Experience with Regional Planning and Village Development in Arusha Region, Tanzania

Volume One

Final Report, prepared by the DAI Technical Assistance Team, Arusha Planning and Village Development Project

In fulfillment of requirements under contract number AID/AFR-C-1556 for technical assistance to the Arusha Planning and Village Development Project

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DAI
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PART ONE

OVERVIEW
CHAPTER ONE
INTRODUCTION

In 1979, Development Alternatives, Inc. (DAI) was selected by the United States Agency for International Development (AID) and by the Government of Tanzania to provide technical assistance to the Arusha Planning and Village Development Project (APVDP). The purpose of this report is to describe and draw lessons from the experience of that project, in fulfillment of DAI's obligations under contract number AID/AFR-C-1556 with AID.

APVDP was a unique development experience that combined the process of regional planning with the simultaneous initiation of local development activities. DAI was selected as the prime contractor with the full participation of national and regional Tanzanian government officials in the AID contracting process. Their participation provided the basis for the positive interaction and support given to the project and to DAI throughout the project's three and one-half year life. In the end, the many accomplishments of this project were the result of the efforts of the Government and people of Tanzania.

The project was designed as the first stage of a long-term effort by AID and the Government of Tanzania to provide development assistance to Arusha Region -- an area of over 82,000 square kilometers, with a population of about 1 million people. Unfortunately, despite a positive midterm evaluation, AID was unable to continue its commitment to the project as a result of cutbacks in its overall foreign assistance budget to Tanzania. Had this decision been foreseen, the strategy for project design and implementation would have been quite different. Nonetheless, through the project's regional planning activities and the testing of local development initiatives, a foundation was laid for future regional development decision making.

This report reflects primarily the views of DAI as the prime contractor for APVDP, and consists of two volumes. The first presents the accomplishments of the project, the method of support given by the technical assistance contractor, and the lessons learned. Also included are the individual DAI team member reports, as well as a survey of the reactions to the project of 90 Tanzanian officials at various administrative levels (the views of both team members and officials were affected by AID's early termination decision). The second volume details the major information activities of the project, and presents an annotated bibliography of the 350 documents prepared under it, including 169 studies in support of regional planning and 181 project-specific, local development activity profiles and documents. It is hoped that the lessons from this project, the most important of which is that achieving development objectives requires a long-term perspective, will be useful to the planning of future foreign assistance projects.
CHAPTER TWO
SUMMARY OF APVDP ACCOMPLISHMENTS

OVERVIEW

The Arusha Planning and Village Development Project was implemented from July 1979 to March 1983. It was a joint effort of the Government of Tanzania, which contributed $6.5 million, and the U.S. Agency for International Development, which provided a grant of $14.5 million. Development Alternatives, Inc. provided over 949 person months of technical assistance (see Annex A), as well as procurement, logistics, and management support.

APVDP combined the process of regional planning with the simultaneous development and implementation of village income-generating activities. The regional planning process provided a decision-making framework for the future development of the Arusha Region. The local development activities added ideas and realism to the planning process, while contributing directly to improvements in the quality of life of rural villages.

The project had four overall objectives:

- To strengthen planning, implementation, and evaluation capabilities at the regional, district, and village levels;
- To improve agricultural production, including crops, livestock, and natural resources;
- To identify and promote other economic activities, primarily rural industries; and
- To improve social and economic infrastructure directly related to productive activities (primarily water and roads systems).

BUILDING PLANNING, IMPLEMENTATION, AND EVALUATION CAPACITY

One of the overall objectives of APVDP was to improve the quality of regional, district, and village planning and project development. This involved the completion of regional planning exercises for Arusha Region as well as specific training and capacity-building activities.
The Regional Planning Exercise[1]

The strategy for regional planning was formulated through a comparative analysis of other Regional Integrated Development Programs,[2] study tours to four other regions, and technical advice.[3] The main elements of the strategy were that:

- The planning process should be evolutionary. Rather than drawing up a lengthy "blueprint" for development, the planning in the region would be done on a step-by-step basis, building on the lessons from project development and implementation and on problem-specific investigation and solution testing;

- The planning process should be based on a realistic assessment of the availability of future resources, with a major concentration on the better utilization of existing resources; and

- Decision making in the planning process should be done by regional and district government and party officials, with external assistance fully integrated into the planning structure and process.

Furthermore, in contrast to some other regional plans, it was decided that the planning done under APVDP should examine the contributions of the parastatal and private sectors to regional development.

Early in its planning and development process, Arusha Region defined the following five goals to guide and evaluate its development efforts. These goals were incorporated into its development decision making:

- Increased village self-reliance, as measured by an expansion of the capabilities of villages to solve their own problems;

- Improved equity, as measured by poorer areas obtaining development benefits in a self-sustaining manner;

- Economic growth, as measured by increases in gross regional product and in generation of foreign exchange earnings;

- Improved 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

- Natural resource protection, as measured by the development of sustainable production systems.
Having identified these five development goals, Arusha Region embarked on a planning process, combining data collection and analysis with the testing of development activities funded primarily through APVDP. The region decided to focus on the definition of agroecological zones. These were refined into planning units, taking into account economic, social, and administrative factors. The main steps in the data collection and analysis process were:

- The definition of agroecological zones through the use of earth satellite photographs, aerial photographs, census, and slope map analysis. As a result, 245 distinct zones were identified and later organized by district officials into planning units;[4]

- The analysis of population growth and movement to determine resulting land pressures;

- The identification of village economic activities and infrastructure through a rapid reconnaissance survey of 153 villages (about 30 percent);

- The preparation of sector-specific background and assessment papers to identify specific problems and potentials; and

- The completion of background papers on such subjects as manpower, availability of financial resources, implementation problems, and soil conservation.[5]

The insights from the planning exercises were complemented by the lessons learned from the initiation of development activities to test approaches and ideas. Major activities were carried out in the directly productive sectors and in rural water supply and road construction.

Approximately 350 documents from both the planning and the implementation activities were produced (see Annex B). Their conclusions, including policy, program, and project formulation, were summarized for regional and district decision making (see Annex C for a summary of the strategies and major policy decisions of the region). The regional planning exercise, which cost $1.5 million, culminated in the completion of a regional plan. This plan identified priority projects for medium-term (five year) and long-term investments in the Arusha Region. The plan was reviewed and approved by the Regional Development Committee in November 1982. The six volumes that make up the Arusha Region Integrated Development Plan are:

- SUMMARY REPORT, which discusses the findings presented in Volumes One through Five;
- Volume One: ARUSHA REGION TODAY: 1981, which focuses on the current development status, trends, and constraints in the region;

- Volume Two: ARUSHA REGION: DEVELOPMENT STRATEGIES AND PRIORITIES FOR THE NEXT 20 YEARS, which represents the region's main policy decisions to guide development to the year 2000;

- Volume Three: ARUSHA REGION: MEDIUM-TERM PLAN 1981/82-1985/86, which outlines projects for government and donor funding under the region's five year plan, including a detailed proposal for a follow-on project to APVDP;

- Volume Four: ARUSHA REGION: MAJOR AREAS FOR LONG-TERM INVESTMENTS, which presents the long-term investment goals for the region, critical medium-term projects that require external funding, long-term project proposals, and ideas to be developed; and

- Volume Five: INFORMATION STRATEGY AND DOCUMENTATION, which includes an analysis of the information strategy for development decision making in the region and an annotated bibliography of the regional planning documents prepared by APVDP.

In accordance with the regional planning exercise, an aim of APVDP was to generate foreign donor interest and cooperation for future investments in Arusha Region (see Annex D). Planning at the village level was undertaken through village meetings and seminars, with village leaders and local officials setting priorities and identifying potential projects.[6] Initial emphasis was placed on villages in four pilot wards specified for each of the three project districts. Eventually, however, additional villages were added. Altogether, APVDP carried out planning activities in 192 villages, involving 489 village meetings or seminars. Additional village-level work was carried out in the Maasai districts, through a series of 51 village land use planning seminars conducted in Kiteto District, as well as several district meetings in Kiteto, Monduli, and Ngorongoro districts.

APVDP also sought to develop standardized methods and procedures to ensure that planned development activities and village resource commitments would realistically take into consideration the constraints to be faced. During the implementation of APVDP, a number of project proposal formats were tested. Initially, these included the preparation of both village- and district-level project proposal documents with a thorough financial analysis. As experience was gained, however, a less complex proposal format evolved. This new format concentrated on producing a detailed implementation plan, with responsibilities of each participating organization specified on a realistic time...
Building Local Capacity

With respect to the development of local planning and technical capacity, a major achievement of APVDP was the development of an integrated training program to support district planning and project development. During the implementation of APVDP, project staff:

- Held 47 communications and technical workshops in planning and project development, involving 650 government and party officials and village leaders;[8]

- Held 57 communications and technical workshops for 1,090 district and field staff in agriculture, livestock, natural resources, cooperatives, the water department, and community development;

- Conducted nine study tours outside of Arusha Region, including one to Botswana and one to Zaire, involving 66 government and party officials. In addition, numerous local study tours were conducted for officials, field staff, and village leaders to visit and study other projects in the region; and

- Provided Master's degree training for five national and regional officials in regional planning at Cornell University.

Increased capacity at the village level was generated through the use of village meetings and seminars. Through such meetings, village leaders and local officials set priorities, identified projects, developed detailed implementation plans, and evaluated the progress of those projects implemented.

APVDP also organized and developed regional and district information systems for planning and evaluating development efforts. This included the assembling of a comprehensive collection of base-line data for the region. In addition, a Resource Center was established in the Regional Planning Office in Arusha, where all of the documentation and other resource materials are readily accessible to planners and functional officers, as well as to other agencies doing research and development work in the region.[9]

To increase the effectiveness of local institutions, the APVDP team placed considerable emphasis on improving integration of:
Sectors, particularly agriculture, livestock, and natural resources;

- Various levels of government -- region, districts, wards, and villages; and

- The APVDP technical assistance team within the existing government structure.

In all three areas, APVDP made progress, although problems still remain. Using land use planning and soil conservation as focuses, training programs and specific projects were carried out that helped to integrate the work of the agriculture, livestock, natural resources, and land departments.

APVDP also improved communications and the interaction among the various levels of government. Aside from direct efforts in this area, the alleviation of the critical constraint of inadequate transportation was a major factor in improving coordination.

Finally, APVDP's emphasis on learning by doing, by having the technical assistance team work jointly with government officials in all planning and implementation activities, had clear payoffs. Regional and district officials were fully involved in the development of the Integrated Development Plan, and there is a general agreement that the goals, strategies, objectives, and priorities of the plan fully represent the views of the region.[10]

As a result of this involvement, there was an increased awareness on the part of regional and district officials of the problems of rapid population growth and the region's deteriorating resource base.[11] In addition, the planning process demonstrated to local officials the importance of maintaining existing infrastructure and services, even at the expense of less new infrastructure creation or a slower growth in the provision of services.

At both the regional and district levels, APVDP helped build management and administrative capabilities through the provision of technical assistance, training, vehicles, equipment, and operational funds.[12] In addition, the project constructed a warehouse and a vehicle fuel and maintenance facility for the region.

NATURAL RESOURCES AND LAND USE PLANNING

A second major objective of APVDP was the improvement of agricultural production, including crops, livestock, and natural resources. Of particular importance was to increase the availability of food and incomes for rural villages. This was critical
since four of the six districts in Arusha Region were food-deficit areas.\[13\] During the project design it became clear that there were no major technological packages that could be used to achieve a quantum jump in agricultural output.\[14\] The project, therefore, sought incremental improvements in existing technologies, through adaptive research, training, improved extension, increasing credit and agricultural supplies, and improved storage.

During the early phases of project implementation, a priority was placed on data collection, macro-analysis, and interpretation. Therefore, sector assessments for agriculture, livestock, fisheries, beekeeping, and forestry were completed. These sector assessments identified the deteriorating resource base of the region as a serious constraint to its development. Renewed emphasis, as a result, was given to soil conservation, afforestation, and other programs in land use planning that would contribute toward conserving and maintaining a sustainable resource base for development.\[15\]

The definition of land pressure problems, combined with population studies undertaken by APVDP, demonstrated to regional and district officials that the region's rapid population growth is a major long-term constraint. APVDP not only helped to clarify the issues stemming from population growth but, as a means of addressing the issue, also helped regional officials formulate a program supporting family planning education and services.

APVDP also created a Technical Information and Support Unit (TISU), whose purpose was to effect the integration of productive sector inputs in specific geographic localities, as well as to provide information support to the technical services. Although the TISU provided a catalyst for encouraging integrated planning and training at the outset, the region and technical assistance staff decided that this could be performed most effectively through informal mechanisms and project-specific activities.

**Agriculture**

One conclusion from the macro studies undertaken was that national policies and outside constraints were serious obstacles to any major program seeking to increase general levels of agricultural production and income for the region. As a result, concentration was placed on projects that, although not leading to immediate increases in marketed agricultural output, would have long run payoffs. Stress was put, for example, on resource conservation. In agriculture, 28 village and district development projects were carried out. These included an agricultural extension program, small-scale irrigation projects, grain storage facilities, testing of new crops and improved farming methods, and development and testing of ox-drawn equipment and food-processing facilities.
During the life of the project, technical training programs and seminars for local-level staff were carried out in agriculture and related programs. These covered topics such as soil conservation, organic agriculture, forestry, beekeeping, water management, livestock health, and agricultural and livestock extension. Extension pamphlets were produced in Swahili covering agriculture, livestock, and natural resources topics, including pamphlets on all major agricultural crops in the region. Furthermore, the TISU focused on adaptive testing, training, land use planning, and problem-specific investigations.

During the last 18 months of APVDP implementation, attention was concentrated on the creation of a viable and sustainable extension service for the three pilot districts -- Arumeru, Hanang, and Mbulu. A modified version of the World Bank's Training and Visitation System was used.[16] The first phase of the extension service development effort involved the identification and training of village-level extension agents and extension coordinators. These individuals, in turn, designed a revolving visitation system, visiting eight groups of farmers over a two-week period. Regular monthly training sessions, focusing on seasonal farm work, were established. The response of both farmers and extension personnel to this system was enthusiastic, prompting an expansion and refinement of the system. Currently, there are 19 extension agents and three extension coordinators, covering three districts, in the program.

Livestock

About 80 percent of the region's land is suitable for livestock production, and the livestock population consists of over 4 million head. The project helped to strengthen the region's livestock department by broadening its scope of work away from the traditional emphasis on disease treatment and veterinary services, to include all aspects of livestock production.[17] Particular attention was placed, for example, on improved forage production and use. The pilot livestock extension projects demonstrated how the livestock extension service could be structured and organized to promote livestock production in the region more effectively. APVDP supported 25 village and district livestock development projects. These included a livestock extension program, an initiative in establishing village-level grass seed production plots, and improvements in existing livestock services.

The livestock program's strategy emphasized improved management and production of both communal grazing areas and lands owned by individuals. Much time and effort was spent in trying to overcome the problem of overgrazing on common land. Historically, attempts at resolving this issue were unsuccessful, particularly when requiring large-scale destocking. As a result, a strategy was developed in which a village, acting through a local livestock or land use committee, would select and control grazing on a small
area, expanding it on an incremental basis until all of the communal land had been covered. It is still too early to judge the success of this approach. The problems associated with the management of communal lands remain severe, however.

Given problems with communal lands management, the establishment of private pastures can be viewed as a necessary step toward the intensification of farm production systems. Thus, activities also focused on the establishment and improvement of private pastures and fodder plots. To accomplish this, extension agents worked on an individual basis with "contact herders." These contact herders, in turn, demonstrated on-farm management practices and inputs to their neighbors. Over 20 extension pamphlets were prepared in Swahili on subjects such as the preservation and use of crop residues, eradication of undesirable shrubs and species in pasture areas, animal husbandry practices, use of livestock manure as fertilizer, culling of unproductive animals, animal nutrition, and disease prevention and control.

Natural Resources Use and Conservation

Arusha Region has an abundant supply of forests. About 3 percent of the region's land is contained in 24 Forest Division plantations. Moreover, there are several village woodlots, and tree planting by private farmers is widespread. Through the forestry projects of APVDP, the International Labour Organization, and the national tree planting campaign, the region's forestry activities significantly increased. APVDP-supported projects included the completion of a forestry sector assessment; the development of tree nurseries in all three districts; and the planting of trees in all three districts, with a high of 2.4 million in Mbulu District, for firewood and soil conservation.[18] Studies done by APVDP and others demonstrated, however, that a sustainable supply of wood resources will require:

- Better control and management of Forest Division plantations;
- An increased number of village communal or cooperative nurseries and woodlots;
- A broader approach to rural forestry, incorporating more varieties of trees and shrubs and integrating forestry with agriculture and livestock production;
- Greater organizational efforts to supply the fuel needs of Arusha and other large towns; and
- Better long-term planning and management to match supply and demand.

Another part of the natural resources component is fisheries. Fishing is a relatively new activity in Arusha Region, and is characterized by small-scale operations in most rivers and lakes.
The region, through APVDP, started developing fishponds on a pilot basis and training fisheries field staff. This should result in a nutritious supplement to the local diet without competing with existing directly productive activities.

Similarly, beekeeping received attention from APVDP. Both traditional and commercial harvesting of bee products is practiced in the region. Traditional harvesting of wild bee honey is widespread, with most of the hive products consumed locally. Arusha Region's Beekeeping Division and several villages practice commercial production. However, because of the prices received and local demand, little honey reaches the export market. This is an unexploited potential that could be developed through the introduction of improved hives, better processing, and a well-equipped extension staff. Thus, APVDP efforts focused on the training of beekeeping field staff and the development of pilot beekeeping projects.

Finally, wildlife is an important natural resource in the Arusha Region, which contains over 2 million head of the larger species. Three major parks and the Ngorongoro Conservation Area cover about 10 percent of the region's land. An additional 46 percent falls within the 11 game-controlled areas. Beyond the income generated by tourism, this potential has not been exploited for the benefit of the local population. To address this problem, APVDP undertook wildlife surveys, and conducted studies of the utilization of wildlife and the role of tourism in the region. The results of this analysis demonstrated that a comprehensive program for wildlife conservation, control, and use is needed. Such a program would include:

- Wildlife cropping schemes;
- Revenue generation through hunting fees;
- Breeding of local exotic species for export sale; and
- Further development of tourism for wildlife viewing.

RURAL INDUSTRIES

The third major objective of APVDP was the identification and promotion of economic investments, such as rural industries, that would improve the incomes of the people of Arusha. The project identified and brought into operation small-scale manufacturing and agricultural-processing enterprises. The small industries component of APVDP was intended to be responsive to the needs expressed by villagers for practical and manageable industrial initiatives.[19]
During the first half of APVDP, a number of sub-projects were started on a small scale in villages. Out of this effort, information was gathered on what was, and was not, practical in terms of the technology and basic criteria needed to evaluate potential sub-projects. At the same time, regional planners could undertake initiatives concerning larger projects that were outside the scope or experience of the villages.

APVDP initially emphasized food-processing endeavors. Among the successful rural industry projects undertaken were 17 maize mills, a bakery, oil-milling projects, and a rice huller. In addition, the project emphasized the production of farm implements. The staff of APVDP discovered that although the use of oxen is common in Arusha, basic ox-drawn equipment and spare parts were scarce. Therefore, APVDP helped establish district ox-cart factories and, at the regional level, an ox-cart component factory. Other agricultural implements were also developed, including a weeder, oil presses, and plows.

Early in the life of the project, the need for plowshare replacements was identified as critical by farmers. Through the project, various alternatives were explored and the local manufacture of new plowshares begun at the regional level. The regional agricultural implements production facility made the components, while the district centers assembled and maintained them. Other local manufacturing operations undertaken with the assistance of APVDP included small-scale brick and tile factories, woodworking and woodcutting industries, and a mat-marketing project. Roughly 29 separate rural industries projects were undertaken through APVDP.

The Small-Scale Industries Program was based on no-interest loans, due to Government of Tanzania regulations. Repayment periods varied, depending upon the type of project being financed. All projects were, therefore, subject to simple, but accurate, financial feasibility studies to ensure adequate rates of return. This requirement, combined with the involvement of villages in the design and implementation of projects, resulted in a loan repayment rate, as of December 31, 1982, of almost 100 percent. The use of loans helped orient the villages toward practical and productive projects, and the consistent follow-up on loan supervision helped to maintain this momentum. Furthermore, considerable effort was made to tap existing financial sources, such as the Tanzanian Rural Development Bank and the National Bank of Commerce, so that ongoing funding would be available for these rural industries.
SOCIAL AND ECONOMIC INFRASTRUCTURE

The fourth principal objective of APVDP was the improvement of the social and economic infrastructure that directly benefited productive activities. This primarily involved investments in water and road systems.

Water Systems Development[20]

With respect to improved water supply for the Arusha Region, there were two key areas of impact by APVDP. One was the introduction of a lower cost per capita alternative for supplying potable water to approximately 40 villages. This involved the construction of shallow wells, rather than the use of borehole, surface pumped, or gravity pipeline water schemes. Capital costs for shallow tubewells were only 10-15 percent of those for gravity pipelines, while operating and maintenance costs were only one-third that of alternative approaches. In addition, in areas where shallow wells were not feasible, gravity water systems were found to be a relatively low-cost approach. As a result, APVDP financed the rehabilitation of several existing systems in the project districts.

The activity that had the most significant impact within the shallow wells program was the introduction of skills and technology into the region for identifying appropriate well sites. The ability to hand-auger within a given village area to locate viable well sites was a major achievement. Prior to this approach, there was no systematic method of identifying potential well sites, and wells constructed often found no water or water with a high salt content. With the hand-turned survey equipment, however, the APVDP team was successful in obtaining water in 29 out of 33 attempts.

The other major achievement in the potable water sector was to increase the awareness within the region of the value of properly operating and maintaining existing water supplies, as opposed to undertaking new construction projects. There was a recognition of the problems caused in the past by the lack of adequate funding for maintenance of existing water projects, and a change in policy is under way to reflect this new awareness.

This change in attitude was due in part to the inventory work carried out through APVDP. At the time of the survey, 30 percent of the existing water supply systems were inoperative, and existing systems were failing at a faster rate than new ones could be constructed. Further, the cost of simply getting the region's existing water supply network back into a proper condition was
staggering. APVDP supported this maintenance approach through the training of village-level technicians, who would be responsible for preventative maintenance. In all, five training courses, with 75 participants, were held for village-level technicians.

Road System Development

Prior to the initiation of APVDP, there had been widespread deterioration of the majority of all main trunk, district, and feeder roads in the region. In part, this was due to inadequate development expenditures on road maintenance; poor management and organization in regional and district Comworks; inadequate maintenance facilities; and a lack of trained engineers, managers, and mechanics. This situation adversely affected the rural economy and the ability of the government to deliver vital services. APVDP sought to address this problem.

The roads component of APVDP was carried out by six technicians, who had personal services contracts with AID (see Annex A for a listing of roads component personnel). The intent of this component was to build the management, operational, and maintenance capabilities of the Regional and District Comworks offices. For planning purposes, the region and its six districts identified a primary roads network that would meet economic development and administrative requirements.[21] Then, through APVDP, 289 miles of roads in the three project districts were either built or rehabilitated. These included 162 miles of roads in Mbulu District, 95 miles in Hanang District, and 32 miles in Arumeru District. The roads constructed or rehabilitated were:

Hanang District:  Dareda-Mbulu Border Road (27 miles)
                Single-Gallapo-Mamire-Babati Road (29 miles)
                Babati-Nakwa-Riroda Road (10 miles)
                Bashnet-Madunga Kati Road (11 miles)
                Gitting-Endasak Road (8 miles)
                Bashnet-Ufana Road (10 miles)

Mbulu District:  Karatu-Mbulu-Dongobesh-Hanang Border Road (81 miles)
                Dongobesh-Haydom Road (30 miles)
                Oldeani-Mang'ola Road (30 miles)
                Njiapanda-Oldeani Road (6 miles)
Mbulu-Kainam-Hayloto-Murray Road
(15 miles)

Arumeru District: Tengeru-Mbguni Road (22 miles)

Usa River-Ngarenanyuki-Oldonyosambu Road
(10 miles)

In conjunction with the study of road priorities, the region conducted a detailed analysis of the Regional Comworks, highlighting specific management, organizational, and equipment recommendations. Subsequently, through APVDP, the maintenance shop facilities in the region and in Hanang and Mbulu districts were equipped, staffed, and trained.

The roads component facilitated the transport of agricultural supplies and production, giving an incentive to, and bringing about increases in, production, as well as improving the efficiency and effectiveness of government operations. It also significantly cut vehicle maintenance and transportation costs for both government and private sector transport.

SUMMARY

Although the project ran out of funds six months prior to its scheduled termination, most of its objectives, as specified in the Project Paper and Project Agreement, were met or exceeded. As was mentioned in Chapter One, the intent of AID and the Government of Tanzania was to initiate a long-term development effort. Unfortunately, U.S. political considerations negated this intention. Nevertheless, the foundation was laid for future policy, planning, and development decision making in Arusha Region.
NOTES

1 The details of the regional planning effort and of the overall information strategy for APVDP are found in Chapters One to Three of Volume Two. This volume was prepared by Charles F. Sweet, Vice President of DAI, who led the initial design team for APVDP and was its Chief of Party for the project's first 34 months.


3 The strategy for, and content of, the regional planning exercise was done with the assistance of David Lewis, Cornell University; Elliott R. Morss, DAI Director of Research; and Charles F. Sweet; Chief of Party, APVDP.

4 The innovative work and methodology for defining agroecological zones was done by Chris Dunford, David Mouat, and Dana Slaymaker.

5 Especially valuable for regional decision making were the studies of Liz Wiley on manpower resources and planning and of Larry Schroeder on local revenue generation in Arusha Region. The latter was jointly financed by APVDP and by Syracuse University's AID-financed Local Revenue Administration Project.

6 See Joyce Stanley's end-of-tour report, which describes APVDP's testing of alternative approaches to village development.

7 The key technical assistance component for building district planning and implementation capabilities was the work of the rural development specialists assigned to district planning offices. For a review of these experiences, see the individual DAI team member reports of John Wheeler and David Kraybill in Part Two of this report.

8 Especially noteworthy was a summer institute on data collection, analysis, and planning, given by the Department of Regional Planning, Cornell University.

9 See Sally Johnston's discussion of the Regional Resource Center and its functions in Part Two of this report.
This was a finding of the AID midterm evaluation. See USAID, Project Evaluation Summary 1981-83, Arusha Planning and Village Development Project, June 1981, p. 13.

The significance of the population problem in the region was documented in Population Profile of Arusha Region by Alan Johnston, January 1980. Subsequently, Mr. Johnston became the Rural Development Planning Adviser for the region. A report of his experiences may be found in Part Two of this study.

Mike Sarco was the Project Management Officer and acting Chief of Party for the last nine months of the project. He had overall responsibility for providing implementation and administrative direction and assistance to the region. His final report on project management is found in Part Two of this report.


The emphasis on village-level soil conservation was a result of the background paper done by Rorke Bryan, Soil Degradation and Conservation in the Arusha Region, March 1980.

Douglas Carter was responsible for the development of the improved extension programs, with assistance from Robert Dodd. Mr. Carter's review of his experiences in the directly productive sectors may be found in Part Two of this report.

David and Thad Peterson were long-term, local hire staff members who provided considerable assistance in developing the region's emphasis on improved use and conservation of natural resources, particularly in relation to livestock production. Their report may be found in Part Two.

The forestry component of the project was developed on the recommendations of Tim Synnott, who also helped develop the soil conservation workshop. For further reference, see his report, Forestry in Arusha Region, July 1980.

Hugh Allen was responsible for the development of this component of the project, as well as providing advisory assistance to the region's Small Industries Development Office and the Cooperative and Community Development services. His report can be found in Part Two of this study.
20 Joseph Gadek was responsible for advisory assistance to the Regional Water Service. His report is presented in Part Two of this report.

21 Dr. Benne J. Ndulu of the Department of Economics, University of Dar es Salaam, developed a low cost methodology for establishing road priorities, assisted by the regional micro-computer center established by APVDP. His reports include Arusha Regional Transport Planning Project (Road Transport Infrastructure) Study, June 1980, and Road Priority Determination: Arusha Region, June 1981.

CHAPTER THREE
ORGANIZATION AND OPERATIONS

INTRODUCTION

DAI was the prime contractor for the provision of technical assistance to APVDP. As mentioned earlier, the implementation of the project by DAI was facilitated by two factors. First, the design of the project had been undertaken in 1977 with the involvement of DAI staff and with the full participation of the Government of Tanzania. Second, AID invited three senior government of Tanzania officials to be part of the selection committee for the prime contractor. Subsequently, this provided a basis of support for the technical assistance team from the Government of Tanzania.

This chapter will review the organization and operation of the DAI technical assistance team and its home office. It will also discuss the interaction of the team with the Government of Tanzania, with AID, and with the roads component. Serious problems arose due to the structuring of the AID relationships and its supervision of the roads component, leading to the premature termination of the project. Inherent in this experience are lessons for the future design of similar projects.

DAI ORGANIZATION AND OPERATIONS IN SUPPORT OF APVDP

DAI began to develop its capacity to field and support a long-term technical assistance team in 1977, with the initiation of its work in the AID-assisted North Shaba Agricultural Development Project in Zaire. Many of the support policies and procedures developed, as well as lessons learned, were applied to APVDP and subsequent long-term projects. Of particular importance was the recognition that a well-integrated home office/field operation was needed, if a project such as APVDP is to be managed and implemented efficiently and effectively.
Team Recruitment and Selection

The implementation of APVDP required a total of 949 person months of technical assistance, broken out as follows:

<table>
<thead>
<tr>
<th>Number of Personnel</th>
<th>Number of Person Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term Staff</td>
<td>15</td>
</tr>
<tr>
<td>Local Hire Staff</td>
<td>6</td>
</tr>
<tr>
<td>Short-term Consultants</td>
<td>64</td>
</tr>
<tr>
<td>Tanzanian Consultants</td>
<td>12</td>
</tr>
<tr>
<td>DAI Field Technical Assistance (Sub Total)</td>
<td>668.9</td>
</tr>
<tr>
<td>DAI Home Office Assistance</td>
<td>70.3</td>
</tr>
<tr>
<td>Total DAI Technical Assistance</td>
<td>739.2</td>
</tr>
<tr>
<td>Roads Technical Assistance</td>
<td>6</td>
</tr>
<tr>
<td>Total APVDP Technical Assistance</td>
<td>103</td>
</tr>
</tbody>
</table>

As prime contractor, DAI was responsible for recruiting all but the road construction staff. The recruitment for APVDP required approximately 8.25 person months of DAI home office staff time, and about two months of field staff time. This involved preparing scopes of work and recruiting personnel.

In recruiting for APVDP, a variety of sources were used to locate qualified development professionals. A resume bank containing over 3,000 active consultants with advanced degrees and field experience was employed. When specific expertise was not found through that system, some of the 1,000 people among professional organizations, universities, and individuals with whom DAI maintains contact were consulted in search of potential candidates.

After candidates were initially screened, they were sent pertinent background materials and interviewed by phone. In addition, both personal and professional references were checked. In the final stage of selection, candidates were brought to Washington for interviews with members of the management and development staff. When this was not feasible, staff trips to the
field were rerouted to enable staff members to interview a candidate. For APVDP, all long-term and local hire personnel were interviewed by the chief of party before final selections were made. Also, during the course of the project, the scores of work and qualifications of each candidate for long-term positions and short-term consultancies were reviewed at DAI field team meetings.

The staff recruited for APVDP were well qualified and energetically committed to their jobs. However, in spite of the rigorous screening of candidates, three out of the 15 long-term staff had to be terminated prematurely for reasons such as an inability to adjust to the project's operational approach, communication problems with government staff, and personal or family problems. All three had had extensive experience in Africa, and their terminations reflect the difficulties of matching personal skills with the needs of a complex rural development project.

A major problem encountered in recruiting long-term personnel was related to the desire of candidates to obtain employment for their spouses. Matching technical and language skills with the area needs also proved challenging. For short-term personnel, the problems encountered were a result of the large number short-term positions to be filled, especially in the initial stages of project implementation, and the limited amount of time available for recruiting the needed personnel.

The Advance Team

To initiate APVDP, an advance team was sent to Arusha, consisting of the chief of party, DAI's director of research, and an experienced DAI management and administrative specialist. This group was responsible for formulating the initial substantive plan for the project with AID and regional officials, as well as setting up the initial management and administrative arrangements for the technical assistance team and the project.

For a large project like APVDP, there are over 70 tasks to be completed or systems to be set up before a team can be fielded. These can be categorized as follows:

- Team support and administration. This involves arrangements with respect to customs and immigration, health and medical clearances, housing, guard services, and other personal support requirements;

- Contract management. This involves such things as field financial management and administrative procedures, government and AID approval procedures, and communication linkages;
Team management. This includes orientation, team meetings and reporting procedures, definition of personnel responsibilities, and supervisory/evaluation procedures; and

Project management and administration. This involves activities such as overall financial management and administration, procurement, office support, training, and setting up communications and operating procedures with the government and AID.

While the above work was being completed, the advance party established initial working relationships with government officials, reviewed the purpose of the project, and developed the first year's work plan. In all, two months of preparatory time was required before the technical assistance team could be fielded and full project implementation could begin. During this period, DAI's home office Personnel Department processed the long-term field members, and the Procurement and Logistics Division assisted in the storage and shipment of personal effects. Upon arrival in Arusha, field team members were given an orientation folder (prepared by the advance team), which covered everything from where to shop to how to open a personal bank account.

FIELD TEAM MANAGEMENT

Although the advance party laid the foundation for the initiation of APVDP, a year was still required before the project and the technical assistance team were functioning effectively.

Management Structure

One of the first problems encountered in the project was that the chief of party was overwhelmed by the responsibilities for both the substantive direction of the project and its management and administration. This problem was solved by the addition to the team of a project management officer, who was assigned responsibility for the day-to-day operation of the technical assistance team and project implementation. As a result, the chief of party could give about 80 percent of his time to the substantive development of the project and 20 percent to management responsibilities, instead of the reverse, which was the case prior to the project management officer's appointment.

Planning and Reporting

APVDP operated on the basis of annual plans developed in collaboration with Arusha Region officials. In addition, quarterly progress reports were prepared for AID and for the prime minister's office, outlining accomplishments, major problem areas and recommended actions, and activities of the next quarter.
Aside from benefiting regional officials responsible for the project, AID, and DAI's home office, these plans and reports helped the technical assistance team and their government counterparts to monitor, evaluate, and correct project implementation.

Team Meetings

The team meetings were the most effective means for planning and coordinating the work of the technical assistance team. These were held monthly, with a three-day meeting every third month. The meetings concentrated on the substantive development of the project, including detailed scheduling of activities. Consultancy, training, and procurement requirements were addressed as well as administrative problems. Minutes were prepared for each meeting and circulated to team members, regional officials responsible for the project, AID, and the DAI home office.

Personnel Management

The first months of the project required intensive interaction, usually weekly, between the chief of party and individual team members, in order to refine the scopes of work and work programs. As roles and relationships became better defined, this requirement lessoned. There continued to be constant feedback, however. The work of each team member was reviewed formally every six months, with a written assessment each year. In problem cases, these assessments were more frequent.

DAI HOME OFFICE BACKSTOPPING

Backstopping APVDP required extensive communication between DAI's home office and the field team. DAI appointed a project officer who committed a total of eight person-months to the project. By the end of 1982, DAI had sent over 575 telexes to APVDP and received more than 500 from the project. Copies of the telexes were distributed to all department heads for appropriate action. The Project Office was responsible for the hundreds of requests that were not specific to personnel, management, procurement, or logistics. Much of the telex traffic was informational, that is, designed to keep the other party abreast of what was occurring, either in the field or in the home office. Many telexes from the project required action by the home office, however. The telexes received from the field entailed some 2,500 requests or requirements for action. These included requests involving substantial home office time, such as those involving procurement or recruitment.
DAI's procurement system originated with the firm's involvement in long-term development assistance projects, of which APVDP was one of the first. The Procurement and Logistics Division was formed to provide technical assistance teams with the equipment and supplies necessary to accomplish their mission. The services provided by the division include commodity procurement, project commodity management, packing and handling of airfreight, and transport and shipment of all commodities originating from the United States.

**Commodity Procurement for APVDP**

The Procurement and Logistics Division developed very specific capabilities as a result of its close ties with the technical assistance component of APVDP. Procurement procedures and administrative systems were carefully tailored to meet project needs in an effort to provide a streamlined commodity acquisition and delivery process. The division procured and shipped over $1 million of equipment and supplies to APVDP. Procurement requests ranged from heavy equipment and supplies for the roads component and the agricultural implements production facility to micro-computer spare parts and medicines for the field team. This was accomplished in a period of approximately two years, and required 38 person months of effort on the part of the home office staff. The cost breakdown for all shipments made on behalf of APVDP is as given below:

<table>
<thead>
<tr>
<th>SHIPMENTS</th>
<th>No. Shipments</th>
<th>Weight (lbs.)</th>
<th>Volume (cubic feet)</th>
<th>Freight Cost ($)</th>
<th>Total Value ($)</th>
<th>Average Delivery Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accompanied Air Freight</td>
<td>46</td>
<td>78,205</td>
<td>5,695</td>
<td>94,413</td>
<td>311,212</td>
<td>3 days</td>
</tr>
<tr>
<td>Air Freight Shipment</td>
<td>26</td>
<td>22,794</td>
<td>1,736</td>
<td>70,065</td>
<td>190,027</td>
<td>2 weeks</td>
</tr>
<tr>
<td>Consolidated Surface Shipment</td>
<td>18</td>
<td>347,812</td>
<td>18,272</td>
<td>132,155</td>
<td>529,110</td>
<td>3 months</td>
</tr>
</tbody>
</table>
Its experience in fulfilling the procurement and logistics needs of APVDP has helped DAI identify several key elements for success in such activities. One of these is the importance of assigning project responsibilities, including that for procurement, to a single contractor. In the case of APVDP, this permitted field team administrative personnel and DAI/Washington procurement staff to establish the working relationships necessary to coordinate the daily operation and logistics involved in supplying the project with needed equipment and supplies. Traditional problems faced by contractors in coordinating offshore procurement and logistics were thus avoided. Moreover, the involvement of Procurement and Logistics Division staff in the substance of the project not only increased their dedication, but also fostered the perception of procurement and logistics support as a means of accomplishing an end, rather than as an end in itself.

Close communication with the APVDP field team staff implementing specific projects ensured that the equipment, supplies, and information delivered were what the project required. Telex communication facilitated this close communication. The division's ability to support APVDP required constant follow-up and tracking by field personnel. Without an in-country logistics network, the project would probably not have received the equipment needed on a timely basis.

Interaction With AID

The procedures and regulations that govern commodity procurement for development assistance projects have proliferated. Although they are fairly well written and consistent, their application to APVDP by AID/Washington and the AID mission was inconsistent. In addition, the high turnover of AID personnel at the mission level meant that guidance to the contractor was inconsistent, and led to delays in actions that could otherwise have been taken promptly and routinely.

