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ARUSHA REGION

INTEGRATED DEVELOPMENT PLAN

VOLUME TWO

ARUSHA REGION: DEVELOPMENT STRATEGIES AND PRIORITIES FOR THE NEXT 20 YEARS

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With The Assistance Of
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During the four year period beginning in July 1979 Arusha Region has been assisted by the USAID-sponsored Arusha Planning and Village Development Project in the implementation of a large number of village development activities and in the preparation of the Region's Integrated Development Plan. It is a great pleasure to me that this Plan has now been completed and that I am able to write this short forward.

The Arusha Region Integrated Development Plan includes a comprehensive description of the current status of development in the Region, an analysis of constraints to future development, and the strategies and priorities that the Region has adopted for guiding its future development. It also includes a review of projects in the Region's Five Year Development Plan as well as priority projects for long term investments.

The preparation of the Plan has involved many meetings at the Regional, District and village level, and the goals, strategies, objectives and priority projects included in the Plan fully represent the decisions of the officials involved in those meetings. I am confident that the Plan will provide a very useful frame of reference for guiding the economic and social development of Arusha Region over both the medium-term five year period and the next 20 years. The total size of the identified projects and programmes is well beyond the normal scope of the financial resources of the Regional budget. Therefore, one function of this document is also to present the necessary facts and justification for attracting assistance from potential sources outside of the Region to carry out priority projects which address the specified development objectives of the Region. The Plan is by no means exhaustive, and there is room for interested organizations to explore other potential investments. Our Plan is therefore a base for future comprehensive planning.

I would like to take this opportunity to congratulate the Regional Planning Office staff and the team from Development Alternatives, Inc., which undertook the implementation of the Arusha Planning and Village Development Project, for their hard work and many accomplishments and to thank all those Regional Government, Ministry, Parastatal, and Party officials who, in one way or another, gave them the necessary assistance and cooperation.

J. A. Mhaville

REGIONAL COMMISSIONER
ARUSHA

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INTRODUCTION

The integrated regional development planning exercise for Arusha Region began with the initiation of the Arusha Planning and Village Development Project (APVDP). Sponsored by the Government of Tanzania and by the United States Agency for International Development, this project combines the process of regional planning with the simultaneous development and implementation of local income-generating and related activities. The regional planning process provides a decision-making framework for the Region's future development, with the initiation of local development activities adding ideas and realism to the planning process while contributing to the well-being of rural villages in the Region.

The Region sees the planning process as evolutionary; lessons and knowledge from past implementation experience will contribute to the development of future priorities, programs, and projects. Also the Region recognizes the importance of the macro-economic factors, which will affect the availability of resources for the future. Considerable research and discussions have taken place over the past 20 months, culminating in a set of policy decisions that will provide a framework for future planning and development.

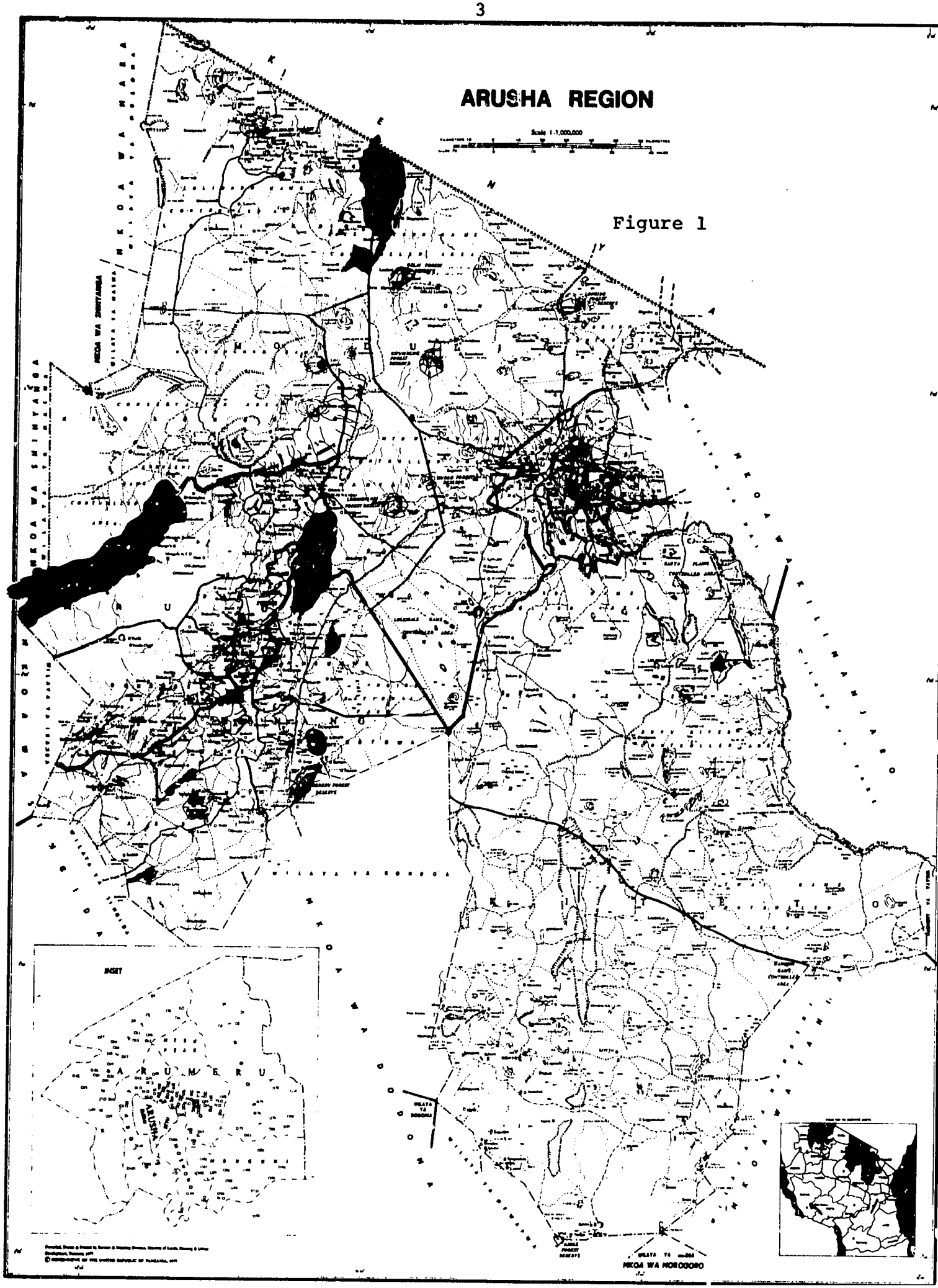
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Figure 1
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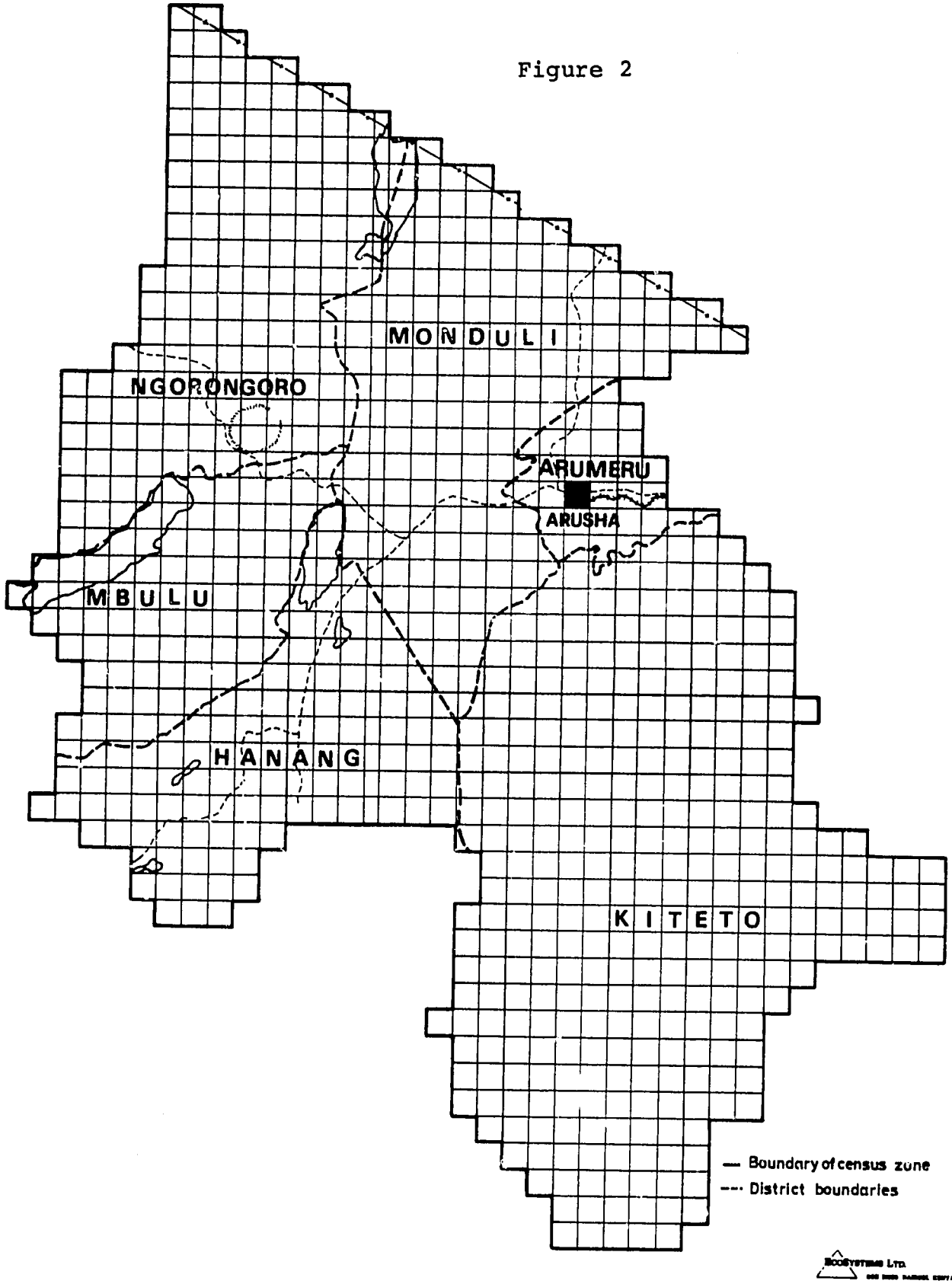
ARUSHA
MKOA WA MOROGORO

ARUSHA PLANNING AND VILLAGE DEVELOPMENT PROJECT

Livestock, Wildlife and Land Use Survey, February 1980

ARUSHA REGION AND DISTRICTS

Figure 2



THE PLANNING PROCESS

Regional Planning Concepts

At the outset of the planning process, the Region decided that its planning should draw from the lessons of other Regions. A comparative analysis of Regional Integrated Development Programs (RIDEPs) was done and study tours to other Regions were undertaken. The conclusions of these exercises were threefold:

> First, the planning process should be evolutionary. Rather than designing a lengthy "blueprint" for development, the planning in the Region should be done step by step, drawing on the lessons from project development and implementation and on problem-focused research and testing.
>
> Second, the planning process should be based on a realistic assessment of the availability of future resources and better utilization of existing resources.
>
> Third, decision making in the planning process should be done by regional and district governments and party officials, with the external technical assistance fully integrated into the planning structure and process.

Specification of Regional Development Goals

Early in the planning process, the Region specified five main development goals:

- Increase village self-reliance, as measured by an expansion of village capabilities to solve their own problems;
- Improve equity, as measured by poorer areas obtaining development benefits in a self-sustaining manner;
- Promote economic growth, as measured by increases in the Gross Regional Product and in generation of foreign exchange earnings;
- Improve regional integration, as measured by stronger linkages -- commercial, institutional, and cultural -- within the Region and with national and international sources of capital and markets; and

- Protect natural resources, as measured by the development of sustainable production systems.

These goals offer a framework for evaluating development initiatives and have been confirmed in later regional and district decision-making forums (See Annex A).

Policy 1: Regional policy, planning, and investment decisions will be guided by the five development goals of village self-reliance, equity, economic growth, integration, and protection of natural resources.

Regional Planning Approach

Early regional and district workshops decided that planning for the Region should be based on the definition of agro-ecological zones; planning units eventually were established taking into account economic, social, and administrative factors. Further, it was decided that the village should be the basic unit of development. With these decisions, the steps in the planning process involved:

- Definition of agro-ecological zones through the use of earth satellite photos, aerial photos and census, and slope map analysis which resulted in 245 distinct zones that were later organized into planning units by district officials;
- Analysis of population growth and movement to determine resulting land use pressure;
- Identification of village economic activities and infrastructure through a rapid reconnaissance survey of 150 villages (about 30 percent);
- Preparation of sector-specific background and assessment papers to identify specific problems and potentials; and
- Identification and development of background papers which cut across sectors such as manpower, the availability of financial resources, implementation problems, and soil conservation.

