Industry FP/MLW/2194	WFP	<u>172,540</u> (1,012,950)	1977-1982	Provision of milk powder & butter oil to dairies for reconstitution and sale at subsidized prices to low income groups & providing a fund for dairy development. Lilongwe, Blantyre, Mzuzu & surrounding districts.
Multi-Purpose Training FP/MLW/2423	WFP	<u>339,020</u> (1,695,700)	1979-1984	Supplementary feeding at rural training centers, mainly those of the Ministry of Agriculture & Natural Resources also including those of the Ministries of Community Development, Social Welfare and Health. Supplementary feeding of National Parks Scouts and workers, through the country.
Chitedze Research (TCO's) <sup>1</sup>	UK/ODA	108,700	1980 (ongoing)	*Provision of three experts for seed production, tobacco breeding & farm machinery, research & development Chitedze.

Under this scheme fully funded Technical Cooperation officers are provided  
Associated with UNDP project MLW/79/001

Table 2  
(Continued)

Malawi: Externally Financed Agricultural Pre-Investment and Technical Assistance Projects and Activities, 1980\*

Project/Activity (Title)	Source of Assistance	Assistance Committed for 1980 (Total commitment if known) \$	Duration of Total Project Begin-End Dates	Nature of Assistance and Location
SAS	UK/ODA	1,565,200	1980 (ongoing)	See under Page (13) 60 British expatriates are working in this sector throughout the country.
Fisheries Department (TCO's)	UK/ODA	21,700	1980 (ongoing)	Provision of one fish technologist, Senga Bay.
Commonwealth Development National See Co. of Malawi (NSCM) Small holder Coffee Authority	UK/ODA	182,600	1980 (ongoing)	Provision of 4 experts for the Small holder Coffee Authority & a General Manager for the National See Company of Malawi.
Tea Research Foundation (TCO's)	UK/ODA	32,600	1980 (ongoing)	Provision of one Tea Biochemist, Tea Research Foundation for Central Africa, Limbe.
Bvumbwe Research (TCO's)	UK/ODA	87,000	1980 (ongoing)	Provision of two experts for crop storage & research entymologist. Bvumbwe.
Ministry of Agriculture & Natural Resources (TCO's)	UK/ODA	32,600	1980 (ongoing)	Provision of one Physical & Environmental Planning Advisor. Ministry of Agriculture & Natural Resources.
Small holder Tea Authority (TCO's)	UK/ODA	43,500	1980 (ongoing)	Provision of one Land Husbandry Officer.

Table 2  
(Continued)

Malawi: Externally Financed Agricultural Pre-Investment and Technical Assistance Projects and Activities, 1980\*

Project/Activity (Title)	Source of Assistance	Assistance Committed for 1980 (Total commitment if known) \$	Duration of Total Project Begin-End Dates	Nature of Assistance and Location
Extension Aid Dept. Ministry of Agriculture & Natural Resources (TCO's)	UK/ODA	32,600	1980 (ongoing)	Provision of one Action Research & Development Expert. Ministry of Agriculture & Natural Resources.
Voluntary Service Overseas (VSO)	VSO	45,700	1980	7 British volunteers are working in this sector through the country.
Veterinary Investigation Project	DANIDA	30,000 (500,000)	1977-1980	Setting up of a Vet. Investigation project (protozoon, viral & helminthic disease) including variable equipment & building of an extension to stock feed lab. Location: Central Veterinary Laboratory, Lilongwe.
Malawi Union of Savings Credit Cooperation 12-0205	USAID	534,000	1980-1984	Provision of technical assistance, training & equipment to develop a national Cooperative Savings & Credit Society.
Agriculture Research 12-0202	USAID	1,648,000	1979-1984	Provision of technical assistance (University of Florida) Commodities physical construction of facilities & financing of recurrent costs to expand Malawi's agricultural research system.

Table 2  
(Continued)

Malawi: Externally Financed Agricultural Pre-Investment and Technical Assistance Projects and Activities, 1980\*

Project/Activity (Title)	Source of Assistance	Assistance Committed for 1980 (Total commitment if known) \$	Duration of Total Project Begin-End Dates	Nature of Assistance and Location
U.S. Peace Corps* Agriculture	USPC	37,300	1980 (ongoing)	Provision of 9 institutional training officers, Ministry of Agriculture & Natural Resources.
Lakeshore Rural Development Project	EDF	553,700	1977-1981	Provision of 7 experts to the project Ministry of Agriculture & Natural Resources.
National Rural Development Programme	EDF	165,100	1980-1982	Provision of five experts, Ministry of Agriculture & Natural Resources Lilongwe
Lakeshore Fisheries Project	EDF	126,599	1980-1983	Provision of 4 experts, Fisheries Department.
Malawi/Canada Dairy Cattle Development Project	Canada/CIDA	924,400 (5,700,000)		Provision of 500 Canadian Friesian and 150 local cattle. 39 man years of technical assistance up to 69 man years of training & a share of local cost funding for the development of the dairy farm, Chinsapo Farm.