Financing large commodity procurement under U.S. government letters of commitment has both advantages and disadvantages. It is one way to reduce the financial burden on the contractor and to facilitate large commodity procurement. The primary advantage from the standpoint of the contractor is that his cash flow improves. From the government's standpoint, the letter of commitment serves both to monitor the contractor's expenditures and to increase the efficiency of funding disbursement. The letter of commitment as a financial instrument is a good method of disbursing funds. It can become awkward, however, when AID requirements are inserted into the documents given to the bank. Antiquated U.S. government forms and bureaucratic inflexibility make this financing system a potential nightmare.
Over the course of the implementation of APVDP (approximately 42 months), DAI's Controller Department personnel committed approximately 16 person months of effort. This time can be broken down as follows:

- Billing and related follow-up - two person months;
- Processing field reports - one person month;
- Payroll processing - six person months;
- Contract monitoring - four person months;
- Administrative support (including telex, check writing, auditing, travel, etc.) - two person months; and
- Departmental supervision - one person month.

On the average, about 40 days elapsed between the time the monthly billing was submitted and the receipt of payment. Allowing 10 days from month end until a billing was prepared, this meant that, on the average, DAI financed approximately two months of costs (except for procurement under letter of commitment, which was financed by DAI for usually no more than three to 10 days).

Most of the problems encountered in the financial management and contracting were communication problems. These resulted from the lack of proximity among the field team, the AID mission, and DAI/Washington. The types of problems encountered included:

- Lack of timely information for reconciliation between billed amounts and payments (such as specific information related to disallowances);
- Instances of duplicate payment, brought about by payments initiated on the basis of both telex and hard copy of billing;
- Difficulties in DAI's obtaining timely information on changes in AID regulations (such as post differential rates and post classification);
- Difficulties in DAI's obtaining information concerning the dates project personnel left their post, and for what reasons;
• Difficulties in DAI's maintaining leave data on project personnel, obtaining employment information on locally hired personnel, and receiving monthly field reports;

• Delays in reimbursement from AID;

• Inability of DAI to respond to individual payroll questions, and time delays in processing employee tax forms;

• Time delays in processing contract modifications, which in turn cause uncertainty in establishing available funding and delays in disbursement;

• Difficulty in monitoring expenditures due to decentralized expenditure authority and to delays in filling orders; and

• Initial difficulty in establishing a letter of credit mechanism due to a lack of familiarity with the process on the part of AID, DAI, and the banks.

These problems, of course, were not endemic to APVDP, but are the result of processes that are unlikely to be significantly improved.

AID's Office of Contracts Management provided guidance and assistance, from the fielding of the advance party to the completion of the project. The relationship with this office required the assignment by DAI of a full-time director of contract administration.

DAI MANAGEMENT AND SUPERVISION

DAI senior management provided substantive assistance in the development of the project, as well as in supervising project implementation and home office support. At the outset of the project, DAI's director of research and other officers provided guidance on such subjects as the design of the regional planning exercise and of other project components. This initial guidance was followed by several management visits to the field during which project progress and the work of individual team members were assessed and assisted. After nine months of implementation, a three-person, DAI senior management team evaluated the project for the benefit of team members, the government, and AID. This internal evaluation resulted in changes in both the structure and the operations of the technical assistance team.

The progress of the project was monitored through telexes and a review of team plans, reports, and minutes of team meetings. Most problems were anticipated, allowing management to troubleshoot as necessary. This work required four months of senior
officer time. In addition, DAI's director of research committed eight person months to helping with the regional planning exercise.

PROJECT STRUCTURE AND OPERATIONS

Arusha regional officials were involved in the selection of DAI as contractor for APVDP. This greatly facilitated the establishment of working relationships between the technical assistance team and government staff. At the outset of the project, it was decided that technical assistance personnel would be integrated into the regional and district administrative structure, and given specific counterparts. The success of this varied. In addition, it was decided that regular regional and district administrative and communications procedures would be used. Technical assistance team members were invited to join and participate in the Regional and District Management Team and Development Committee hearings. These were the formal decision making bodies of the government.

The operation of the project was planned on a yearly basis, with quarterly reporting. The plans and reports were reviewed and approved in the Regional and District Management Team and Development Committee meetings. These provided information to all senior government and party officials on the progress and intent of the project. In addition, workshops were held periodically with those regional and district officials responsible for project implementation, both for purposes of training and for project decision making.

To a large extent, the above measures resulted in excellent communication and in the achievement of most project objectives. However, there were problems. First, because of its funding, APVDP continued to have its own identity, rather than to be perceived as an integrated part of the regional development program. This perception was enhanced by the project's having its own administrative support office and facilities (including vehicle maintenance and fuel). Although it would have been less efficient, the impact of the project would have been greater if it had been operated through the regular regional and district administrative structures and procedures, and if the annual plan and budgeting exercises had been integrated into the regular regional system sooner.

A second problem was the turnover of personnel and the staffing shortages within the region and the three districts. This reduced the effectiveness of the technical assistance team. It also allowed the technical assistance team to act more independently than was desirable. This was especially true in the regional planning exercise, where there was too much reliance on short-term consultants (because of the one-year timetable for plan preparation) and not enough on working through regional technical
offices, to build their data collection and analysis capabilities. Although, on reflection, several changes could have been made, the project did result in an active involvement and commitment by government officials.

INTERACTION WITH AID

In a complex project such as APVDP, there will always be problems when a technical assistance team is hired to serve and advise a government, while under contract to a foreign donor organization. APVDP was no exception. Indeed, the problems were significant during the early years of the project, even though (and maybe because) all parties wished to see the project succeed. Some positive lessons were gained through this experience, however.

In the beginning, the project was supported by the Arusha Regional Office of AID. The use of a regional office meant that the AID officer was separated from the many supporting elements in the mission. As a result, this arrangement did not work. A project officer was subsequently assigned from the mission and relationships and support improved considerably. A change in procedures, requiring the project management officer to prepare a weekly agenda of actions for AID, also helped.

A second problem with serious consequences was that of financial management. A detailed financial statement was not received by the project from AID until its twenty-sixth month. Even then, it was received only through the efforts of a new controller. The financial management problem was compounded further by having the roads team operating under the supervision of AID, rather than the prime contractor. As a result, it substantially overspent its budget. Inadequate financial management, combined with the cost overruns by the roads component, resulted in the project’s termination six months early. Such problems can be remedied in the future if either the infrastructure component is placed under the prime contractor (such as in the North Shaba Rural Development Project in Zaire), or the funding for infrastructure is separated from that of other project activities. Also, it suggests the need for better mechanisms of financial control and reporting at the outset of a project.
CHAPTER FOUR
MAJOR LESSONS FROM APVDP

Many lessons in the design and implementation of APVDP can be drawn that serve to help future government and foreign donor planning. Part Two of this report presents the reports of individual team members on their work, along with their perspectives and recommendations. This chapter will summarize some major lessons. At a later date, DAI intends to prepare a more comprehensive report on the project.

OVERVIEW

The APVDP design included initiatives to upgrade planning and implementation capabilities within a program of local development. It also used an evolutionary process approach to project development, with a concentration on the directly productive sectors. To develop a decision making framework for the region, it incorporated the preparation of the regional plan.

Although problems were encountered in planning and managing such a complex project, it represents a model for large-scale, rural development projects that should be tested and developed further. Of particular importance was the emphasis on capacity building, involving a "learn by doing" program of planning and implementing local development activities. Such an emphasis, with specific investments in training and support, increases the likelihood that the development benefits generated can be sustained.

The evolutionary approach built into the project allowed for the tailoring of development activities to specific conditions in the project area. Technical and organizational arrangements and approaches could be tested and later replicated. If such an approach is to be effective, there are three major constraints that must be addressed. First, the foreign donor must be willing to allow such flexibility, and to adjust its practices and regulations to permit this flexibility. One major problem in APVDP was AID's interpretation of the "adequate planning" clause in its legislation (611a) to require a detailed planning document for every activity, even those that cost less than $5,000. Second, the approach requires an understanding and willingness on the part of the government to test new approaches. Third, it needs a sufficient time horizon to move from testing into full implementation. APVDP was at its takeoff point when political considerations affecting AID reduced funding in Tanzania to the extent that the intended second phase of the project could not be undertaken.

The regional plan was incorporated into the project design at the request of the prime minister's office. This provided a unique opportunity to combine the process of regional planning with the simultaneous initiation of local development and
capacity-building activities. These linkages were weak because of the one-year deadline on plan preparation, and the resulting emphasis on plan completion. As a result, there was inadequate consideration of how the local government's capabilities could be developed. A more effective model would have been a four-year time span for plan preparation, with complementary investments in capacity building.

THE REGIONAL PLANNING EXERCISE

The intent of the regional planning exercise was twofold. First, it was to develop a decision-making framework for the region. Second, it was to assist the government in planning the use of its own resources and in securing new resources from foreign donors. At the outset of the project, a plan was developed for this exercise, with the participation of the government, DAI home office and field staff, and the Department of Regional Planning at Cornell University. The project development schedule, however, called for a one-year time period, which necessitated the simultaneous initiation of several planning activities and a heavy reliance on outside consultants.

A more detailed description of the regional planning exercise and the lessons learned may be found in Chapter Two, Volume Two, of this report. Considerable information was collected and analyzed during the preparation of the plan. One major, unresolved issue is how much information is really needed for effective planning. Many of the studies generated by the planning process have not been used, except for project identification. This was a result of too much being done in too short a time frame, with inadequate mechanisms for discussion and analysis. Yet this evidence allowed regional and district officials to see clearly some of the major problems in the region, and to adopt appropriate policy decisions (see Annex C). It resulted in policies regarding the rapid population growth in the region, and the resulting land pressures, as well as the importance of increased investment in the directly productive sections. It also emphasized the need to make better use of existing manpower and financial resources, as well as to increase those resources devoted to maintenance and operation. It is questionable whether these policy decisions would have been taken without strong documentary support.

Although these policy decisions were taken in to account in formulating the medium- (five year) and long-term (20 year) plans, their translation into action programs and projects was only partially accomplished. This is because they require ongoing consideration and testing. They are part of the long-term capacity building process that should be anticipated and supported in future projects.
LOCAL DEVELOPMENT

APVDP was designed to test various approaches to village development, with an emphasis on directly productive activities. Several approaches were explored for increasing village involvement in development decision making and increasing their resource commitment to development efforts. From this village development work, it was found that the most effective involvement came from an issue-oriented approach, rather than by concentrating on a sector or an area. For many of the villages in Arusha Region, a key issue was the better management, utilization, and conservation of land and water resources. This, therefore, became a major thrust of the project.

The emphasis on better management of natural resources was complemented by initiatives to strengthen the capabilities of the agriculture, livestock, and natural resources extension services. Unfortunately, these initiatives were delayed due to an early concentration by the project on research and sector assessments. In fact, the work with the extension services should have begun immediately, through training extension staff and testing project improvements. Also, the technical assistance required for research and planning differed significantly from the requirements for effective field operations. This conclusion necessitated a change in technical assistance personnel and should be a consideration in future project designs.

A significant initiative of the project proved to be its concentration on rural industries directed toward adding value to production through improved implements and processing equipment. As in the North Shaba Project, such an initiative met farmer needs and interests rapidly, since many of the technological innovations are available for adaptation. While improvements in actual production practices take time, properly designed and developed rural industries can become a leading edge for future rural development projects.

The priority placed on rural industries and other directly productive activities was to help build the financial and institutional capabilities of local organizations. Several of these activities were financed on a loan, rather than a grant, basis. Because of village involvement in decision making, and administrative follow-up, the repayment rate for these loans was nearly 100 percent at the time technical assistance ended. This suggests the potential of village, loan-financed activities. However, there are several problems that should be addressed by the government, the most important of which are strengthening linkages with existing financial institutions and authorizing interest rates (for these institutions and government programs) that will cover costs.
The initial field investigation for the design of APVDP highlighted poor roads and an inadequate and unsafe water supply as major constraints to improved production. Therefore, these components were incorporated into the project. The objective was to have priorities and operations result from the village dialogue process. Instead, both components were initiated at the beginning of the project. This significantly affected their integration into overall project development and reduced the resource commitments to these activities by villages.

TECHNICAL ASSISTANCE

The technical assistance component of APVDP was large, consisting of over 949 person-months provided by DAI field staff and consultants, plus the inputs of the six members staffing the roads component. Several lessons may be drawn from this experience. First, the project showed the importance of having strong and centralized management. There is a need for a special management adviser in large-scale efforts. Also, many of the problems in the project could have been avoided, particularly toward the end, if both financial and manpower resources had been under the control of one technical assistance organization, so that the expenditure of both hard and local currency could be planned and monitored.

Second, many of the accomplishments of the project were a result of a team approach to technical assistance (with effective home office support), in contrast to the assignment of technicians to various offices without an institutional relationship and centralized direction. Beyond the institutional arrangement, regular meetings for planning and assessing project development should be held. In a project such as APVDP, it is important for the technical assistance personnel to share common concerns. These may include a focus on capacity building, sustainability, and the importance of building the necessary institutional structure into a project design.

An attempt was made to integrate technical assistance personnel into the governmental structure. This had the positive effect of giving the project access to the manpower, financial, communications, and decision-making resources of the government, and was critical to ensuring that the development initiatives become self-sustaining. The cost of integrating the technical assistance personnel into the governmental structure was a loss of flexibility and less freedom to test various technological and organizational options. Although there are tradeoffs, the experience of APVDP suggests that such projects should be integrated into the existing organizational and administrative structures and procedures of a government, if capacity building and the sustainability of development benefits are major aims.
APVDP was implemented in a period of serious economic decline in Tanzania, accompanied by serious cutbacks in government resources. This situation forced the project staff to look carefully at the elements necessary to ensure that the benefits generated by the project became self-sustaining. One factor affecting benefit sustainability was the appropriateness of the various technological innovations employed. Innovations were sought that could use locally available resources and thus reduce the region's reliance on imported supplies and equipment (for example, the use of ox-drawn equipment rather than tractors). Another factor affecting sustainability was the financial and institutional viability of local development activities. Of the many activities funded by APVDP, it is likely that the small-scale, village-initiated activities have the highest probability of continuing. A third factor in support of sustainability was the emphasis given to capacity building at all levels, with a major concern being whether the government could cover the manpower and recurrent budgetary costs of an activity.

However, perhaps the most important aspect of sustainability, as experienced by APVDP, is timing. The regional planning exercise would have been more effective if it had been scheduled for four years so that its strategy could have been focused more on working through and strengthening government institutions. Also, the project would have achieved a higher impact if the extension activities in the project had been initiated early on in the project, rather than at its mid-point. More broadly, the primary lesson of APVDP is that large-scale, rural development projects require a longer time horizon (about 10 years), if they aim to build institutional capacities and to implement other measures that result in self-sustaining development benefits.
PART TWO

INDIVIDUAL TEAM MEMBER REPORTS
INTRODUCTORY NOTE

The following are final reports made by APVDP team members. They have been included here to provide a description of the activities carried out in various sectors and geographical locations, and to reflect a range of viewpoints on the major issues that arose during project implementation. In preparing this report, team members were asked to conform to the following format:

- A discussion of activities and achievements in their sector or area;
- Identification of key areas of impact in their sector or area;
- Identification of poor areas of return, and constraints;
- Conclusions and lessons learned;
- A discussion of the project design;
- Opinions on support received from the contractor home office, AID, project management in Arusha, and local officials with whom they worked;
- A discussion of the preparation of the long-term plan and planning capability in general;
- A discussion of local development activities;
- Opinions on the way APVDP used consultants;
- Ideas on the direction of future activities by a donor-funded project; and
- Comments on the sustainability of APVDP.
PROJECT MANAGEMENT

By Michael Sarco

Project Manager
January 1980–December 1982
PROJECT MANAGEMENT
By Michael Sarco

INTRODUCTION

The management officer's position was created in January 1980 with the following responsibilities:

- To assist the region to develop its project implementation capacity through its Project Implementation Unit (PIU), and to assist that unit to manage, implement, and monitor development activities;
- To supervise the flow of project resources to support regional development activities, while ensuring compliance with government and AID regulations;
- To assist in development of the region's financial management and administrative support capability, integrating project functions into the overall regional structure; and
- To act on behalf of the chief of party in his absence, supervising the internal management operations of the contract team.

ACTIVITIES AND ACCOMPLISHMENTS

The PIU of the Regional Planning Office was responsible for the approval, implementation assistance, and monitoring of the village and district development projects funded by APVDP. At the outset of the project, a project review committee was established; it included regional functional managers and was chaired by the regional planning officer. This committee met to review and approve all projects submitted for APVDP funding. Later in the project this approval process was modified to coincide with the government's annual planning cycle, although the same selection criteria were used. When a project was approved, initial funds were released following an agreed-upon implementation schedule. As quarterly reports were submitted, additional funds were released on request.

The PIU also procured commodities and material both locally and abroad. These included spare parts, fuel, roofing sheets, cement, and other difficult to obtain but important items.

The project garage and warehouse also supported the village and district projects by providing maintenance services, spare parts, storage space for goods in transit, and fuel.
The PIU supervised the flow of resources and ensured that AID regulations were followed. This involved meeting the stipulations of the Project Agreement, by providing the necessary documentation to enable AID to obligate and release funds, through annual plan submissions. It also involved providing specifications for equipment being ordered, pro forma invoices, cost estimates, and quotations. Since AID was acting on behalf of both the Government of Tanzania and the project as procurement agent, the options available within the AID regulations had to be clarified with Tanzanian officials.

Annual project local currency budgets were prepared and submitted to AID, as well as monthly expenditure reports of contract expenses. These were summarized in all quarterly reports submitted to AID and to the prime minister's office.

The PIU sought to improve the region's financial management and administrative support. In coordination with the regional accountant and on the request of the RDD, the project account was established. Integration of the project's administrative and financial units and personnel was aided by the regionally assigned project accountant, planning officer, and project coordinator. Lack of financial support in the recurrent budgets of the accounting and manpower departments, however, hindered this effort.

Meetings of the project review committee as well as involving the functional managers in the design of projects for APVDP funding helped in the coordination of sector activities. The DAI staff aided in this process by working individually with sector heads.

Local staff members were given specific duties and were expected to perform them adequately. As a result, they provided a higher than average level of support to the project.

When specific actions were needed from a regional official, the PIU discussed these with the appropriate individual. This method proved most beneficial when regional action was needed to break a bureaucratic or logistics block to project implementation.

The management officer, as acting chief of party, supervised the internal management operation of the contract team. The monthly team meetings served to coordinate the various sector activities.

AREAS OF IMPACT

Three groups were directly involved with the project and derived benefits from it: the expatriate staff, the villagers with whom they worked, and the local staff. One area of immediate
impact was on the expatriates, the U.S government (and its employees), DAI, and the American employees of U.S. companies, given the amount of money committed to technical assistance.

Although much time, effort, and money were concentrated on the regional plan and other regional activities, the project's second greatest impact was made at the village level, where village projects were begun, and where villagers benefited from regional projects such as ox-carts and ox-plows.

The third group that benefited from APVDP was the Tanzanian staff who worked with the project. They benefited by the experience and learned much from the various activities. As a result, they will now be able to pass on to others the information and knowledge they acquired.

AREAS OF POOR RETURN AND CONSTRAINT

The chief constraint to the project was the lack of accountability and responsibility from top to bottom, beginning to end, and design to completion. The reasons for this are many, but if the requirements of AID and of the Tanzanian government had been more compatible, it would have been possible to describe functions and responsibilities precisely, and to budget accordingly. If this had been done, monitoring would have been more meaningful, particularly in the area of financing. We were unable to rationalize fully the AID obligation, earmarking, and release of funds with the real operational life of the project, especially with regard to village and district activities. As a result, the accounting regarding these activities was not as closely tied to requirements as it should have been. Therefore, the project's budget, activities, and expenditures were difficult to translate into a form that was easily understood by Tanzanian government officials. If this had been done, they would have understood more about what the project was doing, and their support for it would have increased.

Real cross-sectoral coordination and management among regional and district staff were not achieved, nor was the full integration of project activities. Some progress was made toward integration, but not enough to allow project activities to be self-sustaining. If the government staff assigned to APVDP had been paid from the government recurrent budget from the outset, integration would have been more complete.

Proper management support to district and village activities was not as methodical or intense as it should have been. More direction and regular visits to the sites, and a village-district focus earlier, would have greatly improved the progress of those activities. Regionally based staff often became pre-occupied with ongoing activities at the expense of those at the village level.
In addition, if photocopy machines had worked and office supplies had been available, the project would have been implemented more smoothly.

Focusing consultants on more specific tasks would have improved their impact. The most useful short-term consultants were those who were operationally oriented and who focused on existing needs or bottlenecks in ongoing programs. The soil conservation work by Bryan, the forestry work by Synott, the irrigation work by Bishay, and the population work by Johnston all fall in this category.

ISSUES, CONCLUSIONS, AND LESSONS LEARNED

The political nature of foreign aid should be recognized and admitted; it should also be recognized in project activities. This fact should be communicated to the host government, and its effect on project evaluations and activities noted from the outset to avoid misunderstandings. When an evaluation of a project is based on whether its implementation is sound or it contributes to development, the continuation of its activities should be linked to political considerations. If this had this been done, the disappointment and misunderstanding concerning a follow-on project to APVDP would have been avoided or greatly lessened.

Projects designed to increase development activities should not be expected to meet their objectives or even function as intended in a shrinking economy. This fact should be recognized, and allowances made for adjustments. If these cannot be made, it should be recognized that objectives cannot be met.

When serious misunderstandings or disagreements between the host country and AID arise, they should be resolved and not glossed over. An example was the increasing desire of the Tanzanian government over the life of the project to view APVDP funds as supplemental to its own operating funds and to use them accordingly. If such differences are not resolved, they will cause problems later in the project.

Realistic goals and objectives are important. Regular reporting of these from top to bottom will improve understanding of what the project is supposed to accomplish and who will be responsible for particular facets of it. If the Project Agreement, which was signed by the Ministry of Finance and endorsed by the RDD, had been translated and distributed at an earlier date in the RMT and RDC, understanding of what the project was supposed to do would have improved.
Too many expatriate consultants were used to gather too much information for the regional planning exercise. If the project started by using the planning information that functional managers and planning officers used in the annual planning cycle, more meaningful involvement of government staff would have occurred, and an information system that was smaller, but suited to the district and regional needs, would have developed.

The issue regarding AID's regulation 611a (adequate planning provision of the Foreign Assistance Act) should have been resolved at the outset to allow the operational and financial flexibility that was called for in the design and expected by the Tanzanian government. Failure to resolve the issue increased the already burdensome task of ensuring accountability in the system.

Integration of the various project components, which would have been difficult as designed, became impossible when the roads component was split from the rest of the project. In addition, the different philosophies of the two teams made the working situation very difficult. The project design of having three roads technical assistance personnel arrive in month 16 was changed to five members arriving the first month and a sixth being added. Yet no one seemed to foresee the financial repercussions that this change generated. This problem, coupled with the blurred responsibilities of REDSO East Africa in Nairobi and the mission in Dar es Salaam, resulted in inadequate supervision and integration.

Formal RMT/RDC approval of the loan guarantee scheme would have increased its acceptability and role as an incentive. It would also have also improved the visibility of the APVDP program.

AID's accountability for overall project funds, and the Tanzanian government's understanding of how it worked, should have been better. I think the Contract Amendment was a mistake because it resulted in the project's staff thinking that they had more control over project resources than was in fact the case. In addition, tighter budgeting procedures should have been adopted. The loss in flexibility would have been offset by increased understanding and accountability. Furthermore, the design and budget of the regional planning exercise should have been tighter in scope and time.

The Tanzanian government should have contributed staff, salaries, and office space from the beginning of the project, and AID should have supported the project to ensure that they were provided. If the Tanzanian government had been unable to provide something, it should have documented its reasons.

Grant-provided hard currency should have been used for specifically designated imports, and the region should have provided local currency from its regular budget.
The main fault of the design was that it assumed an expanding economy, and the project was implemented in a contracting economy. The impact of this situation on the project's ability to meet the goals set forth in the Project Paper and the Project Agreement cannot be over-emphasized. If the approval process had been shorter or if those goals had been modified when it became clear that they could not be reached, the staff could have clarified and lowered expectations, thus making it more likely that project objectives would be met. I think the goals and objectives laid out in the Project Paper were optimistic; they soon became unrealistic, however, given the difficult economic situation in Tanzania. The problem was therefore one of the system's inflexibility as much as the project's design.

The difficulty of including the regional planning exercise and the village development activities in the same project, to be carried out simultaneously, was underestimated by the design team, and proved very difficult to implement. The problem stemmed from the desire of the Tanzanian government to have the plan produced by the project, which was to have a village focus. The two objectives were not inherently incompatible. However, the scope and expected coverage of both were more than the time or money allocated could allow. What was essentially a political compromise was not sound development theory.

A third weakness of the design was in its integration of the project as a whole. The initial wedding of the plan and the village projects made this integration difficult. However, sectoral activities were not integrated into the budget, financing, and expenditures of the existing government programs from the beginning, to ensure local staff participation. If they had been, APVDP would not have been seen by many as a separate activity concerning first, the planning office, and only second, themselves and their sectors. It should be noted that the task was no small one. Even government efforts over the past 10 years to achieve true decentralization and the integration of planning and development activities have not met with success.

Flexibility should not have been stressed when the project design was going to be implemented within a rigid system of regulations and requirements. The contract team believed that the project's objectives and design were worthwhile and possible, and convinced others of it. This, therefore, added to the disappointment when it proved otherwise.

The project design should have recognized the enormous difficulty of stimulating productive sector activity. The design should have more tightly tied the roads and water components to the productive sector activities (from project selection and design to budgeting and expenditures). If these had been linked
more closely, the impact of action in the directly productive sectors would have been greater. The separate contracting of the roads component technical assistance simply broke what was already a weak link.

The regional functional offices of accounting and manpower should have been brought into direct project participation to avoid isolating the project in the planning office. This would have lessened the flexibility of project activity overall and led to frustration, especially on the part of expatriate technicians, but the net result would have been positive.

SUPPORT

DAI/Washington Support

In general, support of the project and staff by DAI was good. At the beginning, however, the payroll and accounting support was poor. Although it improved, I do not think that the effect of accounting errors, wrong pay, no pay, or sending money to the wrong place was adequately appreciated by those responsible. The procurement operation should have been tightened to include estimated costs, and no more than a certain percentage cost overrun allowed. The monitoring of expenses and estimates should have been improved. In most cases, the field team was given the necessary decision-making authority. The information required to use it, however, was not always provided.

AID Support

The level of support from AID for project implementation until recently was not very high. This was due mainly to AID's internal structure and the personalities involved. Yet the field staff was in some sense responsible for not being able to help solve the problem. It is worth noting, however, that a clear definition of the project officer's responsibilities is essential. He is more useful to the project if his office is within the AID mission than at the project site, since AID support involves all offices of the mission. The project officer is needed as an advocate, lobbyist, and support person (as well as a constructive critic) for the project.

Support From Project Management

The management of the project was basically sound. The administrative unit, however, should have been more closely supervised, and the system of commodity receiving, issuing, and use, better structured and documented. The procurement criteria and budgets should have been developed earlier and adhered to, and the distinctions of source of funds and their usage made clear. In some cases where an individual's program differed from the
project's needs, a firmer stance should have been taken. In addition, consensus was sought on issues such as personnel selection, where it was impractical or impossible to obtain. In most areas where it was sought, however, it was beneficial.

Support from the Government of Tanzania

Support from the Tanzanian government varied. It was strongest at the village level and from some individual regional staff, and weakest in the middle (that is, among the functional managers). Staff members were well qualified and educated, and in most cases, committed to making the project work. As the project progressed, less time and energy were available for work, since more time had to be devoted to acquiring essential commodities for living. This is due chiefly to economic difficulties and the decrease in real wages, and thus incentive.

PLANNING

I think the project marginally improved the planning capacities of the government. This resulted as much from village and district activities and training as from the planning exercise itself.

VILLAGE DEVELOPMENT ACTIVITIES

APVDP village development activities were supported by villages because they were involved in the planning and implementation of the activities. These activities proved more successful than many government projects and, in some cases, will be used as a model for other villages. Their overall impact was limited by both time and money, and any significant long-term effect they will have on the system will be lost if they are not continued.

CONSULTANTS

In general, consultants were used to gather static base-line information, which in the long run will be of little use to the region. The most effective consultants were those who were operationally oriented. The project used too many consultants because it was trying to do too much in too short a time. In addition, the project lost sight of the fact that a consultant's work and report must be followed up before more work can be done in the same area. If this follow-up had taken place on a more
systematic basis, it would have resulted in the consultants' having a greater impact on the system as a whole, and not just on project-related activities. This would have been of long-term benefit.

FUTURE

The region should focus on small projects that can be functional and self-supporting within the country's present economic environment. They should be uncomplicated and have clearly stated goals and objectives. These should be viewed in light of the present and probable future economic environment, and judged accordingly. If those goals or objectives are limited by factors beyond regional or national control, they should be designed to account for those limitations.
REGIONAL PLANNING

By Alan Johnston

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March 1981-December 1982
REGIONAL PLANNING
By Alan Johnston

INTRODUCTION

As an integrated rural development project, APVDP by its very nature was extremely complex. Throughout the course of the project, but particularly toward the end, the lack of a clear understanding of the project's objectives on the part of officials at all levels had reduced its effectiveness. In part, this resulted from the high number of transfers of high-level officials. It was also due to confusion about the role of a RIDEP in Tanzania. In an over-simplified way, RIDEPs have been perceived as having two major objectives. These are the preparation of a regional long-term plan, to obtain additional donor funds, and the implementation of large-scale projects that are beyond the financial or organizational capability of existing governmental structures. By design and throughout its implementation, APVDP differed from this model. APVDP focused on capacity building through full involvement of officials at all levels in regional planning activities, together with the implementation of sustainable development activities.

Much of the complexity of an integrated development project lies in the concept of integration. APVDP focused on three particular aspects of integration:

- Integration through better coordination among the sectors (particularly between agriculture, livestock, and natural resources) and a focus on land use planning and resource management;

- Integration through better communication and coordination between the various levels of government -- region, district, ward, and village interactions; and

- Integration of the APVDP technical assistance team within the existing government structures. Individual team members were assigned to specific offices where, by working together on planning and implementation activities, their technical skills could most effectively be passed on to their colleagues.

In all three areas APVDP met with considerable success, although there were significant problems concerning the sustainability of these efforts. With land use planning and soil conservation as focuses, efforts have been made through training programs and specific projects to integrate the work of the agriculture, livestock, natural resources, and land departments. The traditional sectoral emphasis, particularly in budgeting, was a major constraint to this type of integration.
Focusing primarily in the pilot wards, APVDP succeeded in improving the communications, planning dialogue, and interaction among village, ward, and district levels. Alleviating the constraint of lack of transportation was a major factor these improvements. Support by the region for district activities remains a major weakness in the system, and attempts to improve coordination between the region and districts, through the Technical Information and Support Unit, showed very little impact. The funding of training activities at the Regional Departmental Seminar provided some valuable support, but this type of training activity is not likely to be sustained.

APVDP's emphasis on capacity building, through the technical assistance team's working closely with government officials in all planning and implementation activities, had clear payoffs. Regional and district officials were fully involved in the development of the long-term plan, and there was a strong consensus that the goals, strategies, objectives, and priority projects in the plan represent the views of region, and that it is not just a donor-written document.

Although the project's efforts in these three areas of integration were fruitful, long-term improvements leading to a more fully integrated system of development planning and implementation would require more sustained development assistance than the three and one-half years provided by APVDP. However, many lessons were learned about the process and systems required.

ACTIVITIES AND ACCOMPLISHMENTS

One goal of APVDP was to improve the quality of regional, district, and village planning and project development. This was to be done through training activities and the development and testing of planning approaches and procedures that would result in district plans that took into account national, district, and locality-specific potentials and constraints. During the course of APVDP, a large number of planning activities were carried out, including the following:

- A comparative analysis of regional planning in Tanzania;
- An Arusha workshop for preparation of detailed implementation plan for APVDP;
- Three study tours by government and party officials to review the design and implementation of six regional integrated development projects in Tanzania;
• Definition of land planning units based on agro-ecological zones, involving computer enhancement of satellite imagery, a regional aerial survey (by Ecosystems, Ltd.), color aerial photography of 12 pilot wards and Arusha town, and district meetings to review agro-ecological zones and finalize the definition of land planning units;

• Aerial study tours of three districts by government and party officials;

• Arumeru, Hanang, and Mbulu districts workshops to review priorities and annual work plans;

• A regional workshop to review district work plans and develop APVDP policies and procedures;

• A village profile survey of 151 villages;

• Sector assessments and background papers for regional planning. During the course of APVDP approximately 350 reports were prepared, including sector assessments, background papers, issue and project evaluations, and policy-oriented papers (see annotated bibliography);

• Sector-specific workshops on sector assessments and background issues;

• Six district workshops for the development of district strategy and priority papers (Arumeru, Hanang, Mbulu, Ngorongoro, Monduli, and Kiteto);

• District and Regional Planning Committee meetings to adopt strategies and priorities; and

• Preparation of the Arusha Region Integrated Development Plan (five volumes and a Summary Report), September 1982. The plan was reviewed and approved by the Regional Development Committee, November 1982.

At the village level, capacity building for improved project planning and implementation was undertaken through a series of village meetings and seminars to identify priority projects, with follow-up meetings to develop specific projects, make detailed implementation plans, and evaluate implementation. Initial emphasis was placed on the village in four pilot wards specified for each of the three project districts. Eventually additional villages were added in district-specified areas of concentration, or in areas where specific land use planning or soil conservation programs were under way.

APVDP carried out intensive planning activities in a total of 18 wards, in 94 villages, through an estimated 380 village meetings or seminars. In addition, less intensive work, through
the planning and implementation of one or two specific projects, was carried out in 98 additional villages, in 35 additional wards, through 108 additional village meetings. Additional village-level work was carried out in the Maasai districts, through a series of 36 village land use planning seminars conducted in Kiteto District.

A second goal was to develop standardized methods and procedures for project development and preparation that help ensure sound (that is, realistic consideration of constraints) development activities and the commitment of village resources. During the course of APVDP, a number of project proposal formats were tested. Initially they included a very thorough financial analysis. As the project proceeded, a less complex format evolved, concentrating on a detailed implementation plan. Project proposals were prepared for over 200 village development projects, with district functional managers becoming more involved in their preparation.

A third goal was to develop an integrated training program in support of district planning and project development. This program was to include:

- Communications and technical workshops in planning and project development;
- Communications and technical workshops for district field staffs in agriculture, livestock, natural resources, and cooperatives and community development; and
- Third country and in-country study tours.

During the course of APVDP, a large number of technical seminars and workshops were held:

- 47 communications and technical workshops in planning and project development were held involving 650 government and party officials and village leaders.
- 57 communications and technical workshops were held for district and field staffs in the directly productive sectors (agriculture, livestock, and natural resources) and in the Water Department. These workshops and seminars included 1,090 district officials and field staff.
- 9 study tours, involving 66 government and party officials, were conducted outside of Arusha Region, including one to Botswana and one to Zaire. In addition, numerous local study tours were conducted for officials, field staff, and village leaders to visit and study other projects in the region.
A fourth goal was to organize and develop regional and district information systems for planning and evaluating development efforts. One of the major accomplishments of APVDP was the assembling of a comprehensive collection of base-line data for the region. This information is summarized in Arusha Region Today: 1981, and spelled out in great detail in the documents prepared by APVDP.

Another important accomplishment was the establishment of the Resource Center in the Regional Planning Office, where all of the documentation and other resource material are readily accessible to planners and functional officers, as well as other agencies doing research and development work in Arusha Region.

Other activities and accomplishments include:

- The introduction of microcomputers as a tool for planning and management, with the development of a regional planning model for Arusha Region using an Apple II Plus microcomputer;

- Evaluations of projects and development issues to improve evaluation capabilities, including the land use planning evaluation, population issues, Kikwe evaluation, and shallow wells evaluation; and

- A graduate training program at Cornell University. Five district and regional officials participated in a graduate program in regional planning leading to a Master's degree in Professional Studies (International Affairs).

KEY AREAS OF IMPACT

Raising Awareness of Key Issues

One of the key accomplishments of APVDP was in assisting the region, through the planning exercises, to develop a comprehensive set of development goals, strategies, and objectives, as well as outlining priority projects. This planning exercise has had a particularly strong impact in raising awareness of key issues:

- Population. Regional and district officials now agree that rapid population growth is a major long-term constraint to development. APVDP helped clarify the issues stemming from rapid population growth, helped improve development planning through the analysis of the impact of population growth, and assisted regional officials to develop a program of support for family planning education and services as one means of addressing this issue.
- Resource Conservation. The deteriorating resource base of the region is another serious constraint that received considerable attention. Renewed emphasis was given to soil conservation, afforestation, and other programs in land use planning that will contribute toward conserving and maintaining a sustainable resource base for development.

- Maintenance. There was considerable emphasis on improving services and developing a wide range of development projects. Through APVDP-sponsored discussions, there is now an awareness of the importance of concentrating on the maintenance of existing infrastructure and services, even at the expense of slower progress in building new projects.

- Manpower Utilization. The region passed a resolution calling for more efficient utilization of existing manpower and financial resources. Although some efforts were made to improve the performance of agricultural and livestock field staff in pilot areas, the increased awareness of manpower as an issue did not lead to significant attempts to improve the situation.

- Land Use Planning. With land and water resources as the basis of development, much effort was expended in devising a system of improved land use planning at regional, district, and village levels. This effort was only marginally successful. There is an increased understanding of the importance of land use planning, but little progress was made in improving performance. This remains a key area where government and party officials will have to develop means of monitoring the use of resources.

**Improved Project Planning and Implementation**

As the project proposal format for APVDP projects evolved, it was simplified and concentrated on the development of a detailed implementation plan, which had been missing from government projects in the past. Regional and district officials noted the improvement in project implementation, with perceptibly better results attributed to better planning. Although the proposal format was not formally adopted for all government projects, district functional managers were fully involved in project proposal preparation and improved their capability to prepare implementation plans.
Training

Although no comprehensive regional training program was established, and the sustainability of training programs is in doubt due to lack of funding for such activities, the training programs carried out under APVDP were given high marks by the officials involved.

Prior to APVDP, some officials had stated that it was entirely possible that field staff would get no refresher courses during the entire course of their careers. The training workshops carried out under APVDP were favorably received, led to improved technical ability on the part of field staff (based on self-evaluation and general reports from managers), and contributed to a better understanding of the importance of integration of the productive sectors in dealing with such issues as soil conservation and land use planning.