A complete bibliography of the documentation prepared for the regional planning exercise is found in Annex B.

Regional Planning Decision Making

With the generation of a large data base for decision making, the Region decided to form regional and district planning committees consisting of senior government, party, and parastatal officials as well as the appropriate members of parliament. These planning committees were subcommittees of the respective Regional and District Development Committees and were formed to prepare policy and planning recommendations and to evaluate alternatives and progress toward achieving development goals. Their recommendations form the basis for decision making by the regular regional and district structure and processes.

To develop the strategies and priorities presented below, the following steps were taken:

- The findings of the sector and background papers were summarized as resource material for regional and district decision-making;
- District strategy and priority papers were prepared;
- A regional cross-cutting issues paper was prepared to highlight problems and potentials;
- Regional functional office papers were prepared for sector specific analysis; and
- The main policy and program recommendations were made from the above documentation by the Regional Planning Committee which made the initial policy decisions for review by the regular government structure.

The policies adopted constitute the basis for future planning. Within this framework, future program and project development will take place.

A MACRO-ECONOMIC OVERVIEW

In looking to the future, a critical question for Arusha Region and the country as a whole is whether the current economic situation will remain the same, become better or worse. This question is important for both intermediate and longer-term planning to project resource availability and to consider possible regional contributions for alleviating the problem.

The Intermediate Term

The heart of the problem for the intermediate term is the shortage of foreign exchange which has widespread repercussions on all aspects of Tanzanian life. To address this issue, table 1 was prepared.

Table 1: Tanzania: Balance of Payments Projections (in millions of US $)

	1980	1981	1982	1983	1984	1985
Exports(1)	600	580	650	750	870	1000
Imports	-1300	-1480	-1680	-1880	-2090	-2320
Trade Balance	-700	-900	-1020	-1130	-1220	-1320
Principal Repayments	-50	-60	-60	-70	-100	-110
Deficit	-750	-960	-1080	-1200	-1320	-1430
Development Aid	580	630	680	730	780	830
Deficit after Aid	-170	-330	-400	-470	-540	-600

(1) Includes net invisible receipts. Source: World Bank

The export projections in this table are based on World Bank estimates of what could happen if things go right. They are extremely optimistic in that the projections call for an increase in exports of 72 percent over the 1981-1985 period, particularly since total exports fell three percent during the immediately preceeding period of 1977-1981. At this point, the aid projections are not firm, and there is much work that has to be done to insure that disbursements can be accelerated to meet this schedule. Further, there are pre-conditions which will affect whether the International Monetary Fund (IMF) projections are to be realized. The principal repayment projections are required if Tanzania is to fulfill all its international financial obligations. Even if all the above assumptions come to pass, it appears that imports will have to be tightly controlled between now and the end of 1985. If any of these assumptions do not hold, such as a shortfall in exports, imports will have to be reduced further.

Table 2 shows the implications this analysis has for the composition of imports. The projections of food and petroleum imports are what the World Bank believes to be essential if further serious economic disruptions are to be avoided. The table indicates that at least through 1985 imports other than food and petroleum will have to remain close to the 1980 levels.

Table 2. Tanzania: Import Projections (in millions of US $)

	Estimate		Projections			
	1980	1981	1982	1983	1984	1985
Total Imports	1,300	1,313	1,313	1,347	1,460	1,640
- Food	90	60	70	70	80	80
- Petroleum	260	320	370	420	470	530
- Other	950	933	873	857	910	1,030

It should also be noted that if the Government is to honor its international obligations and to keep domestic demand under control, recurrent expenditures will have to be kept under close rein. This need is manifested in the attachment to the guidelines for the Fourth Five-Year Plan in which 1985/86 recurrent expenditures are projected at Tsh 11.5 billion compared to the current 1980/81 estimate of Tsh 10.1 billion. In essence, foreign exchange shortages and the related limitations on recurrent expenditures will continue as far into the future as it is possible to make reasonably accurate projections. Indeed, if these optimistic assumptions do not hold up, things could be even tighter than what these projections indicate.

Some of the implications of this analysis, as seen by the Region, are the need to: recognize financial resource constraints; utilize existing resources; promote food and export crop production; and seek additional funds from external sources.

The Long Term

Standing back from the intermediate term "numbers" projections, the question becomes one of whether there are activities which can be anticipated that are likely to make a significant difference in terms of constraints to the Region's development over the long term. There appear to be several such factors.

First, cement shortages should disappear within a decade with the completion of the new cement factories and with the possibility of a lime-pozzolana plant being established in Arusha Region. Under the assumption that the transport system can handle larger cement shipments (and this is an important caveat), the pace of housing and building construction as well as irrigation works will increase.

Second, serious consideration is being given to the development of three new extraction activities in the country: soda ash from Lake Natron in Arusha Region, phosphates from Lake Eyasi in Arusha Region, and natural gas from Kilwa in Lindi Region. In each of these cases, it is expected that fertilizer will be a major output. Production of large quantities of fertilizer may change cost considerations in its use dramatically.

Another dimension of these extraction industries is the direct impact of their development. For example, the investment costs of the soda ash project are estimated at $400 million or Tsh 3.2 billion. The magnitude of this development activity can be appreciated when investment is compared with the Region's annual development budget of less than Tsh 60 million. Such an investment, while yielding tremendous immediate benefits, requires considerable advanced planning if severe long-term disruptions are to be avoided. For example, this type of project usually starts with a tremendous amount of construction activity drawing people from all parts of the country. It will most likely operate in a capital intensive manner, and the workers who have migrated to the project site will need alternative types of employment after the construction phase ends.

Third, because a markedly higher oil bill has been a major contributing factor to the balance of payment problems, an important consideration is whether the country has alternative energy sources that might be developed. The country does have more hydroelectric potential than it is now using, and it also has coal resources that can be exploited. Some off-shore oil exploration is under way, and there has been progress developing technologies for tapping solar power. However, the lead time required to develop these energy sources is so great that they can only be expected to make a significant contribution in one or two decades from now.

A significant feature of energy consumption in Tanzania is that roughly 90 percent of the country uses wood and charcoal as the main energy source. This has serious implicatons for the future development of the wood industry of Arusha Region.

This brief review of possible long-term activities that might affect development in Arusha Region, along with such actions as the re-opening of the border with Kenya or major investments in the Dodoma Capital zone, indicates that far more planning is necessary to insure that serious consequences do not occur. While the evolution of these activities will be encouraged and closely monitored by the Region, primary attention will be devoted to more fully tapping the high potential of Arusha Region within current planning parameters.

OVERVIEW
STRATEGIES AND PRIORITIES FOR THE YEAR 2000

As discussed in the previous section, one main constraint to development in Arusha Region will be the availability of central government resources. The current national economic crisis means that the central government will not be able to provide the Region with additional financial support, measured in real terms, in the foreseeable future.

In addition, the regional planning documents highlight two other primary constraints to development:

- By the year 2000, the population of all districts will double; and
- This doubling of population, when coupled with needed complementary growth in economic activity, will increase competition for available land and place increased pressures on the environment.

The above constraints lead the Region to the conclusion that its development over the next two decades should be based on four main strategies that incorporate recent policy decisions:

STRATEGY ONE:	Integrated development activities that emphasize village-level land use planning and reduce population growth rates.
STRATEGY TWO:	Highest priority given to directly productive activities.
STRATEGY THREE:	More efficient use of existing manpower, equipment, materials, and finances in support of regional development activities.
STRATEGY FOUR:	New efforts to obtain additional resources for development.

In the following sections, each strategy will be presented in more detail, with reference to the policy decisions found in Annex A and to the implementation issues associated with each strategy.

STRATEGY ONE
INTEGRATED DEVELOPMENT ACTIVITIES THAT EMPHASIZE VILLAGE LEVEL LAND USE PLANNING AND REDUCE POPULATION GROWTH RATES

This first regional development strategy calls for land use planning, a concentration of government resources in specific geographic areas and the gradual extension to other areas, the development of village planning and implementation capabilities in the areas of geographic concentration and the introduction of family planning and migration control programs to alleviate land pressures and to help ensure the economic and social well-being of rural people. Over the next five years, approaches will be developed, tested, and introduced into the gradually expanding areas of concentration. By the year 2000, the effort will be extended to the Region as a whole.

LAND USE PLANNING AND GEOGRAPHIC CONCENTRATION

Over 95 percent of the Region's population is dependent on land resources for its survival. With the high population growth rate, there is increased competition for land from the agriculture, livestock, and natural resources sectors and from village, parastatal, and national groups. Due to the pressures and practices of these competing interests, there is a rapid deterioration in land quality and productivity:

Policy 2: Land use planning and conservation will serve as the basic component for regional planning and development.

Steps have been taken to divide the Region and districts into planning units based on the definition of the 245 distinct agro-ecological zones in the Region. The districts have reviewed and

combined these zones into planning units based on geographic, economic, social, cultural, and administrative factors. These planning units provide a framework for future regional planning and development.

The next step is to determine how production and income in these planning units may be increased in a manner that is self-sustaining. This requires several steps over th xt five years:

- Development of an awareness of the importance of land use planning, particularly in the lower levels of the government and party structures. This will be done through district campaigns for the promotion of land use planning.

- Development of an approach for village- and ward-level land use planning. Currently, an intensive effort is under way in Olkokola Ward, Arumeru District, to generate lessons about how to introduce land use planning concepts at the village and ward level. To complement this effort, the districts will initiate similar (though less intensive) approaches. This experimentation will be monitored and assessed by the Region to identify low cost approaches.

- Development of a methodology for making land use decisions through problem-specific investigations. Several questions continue to emerge regarding the use of land. For example, what are the tradeoffs of NAFCO expanding its wheat production scheme versus an increased effort to improve village crop production in the same area. Or, should a large-scale lease to promote cattle production be granted at the cost of disrupting wildlife migration patterns into national parks. Through problem-specific investigations, the Region will develop a methodology for assessing alternative land uses and their contribution to regional development goals.

- Development of a management plan for land use in the Region, including current uses, assessment of potentials, and a long-term plan for development.

- Introduction of soil conservation practices in village and larger projects. Preliminary investigation of the options has been completed, and the Region intends during the coming fisc year to hold an intensive, problem-related training program. This training will be expanded and extended to ensure that investments in conservation take place.

Over the next five years, the Region expects to have developed a land management plan that is based on an assessment of alternative land uses. In addition, land use planning and soil conservation practices will be introduced at the village and ward levels. Over the long run, the land use plan will be modified and implemented, and the land use planning and conservation approaches will be employed in 100 percent of the villages in the Region.

Because of the diversity of agro-ecological zones and limited resources, it is necessary initially to focus attention and resources in specific geographic areas.

Policy 3: The Region will adopt the concept of geographic area concentration, with the districts defining the basis for selection.

A strategy of geographic concentration is one element in an effort to better utilize existing limited resources. Each district has defined areas of concentration, though with different rationale. One district has decided to concentrate all resources in a large planning unit with high, though as yet unexploited, potential. Other districts have selected wards or villages representative of the various agro-ecological zones to develop technologies and activities which may be replicated or spread to other geographic areas.

Operationally, the geographic concentration approach means an initial concentration of district resources on specific areas and the gradual extension to other areas as local expertise and capabilities are developed so that the benefits of development become self-sustaining. Over a five-year period, the Region expects to develop capabilities in 15 to 20 percent of the villages. In the next two decades, the Region will extend its activities to all villages.

VILLAGE PLANNING AND DEVELOPMENT

Using the approaches of land use planning and geographic concentration, the basic unit for development will be the village.

Policy 4: The basic unit for development in the Region will be the village.

Although there is village involvement in the generation of the project ideas, a primary need is to build village organizational, technical, financial, and managerial capabilities.

Policy 5: The Region and districts will help increase the capacity of villages for project development and implementation through organizational, technical, financial, and management assistance.

An initial emphasis will be, as mentioned above, the development of village- and ward-level capabilities in land use planning. In essence, this is an attempt to ensure that villages plan with an understanding of the available natural resources, the options for development, and the measures necessary to maintain the sustainability of their production systems.

There is a need to develop capacities in the villages for project development and implementation. This will be done through training programs for ward secretaries, village chairmen and secretaries, and village managers. Already the Community Development and Cooperative Development offices have organized training programs in management and administration for their staff, emphasizing bookkeeping, accounting, and administration. The next step is to assist the trained staff to build village management and administrative capabilities.

Under the Village Revenue Act, it is possible to generate village revenues through small enterprises, village cooperative projects, fee collection, and village marketing. The generation of village income for future investments will be a critical step towards achieving sustainable development benefits. In addition the Region has developed a handbook for villages on how to tap loan and grant funds from external sources such as the Regional Development Fund and the village capabilities to draw upon and effectively use these external funds.

In addition to building financial and organizational capabilities, the Region will emphasize the establishment of village technical capabilities to solve problems. The most cost effective method appears to be through the creation of crop-specific (e.g. maize) or livestock paraprofessionals at the village level, with district functional offices providing training and technical support. This idea will be discussed further in the following sections.