Transportation costs for US Peace Corps to and from Malawi not included.

Table 2  
(Continued)

Malawi: Externally Financed Agricultural Pre-Investment and Technical Assistance Projects and Activities, 1980\*

Project/Activity (Title)	Source of Assistance	Assistance Committed for 1980 (Total commitment if known) \$	Duration of Total Project Begin-End Dates	Nature of Assistance and Location
lua Irrigated Stttlement Scheme (750 acres)	Rep. of China (Taiwan)	(not available)	1975-1980	Completion of irrigation, rehabilita- tion construction & cultivation of 750 acres of the total schemes & implementation of power-tillers plan, Nkhotakota District.
khate Irrigated ettlement Scheme	Rep. of China (Taiwan)	(not available)	1978-1981	Completion of Irrigation, construc- tion & cultivation of total scheme. Implementation of a power-tillers plan, Chikwawa District.
omasia Irrigated ettlement scheme (125 acres)	Rep. of China (Taiwan)	(not available)	1977 (ongoing)	Maintenance, operation & management & cultivation of the total scheme, purification & propagation of seeds & training of farmers & extension officials Machinga District.
apanese Overseas operation Volunteers (JOCV)	JOCV	264,000	1980	11 volunteers & 1 expert are working in this sector throughout the country. Ministry of Agricul- ture & Natural Resources.
ree Planting projects	CSC	11,500	1980	Assistance to tree planting project in various Districts.

West Germany was the largest source of Malawi's capital assistance funding in 1980 (21%) followed by the World Bank's International Development Association (14.6%). USAID and the British Government each supplied 10 percent. Much of this assistance was for agriculture and rural development (Table 3).

Table 3

## Malawi: Capital Aid by Source, 1980

<u>Source</u>		<u>Capital Aid</u>
<u>British Government</u>	-General Development Grant	14,754,749
<u>German Assistance</u>	-Chiweta-Kacheche Road	1,538,500
	-National Rural Development Programme Kawinga	879,400
	-Salima-Benga-Nkhotakota Road	9,230,800
	-Liwonde-Nsanama Road	5,897,400
	-Strategic Reserve Storage/Chiweta Kacheche Road	5,641,000
	-Mzimba District Hospital	2,564,102
	-Blantyre Sewerage III	4,871,800
	-Study & export fund	521,820
<u>CIDA</u>	-Mulanje South Rural Piped Water Project	58,824
	-Karonga Rural Piped Water Project	47,059
	-Nthalire Rural Piped Water Project	14,706
	-Dombole (Ntcheu) Rural Piped Water Project	151,765
	-Livulezi Rural Piped Water Project	94,353
	-Chikwawa (Mwanza River) Rural Piped Water Project	193,882

<u>Source</u>	<u>Capital Aid</u>
-Malawi Railways Locomotives	1,392,200
-National Rural Development Programme	2,500,000
<u>CSC</u>	
-Mzuzu Trade Testing Centre	24,400
-South Lunzu Traditional Housing Areas-Social Services	16,000
-District Development Committee	11,765
-Wells Programme	46,000
-Shallow Wells Project	40,089
-South Lunzu Foot/Cycle Path	248,233
<u>EDF</u>	
-Improvements to Staff Training College Mpemba	117,647
-New Nsanje Hospital	101,176
-New Mangochi Hospital	196,470
-Micro Projects	588,235
-Central Lake Fisheries Development	896,696
-New Blantyre Dairy	1,311,764
-University of Malawi-The Polytechnic	447,058
-Blantyre-Mwanza-Mozambique Boarder Road-Economic Study	360,000
-Development of Industrial Areas Phase III (Chirimba)	3,057,647
-Trade Promotion	29,411
-Rural Youth Trade School	485,294
<u>A.T.I.</u>	
-Lilongwe A.D.D. Rural Industries Project	35,434
<u>South Africa</u>	
-Lake Malawi National Park	82,000
-Malawi Bureau of Standards	228,235
<u>I.D.R.C.</u>	
-Rural Fuelwood Research Project	168,470