Other Key Impact Areas

Other accomplishments of the regional planning program included:

- Improved coordination with other Tanzanian institutions, including the National Documentation Center and university library, university faculty (through consultancies on various topics), and agricultural research facilities (through various study tours);

- Development of a strategy of geographic concentration. This strategy was tested in the pilot wards, and adopted by the districts (areas of concentration) as a meaningful approach to improving the impact of development efforts;

- Development of a strategy of financing village development efforts through loans, instead of grants, as a means of improving the village commitment of resources and efforts to development projects. This strategy proved effective under APVDP, and is considered an effective strategy by regional and district officials. They will now have to continue it by working with Tanzanian financial institutions or adopting loan procedures and other revenue-generation strategies under the new district councils;

- Integration of the Resource Center as an integral part of the Regional Planning Office;

- Assembling a comprehensive collection of information, data, and analysis through the regional planning process. This information, incorporated in more than 350 documents
prepared by APVDP, represents a significant improvement in the information available to government officials in Arusha Region, and will provide a strong base for the development of future projects and programs; and

- Provision of assistance to the region in preparing annual and five year plans through the development of a systematic basis for making sector allocations while taking into consideration the region's strategies and priorities.

AREAS OF POOR RETURN AND CONSTRAINT

Administrative and Accounting

As is clear from the accounting problems that led to the early termination of the project, the administrative and accounting sectors, both in AID and in APVDP, were a constraint to the successful functioning of the project. Throughout the project, the flexibility of the process approach was interpreted too liberally, and not enough effort was put into a thorough budgeting exercise on a regular basis that would have lead to closer project financial monitoring.

Development of a Formal Evaluation Program

Although many development issues and projects should have been evaluated, especially those concerning both large- and small-scale land use activities, it was not possible to develop a formal and sustainable system of regular evaluations. A number of pilot evaluations were undertaken, and these were seen as very useful by government officials. However, given the constraints of lack of incentives for performing formal evaluations, and lack of budgetary support, it is most unlikely that the current system of informal project visits will continue in the future.

Development of Formal Integrated Training Program

Training activities under APVDP were viewed as very useful and one of the key areas of impact. Development of a regular, formal training program is not sustainable without donor funding, however, given the shortage of government development funds and the difficulty of including regular training funds in the very limited budget. It is possible that some of the smaller in-service training activities, such as those included in the agricultural and livestock extension programs, may be maintained.
Development of Regional and District Information Systems

In its planning activities, APVDP concentrated on a broad approach to collecting a comprehensive set of regional data as a basis for the long-term plan. In the long run, it might have been better to concentrate on improving the regular reporting procedures in each of the sectors and on information gathering through the extension staffs as a means of upgrading the information systems already in place within the government system.

Technical Information and Support Unit

To improve cross-sectoral integration in the productive sectors, APVDP established the Technical Information and Support Unit (TISU) within the Regional Planning Office, with representatives from Agriculture, Livestock, and Natural Resources. The establishment of a separate unit, rather than leading to an integration of their activities, isolated the TISU representatives from the activities of their sector, leading to the impression that APVDP-supported activities were independent of the regular activities of the sectors. In the end the TISU representatives were returned to their respective sectors where they could function as extension coordinators, while trying to add an integrated, land-use planning perspective to the extension activities in their sector.

CONCLUSIONS AND LESSONS LEARNED

The complexity of APVDP and the flexible, evolutionary, process approach led to a diffusion of effort and delays in making key decisions and initiating efforts in key areas such as agricultural extension. A more structured program might have led to the earlier identification of key activities and more well-defined tasks for the technical assistance team. APVDP may have been too flexible in its efforts at getting local definition of priorities.

Within the management and accounting of APVDP, a particular problem was that no specific budget was given for various sectors (such as training or water). Project management determined budget allocations on a case by case basis. As a result, it was very difficult for the Resource Center to plan an acquisitions program or even give guidelines to APVDP and Tanzanian staff concerning what types and amounts of materials could be ordered. A more detailed budgeting exercise at the beginning, involving key Tanzanian officials, might have led to better accounting, and helped to avoid the difficulties experienced at the end of APVDP. Flexibility can be built into this more detailed budgeting procedure by allowing for regular amendments and changes, to be made in consultation with project and government officials.
Any overseas training should be geared to a specific need. For instance, overseas study tours or third country study tours should be carefully planned in areas where the lessons learned will be directly applicable to the project area. General tours were widely criticized. Criticisms of long-term U.S. training included the following:

- Because of the high number of transfers, the officials trained might not directly benefit Arusha Region (although the training might help the nation as a whole);
- Training in development planning in the United States might not be relevant to the situation in Tanzania;
- The cost of long-term U.S. training at $25,000-$30,000 per participant was excessive, and money could have been better spent in in-country training; and
- Based on the standard graduate-level tests, most applicants from Arusha Region were only marginally qualified to take advantage of the rigorous training offered by a university such as Cornell.

Thus, long-term overseas training should be left to national aid programs, with area programs such as APVDP concentrating on in-country training, together with limited, specifically focused, third country study tours.

In addition, improved implementation plans can lead to better project implementation performance. During APVDP the project proposal format was modified from a complex format involving detailed financial analysis, to a simpler format that concentrated on detailed implementation planning, which many officials noted had led to better performance.

APVDP's original budgetary process was evolutionary, whereby projects could be developed throughout the year. This requires a blocked-funding procedure in an annual budget process. The Government of Tanzania budget submission required fully developed project proposals and costings at the time of the annual plan submission. This requirement led to difficulties in integrating APVDP into the government's annual plan.

A lesson learned was that APVDP projects should be integrated into the annual plan so that all projects could go through the full planning process, including full review and approval by all the relevant committees and officials. After the plan was adopted, the planning office could work with functional managers to develop detailed implementation plans. This step was added to the requirements for APVDP funding release, but it was not officially adopted as a requirement for the release of government funds, although planning officers and functional managers, by working with APVDP, improved their skills in developing implementation plans.
An added benefit of preparing all project proposals as part of the regular annual planning process is that this process conforms more closely to the AID process and procedures. It should be noted, however, that a mechanism for amending annual plans for cases where the proposed projects prove infeasible should be built in, so that allocated funds will not be forfeited.

An elaborated formal evaluation system was infeasible because of lack of budgetary support and because the system of information project visits was viewed as sufficient by government officials. It should be noted, however, that many important land use decisions affecting the region were being made without its careful consideration, by such entities as parastatals.

The strategy of geographic concentration, originally adopted by APVDP in its pilot wards, and later adopted by the districts in their areas of concentration, was established as an effective means of enhancing the impact of development efforts.

Development of sustainable links with other institutions in Tanzania is an important role in the Regional Planning Office, but a role that requires budgetary support through funding of study tours and consultants from those institutions. Such institutions included the Center for Continuing Education, in Morogoro; the University of Dar es Salaam; and the Agricultural Research Institutes.

Microcomputers are an important innovation being tested in many countries. Arusha Region is still in the early stages of testing of the usefulness of microcomputers in development planning and administration. Their usefulness will depend on the commitment of regional planners and functional managers, as the technical skills and required equipment are readily available.

In its planning exercise, APVDP prepared 350 documents containing a comprehensive collection of data, analysis, and recommendations. However, there was little follow-up on many important recommendations. A shorter list of documents more selectively chosen on the basis of priority needs and interest of the relevant functional managers would have resulted in more use being made of the material.

The management team approach adopted by DAI for APVDP, with shared responsibility for project management between the home office and the field staff, proved an effective method of support and administration for a large integrated development project.

Regular monthly team meetings played an important role in coordinating the team effort, ensuring full involvement of all team members in the evolving design of the project, and enhancing the spirit of teamwork, which characterized the project. In retrospect, including key regional officials such as the project coordinator and possibly the regional planning officer in as many such meetings as possible would have been beneficial.
In its design, APVDP was distinct from any of the other RIDEPs in Tanzania. It did not have an initial planning phase (several years) followed by the implementation, during phase two, of a number of the projects designed during phase one. Instead, APVDP combined both planning and project implementation, with each aspect of the project providing important feedback to the other. Not only did the road construction, water projects, and over 200 village development projects add credibility to the project, but the actual implementation work also provided the best means of upgrading planning skills at all levels. This was done through the experience of developing implementation plans for the actual projects, evaluating them, and setting priorities for projects during the next planning period. A distinction of APVDP was thus that it was explicitly designed as a capacity-building project, with a goal of upgrading planning skills at all levels as well as assisting with the preparation of a long-term plan. The advantage of this approach was that regional and district officials were fully involved in decision making at all stages in the development of Arusha Region's Integrated Development Plan. In addition, there is a consensus that the goals, strategies, objectives, and priority projects in the plan fully represent the views of those officials. It is, indeed, the region's plan. Furthermore, local involvement in project planning and implementation of APVDP projects has been seen to be the best means of improving skills in project planning, implementation, and evaluations.

A second major difference in the design of APVDP, compared with other RIDEPs, is that APVDP used a flexible, process approach to planning, as opposed to the traditional blueprint approach of detailed project design and then implementation. In the process approach, the continuous feedback from the experience of implementation of village development projects leads to an evolutionary planning process. There are obvious advantages to this type of planning. It leads to project selection that is more realistic and more closely attuned to the constraints on implementation, with rapid feedback when impediments are encountered.

In retrospect, however, this approach led to several serious problems for APVDP.

- The flexible project selection approval process conflicted with both Government of Tanzania and AID requirements for a detailed annual plan. In an effort to integrate the Tanzanian and APVDP budgets, a detailed annual plan was developed during the final two years of the project.
The flexible approach was perhaps interpreted too leniently by APVDP staff and management. The lack of a detailed budget centered budgetary decision making solely with the project managers; hampered the monitoring of expenditures; and contributed to a lack of focus among project staff, who became involved in a myriad of activities in searching for effective alternatives.

The approach added to the complexity of an already complex project; hampered the understanding of the project among officials at all levels, but particularly the higher levels; and contributed to the feeling among key officials that they were not fully involved in the budgetary decision making.

An evolutionary planning process has advantages. It should not, however, be interpreted too loosely. A detailed plan and budget should be developed, with collaboration between project staff and government officials. This plan and budget should be reviewed regularly by both project staff and government officials, but allowing flexibility in revising both the plan and the budget. In this way, a clear plan can be communicated to all officials, and key officials will be fully involved with budgetary decision making.

Regarding the specific components included in the project design, there has been a close agreement that the emphasis on the productive sectors, infrastructure, and planning was an appropriate selection, given the problems in the region. However, the project's flexible design hindered effective implementation, as project staff were given freedom to explore alternatives before focusing on specific activities. This was particularly true of the agriculturalist position, where a more specified approach might have led to an earlier focus on concrete activities such as agricultural extension. In addition, water activities might have begun sooner. All project staff had enormous scopes of work; the dilution of their effort in varied activities lessened their impact in selected areas.

SUPPORT

The success of APVDP is mainly due to the very close and cordial cooperation the project received from government and party officials and from villagers. Their personal and professional support, and their commitment to working diligently with the project staff in initiating and implementing the development activities supported by APVDP, made the experience stimulating and rewarding.
DAI Support

Organizing effective technical assistance in large development projects is an extremely important, yet difficult, task. DAI uses the management team concept, with responsibilities shared by the field team and the home office. Final authority for the technical assistance effort, however, resides in the home office. Its effective involvement depends upon field visits, consultations, and regular evaluation of the technical assistance field team's efforts. Home office support includes an assessment of the development approach and the organization of project activities, as well as personnel and logistics support systems.

In many ways this system functioned admirably with APVDP and, although minor refinements in the system are required, it proved itself effective, both in comparison with other technical assistance systems (such as individual contracts or academic institution contracts), and with other consulting firms that recruited contract field staff and gave them full authority for project implementation. Required improvements, however, include better monitoring of project finances and better control and monitoring of procurement.

AID Support

Throughout the project, support by AID was a major issue. AID's financial monitoring support was inadequate and proved a major hinderance to the project. To improve this, AID will have to make serious institutional changes. In addition, there was lack of technical support and coordination. APVDP staff attempted to coordinate technical efforts within APVDP with other AID projects. At least seven centrally funded AID population projects visited Arusha, for example, with several providing substantive support to the region. APVDP also worked closely with other AID/Tanzania projects such as Training for Rural Development. However, almost all contacts with such projects were at the personal initiative of individual APVDP staff members. There were probably other projects that were funded by AID that could have contributed to APVDP, in areas such as agriculture, appropriate technology, and communications (support for the Resource Center, for example). AID should develop a better system for coordinating projects, with the country mission staff responsible for initiating the contacts.

Project Management

In terms of support for APVDP staff, the project management was quite responsive. Although all staff members had enormous scopes of work, project management held regular consultations to focus team member activities and delineate responsibilities. However, greater effort should have been spent on specific project budgeting. Throughout the project, budgetary decision making was centered in project management and was made on a case by case
basis by the project manager. As an idea was presented, the project manager approved or rejected it (in most cases he was very supportive). Management would have been much improved if specific budgets had been set for each activity and sector. Flexibility could have been maintained by making provisions for regular amendments to the budgets. This would have allowed team members to plan their activities better and to monitor expenditures. Although most requests were honored, it was difficult to set guidelines concerning the types of materials that could be ordered, or to publicize the availability of funds for acquisition. In addition, it was difficult to plan training activities without an overall budget. Instead, each training activity was approved by project management as it was developed. Thus, although project management was supportive of staff member needs, it lacked in organization, which eventually led to the extremely serious problems that resulted from the early termination of the project without sufficient notice.

Tanzanian Government Support

The close and cordial cooperation of government and party officials was essential to the accomplishments of the project and greatly appreciated by team members. However, lack of government support in key areas, such as the assignment of key officials, seriously hampered the project. In particular, the delay in the assignment of district planning officers to the project districts, and the failure to assign a regional road maintenance supervisor, caused serious problems for the project.

PLANNING

Improving the local capacity to plan, implement, and evaluate development activities was one of the major goals of APVDP. Much less was accomplished, however, than was hoped for in the way of sustainable improvements. The accomplishments include the fact that:

- Many officials at all levels benefited from specific training activities such as seminars, workshops, and study tours, which all received positive evaluations;
- All those involved in planning and implementing APVDP projects benefited from the experience of being involved in thorough planning for implementation, and in the systematic evaluation of the projects;
- A comprehensive data base was assembled through the regional planning exercise and the work of consultants to the project; and
One of the major accomplishments of the project was to assist the region to develop and adopt a set of development goals, strategies, objectives, and priorities to guide development planning and decision making in the future.

However, project impact on improving planning capabilities was limited by a number of factors:

- The high rate of transfer of government officials;
- The lack of government financial resources to continue a regular program of training activities;
- The inability of the project and regional government to make substantive changes in the planning system. The lack of incentives for more thorough planning is mentioned by many officials as one reason why planning has not improved, that is, the allocation of funds by the government does not require thorough project planning; and
- The focus of the project on report writing and assembling of available data for regional planning, rather than on improving the regular data collection and reporting procedures within each of the sectors. The latter focus might have led to more sustainable improvements in planning, even if it had been at the expense of having a less comprehensive set of base data.

One important aspect of planning is evaluation, and an attempt was made through the Division of Planning and Evaluation in the Regional Planning Office to establish an improved system of project evaluation. During the course of APVDP, a number of issue evaluations and project evaluations were conducted, both in the Regional Planning Office and in the District Planning Offices in the project districts. A format was established for drawing up terms of reference for the evaluation, assembling a cross-sectoral evaluation team, and preparing a final report and recommendations. The system was simple in design, inexpensive, and focused on the recommendations for changes in project implementation. Examples of evaluations carried out were:

- A regional land use planning evaluation;
- An evaluation of the computer operations of the Regional Planning Office;
- An evaluation of the Kikwe Building Brigade Project (Arumeru);
- An evaluation of the APVDP Shallow Wells Program (Hanang); and
An evaluation of the Gallapo Dairy Multiplication Unit (Hanang).

Although there was strong regional and district support for every evaluation initiated by APVDP, it was not possible to establish a formal system of regular evaluations. Possible reasons for this are:

- Lack of incentives (informal evaluations are sufficient for preparing the required government quarterly monitoring reports);

- Lack of specific budget support for evaluations (although staff time, nights out, and transport -- which are the only necessary expenses -- are all included in the government recurrent budget); and

- Existence of an established system of government officials making informal site visits to projects and recommending verbally and also possibly by letter specific project recommendations.

As a result, many issues, particularly those affecting land use in Arusha Region, were not adequately addressed because of the lack of a formal evaluation program.

VILLAGE DEVELOPMENT ACTIVITIES

The goal of the village development activity component of APVDP was not only to support the initiation of a number of sustainable village development projects. It was also designed to explore ways of improving the government system of consultation at the village level in the identification of projects to be supported by the government and, more important, of training village leaders to develop their own village development activities.

The original model tried by the APVDP staff was the village dialogue model, based on the approach developed by Paulo Freire. Although an initial attempt was made to work with representative villagers, it was more efficient and acceptable to work directly with the village leaders and village councils in the identification of village priorities for both self-help projects and projects involving outside (government and APVDP) assistance. The goal was for APVDP to work with district and field staff on the development and implementation of these village activities, to build an improved system of village-government interaction.

During the course of APVDP, approximately 150 village-level development projects were undertaken. As a result of thorough planning and consultation with the villages, and the requirement
that as many village resources were to be committed to the projects as possible, the projects were, on the whole, quite successful. However, whether any major impact was made on the system of government-village interaction and dialogue is less apparent. Certainly many government officials and field staff benefited from the experience of working on APVDP projects. However, aside from modest improvement in the performance of a small number of government district-level officials and a large number of field staff (especially those in the pilot extension programs), there was no significant change in the government system.

One obvious reason for this lack of impact is that Tanzania, especially in comparison with many other less developed countries, already has a strong commitment to village consultation and support. If the APVDP staff did not have a significant impact in Tanzania, it is because future projects should not concentrate so much on improving the government system, as on providing major support to selected specific projects (such as agricultural extension and small industries).

Many of the district- and village-level projects were successful. For example, the fruit and forest tree nurseries in Mbulu District produced over 2 million seedlings, and were part of a successful extension program. However, the additional technical and financial support provided could arguably have been more effectively channeled through the existing Natural Resources Department rather than through the creation of relatively independent APVDP nurseries.

One area of major impact was the emphasis on obtaining a village commitment of resources before a project began. APVDP lent money, is compared with government development projects, which are limited to grants. Project designs also called for commitment of village-provided labor and materials wherever possible. This requires further evaluation and analysis, but initial indications are that this substantial village commitment to the projects, in terms of planning time, village labor, and materials, as well as the commitment to repay the loan, led to improved project performance and a greater potential for sustainability. One indication of the level of commitment is that the loan repayment rate of the APVDP loans was 100 percent on time. Government officials noted this performance and, in the future, are likely to put increased emphasis on village commitments to projects and to push for greater utilization of the existing banking structure in Tanzania (NBC and TRDB, in particular) as a source of finance for village development projects.

A major problem area for many of the village development projects is management. A great deal of effort was put into implementation plans and actual project implementation. Not enough effort, however, was put into bookkeeping, accounting systems, and management organizations, all of which are essential
to project sustainability. Too often management was left to the village council or village officials, without technical assistance to set up a detailed, project-specific management structure.

In fact, village management of projects is one of the critical areas of concern for Tanzania as a whole, if performance of village projects and village productivity is to be improved. This is particularly relevant in collective, as opposed to private, activities. Projects are often seen as benefiting only the village, with almost none of the project income being distributed among those who have contributed their labor to the project. This is one factor that has led to the very poor performance of village projects in Tanzania. Designers of project management structures should consider the possibility of distributing the profits or income of a project according to the input or contributions of the workers, thus providing an incentive for them to spend their efforts on the collective activities of the village. A successful project will benefit a village through its output (agricultural produce or roofing tiles, for example), and a portion of the income can be re-invested in other village-owned projects or services. Unless there are increased incentives for villagers to contribute to collective activities, however, their commitment to continue to work hard on such projects will remain marginal, at best.

CONSULTANTS

With over 85 short-term consultants, and many of them returning several times to work on APVDP, there is a need to evaluate carefully their impact. I think that the consultants should have been used in a much more operational setting, working closely with specific sectors to upgrade the existing data collection and reporting system, resulting in a more sustainable improvement in the data available for planning.

The project relied too heavily on consultants. This reliance added to the perception that too much money was spent on technical assistance and not enough on implementation. More important, although most consultants were careful not to put an added burden on government officials during their consultancies, the amount of material and reports generated overwhelmed most officials involved. Although a large number of documents were produced, there was not sufficient time to follow up on many of the recommendations, thus limiting the impact the consultancies had on the system. For example, a report was prepared on "Revenue-Generation Options at the Regional, District, and Village Levels" (Schroeder). The report is clearly written and contains excellent ideas, yet it was never fully discussed or reviewed by government officials.
Consultants were used in training, with mixed results. One of the most successful was the Soil Conservation Workshop, but even there too heavy an emphasis was placed on overseas consultants (three for that one workshop), and not enough on local resources. A recent training consultant who was widely appreciated was the irrigation consultant (Bishay Bishay), who made excellent use of his Tanzanian colleagues, both in preparing his reports and in conducting the training.

Consultants were also used to design the original project and to analyze planning experiences elsewhere in Tanzania. The work of Elliott Morss was crucial to the design of APVDP and contributed significantly to whatever the project accomplished.

The use of local Tanzanian consultants, such as faculty members from the university, is one area of technical assistance that requires further evaluation. The work of Professor Ndulu in road priority development, and that of Professor Mlay in population analysis, illustrates the advantages of using local experts who are familiar with the cultural, environmental, economic, and political environment, and who have obvious advantages in communication. Their work was of the highest quality, indicating that much greater use could have been made of Tanzanian consultants. One problem area was the question of remuneration. On one hand, the Tanzanian consultants were just as capable and professionally trained as overseas consultants. On the other hand, however, their salaries should not have been above Tanzanian standards (both their own salaries and those of government officials with whom they will be working). In most cases, the project compromised, at a level approved by the university, but much higher than equivalent government salaries. Government officials resented this, yet appreciated their work and recommended more use of local consultants.

FUTURE ACTIVITIES

The concept of APVDP as an integrated development project combining planning activities with village development projects and infrastructure implementation, all within a framework emphasizing capacity building, has demonstrated its appropriateness. If funding could be found at a level to justify this approach, a follow-on project using a similar design would be appropriate. Given the economic conditions in Tanzania, added emphasis should be given to the productive sectors, specifically agriculture and small industries. Also, any project should continue to include some road support, but it should be geared toward capacity building for road maintenance. The long-run development of conservation activities is extremely important, and afforestation and soil conservation warrant continued funding. One additional activity that could have a long-run impact is in the area of population, because population growth represents
perhaps the major long-term development constraint. Funding for an integrated program to increase awareness of the population issues, improve education and services on family planning, and improve development planning to take account of the inevitable population increase (through programs on employment generation, for example) is extremely important.

If large-scale funding for an integrated development project is not available, the region should continue to press the prime minister's office to locate additional funds to support specific priority projects, as outlined in the long-term plan. Careful negotiations with donors are required to ensure that project funding coincides with regional priorities.
THE AGRICULTURAL SECTOR

By Douglas Carter

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ACTIVITIES AND ACCOMPLISHMENTS

Extension Activities

Since January 1982 the major focus of agricultural activities was on the development of an extension service for Arumeru, Hanang, and Mbulu districts. On recommendation of DAI staff member Robert Dodd, a regularized work and training schedule was established, based upon the World Bank training and visitation (T&V) system. From January to June, APVDP identified personnel to serve as village- or ward-level agricultural extension agents (Bwana Shambas) and district extension coordinators (DEC). These individuals designed a viable, revolving visitation system, visiting eight groups of farmers over a two-week period. Regular monthly training sessions, focusing on seasonal farm work, were established. A total of 18 village-level extension agents and three extension coordinators were involved.

The response of farmers and extension personnel to this system was enthusiastic, prompting its expansion and refinement. Nineteen agricultural extension agents and three DECs were distributed as follows:

Arumeru: 1 DEC 4 Bwana Shambas
Hanang: 1 DEC 11 Bwana Shambas
Mbulu: 1 DEC 4 Bwana Shambas

During this second phase the question of sustainability was examined. It was felt that a serious effort should be directed toward building the planning and budgeting capabilities of each DEC. Lengthy sessions were devoted to developing a viable annual budget, within the constraints of the regional financial situation. All components of the extension effort were reviewed, and priorities established. All DECs were actively involved in this process; therefore future budget proposals should reflect their enhanced capabilities in this area.

Before accurate budgeting occurred, a detailed annual action plan was developed. The major components of the extension project were designed to include training, night-out allowances, fuel, field days, and material support. A conscious effort was made to make these components as cost effective as possible.

Note: No report is included here from the Productive Sectors Adviser, 1979-1981.
The second phase of T&V system was modified further to reflect and utilize the existing political structures of the Tanzanian government. What one can call a pure "Mabolozi" system was first established in Mbulu. Under this system, the chairman of the "Kitongoji" (a subdivision of the village) was selected as the contact farmer. All Mabolozi within the Kitongoji were invited to attend the Bwana Shamba's regular visitation. In turn, the Mabolozi were to return to their respective "ten cell units" and explain the Bwana Shamba's recommendations. Using this system, each Bwana Shamba visited 16 contact farmers, each contact farmer was visited by 10 Mabolozi who in turn contacted 10 (or more) "ten cell unit" farmers: The ratio of farmers visited by the Bwana Shamba is 1:160, whereas indirect farmer contact is 1:1,600. The remaining districts adopted modified versions of this basic plan.

A weakness of the initial six months of the extension effort was the content of the monthly training session. This problem was addressed in the second stage. Greater emphasis was placed on involving the Bwana Shamba in planning these sessions. Feedback from farmers was not specifically included, but with the inclusion of the Bwana Shamba, this deficiency was partially addressed. AID's proposed Training for Rural Development Program could help formalize the inclusion of farmers into the planning process.

Organization

An important factor in improving agricultural productivity is the fostering of relevant and appropriate cultural mechanization to increase the work accomplished. The use of oxen is common in Arusha Region. However, basic ox-drawn equipment and spare parts have in recent years become scarce. Very early in the project, the farmers identified the need for plowshare replacements. The Technical Information and Support Unit (TISU) office and the Small Industries Sector explored several possibilities to alleviate this shortage. Repair of existing plowshares was investigated, but found to be uneconomical. Therefore, the implementation team opted for manufacture of new plowshares by the Themsi Implements Factory, established by APVDP. The quality of these locally produced plowshares is extremely high and will have a great impact on the farming community.

The extension project was also actively involved in the testing of locally produced ox-drawn plows and weeders. The locally produced plows are now available, as is a weeder attachment, but further testing and viability will be required. The improved agricultural extension project (PAEP) will be actively involved in testing and promoting this weeder attachment. The last ox-drawn item recommended for production by the extension office was a twin row-planter, which can be attached to the existing plow tool bar. The production and testing of the initial prototype led to the development of a second prototype.
TISU and the Formation of the Land Use Planning Committee

Over the life of APVDP, productive sector integration was a major objective. The formation of TISU was in direct response to this need. The unit included representatives from each of the three productive sectors (agriculture, livestock, and natural resources). They were to work together and promote an integrated approach by district staff. However, very little integration was achieved. It was probably necessary to create TISU, if for no other reason than to demonstrate that senior government officials must be actually involved to achieve true integration. TISU simply did not have the necessary power, however, to alter the normal course of sectoral decision making.

During the closing days of APVDP, the planning office officially endorsed a plan to create a standing land use planning (LUP) committee, chaired by a senior planner and composed of the functional managers of the three productive sectors. Under this proposed plan, which must be ratified by the RMT, the productive sectors will retain control over their respective budgets. However, through the LUP committee, specific areas of concentration will be identified and an integrated action plan developed to deal with them. Development and recurrent money must be directed to support the implementation of this action plan.

KEY AREAS OF IMPACT

The major focus of the work in 1982 was on the development of a viable, sustainable, extension service. The work centered on the regularized work schedule and the inclusion of regular training sessions, planning, and budgeting. It also focused on the greater visibility of the extension service. Another important accomplishment was the increased morale of the participants, largely the result of the efforts to develop a viable extension service. Increased morale is important, because sustained progress and the development of the service depend to a large degree upon the support they can generate.

The project's impact on farmers was significant. One indication of farmers' support was shown during the selection of contact farmers. In Hanang District, there was active and vocal lobbying among those who wanted to be selected as a contact farmer. This is important because no inputs were provided to contact farmers; the Bwana Shambas offered only advice. Based upon the first stage of the pilot, therefore, the farmers considered the advice being offered of significance to them. This development represented a complete change from attitudes voiced earlier, not only by the farmers, but also by APVDP. If nothing else, this project demonstrated that the development of the extension service is a viable option for Tanzania, and can improve its production.
Another major contribution was in the identification, development, testing, and local production of plowshares. Much of the credit for this must go to the Theml Implements Factory. The major contribution of PAEP was in the initial identification and testing phase.

AREAS OF POOR RETURN AND CONSTRAINTS

Training and Development of Extension Methodology

The development of a viable, cost-conscious extension service structure was considered the highest priority. The component parts of the system, including demonstration plots, field days, and training, were developed only to the extent necessary to facilitate the structural development.

Training Sessions

Training sessions were largely refresher courses in crop husbandry. However, the farming systems concept, suggested during an earlier consultancy, was not significantly developed. Concentration was on basic crop husbandry practices such as time of planting, spacing, and early weeding. These factors accounted for 30-60 percent of the variability in yield. While timely and adequate rainfall are important, achieving maximum yield potential under any climatic regime requires good husbandry practices. This basic thrust was formulated after studying current farming practices. It was agreed that the greatest yield increases, over the short term, could be achieved by following these recommendations.

A major disappointment was the failure to broaden the scope of the training sessions. This was to be a major area of concentration during the second phase. I hope that the action plan, which included soil conservation, tree planting, and manure use, can be successfully implemented.

The training did not focus on communication techniques, which are a major area for future development. This aspect was neglected due to a shortage of appropriately trained individuals. The only area covered that touched marginally on communication skills was the creation of an awareness that farmers were experts. The extension agent should seek their advice and advise on changes in crop husbandry that could match the farmers yield expectations.

Demonstration Plots and Field Days

Field demonstration plots are the most effective extension method for convincing farmers to adopt a specific husbandry practice. Demonstration plots served as a focal point for the farmer field days held in Hanang, Mbulu, and Arumeru. The
The project's main shortcoming was in effectively using these demonstration plots to reach a significantly large audience. This was especially true in Arumeru, where the relatively weak organization and management skills, compared with those in Hanang and Mbulu, would have been severely taxed. However, excellent use was made of the demonstration plots in Hanang and Mbulu, where over 60 farmers and political leaders attended.

To a large extent, the less than effective utilization of these plots stemmed from their newness. Although demonstration plots have been a part of Kilimo's official duties, they were never used to the degree employed in this project. A total of 55 demonstration plots were established on individual farmers' fields. For many of the seven Bwana Shambas involved, this was their first exposure to such an arrangement. The whole exercise was a valuable experience in location selection, planning, and care of the plots. Now that the Bwana Shambas are familiar with the process, greater emphasis can be placed on using them to reach a wider audience.

LINKAGE OF RESEARCH STATIONS, THE EXTENSION SERVICE, AND FARMERS

Although there is a recognized need for effective linkages between research, the extension service, and farmers to develop relevant and innovative farming recommendations, there currently are no formal channels to permit these linkages. The development of these channels cannot be done by the regional government, as it requires national policy guidelines. To this end regional officials should lobby for change. In the meantime, only ad hoc arrangements can be made.

Coordination of Productive Sector Activity

Given the limited material and fiscal resources of Arusha Region and of the country, there is an obvious need to coordinate productive sector activities. The formation of TISU was a start, although not a very successful one. During the final months priority was placed on developing a sustainable regional level institutional commitment to land use planning. The recommendations for establishing a LUP committee were approved by the RPLO and functional managers. However, they must be ratified by the regional government. This committee, even if approved by the RMT, will probably never be effectively implemented without initial guidance based on APVDP experience. Hopefully, the TRD project can provide this support by housing their project in the Resource Center.
CONCLUSIONS

The Model

The basic strategy formulated to develop a viable extension service addressed several constraints:

- Administrative reticence and pessimism toward extension;
- Absence of any regional officials to initiate an innovative extension service; and
- Lack of a formal extension service structure.

After concluding that initiation of a formal extension service development project, with full cooperation and support of key regional officials, was impossible, a pilot project was created to be largely administered by APVDP. The basic strategy was to develop a workable extension model that regional and district officials could support, and to build a cadre of trained personnel to administer the system. The goal was to develop an operational structure with demonstrated results to convince officials that extension can work. Regional and district FMIs may not have been sufficiently involved from the onset, but this was due more to their own apathy than to any exclusion policy on the part of APVDP.

The initial testing period, from January to July 1982, proved successful. Armed with these results, the staff lobbied for greater emphasis on extension activities. Although this process was not completed, the major decision makers in the regional offices were convinced. District-level support must still be developed, especially in Arumeru District. During the budget cycle, each district will submit an extension budget as part of the development budget. This effort has the full support of the regional planning officer. Another result of this lobbying was to place for ratification before the RMT binding job descriptions for all levels of the extension service. With these job descriptions regional, district, and village-level extension staff can concentrate solely on extension activities.

The second part of the strategy was to build a cadre of trained personnel. There are now in place three district extension coordinators. Not all of them are highly qualified, but all are highly dedicated. At the ward and village level, all Bwana Shambas are enthusiastic about this program and will help to familiarize newly incorporated Bwana Shambas with the T&V system. At the regional level, the TISU officer involved in PAEP, was appointed regional extension director.
Extension Development

Several conclusions should be mentioned:

- Institutional changes must be made, and these changes must be based on proven, field-tested pilot projects;
- The cost of an extension system must be within the limited national, regional, and district funds available;
- Regular training must be institutionalized;
- Incentives are critically important to motivate all levels of the extension service; and
- Farmers must be brought into the decision-making process for the identification of relevant training content and the local evaluation of recommendations.

Institutional Changes

There can be no exact replication of any extension service model. Although the T&V system was used as the model, many modifications were made to conform to the political and administrative realities of Tanzania. This T&V system test period over the first six months was necessary, even with all its problems, to convince the regional and district government to adopt the system. Extension service development is a very slow process.

System Cost

At all times the cost of the program was a concern. As was learned from the Tanga RIDEP, sustainability, in large part, requires staying within the limits of the district budgets. That RIDEP had consciously exceeded the government's capacity to support the effort in an attempt to transfer directly the T&V system.

Hanang District is a good example of cost consciousness. During the 1982-1983 season, 11 Bwana Shambas and the DEC will spend approximately 50,000 Tsh to support fully the T&V system. This amount includes monthly seminars, petrol for nine motorcycles, informational and demonstration field days, and supplies and materials. Other districts used more money per Bwana Shamba, but their programs included tours, which are costly and can easily be excluded from future budgets. The most important training and visitation components are relatively inexpensive. Thus, 25 Bwana Shambas could easily be fully supported on 100,000 Tsh annually.
Training

Regular training is a necessary component of the T&V program. It serves two purposes:

- The actual training received is a review for many, whereas newly recruited Bwana Shambas receive no training at all; and
- It is an important monetary and morale incentive, providing nights-out allowance money as well as recognition.

The regular training sessions were eventually to be incorporated into the activities of the LUP committee. After the committee's action plan was developed, either at the region or district, the sectors were to use the training sessions to instruct the extension agents in the particular component activities to be started during that time period.

Incentives

Work and performance incentives are needed at all levels. However, the project could deal only with those at the village, Bwana Shamba, and DEC levels. In Hanang District, steps were taken to initiate an incentive program, essentially a competition. All participating Bwana Shambas were included in this competition. A set of incentives was instituted for:

- Following the visitation system schedule;
- Quality and yield of demonstration plots (as a percentage of local average yield);
- Report quality and timeliness reports must include the
  - Number of farmers attending the visitation,
  - Monthly rainfall report, and
  - Questions asked by farmers during the visitations; and
- Number of farmers attending the visitation of the contact farmer.

Each of these categories was assigned a value. At the end of the season the totals were tabulated, with the winner being the one with the highest score. This competition had two purposes: First, it was an incentive (a radio was given for first prize); second, it generated needed data.
Farmer Involvement

Farmers must be brought actively into extension program development, both to guide the development of the training format and to direct research activity. Of the two, the integration of their ideas into the training program seems most likely to occur even without APVDP help. The input into research activity will occur only on a haphazard basis until national policy guidelines are established.

Integration of Productive Sector Activity

Integration of the productive sectors' activity is vital. The recent approval of APVDP's recommendations for LUP is a positive first step; however, its future is anything but certain.

Use of Oxen

The use of oxen in Tanzanian agriculture is absolutely necessary. The steps the project took just began to satisfy the need. It is unfortunate they were not taken sooner and given priority. Besides the local production of ox-drawn equipment, an entire program should be started to address the serious need for better yoking and training of oxen for farm work.

Project Design

The APVDP Project Paper (July 1978) lays out a scenario for "Improving Agricultural Production." Major items to be addressed were:

- Destocking;
- Farm centers;
- Collection of farm operation base-line data;
- Development of an agricultural production plan for each village;
- Village storage and roads;
- Agricultural support system, including research linkages and extension services development; and
- Extension agents training, including communication skills and crop-specific training.

For the first four items, nothing was done. Of the remaining items only portions of each were addressed in a serious manner. The lone exception was village storage and road development, where some progress was made. If the Project Paper had been followed, much greater progress could have been made.
Furthermore, if the the Project Paper had been more closely followed, most of the on-going projects could have fallen under its umbrella. There is a specific reference to include livestock in the centers, and this could have easily been expanded to forestry. Even the small industries component, which centered largely on maize mills, would have been incorporated into an expanded farm centers approach. The entire focus of the project should have been the land-based production economy. The Project Paper clearly had this focus.

Support

DAI Washington

Up until mid-October 1982, the support of DAI/Washington was good, although the agricultural sector did not require a large support system. The repercussions of the early termination, due in part to fiscal problems, cannot be minimized. It of course will not negate what was accomplished, but PAEP required technical assistance to usher it through its second season. I believe PAEP will continue, but without great innovation.

AID

Support from AID/Tanzania was very good. Tim Miller and K. Livvers helped organize the planned (and aborted) extension study tour to Sri Lanka. They provided excellent follow-up via the AID offices in Sri Lanka and secured dates for the tour. As a result of the fiscal problems that surfaced in October 1982, however, the tour was cancelled.

Project Management

The project's management was responsive, but loose. The funding support received for projects proposed outside the annual plan was excellent. Also, the willingness of the management and other team members to redirect money toward agriculture and livestock development was appreciated.

Miscellaneous problems, such as the cut-off of electricity and water to our residences due to late payment (or non-payment) by the accounting office, were a bothersome and needless expenditure of team energies. Also, the difficult process for reimbursement of out-of-pocket money was another bothersome area requiring constant attention. Vehicle maintenance, which was generally good, proved to be a time-consuming endeavor.

The use of regular team meetings was a successful vehicle for airing of differences and overall coordination of activities. The importance of both formal and informal discussions at these meetings provided a sense of involvement apart from sectoral activities. This type of regular meeting should be a standard in all projects.
Tanzanian Government Officials and Colleagues

In terms of their technical competence, the quality of Tanzanian government officials was good. Persons who were good junior-level staff made good regional officers. Several officials with whom I worked who should be singled out for praise. P.N. Msabaha, Kassim, and Muturo, the DECs of PAEP, were highly motivated and dedicated government employees. Working with these individuals was the most rewarding experience of my tenure.