In sum, the Region will emphasize village capacity building through the introduction of land use planning, training of ward and village leadership in project development and implementation, the promotion of village revenues (and necessary management and administrative skills), and the provision of technical training. This effort will be directly tied to the strategies of geographic concentration and spread. It should be noted that the pace of development in various villages will depend on its leadership, stage of development, and past implementation experience; moreover, the size and complexity of activity will evolve as village capabilities expand.

Under APVDP, an experimental method of village development has been initiated and tested which involves an evolutionary, dialogue approach. Funds for income generating activities are provided as loans to villages which repay the districts. This

revenue will then be reinvested in other activities developed by the village with the support and supervision of the district and Region. In essence, a district revolving loan or discretionary fund is established similar to those in Botswana and other countries where decision making has devolved to lower levels of government.

Policy 6: The Region will institutionalize the evolutionary dialogue approach to village development activities, including the establishment of support mechanisms such as a revolving credit funds and blocked budgetary requests.

Over the past 20 months several income generating activities, such as grain grinding mills, rural industries, testing of crops, the introduction of fruit and forestry tree nurseries, and improvements in livestock have been developed by villages. The emphasis on income generating activities appeals to foreign donors and should attract additional funding from such sources, thereby increasing the amount in the revolving credit funds. In addition, the Region has urged the central government to consider "blocked" funds (supplemental to sector-specific allocations for districts)to support village development initiatives. This funding combination will help move development decision making closer to the beneficiaries.

INTEGRATED DEVELOPMENT ACTIVITIES

The emphasis on land use planning, geographic concentration, and village development requires integrated planning and implementaton of development activities in order to achieve the intended impact and ensure the best possible utilization of government resources.

Policy 7: Future planning and project development will have a geographic-specific focus (whether a village or larger area focus) with integrated planning for development.

The district strategy and priority papers are the first steps in promoting this emphasis. For it to evolve, more training of lower-level officials in the process of integrated planning is necessary. Moreover, village, district, and regional planning and project proposals must provide for, and examine, cross-sectoral issues.

The lack of training in this area, few incentives for integrated planning, and limited budget allocations have impeded and will continue to impede progress in integrated planning over the next five years. However, if integration remains a focus of the planning, training, project development, and review processes, then the operational implications should become accepted and institutionalized. The design and implementation arrangements of foreign donor projects can provide a catalyst to this process.

The problem of integration is severely constrained by the inputs of parastatals and of line ministries which constitute the bulk (about 90 percent) of the government's development resources being invested in the Region. Frequently, the development plans of these agencies are not known to the Region or districts resulting in incompatable, inconsistent and redundant programs, and the absence of sharing lessons and ideas which would contribute to regional development.

Policy 8: The Region requests that the central government arrange sittings with parastatals and line ministries early in each budget cycle to review and coordinate upcoming development initiatives. In preparation for these meetings, the Region and districts will conduct their own assessments of the strengths and weaknesses of ongoing projects in relation to their impact on regional and district development.

In addition to improved communication, planning, and evaluations, the Region will reorganize its information base on non-regionally controlled investments so that activities can be more effectively monitored. Such actions will allow the Region to give greater guidance for future investments.

POPULATION GROWTH AND MIGRATION

One main impetus for the emphasis on land use planning has been the recognition of the significance of the problem of population growth and movement. Conservative estimates indicate that the Region has one of the highest growth rates in the world, with a doubling of the population anticipated during the next 20 years. Land scarcity, food availability, per capita economic growth, and quality-of-life considerations call for strong measures to control population growth and movement.

Policy 9: The Region and districts will develop programs to encourage slow population growth rates and to control migration.

In implementing this policy, the Region will support both modern and traditional family planning programs. Included in this effort will be an educational campaign on the problems of population growth and resulting land pressures. Various alternative approaches will be tested at the village level to determine which are acceptable to, and will be used by, the villages.

Initial cooperation has already taken place with the UMATI program, which has responsibility for the introduction of family planning. However, UMATI does not have the resources to support this program so the Region will take steps to obtain additional funding elsewhere. Funding from foreign donors should be easily available because of the priority the international community has placed on this matter.

Migration problems are both inter- and intra-regional, and several actions will be taken. First, APVDP resources will be used to analyze the 1978 census figures. This analysis will identify the magnitudes and directions of migration flows, both into and within the Region, and point to the primary reasons for

them. The analysis will be buttressed by several village-level case studies of the determinants of migration. Second, government laws and regulations will be reviewed to determine what authority the Region, districts, and villages have to control migration. At the conclusion of these efforts, policy options will be developed that address the questions of optimal population densities and the need to relocate villages.

The next five years will see the testing and extension of acceptable modern and traditional family planning methods in the areas of geographic concentration. Further, the Region will establish and implement immigration control policies and procedures that take account of village decision making over the long run, and population programs will receive priority in order to alleviate land pressures and to help ensure economic and social well-being.

STRATEGY TWO
HIGHEST PRIORITY GIVEN TO DIRECTLY PRODUCTIVE ACTIVITIES

This second regional development strategy calls for the highest priority to be given to directly productive activities to build village financial and organizational capabilities so that they can finance quality-of-life improvements. Since agriculture and livestock provide the economic base for the Region, these sectors and related industries which add value will be the major emphasis of regional planning and development. Emphasis will also be placed on natural resources, particularly forestry because of the extensive use of wood as an energy source. In the next five years the development of these activities will be concentrated in specific geographic areas utilizing government resources in a more effective manner than previously. Additional external resources will be sought in order to expand into new geographic and substantive areas in the future.

BUDGET ALLOCATION FOR DIRECTLY PRODUCTIVE ACTIVITIES

Investments in directly productive activities will build village financial and organizational capabilities so that they can finance quality-of-life improvements, leading to self-sustaining contributions to national revenues at a time when there is an urgent need to increase export crop and food crop production.

Policy 10: Directly productive activities will receive priority in funding, with at least 40 percent of the development budget being allocated for these activities.

Recent regional development budgets have allocated close to 40 percent of their budget to directly productive activities. Arusha Region expects to continue meeting this minimum allocation

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and hopes to place an even greater priorty on funding such activities.

AGRICULTURE AND LIVESTOCK

Agriculture and livestock are the economic base of the Region, providing close to 90 percent of the Gross Regional Product. Although about 95 percent of the people participate in agricultural and livestock production activities, there are serious personnel, funding, planning, and project deficiencies in these two sectors so their full potential has not been realized.

Policy 11: The livestock and agriculture sectors will receive regional policy, program development, and funding priority.

Agriculture

By official estimates, Arusha Region produces larger agricultural surpluses than any other region in Tanzania. Given that much of this production moves through unofficial markets, its actual surplus is probably even greater relative to other regions. Nonetheless, it is probable that total agricultural production has declined over the last decade due to numerous well-known impediments such as, low producer prices, inefficient farm input delivery and marketing systems, the absence of meaningful extension programs, the changing crop targets with requests for farmer cooperation with minimum attention to necessary incentives, and poor management of estate farms.

While production trend data for the Region are not available (except for that which flows through the official market), Table 3 gives some indication of relative trends of export crops and their associated costs and significance.

Table 3: Tanzania: A Comparison of Actual 1980 Crop Exports with Potential Exports

Crop	Volume (000 tons) 1980 Actual	Volume (000 tons) 1980 Potential*	Prices (US$/ton) 1980	Exports (in millions of US$) 1980 Actual	Exports (in millions of US$) 1980 Potential
Coffee	41	61	3600	146	218
Tea	16	16	1500	24	24
Cotton	38	86	1700	65	147
Sisal Fiber	65	218	700	45	152
Cashew Nuts	15	114	700	11	80
Cashew Kernels	5	6	3000	15	18
Tobacco	8	16	1800	15	29
Cloves	6	11	7500	45	82
TOTALS				366	750

* Potential volume is measured empirically, the highest annual export volume that has been achieved for each crop since 1966.

The table shows that if Tanzania had produced at past levels, it could have avoided increasing arrears (an increase of US$130 million) and still have had enough left over to purchase 20 percent more imports (US$254 million) than it actually did in 1980.

Rough estimates of food crop production indicate that the Region produces annually about 370,000 tons, of which 42 percent is consumed, 15 percent is lost through spoilage, and 43 percent or about 160,000 tons is surplus. With the current high population growth rate, it is projected that an additional 36,000 tons of food grains will be needed by 1985, and an additional 172,200

tons by 1990. This requires either a significant increase in production or a major reduction of the food supply that the Region offers for export to the rest of the country. While it will not be possible to increase production overnight, the Region plans a series of activities including an increase in producer prices which should be an effective incentive to increase production.

Livestock

There are nearly 2.2 million cattle, 1.1 million sheep, and 1.5 million goats of indigenous breeds in the Region. About 59 percent of the land is available for livestock grazing, though large areas are not usable due to tsetse fly infestion. With such a high level of production, human protein requirements can be met. However, there are no reliable figures on offtake. The evolving dairy industry has the potential to meet milk and dairy product demands in the Region though only 25 percent of the supply necessary for the Tanzanian Dairy Corporation is being provided, with the remaining 75 percent available through food imports. There is small rudiment production but on a small scale, falling below the requirements and potentials of the Region.

As a consequence of rapid population increases and resulting land pressures, competition for land will increase and traditional livestock management will be modified. More than likely, the nomadic practices will have to yield to enclosed, land intensive range management and production methods. While such a change will be difficult, it could be tremendously beneficial to the Region and to the primary livestock producers, by reducing land conflicts and deterioration and leading to significantly higher production and incomes. Therefore, steps will be taken to lay the groundwork for these changes, by testing alternative ways to affect the local levels.

Strategy and Priorities

The regional concentration on specific geographic areas and integrated land use planning provides a framework for the development of the agriculture and livestock sectors. A key to the development of these areas will be finding the mix of agriculture and livestock activities which have the greatest return from various agro-ecological zones and which can be sustained through better utilization and conservation of land and water resources. Staff and other resources will be concentrated in the priority geographic areas.

Research and Extension

There is a need to improve significantly the quality and amount of agricultural livestock research and extension. There are several areas for initial emphasis. Adaptive testing, which is important for determining the potential rates of return from the geographic areas of concentration, will be started. Maize is the main crop in these areas so the Region and the National Maize Program will test improved production practices. In regard to crop diversification, new crops (particularly oil seeds) will be tested with existing resources, and new projects will be designed to test and to introduce drought resistent crops as well as to explore the potential for commercial spice production, primarily for export markets. In the livestock sector, the main emphasis will be on range management and the introduction of intensive livestock production methods.

In addition to the general thrusts outlined above, specific issues will be investigated in order to determine policy and program options. One example is an analysis of the costs and benefits of allowing NAFCO to expand its wheat schemes onto new lands. Another is an assessment of how to increase production on estate

farms which could increase both food and export crop production. The Region also sees value for long-range development in more comprehensive farming (agriculture and livestock) systems research and adaptive testing and will attempt to design, with foreign donors, projects to generate reliable production and trend data.

The Region has already completed a first-phase training program for livestock officers and will introduce more intensive training for lower-level agricultural extension workers. In the next five years, the Region will initiate and test a paraprofessional program which should help expand the technical capabilities of villages. In both the livestock and agriculture sectors, a regular program of communication and problem solving workshops will be introduced so existing problems and knowledge can be shared in the extension services.

Delivery of Inputs

The input delivery systems for agriculture and livestock are inefficient and are further restrained by shortages of foreign exchange. One major constraint is the availability of agricultural implements. The Region is initiating a major program, financed by APVDP, to produce ox-drawn equipment. (See rural industries discussion below.) There will be a need for credit for small farmers to enable poorer elements to take advantage of this equipment; this suggests that the central government should review its policies and mechanisms for the provision of credit to small farmers.

A second problem is the availability of seed. For this, the Region will examine the question of seed distribution to see how existing systems can be improved, perhaps through the development of an externally financed project. For the livestock sector, the main constraint is the availability of animal drugs and vaccines.

Interim steps are being taken to solve this problem, but the long-term solution lies with the establishment of a production facility which is currently anticipated from Finnish aid and which will be encouraged by the Region. As other input requirements are identified as critical, the Region will follow a similar investigation and problem-solving approach.

Development of Infrastructure

The infrastructure in support of agricultural and livestock production suffers from a lack of investment both in development and operations and maintenance. One priority is to reduce the current food crop losses through the construction of storage facilities. Initial emphasis will be on insuring the full development of village storage facilities in the areas of geographic concentration. Also, there appears to be a need for on-farm storage which will be developed through the testing and introduction of known technologies.

Considerable increases in crop production can be achieved through the introduction of irrigated farming. With the initiation of the ILO project and of the APVDP Maroroni Project, this potential is beginning to be explored. The Region intends to develop proposals for large-scale schemes which will have to be financed by external sources and small village schemes which can be accommodated under APVDP and regular regional funding. In the process of developing these projects, the Region will assess its technical capability for supporting such projects and tie the development of this capacity into possible foreign donor projects.