## External Loans and Credits\*

<u>Source</u>		<u>Capital Aid</u>
<u>ADF</u>	-John Mzumara-Ekwendeni Road Construction	2,135,285
	-Namwera Rural Development Project	1,022,823
	-District Centres Water Project	1,271,553
	-Primary School Construction in Urban Areas	3,178,823
<u>ADB</u>	-Kamuzu International Airport Initial Civil Engineering Construction	1,424,393
	-Rural Electrification	1,468,235
<u>ADB/EDF/IDA and Federal Republic of Germany</u>		
	-Loan to ESCOM (Nkula (Stage II)	5,173,152
<u>Danish Government</u>	-Sixth Danish Loan	4,000,000
	-Fifth Danish Loan	80,000
<u>IDA</u>	-Shire Valley Agricultural Development Project Phase III	2,370,714
	-Karonga-Chitipa Rural Development Project Phase III	2,000,000
	-Third Highway Kasungu-Jenda Road Construction	29,412
	-N.R.D.P. III - Wood Energy	2,672,576
	-N.R.D.P. III - Energy Unit	498,115
	-Second IDA Education Project	358,098
	-Third Education Project	8,000,000
	-National Rural Development Programme Phase I	5,875,336
<u>French Government</u>	-Loan	7,852,744
<u>OPEC Special Fund</u>	-Third Highway Project-Lilongwe-Dedza Road Strengthening	561,791
<u>U.S.A.I.D.</u>	-Fourth Education Project	5,000,000
	-Fourth Highway Project	9,866,625

<u>Source</u>		<u>Capital Aid</u>
<u>Japanese Government</u>	-Additional Soft Loan for Construction of Kamuzu International Airport	1,522,000
<u>I.D.B.I.</u>	-Lilongwe Water Supply Emergency Works	1,841,176
<u>Other External Loans</u>	-	18,799,329
TOTAL CAPITAL AID (Grants, Reimbursements, Loans & Credits)		149,280,587

\* April-March 1980-1981

\*\* Abbreviations appear in Table 4

Source: UNDP, Office of the Resident Representative, Development Assistance to Malawi, Annual Report for 1980, Lilongwe, 1981.

There doesn't appear to be much likelihood for overlap between USAID's and World Bank's proposed development strategy and projects in Malawi. The World Bank is considering funding the following agricultural projects over the next few years.

Fiscal 1980	-initiated NRDP-II, a five-year national forestry program developing wood energy, budgeted at \$11-12 million per year.
Fiscal 1982	-NRDP-III, will most likely focus on the Karonga area development project.
Fiscal 1983	-NRDP-IV, will most likely focus on Dedza Hills and Lilongwe N.E. area development projects.
Fiscal 1984	-NRDP-V, will mostly likely focus on consolidation of Shire Valley projects and involve some irrigation.

The greatest likelihood of overlap between USAID and World Bank projects would be in the manpower development area. The World Bank is considering training NRDP middle management in a future education project which is not too dissimilar to what is

expressed in USAID/Malawi's draft manpower development project identification document. The two donors will consult before either project is finalized.

Table 4

## Abbreviations Used in Tables 2 and 3

ADB	African Development Bank
ADF	African Development Fund
ATI	Appropriate Technology International
CDC	Commonwealth Development Corporation
CIDA	Canadian International Development Agency
CSC	Christian Service Committee
DANIDA	Danish International Development Agency
ECA	Economic Commission for Africa
EEC	European Economic Community
EDF	European Development Fund
FAO/TCP	Food & Agriculture Organization/Technical Cooperation Programme
IDA	International Development Association
IDBI	Industrial Development Bank of India
ICAO	International Civil Aviation Organization
IDRC	International Development Research Corporation
ILO	International Labour Organization
IMCO	Inter-Governmental Maritime Consultative Organization
ITC	International Trade Centre
ITU	International Telecommunications Union
OECD	Overseas Economic Cooperation Fund
OPE	Office for Projects Execution
OPEC	Organization of Petroleum Exporting Countries
OXFAM	Oxford Famine Relief
SEB	Scandinavian Export Bank
UK/ODA	United Kingdom Overseas Development Administration
UN	United Nations

UNDP/DTCO	United Nations Development Programme/Department of Technical Cooperation for Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Fund for Population Activities
UNCHS	United Nations Centre for Human Settlements (HABITAT)
UNCTAD/GATT	United Nations Conference on Trade & Development /General Agreement on Tariffs & Trade
UNICEF	United Nations Children's Fund
UNIDO/SIS	United Nations Industrial Development Organization/Special Investment Services
UPU	Universal Postal Union
USA	United States of America
USAID	United States Agency for International Development
USPC	United States Peace Corps
VSO	Voluntary Services Overseas
WFP	World Food Programme
WMO	World Meteorological Organization
WHO	World Health Organization
WTO	World Tourism Organization