Planning

In agriculture and related areas, innate planning abilities seem to be the only reservoir tapped by the planning process. Concerning training in general, classic classroom situations removed or divorced from a specific project have marginal if any redeeming value. It is better to conduct on-site training, with a heavy emphasis upon augmenting existing projects. Yet most training was held for the sake of training. No action plans were developed, nor were projects implemented as a result of this training. The extension program can be singled out for criticism, since early sector training did not specifically design the training program to focus on an action plan. Later programs focused exclusively on supporting PAEP.

Village Development Activities

Village activities were the most important aspect of our project. Some good projects were stymied by the lack of government involvement or cooperation. Others were hampered by the ineffectiveness of various parastatal organizations. Still, most village projects, which were conceived with the support of villages and village leaders, were successful. Water systems, godowns, the barley project, PAEP, and oil presses and mills will all have a lasting impact on villages and village life. If they can be maintained by continued support, our project was at least partially successful.

Irrigation projects, although extremely popular, were a big disappointment. They suffered from poor research and lack of a feasibility study (for the Mararoni project), and poor governmental support in terms of technical input (in the Magugu project). It seems unlikely that either will be completed.

Consultants

Dr. Bishay's irrigation consultancy and Rorke Bryan's soil conservation seminar rate highly. The work of Dr. Bishay and the impact he had upon those with whom he worked is incalculable. Many individuals have commented that they learned more in Mr. Bryan's seminar than in any other. Also, the land conservation program started in Karatu, Mbulu, was largely a direct response to recommendations presented by Dr. Bryan.
Bruce Lundeen's consultancy helped direct the present and future training component of PAEP. As a result of his consultancy, ideas and recommendations were included in Garry Thomas' report to TRD, which should be of long-term benefit to the region.

Future Development Activities

Arusha Region is primarily an agricultural and livestock economy. Although there is an industrial economy, the livelihood of the vast majority is from land-based production. Any future project should focus exclusively on the agriculture and livestock sectors and their supporting structures.

Any new project should have an extension development component linked with the LUP component. The parallel development of these components is vital to protecting the land-based economy as well as fostering its proper development. A small industries specialist or appropriate technology specialist would complement the first components. In addition, a systems analyst would help streamline and consolidate existing administration operations.
RESOURCE MANAGEMENT

By David and Thad Peterson

Resource Management Advisers
November 1979-December 1982
Activities and accomplishments were:

- A survey of 153 (34 percent) villages in Arusha Region was conducted from December 1979 through April 1980. The primary objective of the village profile exercise was to incorporate perceptions and information from the village level into the regional planning exercise, by identifying specific projects and needs at the village level. The usefulness of the data was limited, however, due to its subjective nature. The Village Profile Exercise presented an overview of the village information-gathering exercise;

- An analysis of general land use and range pasture management information from the village profile exercise, which resulted in a discussion paper, Range Management in Arusha Region, that outlined trends, constraints, and recommendations. This paper became a "blueprint" for much of our later work;

- The planning and implementation of an approach for integrated land use planning and management at the village and ward level -- Olkokola Land Use Planning Project, Arumeru;

- Long-term strategy papers were developed jointly with officials in the Maasai districts;

- The Gallapo Land Use Planning Project, Hanang, was planned and implemented;

- An extension of the APVDP into the Maasai districts was designed;

- The Karatu Soil Conservation Program was planned, organized, and implemented;

- A district-wide village land use planning seminar campaign in Kiteto District was planned and implemented;

- Watershed conservation measures in the Kisongo Small Water Catchments Drought Project were implemented;
Pilot livestock extension projects (PLEPs) in the three pilot districts were planned and implemented; the establishment of pasture seed multiplication plots in Arumeru was planned and supervised. Similar efforts were undertaken in Mbulu and Hanang districts; and the staff attended numerous training programs on conservation, livestock production and management, intensification, and integration of crop and livestock production.

KEY AREAS OF IMPACT

A major area of impact was the promotion of an awareness among villagers, government officials, and politicians of the land resource situation. This involves an understanding of the role of population growth, interactions between different sectors, basic land use problems and trends, and the need to plan and develop land use in a way that integrates and considers all these factors. This awareness is reflected in the following ways:

- The promotion of integrated land use planning and of programs to slow population growth in the region were given high priority in the Arusha Region Integrated Development Plan;

- The design and implementation of projects by the districts required the cooperation and involvement of several different sectors. These projects include the Karatu Soil Conservation Program, the Kiteto District Village Land Use Seminars, the Kisongo Small Water Cachments Drought Project, and the Mukulat Soil Conservation Seminars; and

- The emphasis that politicians and government officials have given land use planning in speeches and discussions.

A second important area of impact was the strengthening of the Livestock Department by:

- Broadening its scope of work away from the traditional emphasis on disease treatment and veterinary services, to include all aspects of livestock production, with a particular focus on improved forage production and use; and

- Demonstrating, through PLEPs, how a livestock extension service could be better structured and organized to be effective in developing livestock production in the region.
Important components of PLEPs were:

• The development of detailed work programs for extension staff that involve regular visits to contact herders, and meeting with village livestock and land use committees;

• Monthly district workshops for participating extension staff to review activities and progress from the previous month and to plan work activities for the coming month; and

• Regular visits by regional and district livestock staff to the pilot wards and villages.

PLEPs provided the structure for involving livestock staff in areas of work other than routine meat inspection and disease treatment and control. The program strategy emphasized two interrelated areas, the improved management and production of communal grazing areas and the improved management and production by individual livestock owners and individual land holdings.

Ten livestock and land use committees were formed; they are responsible for planning and implementing improvements related to communal grazing areas and livestock services. The major actions of these committees included the designation of exclusive livestock-grazing areas in the village, delineation of wet and dry season pastures, selection of priority areas for pasture improvement (such as bush clearing and re-seeding), improvement and arbitration on use of water supplies, and village procurement of acaricide.

In conjunction with the formation of village livestock and land use committees, contact herders, with whom the extension officer would work on an individual basis, were chosen in each area. The intention was to use the contact herders to demonstrate on-farm management practices and inputs that could be used to increase production. More than 80 contact herders were involved in the program. Activities focused on the establishment and improvement of private pastures and fodder plots. Most of these 80 farmers, as well as many others who were contacted through the program, intend to plant from one-half to four acres with improved pasture grass and legume species in 1983. Given the problems associated with the management of communal areas, the establishment of private pastures can be viewed as a necessary step toward the intensification of farm systems and the integration of crop and livestock at a manageable level.

Additional inputs and emphasis of the program include:

• Preservation and use of crop residues, as well as the elimination of soil disturbance and compaction in fields by livestock;
- Construction of contour bunds in fields and the planting of these bunds with fodder species;
- Eradication of undesirable shrub species in pasture areas;
- Improvement of animal husbandry practices, for example, kid and calf care, shelter and corral practices, and breeding;
- Use of livestock manure as a fertilizer in fields;
- Culling of unproductive animals;
- Assistance in purchasing higher yielding dairy cows; and
- Disease prevention and control, with primary emphasis on the link between nutrition and disease prevention.

Over 20 extension pamphlets were prepared in Swahili on these subjects, as an aid to extension staff and farmers.

A third area of impact was to demonstrate the importance of starting with a small area of concentration and expanding only after achieving success. Such a strategy is particularly relevant to the problems of soil erosion and overgrazing. Several projects initiated in key areas, such as a dam watershed, were successfully rehabilitated or managed and improved.

AREAS OF POOR RETURN AND CONSTRAINT

Despite an increased awareness in the region of the need for land use planning and integrated project development, this awareness has yet to be practically and structurally integrated into the government planning process. One reason for this is that government funds are allocated through the annual budget cycle on a sectoral basis; therefore, each sector has traditionally planned and submitted projects independent of other sectors. Thus the budgeting and implementation of a project that cuts across sectors is considerably more complex and difficult. It requires cooperation and communication between sectors. In some cases, there is no incentive among the concerned officials in the various sectors to take on the added responsibilities and deal with the complexities of such integrated projects. In addition, changing or adding to established procedures is difficult, particularly when the initiative comes from the region rather than from a higher level of authority.

Much time and effort were also spent dealing with the problem of overgrazing on common land, with few tangible results. This issue has a long history of failure, particularly when approached through large-scale destocking programs. As a result, a strategy
was developed as a part of PLEPs in which a village would slowly begin to control and manage grazing on its communal land. This strategy involves selecting one area, usually small, and after properly controlling and improving grazing on this area, adding others until the whole area has been covered. Although such a strategy appears feasible, and some progress was made through PLEPs, it continues to be a very difficult issue to resolve because of the contradiction posed by having communally managed land, but privately owned livestock. Any attempt by a village to control grazing of private animals on communal land requires a great deal of cooperation, cohesion, and leadership within the village.

CONCLUSIONS AND LESSONS LEARNED

PLEPs and PAEP appear to have provided a solid base for effecting changes in farming practices that result in greater sustainability and higher production from land resources. It is too bad that no one on the team realized the importance of having a functioning extension program earlier and that the pilot programs were not initiated early in APVDP's tenure.

The planning approach used in the Olkokola and Gallapo Land Use Planning projects was sound, as evidenced by villager response. Land-related problems and causes, such as population, were raised in a manner that was relevant to village situations. Villagers, together with multidisciplinary technical teams from the district, worked out solutions in an integrated way. However, the structure for day to day follow-up, such as a functioning extension program, could have been provided. The lack of incentives for district staff, together with the distance between villages and district headquarters, resulted in a program too dependent on the two land use planning consultants. As a result, district support, as well as that of fellow team members, had diminished. Some of the team members thought the project approach was nebulous and intangible. Thus the projects were discontinued.

The emphasis then moved toward revitalizing extension programs. Unfortunately, these are sectoral, and the holistic, integrated approach of the LUP projects was largely lost. In retrospect, the ideal would have been to dovetail the two programs, that is, use the land use planning approach, with structured and functioning extension programs providing the necessary day to day follow-up.

While the impact of the extension programs is mostly on individual holdings, PLEPs addressed communal issues and land use as well. Furthermore, although formal integration of the extension programs had not taken place, the programs provide the means for institutionalizing the integration of productive sector activities. The easiest means to achieve integration is for an
interprogram exchange of information and inputs backed up, when necessary, by technical assistance. Such an approach has the advantage of circumventing critical manpower and resource shortages faced by the region in sustaining and expanding PLEP and PAEP.

There is also the question of sustainability. APVDP projects worked because government staff were mobilized through the provision of necessary support and incentives. It is questionable whether the government alone would be able to provide these incentives.

Thus the macro land use planning activity was probably a waste of time and resources. The use of satellite imagery and the delineation of agro-ecological zones were largely superfluous. District officials already possessed sufficient knowledge to enable them to select areas that represented their district's diversity. The village is where any effort to influence land use sustainability and production must begin, and that is why the land use planning approach, supported by viable extension programs, is a right strategy.

Village communal endeavors are extremely difficult to implement. Our approach, adopted together with and strongly endorsed by Tanzanian colleagues, was to provide guidelines and support for village incentives. Village responsibility, however, must be clearly defined from the start. It must also be made clear that support can and will be withdrawn at any stage should the village fail, without adequate reason, to fulfill its responsibilities.

PROJECT DESIGN

The design of APVDP was appropriate for the region. APVDP's open-ended process approach allowed flexibility in determining priorities and working strategies. Too much time and too many resources, however, were spent on collecting and analyzing data at a macro level in order to formulate a comprehensive plan. The planning component should have been reduced, and the extension programs, as a basis for generating information and defining priorities, should have been expanded.

The reports and studies with recommendations to the government were generated at a faster rate than could be followed up upon by the Regional Development Committee and other concerned bodies. Furthermore, the question of regional impotence in the face of national decision-making arenas seemed not to have been fully grasped within the planning component.
The regional planning exercise did, however, facilitate a realistic appraisal of what kinds of projects were appropriate and sustainable and, therefore, provided a balance to pressure for high cost, capital-intensive, projects.

SUPPORT

Support from project management, DAI, and AID was good. Of course, the recent financial miscalculation was a sour and disappointing way to end the project.

Government of Tanzania support, in terms of planning and idea generation, was excellent. However, bureaucratic delays, personnel transfers, and lack of incentives impeded Tanzanian officials from taking the initiative.

PLANNING

The project, through its numerous training programs as well as actual project development, definitely promoted a greater appreciation and skill in planning at all levels, from village to the region. However, planning criteria in the government system were not altered significantly, and it is apparent that the level of planning will continue to be determined by the level required to procure funds. In addition, particularly when a donor is involved, realistic planning tends to be obstructed by the hope of unlimited resources.

VILLAGE DEVELOPMENT ACTIVITIES

The emphasis of APVDP on village-level activities resulted in it having a broad impact on the people and the area covered. The involvement of villages in planning and implementing projects played an important role in strengthening the village structure as a planning unit and in encouraging village-level initiatives.

CONSULTANTS

The most important consultancies were the operational agricultural extensionists, and those consultancies that resulted in population studies and the soil conservation workshop and training activities. Other than the irrigation consultancy, most other short-term productive sector consultancies seem to have had little lasting operational impact.
FUTURE ACTIVITIES

A new project would not have to grapple with the question of the relative weight of planning versus village development activities, but could continue to build on the foundation laid by APVDP. Thus, a new project should be able to show greater tangible impact than did APVDP. Given the APVDP experience, we recommend a rural integrated development approach similar to that outlined in the joint IFAD-AID proposal.

For specific key activities we recommend:

- Emphasis on the productive sectors, since the economic base of the region is its land resources. This emphasis should be on strengthening and expanding extension programs, combined with a village land use planning approach;

- Programs to strengthen and support family planning education and services; and

- Promotion of small industries.
THE SMALL-SCALE INDUSTRIES SECTOR

By Hugh Allen

Small-Scale Industries Adviser
September 1979–December 1982
THE SMALL-SCALE INDUSTRIES SECTOR
By Hugh Allen

ACTIVITIES AND ACCOMPLISHMENTS

APVDP accomplishments in this sector included the following:

Arusha Town
- Themis Farm Implement & Engineering Company Ltd.

Arumeru District
- 5 maize mills
- 1 brick and tile project
- 1 ox-cart construction project
- 1 bakery

Mbulu District
- 1 maize mill
- 1 tile project
- 1 ox-cart construction project
- 1 oil extraction project

Hanang District
- 11 maize mills (including joint SIDO-APVDP
- 1 ox-cart project
- 1 rice-hulling project
- 1 woodcutting project
- 1 woodworking project
- 1 mat marketing project
- 1 oil-milling project

The following steps were taken to establish systems for better administration and initiation of small industry projects in the rural areas:

- Development of district support responsibility for small industries in the Department of Community Development;
- Development of coordinating responsibility for this work on SIDO, to their technical officer; and
- Initiation of loan guarantee agreements and experimental lending programs with the Tanzania Rural Development Bank (TRDB) and the National Bank of Commerce (NBC).
KEY AREAS OF IMPACT

The role of the small industries sector was designed to respond to needs expressed by villages for practical and manageable industrial initiatives. In the first half of the project, this strategy was pursued, and a series of projects were started on a small scale in the villages. Out of this effort, the project learned not only what was technologically practical, but also what basic criteria should be applied. In addition, the project learned which managerial and technical supports were necessary to ensure success. At the same time, it became possible for regional planners in this sector to initiate larger projects that were outside the scope or experience of villages.

Food processing was emphasized. A large number of maize-milling machines, a rice huller, and oil-milling projects were begun. In the latter half of the project, production of farm implements at both the regional and the district levels, with the establishment of district ox-cart factories, and a regional plow and ox-cart component factory, was emphasized. These units were integrated, in terms of supply linkages, with the regional factory supplying the district units, and the district units acting as supplementary marketing centers for other products, such as plow-shares and planters.

The program was based on loans, with villages repaying them at low interest over varying periods of time, depending on the type of project. All projects were therefore subject to simple but reasonably accurate financial feasibility studies, to ensure adequate rates of return. The loans helped orient villages toward practical and productive projects, and the consistent follow-up on loan supervision helped maintain this momentum. Perhaps one of the most disappointing aspects of the termination of the project was that as the first round of loans neared completion, it was not possible to move on to the next and most exciting step, which was the design of projects for commercial and development bank finance, using repaid funds as loan guarantees. However, a large number of villages became used to the reliable management of credit, and have concrete benefits to show for it.

AREAS OF POOR RETURN AND CONSTRAINT

Areas of poor return and constraints to the project's success include:

- Inadequate integration with SIDO, and inadequate levels of mutual consultation;
- Inadequate integration with commercial and development bank financing systems; and
• Slow start to agricultural implement and processing production systems.

SIDO Integration

It took over a year before project activity that involved SIDO was attempted. This was because the possibility of working effectively through the local office was thought to be limited. After a year, and a tentative decision to work through the Department of Cooperatives, the SIDO office underwent a radical transformation, with two key staff members being removed, and replaced with highly qualified personnel.

The experience of working through SIDO was uneven. The small-scale industries adviser managed implementation of district projects at the expense of assisting the regional office in building its rural development and support capacity. In addition, the local office lacked the ability to move in the districts with the same freedom that was possible under APVDP.

There is no question that there is now more effective participation of SIDO in regional decision making, although this is largely due to the energy and commitment of the regional small industries promotion officer. There was still a tendency, however, for SIDO to look upon APVDP projects as RIDEP projects, for which there is only consultative responsibility. APVDP took a limited interest in other SIDO projects, although some joint efforts were made. These were confined to maize-milling projects, and joint study of the SIDO Lime Fozzolana program.

There should be more emphasis in SIDO on support of genuinely rural projects, that is, those that are planned in the villages, rather than on large- or medium-scale projects that are planned in Arusha. The potential of rural areas for projects that support agricultural processing, or supply commodities that help in food and cash crop production, needs to be emphasized. It is unfortunate that we did not effectively advocate the notion of industrial initiatives based on these criteria, or at least did not do so outside APVDP and the government.

Integration with Financial Institutions

Excellent progress was made in convincing NBC to support to a scheme of loan guarantees. Unfortunately, the bank was extremely slow to legalize the scheme, and the obligated funds reverted to other budgets. Schemes of the sort proposed to NBC are long term in nature, and implied an expectation that the project would continue for four or five more years. This amount of time would have been necessary to turn over the initial portfolio of loans, and to create precedents by which the bank could continue to accept loan guarantees by other agencies, potentially even the government. This time was not available, however, and the program never got under way.
There was excellent cooperation with the TRDB, leading to the financing of 400,000 Tsh of the working capital of the farm implements project, the full capital finance of the Makumira Bakery, and the joint effort to locate and support a local Arusha manufacturer able to meet TRDB requirements for maize-milling machines. Unfortunately, the termination of the project did not permit time to capitalize on these gains with more formally structured operations, leading to systematic response to project initiatives. TRDB's support for jointly initiated projects thus was not formally integrated into the bank's routine decision-making process. Given time this would certainly have happened, since all loans offered as a result of our suggestions were well managed and were repaid either on schedule or in advance.

Delays in Agricultural Processing and Implements Production

Delays in start-up of ox-cart and plow production were the result of slow procurement of equipment by AID, leading to the rescheduling of plans by over one year. At the same time, the supply of oil seed processing equipment was delayed by a year owing to long delays in the granting of necessary waivers. These, however, should have been anticipated.

The region itself was slow in supporting the process of selection of entrepreneurs capable of operating the Themi Farm Implement & Engineering Company. Without the extremely good support from SIDO for this project, delays would have been much greater.

CONCLUSIONS: LESSONS LEARNED

Rural industrial activity has only a marginal chance of success unless it based on the following criteria:

- The project must be designed to supply either a service or a product aimed at rural consumption. Projects that aim to use rural materials and produce a product that is consumed elsewhere will have very little chance of success. Management of rural projects depends on community pressure applied to leaders and responsible managers to make the project work. It is not enough to say that the project brings more money to the area; it must make a difference in people's lives and their ability to be both consumers and producers.

- The project must be based on local raw materials. Trucking in raw materials for a rural project that produces for an outside market is impossible due to the supply situation and the perilous condition of the road. APVDP supported ox-cart production, since the product was
in demand and assisted farm productivity. At the same
time, these projects are vulnerable, depending as they do
on supplies being made available at a reasonable price
from Arusha. These supplies are themselves vulnerable,
since materials are hard to obtain.

- Projects that work well in Tanzanian villages are those
  that meet the above criteria and, in addition, do not
depend on management of large numbers of people, nor the
proper management of large amounts of working capital. A
maize mill works because the first customer supplies work-
ing capital. Those projects that have to utilize a large
cash flow for materials, labor, and receivables are likely
to have problems.

- The approach adopted by APVDP was good. We were able to
  learn from inexpensive mistakes, while having an impact at
the village level. The mistake was to abandon the initial
thrust in favor of conformity to the government planning
cycle. In the industries sector, this is not a practical
approach, since costs change with greater rapidity than in
other sectors, and planning must be specific, detailed,
and short term. Since the government will never become
more than a marginal contributor of capital in this
sector, conformity to its planning cycle is pointless.

- Consultant help was uneven. In future projects of this
sort, where the emphasis at first is on understanding the
environment, more time should be given to each sector
specialist to develop priorities. Consultants can swamp
the administrative capability of the region and the pro-
ject, and tend to alienate regional and district official-
s. The best consultants supplied to the APVDP were
technicians. Yet in the industries sector their job was
to recommend a small industries strategy. This, however,
was the proper job of the long-term staff.

- There was a tendency to subordinate project implementa-
tion to planning. In addition, project implementation was
often a matter of crisis reaction, and the burden of
organization fell on sector specialists. This resulted
from a preoccupation at the regional level with preparing
the plan. If we had stuck more determinedly to the notion
of a flexible planning process in which there was a
symbiosis between project development and regional
planning, there would perhaps have been less separation
between district and regional perceptions of the project.
PROJECT DESIGN

APVDP was appropriate for the region in terms of its components and priorities, although a more faithful adherence to the principles of the Project Paper would have helped. The best commitment to a serious planning approach came, in the case of the small-scale industries sector, in cases where there was a reason for planning. This implies that the existence of resources for development activities provided the motivation to plan. This motivation is of course noticeable at the district level, and even more so at the village level. Since the government can do little more than cover the recurrent budget, this was a good development. Villages were made aware that they were, in essence, on their own. But the start given by APVDP projects provides the basis for capital accumulation under village control. Thus the best development within this sector was the beginning of an understanding in some villages that development can take place without necessarily depending on government.

Although implicit in the project design, training and planning were over-emphasized. Since the project was expected to be extended, there were a number of objectives, explicitly stated in the project design, that were not met.

SUPPORT

DAI/Washington

DAI/Washington's support was good, particularly in procurement and supply. DAI was able to get equipment to the project quickly, and in good condition. There were some problems, however, with the quality of the equipment. In the future, field staff should be required to make exact specifications to avoid duplication and short supply. In addition, there were problems in the administration of personnel matters, including proper payment of salaries.

AID

AID support in the small-scale industries sector largely involved procurement and the admission of waivers for equipment. AID was generally sympathetic and efficient in granting necessary waivers, but the management of procurement was disastrous. Equipment was ordered from EPD in September 1980. Assurances were given verbally of delivery to Tanzania within six months to eight months. Predicated on these assurances, plans were made for the whole agricultural implement production strategy. At the end of the project, the equipment had still not all arrived. Procurement problems included the following:
Although reconditioning was requested and paid for, in two out of three machines that arrived this was not done;

One machine originally requested as a radial arm drill, and in all EPD correspondence referred to as a "drilling machine" arrived as a six position turret drill -- at a cost of $10,000;

A milling machine was dropped at Bayonne, New Jersey, and ruined, and the replacement machine arrived Arusha in December 1982; and

$10,000 worth of tools for the milling machine were missing.

As a result, the manufacture of implements was over a year behind schedule. The equipment procured through these channels, however, was all adequate.

**Project Management**

Project management support was mixed. In terms of support for experiments, ideas, and freedom to innovate, it was excellent. Concerning project implementation support, it was weak, leaving this area to the sector specialists. A more organized and determined approach at the beginning may have led to less duplication of effort. Yet all projects planned were implemented, and worked, with the exception of one tile project that was canceled because of lack of time. The lack of reliable information on budgets, despite repeated requests by all team members, was a major weakness of management.

**PLANNING**

The project had a mixed impact on the regional planning capability. I do not believe that there were either substantial or lasting gains made at the regional level. Although the region adopted a set of priorities and an overall planning strategy, the focus of actual project planning was elsewhere.

There was, however, a major impact in the villages. The extent to which a village is able to absorb the lessons of planning depends upon the quality of the leadership. Nevertheless, planning in the villages concentrated on making things happen. As a result, it received the enthusiastic participation of villagers and leadership alike. Studies conducted during project implementation made it clear that enthusiasm for APVDP and belief in its methods increased the closer to the village the questions were asked. This is a proper and healthy outcome.
VILLAGE DEVELOPMENT ACTIVITIES

The impact of village development activities was substantial. Direct benefits were of enormous value to individual villagers, and this tended to guarantee a continued commitment to the projects. The strategy of a simple needs assessment was useful in identification of projects that were of value to the villagers and engaged their interest in continued support. The tragedy of the project's abrupt termination was that the next phase, in which projects would have been renewed through re-utilization of repaid loans, will not now take place. This would, in institutional terms, have been the biggest benefit, since it would have steered villagers away from depending on government. Nevertheless, the extent of physical and local leadership benefits should not be minimized and, in the case of the maize mill programs, a major remaining benefit is the increased income-generation capability of villages.

CONSULTANTS

The most effective consultant working under my supervision was Benna Ndulu, who determined a strategy and methodology for establishing priorities for road repair efforts. These formed the basis for work done by the roads crew, and met with a high level of district and regional concurrence. Although other consultants performed their tasks well, the results were not often drawn upon for use in the project.

FUTURE ACTIVITIES

A new project involving the small industries sector should concentrate on the following:

- Consolidation of routine liaison and reporting between the district personnel of Community Development and SIDO Arusha. This implies continued means of mobility, that is, motorcycles in the districts, and Landrover and mobile workshop facilities at the regional level;

- A major commitment of resources to loan systems tailored to leverage local funds through banks. This should build immediately on loans revolved through APVDP, while other separate funds should attempt to extend the first new series of high risk, close supervision loans offered through the project. Community Development would carry out this program with SIDO assistance;
• Consolidation of the agricultural implement manufacturing program, with substantial recapitalization after two years of products in high demand, with other capital available for product diversification. This should involve the exploration of light-weight tractor cultivation, and extension of experiments aimed at supplying a range of equipment for ox-drawn toolbar use;

• Identification of three or four main areas of investigation for opportunities in medium- to large-scale activity, related to products or processes that serve agricultural production or depend on regional resources (raw materials). Funds should be set aside for pre-feasibility work through professional agencies; and

• Continued and intensive operations with villages having returned first rounds of loans to develop new projects. This implies a continued need to reach routinely into the districts.

Industries tend to be compact operations. They have a focused visibility and a specific task that is easily understood in the village context. If the cost is affordable and the project self-sustaining, there are really very few other questions that need to be asked concerning the appropriateness of such an operation. The small industries sector thus operated in isolation.

The questions that were asked concerned technical and financial viability, and not intentions. No other approach could have led to such a high rate of success in terms of viable projects. Integration between sectors is not the proper pre-occupation of sector specialists. There must be a structure that mandates awareness of what others are doing, and a structure that subordinates technical decision makers to a process of response that begins with planners and development thinkers. APVDP had an impact because the technicians were willing and able to get into villages, and to learn what constitutes operational and planning efficiency, as well as appropriate technical methodology.

The most damaging development was the shift from capacity building toward a frantic effort to complete planned projects. The realization that, after APVDP, minimal resources would be available took the edge from efforts aimed at capacity building, and focused them on a determination to ensure that projects survive and prosper. This is natural and realistic in light of the project's termination, but it raises questions about what a project such as APVDP was doing in a country whose economy was declining as fast as that of Tanzania.
SUSTAINABILITY

On a technical level, projects will sustain themselves, since care was taken to invest where there was a reasonable chance of adequate return. Approximately two-thirds of the village projects will succeed, that is, the loan will be repaid and operations will continue for at least five years. In terms of institutional capacity there is less certainty, since institutional efforts must be made with some hope of effectiveness. There is little immediate prospect that SIDO will have the physical and manpower resources to sustain the service and information side of the activities initiated by APVDP. Without these, half the program is gone, and resultant prospects for sustaining the work of generating new projects are poor. APVDP tended to ignore the importance of creating effective links between villages, TRDB, and SIDO, at the very least in terms of basic knowledge of methods and probabilities. This was done because of the knowledge that without the means and motivation to reach the village, SIDO officials were not in a good position to make use of this potential.
WATER SYSTEMS SECTOR

By Joseph Gadek

Water Systems Adviser
October 1979-October 1982
WATER SYSTEMS SECTOR
By Joseph Gadek

MAJOR ACTIVITIES AND ACCOMPLISHMENTS

Working under the direction of the regional water engineer, with Tanzanian engineers and staff at the Arusha Region Water Department (MAJI), provided me the opportunity to engage in the following APVDP-funded activities:

- Coordinating and sponsoring a program to train seven Arusha Region MAJI employees through the Morogoro Wells Construction Project (Dutch funded) to survey for and construct shallow wells;

- Establishing a regional shallow wells survey and construction team. These teams surveyed and constructed 29 successful tubewells in Hanang and Mbulu districts, with plans and funds to construct 16 additional wells by September 1983. Annex A lists the villages and number of wells constructed in each village under this effort;

- Establishing district-based ringwell construction units in Hanang and Mbulu districts. These teams will install large diameter culvert ringwells in villages where groundwater has been identified at a shallow depth but, due to an inadequate aquifer recharge rate, a hand-drilled tubewell would not be suitable;

- Assisting the Regional Water Department to focus on operation and maintenance efforts as opposed to the construction of new water systems;

- Developing and initiating a comprehensive program to inventory each existing water supply scheme in Arusha Region. It was recognized from the beginning of APVDP that if a concerted effort was to be made in the area of operation and maintenance for rural water supply, baseline data of existing physical conditions needed to be established. These inventory data now exist in the region and should be used to develop the medium- and long-term strategies for the region's water supply development. This has been formally approved by the Regional Development Directorate and submitted to the prime minister's office;

- Creating a program for the rehabilitation of eight existing water systems within the region. These eight systems are: Katesh and Gallapo in Hanang District; Olkokola, Sakila, and Karangai in Arumeru District; and Kilimanjaro, Mbulumbulu, and Yaida Chini in Mbulu District;
• Establishing a village water supply technician training course in Arumeru, Hanang, and Mbulu districts. These three-week training courses were designed to address the problems of maintaining rural water supplies. The training was aimed at basic pipefitting skills and preventive maintenance. People were selected by the participating villages to attend the training. Following the successful completion of the course, the villages were given a basic set of tools needed by the participant to carry out his newly acquired skills. Annex B lists the villages and number of participants that were trained. In Arumeru 28 participants were trained; in Hanang, 11 participants; and in Mbulu, 36 participants. Three additional training sessions are scheduled with an additional 60 potential participants attending;

• Planning and giving financial support for the drilling of two deep borehole water supplies. The Olkokola borehole was unproductive, whereas the Kikatiti borehole was found to be productive and will supplement the existing water supplies in Kikatiti and Samaria villages;

• Giving technical assistance in producing a prefeasibility study for one hydroelectric power supply project ("Hainu River Study-Prefeasibility Report") and a feasibility study preliminary design for one large-scale gravity water system to serve 16 villages (Dongobesh Gravity Water System-Preliminary Report");

• Proposing and obtaining an additional $800,000 for three supplementary water projects proposed as regional priorities. These were:
  - Maasai Districts Village Water and Transport Project,
  - Mbungwe Division Gravity Water Supply, and
  - Kisongo Water Catchments Project;

• Assisting MAJI by supplying five Landrovers for use by the district and regional level offices. Also six Isuzu 7-ton lorries were delivered to MAJI to facilitate construction activities; and

• Setting up a water quality testing laboratory for the measurement of fluoride content and electro-conductivity (salt content indicator). Floride content in the region is of particular concern, with concentrations from some sources going as high as 30 ppm. Deformed bone structure can be observed in some areas and is linked to high fluoride content.
KEY AREAS OF IMPACT

There are two key areas of impact as a result of APVDP input into the water supply sector in Arusha Region. These were the introduction of the lower cost per capita shallow wells alternative to supplying potable water to villages as compared with borehole, surface-pumped, and gravity pipeline water scheme alternatives. The other major area of impact was the change in direction within the region toward an emphasis on the proper operation and maintenance of existing water supplies.

The shallow wells survey and construction teams trained in Morogoro have given the region a relatively low-cost, technologically proven, means of serving rural areas with a potable water supply. Capital costs are about 100 Tsh per capita for shallow tubewells, as compared well 800-100 Tsh per capita for gravity pipeline water supplies. The operation and maintenance costs per capita per year should be about 20 Tsh; operation and maintenance costs for gravity pipeline systems with no treatment provided would be 50-60 Tsh per capita per year.

In addition, the skills and technology brought into the region for the surveying for appropriate well sites had significant impact. The ability to hand auger within a village area to locate viable well sites is a major step toward site identification. Prior to this approach, there was no systematic method of identifying potential well sites. In many cases culvert ringwells were sunk, and either no water was found or water with a high salt content was struck. The hand-turned survey equipment purchased through the Morogoro Wells Construction Project permitted the successful construction of 20 out of 33 wells.

Even if funding for the shallow wells unit were to decrease, the survey team could be kept intact and still work with district-based ringwell construction teams. The ringwells pose more of a problem in terms of potential contamination of the well, but are the next best alternative to the tubewells.

The shallow wells option should not be regarded as a low-cost solution that can be adapted throughout the region. There are only limited areas where shallow depth groundwater can be developed. The deepest well installed with the hand-turned equipment was 16 meters.

Hanang and Mbulu districts show the most potential for this option. However, a maximum of 30 percent of the population could depend upon wells for their potable water requirements. Isolated pockets that have the potential for shallow wells can be identified in the other four districts as well, but the maximum potential service would be low. Any village that relies on a traditional well has good potential for the development of a cleaner water supply through tubewells.
The second major area of impact was the gradual shift in emphasis toward maintaining those systems that are in place. Regional policy concerning the amount of monies budgeted toward maintenance as compared with that budgeted for new construction of water projects is encouraging. The recognition of the problems caused in the past by the lack of adequate funding directed toward maintenance of existing water projects was realized. The change in policy was recent; the results, therefore, will not be seen for at least one to two years.

This change in regional attitude is in part attributed to the inventory work carried out throughout APVDP/regional MAJI staff efforts. The inspection of each system throughout the region and uniform reporting gave the regional water engineer the information necessary to present his case for a larger maintenance budget, even if it reduces the rate of new development projects. The results of the inventory are staggering. To get the existing water system back into proper basic condition, the region will have to spend 30 million Tsh. Because of manpower constraints, however, this will have to be done over about a five-year period.

The APVDP-supported village water supply technician training programs addressed the problem of maintenance and its associated rising costs. Village-level technicians are expected to act in a preventative maintenance role. They should and will still expect support from the District Water Department and Regional Water Department for major maintenance problems. However, to open a washout point, or clean an intake or storage tank, they do not need help from the district office. Problem identification and reporting to the district water engineer will also reduce maintenance costs.

AREAS OF POOR RETURN AND CONSTRAINT

There was only one major area of poor return that was undertaken with APVDP funding in the water supply sector. Many who attended village- and ward-level meetings during the early stages of the project indicated that many of the existing water supply systems were in poor condition. They proposed to begin rehabilitating a few of these older water supplies in coordination with the district water engineers.

The intention of the region was to provide APVDP funding and act in only an advisory role, while allowing the district water engineer to move ahead with the logistics and actual implementation responsibilities. In Mbulu District, with one small-scale rehabilitation project, this concept worked well. In Arumeru and Hanang districts, the proposed rehabilitation projects progressed very slowly because the relationship between the district water engineer's office and the APVDP water supply adviser was never formally agreed upon.
The failure in this area was in part the fault of the APVDP adviser, in not supervising the district water engineer more closely. It is unfortunate that the respective district water engineers were by-passed. The fact is that it is easier to monitor implementation of projects that are under regional-level construction units than those under district-level personnel. However, it would have been better to work through the district offices where possible to obtain closer village linkages.

CONCLUSIONS AND LESSONS LEARNED

In almost all cases the amount of community participation in both the planning and the implementation of a village potable water supply was too low. This had significant ramifications in terms of the identification of the water supply as a village resource and, consequently, the failure of the village residents to feel a responsibility toward the continued proper operation of that water system.

The problem of poor maintenance of rural water supplies has been documented. It would cost 30 million Tsh for the first phase of the rehabilitation of Arusha's water supplies. Spending the money would be worthwhile only if the basic concept of villagers' participation in providing a water supply to a village were modified. If villagers are not asked to be involved in the planning phase or are not required to be involved in the construction phase, then it is much more difficult to expect them to be involved in the endless task of maintenance. The maintenance of water supplies cannot be done on a district or regional level without the partnership with the actual village being served.

The entire responsibility for water supply maintenance should not be put on the village, however. Some maintenance tasks require a skilled and experienced person to handle. Others, however, can be carried out by a layman with little prior instruction.

Idara ya Maji should consider working with another government department, the Department of Community Development, to attempt to establish better linkages with the villages and wards. MAJI could also set up its own internal section to tackle the problem. Inter-departmental liaisons would also be beneficial in regard to health and livestock issues. However, the community participation aspect is the most important; from it, identification of health- and livestock-related problems could be addressed as well.

Consequently, more training at all levels would be required in maintenance skills. The proportion of annual budget allocated to the development of new projects as opposed to the maintenance of existing ones would have to be continually re-evaluated.
PROJECT DESIGN

APVDP was designed as a multi-faceted program addressing the productive sectors of agriculture, livestock, and small industries, as well as the service-oriented sectors of water supply and roads. The concept of the project was excellent, but probably too ambitious. In all areas of endeavor, the planning component will most likely in the long run turn out to be appreciated the most.

Many goals outlined in the original Project Paper were not fully achieved. However, a great number of lessons learned in regard to planning will remain and genuinely benefit the region. The project helped to identify priorities for the future and to plan for those goals in a systematic manner.

SUPPORT

Tanzania Government Officials and Colleagues

The senior level government staff in the Arusha Region Water Department were a pleasure to work with. They are qualified and well motivated. The task they have been mandated to carry out is awesome, and they deserve the best in their pursuit of providing water to the region's population.

AID

My personal dealings with AID personnel were limited by the nature of the organizational structure. I am dismayed and angry over the inadequate performance of AID in the area of project financial monitoring. Individual employees, however, were helpful. The mission itself took little interest in the project.

DAI/Washington

DAI's support was good. The personnel in Washington were usually eager to help when assistance was required.

Project Management

Project management in Arusha was helpful. Keeping as many projects going as APVDP attempted to do was a major task for management, and the effort was appreciated. The organization of management, however, was a bit weak.