Water is also critical for the development of livestock as well as the construction of additional dips and related activities. A program will be developed that is integrated with other government investments.

Special programs will be needed to protect existing land resources as well as to open up under-utilized areas. The Region has already financed a soil conservation prefeasibility study in Karatu Division where there is high production and serious soil erosion problems. The Region will attempt to mobilize the resources necessary to initiate the major program needed to conserve this potential. In addition, the Region is organizing intensive training in soil conservation for functional officers in livestock, agriculture, and natural resources. Further, the Region and districts have identified areas which can be exploited and prefeasibility studies will be done to secure the resources necessary for the development of these areas.

Marketing

Serious problems exist in both the agriculture and livestock marketing systems. Of particular importance for increased production and availability of agricultural and livestock commodities will be an increase in producer prices.

Policy 12: The Region urges the central government to increase producer prices.

While the pricing structure is a primary constraint, there is also a need to improve the marketing mechanisms. The Region will assess how to improve the marketing and storage capabilities of the National Milling Corporation, and perhaps develop a project for external funding. As serious as the inefficiencies of the National Milling Corporation is the ineffectiveness of the Tanzanian Livestock Marketing Corporation (TLMC). Therefore, the Region will place priority on developing a project either through TLMC or alternative vehicles for improving livestock marketing.

The Future

The above measures will be emphasized over the next five years with the realization that improvements, particularly in production, will take time. However, the geographic, land use, problem-specific emphasis will allow evolutionary development of the agriculture and livestock sectors and gradual expansion into new areas based on testing and new knowledge of options.

Industry

There is a need to develop complementary rural industries which add value to the products of the agricultural and livestock sectors, and the Region will place priority on rural industry development.

Policy 13: The Region will develop a program for the promotion and support of small, rural industries, including the development of district institutional support capabilities.

While priority will be placed on rural industry development, the Region looks at this potential from a broader perspective. Arusha is the second largest industrial center in the country, and it has a major role in forwarding the nation's industrial strategy of self-sufficiency with large-scale factories that produce tires, textiles, beer, and bakery products. In recent years, the production of these factories has been severely constrained by shortages of necessary production inputs. These shortages are largely a result of the deterioration in the balance of payments situation and the resulting need to restrict foreign exchange allocations.

Evidence presented earlier suggests that the shortage of foreign exchange is likely to be a long-term problem; the Region's industries will continue to suffer as a result. In formulating

its future industrial development strategy, the Region noted one other important point: despite the fact that the Region is a leader in the promotion of primary goods (agriculture and livestock) and certain manufactured goods for consumption, it has very little industry that adds value to these activities either in terms of producing inputs or in processing and marketing the outputs. Following these considerations, the Region's industrial development strategy will be to put priority on new industries with low import requirements that add value to the Region's current agriculture, livestock, and natural resources activities.

In the future, the Region will favor small-scale enterprises that can be spread among the villages rather than be located in a single place. For each new idea there will necessarily have to be some prototype testing and design, a process cheaper for small units than large ones.

Operationally, the first step will be to develop a district rural industries promotion capability. Community Development and Cooperative Development officers will be trained by SIDO to promote rural industries. The Region will work with SIDO to test and to introduce on a commercial basis technologies suitable for rural industry development. Currently, efforts are under way to do this with ox-drawn equipment, grain mills, and oil presses. Funding from APVDP is being used to establish an agricultural implements production facility at the regional level, with district (ward- or village-level) facilities for assembling and maintaining this equipment. Other projects include the development of brick and tile manufacturing in four locations and a soap making industry in Hanang District.

In addition to the small-scale enterprises, the Region will prepare prefeasibility studies for large-scale industries to utilize effectively its natural resources through the tapping of external investment. Priority projects include the establishment

of a lime-pozzolana cement production facility for which the preliminary studies have been done. The potential for salt extraction and processing, glass production, vegetable dehydration, fruit and vegetable canning, tractor maintenance, fertilizer production, and the mining of semi-precious stones will also be explored.

These activities suggest the potential of industrial development within the Region. The Region sees the development of small-scale industries with minimum import requirements as a major priority and will turn to internal and external financial sources for their development.

Natural Resources

The natural resources sector has and will continue to receive priority, particularly in the areas of forestry, fisheries, and beekeeping. Though the Region will attempt to link village development activities to the wildlife/tourism sector, it will rely on external funding for the necessary investments to develop this industry because of the foreign exchange requirements of tourism.

Forestry

As mentioned earlier, wood serves as the fuel for roughly 90 percent of the energy requirements of Tanzania. It is also the primary input into industries such as paper and furniture making.

Compared to other regions, Arusha is fortunate in that it still has abundant wood reserves. However, there is reason to believe that these resources are being depleted. There are two reasons to bring a halt to this depletion. First, wood is a renewable resource; with proper management practices, the Arusha

forests could provide for all regional needs and significant exports for the foreseeable future. Second, further depletion of the forest stock could seriously endanger the Region's environment which depends on the watersheds provided by the forests. By means of the steps outlined below, the Region will avert depletion of its forest reserves and rationalize wood production and consumption over the coming years.

Significant success has been achieved in promoting forest tree production in Mbulu District. The strategy involves ward and village nurseries, training in tree planting and tending, and an improved delivery system for trees. This model will be replicated in other parts of the Region.

In order to develop a forest production plan, there is a need to do an assessment of the forest reserves. This involves an assessment of future needs of forest products for energy and wood-related industries, and an evaluation of existing and potential resources to service these needs.

The combined approach of development of ward and village nurseries and wood production activities and of the development and systematic exploitation of forest reserves will provide a base for the future. Because of limited resources, the initial concentration will be in the areas of geographic concentration.

Fisheries

At this time, the Region does not have anything that could be considered a fishing industry. Instead, it has limited areas in which fishing for local consumption is carried on. There are numerous large bodies of water that offer the potential for large-scale fishing activities, and opportunities on a small scale to initiate village fish ponds which can produce an important food resource.

Development of the fisheries sector will be evolutionary. The initial investments will be in small-scale, low-cost fish ponds. The large water resource potentials will be examined, but after the Region's fisheries staff, which is currently unable to support an expanded program, receive additional training.

Beekeeping

Beekeeping is also an industry with potential. The Region is engaged in introducing more modern hives, better marketing, and more productive use of beeswax in an experimental training and development project in Mbulu District. This and similar efforts will be continued, primarily in the areas of geographic concentration.

Tourism/Wildlife

Since Arusha is the starting point for most tourist activities in Tanzania, there is the question of whether new initiatives might not expand tourism in the Region. However, it must be recognized that the tourism industry is very import intensive. Much of the building materials, vehicles and fuels, and amenities must be imported from the outside. Moreover, while there has been a rebound in tourism activity from the all-time low that was hit after the closing of the Kenya Border, Europe is in the midst of an economic recession; bookings are off this year and uncertain in the future. In perhaps a year, the World Bank will be considering what can be done to assist the Tanzania Tourism Corporation. In addition, the International Finance Corporation (IFC) is considering an investment program to improve the capacity of private tourist facilities and tour operators. The Region will work with the World Bank and IFC to make best use of these resources, but tourism does not hold a high enough priority to warrant further investment of funds except for village-related development

activities. The Region will concentrate on small-scale production (agricultural and handicraft) activities which link village production with the tourist industry.

In the area of wildlife, however, some actions are anticipated. Plans will be developed for one or two wildlife farming schemes, with a primary purpose being the breeding of exotic species of wildlife for export sale. The Region will also consider game cropping and local hunting fees to generate additional local food supplies and revenue. A step in this direction will include prefeasibility studies in cooperation with potential investors. These activities will be developed in the framework of land use planning which becomes particularly important given the competitive demands for land.

Rural Employment

With the development of agriculture, livestock and natural resources sectors, and the related development of appropriate rural industries, employment opportunities in the rural areas will be generated. In contrast to past investments, training programs (and the expansion of training facilities) will only be done as specific rural employment opportunities and the needed skills are identified. Training programs will then be geared to developing or upgrading these skills.

Policy 14: The Region and districts, primarily through the Youth and Culture Office working in cooperation with other functional offices, will create an employment generation program for all youth in directly productive (rural) sectors, with future investments in training facilities and programs delayed until skill requirements are better defined.

The initial concentration of the Region will be on the opening of opportunities in the rural industry sector, with subsequent expansion as other opportunities are identified.

STRATEGY THREE
MORE EFFICIENT USE OF EXISTING MANPOWER, EQUIPMENT, AND FINANCES IN SUPPORT OF REGIONAL DEVELOPMENT ACTIVITIES

This third regional development strategy calls for the more efficient use of existing manpower, equipment, and finances in support of regional development activities. The starting point for the implementation of this strategy is to improve the planning, implementation, monitoring, and evaluation capabilities of the Region and districts. With limited resources, significant progress can also be made by training regional manpower in management and technical skills. Financial resources can best be utilized to fund the operation and maintenance of existing roads, water systems, and social service facilities. And much progress will be made by creating industries that produce needed materials and by improving maintenance and standardizing equipment. Over the next five years, the Region will concentrate on how to better utilize existing resources and apply these lessons in the future when the resource constraint eases.

PLANNING, MANAGEMENT, MONITORING, AND EVALUATION

Better utilization of resources can come from improved planning, management, and evaluation of the use of development resources. The Region has already taken the first step towards this objective through the reorganization of the Regional Planning Office into three divisions: Financial Management and Budget, Planning and Evaluation, and Project Management. The Planning and Evaluation Division will concentrate on annual and long-term planning, project development, and issue investigations and evaluations to formulate policy and program options. The Project Management Division will help review and approve projects, manage available resources (particularly those for cross-sectoral

projects), monitor and evaluate progress, making corrections in project design as needed and eliminating bottlenecks as they are encountered. The Financial Management and Budget Division will carry on the traditional functions of a Regional Planning Office plus initiate the monitoring of parastatal, line ministry, and external donor resources.

The reorganization of the Regional Planning Office has been combined with the development and testing of a new project proposal format which will be used to develop effective implementation plans which specify implementation schedules and responsibilities so progress can be more effectively monitored.

Similar efforts are under way to build district planning, management, monitoring, and evaluation capabilities through in-country training and on-the-job technical assistance. The importance of all these efforts is to help ensure the better utilization of existing resources, including manpower resources, financial resources, and materials resources.

MANPOWER

A primary resource of the Region is its manpower which can be better utilized through improved management, administration deployment, and training.

Policy 15: The Region commits itself to a policy of improving the effectiveness and efficiency of its work force.

The strategy of geographic concentration suggests how to improve the deployment of manpower. The Region will re-assign its personnel to support this strategy as well as develop job descriptions which reflect the new substantive areas of priority.

To complement the existing manpower force, the Region will test and develop a program of paraprofessional workers. The intent is to establish a corps of trained individuals at the village level who have expertise in a specific crop or livestock area. The recruitment and financing of paraprofessionals will be the responsibility of the villages with the district providing training, supervision, and technical support. This is a low-cost program that gives villages accountability for developing a manpower pool better able to serve their needs.

Over the past years only a minimum amount of funding has been requested and made available for staff development. As a result of the Region's comprehensive manpower study, a major emphasis will now be on the development and training of staff. The Region has formulated, and is conducting, a training program in regional planning with Cornell University which will result in five individuals receiving a masters' degree in regional planning. This external training has been complemented by in-country training in data collection and analysis, planning, and project development for planning and functional officers.

Another priority is the development of the management and organizational skills of regional and district functional officers. Considerable improvements in manpower utilization can take place through this type of training which will be done in-country. It is anticipated that the management and organizational training will take place over the next several years.

A third training priority will be technical training for specific functional officers. The Region has developed training modules for Community Development and Cooperative Development officers and for livestock extension personnel. It intends to continue to develop intensive training programs for the technical personnel of different functional offices. Further, there appears to be high return from regularly scheduled communications and

training workshops for district personnel. These programs will be carried out initially for agriculture, livestock, natural resources, and Community Development and Cooperative Development officers. Further plans for technical training are being developed in the health area through the Arusha Rural Health Project which will be financed by USAID.

The final priority area for training will be for ward secretaries, village managers, village chairmen and secretaries, and village bookkeepers as was discussed earlier. The emphasis of this training will be on land use planning and the planning and implementation of village development projects.

In addition to improved deployment, management and training, a key area for improving the performance of regional manpower is through better personnel administration. The Region will develop a project for external funding for building the capabilities of the regional and district manpower offices. These offices are currently reviewing their procedures in order to initiate improvements.

Investment in manpower programs is a low-cost means of better utilizing existing resources. Although there are specific personnel shortages, primarily in agriculture, Comworks, Maji, health, and education, significant progress can be made over the next five years through the above actions. Over the long term, the intent of the Region is to build up village capabilities so as to improve accountability and to minimize direct costs to the government.