APVDP Colleagues

Working on this project was very demanding and usually rewarding. Personality conflicts did exist between staff members, but they were handled professionally. I enjoyed the working
atmosphere generated by the Arusha team members and respect all for their sincere efforts.

PLANNING

The planning capability within Arusha Region certainly benefited from APVDP. The approach to planning for water supplies throughout Arusha Region benefited from the entire planning emphasis.

In most cases basic planning skill and concepts were in place, but an orderly region-wide approach was not coordinated. APVDP pushed very hard to get this coordination, and achieved the goal. Many officials in the region are justifiably disappointed that there were not more funds available for the implementation of more projects or for a follow-on project. The true benefit and sustainability of the project should become clearer when the real benefits of APVDP's concentration on planning become more apparent.

VILLAGE DEVELOPMENT ACTIVITIES

With Idara ya Maji, more of village-ward-district contact took place through APVDP than would have occurred through the usual planning and implementation channels. Much more low-level contact should have occurred through APVDP than actually did, but at least a model was developed. MAJI needs to have much more contact, especially at the village level, in order to provide people with good, safe water supplies that will continue to operate through the years. APVDP attempted, in its water supply sector, to stimulate more of this contact, but there is still room for improvement. Establishing a linkage between MAJI and possibly the Department of Community Development is a means of overcoming this apparent weakness.

CONSULTANTS

The use of short-term consultants did not result in substantial benefits, given the amount of financial resources that were expended. The most beneficial consultancy reports were those involved in the following areas:

- Irrigation;
- Manpower;
- Roads;
• Revenue generation; and
• Population.

Follow-up of these reports and their recommendations was weak. The reports showed insight and suggested meaningful changes; the problem was how to bring about those changes.

FUTURE ACTIVITIES

In relation to the water supply sector, I recommend the following emphasis in activities:

• Initiation of a community participation unit within the regional and district MAJI offices to provide a better linkage to the village level where the maintenance of water supplies begins; and

• Continuation and strengthening of the shallow wells program in the region. This would require a small amount of financial support, if begun soon. The stocking up of spare cylinders for district-level maintenance would be a priority that was neglected by APVDP as a result lack of funds.
# ANNEX A

## Shallow Depth Tubewells Construction

### APVDP-MAJI

<table>
<thead>
<tr>
<th>District</th>
<th>Village</th>
<th>No. of Functioning Wells</th>
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</thead>
<tbody>
<tr>
<td>Hanang</td>
<td>Majengo</td>
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</tr>
<tr>
<td></td>
<td>Ayamango</td>
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<tr>
<td></td>
<td>Gedamar</td>
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<tr>
<td></td>
<td>Tsamasi</td>
<td>3</td>
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<td></td>
<td>Boay</td>
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<tr>
<td></td>
<td>Vilima Vitatu</td>
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</tr>
<tr>
<td>Mbulu</td>
<td>Matala</td>
<td>2</td>
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<tr>
<td></td>
<td>Endaharagadakt</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Labay</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Maretadu</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Masieda</td>
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</tr>
<tr>
<td></td>
<td>Gunyoda</td>
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</tr>
<tr>
<td></td>
<td>Bargish Auga</td>
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<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>Burger</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Endamararick</td>
<td>2</td>
</tr>
<tr>
<td>Arumeru</td>
<td>Mbuguni</td>
<td>2 (functioning part of the year)</td>
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Total 31
## ANNEX B

Rural Water Supply Technician Training

**APVDP-MAJI**

Training Course No. One -- Arumeru District, September 1981

<table>
<thead>
<tr>
<th>Village</th>
<th>No. of Participants</th>
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<tr>
<td>Nduruma</td>
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<td>Mbuguni</td>
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<tr>
<td>Bwawani</td>
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<tr>
<td>Sakila</td>
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<td>Saitabau</td>
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<td>Olkungodo</td>
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<td>Samaria</td>
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<td>Kuanikuli</td>
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<td>Kwaugoro</td>
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<td>Usa River</td>
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<td>Kigongoni</td>
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**Total** 14

Training Course No. Two -- Mbulu District, November 1981

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<tbody>
<tr>
<td>Endabashi</td>
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<td>Yaenda Chini</td>
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<td>Hayderer</td>
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</tr>
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<td>Haydom</td>
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<td>Kilima Moja</td>
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<td>Kansey</td>
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<tr>
<td>Rotia</td>
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</tr>
<tr>
<td>Changarawe</td>
<td>2</td>
</tr>
<tr>
<td>Upper Kiteto</td>
<td>2</td>
</tr>
<tr>
<td>Maghang</td>
<td>2</td>
</tr>
<tr>
<td>Enda Maghang</td>
<td>2</td>
</tr>
<tr>
<td>Qurus</td>
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**Total** 20
### Training Course No. Three -- Hanang District, February 1982

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<tr>
<td>Nangwa</td>
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</tr>
<tr>
<td>Hagara</td>
<td>1</td>
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<tr>
<td>Mwada</td>
<td>1</td>
</tr>
<tr>
<td>Sangaiwe</td>
<td>1</td>
</tr>
<tr>
<td>Dareda</td>
<td>1</td>
</tr>
<tr>
<td>Himiti</td>
<td>1</td>
</tr>
<tr>
<td>Nangara</td>
<td>1</td>
</tr>
<tr>
<td>Gallapo</td>
<td>1</td>
</tr>
<tr>
<td>Endasak</td>
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</tr>
<tr>
<td>Gendabi</td>
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**Total** 11

### Training Course No. Four -- Arumeru District, April 1982

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<th>Village</th>
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<td>Karangai</td>
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<td>2</td>
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**Total** 14

### Training Course No. Five -- Mbulu District, June 1982

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**Total** 16
ANNEX C

Drought Project Descriptions

APVDP-MAJI

1) Maasai District Village Water and Transportation Project

This project was designed to serve the three Maasai districts of Ngorongoro, Monduli, and Kiteto with the following procurement:

- 10 windmills to provide alternative power sources to borehole water supplies in these remote districts;
- Spare parts for engines and pumps used in these districts to provide potable water supplies;
- Spare parts for heavy equipment used to construct dams in these districts;
- 5 Landrovers for the maintenance of water supplies in the districts and region; and
- 9 lorries for transporting food in these areas.

2) Kisongo Water Catchments Project

This project was designed to build 15 small-scale water catchments in the Kisongo area for livestock watering facilities. It is combined with range management and soil conservation practices to serve as a model for alternatives to large-scale dams for livestock watering.

3) Mougwe Division Water Supply

This project is a 23-km extension to the Magugu water supply. This will serve three villages in a very dry area of Hanang District with potable water.
VILLAGE DEVELOPMENT:
ARUMERU DISTRICT

By John Wheeler

Rural Development Specialist
Arumeru District
February 1980-December 1982
ACTIVITIES AND ACCOMPLISHMENTS

The Rural Development Specialist (RDS) position was established within the planning office, with the district planning officer as the primary counterpart. Through the planning office, the APVDP District Program was developed by working directly with the functional managers and departmental staff of all the relevant sectors, together with selected village councils. Project funds were disbursed from the region to the district development director's deposit account and through normal government channels for expenditure. The RDS did not directly control these funds. All of the activities listed below were directed toward the overall goal of building capacity at all levels of government, as well as planning and implementing appropriate programs and projects in support of the productive sectors.

A multi-sector village development program was initiated, working primarily with village councils in the pilot wards, and later within the district's area of concentration. A needs assessment undertaken by the village established priorities. Once they were determined, individual projects were planned and implemented jointly by the village, government departments, and APVDP. Such projects were often income generating (15 of 50 projects), although increased emphasis was placed upon land resource conservation. Through experience with this program, villagers were able to improve their planning and management skills.

At the district level, intensive work was carried out with all relevant sectoral departments, in support of village activities, and to plan, implement, and manage district initiatives and programs. Major district initiatives included field staff training in all the productive sectors and a radical revitalization of the agricultural and livestock extension services. Throughout, attempts were made to improve cross-sectoral coordination and encourage the design of integrated, usually land-related, programs. Further emphasis was given to experimentation, attempting new approaches and techniques.

In addition, assistance was provided to the planning office in the formulation of long-term policy, resulting in the district's long-term strategy paper. The project also assisted in the design and implementation of other externally funded projects, such as the Kisongo Drought Relief Project and investigation of population pressure in Arumeru District.
The major accomplishments of the project are as follows:

I. **Projects Supported by APVDP in Arumeru**

- **Projects by sector**
  - Agriculture: 8
  - Livestock: 6
  - Natural Resources: 6
  - Land Planning/Conservation: 3
  - Small Industries: 10
  - Water: 10
  - Roads: 2
  - Other: 5

  **Total**: 50

- **Projects by type**
  - Village income-generating: 15
  - Land Conservation: 5
  - Training: 7
  - Village Services: 12
  - Extension and Field Staff Support: 6
  - Other District Support: 5

  **Total**: 50

- **Total number of villages directly benefiting from at least one project (not including one-day seminars):** 59 (44 percent of all villages).

- **12 loans were made totaling:** 2,540,331 Tsh
- **36 grants were made, not including roads projects, totaling:** 4,357,727 Tsh

  **Total**: 6,898,058 Tsh

II. **Technical Assistance**

The major areas of technical assistance are as follows:

- **Assisting with the planning, implementation, and management of 50 projects benefiting 59 villages;**

- **Working directly with the District Planning Office and departments on the preparation of annual plans and project proposals;**
• Working with villages on such things as project identification, planning and implementation, and running training workshops;

• Assisting the district in the preparation of the long-term strategy;

• Assisting the district in the design and implementation of the Kisongo Livestock Watering Project (AID Drought Relief Funds); and

• Preparing proposals for the use of PL 480 funds (AID).

KEY AREAS OF IMPACT

The key areas of impact were:

• Introduction of widespread income-generating projects at the village level through working with village councils;

• Demonstration to the district that such village-controlled projects are viable and within the capacity of villages to plan, implement, and manage; a demonstration that the district also has an important role to play in promoting and supporting such activities;

• Initiation of an approach that enables the village and the district to focus upon the development and conservation of land resources;

• Revitalization of extension services supported by in-service training for field staff;

• Informal and practical assistance to departments to upgrade project and program design and implementation;

• Assistance to the district to articulate development more fully;

• Provision of transport to all levels of government staff; and

• Introduction through APVDP of the district to groups such as SIDO and AATP.

The implementation of 15 income-generating projects provided village councils with a source of funds for further projects, both through profit from the project and continued access to the revolving Village Development Fund. Furthermore, these and other
service projects assisted the village councils in upgrading their planning and management skills. With guidance from both APVDP and the district, the village councils promoted participation throughout the design and implementation of all projects. About 22 villages directly benefited from the introduction of income-generating projects, providing services (such as maize mills), commodities (such as ox-carts), and opportunities (such as irrigation). Finally the speed with which projects were designed, provided with funds, and then implemented did much to boost the morale of those villages involved.

Through the successful implementation of this village program, it was demonstrated to the district that such locally controlled projects can be viable, provided the projects are well planned. The program also, in the course of implementation, strengthened the linkages between the two levels of government. Continuing institutional support for these projects and similar one was established. For example, the district natural resources officer and the officers of the Horti Tengeru are committed to continue support and, if possible, expand the village tree nurseries program. The success of these projects, including loan repayment, can be used by the district to obtain further loans from other lending institutions.

Attempts to identify a viable approach to land resource planning and conservation led to a model that will allow the district and village departments to pursue land issues at the local level. Given organizational constraints, an approach that focuses upon a single issue and then broadens to include other issues and sectors can succeed. One that attempts a broad approach from the outset will lack cohesion, however. An example of the former is the Kisongo Livestock Watering Project, which was deliberately designed to focus initially on a single issue (livestock watering), but then to draw in other issues concerning land husbandry. It now includes village-level land use planning, pasture improvement, tree planting, soil conservation, and ways to increase livestock productivity. On the other hand, the Olkokola Land Use Planning exercise attempted to address similar problems, but on a broad front from the outset. The program suffered from a lack of focus. Too many issues were tackled simultaneously, and technical officers were unable to provide support.

The introduction of a structured program for extension staff (based on the World Bank Training and Visitation System), together with in-service training, enabled the district to begin to revitalize the agriculture and livestock extension services. If the program is maintained, and if continuing training is provided so that the abilities of extension staff continue to broaden, then an effective service will be available to the district's farmers. This will be particularly so if efforts are continued to increase the coordination across departments, to encourage
extension staff to work within a wide range of land issues. Field staff will then be able to assist villages in tackling their major land-related problems from a standpoint that considers land use as a single issue rather than a discrete sectoral viewpoint.

Further operational assistance was provided to functional managers in project design, implementation, and management. Through practical experience with APVDP projects, they improved their capability to carry out successful development programs. The APVDP proposal format was designed with this intention, requiring that, at the proposal stage, the viability of a project and its implementation schedule be comprehensively planned.

The project assisted and reinforced the district's policy commitments. Through the preparation of the long-term strategy paper, the district was able to articulate these commitments in a comprehensive manner. APVDP assisted in the development of appropriate policies and action plans in response to this strategy. The shifting of APVDP funding to the district's area of concentration, and the completion of an investigation into population and land pressure in the district, are two examples.

The provision of transport to government officers at all levels increased mobility and enabled them to attend more readily to their duties. This not only improved work efficiency, but also raised morale.

AREAS OF POOR RETURN AND CONSTRAINT

Expectations were never realized for upgrading the district's planning capacity, in particular, the annual planning cycle. The constraints were largely institutional. The APVDP planning system and its requirements were fused to the traditional government system. However, government officials regarded them as two systems operating in parallel rather than as a single system. Given the lack of overt regional commitment to upgrade the government's system, efforts by APVDP at the district level to improve the annual plan process largely failed. The traditional approach was easier (it certainly required less work), and functional managers were never compelled nor given the incentive necessary to prepare more comprehensive proposals. One of the more distressing disincentives to upgrade the annual plan was the continuing arbitrary nature of cuts carried out by higher authorities.

Similar poor return resulted from efforts to induce the district and functional managers to design cross-sectoral programs. Again, some of the constraints resulted from the existing system of funding by sector. But perhaps more important, APVDP itself failed to demonstrate cross-sectoral efforts and initiatives and did not devise a viable means of integration across sectors.
The lack of key government staff at various levels impeded the implementation of both projects and programs. For example, the Kikwe Building Brigade Project lacked a building adviser, and field staff as well as an extension coordinator were unavailable to follow-up on issues identified under the land use planning exercise. Given the existing workload of most senior district officials, the introduction of additional responsibilities always poses a constraint.

CONCLUSIONS AND LESSONS LEARNED

The major lessons learned and conclusions may be summarized as follows:

- The project was able to demonstrate the viability of a multi-sector, relatively small-scale, approach to sustainable development;
- The pressure to implement projects detracted from other aspects of the project;
- The process approach was inherently sound, but given the short time span of the project, it took too long to identify priorities;
- In some respects the project objectives and methodology were in conflict;
- Great care must be taken to ensure innovations are adapted to local conditions and attitudes, particularly where such innovations must operate within the existing system; and
- An integrated project must ensure that all its components are operating together in a mutually supportive fashion.

Although the region may still not fully accept the approach as appropriate for major donor funding, the project successfully demonstrated that an approach using relatively small-scale projects can assist the promotion of the productive sectors. The success or failure of such an approach should be judged by its sustainability in the poor economic climate of Tanzania. The indications are that, overall, the projects and initiatives funded by APVDP were within the means of the region to sustain them and that commitment is sufficiently high to ensure such sustainability. Further, the widespread benefits such as capacity building will remain and were obtained in an informal, practical manner during the course of implementation. It is doubtful that such widespread benefits would have accrued, if funds had been concentrated on a few large-scale projects.

From the district's viewpoint, the project attempted too much over too short a time span. The attempt to implement such a large and diverse program tended to overshadow more abstract or policy-oriented issues. The district's priority was to implement
projects, and this pressure toward overt activities detracted from attempts to upgrade the planning system, work through broad policy issues, or tackle organizational bottlenecks. The RDS operated either without a clear set of priorities or with priorities that changed frequently. Some of these shortcomings resulted from the diversity and breadth of project objectives. Some resulted from the failure of the project to assist districts to define more vigorously their own priorities. And some resulted from the bureaucratic relationship between APVDP and the district government.

The process approach adopted by the projects ensured that the regional government recognized that the issues it attempted to tackle were priority issues. However, it took many months for these issues to emerge and, given the short life of the project, there was little time to work toward adequate approaches and solutions. If the follow-on projects had come about, these delays would have been acceptable. The failure to undertake a follow-on project meant the full potential of the project was not realized. Without the long-term plan, it is possible the project would have more quickly identified key issues (for example, land conservation).

In certain respects, the project's objectives and methodology were in conflict. The objectives called for experimentation and trial, whereas the methodology called for integration into the government system. The project greatly underestimated the inertia of the established bureaucratic system, and overestimated the project's ability to influence and shift the methodology of that system. In addition, once the project was installed in the government system, its freedom to experiment was heavily curtailed. Such restriction was amplified because all resources were in short supply. Certainly the district became more reluctant to use resources to fund projects with uncertain returns. It preferred to see such resources spent on traditional projects. The final irony is that, while the team felt that the degree of integration compromised certain aspects of the project, government officials felt that the project was not fully integrated with the system.

One of the project's primary functions was to act as a catalyst, assisting the region to identify ways and means to tackle widely recognized problems. If there is only a limited mandate and means to bring about change to the bureaucratic system, then any initiatives must be carefully designed to build upon that system. Any major innovation will take time, and be achieved incrementally, but only if it is strongly supported by those who will operate it. The revitalization of the extension services is an example where the project introduced new ideas but tailored them carefully to the local situation. The project's attempt to introduce a methodology for land use planning using agroecological zones was not successful at an operational level.
A major reason for this was that the approach was seen as being outside the administrative system. More care to adapt the concept to local realities might have resulted in its acceptance.

APVDP was an integrated development program only in the broad sense that its primary commitment was toward the productive sectors. Even here it was fragmented. The implementation of two major components, roads and water, was not linked to initiatives in the productive sectors. The opportunity was missed to demonstrate the benefits of developing a multi-sector program whose elements are mutually supporting. It may well be that, given the existing economic climate, the region would not have tolerated the concentration of resources into a more restricted area than that covered by APVDP. However, the desire that everyone should benefit from the project diluted the potential long-term impact of APVDP. A conscious choice has to be made about whether to provide general support to the development budget or whether to attempt to put forward a holistic alternative approach. APVDP gradually reverted to a more general, albeit important, support to regional development. The project successfully demonstrated viability and sustainability of a scale of development. It did not, however, show that the potential for dramatically increasing the impact of such development exists by directly interrelating individual projects.

PROJECT DESIGN

The project was both appropriate and successfully implemented. Given the economic situation in Tanzania, it is doubtful whether another approach would have been more successful, especially from the viewpoint of long-term sustainability.

With the project's overall emphasis upon the productive sectors, the concentration upon agriculture, livestock, natural resources, and small industries was entirely appropriate. However, the interrelationship between these components and those of water and roads was not well developed. The preparations of the long-term plan was another major component that was successfully completed. However, the commitment to this exercise detracted from the early vigorous pursuit of other aspects of the project. A higher priority should have been given earlier to operational support to agriculture and livestock production. The last year of the project demonstrated that effective action and intervention can be initiated at the local level.

Given the breadth of the project's mandate, the make-up of the permanent technical assistance team was balanced. A major exception was the roads component, which seemed to be overstaffed at the regional level. The mandate of the agriculture/livestock/natural resources adviser was, perhaps, too broad to be effective and should either have been split between two permanent staff
members or given more operational support from short-term consultants. In addition, short-term staff can be used to assist the region to tackle issues; a good example of this was the irrigation consultancy.

Perhaps the project attempted to do too much in too short a time. The breadth of the goals led to a lack of clarity of purpose and priorities, diluted technical assistance efforts, and left many areas of major potential impact unfulfilled. Greater impact could have been achieved if the project design had been more narrowly focused, and resources had not been spread too thinly.

SUPPORT

DAI/Washington

The major area of operational support was the procurement of commodities, and this task was undertaken competently and promptly. DAI, however, failed to monitor expenditures adequately, which led to the drastic curtailment of technical assistance.

AID

I think that the design of the project and the requirements of AID regulations were incompatible. This tension between a regulation-bound bureaucracy and a project attempting flexibility and evolution was never reconciled. In fact, it exacerbated the relationship between project management and AID. In addition, the failure of AID, until near the end of the project, to establish direct communications with the region, preferring to pass everything through the contractor, led to many misunderstandings. Furthermore, AID’s lack of control of the roads component was partially responsible for the widespread dissatisfaction with the component’s performance and wholly responsible for serious cost overruns. Finally, the failure to account for project expenditures was inexcusable.

Project Management

Project management was highly supportive and flexible. The occasional lack of priorities and firm directions mirrored a failing of the project as a whole. Project support administration always had the appearance of being ad hoc and lacking in direction, seemingly responding to the loudest demands. Management certainly assisted the team attain cohesion, and in matters of concepts and approach was stimulating.
Tanzania Government Officials

Almost without exception, government officials were responsive and supportive of all project activities. At all levels they were prepared to listen and try ideas. They tended, however, to respond to project initiatives rather than to direct them. Yet the degree to which the project succeeded in attaining its objectives is a reflection of the commitment and energy of officials at all levels.

PLANNING

The Regional Long-Term Plan

The process by which the plan was prepared, involving the close participation of regional and district officials and politicians, resulted in a document fully understood and accepted by the regional government. This, in itself, was a real achievement when comparisons are made with other RIDEPS. Of particular importance is the statement of strategies and priorities, which, if adhered to, provides the region with a comprehensive set of policies for future development.

The methodology used for data collection was less satisfactory. The project undertook what was described as a rapid reconnaissance, using short-term expatriate consultants to gather data and identify issues. The exercise in the end was not particularly rapid, was expensive, and little was learned that could not have been generated using internal resources. The use of internal government resources to obtain data and to identify sectoral issues would not only have been cheaper but would also have involved officials and politicians at all levels in the preparation process of the plan earlier. Further, the opportunity could have been taken to work with the region to overhaul the government's data collection system and thus provide further benefits for long-term use. Far too much investigatory work was carried out before the issues were identified, using resources that would have been better utilized to address issues after they were identified.

The project assisted the region to upgrade its planning capacity. As a result, there is a growing commitment to solving issues identified through the planning process (such as population growth, land pressure, and land conservation).

The Annual Planning Cycle

In marked contrast to the long-term plan preparation, there is little evidence of the project's impact on the annual planning cycle undertaken by the districts and region. As a result of APVDP activities, functional managers do have a greater
appreciation of the need for, and their ability to prepare, individual projects. However, the project's intermittent attempts to upgrade the manner in which the annual plan is prepared, and to encourage a more cohesive strategic approach to the allocation of funds, was not successful. Similarly, little impact resulted from encouraging cross-sectoral approaches to development. The reasons for this failure may be summarized as follows:

- APVDP was not perceived as an integral part of the districts' annual plan system (although it was included alongside it);
- Declining government funds discouraged experimentation;
- Incentives were not offered for well-presented and argued plans. Rather, arbitrary cuts were made at higher administrative level; and
- No firm directions to the district were ever forthcoming from the region.

In addition, the preparation of the region's long-term plan took much longer than originally intended, thus detracting attention from this issue.

Sub-District Planning

Except at the very outset of the project, no attempt was made to encourage broad issue planning at the village, ward, and divisional level. Much work was done upon individual project planning, and in some instances the land use planning exercises approached this issue, but in no case included it. The pressure upon project staff to undertake other tasks successfully is a reasonable excuse concerning why this level of planning was never really supported. Nevertheless, it should be noted that the opportunity was missed to build up even a model that the districts could adopt.

VILLAGE DEVELOPMENT ACTIVITIES

A total of 59 out of 133 villages in Arumeru District directly benefited from APVDP-funded projects, either income generating or service infrastructure. The 17 villages in the original pilot wards received two and one-half projects each. Further, all villages in the district benefited in less direct ways, such as through the increased mobility of government staff. The impact on the recipient villages was great: income-generating services, income-earning opportunities, infrastructure and services, and improved government services.
However, the project attempted, and to an extent gained, wider impact than those directly accruing to individual projects. By working with village governments through all aspects of project planning and management, the capacity of villages to undertake further development initiatives was enhanced. Moreover, those villages that received loans will attain credit worthiness with other lending institutions (such as the Tanzanian Rural Development Bank and the National Bank of Commerce) once they have completed loan repayment. Many villages were able to obtain, for the first time, funds to implement projects that they themselves control and manage. The impact upon morale has been considerable.

Through the implementation of this program and the provision of transport, linkages between villages and the district were strengthened. Systems of continuing support and contact were built up around these projects. Examples include the establishment of the small industries support officer in M/Jamii, the posing of Bw/Miti's to assist village tree nurseries, and the revitalization of the extension services. The strengthening of these links, however, was carried out in an ad hoc manner. Perhaps the project could have attempted to strengthen links between the two levels of government in a more formal manner.

In addition, although individual projects and their planning and implementation were carefully undertaken, in only scattered instances were individual projects interrelated to build up into a greater whole. This approach was attempted only through a land use planning exercise, which was never satisfactorily concluded.

THE RELATIONSHIP BETWEEN LONG-TERM PLAN PREPARATION AND VILLAGE ACTIVITIES

Working through established government and political channels and directly with a wide range of villages, the project aided the generation of information and opinion from lower levels, to contribute to the planning process. The process was, however, largely informal, and little was done to obtain specific inputs from villages and wards. The constraints of time largely account for this, but the plan would have been enhanced if the process of obtaining a long-term perspective started at the ward level, and not at the district level. Furthermore, the project failed to send back to the villages the information that was collected through the course of plan preparation. Such information, suitably presented, would greatly have assisted village-level understanding of decision making.

The perceived requirement for information at the outset of the preparation for the plan called for the intensive use of outside short-term consultants as well as project staff. The concentration of time and money upon information gathering detracted from any attempts to establish operational programs in
the productive sectors. For more than two years, virtually nothing was achieved operationally in the agriculture and livestock sectors, which should have been the focus for project activities. If less time and effort had been devoted by expatriates to gathering information, these resources could have been available to assist operational activities at a local level.

If the project had elaborated a model for local development initiatives, the region would now have at its disposal more appropriate tools for implementing its long-term plan and turning strategies and intentions into action. There remains a vast gap between the aspirations of the long-term strategies and the ability of the region to act upon them.

CONSULTANTS

Those consultants who worked with officials on well-identified issues, providing training and practical assistance, were the most worthwhile. The prime example of this is the two visits by the irrigation consultant. He made genuine progress toward both upgrading local capacity and practical implementation. A further example, although more restricted in impact, was the work carried out in soil erosion in Mbulu. The model of repeated visits by an individual, following-up on issues, is one that should be replicated.

Other consultancies did successfully provide information to the region. However, the region's lack of capacity on to follow up on these studies was a problem. Studies such as that on population did provide widely used base-line data that formed the basis for policy decisions and action. Others, such as the Manpower Study were effective documents, bringing information and issues to the attention of the region. Yet for lack of capacity, its recommendations were never acted upon. There was therefore an overdependence on consultants to do jobs that could have been completed more satisfactorily using local resources.

FUTURE ACTIVITIES

Any future project in the productive sectors should be designed to take up the major issues identified in the region's long-term plan. The main emphasis should be placed upon land conservation and development, as in the IFAD proposal. Land is the primary resource of the region, and its conservation and enhancement should be placed above all else, including infrastructural development.
Future projects should be narrowly focused, but within such a focus, attempt greater integration. A project more firmly focused on land issues would be ideally placed to achieve such integration. Any future project must carefully balance its resources within the area in which it attempts to work. If it is concerned with land conservation, it should concentrate on a restricted area, using practical experience to provide training, rather than attempting to work throughout the region or even a whole district.
VILLAGE DEVELOPMENT:
HANANG DISTRICT

By David Kraybill

Rural Development Specialist
Hanang District
June 1981–December 1982
VILLAGE DEVELOPMENT: HANANG DISTRICT
By David Kraybill

ACTIVITIES AND ACCOMPLISHMENTS

The rural development specialist (RDS) was involved in both the planning and the implementation of village development projects. The chief planning task was to assist the district government to develop its 1982/83 annual plan, toward which APVDP contributed 1,205,000 Tsh, or 33 percent of the total district development budget. The RDS's project implementation responsibilities included detailed costing and organizing of approximately 50 development projects, which were included in the 1981/82 annual plan. APVDP contributed 2,563,000 Tsh, or 53 percent of the total district development budget, toward the 1981/82 annual plan.

In Hanang District, APVDP undertook the following activities during its last 18 months:

- Establishment of 13 village-owned fruit and tree nurseries, each having 10,000 seedlings. Village employees attended a six-month training program;

- Establishment of a district-level citrus nursery at Bonga with 17,000 citrus trees that will be ready for transplanting at the end of 1983;

- Development of an agricultural extension program, covering 40 out of the 112 villages in the district;

- Development of a livestock extension program to help villages to draw up grazing plans and establish improved pastures, and development of a district pasture grass seed production project;

- Establishment of an oil-seed press that will produce cooking oil from sunflower seeds;

- Installation of seven village grain-processing machines, six maize mills, and one rice huller;

- Completion of a land survey and technical design for a large irrigation scheme in Magugu area;

- Provision of transportation (motorbikes and bicycles) for 98 government staff members in the following departments: Agriculture, Natural Resources, Community Development, Cooperatives, Water, and Livestock;
• Establishment of an ox-cart production factory in Babati, and development of an ox-cart loan scheme to enable villagers to purchase these carts;

• Planning and execution of 12 five-20-day training seminars, for staff of various departments;

• Establishment of two fisheries projects, a fishpond and a fish-drying facility;

• Construction of 17 shallow wells in six villages; and

• Rehabilitation of two village gravity water systems.

KEY AREAS OF IMPACT

Village Fruit and Tree Nurseries

After a year of experimentation with large nurseries, it was decided to reduce the size of the nurseries and increase their number. Village leaders were overwhelmed by the management requirements of a nursery with 30,000 or more seedlings. The size was reduced to 10,000 seedlings per nursery, and the villages made satisfactory progress without daily supervision by district officials. In addition, villages were required to make cash contributions toward operating costs to ensure that the villages would consider the nurseries as their own.

Agricultural Extension Program

Agricultural officers visited a selected group of farmers in each village every two weeks, teaching them production-increasing cultivation techniques that are not dependent upon imported resources. The harvest from participating farmers' plots indicated that the program was highly successful. However, the extension program could have had a much greater impact if it had been linked to three other elements essential to agricultural development:

• An adaptive research program that would, through the extension program, test crop innovations (including new varieties, intercropping, agro-forestry crop combinations, and locally made implements);

• An effective agricultural inputs delivery system for jembes, plows, seeds fertilizers, and insecticides; and

• An effective crop-marketing system that ensured farmers immediate payment at economic prices.
Vegetable Oil Extraction

The vegetable oil extraction project promises to have the highest economic and financial rate of return of any project funded by APVDP in Hanang District. It will have significant effects on both consumption and production. It will help meet the strong demand for cooking oil, reflected in the exorbitantly high market price for this commodity. The project will also stimulate agricultural production of sunflowers by offering farmers an attractive price for this crop. The project was in the installation stage and was not tested. If tests prove successful, the district government should attempt to install more presses (perhaps through the Tanzanian Rural Development Bank [TRDB]). With a total of five or more presses operating, a facility in Arusha to manufacture soap from sunflower oil could be established.

Maize Mills

Maize mills proved to be an excellent source of village revenue. They also showed that villages are capable of managing a technically complex project, if the demand for that project's services is high enough. The great demand for milling services encourages village leaders to maintain the machines and procure the necessary supplies. The APVDP support system for maize mills consisted of the procurement of replacement parts for each machine, a one- or two-day seminar on maintenance for machine operators, and follow-up on loan repayment by a district officer.

Irrigation

The economic potential in the Magugu Irrigation Project is very great. The slope of the land is such that approximately 700 acres can be irrigated without the use of pumps or even weirs. If the participating farmers are willing to cooperate among themselves so that all are planting, and later harvesting, the same crop at the same time, three crops per year can be raised. This triple-cropping program, together with the increased yields due to an adequate water supply at all times, will result in an enormous output. It will also be particularly significant in terms of increased rice production in the area. However, implementation has not yet begun. The land survey is complete, the technical design finished, and project funds are available. The district should appoint someone in the planning office to coordinate this project, since it encompasses several departments (Agriculture, Water, Health, and Lands) and because the social nature of irrigation projects is complex.
AREAS OF POOR RETURN AND CONSTRAINTS

Livestock

Among the productive sectors, livestock has the lowest return on investment. APVDP undertook projects to improve existing cattle dips, train field staff, improve the extension program, produce and distribute pasture grass seeds, and provide equipment for veterinary centers. The benefit derived from them, however, was one of increased convenience rather than greater economic productivity. Increasing productivity depends so heavily upon increasing off-take rates that until this politically sensitive issue is satisfactorily dealt with (either through pricing policy or enforced government mandate), investment in livestock will yield minimal returns.

Crop Production Projects

Crop production projects were planned under APVDP for barley, maize, sunflowers, and groundnuts. Implementation was attempted for three of these projects — one was abandoned in the planning stage, and none was carried to successful completion. It is instructive to look at the reasons why these projects failed.

Barley

In 1981, barley trials were successfully carried out in the Mandunga area. On the basis of these results, a 300-acre project was planned in three villages in that ward. However, the fields were never plowed. Villagers were encouraged to plow by oxen, but they thought that the soil was too hard. They also tried unsuccessfully to obtain the services of a tractor. Since tractors are so scarce, however, it is not advisable to encourage new crops such as barley unless there is a commitment on the part of the government toward animal traction. This would involve making plowshares and chains available for the UFI plow, investing resources in ox-training programs, and promoting ox-cultivation.

Groundnuts

The intent of this project was to buy groundnuts outside the district and resell them to Hanang farmers, since groundnuts are not available through GAPEX. The DPLO went to Tabora to attempt to buy them directly from farmers. The RDD Tabora refused, however, saying they must be bought through GAPEX Tabora, which then promised to reserve some groundnuts for Hanang. Despite repeated attempts to contact GAPEX Tabora, the district did not obtain a favorable response. The major problem is the government price for groundnuts, which is about 20 percent of the unofficial price. Consequently, farmers do not sell to GAPEX, and the government is not able to collect enough groundnuts even for seed.
Maize

This project was abandoned in the planning stage because the chances of succeeding, where even the National Maize Program had failed, were not good. A major problem with maize production in the country is the unavailability of improved seed. There is a severe shortage of seed, and district-level projects cannot address this problem.

Sunflower

This is the only crop production project in the district worth attempting again. It failed in 1981 because the seed that was distributed to farmers was apparently several years old and had lost its viability. This project is worthwhile because it is linked to the Gedamar Oil Seed Press. Farmers will be paid immediately in cash and at a good price. Therefore, it is likely that a project to encourage sunflower production (by distributing seeds) will have a real impact.

The first three of the above projects are not recommended because of difficulties caused by inadequate national agricultural policies. These policies concern the choice of technology (oxen as opposed to tractors), crop prices, and availability of improved seeds. Until these issues are addressed at the national level, crop-specific production projects in the district should not be encouraged.

Participatory Approach to Village Planning and Implementation

APVDP attempted two participatory approaches, the village dialogue model and, later, land use planning. These two approaches were similar in that APVDP employees together with district officials spent a large amount of time in village meetings. Villagers were encouraged to talk about their needs and concerns, resulting in the planning and identification of specific projects. Such an approach, however, requires a much greater availability of government transportation than is currently the case. With the shortage of cars, spare parts, tires, and fuel, it simply is not possible for government officers to continue this approach, as it was envisioned under APVDP. Furthermore, this intensive, village-level participatory approach tended to encourage the belief that APVDP was an organization separate from the government. The villagers frequently commented that APVDP listens to them and is more likely to respond to them than is the government. Although a compliment, it was also a sign of APVDP's failure to integrate fully with the government. If APVDP was not considered to be a part of the government, then it only drove home the unfortunate lesson that a foreign organization was needed to bypass the local government to bring about development.
Thus the participatory approach had major drawbacks, particularly given the macro-economic constraints of Tanzania. It would have been a more economical and sustainable approach to improve the system as it is currently conceived (but not for the most part practiced). Village councils should forward their project requests to the district government, which would then base its annual plan on these requests. These projects could then be managed by village councils, rather than by the district departments, as is currently the case. Although village dialogue would become a bit less intense than it was under APVDP, the planning of projects financed under the ordinary development budget would be improved. There would also be more reliance on resources available within the districts and within the country, rather than on the outside, where help is not always certain and can be cut off with short notice.

Small-Scale Industries

While small-scale industry projects are of great economic and social importance, and APVDP helped establish some of the districts' best small-scale industries, a major constraint was the lack of definition about which organ of the government is responsible for assisting villages. SIDO was given formal responsibility, but had no district staff and only three people at the regional level. Thus the assistance provided to the district by SIDO was almost non-existent. Community Development was tapped as the most likely alternative department. In Hanang District, small-scale industries were supported and serviced excellently by an enthusiastic and competent officer in that department. However, it does not appear that the heads of this department at either the district or regional levels perceive of small-scale industries as a major function of the department. There is a need for the central government to spell out clearly which department is to have this responsibility, and then to train officers who have a good technical background in machinery, can teach bookkeeping, and will take charge of coordinating credit services from all sources. Many individual small-scale industries started by APVDP have a high return. But a major constraint to any future, systematic, development of such projects is the failure to identify the government agency that has the responsibility for providing assistance at the village level.

CONCLUSIONS AND LESSONS LEARNED

Village Contributions

More emphasis should be placed on village contributions, particularly on water, fruit and forestry, and irrigation projects. Nurseries are better cared for if villages make a significant contributions. In most cases, this contribution must be in cash to hire laborers, as villagers frequently are willing
to volunteer labor for government funded projects. The fact that villagers supported all the costs of construction of the maize mill buildings may well be a major factor explaining why all APVDP-funded maize mills are operating at present.

Role of APVDP

An outside-funded project can be seen as a way to bypass the local government. There was a tendency on the part of all parties concerned to want to consider APVDP as a separate entity. The expatriates did so because it gave them greater control over project resources. District officials did so because the project gave them as opportunity to obtain goods that they would be less likely to get if they had to request them through the heads of departments (especially fuel, motorbikes, and nights-out allowances). At the same time it lightened the responsibility of department heads to perceive a project as an APVDP project. Villagers seemed to feel that an outsider would be quicker to respond than a government official.

Thus an externally funded project such as APVDP should not create a system of differential accessibility to government resources. The entire government planning process should be slowly moved toward the "ideal" development approach, rather than using it only in projects such as APVDP.

Maintenance versus New Construction of Roads

At a cost of approximately 20,000 Tsh per km, money would best be spent on simple maintenance of existing district roads. This would involve grading the road surfaces and clearing ditches (especially the lateral evacuation ditches that carry water away from the road). Because of lack of fuel and spare parts, manual laborers should be used for road repair for all tasks that can be performed with a jembe and shovel. This approach is sustainable because it does not require foreign exchange. It also provides income for the laborers.

Agricultural Policies

If the agricultural sector is in disarray and policies (particularly pricing) do not provide enough incentive for farmers to sell in the official market, then there is little that an outside-funded project can do to increase production (irrigation is an exception). In fact, outside donor funds may well be making things worse in the long run, by forestalling the required changes (particularly related to prices) and by continuing to hold forth promise through cosmetic changes. A project such as APVDP, by pumping in funds for equipment, supplies, and vehicles, tends to divert attention from fundamental constraints in the Tanzanian agricultural sector that are policy- rather than resource-related.
The lesson here is that a regional project may have only minimal impact on agricultural production, if certain important policies are controlled at the national level. Care should thus be taken to avoid the false impression that major strides can be made under such circumstances. There is essentially no way, other than incentive-creating economic policies, to stimulate production.

**A Systems Approach**

When investing in a sector or in a certain type of project, one must consider the project planning and implementation environment as a system. Is that system capable of sustaining development? Can it become capable? Concerning cattle dipping as a system, for example, it is now apparent that money invested in Hanang District to repair two cattle dips may not have been wisely spent because acaricides are frequently not available. Perhaps a better step would have been first to develop a revolving village fund to purchase acaricides, which are available in Dar es Salaam. Only then should the cattle dips have been upgraded. Another example is women's projects. There are currently few district departments that have female officers who are charged with project implementation responsibilities. It is not very likely that a women's project will succeed without support from a female government officer. Therefore, these projects should, in most cases, be planned only if a female officer is available in that sector and that area.

The systems approach looks at the entire social, economic, and physical environment to see if there are certain prior steps that need to be taken so that the project can be both successful and sustainable. It attempts to avoid projects that seem would not be fully implemented due to constraining factors that are observable in advance, unless those constraints can be removed.

**Donor Funds Following Government Funds**

Activities that are funded only by donor funds appear to have less chance of being integrated into departments. In the case of roads and water, there was no money allocated in 1981/82 in Hanang District for new construction, although funds were available through APVDP. In both cases, there was minimal project management involvement by the district departments. If, however, those departments had had ongoing construction projects funded under the development budget, the heads of the departments concerned would have likely been involved in implementation of APVDP-funded projects. The departments would have already established systems for carrying out certain tasks, and these could have been employed on the APVDP projects. It would thus seem advisable to fund construction activities (especially for roads and water) only if the government has first deemed them important enough to fund similar projects in the districts.
Funding for New Initiatives versus Recurrent-Type Expenditures

In 1978, when APVDP was designed the idea of starting new initiatives across many sectors appeared advisable. However, increasingly APVDP funds were used for nights-out allowances, fuel, vehicle maintenance, and salaries. If the economy had been stronger, more of these costs would have been picked up by the government, rather than APVDP. In view of declining government revenues and budget allocations, it was appropriate for APVDP to assist in these areas. However, in diverting an increasing amount of resources away from new initiatives and toward recurrent items, APVDP spread itself too thin. Future RIDEPs in Tanzania should look at the size of recurrent budgets for existing government operations, as well as the recurrent budget load added by new projects. It would be appropriate to allocate a significant amount of funds to recurrent budgets, since a diversion of funds for recurrent items will probably take place anyway. When this happens the project will become over-committed in terms of manpower and resources, and will not be able to concentrate adequately on those activities already started.

Data Collection

In general, district officials found the vast amount of information available from data collections efforts and consultants' reports to be of limited use. The economics of information gathering was apparently not considered when the information strategy was planned. Much less information should have been gathered; it should have been tailored to specific needs and fed into the existing government systems of data processing.

SUPPORT

DAI/Washington

DAI was supportive both professionally and personally. However, DAI's oversight of its contract accounting led to the early termination of the contracts of the technical assistance staff. It was a tremendous disappointment to be told that all the expatriates were having their contracts terminated because of an accounting oversight.

AID

I had little contact with AID during my tenure here. The project officer was interested and supportive, but the AID mission in Dar remained aloof from APVDP. In the year and a half I was in the district, mission staff who came to see APVDP projects visited the district only twice.
Project Management

Project management was quick to respond to requests for fuel, project inputs that were available locally, budgeted project funds from the region to the district, travel arrangements, and so forth.

However, project management should have taken a stronger role in ensuring that the lessons learned from the village development activities were clearly spelled out, and then fed back into the regional planning exercise. There was a tendency, for example, for project management to continue talking about agro-ecological planning units long after it was apparent in the districts that this approach was not proceeding well. Project management should have undertaken a quarterly review of village development projects in all districts to maintain closer contact with the environment in which development implementation takes place.

Tanzanian Government Officials and Colleagues

Government officials were always supportive of APVDP-sponsored plans. In the implementation stage, support was less even. Ironically, implementation support was strongest in two departments where the functional managers were weak but where a lower level officer was willing, capable, and not burdened by all the departmental tasks. Support was less than adequate in two departments whose functional managers were strong, but who were not willing to delegate authority to their subordinates.

Cooperation with the party was much more difficult. Time and time again, civil servants commented that it would not be good to get party officials involved in APVDP-funded projects because they would only slow things down. On one project, Magugu Irrigation, I attempted to get the party involved. The officials were willing to talk and to attend village meetings, but not to become involved in implementation. The district party chairman was named chairman of an ad-hoc committee to oversee this project, but did not call a single meeting even though it was made clear that APVDP would take no further steps until the committee met and laid out a course of action.

PLANNING

Impact of the Formal Planning Process

A few APVDP documents had a significant impact on the thinking of both government officials and APVDP technical assistance staff. The Population Profile of Arusha, Development Strategies and Priorities for the Next 20 Years, and Arusha Region Today were the documents that were referred to most.
Many of the other planning documents, however, had little impact upon subsequent planning, particularly the most recent annual plan. While much effort and money was put into developing these regional planning documents, the region then failed to develop a coordinated effort to help the districts translate those documents into improved project identification. This translation of policies into projects is so important that a thorough planning process should focus on it. The 1982/83 annual plan was developed on a haphazard basis. Deadlines for lower-level government to submit plans to higher levels did not seem to be clear, and meetings were called with little advance notice. Officials at the village and district levels were not aware of policies that had been adopted at the regional level, and did not submit their project requests with these policies in mind. It would have been appropriate for the region to hold a planning cycle. The districts then would have held a seminar for village officials. These seminars would have strengthened the planning-from-the-bottom-up preparation of the annual plan. At the same time, the seminars would have given lower-level officials exposure to regional policies.

Although APVDP was not successful in helping planners develop a better, more effective planning process, it did help to develop specific projects that make better use of resources. Lower cost, more efficient ways were found to deliver goods and services. These include village tree nurseries requiring less transportation and fuel, and irrigation without expensive pumps or weirs.

Impact of Village Development Projects on Regional Planning

APVDP differed from many regional planning projects in that it had a village development component that was to function as a testing ground and keep planners realistic. Feedback functions are difficult to develop in government bureaucracies, and APVDP was no exception. In Hanang, the region evidenced little desire to learn from the district's village development projects. Members of the Regional Development Committee (RDC) should have made periodic visits to village projects to assess regional policies and evaluate the merits of alternative methods of delivering the desired goods or services.

A formal evaluation process would have helped to feed the lessons of village development back into district and regional planning. Three evaluations were undertaken in Hanang in 1981/82. One was for the Hanang Shallow Wells Program, another for the Gallapo Dairy Project (not funded by APVDP), and a third for the Land-Use Planning Project. While these evaluations contained valuable insights, they had little impact due to their limited focus. No prior position had been created in the planning process for examining project evaluations. Members of the RDC should have personally conducted such evaluations and made recommendations presented at RDC meetings.
VILLAGE DEVELOPMENT ACTIVITIES

In evaluating the impact of APVDP-funded village projects, one should distinguish between the entire economy of the village and the village government. The latter is a sub-sector of the village economy. The economic impact of projects on entire village economies was small, and this is not surprising. To effect a major change in four years is very difficult. But the impact on village governments was frequently significant. Many villages previously had no (or few) income-generating projects to bring revenue to the village account. As a result of APVDP assistance, they started such activities.

Where projects were funded on a loan basis (17 projects in Hanang), village leaders were becoming accustomed to loan repayment procedures. Out of the 10 village projects whose loan repayment had begun, only one had developed a serious default problem. This loan repayment experience should make it easier for these villages to obtain future loans from such sources as the TRDB and NBC, since a positive credit record was established. In addition, village leaders gained valuable experience in financial management, particularly if the village made a significant cash contribution, and if the money was handled by the village leaders.

A labor contribution does not seem to be a good substitute for a cash contribution, since it is usually not the village leaders who contribute the labor. To village leaders, labor is viewed as relatively costless. However, a cash contribution forces village leaders to decide between the proposed project and alternative ones. This difficult choice causes the project to be taken more seriously, and, consequently, it is likely to be accorded better management, the most critical factor in village projects.

Thus, while APVDP-funded projects had a significant economic and institutional impact on the village economy, APVDP was not able to bring about major changes in agriculture, which represents the largest portion of the village economy. Given the control of agricultural policy at the national level, it is doubtful whether, with the exception of irrigation, a regional project could have a significant impact in this sector.

CONSULTANTS

The most successful consultancy was that of Dr. Bishay. He is experienced both in teaching and in designing irrigation projects, has much enthusiasm, is willing to work long and hard. He left behind his textbook on irrigation, which is treasured by all who took his course.
Due to the great demands placed on a consultant in a short amount of time, it is important that the consultant have had a considerable amount of experience in a similar situation. If he is expected to do a sector assessment, he should have had previous experience doing similar work in a developing country.

A staff member should be available to familiarize the consultant with the region, the project, the government structure, the physical environment, and key individuals. The consultant is unlikely to understand constraints in the social and physical environment, and a staff person can help him understand these better. However, APVDP seldom had people available for the required amount of time.

FUTURE REGIONAL PROJECTS

Recommendations for future projects are useful only if they are based upon a realistic assessment of the state of the economy. The prospect for the national economy in the next few years does not look bright. The worldwide recession, the high national oil import bill, and the shortage of foreign exchange place major limitations in the availability of development resources.

A crucial question is whether the high level of outside aid (over 60 percent of the development budget) is taking Tanzania close to, or farther from, its goal of self-reliance. An artificially supported economy has failed to bring the country the measure of economic independence it has sought. This support has given substance to political solutions to production that do not appear to be leading to sustainability. Further infusions of aid, by keeping the economy artificially afloat, forestall decisions that can make the economy self-reliant and healthy.

Foreign aid is likely to continue in Tanzania, however, for a variety of international political reasons. Self-reliance should still be given high priority in project designs.

Instead of delivering goods and services directly in the villages, future regional projects should lend broad sectoral support, with a heavy emphasis on agriculture. Investments should be made in such areas as an adaptive research program in the districts, an agricultural inputs delivery system, and an effective crop-marketing system.

Similar institutional support could be given in other sectors as well. In natural resources, a program supporting small village nurseries is recommended to deliver seeds, polythene tubes, water-cans, soil sieves, and jembes (for example, through district TFA branches), as well as a training seminar for village nursery employees. In small-scale industries, a technical support and credit program is recommended. Credit from all sources would be
coordinated by the responsible department, which would push existing credit institutions such as TRDB to shorten loan-processing time. In addition, the technical support program could train both district-based government technical officers and village project managers.

Since the policy-making power of the regions is limited, none of the above recommendations can be accomplished without policy changes at the national level. Regional projects can have a significant economic impact only if they are based on realistic national policies.

Thus future regional projects should concentrate on improving delivery systems in the productive sectors. When a system is functioning well, it is then appropriate for outside aid to assist in delivering resources to the system, but not directly to the users.
VILLAGE DEVELOPMENT:
MBULU DISTRICT

By Lynn Schlueter

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Mbule District
August 1979-August 1982
INITIAL PLANNING AND PROJECT IDENTIFICATION ACTIVITIES

In the design of APVDP, 18 of the 88 villages in Mbulu District were identified as pilot villages that would participate in the project's activities. Among the criteria for selection were the ecological environment, development potential, and areas of relative deprivation. Ten of the villages chosen (2 wards) were located in the dry southwestern end of the district, 25-50 miles from the district headquarters. Four others were situated in the high eastern side of the district. The remaining four were five to 15 miles north of Mbulu town.

In the two or three years preceding APVDP, very few village-level projects had been initiated in Mbulu, other than the construction of classrooms, health centers, and cattle dips. Because of budgetary constraints, most of the project ideas and requests for assistance forwarded to the planning office from the villages were either postponed or planned in such a way so as to spread whatever benefits were to be had over many villages. The purchase of oil seeds that were distributed in 24 villages is one example. Consequently, most villages did not have difficulty identifying projects they hoped to initiate, since the villagers had discussed many of the ideas for some time. The district technical support offices, however, had considerably more experience with project implementation. For the most part, they had more success building projects and distribution activities than development initiatives that involved a great deal of organization, or those that required technical support over a long period of time. In fact, many implementation efforts had failed completely.

Based on this information and experience, the planning office staff concluded that the most appropriate course of action would be to start some implementation activities, and adopt a learning-by-doing approach. Such an approach would accomplish the following:

- Involve many people;
- Offer first-hand experience of the problems facing those responsible for project implementation; and
- Begin to strengthen the capabilities of functional officers and their support staff, as well as ward and village leaders.

Also, it was understood that project initiatives would have to be implemented successfully, if those participating were to benefit from their experiences.
Implementation activities began in early 1980 in semi-arid Dongobesh Division, where 10 of the 24 villages had been targeted for APVDP assistance. As a result of the meetings that had been held in the area, a number of mutually agreed upon development priorities were identified that would serve as a starting point for implementation work. The areas identified as being of greatest need and possible benefit to the villagers were water development, ox-plows and ox-carts, afforestation, fruit tree production, crop storage, and oil-seed processing.

Some of the development initiatives being considered in Dongobesh would require a great deal of assistance from regionally based APVDP specialists. Water development work, including the construction of shallow wells in many Dongobesh villages, would be the responsibility of the APVDP water specialist and the District and Regional Water Departments. Ox-plow and ox-cart production and oil-seed processing would require the skills of the APVDP small industries specialist, whose efforts led to the establishment of a farm implements production facility at the regional level, and ox-cart production units in each of the three districts -- including the Dongobesh Ox-Cart Production and Training Unit that began in mid-1980. Similarly, the specialist's search for oil-seed processing equipment began with the construction and testing of various hand-operated prototypes; it ended with the importation of a simple diesel operated press, and the establishment of the Dongobesh Sunflower Oil Production Unit in mid-1982, and similar production units in Hanang and Arumeru.

Afforestation, fruit tree production, and construction of two large crop storage facilities (completed in 1981-82) were the kinds of project initiatives that could be designed and implemented by district technicians and local leadership, without outside expertise. The Dongobesh Fruit and Forest Tree Nursery and Village Extension Program, our first major implementation challenge, was an especially complex undertaking, requiring a sustained effort from many people. In addition, it sought to introduce a new activity to the area that would necessitate extensive involvement from both the District Agriculture Office and the Natural Resources Office.

By mid-1980, the Dongobesh Fruit and Forest Tree Nursery was fully established. In the first year, the two-acre nursery produced 160,000 forest tree transplants, most of which were transplanted by villagers in 10-acre woodlots in 22 villages. (Because the need for trees was equally great throughout the division, a decision was made that the nursery would not just serve the 10 APVDP pilot villages, but all 24 villages, if possible.) The nursery also produced more than 50,000 fruit tree transplants, which were sold at very low cost. The income received in the first year, about one-third of recurrent costs,
helped to pay casual laborers who worked in the nursery. Forest trees, however, were provided without cost to villagers that had completed all preparations for transplanting.

A similar nursery and extension project was then begun in Murrai, another APVDP pilot area where afforestation and the introduction of fruit tree production were also priorities. One year later, two additional fruit and forest tree nurseries were begun in Daudi Ward, where the closing of all national forests in 1980-81 had put tremendous pressure on local people to produce their own supplies of timber, building poles, and firewood. By 1982, the combined annual production of the four nurseries established with APVDP support had reached 700,000 forest trees and over 100,000 fruit trees; in addition, 42 villages were involved in intensive tree-planting activities.

In the case of the nursery projects, as well as other initiatives, the project provided as much support as necessary to help ensure successful outcomes, including:

- Finding the right people to perform key functions;
- Making sure sufficient technical support was readily available;
- Assisting in the procurement of supplies and tools;
- Raising issues and concerns;
- Reviewing various tasks and responsibilities;
- Helping to solve problems and resolve issues;
- Establishing a routine for all project operations;
- Ensuring that various activities were completed on schedule; and
- Monitoring all project developments.

IMPLEMENTATION ACTIVITIES

Agriculture

- Dongobesh Fruit & Forest Tree Nursery and Village Extension (24 villages)
- Murrai Women's Vegetable Production Project (120 women in 3 villages)
- Karatu Soil Conservation (2 villages)
• Mbulu District Fruit Tree Orchard and Demonstration Facility
• Agricultural Pilot Extension Program (8 villages)

Livestock
• Village Grass Seed Multiplication Plots (10 villages)
• Village Livestock Slaughtering Facilities (3 villages)
• Livestock Disease Prevention Program
• Livestock Pilot Extension Program (10 villages)

Natural Resources
• Murrai Fruit & Forest Tree Nursery and Village Extension (7 villages)
• Daudi Ward Beekeepers' Training Project (36 men in 3 villages)
• Hayloto Village Fishpond (4 villages)
• Daudi Fruit & Forest Tree Nurseries and Village Extension (9 villages)
• Leucaena and Black White Wattle Seed Distribution (60 villages)
• Daudi Soil Conservation

Cooperatives (Small Industries)
• Kuta Village Maize Mill Project (3 villages)
• Dongobesh Sunflower Oil Production Project (20 villages)
• Tlawi Roofing Tile Production Project

Community Works (Village Construction)
• Labay Crop Storage Facility (3 villages)
• Maghang Crop Storage Facility (4 villages)
• Maretadu Bridge Construction Project
• Murrai Women's Community Center (3 villages)
Water
- Construction of 17 shallow wells
- Rehabilitation of 3 water systems
- Village Water Systems Maintenance Program (20 villages)

Roads
- Reconstruction of 180 miles of district roads

Planning Activities
- Village-planning meetings in 40 villages
- Extensive project planning in more than 20 villages
- District level planning meetings on many occasions
- Extensive project planning with 8 technical sectors
- Preparation of the "Mbulu District Issues and Priorities"
- Participation in the district's annual planning and budgeting exercise
- Preparation of 36 APVDP project proposals

TRAINING AND SUPPORT ACTIVITIES

Training Courses
- Agricultural Extension Training Course (21 people for 2 weeks)
- Training Course for Veterinary Auxillaries (20 people for 3 weeks)
- Livestock Dip Attendants Training Course (60 people for 2 weeks)
- Forestry Extension Staff Training Course (22 people for 2 weeks)
- Cooperatives Extension Staff Training Course (16 people for 2 weeks)
- Village Water Systems Maintenance Training Course (36 people for 2 weeks)
- Lushoto District Study Tour (11 ward and village leaders)

**Transport Support**

- 6 Landrovers to functional offices
- 35 Motorcycles to technical support and extension staff
- 40 bicycles to technical support and extension staff
- 1 7-ton truck for project implementation
- A full compliment of road-building equipment

**Feasibility Studies**

- Hainu Falls Hydro-Electric Pre-Feasibility Study
- Dongobesh Gravitational Water System Feasibility Study
- Karatu Soil Conservation Feasibility Study

**KEY AREAS OF IMPACT**

**Impact of Village and District Project Initiatives**

- Afforestation and fruit tree production
- Soil conservation
- Income-generating activities and projects of special significance
- Local production of needed commodities
- Water development activities and road reconstruction

**Impact of APVDP**

- Improved work performance
- Experience gained through participation
- Establishing development priorities
- Strengthening village support linkages
- Establishing an improved base for initiating development activities
IMPACT OF VILLAGE AND DISTRICT PROJECT INITIATIVES

Afforestation

The four tree nurseries under APVDP resulted in the planting of 1.5 million forest trees in Mbulu District. The District Natural Resources Office now has the capacity to produce 1 million forest trees every year. Murrai and Daudi wards have undertaken an intensive tree production effort, whereby every year 10 villages are each planting 25 acres of village woodlots. In Dongobesh Division, the establishment of the tree nursery made it possible to introduce tree planting in 22 villages -- and each village has planted 10 acres of woodlots for the past three years. Another major development in afforestation was the introduction of Leucaena throughout the district. Future benefits resulting from forest tree production activities will not go unnoticed in Mbulu.

Fruit Tree Production

Over 150,000 fruit trees were purchased and planted by villagers throughout the district: orange, lemon, tangerine, avocado, pear, apple, guava, and papaya trees were established in almost every village. In addition, four fruit tree nurseries with a considerable productive capacity are now in full operation, under the guidance of the district horticulturist. A district fruit tree orchard of 1,200 fruit trees was also established to serve as a demonstration and farmer training facility, and to provide seeds and root stock for all local nurseries. As a result of these projects and the experience they provided, fruit production will provide an additional source of income for many families in the future.

Soil Conservation

Soil erosion and the loss of soil fertility may be the most serious long-term problem facing Mbulu. The extent of the problem and recommendations to control it were the focus of a special APVDP study, which led to a regional-level workshop on soil erosion, the establishment of the Mbulu District Soil Conservation Team, and extensive soil conservation work in a number of villages. The primary thrust of local-level activities was to dissuade farmers in the Karatu area from plowing up and down slopes with tractors; a secondary aim was to establish sites for village experimentation with soil conservation. In the first year, when land was being prepared for cultivation, 3,600 acres of farm land in two adjacent villages were contour plowed, and grass dividers established. New village laws were also passed to support the measures being taken. In addition, approximately 50 acres in three village were used for testing and demonstrating various soil conservation techniques.
Income-Generating Activities

An extremely important dimension of APVDP implementation activities was efforts made to initiate projects that would generate income. The Dongobesh Sunflower Oil Production Unit is certain to produce substantial income to the village and farmers in the area. To a lesser extent, the production of ox-carts, roofing tiles, timber, fruit, fish, and vegetables will also generate much needed income.

Projects of Special Significance

Some of the village-level projects implemented with the support of APVDP offer special benefits that cannot always be quantified. The Hayloto village fishpond is expected to produce large quantities of fish, in an area where human diets are deficient in protein. Similarly, commercial vegetable growing involving 120 women in three Murrai villages is generating income for those participating; it is also introducing them and their families to new sources of needed vitamins and minerals. The establishment of new water sources in many villages is a great blessing to women who previously had to go 6-10 miles a day to get water for their families. And since the opening of the Kuta Village Maize Mill, people in the area no longer have to walk 15-20 miles to grind their maize.

Local Production of Needed Commodities

Among the district's priorities are projects that attempt to initiate local production of needed commodities that would not otherwise be available; cooking oil, roofing tiles, and ox-carts are three such commodities now being produced in the district as a result of APVDP.

Water Development Activities

In areas where water availability is a major problem, the construction of shallow wells and the rehabilitation of village water systems had considerable impact in communities now benefiting from their existence.

Road Reconstruction

The road reconstruction work undertaken in Mbulu had a positive impact on the people of the district, especially as it made possible the flow of goods and services, which had been disrupted by extremely bad road conditions.
IMpact of APVDP

Work Performance

The effects of both formal and informal training, with regard to improved work performance, were especially noticeable among technical support staff, ward and village leaders, and some extension personnel. The procurement of 35 motorcycles and 40 bicycles for key personnel also helped to boost morale and contribute to improved work performance.

Experience Gained Through Participation

Experience gained through participation in successful project implementation was one of the most important outcomes of APVDP. Village initiatives offered practical examples of how to start and manage local development, and helped to establish many new approaches to critical problems.

Establishing Development Priorities

The extensive planning exercise promoted by APVDP helped district leaders to identify the major issues confronting the district, and to establish development priorities that will guide future project initiatives.

Strengthening Village Support Linkages

By establishing on-going projects that necessitate regular contact and support, APVDP got many district-based technical support staff out to the villages on a continuing basis, to assist in local level development activities.

Improving the Base for Initiating Development Activities

The region and the three pilot districts now have a far better support base from which new development projects can be initiated.

Areas of Poor Return and Constraint

APVDP accomplished little in terms of improving farming practices and increasing on-farm crop production. Part of the reason is that the agriculture sector is faced with enormous problems and constraints that preclude quick and easy solutions. Also, it was not until the third year of APVDP that an agricultural specialist was available to provide full-time assistance. Consequently, in the first two years of the project,
local initiatives in agriculture focused on development opportunities that could be implemented and sustained. As a result, a number of significant project activities were successfully initiated. These helped to create momentum and establish a base of experience from which new initiatives could be taken. The response and support given to the Pilot Agricultural Extension Program begun in the third year was encouraging, but APVDP had only set the stage for further developments in improving crop production and farming practices.

The high rate of transfer among functional officers and other key personnel was a major constraint to development activities. In Mbulu, Agriculture had three functional officers in the first year of the project. In such cases, much greater cooperation was sought and established with technical support personnel, because they were far less likely to be transferred, and more likely to be available for village development activities.

In Mbulu District, an attempt was made to employ the dialogue method in four pilot villages, after special preparations and training in the technique had been provided. Over the course of eight weeks, several village meetings were conducted and a survey was carried out by representative villagers. The end result was that the villagers identified the same basic needs and priorities that had been privately stated by village and ward officials. Further, participants indicated that they were prepared to support their village leaders, who they recognized as having the responsibility for planning and directing development activities in the village. Thus there was really no reason to circumvent the structure that existed for interacting with villages; a more appropriate approach would be to work closely with ward and village leaders to improve their capacity to plan, organize, and direct village development activities, while seeking to strengthen contacts between villages and functional offices and their technical support staff.

LESSONS AND CONCLUSIONS

- Start out with project initiatives that will be successful and produce tangible benefits. Other things will then follow more easily, creating new opportunities and permitting new levels of involvement;

- Much of what was accomplished through APVDP can be attributed in part to the fact the expatriate technical assistance team was well situated within the government structure, in positions of considerable authority;
A well-implemented village project can have an impact on a village and its leadership that far exceeds the particular aims of the project. This is especially true in villages that have had many unsuccessful implementation experiences;

An effective way to improve one's capacity to initiate, manage, and support village development activities is through implementation experience that emphasizes learning by doing and on-the-job training; and

With support and encouragement, most villages are capable of implementing a number of development activities simultaneously. If they are to be successful, however, they require a lot of technical and problem-solving support. Strengthening the capacity of the district technical support departments, as well as village and ward leadership, is necessary if Tanzanian villages are to prosper.

DESIGN OF APVDP

APVDP was well conceived, and its focus on village development activities and strengthening of local support capabilities was especially significant. It enabled technical assistance to start with the existing realities and to respond to the development priorities of district and village governments.

The early termination of APVDP was most unfortunate, however. Four years of technical assistance is not enough time to obtain the maximum impact from the many initiatives set in motion by APVDP.

SUPPORT

DAI/Washington

The logistics and professional support provided by the home office was excellent.

AID/Tanzania

Support from AID was good, although it was surprising how little interest was taken in the accomplishments of APVDP.
APVDP Project Management

Project management was very supportive, in spite of all the demands and pressures that resulted from overseeing the regional planning exercise and the implementation of development activities.

Tanzanian Government Officials

The degree of support and enthusiasm offered by Tanzanian officials at all levels was extraordinary. Much of the credit for what was accomplished in Mbulu District goes to the area commissioner and other key officials, who supported APVDP from the beginning.

THE USE OF APVDP CONSULTANTS

One-third of the consultants made excellent contributions, one-third made useful contributions, and one-third contributed little.

APVDP should have had a full time "hands on" agricultural specialist involved in village development activities from the start of the project. In addition, the project should have had the services of an irrigation specialist much earlier, and he should have returned at regular intervals.

DIRECTION OF FUTURE ACTIVITIES BY A DONOR PROJECT

Those activities that should be considered for donor funding are as follows:

- Irrigation;
- Agricultural resources;
- Water development; and
- Soil conservation.

APVDP demonstrated that much can be accomplished when village development is the focus of project assistance. A prospective donor aiming to promote village development and other local-level initiatives would do well to consider the three APVDP pilot districts as prime targets for further development assistance.
DAI often reminded the APVDP technical assistance team to think about the sustainability of various projects and programs. Sustainability was always a concern in the design and planning of local-level activities. As a result, many APVDP project activities will continue to prosper. But there were other projects that were only in a very early stage of their development, including the pilot extension activities in agriculture and livestock, irrigation and soil conservation work, water systems development, and the production of farm implements. It is unfortunate that the project had to be terminated so early.
VILLAGE PARTICIPATORY APPROACHES

By Joyce Stanley

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Arumeru District
July 1979-July 1981
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THE ARUSHA PLANNING AND VILLAGE DEVELOPMENT PROJECT

APVDP was developed as a result of the Tanzania government's policy directions and was established to utilize the best features of the policies of participatory planning, and to expand and improve them as needed.

Objectives

One of the major goals of APVDP was to integrate the preparation of a regional plan with the process of bringing about developmental change in rural villages. The approach was not traditional because the development of the plan, by responding to village and district initiatives as well as external realities, would eventually provide a practical decision-making framework for the assessment and initiation of all regional development activities. The goal was to develop a planning approach that would be evolutionary and continuous, and that would not simply provide a static blueprint to the region based upon externally perceived needs.

Working within the existing institutional structures of the Tanzanian government, the project was developed to assist in the definition and implementation of a rural development strategy and action program that would ensure the flow of development benefits to rural people in a self-sustaining manner. Based on people's own participation in priority selection, it would remain a major focus of the project to act within existent policies. But where necessary and requested, the focus would act to improve capabilities, so implementation of these policies would improve.

The principal goal was to strengthen, plan, implement, and evaluate capabilities at the regional, district, and village levels. The government and project participants agreed that without this increased capability and the consequent interaction between villagers and district and regional personnel, the goal of self-sustaining development would not be easily achieved.

REGIONAL PLANNING SUPPORT

The regional plan, as envisaged by the project planners, was to be a process analysis that would grow and change according to development realities. Therefore, information was collected that would be useful for present and future planning. At the same time, there was an attempt to develop the planning skills of
government officials, with village support, so that the initial activities would continue. Districts were to assist in the implementation through the following activities:

- Collection of information on district resources and on past and current development activities;
- Assistance in the preparation of various sector assessments and definitions of planning units;
- Development of planning workshops for district staff to provide them with feedback on the progress of the plan and to maintain their inputs into its development; and
- Development of a comprehensive district-specific, long-term strategy paper utilizing the information collected during the first two years of information collection activities. This paper was to be developed to assist the region in the preparation of the regional long-term development plan, and the district staff in its own district-specific forward planning.

The regional planning activities provided one focus for increasing district and village capabilities. The second focus was more village centered, emphasizing increasing villagers' capabilities to plan, while integrating the village and district support systems.

The emphasis on this second aspect was based on two factors:

- The recognized problems with the traditional approaches to grass-roots planning presently being used; and
- The need to improve effective linkages between village planners, district officers, and regional decision makers.

To encourage increased communication in planning, the development of problem solving skills, and a commitment to the use of local resources for project initiatives, several programs were developed at the village level.

CAPACITY BUILDING AT THE DISTRICT LEVEL

Since the long-term success of the planned activities depended on the capabilities of the district staff to support the yearly regional planning initiatives and to work with the villagers in project planning, implementation, and evaluation, a major component of the project was the provision of training programs in six areas.
Planning

A workshop in district planning was conducted for all sector heads by the Cornell University Faculty of Regional Planning. The workshop included discussions on planning, project development and implementation techniques, and project management, as well as practical exercises in selecting an actual district priority and developing a district project around it.

District planning workshops were conducted to develop the 1981/82, five year and 20 year district plans. The topics included priority issues (needs) selection for the district, and priorities for the next year and the next five to 20 years, based on the issues selected. Issues chosen by the district included population increases, land use and land scarcity, personnel deployment and utilization, project selection process for each year's plan, material procurement, and financial resources.

From these issues, the District Planning Committee, including the functional managers, a member of Parliament, and the administrative and party officials, developed specific strategies to be followed by the district, to address the major problems selected.

Technical Support

For Ujamaa and Cooperative Development officers, a one-week workshop was held by the Ujamaa and Cooperative Development office to improve their village support skills. The content included refresher courses in bookkeeping, village shop management, and saving and credit schemes development.

For the livestock field staff, a three-week workshop was held on practical techniques in livestock management.

Experimental Approach Support

Prior to the initiation of the village dialogue and land use planning approaches to project development in the villages, district-level workshops were held for those expected to support the activities. Workshop content was developed from inputs of regional staff and seminar participants prior to each training activity. The training also included work-study tours in the United States and in other areas of Africa, as well as in-country and on-the-job training for district and some ward officials. There was also advanced training in planning in the United States for some regional officials, to provide the region with formally trained planning personnel.
Capacity Building at the Village Level

The basis for Tanzania's participatory policies and for every district and regional plan is the Tanzanian farmers. They provide the backbone of the economy through the provision of their labor. The importance of the farmer is recognized at all levels; at the same time, however, the farmers' capacity to plan and implement projects or programs is recognized as being inadequate in many cases. Therefore, improving the planning, implementation, and evaluation skills of the farmers, and integrating their planning activities into government initiatives, became a major emphasis of the project.

Although the basic system for capacity building existed, with the village councils communicating their plans annually to the districts, implementation was in most cases inadequate to provide self-sustaining programs. In consultation with regional and district officials, the project decided to utilize two relatively new approaches to village involvement in planning, compare these with the traditional approaches, and draw some conclusions for future activities in the district.

The Village Dialogue Model

The objective of this approach is to develop a cadre of district- and village-level facilitators who are capable of encouraging village mobilization for the implementation of self-reliant development activities. The facilitators, selected by the villagers, receive training in leadership skills; group discussion techniques; issues and resource survey techniques; evaluation and monitoring activities; and action planning, implementation, and management approaches.

After being trained, the facilitators conduct an issue and resources survey, with the general village population providing the information. When priorities are selected, action plans are presented to the village council for further development and implementation planning. This approach concentrates on assisting villagers to recognize and analyze their own needs and resources. Eventually, through small group discussions, the villagers develop plans to solve the selected problem. The skills gained in this process could continue to be utilized for other future problem solving and planning activities.

The Land Use Planning Model

This second approach was originally called the leadership experience model, since the approach was to have concentrated on already established and skilled persons in the village and district. The name of the approach was eventually changed to the land use planning model, as a result of the emerging interest in land use issues throughout the districts.
The essence of this approach is learning by doing in the field, with minimal organizational and communication skills training. Further, the approach is implemented directly through the village councils and their committees rather than through the mass mobilization approaches used in the village dialogue model.

The method begins with district-level workshops that concentrate on the description of the project and the identification of data requirements for developing a village production plan. The appropriate district officials then hold village meetings to gain the commitment of the village councils to participate actively in the project and to develop preliminary information on the problems and potentials for improved production and land use in the village.

The village council is then asked to assign the responsibility of developing a village production plan to one of its committees. With the assistance of district officials, this committee conducts a village land use survey and an inventory of existing economic activities. The findings of this study are reported back to the village council, with recommendations specifically in the fields of agriculture and livestock, small industries development, and soil and water conservation. Through village council meetings, possible activities are identified and priorities are established.

After a potential activity is identified, the district officials work with the village council to formulate an action plan, including the identification of necessary inputs, a proposed contract defining what the government and village council will each provide, and a plan for the future maintenance and support of the activity. The preparation of this work plan also includes basic social, economic, technical, and environmental assessments and provides for the introduction of these concepts to village and district officials. Built into these work plans are the necessary technical and management training to ensure that the village council can support an activity with a minimum of external assistance.

PARTICIPATORY APPROACHES IN ARUMERU DISTRICT

The geographic focus for the analysis of these experimental approaches was in the Arumeru District. The project staff there attempted to implement all the activities according to the original project plan in order to compare them and to recommend future activities to the region and district.

The other APVDP pilot districts interpreted this aspect of the project differently, based on population, land and climatic conditions, production emphasis, priorities, and needs.
Arumeru's activities were based on the diversity of ecology within a relatively small area, the varied leadership skills, the varied levels of development among villages, and the district's interest in utilizing all the approaches, to assist the planning office in making decisions on the usefulness of continuing any one of the approaches in the future.

After the first annual plan was developed, the district planning office held a district workshop for functional managers. At this time, the approaches were presented and decisions were made on which approaches, if any, would be implemented and how each would be operationalized. Although the approaches were offered as essentially a regional input to district development planning activities, they were presented as models to be tested, so that the district functional managers and planning officer could evaluate them and select which would be most useful for district development. The framework, therefore, remained a pilot activity to be implemented and evaluated at a later date.

Areas for implementation of each model were then selected, based on the present leadership capability, environmental conditions related to production potentials and land use, the need for technical or agricultural/livestock inputs, and other factors known to the functional managers involved in the selection process.

Two areas were selected for the facilitator model, one in a ward with varied leadership and the need for support in organization of its projects, and one in a ward where village dialogue activities according to the model were already ongoing because of the work of the Arusha Appropriate Technology Project (AATP).

The implementation of the land use planning model was selected for an area that was rapidly becoming over-populated and had problems relating to overgrazing and soil erosion (The Waarusha Livestock Agriculture Area).

Village Dialogue Model

The district team decided to begin with the village dialogue model, since much of the information related to the land planning activities is still to be collected through regional planning activities. Also, since the APVDP district consultant and AATP had already implemented or were implementing several similar activities, the group believed it was best to start with something more familiar to the district. Future plans for the land use planning implementation would depend on manpower availability, experience with the village dialogue model, and information on land use generated during the regional planning activity. The functional managers then selected a team of seven district persons, including representatives from livestock, education, agriculture, and natural resources, to implement the approach. Three of the team members were women.
Since the team could not begin its activities without its own training program, the district requested that the region conduct a training program, in the village dialogue model, as proposed in the first APVDP regional annual plan. This district proposal was based on the belief that what was prescribed in the plan would be implemented in all three districts and that training of district facilitators was necessary before village activities could begin.

The five-day regional seminar on the village dialogue model was conducted by two female expatriates from Kenya who had been conducting similar workshops and working with East African villages on this approach for over 10 years. Teams from Mbulu, Hanang, and Arumeru districts and from AATP attended. The response to the workshop was varied. Those attending from AATP were enthusiastic and committed to implement the model (its staff had had three years of informal experience in the village dialogue model implementation). Others, however, were skeptical about whether villagers would accept an approach to project development and implementation by the participants from one district. The Arumeru team was somewhere in the middle, accepting the basic concepts of the philosophy of participation, but anxious to put the program into action in order to evaluate its applicability in a Tanzanian village context.

**Village Dialogue Case I: Kikatiti Ward**

After the seminar, the Arumeru team drew up an action plan for the implementation of the village dialogue model in Kikatiti Ward, the area selected by the district functional managers as the most appropriate place to start the implementation activities. Specific criteria for the selection of this ward included good leadership, but with a need for training in project development and management; village councils that were organized but not very active in project activities; a low income area capable of increasing income through additional project activities; and an agricultural area.