FINANCES

The heavy investment in directly productive activities will involve tradeoffs in terms of development and recurrent expenditures. Of particular concern to the Region is the lack of

sufficient operating funds for existing roads, water supply systems, and social service facilities. It is critical that resources for the operational and maintenance requirements of existing facilities be made available.

Roads

The Region only possesses the financial and equipment resources to maintain 1000 kilometers of roads (though it has a mandate to maintain at least 1000 kilometers of regional roads and 970 kilometers of district roads). Further, Comworks is constrained by a shortage of trained manpower, particularly in senior regional and district positions, and by organizational problems. With the current limited resources, the Region will define a minimum network that can be maintained by Comworks and will attempt to secure additional resources for road development.

Policy 16: The Region and districts will determine road priorities on the basis of economic growth, specifying a minimum network to be maintained by Comworks. Comworks will present a plan for the better use of existing resources for maintaining this network, with particular reference to building district maintenance capabilities.

The Region has conducted an initial transport economic study which provides a framework for decision making. A follow-up study will be done in collaboration with regional and district officials to define the minimum network to be maintained by Comworks as well as those roads to be maintained by villages and by central government programs. A second study was done on the capacity of Comworks with recommendations for the better utilization of existing resources which will help guide the development of the Comworks plan.

The future development of the Region will depend on the expansion and improvement of its road network which will continue to be a priority for the Region. However, this expansion must be predicated on a reasonable increase in recurrent funds for ongoing maintenance.

Water

A similar situation exists with water as with roads. About 40 percent of the water systems that have already been installed are not functioning for significant amounts of time each year. To address this problem, the Region is developing activities and proposals which include:

- The introduction of easily maintained water systems wherever possible such as shallow wells, catchment systems, and windmills;
- The development of district maintenance capabilities;
- The training of village water technicians to be recruited and paid for by the villages; and
- The conduct of water investigations to identify potential sources which can be developed on a low cost basis.

Part of these activities are already being funded by APVDP in Arumeru, Hanang, and Mbulu Districts. A proposal for Kiteto, Monduli, and Ngorongoro Districts has been submitted to USAID.

Policy 17: Maji will concentrate its efforts on the maintenance of existing systems (and the development of an ongoing maintenance capacity), even at the cost of the installation of new water supply systems in the short term. Future investments in new projects will be related to the potentials identified in water resource investigations.

This is a short-term solution which takes account of the government's resource constraint. Over the long term, the Region views the development of water supply systems as essential not only for human consumption but also for directly productive activities. This requires integrated planning and suggests that water systems should be considered by the central government as economic infrastructure as well as a fundamental social service.

Social Services

The overwhelming evidence from the regional planning exercise is that the personnel, housing, equipment, supplies, and funds necessary to maintain existing social service programs are lacking.

Policy 18: Development expenditures on social services will be reduced until such time as the operational requirements of existing facilities are met; the Region petitions the central government for the gradual expansion of social services in keeping with the growing population and for adequate funding for support of village-initiated projects such as village first aid boxes.

This suggests that the pace of developing new facilities should be reduced over the short term. However, with the emphasis on directly productive activities, the villages should have additional resources to finance their own quality-of-life needs. As the government's financial outlook improves, then it can do more in terms of development expenditures aimed at areas of significant population growth.

The Region sees improvements in the efficiency of parastatal enterprises as a major way to better utilize existing resources. Of major concern in the Region is the failure of the Tanzanian Livestock Marketing Corporation to provide effective marketing outlets for village products. There also appear to be serious problems with high overhead rates and inefficiency in other parastatal organizations.

Policy 19: The Region observes with delight the recent Government move to restructure some of the parastatals but appeals to the Government to examine marketing and distribution functions for all parastatals, in particular the Tanzanian Livestock Marketing Corporation.

To assist this process, the Region will conduct its own internal assessments of such operations.

Pricing of consumer products is of major concern. However, the costs involved in transport and marketing are not sufficiently documented to rationalize recommendations for consumer price changes. Therefore, the Region will establish a means for such analysis and present its recommendations to the central government so as to have fair but commercially viable prices.

Policy 20: The Region will establish a cost-accounting procedure in order to make recommendations to the central government on how to rationalize consumer prices.

Materials

Significant savings can be achieved through the production and delivery of materials for development activities. Better planning of resource requirements can also help insure that materials are available when needed at the lower price.

Policy 21: The Region and districts will improve the availability of materials through these activities:

- Promotion of rural industries to produce necessary equipment and supplies with locally available resources;
- Exploration and testing of appropriate technologies through in-country and external study tours;

- Delivery of equipment and supplies from government trading companies to government-supported programs; and
- Consolidation and integration of requests in districts for materials in support of village development activities.

In pursuit of these decisions, the Regional Planning Office has commissioned a study of future material requirements of Government and non-Government agencies, the sources within and external to the Region, and the effectiveness of delivery systems. Special attention is being directed towards the way in which materials can become more readily available and the steps which may be taken to use local resources. The Region has already made progress in developing local sources of supply, as mentioned in the section on industries.

In addition to developing new local sources of equipment and supplies, significant savings can be achieved through the better maintenance of existing equipment, particularly vehicles. Therefore, priority is placed on the development of maintenance facilities.

Policy 22: Priority will be placed on upgrading and equipping district vehicle maintenance facilities and staff, including the construction of facilities in Arumeru and Ngorongoro districts.

Under APVDP, this effort has been started in Arumeru, Hanang, and Mbulu Districts but considerably more resources and training assistance will be required. The region will develop a project to seek such assistance as well as to provide for the construction of facilities in Arumeru and Ngorongoro Districts.

Further savings can be achieved if the Region standardizes the equipment used in the Region to help alleviate spare parts shortages. This will require a study of cost effectiveness of different types of equipment.

Policy 23: The Region and districts will conduct an ongoing review of equipment to determine appropriateness and standardization, and to improve deployment and maintenance practices.

The Region is already internally conducting an assessment of the heavy equipment available for road and water system construction to determine allocation alternatives. Further study on these questions will take place over the coming year.

STRATEGY FOUR
NEW EFFORTS TO OBTAIN ADDITIONAL RESOURCES FOR DEVELOPMENT

The current macro-economic situation suggests that there will be few additional resources, in real terms, from the central government in support of regional development activities for the foreseeable future. Therefore, the Region must increase its revenue through alternative mechanisms such as user contributions, borrowings from financial institutions, and loans and grants from external sources. Moreover, the Region requests that the central government consider: 1) an increase in the share of the government development expenditures in the Region that is channelled through the government development budget (currently only 10 percent of all development expenditures are through the development budget); and 2) the means by which additional operations and maintenance funds can be made available to the Region. Further, the Region sees the possible contribution of parastatal and line ministry resource investments to regional development goals but only if the Region actively participates in the decison-making process.

Through the above means, this fourth strategy calls for the securing of additional resources for development, with the Region taking the primary initiative in generating these revenues.

GOVERNMENT RESOURCES

Looking into the future, there are several potential financial resources: the central government budget (excluding foreign assistance); foreign assistance; parastatals; revenues of the Regional and lower levels of Government; borrowing by Regional- and lower-level entities; and private investment.

Traditionally the central government's budget has been a major source of financial resources for the Region. However, it is recognized that there is little chance for additional financial resources, in real terms, from this source over the foreseeable future due to macro-economic constraints. This situation could change if the central government decides to increase allocations to the Region at the expense of parastatal and line ministry financing. Currently, less than 10 percent of the central government's funds being channeled into the Region are for the regional development budget, which is inconsistent with the stated policies of decentralization and village-up development planning.

Policy 24: The Region requests that a larger proportion, then the current 10 percent of the central government's development expenditures in the Region be channelled into the Region's development budget.

There are numerous indications that a larger allocation is going to development expenditures at the cost of operation and maintenance outlays than efficiency considerations would warrant. It can be anticipated that recurrent expenditures, in real terms, will fall over the next few years as a result of the economic crisis facing the nation, and government wage and salary payments will increase taking up a larger share of the recurrent expenditures. In spite of this bleak outlook, there is a need for more operational funds even if they come at the expense of the development budget. It would also be worthwhile making a case to foreign donors that overall development would be accelerated if foreign aid projects increase the share of funds devoted to operating and maintenance expenditures.

Policy 25: The Region appeals to the central government for increased funds to finance operation and maintenance needs.

In addition to increases in central government funding, there are other sources of revenue which the Region might tap. The Region is exploring the possibilities of generating revenue through user contributions, fees, and taxes. Very few funds are generated in this way, but indications are that villages are willing to contribute for badly needed services such as livestock drugs, dispensary equipment and drugs, and the maintenance of water systems. Local contributions also tend to improve the quality of services, because the "marketer" is more accountable to the "clientele."

There are various national credit agencies that hold considerable amounts of undistributed foreign assistance monies. The Regional Planning Office has commissioned a study on these potential sources, including their structures and decision-making procedures. In the rural industry sector, discussions are under way with the Tanzania Rural Development Bank and the National Bank of Commerce to set up arrangements, such as a loan guarantee fund, to make these resources available to the Region and its villages.

Policy 26: The Region and districts will establish mechanisms that increase their ability to mobilize financial resources, including user contributions and new borrowing mechanisms.

Over the next five years, a priority will be on the generation of locally controlled revenues, particularly through user contributions and relationships with lending institutions.

Parastatals and line ministry programs make a significant contribution of financial resources to the Region. While a specific breakdown is not available (which is a serious inadequacy in regional planning), it was estimated in last year's budget speech that for the nation, parastatal recurrent expenditures would be about Tsh 15 billion and parastatal development

expenditures would be Tsh 3.4 billion. This compares with the central government's budget figures of Tsh 7.5 billion and Tsh 7.2 billion, respectively. The Region has little influence on how its proportion of these funds are expended though it may have the knowledge base, particularly through its land use planning work, to contribute positive ideas on their use. Further, beyond its control over land, it should have a say in the plans for future development.

Policy 27: The Region requests detailed information on the future development plans of parastatals, line ministries, and foreign donors. It insists upon its right to accept, reject, or modify these initiatives depending on their congruence with the Region's development plans.

NON-GOVERNMENT RESOURCES

The Region recognizes the need, particuarly in light of the macro-economic situation, to develop sound parastatals that will attract additional external funding. With the termination of the Maasai Range Project and with the initiation of APVDP, the Region sees a need for the extension of APVDP activities into the Maasai District.

Policy 28: The Region will place as its first priority for future project development the preparation of a plan for the expansion of APVDP to the three Maasai districts.

The three Maasai Districts have been fully involved in the regional planning exercise so the next step is the preparation of a specific project proposal. This work is scheduled to begin in April 1981.

One of the main constraints to development in all sectors, is the rapidly deteriorating road network. As mentioned earlier, Comworks has the capacity to maintain and rehabilitate only a

small portion of the regional and district roads. A proposal has already been submitted to USAID to finance maintenance camps along the drought roads. But this is just the beginning, and as development progresses there will be an increasing demand for better roads.

Policy 29: The Region will place priority in its future project development, particularly for foreign donors, on roads improvement activity.

Foreign assistance will remain a major source of financial resources which the Region intends to further tap. Among the priority projects identified for funding are:

- Expansion of the fund to support village income generating activities;
- A large-scale irrigation project and smaller irrigation schemes combined with training and technical assistance to build regional capacity to plan and implement such activities;
- A farming systems (agriculture and livestock) research center for adaptive testing of alternative technologies for increasing production in various agro-ecological zones;
- An animal drug and vaccine production facility (currently anticipated from Finnish aid);
- Soil conservation and soil fertility project in Karatu Division (prefeasibility study completed by APVDP);
- Lime-pozzolana cement production project (prefeasibility study completed by APVDP);
- Introduction of appropriate water supply systems for Kiteto, Monduli, and Ngorongoro Districts;
- Hainu Hydro-Electrical power project (prefeasibility study completed by APVDP and by TANESCO);
- Experimental family planning and migration control project;

- Village transport project through which villages are provided with lorries on a loan basis;
- Livestock and agricultural marketing projects (if additional resources or different approaches are identified as needed during regional investigations);
- Rural industry development with funds for conducting full feasibility studies in glass production, vegetable dehydration, and vegetable and fruit canning and processing; and
- Personnel administration and financial management training and support project for Regional offices.

The Region, as it has already done on several of the above projects, will conduct the prefeasibility studies and then assist in full-project development. Resource commitments for project development by foreign donors will increase the prospects of their funding full-scale projects.

The Region will also encourage and assist the development of the large-scale mining and extraction projects such as the anticipated soda ash and phosphate projects in the Region to produce fertilizer. In line with these projects, the Region will also design projects suitable for private investment, though ones which are appropriate for small farmer involvement such as spice production.

Policy 30: The Region will select certain products (such as spice production) for soliciting private sector investment.

CONCLUSION

Arusha Region's statement of its strategies and priorities for the year 2000 started with a review of the macro-economic situation in Tanzania. It concluded that the government's financial resources and opportunities to import goods will be extremely limited in the foreseeable future. There can be no question that these limitations will curtail the rate at which the Region can pursue its development objectives.