Meetings were then held with each village council at which the district team described APVDP and the village dialogue model, and explained how it would be integrated into the year's planning activities. The villages accepted participation in the implementation of the approach and seemed even more interested when they learned about the revolving loan scheme that would be available for income-producing activities through the project. After these initial meetings, village teams were selected as facilitators.

The team of seven village facilitators who were eventually selected included two women, three non-village council members, the village chairperson, and the secretary. The chairperson and secretary were included on the team to ensure understanding and support from the village government. The other members were
specifically selected because the village council, although often representing a cross-section of the village population, rarely represents a wide geographic area or poor villagers. Since one goal of the activity was to include all villagers in project selection, planning, and implementation, the district team believed that the selection of project representatives based on geographic and economic factors would be most important. The district team also insisted that women be represented on the team, if the project was actually to reach the entire village population.

Although the villagers agreed to all the selection criteria, the inclusion of women proved to be a considerable problem when the seminar was actually held. Surprisingly, when the villagers sent the names of participants to the district prior to the seminar, each team consisted of five men and no women.

The district team visited each village to learn that no women were available to leave their homes for the three-day seminar. Eventually, however, when the village councils were informed that the seminar could not be held without women participants, two women from each village were found to participate. Each village facilitator group then consisted of the village chairperson; the village secretary; three to four villagers who were non-council members; and one to two women, in some cases the national women's organization representative, in others, teachers. The district team then developed the village seminar syllabus, based on the regional seminar activities, and conducted the village seminars.

The village seminars were then held in two stages, the first concentrating on needs and resources assessment and skill development, and the second focusing on an action plan and implementation activities. After the first seminar, the participants returned to their villages, established discussion groups through their 10 house cell units, conducted a needs and resources assessment through listening surveys and discussions with the small groups, selected priorities, and presented these to the village council for concurrence.

The participants then returned to the second seminar with this information to be used in the action planning exercises. The two-session approach gave the villagers a chance to return to the village context between seminars, and bring real problems and issues for the action-planning implementation.

Upon completion of the second seminar, the trained facilitators returned to their small groups to begin action-planning discussions. The action plans developed in each group were then presented to the village council, with a request that the plans be synthesized and developed for village-wide implementation.
The district team attended all the village group meetings, both to provide support to the village facilitators and to learn more about the actual implementation of the approach at village level. Problem priorities were selected by each village, and actions were recommended and taken by the council.

The majority of the solutions for action depended on APVDP funds, and few included the development of projects or action that was totally dependent on village inputs or that was dependent on other fund sources. The team and APVDP consultant were initially disturbed by this, since the major goal of the project was to develop village self-reliance in planning and implementation skills. Most projects selected, however, were either income producing or through the provision of a needed service, would eventually lead to increased income (water projects, for example). All projects were given the full support of the village and, in some cases, would require their inputs for construction activities or their contributions. Villagers were unaware of funding sources other than APVDP and the government, and justifiably saw APVDP as an excellent source of funds.

The evaluation and analysis meetings resulted in the production of a loan and grant sourcebook for villagers. At the time village dialogue model activities were being implemented, Arumeru District had access to the services of two students from the National Rural Development College who were conducting their one-term's fieldwork in the district. Based on villager inputs, the district requested that these students assist in preparing a guide to non-government funding for villagers.

The booklet included a description of potential funding sources for villagers, including loan or grant requirements, and samples of organizations' required forms and any other information relevant to the villagers to assist them in applying for funds from the groups. In addition, there were examples of two hypothetical villages going through the process of applying for funds from two of the organizations.

The villagers pointed out during their evaluation discussions that there are very few projects that do not depend in some way on outside resources. They also indicated that future action planning discussions should emphasize realistic resource assessment for project implementation, as well as consideration of projects that rely upon minimal outside inputs.

**Village Dialogue Case II - Kikwe Ward**

Kikwe Ward's experience with the village dialogue model began a full year before APVDP's and the district's inputs, with the work of AATP. It had been working in the area, conducting facilitator seminars and using essentially the same approach used in Kikatiti.
During the needs resource assessment with each village (Kikwe, Namtala, Karangai, Mawenzi, and Valeska), the need for improved housing proved to be the major priority throughout the ward. Since AATP could continue to provide only technical assistance in future project development, the villagers, district staff, and AATP decided to develop a proposal for APVDP funding of an improved housing project, including the establishment of village building brigades in each village of the ward. It was believed that the integration of all of these resources would encourage the successful implementation of the project, and improved communication and mutual support by all parties involved.

After several village and ward meetings involving all participants, a proposal was developed that included the following components:

- The establishment of village-centered building brigades in each village;
- The initiation of a training program on improved low-cost housing methods and designs by AATP;
- The establishment of a district building brigade to provide continual district-based support for project activities;
- The training of village bookkeepers in each village by Ujamaa and Ushirika; and
- The provision of housing loans to villagers by APVDP, to assist both the poorer villages in house construction and the brigades in the development of their small industry, by ensuring customers during their initial stages of project activity.

The proposal was approved at the region, and a board of directors was established under the direction of the ward to manage and monitor all village brigade activities. The board consisted of the ward secretary, the ward education officer, the village chairmen from each village, and two representatives from each village building brigade.

The training was conducted, and one house was built in each village by each brigade. However, the problems connected with implementation were numerous. The ward secretary was transferred immediately following the development of the project. The price of the house had doubled since the original estimates were established. The house built during training was of a different design than that planned for village construction and confused the villagers who were requesting loans for smaller houses. Considerable amounts of cement were stolen, decreasing the strength of the initial houses and causing the villagers to be suspicious about the appropriateness of the technology being offered.
Several technical problems surfaced during village construction activities, even though the same technology had been successfully utilized in other areas of the district. The district building brigade technician did not arrive in the district until two months after the training program and, after his arrival, had difficulty continuing fieldwork because of other commitments.

Even with these problems the villagers continued to support the activity and had several meetings to provide the district with a request for continuation, with modifications. Their requests included an increase in the APVDP loan to reflect the increase in costs for materials, more involvement by the District Building Brigade, a motorcyle for the ward secretary to enable him to maintain follow-up activities, and additional on-the-job training for the village brigades to enhance the skills attained during the initial training program.

Land Use Planning Model (formerly the Leadership Experience Model)

This was the second approach established by the region for implementation in villages and approved by the Arumeru District functional managers. When the time came for implementation, it was decided both to change the name of the activity and to incorporate additional components. This was done because of the experiences in the district to date and the information gained during the regional planning exercise. The leadership experience approach became the land use planning activity; in addition to training in land use planning, all participants were to receive training and information on communication and leadership skills that were utilized successfully during the village dialogue activities.

Olkokola Ward remained the site for implementation because of its soil erosion problems; leadership capabilities; agricultural and livestock economic dependence; and the rapid increase in population, which has drastically affected land use (Waarusha Livestock Agricultural Area).

Activities began at the district level where discussions and workshops were held on population issues, land use planning techniques, ecology, environment, and communication techniques for village dialogue. Participants from the district included representatives from the agriculture, livestock, natural resources and planning offices, with functional managers attending the initial planning meetings. Unfortunately, there was only one field staff person assigned to the Olkokola area (from natural resources), so the project initially become dependent on the district-centered staff for implementation and follow-up, even though the experience with the village dialogue model proved that this type of dependency was not ideal.
At the district-level meetings, the team developed a list of major constraints to district- and village-based land use planning activities, and a methodology for discussion and implementation of land use planning activities in Olkokola. The constraints as seen by the district staff included increases in population in the area, overgrazing, and inadequate use of drought-resistant crops.

The first step at the village level was the presentation of the approach to village leaders from the wards. This meeting took on a workshop approach in that issues related to land use and population that were discussed at the district level were also considered here. Picture codes were used during this activity, depicting some of the problems already established, to assist discussion. The leaders concurred on the problems that existed and agreed to have individual village council meetings for each of the four villages in the ward in order to begin local-level discussion.

Meetings were held in each village where problems selected by villagers during the regional plan survey of villages were presented, to obtain the concurrence of village councils and to establish priorities. After they were determined, each village established sector committees to look at those priorities, develop tentative action plans with villager concurrence, and present these plans to the village council for approval and development of an implementation schedule.

These committees were seen as technical liaison bodies, coordinating village needs assessment, action plans, and district inputs. Selection to the committee was based on interest in a particular discipline and the council's recommendation that the person was dependable. A schedule was developed for future meetings by these committees to discuss the problems and develop action plans for the village councils.

The major problems selected by the villagers proved to be almost exactly the same as the district-generated list. The villagers' priorities included concerns about population growth and land scarcity, overgrazing and methods to encourage destocking, improved agriculture activities including the introduction of drought-resistant crops, and the need for tree planting in the area to help prevent continued soil erosion.

COMPARISON OF THE TWO PILOT APPROACHES

Commonalities

The Arumeru District planning officer noted that both approaches had positive results, and both suffered from some of the same problems. The importance was thus to incorporate the
best of each into the regular planning system. He also noted that, without the necessary support systems to implement the two approaches thoroughly, their continuation in the districts would be difficult.

Both approaches were implemented as an experiment to assess their applicability in district and village development, and therefore required additional manpower and activity inputs in the overall district- and village-planning activities. Their replicability was dependent on their singular relevance and capability to continue within the given district structure. Neither model was able to do this.

It is true that many aspects of the village dialogue model were incorporated into the land use planning model and that the annual planning document includes specific training programs in land use planning and communications. But as a total entity, as implemented in the pilot wards, neither will be continued.

This then provides the second common feature, namely, the support for various aspects of each model and interest to continue certain selected activities, including:

- Use of facilitators in district workshops on land use planning and general planning activities;

- Incorporation of the land use planning concepts into the district plan, including the recommendation to extend the pilot activities in an entire division, village selection of priorities, and development of a district land use planning committee;

- Selection of district facilitators and land use planning team members for participation in various regional workshops on related activities (such as soil conservation and Ujamaa and Ushirika management training);

- Continued use of picture codes and facilitator discussion techniques in pilot wards for other project planning activities;

- Encouragement of villages selecting priorities based on an analysis of farmers' and future village plans by district functional managers during their yearly planned village visits; and

- Assessment of human and material resources in project planning in the villages that participate in the activities.
Difference in the Approaches

The village dialogue model was used as a resource for the implementation of the land use planning model. Thus a clear distinction between normally comparable elements of each is impossible. District village dialogue team members conducted training during the land use planning workshops. Picture codes, a feature of the village dialogue model, were used in all village discussions to encourage the analysis of problems by villagers. Village committee members in the land use planning area began to develop small action groups for planning and implementation.

The only problem that emerged during the village dialogue model that was not adequately solved during the land use planning implementation was the need for an extension person based in the area for concentration and implementation. (Although the district had planned to have a livestock and natural resources officer located in the Olkokoka Ward to follow up on the planned activities, one month prior to implementation the livestock person was accepted in a degree program, leaving only the natural resource officer.)

Despite the obvious overlap due to the consecutive phasing of the two models, differences can be noted:

- The village dialogue model emphasized mass mobilization and participation in every aspect of planning and implementation, while the land use planning approach relied on village leadership for these tasks; and
- The village dialogue model concentrated on communication and leadership training, whereas the land use planning model stressed training related to land use, population, livestock, agriculture, and natural resources. The village dialogue model would include this type of training only when and if requested specifically by a villager after the needs assessment and action planning.

BENEFITS AND PROBLEMS IN PARTICIPATORY APPROACHES

Village Dialogue Model: Benefits

The major positive features of the model included:

- Integration of development planning activities by villagers, and ward, district, and regional staff. Each phase of project development required communication among these parties, and success was dependent upon it;
• Selection of problems and priorities by the majority of villagers and district staff. These skills will remain with the participants in their own future work;

• Development of village projects that require widespread participation and commitment to continuation; and

• Development of skills in project management and evaluation.

Village Dialogue: Problems

The transfer of district team members was a major problem faced in the implementation of the village dialogue model. After the facilitator model was introduced, the district had three district development directors and three planning officers. More important, at the village level performance was affected by the transfer of five of the original facilitator district team members after training and after village-level implementation.

Recommendation

Train local people who will not likely be transferred. District staff are frequently transferred and often cannot implement planned activities due to the lack of transport. Using available resource persons would ensure a continuation of initiated activities.

Lack of either material or technical support was a major problem. Even if a village selected a project that could be implemented locally, implementation would usually depend on some outside support, either in the case of materials or technical expertise.

In too many instances, when the villagers reached this stage of project development, support was not forthcoming. Since neither the villagers nor the district team could anticipate all types of inputs needed prior to project selection, or shortages that would occur, preplanning was difficult. Without needed support systems, project success was impossible. Discussions with villagers showed that increased resources assessment during action planning was necessary, so that alternatives could be developed prior to implementation.

Recommendation

Increase analysis of resource availability during action-planning stages, and consider other options should resources that are expected fail to materialize.
Lack of funding support was also an issue. All participants in the village dialogue approach questioned the need to discuss self-reliant development activities when they knew the funding capability of APVDP. Although the team stressed the short-term availability of APVDP inputs and the importance of the long-term effects of the training, the villagers consistently developed projects that were dependent on outside, APVDP funding support.

Recommendation

Participants should be made aware that not all funding support can come from project implementers, even though some funds might be available. In all cases stress should be on independent funding source selection, encouraging analysis of self-reliant project development.

To encourage movement away from this type of dependence in Arumeru District, the team developed two solutions. The first was the preparation of the handbook on loan and grant facilities to villagers. The second was the initiation of several discussions with villagers on the reasoning behind project approval by APVDP. In all cases only those projects that would eventually pay for themselves were approved for submission to the region by the District Planning Office. These discussions on self-sustaining project development that would eventually assist the villagers in provision of other needs, especially social service projects, proved useful to the villagers in better understanding the purpose of APVDP and larger issues of development. In many ways, however, the discussions proved most useful to the district team. On numerous occasions during other planning meetings at the district, the team members were seen as strong advocates of self-sustaining income-producing development projects prior to the initiation of social service activities.

Land Use Planning Model: Benefits

The major positive features of the model included:

- Training in land use planning techniques for district staff. Implementation of the land use planning approach in one district ward on a pilot basis prepared the district for more widespread implementation of similar activities; and

- Analysis by villagers of resource factors that influence their lives, specifically village discussions on land use and population. This included presentations in all participating villages by the regional office of the National Family Planning Association on establishing population growth in the area;
**Increase in awareness of land use considerations for the area, laying the groundwork for future implementation; and**

**Increased knowledge for committee members who work with district personnel and can share their new knowledge with interested villagers.**

**Land Use Planning Model: Problems**

Although not as many district-based team members were transferred, during the first six months of operation the land use planning team had three different livestock representatives working with the group.

**Recommendation**

If possible, any team working with villagers on a continual basis should live and work in the area. Field extension staff are the most appropriate as they have both a familiarity with the area and an additional expertise required for implementation.

The village council selected priorities and members for the various committees. In some cases these decisions were inadequate. In one village, for example, the livestock committee decided that the village should establish a communal grazing area to encourage destocking and eventually improve land use. When the villagers were called to lay the boundaries for the area, only three persons arrived, the village chairperson and two others. As a result the leaders decided to meet with small groups of villagers (10 house cell units) and begin discussions on the action selected. Gradually, through continued implementation of village-based activities, it was established that without commitment by a wide range of villagers, project implementation would be unlikely. Consequently, increased emphasis on village dialogue was stressed.

**Recommendation**

Action plans developed by village leaders do not always receive adequate support from those required to implement them. It is best, therefore, to encourage the development of action plans and concurrence by those who will have to participate in implementation. If the leaders are depended upon to ensure action implementation, they will need the influence, respect, and skills necessary for positive results.
Most technical inputs required and requested by the villagers and all project development were dependent on district staff. With each team member's other commitments, it was impossible to provide consistent technical inputs into the area.

**Recommendation**

Ensure support of field extension staff prior to project implementation and do not rely only on district staff.

**CONCLUSIONS**

**District Capacity Building**

To encourage the support of village participatory activities, training programs and dialogues on planning approaches were generated at the district level.

The impact of the district's participation in issues selection, priority establishment, and strategy development (essentially a re-enactment of the village dialogue model at the higher government levels) spread in two directions.

First, the information and insights provided through the district strategy paper assisted the region in preparing a regional planning strategy and policy recommendations for future development programs. This ensured the construction of a plan that reflects the concerns of the districts.

Second, through numerous training programs in planning, district functional managers became aware of their ability to affect village development programs. They also became more capable of assisting villagers in planning, implementing, and evaluating their own development projects. If one can assume that increased awareness and involvement in policy and strategy development results in action, implementation can be expected in the future.

One problem remains, however. That is the issue of personnel transfers. All of the regional functional managers who attended the planning courses and the regional development directors who participated in the planning activities were transferred. Although they generated strategies and policies that are well documented and district supported, it remains to be seen whether their replacements will have the same commitment. This high number of transfers did not occur at the district level and, therefore, continued commitment at that level is more likely.
Village Participatory Approaches

The major conclusion to be drawn is that a relevant participatory approach will emerge:

- If the population of a village or group selects the action after thorough discussions by all potential beneficiaries and participants;

- If the population of a village or especially selected representatives are involved in planning, implementing, and evaluating the action selected or project designed;

- If those required to participate in action implementation are participants in action planning;

- If the project encourages self-sustaining income-generating activities;

- If an extension person, or trained support person, is living and working within the target community; and

- If support systems are available locally or firmly established during the action-planning phase of the project (this includes material, human, and technical support).

The importance is in the thorough consolidation of all of the points for realization of an effective participatory development strategy. Elaboration of each point underlies the rationale.

- The population of a village or group selects the action priorities after thorough discussion by all potential beneficiaries and participants.

This step often takes the longest. In many village-based projects, however, it is one of the most crucial factors. All too often leaders are asked what are the needs of the village or primary issues facing the population are. Yet the leaders often are the rich of a village who cannot and do not represent the general interests. Without a needs/issue/resource survey of the target group, the initial information received by project planners could be invalid and make all future action steps futile exercises. This does not necessarily mean a survey of general needs, issues, and resources is required for each and every program. The planner or surveyor can be working within very specified parameters, depending on the focus on the project. For example, AATP centered its village needs assessment on those issues relating to water supply and storage, housing, fuel conservation, and transport implements. Another project in the region surveyed only health-related needs. The same could be done with an agricultural, livestock, or natural resources project,
simply by concentrating the survey on the area of future project work. The importance, however, is the selection of priorities for action by the general population if their support is to be expected.

This process will take more time than a rapid reconnaissance survey by an outsider or discussions with village leaders. But without this first essential first step, the initial information received by project planners could be totally inadequate.

Those who espouse the development of technology packages for villages without adequate consideration of locally stated priorities often consider participation as important only to enable the farmers to adopt new technologies that outsiders view as capable of increasing the farmers' income and self-reliance. The important element of involvement in problem solving is missing, however. Will participation in the project being advocated ensure that the participant will act in the same positive ways in future project development? What will the villagers learn about future project selection and development when the choices are being made by others for them?

The concern remains that if projects are selected for the villagers, they will never develop the problem-solving skills necessary in the future to select, plan, and implement activities not suggested by outside experts. The implication is that the expert is needed to provide the critical, creative, innovative touch. When the project is successfully completed, according to this view, others will follow the progressive farmers lead and adoption will take place.

If development planners do not take the time to listen to the farmer and let him select priorities for action, and if the planners continue to come up with answers and approaches that are needed to improve the villagers' life, the real difference between the old top-down approach and the new participation approach are negligible.

- The general population of a village or group, or specially selected representatives for a project, are involved in detailed planning, implementing, and evaluating the action selected.

The first step ideally should be undertaken with the general population, and then that group should select a committee of planners for project development. If already established committees are utilized for a new project, the freshness and enthusiasm connected with developing the new project is very often lost. Also, the use of problem-oriented committees can encourage volunteer support as a result of project focus. Once the committee is developed, its members should prepare an additional plan and present this plan to the general populace for concurrence.
A good example of this occurred in Kikwe. After the village-wide surveys, which identified housing needs, village-building committee members participated with the village chairman and secretaries in establishing the ward board of directors, which took over project management activities. As both council members and brigade members participated, action planning related to the practical needs of both implementation groups.

- Those required to participate in action implementation are participants in the action planning.

This does not necessarily mean that those who participate in action implementation have to be involved in every meeting connected with project development and planning. The selected planning group, those particularly aware of skill requirements, would prepare an action plan for the larger group and then present their final plan for approval. In one land planning village in Arumeru, the livestock committee selected by the village council developed an action plan to control overstocking by creating a village communal grazing area that would serve the ideal number of cattle for the village. The committee agreed and council agreed, but no general meetings were held with villagers, nor were there small group discussions set up by the committee. After several attempts to begin the fencing activity, the committee decided that they would have to begin discussions with villagers before the fencing would actually take place.

This participation in action planning by implementers refers not only to the village participants but also to all potential participants in project implementation. Without ensuring involvement in planning by all actors, including government officials and suppliers, actions cannot be ensured.

- The project selected is a potentially self-sustaining income-producing activity.

Social service projects, although often mentioned as village priorities, are not considered important regarding implementation. As one village woman said, "Our health problems are totally based upon our money problems. Without feed we cannot work, without clothes our children cannot go to school, without money we become sick." This woman, the leader of the women's group in one village, was instrumental in working with her group to develop a village shop, which is now making a profit. Now the women can begin to have discussions on health issues and approach their solutions knowing their own financial capabilities. This is only one example of many in Tanzania, where villagers, after developing financially viable projects, begin to work on their schools and clinics.
In addition, income-producing activities such as the Kikwe building brigades can lead to other economic activities that increase the village's potential to support itself. With skills gained and capital increased, the villages are capable of continued self-reliant expansion.

• An extension person or trained support person is living and working within the target community.

Villagers develop priorities, establish action plans, and set up implementation committees. Their solutions can have economic benefits. But there often is no local person available with some knowledge of outside resources, or with some additional skills for information. In such a case a project could work, but expanded implementation time should be expected.

The project manager could be a government extension person serving a liaison role between specific sectoral offices and having an access to specific technical information. This person could be a village who had received outside training in a skill related to the project. He could be a church worker, a representative of a private voluntary organization, or a volunteer living in the area and interested in the particular project. The most important factor is that the person is selected by the villagers and project planners to assist in implementation and project development and that person agrees to take on the commitment. Once the villagers begin working with this person, the necessary link to outside information or inputs is established.

• Support systems are available locally or firmly established during the action-planning phase of the project (this includes technical and human support systems).

Villagers cannot plan for every contingency. An attempt must be made to identify the resources needed for project implementation and to develop the project with these in mind, establishing contingencies in every reasonable case.

An example is a village that decided to request a loan for a maize mill. During discussions about resources at a village meeting, it was firmly established that the village had in the past produced more than an adequate amount of maize to support such an activity. The loan was granted, and the mill was installed. When the payments started coming in late, an investigation showed that in fact the great quantities of maize were being sold outside of the village because of the higher prices received. Villagers were using purchased, already ground maize for their own consumption. The mill was not being used locally. Although the resources were there, their actual availability was not really considered.
These then are the major components recommended for successful project implementation. Some works on participation often add an additional consideration, namely, the recommendation for ensured leadership support before participatory approaches can be implemented.

For the women of Majengo village in Arumeru District, development in a participatory development project meant the development of a village shop even though the village leadership was firmly opposed to the initiation of the activity. After the women conducted a needs assessment and decided to develop a women's shop, the plan proved to be a threat to the village chairman, who owned one of the only other existing commodity shops in the area. He attempted to prevent their plan by complaining to the district and regional authorities that the women's shop was illegal. His attempts only increased the commitment of the women. They recruited the support of other village groups and confronted the village chairman at a general meeting. The conclusion of the meeting was that the village would consider electing a new village chairman and that the women's shop would continue.

Thus the participatory approach is intentionally revolutionary where political exploitation exists. The approach by operation does not rely upon hierarchical government control, but rather seeks to generate its own. Therefore, to conclude that without the political and bureaucratic support the participatory approaches will not result in affirmative action is to reject totally the strength of the approach in making people aware of their potential to change their lives and improve their condition, especially those who are being exploited.

It is true that the entire system in Tanzania was originally developed to support a participatory grass-roots approach and is often successfully based on local bureaucratic and party support. An absence of support by that or another political or bureaucratic system, however, should never preclude development of a participatory program. The program, if it supports participation in problem identification and problem-solving skills, will find its place in the system in which it exists.

Participatory approaches, when utilized fully, encourage reflection, and respect for local needs, and result in critical awareness and action. This can begin and occur regardless of the social structure, but the actions of the participants will reflect an identification and reaction to the existing situation. If the result of successful participation is to identify an oppressive structure, confrontation will most likely occur. If, however, the political structure is responsive to the issues raised by this approach through open media and public forums, then growth can result.
The awareness, if gained, can never be lost. Frustrations will come with the inability to act on one's behalf, but to deny people the opportunity to grow because in the long run they will become frustrated is not the right of the development planner. To introduce participatory approaches to people who are oppressed, who are unorganized, who have had little input with respect to their knowledge and expertise, is to begin a process of development that has the potential for significant social action and change.
THE RESOURCE CENTER,
REGIONAL PLANNING OFFICE

By Sally Johnston

Resource Center Coordinator
THE RESOURCE CENTER, 
REGIONAL PLANNING OFFICE 
By Sally Johnston

ACTIVITIES AND ACCOMPLISHMENTS

Since the inception of the Resource Center, its staff have:

- Organized and cataloged, by author and title, 1,100 books and articles;
- Compiled complete sets of APVDP documentation (190 documents) and placed them in the Resource Center for easy access and safe keeping;
- Organized extra copies of documents so they could be easily found and set up a notebook to keep track of their distribution;
- Instituted a check-out system for Resource Center materials;
- Circulated catalogues of publications to team members so they could indicate which publications they would like ordered for the center;
- Ordered those books requested and designed an acquisitions register to keep track of what was ordered, paid for, and received; made sure all invoices were paid promptly;
- Catalogued new acquisitions;
- Responded to requests for the procurement of materials, specific books, and maps from regional and district officials, administrative staff, and members of the technical assistance team;
- Initiated a newsletter that is now published every two months. This newsletter describes the center, announces new activities in which the center is engaged, and describes recent acquisitions of particular interest. Each issue has a complete listing of recently acquired materials. This newsletter is distributed to the districts, and people are encouraged to request materials of interest;
- Organized a set of land use planning materials, consisting of 300 maps, aerial photographs, satellite imagery, and Ecosystems survey data material. Inventoried the map file and indicated location of materials described in Land Informaterials Available to APVDP by Christine Dodson. A check out system designed by Ms. Dodson is used for these materials;
• Regularly up-dated and distributed the APVDP documentation list;

• Sent complete sets of APVDP documentation to the East Africana Section of the library at the University of Dar es Salaam and the National Documentation Center at the national library. Continued to send documents as they were published. Documents were also sent to DAI/Washington and to Dave Lewis at Cornell University;

• Trained Ms. Mkonyi, who was recently assigned to work in the center. She is adding the documents from the Regional Planning Office to the center and cataloguing them;

• Wrote a manual of instructions for running the center, including cataloguing, and finding and checking out materials; made a diagram of the center showing the location of different types of materials;

• Abigail Ryan, a Peace Corps volunteer assigned to work in the center, produced a subject index for the materials catalogued. She is producing extension materials in Swahili for extension agents, contact farmers, and contact groups; and

• Annotated the APVDP documentation list for inclusion in Volume Five of the long-term development plan.

IMpACT

Publicity through the newsletter and word of mouth resulted in an increase in the number of Tanzanians coming to use the center, both to borrow materials and to take away documents. They come from such places as ASAMI, TIB, Dodoma, Education-Planning in Dar es Salaam, TIRED Tanga, CIRD AFRICA, and a local high school.

AREAS OF POOR RETURN AND CONSTRAINT

Areas where problems still exist include:

• Lack of Swahili materials for people not fluent in English;

• Lack of a specific budget for the center. Requests from members of the technical assistance team and Tanzanians were always honored. However, some people never requested anything and materials in their subject areas may be lacking. The lack of a budget was also a constraint to soliciting requests for materials because the permissible level of purchases was unknown;
Lack of a Tanzanian counterpart assigned to the Resource Center for over one and one-half years. Also, since the staff of the center were employed only part time, it was often closed, thus frustrating people's attempts to use it;

- More should have been done in terms of getting materials out to the districts;

- Lack of a working Xerox machine made it impossible to copy parts of documents or books; it also made duplication of documents extremely difficult as everything had to be done on stencils; and

- Use of the center by regional planning officials was not as great as had been hoped.

LESSONS LEARNED

When the technical adviser began work in the Resource Center in April 1981, it was expected that she would work with a Tanzanian counterpart. But the counterpart assigned was sent to Morogoro for training after one month, and no replacement was assigned, in spite of repeated requests. Perhaps it would have been preferable to have a Tanzanian involved in the initial organization of the center. However, until it was organized and functioning as intended, it could not be used, and the benefits of such a center could not be recognized. When a new regional planning officer, John Kyambwa, arrived, he was most pleased and impressed with the center. He assigned a planning officer to work with the technical adviser in the Resource Center and eventually run it. Ms. Mkonyi was assigned to the center in July 1982, more than one year after the departure of the original counterpart.

Thus, for projects whose usefulness is not initially recognized by the Tanzanians, the best approach may be to establish them first before insisting on Tanzanian input. Once the value of a project is recognized and there is a desire on the part of the Tanzanians to sustain it, it is easier to get a commitment of assistance.

The Resource Center was initially located in Room 36 of the Regional Block. But when TISU left the Conference Center and moved to the Regional Block in July 1981, the Resource Center and the Secretariat were moved to the basement to make room for them. A Resource Center that is trying to encourage people to come and use its materials should not be located in an inaccessible, noisy, unpleasant place. Thus only highly motivated expatriates used the center. Fortunately TISU did not need the two rooms assigned to it, and the center moved back to its original location.
Initial attempts to obtain input from regional and district officials concerning types of information and materials that would be useful to them were unsuccessful. Only when lists of available materials were circulated did they respond with requests. People did not seem to know what types of material might be available or what to ask for.

**SUPPORT**

Response by DAI/Washington to requests for materials and for duplication of documents was usually good. Support by AID, however, was insubstantial.

Project management always responded positively to requests to purchase materials. However, no advice was ever offered. Among Tanzanian officials and colleagues, John Kyambwa was most supportive and proud of the center.

**CONSULTANTS**

Such papers as women in development, soil erosion, population profile, and the village profile were much in demand. If consultants do not produce papers, little of what they learned is passed on.
PART THREE

TANZANIAN VIEWS
INTRODUCTION

The following opinions, findings, and conclusions are based on an analysis of data collected from a sample of 90 government, party, and village officials who were asked their views of APVDP. These interviews were strictly informal, and quoted opinions therefore are not attributed.

No opinions are expressed in terms of percentages. The reasons for avoiding this kind of formal analysis are threefold:

- Those interviewed gave varying emphases to their statements;
- It was not expected that all of the 90 people interviewed would have views on all of the subjects; and
- The informal, discursive nature of the interviews was not conducive to statistical analysis.

In this study, criticisms of the project outweigh compliments. This is because criticisms serve to determine where the approach of APVDP could have been improved.

Nonetheless, the outstanding conclusion of the survey is that APVDP was widely and greatly appreciated in the region, and was viewed as a success. Above all, in the view of most officials, the project achieved its objectives and met its contractual obligations. The technical assistance team supplied by the project worked hard, long, and honestly. Many of those interviewed made the point that they viewed the negative things they had to say about the project as shortcomings of a good project, not as indications that APVDP was a bad project.

It may also be useful to point out several observations the interviewer made in the course of the survey, and that may stand out as curious in the text.

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1 This part of the Final Report was compiled by Liz Wily, a consultant, at the request of DAI and of Arusha regional officials, to add the insights of Tanzania government party and village officials regarding the lessons learned from APVDP. It should be noted that APVDP experienced an almost complete changeover of regional and senior district officials during its course of implementation. Although this made the process of implementing a cohesive and well-communicated project difficult, it nonetheless resulted in more Tanzanian officials being involved in and learning from the project.
First, on many subjects the same person made seemingly contradictory statements. This is largely due to the discursive nature of the interviews wherein an interviewee modified his view after giving it more thought, or seeing the issue in a new context. In part it is also due to a genuine ambivalence about the more complex issues relating to the project.

These contradictions have been reconciled where possible, but many still stand as they were presented.

Second, the nearer to the village level, the more favorable were the views expressed. APVDP was primarily a village development program, and village leaders were entirely enthusiastic.

Yet at policy-making levels, the fact that APVDP was not, by design or implementation, a large projects program, such as the kind found in most other RIDEPs in the country, clearly was a disappointment and tended to overshadow views of officials at those levels. The author was tempted to conclude that had these precedents not been set, views of senior officials might well have been different.

Third, the fact that the lifetime of APVDP was cut short, and that the increasing pessimism in the region that APVDP's donor, AID, will not be forthcoming with new funds, also influenced impressions and opinions on the project's success. Again this was especially at those policy-making levels where such issues are of prime concern.
### Arusha Region
Interviewees by Category

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<th>Functional Heads</th>
<th>Other Staff</th>
<th>Field Staff</th>
<th>Party at District Level</th>
<th>Katibu Tarafa &amp; Kata</th>
<th>Village Leaders</th>
<th>Total Number</th>
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Early in the interview officials were asked to identify the good things and the bad things about APVDP. These responses are difficult to put into any kind of hierarchy of importance for the following reasons:

- The question was too broad, and interviewees answered it in different ways at different points of the interview;
- Interviewees gave varying weight to the things they considered positive or negative;
- Interviewees tended either to concentrate upon activities in their own sector or area, or to discuss virtually every activity; and
- Interviewees often qualified a stated achievement or failure later in the interview.

Nonetheless, the more involved an official was in the implementation of APVDP, the more positive that official's attitude was. The more involved an official was in village-level project implementation, the less concerned he was about whether the project was a proper RIDEP or not.

Village leaders, almost without exception, were unable to cite bad things about the project. Many felt they had received more help from APVDP than from any other body, including government. In contrast, officials at the regional level felt less involved with APVDP and were less positive.

Both achievements and failings were talked of more abstractly the further away from the village level the interviewee was. For example, illustrative comments included:

- At the regional level: "APVDP has helped us identify key problem areas."
- At the district level: "APVDP has given soil conservation a good push in this district."
- At the village level: "The best thing about APVDP has been the maize mill machine they brought us."

Notwithstanding the disappointment that APVDP was so short, officials almost without exception felt APVDP had done what it said it would do. At the regional level these comments were made primarily in reference to the obligations of the contract. At the district level and below, officials more emphatically praised the project for meeting nearly all the commitments it had made.
All officials at the district level and below stressed the fact that APVDP had helped them do their job. Their opinions varied, however, about whether this had been achieved primarily through the transport provided, the finance made available, formal or informal training, technical assistance, or simply "they have encouraged us."

In terms of tangible activities, the following rate very high if number of times they were mentioned, and at all levels, is calculated:

- Roads, in particular, "The road that Jack built" (Mbulu);
- The provision of transport;
- Small industries; and
- Nurseries (especially in Mbulu).

In terms of failures, the following criticisms stood out:

- Expectations of APVDP as a typical RIDEP had not been met;
- Too much money had been spent on expatriate technical assistance;
- The project was too short to be effective;
- The government did not have enough control over expenditures;
- Consultation about and with the project was very poor at first;
- The project had been useful, but it had not solved the region's real problems of shortages of money, manpower, and management.

THE PLAN AND PLANNING CAPABILITY

The Plan

All those officials who had seen the proposed long-term plan at the time of the interview expressed satisfaction with its overall content. ("It actually reflects our thinking on these things.") A number of these officials pointed out that the plan could hardly be unsatisfactory because "this plan is made up of the ideas of local leadership. RIDEP has never made these ideas." Or, "Throughout we have been consulted so I am not surprised to see our views and plans here." However, while all officials felt they had been adequately consulted, some complained that only those at the district level had input and that the existing
system of listening to the villagers had been ignored: "This plan is fine but it is coming from the district. APVDP never bothered to build the plan from the village."

Certain other reservations concerning the plan were expressed. The most frequent of these was the widespread disappointment that the plan carried with it no commitment by AID. It was evident that enthusiasm for the plan was greatly tempered by this reality. A number of staff went so far as to say that the plan might well be "useless," "just a book collecting dust," if AID did not implement it.

Only three officials, however, made the following point:

"I don't fear so much for the plan being used, because it is OUR plan. We have been involved in its preparation. It expresses what WE want. Therefore if any [new] donor comes it will be hearing the same things."

The importance of this view, albeit a minority one, should not be underestimated, given the fact that many earlier RIDEP long-term plans had "collected dust" because local officials had not been fully involved in its preparation. Thus, APVDP met one of its objectives.

Meanwhile, the view of the long-term plan as a fund-raising brochure emerged in these discussions. "In truth," said one senior official "the region never wanted to be told how to plan, only to get a basis for further funds." Another said, "Our problem has never been a poverty of ideas or plans, but a poverty of means." And, "APVDP is not going to be successful if experience will show that no one is going to adopt the recommendations or if they can't adopt them for lack of funds."

Another area of reservations was expressed as follows:

"APVDP has been telling us to make better use of existing resources. But it gives us a plan that we can't implement without a foreign donor."

"The only thing I would criticize the plan for is that there is no recognition of our limited resources...It hasn't taken into account economic realities."

"I like the plan...but there hasn't been enough prioritization of activities."

"I wanted a plan that would invest in management in the cheapest way possible. This plan is too expensive and also it hasn't taken account of the existing distribution of resources."
Most people expressed pleasure, however, that the plan was finally written. "Putting the plan together has been a big step forward."

Building Planning Capability

Officials were negative about the efforts of APVDP to build planning capability in the region. Almost without exception respondents said that they could see no improvement in planning capability at the regional and district level, since APVDP or as the result of APVDP efforts. Those who gave reasons attributed this failure to:

- Inadequate efforts on APVDP's part;
- Wrong strategy for promoting planning; or
- Lack of incentive to improve planning on the part of Tanzanians.

Illustrations of these views include:

"APVDP never tackled the problem of the McKinsey format so no one took their planning methods seriously."

"The RDD and RPLO never took the lead in making people plan better."

"If you think a lecture or a paper can change things this is foolish. Planning seminars are a waste of time."

"Telling people to plan better is like pushing a baobab tree. I can't blame APVDP."

"They didn't bother about our own planning system. For example APVDP despised village shopping lists, and never tried to build on our official system. They should have helped villages plan, then wards, then tarafas, and then districts."

In contrast, officials insisted that the planning seminars held at the Tanzanite, and the development of the strategy papers, had been "very useful." Furthermore, in the context of other questions, such as village level program, for example, an equally large number of officials observed that functional heads were now better able to do their job, including the planning of projects, as a result of their involvement with APVDP:

"APVDP's way of accurate planning has made most of our projects a success. I can see we have improved our way."
"I think RIDEP has helped functional heads see the importance of keeping in touch with projects. They are working better with villagers now."

Much of the improvement is attributed to the work of the rural development specialists (RDSs):

"The RDS has given our functional heads a lot of informal training through planning projects with them."