The importance of the level of resources available for development was clearly registered in the Region's recent fact-finding tour to Botswana. There, the availability of resources barely constrains development initiatives, and the results have been impressive. While several approaches and technologies can be drawn from Botswana, the situation in Tanzania calls for another development path. Tanzania's serious resource constraint suggests that the Region place a premium on getting the maximum use out of existing resources.

Arusha Region is fortunate in that it has a rich endowment of natural resources. However, its planning effort shows that these natural resources are threatened by rapid population growth and the accompanying growth in economic activity. If the present trend continues, there is great danger that the Region's resource base will be depleted and a situation will emerge similar to Haiti where the environment has been destroyed and the people live in abject poverty. If steps are taken to reverse these trends, however, there is a great potential for the future, and a situation like Central Java, Indonesia, can be developed where there is a high population density, sustained production, and ever increasing per capita income. The difference between Haiti and Central Java is that Central Java has recognized that land use planning and

conservation methods are essential and has instituted them. Also, efficient agricultural practices are followed, and livestock activities are confined to certain areas. Such actions were not taken in Haiti, and now it is perhaps too late.

Arusha Region's strategies and priorities recognize both the serious resource constraint and the inherent dangers of not addressing the pressures on its environment. The policy decisions of the Region call for:

- Better use of natural resources through integrated, land use planning at the village level;
- A focus on directly productive activities with the aim of generating additional income for the villages and the country that can be used for further development;
- New initiatives to make better use of existing manpower, equipment, and financial resources; and
- New efforts to tap additional resources for development, both within the Region and outside.

The Region's strategy differs somewhat from the approach suggested in the Government's Guidelines for the Fourth Five-Year Plan. Instead of starting by specifying a set of targets and calling for strategies to realize them, the Region has chosen to start by asking how it can make best use of the resources available to it to achieve its development goals. Using this approach, development targets are the outcome of the planning activities rather than the starting point.

The Region will continue its evolutionary approach to planning and development, drawing on its lessons and expanding knowledge base to: increase village self-reliance; improve equity; promote economic growth; encourage integration; and, protect its natural resources. These are the development goals which Arusha Region will continue to pursue.

ANNEX A
SUMMARY OF POLICY DECISIONS: ARUSHA REGION

ANNEX A

SUMMARY OF POLICY DECISIONS: ARUSHA REGION

Policy 1: Regional policy, planning, and investment decisions will be guided by the five development goals of village self-reliance, equity, economic growth, integration, and protection of natural resources.

Strategy One

INTEGRATED DEVELOPMENT ACTIVITIES THAT EMPHASIZE VILLAGE-LEVEL LAND USE PLANNING AND REDUCE POPULATION GROWTH RATES

Policy 2: Land use planning and conservation will serve as the basic component for regional planning and development.

Policy 3: The Region will adcpt the concept of geographic area concentration, with the districts defining the basis of selection.

Policy 4: The basic unit for development in the Region will be the village.

Policy 5: The Region and districts will help increase the capacity of villages for project development and implementation through organizational, technical, financial, and management assistance.

Policy 6: The Region will institutionalize the evolutionary dialogue approach to village development activities, including the establishment of support mechanisms such as revolving credit funds and "blocked" budgetary requests.

Policy 7: Future planning and project development will have a geographic specific focus (whether a village or larger area focus) with integrated planning for development.

Policy 8: The Region requests that the central government arrange sittings with parastatals and line ministries early in each budget cycle to review and coordinate upcoming development initiatives.

In preparation for these meetings, the Region and districts will conduct their own assessments of the strengths and weaknesses of ongoing projects in relation to their impact on regional and district development.

Policy 9: The Region and districts will develop programs to encourage slow population growth rates and to control migration.

Strategy Two

HIGHEST PRIORITY GIVEN TO DIRECTLY PRODUCTIVE ACTIVITIES

Policy 10: Directly productive activities will receive priority in funding, with at least 40 percent of the development budget being allocated for these activities.

Policy 11: The livestock and agriculture sectors will receive regional policy, program development, and funding priority.

Policy 12: The Region urges the central government to increase producer prices.

Policy 13: The Region will develop a program for the promotion and support of small, rural industries, including the development of district institutional support capabilities.

Policy 14: The Region and districts, primarily through the Youth and Culture Office working in cooperation with other functional offices, will create an employment generation program for all youth in directly productive (rural) sectors, with future investments in training facilities and programs delayed until skill requirements are better defined.

Strategy Three

MORE EFFICIENT USE OF EXISTING MANPOWER, EQUIPMENT, AND FINANCES IN SUPPORT OF REGIONAL DEVELOPMENT ACTIVITIES

Policy 15: The Region commits itself to a policy to improve the effectiveness and efficiency of its workforce.

a. Manpower deployment will be reevaluated to be consistent with the agreed upon regional policy guidelines and requests for additional trained

staff from national allocations will relate specifically to identified needs of sector programs and the capabilities within the sectors to support those staff.

b. All sectors will reassess job descriptions of all cadre in relation to the modifications necessary to meet requirements of changes in the pattern of deployment.

c. Informal training programs, largely within the Region, will be established in all sectors to:

   - improve on-the-job training of lower cadre;
   - provide seminars/refresher courses for lower/middle-level cadres in technical skills required for their jobs; and
   - provide courses in communication of information and ideas, both communications with other technicians and with nontechnicians.

d. Sector technical staff will be involved in deploying a cadre of paraprofessionals at village level to promote village self-reliance.

e. Village level training will be promoted through management training of village management staff.

f. Since functional heads are central to the efficient use of manpower and resources, they will receive management training. This opportunity will also be extended to Development Directors and Planning Officers.

g. The Department of Manpower Management will urgently adopt a plan for action to radically improve their services to staff. The RMMO will activate a manpower committee, comprising DMMO's, to determine and implement this plan of action.

Policy 16: The Region and districts will determine road priorities on the basis of economic growth, specifying a minimum network to be maintained by Comworks. Comworks will present a plan for the better use of existing resources for maintaining this network, with particular reference to building district maintenance capabilities.

Policy 17: Maji will concentrate its efforts on the maintenance of existing systems (and the development of an ongoing maintenance capacity), even at the cost of the installation of new water supply systems in the short term, and future investments in new projects will be related to the potentials identified in water resources investigations.

Policy 18: Development expenditure on social services will be reduced until such time as the operational requirements of existing facilities are met; the Region petitions the central government for the gradual expansion of social services in keeping with the growing population and for adequate funding for the support of village initiated projects such as village first aid boxes.

Policy 19: The Region observes with delight the recent Government move to restructure some of the parastatals but appeals to the Government to examine marketing and distribution functions for all parastatals, in particular the Tanzanian Livestock Marketing Corporation.

Policy 20: The Region will establish a cost accounting procedure in order to make recommendations to the central government on how to rationalize consumer prices.

Policy 21: The Region and districts will improve materials availability through these activities:

- The promotion of rural industries to produce necessary equipment and supplies with locally available resources;
- The exploration and testing of appropriate technologies through in-country and external study tours;
- The delivery of equipment and supplies from government trading companies to government-supported programs; and
- The consolidation and integration of requests in districts for materials in support of village development activities.

Policy 22: Priority will be placed on upgrading and equipping district vehicle maintenance facilities and staff, including the construction of facilities in Arumeru and Ngorongoro Districts.

Policy 23: The Region and districts will conduct an ongoing review of equipment to determine appropriateness and standardization, and to improve deployment and maintenance practices.

Strategy Four

NEW EFFORTS TO OBTAIN ADDITIONAL RESOURCES FOR DEVELOPMENT

Policy 24: The Region requests that a larger proportion, than the current 10 percent, of the central government's development expenditures in the Region be channelled into the Region's development budget.

Policy 25: The Region appeals to the central government for increased funds to finance operation and maintenance needs.

Policy 26: The Region and districts will establish mechanisms that increase their ability to mobilize financial resources, including user contributions and new borrowing mechanisms.

Policy 27: The Region requests detailed information on the future development plans of parastatals, line ministries, and foreign donors, and insists on its right to accept, reject, or modify these initiatives depending on their congruence with the Region's development plans.

Policy 28: The Region will place as its first priority for future project development the preparation of a plan for the expansion of APVDP to the three Maasai districts.

Policy 29: The Region will place priority in its future project development, particularly for foreign donors, on roads improvement activity.

Policy 30: The Region will select certain products (such as spice production) for soliciting private sector investment.

ANNEX B

ARUSHA PLANNING AND VILLAGE DEVELOPMENT PROJECT DOCUMENTATION

ANNEX B

ARUSHA PLANNING AND VILLAGE DEVELOPMENT PROJECT DOCUMENTATION

GENERAL OUTLINE

1. APVDP Annual Plans
2. Arusha Region Integrated Development Plan
3. APVDP Progress Reports
4. Issue Papers
   - A) Agriculture
   - B) Financial Resources
   - C) Health
   - D) Land Use and Conservation
   - E) Livestock
   - F) Manpower
   - G) Natural Resources
   - H) Population
   - I) Small Industries
   - J) Transportation/Works
   - K) Water
   - L) Wildlife and Tourism
5. Issue Paper Summaries
6. Regional Sector Papers
7. General Policy Papers
8. Evaluation Papers
9. District Strategy and Priority Papers
10. Seminars, Planning Workshops, Planning Committee Meetings
11. Regional and District Project Profiles

1. APVDP ANNUAL PLANS

a) First Annual Plan, July 1979-June 1980.

b) Second Annual Plan, July 1980-June 1981.

c) Third Annual Plan Submission, July 1981-June 1982. (Supplement to the Arusha Regional 1981/82 Annual Plan Submission.)

d) Fourth Annual Plan, 1982/83. (Also included in Regional Annual Development Plan 1982/83.)

2. ARUSHA REGIONAL INTEGRATED DEVELOPMENT PLAN

a) Summary Report: Arusha Region Integrated Development Plan

b) Volume One: Arusha Region Today: 1981.

c) Volume Two: Arusha Region: Development Strategies and Priorities for the Next 20 Years.

d) Volume Three: Arusha Region: Medium-Term Plan 1981/82-1985/86.

e) Volume Four: Major Areas for Long-Term Investments.

f) Volume Five: Information Strategy and Documentation.

3. APVDP PROGRESS REPORTS

a) First and Second Quarter Progress Report, July-December 1979.

b) Third Quarter Progress Report, January-March 1980.

c) Fourth Quarter Progress Report, April-June 1980.

d) Fifth Quarter Progress Report, July-September 1980.

e) Sixth Quarter Progress Report, October-December 1980.

f) Seventh Quarter Progress Report, July-September 1981.

g) Eighth Quarter Progress Report, April-June 1981.

h) Ninth Quarter Progress Report, July-September 1981.

i) Tenth Quarter Progress Report, October-December 1981.

j) Eleventh Quarter Progress Report, January-March 1982.

k) Twelfth Quarter Progress Report, April-June 1982.

l) Thirteenth Quarter Progress Report, July-September 1982.

m) Fourteenth Quarter Progress Report, October-December 1982.

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A. Agriculture

1) Arusha Region Agricultural Review -- Donald Humpal, May 1980.

2) Agricultural and Livestock Production in Arusha Region: An Agricultural Economic Perspective - Merritt Sargent, October 1980.

3) Regional Agricultural and Livestock Activities in Relation to Arusha Region Development Objectives: Summary Papers - Ian Walton, September 1980.

4) Back to Basics, Some Thoughts Concerning the Agricultural Sector in Arusha Region - Robert Dodd, November 1981.

5) Extension Agent's Field Guide - Robert Dodd and Beth Jackson, February 1982.

6) Muongozo wa Kilimo cha Mazao Mbali Mbali (Guidelines for Various Agricultural Crops), 15 crops (Swahili) - P.N. Msabaha, Hanang Ag. Extension Program and Regional Resource Centre, June 1982.

7) Developing Irrigation in Arusha Region Tanzania - Bishay G. Bishay, May 1982.

8) Strengthening Arusha Region Extension Services in the Productive Sectors - Bruce Lundeen, August 1982.

9) A Four Week In-Service Training Program in Agricultural Irrigation and Drainage, Arusha, Tanzania - Bishay G. Bishay, August 1982.

B. Financial Resources

1) Financial Resources Available for the Development of the Arusha Region: A Look into the Future -- Elliott Morss, May 1980.

2) Kitabu cha Mikopo na Misaada Vijijini (Village Loan and Grant Guidebook) (Swahili) -- Arumeru District Development Office, July 1980.

3) An Assessment of the Revenue Generation Capabilities of Villages, Districts and Arusha Region: Some Policy Options -- Larry Schroeder, Local Revenue Administration Project, Syracuse University, June 1981.

4) The Financial Infrastructure in Tanzania, Perspectives, Problems and Policy Strategies with Policy and Program Implications for Arusha Region -- M. S. D. Bagachwa, Economic Research Bureau University of Dar es Salaam, June 1981.

C. Health

1) A Survey of the Health Service in Arusha Region-- Edith Alger, May 1980.

2) APVDP Health Component -- Stan Yoder, September 1980.

3) Health Sector Assessment -- Stan Yoder, October 1980.

4) Education and Training for Health Planning in the Arusha Region, Tanzania (with abstract) -- Paul Chikira, August 1981 (Cornell University thesis).

D. Land Use and Conservation

1) Four Discussion Papers -- Henry Fosbrooke

i. Land Tenure and Land Use
ii. Farming Systems
iii. Urban Development and the Growth of Communications
iv. Resource Conservation

2) Soil Degradation and Conservation in the Arusha Region -- Rorke Bryan, March 1980.

3) Information for Rural Land Planning in Arusha Region -- Dunford, Mouat, Slaymaker, June 1980.

4) Livestock, Wildlife and Land Use Survey: Arusha Region -- Tanzania. Final Report. Volume I: Text. Ecosystems Ltd., September 1980.

5) Livestock, Wildlife and Land Use Survey: Arusha Region, Tanzania. Final Report. Volume 2: Figures and Tables. Ecosystems Ltd., September 1980.

6) Land Resource Survey & Planning -- Arusha Region, Tanzania -- Christopher Dunford, Land Resource Surveys, 1980.

7) Land Information Materials Available to Arusha Planning and Village Development Project -- Christine Dodson, December 1980.

8) Proposed Land Planning Units for Arusha Region, Tanzania -- Christopher Dunford, December 1980.

9) Recommendations for Soil Conservation in Karatu Division, Mbulu District, Tanzania -- Rorke Bryan, February 1981. (English and Swahili.)

10) Change in Cultivated Areas and Erosion Gullets in Northern Mbulu District, Tanzania 1958 to 1972 -- Christopher Dunford, May 1981.

11) Promotion of Land Use Planning in Arusha Region -- Francis G. Finda, June 1981.

12) AP/VDP Soil Conservation Workshop -- Summary and Conclusions -- Rorke Bryan and Tom Dunne, June 1981.

E. Livestock

1) The Livestock Sector in Arusha - Ian C. Walton, December 1980.

2) Masai Motivation and its Application - Henry Fosbrooke, March 1980.

3) Masai Motivation and its Application Annexure II The Masai Gift Scheme, 1940-1944 - Henry Fosbrooke, March 1980.

4) Tsetse Clearing in Mbulu District, 1936-1953 - Henry Fosbrooke, March 1980.

5) Assessment of the Arusha Livestock Situation and Recommendations for Use in the Arusha Region, 1980-1985 Livestock Plan - M. Jacob, Dr. J. Melewas, and G. Sumari, April 1980.

6) Range Management in Arusha Region: Discussion Paper - David Peterson and Thad Peterson, July 1980.

7) Livestock Leaflets, 20 subjects (Swahili) - Ofisi ya Maendeleo ya Mifugo (Livestock Development Office), June 1982.

F. Manpower

1) A Profile and Analysis of Government Manpower in Arusha Region -- Liz Wily, October 1980.

2) General Conclusions and Recommendations of A Profile and Analysis of Government Manpower in Arusha Region -- Liz Wily, October 1980.

G. Natural Resources

1) Agro-Forestry and Its Relevance to the Arusha Region -- Henry Fosbrooke, March 1980.

2) Fisheries in Arusha Region, Tanzania -- Phoenix Development Services Ltd., May 1980.

3) Forestry in Arusha Region -- T.J. Synott, July 1980.

4) Beekeeping in Arusha Region -- Christopher Dunford, July 1980.

5) Pre-feasibility Assessment of Geothermal Resources in Northern Tanzania -- Kathleen Crane, Lament-Doherty Geological Observatory, Palisades, New York.

6) Notes on Forestry in Hanang -- T. J. Synott, June 1981.

7) Proposals for Forestry Projects in Arusha Region -- T. J. Synott, July 1981.

H. Population

1) Population Profile of Arusha Region -- Alan Johnston, January 1980.

2) Monitoring Population Growth in Arusha Region -- Population Data Collection Systems and Suggestions for Improvement -- C. Lwechungura Kamuzola, Department of Statistics, University of Dar es Salaam, October 1981.

3) Assessment of Inter- and Intra-Regional Migration in Arusha Region -- Wilfred Mlay, Department of Geography, University of Dar es Salaam, October 1981.

4) Population Pressure in Arumeru District: Development of Strategies and Policies for Dealing with Population Pressure in Arumeru District -- W. F. I. Mlay, Department of Geography, University of Dar es Salaam, June 1982. (English and Swahili.)

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1) APVDP Discussion Paper: A Possible APVDP Strategy for Small Industries/Appropriate Technology Activity in Arusha Region -- Hugh Allen, October 1979.

2) The Urban Informal Enterprise Sector in Arusha Region -- M. S. D. Bagachwa and S. S. A. Ngware, University of Dar es Salaam, January 1981.

3) Formal Private Industry in the Arusha Region: A Survey -- Peter Schaefer, March 1980.

4) The Availability and Distribution of Selected Building Materials in Arusha Region -- W. E. Maro, Economics Research Bureau, University of Dar es Salaam, August 1981.

5) Formal Industries in Arusha Town (Inventory.)

6) Formal and Informal in Rural Arusha Region (Inventory.)

7) Agricultural Implements Factory at Njiro Hill Arusha, Project Report for APVDP - SIDO Arusha, September 1981.

8) The Spider Tractor in Tanzania - John Kilgour, C.R. Crossley, National College of Agricultural Engineering, Crangield Institute of Technology, Silsoe, England, October 1982.

9) Prefeasibility Study on Brick and Tile Making for Village Development Project - Ajit Pal Singh, November 1980.

J. Transportation/Works

1) Planning Roads for the Arusha Region -- Edward Holland, January 1980.

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4) Arusha Regional Transport Planning Project (Road Transport Infrastructure) Study -- Dr. Benno J. Ndulu, Department of Economics, University of Dar es Salaam, June 1980.

5) Regional Works Issues for Discussion -- John Morrison, October 1980.

6) Assessment of Arusha Region Works Organization and Management -- John Morrison, October 1980.

7) Road Priority Determination: Arusha Region -- Dr. Benno J. Ndulu, Department of Economics, University of Dar es Salaam, June 1981.

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K. Water

1) Hainu River Study Pre-feasibility Report (TANESCO) -- M. Katyesa and J. Gadek, December 1980.

2) Hydrogeological Investigation Report for Olkokola Borehole -- K. Roy, Regional Hydrogeologist, November 1980.

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5) Planning for Operation and Maintenance of Rural Water Supply Systems in Tanzania: Arusha Region Case Study (Cornell University thesis) - Gwabe M. Khawange, August 1982.

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1) Sector Assessment of Tourism in the Arusha Region of Tanzania -- Victoria Morss, May 1980.

2) The Status and Utilization of Wildlife in Arusha Region, Tanzania, Final Report. Ecosystems Ltd., September 1980.

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A. Agriculture
B. Beekeeping
C. Financial Resources
D. Fisheries
E. Forestry
F. Health
G. Implementation of Development Initiatives
H. Land Use and Conservation
I. Livestock
J. Manpower
K. Population
L. Small Industries
M. Transportation
N. Water
O. Wildlife and Tourism

6. REGIONAL SECTOR PAPERS: SUMMARY OF THE CURRENT STATUS, CONSTRAINTS, AND PRIORITIES FOR FUTURE DEVELOPMENT - Regional and Functional Offices, December 1980.

A. Agriculture
B. Education
C. Land Development
D. Livestock
E. Natural Resources
F. Small Industries
G. Stores
H. Ujamaa and Cooperatives
I. Water
J. Works

7. GENERAL POLICY PAPERS

a) APVDP Policy Paper

b) Village Development Activities, Arusha Planning and Village Development Project, March 1981.

c) Information Activities of the APVDP: Present and Future Potentials -- Elliott Morss, March 1980.

d) A Case for Regionally Integrated Planning -- Elliott Morss, March 1980.

e) Integrating Regional Development Objectives into the Regional Planning Process -- Elliott Morss.

f) Regional Development Planning: A Critical Assessment of the Tanzania Experience and its Implications for the Arusha Planning Process -- Elliott Morss, August 1979.

g) Center and Periphery in Arusha Region: Institutional Capacities and Development Initiatives in the Context of Existing Governmental Structures and Village Organization -- Garry Thomas, November 1980.

h) The Village Profile Exercise: APVDP Background Information, Impressions and Perceptions -- David Peterson and Thad Peterson, June 1980.

i) The Village Profile Exercises: Codes for Information Held in Computer Files -- T. M. B. Chikoti, February 1982.

j) English translation of the Guidelines for Preparing the Union Five-Year Plan 1981/82-1985/86.

k) English translation of Guidelines for the Preparation of the Regional Estimates for the 1981/82 Financial Year.

l) Cross-Cutting Issues Emerging from the Arusha Regional Planning Exercise -- Elliott Morss, November 1980.

m) Summary Strategy Paper.

n) Arusha Regional Planning Exercise: Decisions for the Future, January 1981.

o) Women and Development: A Case Study of Ten Tanzanian Villages -- Liz Wily, March 1981. (Summary in English and Swahili.)

p) Encouraging Village Self-Reliance in Arumeru District, Tanzania -- Joyce Stanley, June 1981.

q) APVDP Briefing Paper -- July 1981.

r) Fuel Availability and Distribution in Arusha Region -- W. E. Maro, Economic Research Bureau, University of Dar es Salaam, August 1981.

s) Integrated Rural Development Planning through the Decentralized System: Shortcomings and Prospects. The Tanzinian Experience with the Arusha Region as a Case Study -- Mbwiga Mwalende, May 1982 (Cornell University thesis.)

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a) Evaluation of the Third Five Plan (1976-1981) Arusha Region -- Institute of Development Studies, University of Dar es Salaam, April 1980.

b) English translation of Dutch Evaluation Visit to Arusha Planning Village Development Project, March 1981.

c) Report on the Evaluation Visit to the APVDP Graduate Training Program in Regional Planning at Cornell University, February 1981.

d) Kikwe Building Brigade Evaluation, December 1980.

e) Joint USAID/Government of Tanzania Evaluation of AP/VDP, June 1981.

f) A Preliminary Investigation into the Potential for Agricultural Production from the Kiru Valley Area of Hanang -- I. Walton, J. Gadek, & D. R. R. Mabugo, June 1981.

g) Evaluation of the APVDP Shallow Wells Program in Hanang District, October 1981.

h) Evaluation of the Gallapo Dairy Multiplication Unit in Hanang District, November 1981.

i) Land Use Planning Activities in Arusha Region, Report and Recommendations -- The Regional Development Directorate, Arusha, April 1982.

j) Evaluation of the Computer Operations of the Regional Planning Office, Arusha Region: Report and Recommendations - Regional Planning Office, Arusha, August 1982.

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a) Arumeru District Strategy for Planning 1981/82 Future 5 and 20 Years, December 1980.

b) Hanang District Long Term Development Strategy, December 1980.

c) Kiteto District Development Planning Framework for 1981/82 and the Future 5 and 20 years. Issues, Strategy and Supporting Action - Area Commissioner's Office, January 1981.

d) Mbulu District's Development Issues and Strategies - District Planning Committee, January 1981.

e) Monduli District Development Issues, Strategies and Actions for the next 5 to 20 Years - Area Commissioner's Office, January 1981.

f) Ngorongoro District Long Term Development Strategies and Supporting Issues.

10. SEMINARS, PLANNING WORKSHOPS, PLANNING COMMITTEE MEETINGS

a) Seminar on Data Analysis and Development Planning Report - Lewis, Brandford, Jones, August 1980.

b) Workshop on RIDEP/Arusha, September 1979.

c) Manyara Workshop Papers, October 1979.

d) Ngorongoro District Planning Workshop Report - Neal Cohen, January 1980.

e) Maoni na Maelekeo yaliotokana na kukusanya Takwimu na Maarifa Kutoka Vijiji vya Wilaya ya Kiteto (Kiteto District Planning Workshop Report) - D. Peterson and T. Peterson, February 1980. (In Swahili).

f) Minutes of Regional Planning Committee Meeting, 9-11 February 1981. (English and Swahili).

g) Report of a Study Tour Undertaken by Arusha Regional Team in Botswana, February 25-March 14, 1981.

11. REGIONAL AND DISTRICT PROJECT PROFILES

A. Regional Projects

Project Number	District	Project Name
1	Region	Regional Planning Activities

2	Region	Facilitator Training Model Seminar
3	Region	Workshop on Data Analysis and Planning
4	Region	Graduate Training program /Regional Planning
5	Region	Themi Farm Implement Company
6	Region	Improvement of Regional Veterinary Services
7	Region	Procurement of 35 Landrovers
8	Region	Procurement of 10 Isuzu Lorries
9	Region	Procurement of 120 Motorcycles
10	Region	Regional Well Drilling Equipment Spare Parts
11	Region	Construction of Regional Warehouse/Garage
12	Region	AATP Technical Development Project
13	Region	Spider Tractor Testing Program
14	Region	Agricultural Implements Research/Development
15	Region	Regional Pest Control Program Support
16	Region	Resource Center in Regional Planning Office
17	Region	Computer Center in Regional Planning Office
18	Region	Training of Shallow Wells Survey/Construction Unit
19	Region	Tanga Region Study Tour For Planners

20	Region	Study Tour to Botswana
21	Region	Regional Soil Conservation Workshop
22	Region	Regional Irrigation Seminar
23	Region	Regional Community Development Seminar
24	Region	Regional Cooperative Development Seminar
25	Region	Study Tour to Agricultural Research Stations
26	Region	Kiteto Land Use Planning Seminars
27	Region	Regional Organic Agriculture Seminar
28	Region	Reading University Livestock Course
29	Region	Cornell University Communications Seminar
30	Region	Procurement of Regional Radio System
31	Region	Fruit Tree Up-Grading, Horti-Tengeru

B. Arumeru District Projects

Project Number	District	Project Name
1	Arumeru	Ngarenanyuki Irrigation Rehabilitation
2	Arumeru	Maroroni Irrigation System
3	Arumeru	Pilot Agricultural Extension Program
4	Arumeru	Agriculture Field Staff Training
5	Arumeru	Irrigation Pump Procurement

6	Arumeru	Agriculture Field Staff House
7	Arumeru	Maize Production Seminars
8	Arumeru	Kisongo Dip Rehabilitation
9	Arumeru	Repairs to Livestock Dips
10	Arumeru	Livestock Field Staff Training
11	Arumeru	Spray Race Attendants House
12	Arumeru	Pilot Livestock Extension program
13	Arumeru	Grass Seed Multiplication plots
14	Arumeru	Olkokola Tree Nursery
15	Arumeru	Lekitatu Fishpond
16	Arumeru	Forestry Field Staff Training
17	Arumeru	Fisheries and Beekeeping Field Staff Training
18	Arumeru	Pilot Beekeeping Project - Nduruma
19	Arumeru	Village Tree Nurseries
20	Arumeru	Soil Conservation Seminars
21	Arumeru	Soil Conservation - Musa and Mwandet
22	Arumeru	Olkokola Land Use Planning Program
23	Arumeru	Ngarenanyuki Ox-Cart Production Unit
24	Arumeru	Uwiro Maize Mill
25	Arumeru	Ngabobo Maize Mill
26	Arumeru	Kisimiri Maize Mill

27	Arumeru	Samaria Maize Mill
28	Arumeru	Sakila Maize Mill
29	Arumeru	Kikwe Ward Building Brigades
30	Arumeru	Kiranyi Brick and Tile Production
31	Arumeru	Makumira Bakery
32	Arumeru	Lands Department Equipment Procurement
33	Arumeru	Kisongo Roads Base Camp
34	Arumeru	District Housing Construction and Repair
35	Arumeru	Field Staff Bicycle Purchase Scheme
36	Arumeru	Sakila Pump Attendants House
37	Arumeru	Community Development Assistants Training
38	Arumeru	Village Godowns
39	Arumeru	Ox-cart Purchase Scheme
40	Arumeru	Olkokola Borehole Water Supply
41	Arumeru	Olkokola Gravity Water Supply Rehabilitation
42	Arumeru	Kikatiti Borehole Water Supply
43	Arumeru	Shallow Wells Survey and Construction
44	Arumeru	Village Water Supply Technician Training
45	Arumeru	Karangai Pipeline Rehabilitation
46	Arumeru	Sakila Gravity Water Supply Rehabilitation

47	Arumeru	Sambasha Gravity Water Supply Project
48	Arumeru	Oldonyosapuk Hydraulic Ram water Supply

C. Hanang District Projects

Project Number	District	Project Name
1	Hanang	Pilot Agricultural Extension Project
2	Hanang	Qameyu Women Farmers Group
3	Hanang	Barley Production
4	Hanang	Training of Agricultural Extension Staff
5	Hanang	Oil Seed Production
6	Hanang	Magugu Irrigation Survey
7	Hanang	Magugu Irrigation Project
8	Hanang	Mapea Coconut Nursery
9	Hanang	Groundnut Purchase Scheme
10	Hanang	Ox-Plough Purchase Scheme
11	Hanang	Livestock Extension Program
12	Hanang	Qash Cattle Dip Attendant's Quarters
13	Hanang	Pasture Grass Seed Production
14	Hanang	Livestock Extension Staff Training
15	Hanang	Tsamasi Cattle Dip Improvement
16	Hanang	Nangwa-Dirma Livestock Watering Project
17	Hanang	Forestry Extension Program

18	Hanang	Hanang Forestry Project
19	Hanang	Village Tree and Fruit Nurseries
20	Hanang	Fruit Tree Nurseries
21	Hanang	Gallapo Fishpond
22	Hanang	Bassotu Fish Receiving Center
23	Hanang	Training Course for Forestry Extension Staff
24	Hanang	Fisheries Training Seminar
25	Hanang	Training in Project Planning for Women
26	Hanang	Bookkeeping Training for Village Women
27	Hanang	Training Seminar for Village Accountants
28	Hanang	Gedemar Oil Seed Press
29	Hanang	Madunga Kati Maize Mill
30	Hanang	Madunga Kati Wood-Working Project
31	Hanang	Mapea Mat-Marketing Project
32	Hanang	Qameyu Wood-Cutting Group
33	Hanang	Magugu Maize Mill and Rice Huller
34	Hanang	Village Maize Mill
35	Hanang	Ayamango Maize Mill
36	Hanang	Kizakiba Ox-Cart Factory
37	Hanang	Ox-Cart Purchase Scheme
38	Hanang	Hanang Extension Transportation Project

39	Hanang	Shallow Wells Survey and Construction
40	Hanang	Ring Wells Survey and Construction
41	Hanang	Katesh Gravity Water Supply Rehabilitation
42	Hanang	Gallapo Gravity Water Supply Rehabilitaiton
43	Hanang	Village Water Supply Technician Training

D. Mbulu District Projects

Project Number	District	Project Name
1	Mbulu	Labay Crop Storage Facility
2	Mbulu	Maghang Crop Storage Facility
3	Mbulu	Agriculture Training and Extension Support
4	Mbulu	Soil Conservation/Land Use Planning Karatu
5	Mbulu	Pilot Agricultural Extension Program
6	Mbulu	Dongobesh Oil Seed Production Project
7	Mbulu	Dongobesh Ox Plough Training
8	Mbulu	Murray Women's Vegetable Production Project
9	Mbulu	Mbulu Fruit Tree Orchard and Demonstration Facility
10	Mbulu	Dongobesh Pig Multiplication Unit Support
11	Mbulu	Training for Veterinary Center Attendants

12	Mbulu	Training Course for Dip Attendants
13	Mbulu	Moringa Village Slaughter Facility
14	Mbulu	Village Grass Seed Multiplication Plots
15	Mbulu	Cattle Dip Construction, Moringa Village
16	Mbulu	Training for Livestock Field Staff
17	Mbulu	Pilot Livestock Extension project
18	Mbulu	Karatu Slaughter Facility
19	Mbulu	Dongobesh Slaughter Facility
20	Mbulu	Livestock Disease Prevention Program
21	Mbulu	District Tree Planting
22	Mbulu	Dongobesh Fruit and Forest Tree Nursery
23	Mbulu	Murray-Kainam Fruit and Forest Tree Nursery
24	Mbulu	Daudi Ward Beekeepers Training Project
25	Mbulu	Daudi Ward Fruit and Forest Tree Nursery
26	Mbulu	Hayloto Village Fishpond
27	Mbulu	Forest Tree Seed Purchase and Distribution
28	Mbulu	Natural Resources Training and Extension Support
29	Mbulu	Soil Conservation Along District Roads
30	Mbulu	Bicycle Purchase Scheme for Extension Staff

31	Mbulu	Dongobesh Ox-Cart Production Unit
32	Mbulu	Tlawi Tile Production Project
33	Mbulu	Dongobesh Oil Seed Pressing Project
34	Mbulu	Kuta Village Maize Mill
35	Mbulu	UCDA Training Course
36	Mbulu	Training for CDA's and Village Leaders
37	Mbulu	Shallow Wells Survey and Construction
38	Mbulu	Ring Wells Construction
39	Mbulu	Yaeda Chini Gravity System Rehabilitation
40	Mbulu	Harsha Gravity Water System Rehabilitation
41	Mbulu	Upper Kitete Gravity System Rehabilitation
42	Mbulu	Kilima Tembo Gravity System Rehabilitation
43	Mbulu	Training of Village Water Technicians
44	Mbulu	Murray-Kuta Community Center
45	Mbulu	Maretadu Bridge Construction Project
46	Mbulu	Construction of Grade 'B' House, Mbulu Town

E. Roads Projects

Project Number	District	Project Name
1	Hanang	Dareda-Mbulu Border Road (27 Miles)

2	Hanang	Single-Gallapo-Mamire-Babati Road (29 miles)
3	Hanang	Babati-Nakwa-Riroda Road (10 Miles)
4	Hanang	Bashnet-Madunga Kati Road (11 Miles)
5	Hanang	Gitting-Endasak Road (8 Miles)
6	Hanang	Bashnet-Ufana Road (10 Miles)
7	Mbulu	Karatu-Mbulu-Dongobesh-Hanang Border Road (81 Miles)
8	Mbulu	Dongobesh-Haydom Road (30 Miles)
9	Mbulu	Oldeani-Mang'ola Road (30 Miles)
10	Mbulu	Njiapanda-Oldeani Road (6 Miles)
11	Mbulu	Mbulu-Kainam-Hayloto-Murray Road (15 Miles)
12	Arumeru	Tengeru-Mbguni Road (22 Miles)
13	Arumeru	Usa River-Ngarenanyuki-Oldonyosambu Road (10 Miles)

ANNEX C:
HISTORICAL CHRONOLOGY OF ARUSHA REGION

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HISTORICAL CHRONOLOGY OF ARUSHA REGION

Date	Event
2000 BC	Stone Bowl Culture, Neolithic Pastoralists flourished from Serengeti through Ngorongoro and Monduli to West Kilimanjaro.
500 - 200 BC	Engaruka flourishes as irrigation settlement.
Ca 1680 AD	Meru first established in present homeland.
CA 1700 AD	First Iraqw arrived in Mama Isara area.
Ca 1840	Maasai replace Tatog in Ngorongoro and Kwavi in Kisongo, Sigirare, and Naberera areas.
1848	Existance of Kilimanjaro announced to outside world.
1850 - 1880	Swahili Caravan Trade (no Arabs and no slave trade) flourishes along Arusha-Engaruka-Ngorongoro-Serengeti-Lake Victoria Nyanza route.
Ca 1850	First Arusha migrated to Selian area from Arusha Chini.
1856	Mount Meru, Great Arusha, Kisongo, Engaruka, and Oldonyo Lengai first appear on map.
1870	Serengeti and Ngorongoro first appear on map.
1885 - 90	The Great Famine; smallpox decimates human population and rinderpest kills off cattle and wildlife.
1900	Establishment of German military garrisons at Arusha.
1902	First mission, Leipzig Mission Society, established on Meru.
1905	200 Afrikaner settlers arrive in Arusha.
1912	Railway reaches Moshi: extended to Arusha 1931.
1916	Germans evacuate Region, British Military Government established.

1920	Britain accepts Mandate for Tanganyika from League of Nations.
1926	German settlement commenced Oldeani, later subsidized by Nazi Government.
1929	Maasai established as substation district with headquarters at Monduli.
1930	Loliondo established as substation of Maasai District.
1930 - 1939	World depression and threat of return of Tanzanyika to Germany retards development.
1943	Sleeping sickness invades Region (Kiru-Magugu) October 1943.
1945 - 52	Karatu-Murera-Mbulumbulu clared of tsetse fly.
1949	Construction of tarmac road, Namanga-Arusha-Moshi-Taveta commenced.
1959	Discovery of *Australopithecus boisei* skull made Olduvai world-famous.
1961	Full internal self government in Tanganyika 1st May, 1961.
1961	Tanganyika achieves independence 9th December.
1963	Arusha established as separate Region.
1966 - 68	Diplomatic relations with UK broken 1966, restored 1968.
1967	Arusha Declaration, 5th February 1967.
1969	Mbulu District divided into Mbulu and Hanang Districts.
1969	Maasai Livestock and Range Management Project, U.S.A.I.D., commenced: closed 1979.
1972	Decentralization to Regions.
1974	Maasai District divided into Monduli and Kiteto Districts.
1975	Ngorongoro Conservation Area Authority established as parastatal.

1977	T.A.N.U. and A.S. Parties combine to form C.C.M.
1978	East African Community dissolved.
1979	Arusha Regional Integrated Development Programme commenced July 1979.