"After APVDP every functional head can write a good plan and follow it. This is how the RDS has helped us."

A curious minority view is the following:

"The way RIDEP has helped us with planning is by giving us money. This money has helped us reach our targets so we have had to make higher plans."

Field staff who were involved in the pilot agricultural extension program made comments like:

"On the side of extension I can say APVDP has helped me plan my work better."

"The pilot has helped us organize. We have a plan now and we follow it."

The view of one senior official probably reflected the consensus:

"The best method of learning to plan is by doing projects. Then you take everything seriously, especially when it comes to implementation. Functional heads have learned something from APVDP this way, and so have villagers."

Regional, district, and field staff all commented on the increased capability of village leaders through their practical involvement in planning and implementing projects.

"One thing I have observed is that the villages are more serious about planning. Once they make a plan and then really get the money they can see the benefits of proper planning."

"I can see that APVDP has helped the district and villages to plan better. You can see that by the fact that there are fewer problems in implementation these days."
"APVDP has helped villagers understand the importance of time. APVDP projects do not lie in books."

Village leaders themselves consider they have learned a lot from APVDP:

"We are thinking nicely on projects now."

"I have learned that once I have planned a project I must start on the action plan at once."

"When APVDP plans something, it does it. It has set us a very good example."

Interviewees were also asked if they thought building planning capability was still an important task to be undertaken in the region. One or two staff made comments such as:

"Planning is not important to me. I am an implementer."

"There is too much talk about planning. If you are stuck you should at most go to the DPLO for help, not waste time on seminars."

However, most officials thought that building planning capability was still an important need in the region. The method?

"...Training."

"We need more seminars."

"We need study tours to see how other people are planning."

The Information Strategy for Planning

There was much enthusiasm for the information and data generated under APVDP. One person exclaimed, "The data is fantastic!" Another said, "Before APVDP we had no reliable information on the region."

Planning officers were particularly emphatic that the data had, and would, help them in their planning. When pressed, other officials were less sure that they would really use the data, and had difficulty recalling instances where they had already done so. Nonetheless, they thought that the information was important and interesting:

"I really liked that book Arusha Today. It has helped me know about the region. We are just working in our own sectors and not knowing what else is going on."
As discussion proceeded, interviewees became less enthusiastic about the amount, type, and utility of the information. Their criticisms fell into the following categories:

- That too much information had been collected, and that there had never been a clear plan for information collection;
- That data and reports were, in most cases, not written in such a way that officials could readily use them or take up the recommendations;
- That the information was simply "too much." The absorptive capacity of the districts especially could not keep up with it;
- That APVDP had not followed up on most of the reports and recommendations;
- That too much time had been spent on research; and
- That the collection of information had been "far too expensive."

The following opinions illustrate these points:

"There was no clear purpose to the research."

"The reports are interesting but what can we do with them?"

"It would have been better if fewer reports had been written, and APVDP followed up properly on their findings."

"I can say the data are useful but then we don't have the capacity to use it, so then it will be valueless."

"All these reports have been a waste to time and money."

"Perhaps seeing projects rather than books would have created a better impression."

A rather dismal conclusion by one official was: "I don't think it will be entirely wasted. Somebody must use it". Another commented, "...Well, I can say we don't need any more."
The Resident Technical Assistance Team

Members of the resident technical assistance team were described as "helpful," "always busy for us," and "easy to work with." Nonetheless, personalities played a part in terms of acceptability of the technical assistance team. On the positive side, officials at all levels expressed a good deal of "loyalty" to those team members with whom they had worked most closely. On the negative side, where relations between team member and official were less than cordial, the work output, not just the working relationship, was clearly affected. ("He is a rude man so I don't bother to consult him anymore.")

One senior official observed:

"It is critical that technical assistants are professional, have much experience and knowledge, and know how government works and the local situation. Also they cannot be arrogant toward us.... If an expatriate is arrogant, then no matter how much of an expert he is, you will find people not interested to work with him."

Of all team member positions, that of RDS was singled out as "important." Interviewees familiar with other RIDEPs claimed that it was "a better system to have a link man at the district level." District functional heads in two districts were emphatic that without the RDS they could not have used APVDP as much as they did. In the third district, most functional heads felt quite the contrary; although they had liked the RDS and enjoyed working with him, they felt his position was unnecessary. "He had been doing a Tanzanian's job." "The DCLO could have been doing his work." The reasons for this difference among districts stems from the different interpretation put on the position.

A number of officials felt the resident technical assistance team was too big. The same officials usually had difficulty saying precisely which team member posts should have been excluded, because "each had played a role." Moreover, in the course of discussing sectoral or village programs, an equal number of staff (and sometimes the same staff) observed that the project would have been helped by employing an additional agricultural expert, an irrigation expert on a long-term rather than short-term basis, or a live-stock expert. There was no pattern of priorities in these comments; individual staff consistently favored the recruitment of experts in their own sector. When discussing a potential new project in the region, very few staff said a new project did not need technical assistance at all. A typical opinion was:
"...But in future they are not so necessary. We have reached a point where the sort of people we need must be tailored for the exact skill the program needs."

More often than not, criticism of technical team size was related to the question of cost. A significant proportion of officials believe that too great a proportion of the project's budget was spent on technical assistance. In the view of many officials APVDP expatriates were simply "paid too much." One official went so far as to say that "their salaries are insulting to Tanzanians who can't even afford cooking oil these days."

Officials recognize that the high cost of expatriate technical assistance made them more demanding of performance. All interviewees expected technical assistants to be "experts," and about half of the APVDP team were variously criticized for not being proper experts. For example, one comment was that "you can't bring someone here who has come straight from the university and call him an expert."

When pressed for a definition, the interviewee said that an expert is "someone who knows more than we do," or "who can do things we can't do." Observations that some team members were not experts centered on the fact that "they are doing things we can do ourselves." Some roads component members were specifically included in this view. In spite of this, few officials felt team members were failing to do their job. On the contrary, most were doing their work "very well," and when asked, officials admitted that if the team members had not been there the job would probably not have been done.

The following quotes sum up the majority feeling, and ambivalence, on this issue:

"He has worked well and been very useful to us. But I can't see that he has skills that we don't have ourselves. But with our shortage of manpower I would not say he is not needed."

"If you get technical assistants you expect them to be experts. But I can see that the job they have to do here is not always a job for experts."

"Before someone comes you can't see how they will be needed but when they come and do the job then you appreciate the work they are doing."

Perhaps the most interesting observations on technical assistance were made in reference to its integration with government. A number of officials at the district and regional level felt that while team members worked very well with local officials, most did not have proper counterparts, and that this was to the detriment of the project. This component was surprising when it was made in reference to the RDSs posted to the three districts
and whose counterparts had from the outset been the district planning officers. It was all the more surprising to hear a DPLO himself make the comment! When asked about this, another DPLO said:

"We are supposed to be working together but in practice he is doing RIDEP work and I am doing the other work. Even I sometimes forget that I am his counterpart."

In addition, a number of other officials made the comment that each project should have had a district or divisional official assigned to it to help RDSs and sector specialists.

At the district level, key officials, with one or two exceptions, felt they had been fully involved in key decision making regarding the implementation of APVDP. This was not the case at the regional level. Several officials who could be regarded as pivotal to APVDP's implementation made observations such as the following:

"My position hasn't been taken seriously. Decisions are made and then brought to me. You do not even include us in your team meetings."

"I think it would have worked better if from the outset certain individuals had been appointed as counterparts and included in decision making from the beginning. Then we would feel it was more our project."

"The trouble is some of your people are working too much for AID and not enough for us."

Consultants

None of the ambivalence noted above was found in views expressed about consultants. Almost uniformly interviewees said, "There have been too many," and "Their quality has been variable." Only one individual consultant was mentioned more than once as having being "very useful," and when asked why, most officials responded that "he was expert," or "he not only told us how to do something, he came and did it with us."

A number of officials said APVDP should have made much more use of local expertise, rather than "employing these expensive foreigners." An equal number felt that they had sometimes had consultants "thrust upon them," and that they had been inadequately consulted as to their recruitment. Others complained that there was never enough follow-up to consultant trips, and that the consultants' reports tended to collect dust, were too long, or were interesting but not useful. A small number of people said some consultants did not know "local realities" and tended to work outside the framework of what the region or districts could do.
It should be noted that interviewees did not make distinctions between those consultants who had been hired to do investigations and collect data, and those who had been hired to train local officials. Under later discussions on training, for example, many interviewees expressed the opinion that seminars had been a very important part of the project.

**PROJECT APPROACH**

**Working with Government**

Although officials were not directly asked whether APVDP had worked well within the government system, a variety of comments were made on this topic. In general, officials felt that APVDP had integrated itself very well within the government system. A number of officials compared it favorably with both the Maasai Range Project and other RIDEPs, commenting, "This project belongs to the region; the Maasai Range didn't," and "Compared with other RIDEPs I can say APVDP has integrated with government very well."

Although many people thought APVDP was working well with government, this was not always the case:

"...In the early days of the project APVDP was working too much on its own."

"We weren't consulted enough. No one came to our office for one year. It is better now."

"No one knew what they were doing. They should have introduced themselves properly and published their objectives."

In the course of interviews, officials indicated areas where they believe APVDP was inadequately integrated within the local government system. The most frequent and most critical comments were made in the area of project finances. The following sample of views reflects the range of opinions:

"Financial statements have always been very unsatisfactory. You can't demand to see the accounts and get a good idea of what has been spent on what."

"Regional functional heads are being told that this is their project and their responsibility. But you cannot expect them to be committed to the project if they have no financial role. Even the RDD, he is supposed to be the accounting officer for the region but he has no control."
"Money should have been routed through the government system. Now we have many problems because APVDP has been paying people higher salaries than they get under government."

"We have never understood the accounting of this project. I can say the financial operation has been very bad."

On its side, the government did not play its full part in the project, according to some senior officials. Their comments include:

"The Project Agreement should have been strictly adhered to. APVDP has not been strict enough on this and now we have problems."

"The Tanzanian government should never have made commitments it knows it can't meet."

"If implementation has been slower than expected we can say this is because of failure in our own economy, or because of the way we train and manage our staff."

"From our side...not many Tanzanians have been pulling their weight. They are more interested in what they can gain personally from the project."

Finally, in the course of interviews at the district level, it became clear that the RDS had been operating largely as if APVDP were a distinct program, not one designed to support and improve government capabilities. For their part most officials in the district assumed that that was the manner in which RIDEPS usually operated, and were often unaware that such separation was contrary to the design and spirit of APVDP. They were unhappy with this mode of operations:

"It has been the impression of people that RIDEP is a special program, not part of government. The politicians in particular didn't like this. But that has been the way he was handling things."

Reservations have fixed firmly upon the fact that the RDS in the district acted "too much on his own." This state of affairs influenced the thinking of officials in this district in a number of areas:

- They were, for example, alone among officials of the three districts in citing the view that the RDS position was not very important;
• At both the district and local level a number of officials insisted that the APVDP-supported projects "belonged" to RIDEP, not to the district or village. This contrasted sharply with the thinking of officials in the remaining two districts who referred to projects in the vein of "our projects which APVDP has been helping us with"; and

• Officials at all levels, including village leaders, were concerned that those projects for which the RDS was taking full responsibility would not be sustainable.

Working with the Party

Interviewees were asked if they thought APVDP had been in tune with party thinking on the development of the region. The response was uniformly positive, with comments such as:

"All the problems they are solving are the problems we are facing."

"Government and party policy is to work with the villages and help them develop. This is just what APVDP has been doing."

One villager said that APVDP had been "entirely consistent" with party policy on development, and to prove his point added:

"For example, it has conformed with our party directives that each village should have a maize mill, that each village should have a communal plot like our barley plot, that each village should start small industries, and that each village should establish a demonstration plot for each crop...."

In terms of consultation, however, district-level party officials felt they had been inadequately consulted in the course of APVDP's implementation. There was no exception to this. Most recognized that this was not solely the responsibility of APVDP, but reflected the government and party structure. "Anyway," said one, "I don't need to be informed all the time. If a project is going well I don't need to know about it. I am concerned only about complaints."

All the same, most district-level party-related staff felt it had been APVDP's loss that they had not been more closely involved with the project. "If they had involved us they would have seen that we are the ones who can persuade the villagers."

In contrast, party cadres at the divisional and ward levels were unanimous in the view that APVDP had fully involved them in activities in their areas. In all but one instance, the working relationship was considered excellent and productive. The general consensus was at this level that "APVDP people have been working with us better than government staff usually do."
Training for Rural Development

Interviewees were on the whole favorable toward the planning seminars run by Cornell, although few of these officials could say how they had put that training to use. An equal number of interviewees, including some of the above, indicated that "learning by doing" was a more effective method of training. These people cited the informal training functional heads and village-level officials had acquired through their involvement in APVDP initiatives.

The only element of the training program that was strongly praised was the courses that had involved field staff. These included informal training through seminars under the pilot agricultural and livestock programs. The more formal seminars and workshops on soil conservation, forestry, livestock, and irrigation were all mentioned more than once as having been very useful:

"Training has been very important....I have come to learn this from APVDP. These seminars have helped morale and improved performance."

"It helped us consolidate as a team. I can say I don't think there are technicians in another region who know as we now do."

"I can recall that in the past field staff could retire without a refresher. RIDEP has helped us a lot."

Little enthusiasm was expressed for external study tours or overseas training. On the contrary, most staff who did mention them were scathing in their comments:

"...A complete waste of money. All that money on one or two people! It should have been used for internal training."

"I have seen no benefit to use as a district or even as a region from these people going outside the country."

An Integrated Approach to Rural Development

A number of officials variously cited the Karatu Soil Conservation Project and the fruit and forest tree nurseries in Mbulu as evidence that some integration among productive sectors was taking place with help from APVDP. The Karatu project was in particular praised for the way in which staff from three sectors were working together.

Beyond these projects, however, almost no one felt APVDP had been successful in promoting an integrated approach to development, although many thought the project "had tried." ("I can see now that we are still only related, not integrated.")
The reasons officials gave for this failure included:

"APVDP doesn't integrate its own projects so why should they expect government to be integrated."

"If land use planning had taken off then we would have seen integration in this district."

"I have seen no improvement, but this is a problem of our own training."

"If you want an integrated project then you have to put emphasis on the areas of convergence and work from those areas only. APVDP was doing too many things that had nothing to do with each other. They should have started with an integrated plan of action in the first place."

Despite these comments the weight officials place on the failure to promote an integrated approach is evidently not great.

Nearly all Community Development and Lands Department staff interviewed said APVDP had failed to involve them properly:

"...From the beginning they referred to us as not being a productive sector and in this way excluded us. It would have been better for them to use us more in their village work, particularly in so-called productive sector work where we are needed to link technicians with the people."

Opinions on TISU, as a source or framework for integration, were generally negative. TISU had been established to promote, among other things, an integrated approach to development among the productive sectors. Not only were few officials aware of this, but some productive sector staff also claimed they had not even heard of TISU. One TISU member interviewed said the unit had failed "totally" to promote integration among the three key productive sectors:

"...We don't even work together ourselves. The Kilimo person has no idea what the livestock person is doing and so on. Even the APVDP staff working with us don't integrate their work....Moreover there is no real support from our departments for integration."

THE VILLAGE-LEVEL PROGRAM

Interviewees were not asked directly about the village-level program (or sectoral programs). This was an omission on the part of the interviewer. Still, much comment was elicited indirectly on the subject.
In general, the village-level program appears to have been a success, and officials, including village leaders, liked the way it was implemented. It was interesting to note that, given the amount of criticism of "small projects," so many officials listed elements of the village-level program as key achievements. Not only were individual small projects singled out, but the program as a whole was also praised:

"I can say APVDP has given villages the good life."

"When I look at the villages managing their own projects I feel APVDP has been an excellent thing."

"APVDP has given villages good advice and helped them start developments in the proper way."

"RIDEP has been very successful in helping the districts mobilize villages -- although I do not think this is a job a donor should be brought here to do."

"I can say it is the first time villages have got funding for projects on time...like loans: it takes two years to get a loan from TRDB."

Village leaders themselves said:

"I am happy for RIDEP. We didn't expect it!"

"There has been very good co-operation between RIDEP and the village. There is no corruption."

"The RIDEP seminars helped us to be more self-reliant. After that, we got a village lorry by local contributions."

"When APVDP says it will help with something then it is really helping, not talking."

The Village-Level Program as a Pilot

Interviewees were not asked directly about the applicability or replicability of the village-level program in the long term, but a few interviewees volunteered opinions. Most referred to the "fragmented" "uncoordinated" nature of the village-level program. One person said, "I think there were too many ideas, too many directions. Projects were undertaken in a random way." Another added, "There was no integration at the village level. APVDP did whatever the villagers asked them."

The two people who commented on the strategy of pilot wards said:
"One thing I didn't like was using pilot wards. In this way APVDP slowed itself down by not selecting the most progressive villages. More could have been achieved if APVDP had focused on these."

"The choice of pilot wards was a big mistake. It was amended when we changed them to priority areas. We are still following that strategy."

In terms of applicability of projects at the village level, most officials indicated that, far from being inappropriate, the initiatives APVDP supported in the villages were not only applicable to village needs, but also were the kind of projects their departments would have promoted themselves if they had the resources:

"All the things APVDP is doing are in response to the problems we are facing."

"I am not saying these projects are bad, only that we should be doing them ourselves, not waiting for a donor to show us what we should be doing."

Concerning individual village projects, neither officials nor village leaders are confident of their replicability:

"It would be easy for us to keep going with installing maize mills, but it is very difficult to work with TRDB on village loans. It can take up to two years for the village to get the loan."

"We will be able to keep these village nurseries going because the villagers are already committed to paying for the laborers, but I cannot see us having the resources to expand them."

"We will not be able to make more shallow wells in this district until the problem of spare parts is solved."

Officials are concerned that factors external to the projects will determine whether the district will be able to continue promoting such projects in the villages.

A Bottom-Up Approach to Planning Village-Level Activities

In one district a group of projects was singled out by officials and village leaders alike for failing, largely because village leaders had not been involved enough in their planning and implementation. These projects shared one characteristic. They were projects that the district intended to hand over to the villagers when they were ready to manage them. They included tree nurseries, beekeeping projects, and a fishpond. Officials are now questioning the validity of this approach:
"RIDEP started the divisional nurseries for the villages, not the district, but when the lorry went around to sell the trees, the villagers were not interested to buy them so we had to give them away free. The problem is that the villagers are not committed.... Perhaps it would have been better if the villages had owned the nurseries themselves from the start."

"The project would have succeeded if they had given us the equipment and the hives from the start. But they refused to give us uniforms or anything, so when the ants came to eat the bees we could do nothing. We called the beekeeper but he came days too late. A project has to involve villagers completely to be a success. It wasn't the village asking the district, it was rather the district always explaining to us what was going to be done."

"RIDEP told us they were going to start a fishpond in our ward. We don't know how the project is going because when the fishery officer comes to check on the pond he doesn't even visit our office to tell us how the project is going. I don't know if this is supposed to be a village project or for the district....But they are saying we will have to manage the pond, and we are to send people for training."

The above cases are exceptions. In all other instances, district- and village-level staff were emphatic that village leaders had been fully involved in the planning and implementation of projects, and that the projects that had been undertaken had stemmed directly from village-level requests. In fact, some officials thought that too much time was spent on project identification and preparation.

Most officials, however, thought the planning activity that had taken place at the village level, in preparation for projects, was "commendable, especially scheduling," and "flexible." Another commented that "APVDP has made villagers plan in an accurate way. You can see this because they have less problems with implementation these days."

In one district, however, both district and village leaders thought that despite lengthy planning two projects had failed. ("It is clear now they didn't do proper research.") The overall verdict of one of the district leaders was, however, that "in Tanzania it is our policy to start at the bottom, to plan projects with the villages. APVDP had done this."
Loans

Interviewees were not questioned about the loan system promoted under APVDP, but comments were made about it:

"I think maize mills and loans have been very important. Just today we are celebrating the first full repayment of a loan. Villages are now fully understanding the system and liking it. It makes them more serious than if the money was just a gift."

Village leaders appeared happy with loans and confident that they could repay the loans. They said, "Repayment of the loan? We will have no problem," or, "We have already started to pay."

Concern was expressed, however, by a number of district-level officials that the loan system established could not continue:

"I like the loans and we will make sure all the loans are repaid. But the system can't be expanded because the district does not have the funds to lend. I suppose we could work with TRDB but it doesn't move fast."

"I can't say TRDB will sustain the system. In most cases, for TRDB to give a loan, the village has to be very well off and already have proved itself. APVDP has started a good system, but the scale is too small to have any impact."

SUSTAINABILITY: WHAT WILL AND WHAT WILL NOT SURVIVE?

The activity under APVDP that most interviewees believed would not be sustained after the end of the project was the roads program. This was followed closely by division-level (as compared with village) nurseries, and transport and road equipment. It is significant that the above activities were also singled by the largest number of people as "key achievements."

The activities that interviewees believe will continue are all small-scale village projects, (including maize mills, woodcutting, pasture grass seed plots, and village nurseries). Nearly every interviewee said that shortage of funds, in particular, recurrent funds, would be the cause of projects collapsing. Foreign exchange to purchase spare parts was also mentioned, but less frequently. No interviewee thought the departure of technical assistance would lead projects to collapse, although some said certain projects would run less efficiently.

Village leaders were on the whole confident that projects they had initiated with help from APVDP would be sustained. They were concerned however that the district staff would not follow-up
these projects, and that implementation might be more difficult. Most projects also contain, in their view, an element of uncertainty -- "good funds, fuel availability, and spare parts" -- but village leaders expect this and are prepared "to solve these problems." Village leaders, field staff, and district officials involved in implementing village-level projects believe APVDP did all it could to make these projects sustainable. Almost no interviewees believe, however, that those projects that will be sustained will be expanded or replicated: "We simply do not have the funds."

While interviewees are pessimistic about the sustainability of certain projects, they do not believe these should not have been started in the first place. The following sample of opinions serves to illustrate the above findings:

"Even if no one maintains the road we will have benefited from it for some time."

"Anything that depends on recurrent funds will collapse."

"We never got recurrent funds before RIDEP and we won't be getting them now. But it was still worth starting."

"I can say we will keep these projects going [village nurseries] but we won't have the money to expand."

"All maize mills will continue because the villages are already looking after these themselves."

"In one year you won't see any RIDEP vehicles on the road. We will have failed with spare parts."

"If we don't keep all the projects we have started going then we only have ourselves to blame. It is up to us to see that important projects which need recurrent funds get funded."

"I will keep doing my job as I am doing now but I will probably visit fewer farmers as I won't have the money for transport. And I won't be expanding the number of farmers I visit."

"The shallow wells teamwork will have to continue. We are committed...but if we do fail it won't be because of lack of commitment, it will be because of funds."

"The soil conservation project is very important, although the future is unsure."
"Nothing of RIDEP in this district will be left in five years; roads, nurseries, transport will all fail. The memory will be left: "these people came and couldn't help us....We could have been like other regions."

"I see from this project there has been a conflict between the policy of supporting existing infrastructure and then buying new things. But neither can I say APVDP shouldn't have brought those new things...."

"We can keep going. My only worry is a market for the carts. We can never know how many orders we will get over time."

"He [APVDP sector specialists] has been bringing a district officer here to know our problems, but I don't believe that after the project that man will help us."

CONCLUSIONS

It appears that either officials were inadequately consulted in the early days of the project about the precise capabilities of APVDP, or that these capabilities were exaggerated, or that pre-conceived ideas of what a RIDEP should do were so fixed that few people listened. It should be noted, however, that very few senior officials interviewed were present in the region at the time of the project's initiation.

The more involved officials were in APVDP, the less the issue of APVDP as a RIDEP concerned them. Similarly, the more involved officials were and the nearer the village they were posted, the more positive they were about the program.

It is to the credit of APVDP that despite the premature end of the project, so many regional, district, and village officials felt that commitments had on the whole been met. Interviewees at all levels did not feel they were being left with a vast number of unfinished initiatives. Indeed they would have preferred assistance to have continued and could list a number of areas in which they were planning to ask for assistance. But promises that had been made were by and large met.

The issue of project finances and their control is in every way as critical an issue as interviewees indicated. The statement made by senior officials that a commitment cannot realistically be expected without shared authority has validity. Certainly where financial control had been delegated (for example, at the district level, especially in two districts), a commensurate degree of commitment and concern would seem to have followed. The lack of clarity in accounting statements meant that regional officials had
difficulty knowing how money was spent. While the origins of this problem may lie in the complex AID accounting procedure, APVDP could have simplified these for common consumption.

Possibly APVDP had too many objectives and too wide a range of activities, especially given its short lifetime. If the project had been more concentrated, perhaps officials would have felt, as several of them said, that it had achieved more. The wide range of activities of APVDP led it to appear fragmented; in terms of the village-level program, it did indeed seem to begin in a fragmented way. Part of this was the nature of the project in trying to respond to village needs as villagers perceived them. But also it appears that there never was a clear plan of action or coordination among activities at the village level. A certain sense of direction, priorities, and focuses certainly emerged in the course of implementation. Land use planning and soil conservation was one of these. However, one has the impression that APVDP more or less left the emergence of a direction to chance, that it did not set out consciously to find a pattern of activities to represent a holistic plan of action that could be replicated elsewhere. Certainly piloting was not a major topic of discussion under APVDP.

It is possible that these comments are unfair to the project; perhaps it was merely following very closely its mandate to allow village perceptions and needs to determine the content of the village-level program. Or perhaps it was just a question of the project's length; activities may not have had the time to crystallize into a clear pattern.

In discussing the APVDP-RIDEP issues with officials, they were disappointed that it was not widely understood that APVDP was not a typical RIDEP, recognizing that large-scale projects do not appear to be working or effectively promoting sustainable development. Thus APVDP deliberately chose to test another approach to multi-sector development, a small-scale, village-based program, in the belief that it would in the long term be more appropriate and thus more successful. This approach proved successful, and would have been more widely recognized as such if the project had had a longer lifespan.

Furthermore, the most sustainable projects (and thus the longer-term impact) were the small-scale and the village-level projects. Although interviewees came to the same conclusion, few consciously saw its irony in view of the widespread wish that APVDP had undertaken large-scale projects.

At the same time the impression was repeatedly given from interviewees that despite ambitions for a so-called full-scale RIDEP, the vast majority of officials (and nearly all those at the district level and below) supported the project, endorsed its
approach, and, on the whole, considered it successful. The interviewer found no relief among interviewees that APVDP was finishing -- rather, gloom, disappointment, and a good deal of annoyance.

Beyond the expectations concerning APVDP as a RIDEP, there was a surprising lack of substantive expectations of the project. Few individuals or sectors seem to have had a full or precise idea of what assistance they were seeking from the project. It seemed in fact to the interviewer that they were entirely unprepared to be involved in determining the substance of the program. Expecting a typical RIDEP, they were waiting for the donor to bring them projects. A wait and see what APVDP will do attitude was pervasive.

Although few interviewees singled out this aspect of APVDP for comment, probably all officials found this approach surprising, refreshing, and rewarding -- to an extent that demands for full involvement and consultation became the norm. In short, many officials did not expect to be designing or controlling donor-funded projects, but now that they have done so, they demand this as their right. This is a major step forward in terms of donor projects, and validates the determination with which APVDP protected its flexible approach. It has also been a great gain to the region. It is unlikely that Arusha Region will rest easy with a passive role in the future.

It is clear that the sustainability of projects is a critical issue, and one that officials and the technical assistance team became explicitly aware of as the project came to an end. Efforts to ensure that individual projects and activities were sustainable accelerated since the potential for follow-on funds had receded. Evaluation of and adjustments to virtually every sectoral activity were made. These efforts provided successful on the whole -- at least to the extent that constraints upon the regional recurrent budget and the overall economic situation allowed.

APVDP was, from the outset, concerned with sustainability. There were exceptions, however, and local concern over these has been detailed in the text of this report. But in most sectors and in most projects, APVDP was almost obsessed with what it called "viability." Individual projects, particularly those designed to generate income, were scrutinized to make sure they would not fail, and that as many possible pitfalls as possible were anticipated. In those exceptional cases where this was not done, local officials are painfully aware of the need for such an approach. While some officials complained of too much pre-planning, by far the majority appreciated the careful way in which APVDP helped them plan even the smallest project. The need for planning is not a new idea; officials have been talking of planning for years and to one degree or another have been doing so. But for many officials, APVDP showed them a practical and effective way of doing it. This is, in the writer's view, one of
the things interviewees meant when they said, "The important thing I have learned is that good planning leads to successful implementa-
tion," or "APVDP has helped me do my job."

The importance of APVDP as a catalyst has broader aspects. As interviewees pointed out, the region or district has known about its problems for a long time. But ways and means have been more difficult. In some instances the bottleneck has been a
matter or resources, primarily money. But in other instances, the
lacking ingredient has been a method of reaching objectives.
Perhaps the best example of this has been the development of the
pilot agricultural extension program. Kilimo staff have known for
years that the extension service given by Bwana Shambas needs
improving. But, as elsewhere in the country, they have not known
how to tackle the issue effectively. According to participating
Bwana Shambas and villagers, APVDP helped district agricultural
offices through this bottleneck, and established the conditions
for improved service, at low cost, and without dramatic upheaval.

Land use planning and soil conservation initiatives are
another case. Both regional and district officials have known
that they face a severe soil degradation problem, but have not
known how to tackle it. Of course money is part of the problem,
but the comment of one official is significant: "We have known
about this money from ILO for some time but until APVDP has helped
us we were uncertain of how to set about using it."

Seed plots for pasture improvement are similarly a simple and
cheap innovation. The way in which APVDP helped the district work
with villages on income-generating projects was significant.
There was nothing particularly innovative about the approach of
APVDP, but in setting and following guidelines it opened up
channels to the villages, and helped redefine the role district
governments may have in assisting them.

Thus as a catalyst, APVDP succeeded. The criticism made that
technical assistance staff were not experts therefore takes on a
new light. It is quite true that team members initiated very
little that Tanzanians could not have, in theory, done themselves.
This is exactly the way it should have been. APVDP's mandate was
not to establish techniques, mechanisms, or skills that local
government officials could not undertake, continue, and expand
themselves. APVDP's mandate was to increase capabilities. APVDP
personnel kept faithful to this role as facilitators, that is,
helping the villager, field, or district officer to do his job
better. In this objective, the project was more than successful.
ANNEX A

INTERVIEWEES

Regional Level

Regional Planning Officer, Nd. J. Kyambwa
Regional Natural Resources Officer, Nd. N.M.G. Sabuni
Regional Cooperatives Development Officer, Nd. B.M. Tungaraza
Regional Irrigation Officer, Nd. D.R. Mabugo
Regional Water Engineer, Nd. B.E. Njau
Regional Community Development Officer, Nd. Kilanga
RIDEP Coordinator, Nd. A.J. Lwelamila
Regional Assistant Planning Officer, Nd. P.K. Kitema
Livestock Representative: Technical Information and Support Unit, Nd. Challe
APVDP Logistics and Supplies Officer, Nd. M. Killerai
Arumeru District

Area Commissioner, Nd. A.M.P. Kuchillingulo
Member of Parliament, Nd. P. Ole Saitabau
District Development Director, Nd. I. Ole Kariongi
District Planning Officer, Nd. Y.R. Tessua
District Agricultural Development Officer, Nd. P.M. Mselle
Maize Extension Project Officer, Nd. S.E. Munuo
Assistant Agricultural Extension Officer, Nd. S.S. Mollel
District Livestock Development Officer, Nd. Dr. Mtayomba
Assistant Livestock Development Officer, Nd. N. Mbise
District Forestry Officer, Nd. F. Mollel
District Cooperatives Development Officer, Nd. I.G. Swai
District Engineer, Nd. M.R. Shadrak
Land Use Planning Coordinator, Nd. C. Lotakajaki
Assistant Planning Officer, Nd. M. Sabaya
Bwana Miti, Ngarenanuki, Nd. E. Pilangyo
Bw. Miti, Kikwe, Nd. M.J. Salum
Bw. Mifugo, Kikwe, Nd. E. Kileo
Bw. Mifugo, Kimnyanki, Nd. G. Kileo
Bwana Shamba, Kikatiti, Nd. L. Sangawe
Kitibu Kata, Kikatiti, Nd. J.M. Mollel
Mratibu Kata, Kikatiti, Nd. H.N. Kombe
Kitibu Kata, Ngarenanyuki, Nd. Mungure
Kitibu Kata, Kikwe, Nd. E.O. Mollel
Village Chairman, Uwiro, Nd. J. Erasto
Village Secretary, Uwiro, Nd. G.M. Kulei
Village Chairman, Kikwe, Nd. H. Iddi
Village Chairman, Maweni, Nd. J. Nyiti
Village Manager, Maweni, Nd. Mtindi
Hanang District

Area Commissioner, Nd. L.M. Mambo
Member of Parliament, Nd. A.A. Dodo
District Planning Officer, Nd. Mgalula
District Agricultural Extension Officer, Nd. Msabaha
District Livestock Extension Officer, Nd. S.T. Matotay
District Engineer, Nd. Lesironga
District Water Engineer, Nd. Samki
District Co-operative Officer, Nd. E.L. Pallangyo
District Natural Resources Officer, Nd. E.J. Malisa
Small-Scale Industries Officer, Nd. Somosomo
(ex) Planning Assistant, Nd. D. Lyimo
District Forestry Officer, Nd. R.S. Moshi
Katibu Tarafa, Bashnet, Nd. L.S. Bilauri
Katibu Tarafa, Mbugwe, Nd. M.S. Tlaghwe
Katibu Kata, Gallapo, Nd. J. Samu
Bwana Shamba, Gallapo, Nd. M. Fidelis
Bwana Shamba, Bashnet, Nd. S.A. Shilla
Bwana Miti, Magugu, Nd. A Rwiza
Village Chairman, Qameyu, Nd. P. Margwe
Village Chairman, Mapea, Nd. S.M. Ndogo
Village Manager, Mapea, Nd. A. Sawaya
Village Chairman, Ayamango, Nd. R.S. Bura
Village Secretary, Ayamango, Nd. E.K. Kangay
Mbulu District

Area Commissioner, Nd. N. Kissenge
District Development Director, Nd. G.L. Msuya
District Planning Officer, Nd. M.J.S. Kijale
District Water Engineer, Nd. V. Shayo
District Engineer, Nd. S.W. Msengi
District Lands Officer, Nd. D. Mjau
District Community Development Officer, Nd. J. Shayo
District Cooperative Officer, Nd. P. Shayo
District Natural Resources Officer, Nd. E. Kombo
District Forestry Officer, Nd. Nyabusani
District Horticultural Officer, Nd. R.N. Tondi
District Livestock Extension Officer, Nd. M. Kinde
Bwana Miti, Murray, Nd. S.T. Haway
Bwana Shamba, Gahando, Nd. A. Msumari
Bwana Shamba, Murray, Nd. E. Robert
Bwana Shamba, (Leader, Soil Conservation Unit, Karatu) Nd. A. Iddi
Bwana Mifugo, Katatu, Nd. S. Mkumbi
Bwana Mifugo, Dongobesh, Nd. A. Daata
Katibu Terafa, Dongobesh, Nd. M.T. Ngaida
Katibu Kata, Dongobesh, Nd. D. Kwatlema
Katibu Kata, Murray, Nd. Mangay
Katibu Kata, Tlawi, Nd. M. Anselmi
Village Chairman, Dongobesh, Nd. M. Gechamet
Village Secretary, Dongobesh, Nd. A. Sulle
Village Chairman, Moringa, Nd. T. Ngaida
Village Chairman, Tlawi, Nd. A. Barnabas
Village Secretary, Tlawi, Nd. S. Fitt
Village Chairman, Murray, Nd. E. Gituda
ANNEX A

LIST OF CONSULTANTS AND STAFF
# ANNEX A

## LIST OF CONSULTANTS AND STAFF

### LONG-TERM EXPATRIATE PERSONNEL

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Person Months</th>
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<tbody>
<tr>
<td>Sweet, Charles F.</td>
<td>Chief of Party</td>
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<tr>
<td>Sarco, Michael</td>
<td>Management Officer/Acting Chief of Party</td>
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<tr>
<td>Allen, Hugh</td>
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<td>Carter, Douglas</td>
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<td>Cohen, Neal</td>
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<td>Gadek, Joseph</td>
<td>Water Systems Construction Specialist</td>
<td>36</td>
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<td>Johnston, Alan</td>
<td>Rural Development Planning Adviser</td>
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<td>Harmsworth, Josephine</td>
<td>Rural Development Specialist</td>
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<td>Kraybill, David</td>
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<td>Schleuter, Lynn</td>
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<td>Stanley, Joyce</td>
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<td>Walton, Ian</td>
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<td>Wheeler, John</td>
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<td>Weir, Alexander</td>
<td>Appropriate Technology Specialist</td>
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**Total Person-months**: 334
### APVDP Local Hire Personnel

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<tr>
<th>Position</th>
<th>Name</th>
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<tr>
<td>Financial Management/ Administrative Officer</td>
<td>Juanita Acevedo</td>
<td>20.0</td>
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<tr>
<td>Resource Center Coordinator</td>
<td>Marjorie Nishek</td>
<td>21.0</td>
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<td>Resource Center Coordinator</td>
<td>Sally Johnston</td>
<td>9.5</td>
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<tr>
<td>Land Use Planning/Village Profile Survey/Range Management Report/Livestock Projects</td>
<td>David Peterson</td>
<td>27.0</td>
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<td>Land Use Planning/Village Profile Survey/Range Management Report/Livestock Projects</td>
<td>Thad Peterson</td>
<td>27.0</td>
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<tr>
<td>Brick and Tile Manufacturing Projects</td>
<td>Ajit Pal Singh</td>
<td>23.0</td>
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**Total Person-months**  
127.5
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<tr>
<th>Major Task</th>
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<tr>
<td>Development Issues Research/Various Reports</td>
<td>Elliott Morss</td>
<td>8.00</td>
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<td>Management Assistance and Supervision</td>
<td>Donald Mickelwait</td>
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<td>Albert H. Barclay</td>
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<td>Charles F. Sweet</td>
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<td>Regional Planning Workshop and Technical Assistance</td>
<td>David Lewis</td>
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<td>Barclay Jones</td>
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<td>Paul Branford</td>
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<tr>
<td>Village Profile Survey/Planning in Maasai Districts</td>
<td>Robert af Klinteberg</td>
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<tr>
<td>Agricultural Information</td>
<td>Ian McDonald</td>
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<td>Resource Inventory/Remote Sensing</td>
<td>David Mouat</td>
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<td>Agricultural Economics Report</td>
<td>Merritt Sargent</td>
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<td>Survey and Report on Private Sector Industries</td>
<td>Peter Schaefer</td>
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<td>Population Report</td>
<td>Alan Johnston</td>
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<td>Hydrogeological Survey</td>
<td>M.A. Siddique</td>
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<td>Soil Conservation Workshop and Studies</td>
<td>Rorke Bryan</td>
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<tr>
<td>Parastatal Survey</td>
<td>J. Thomas Chirurg</td>
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<td>Land Use Planning/Natural Resources/Tourism</td>
<td>Chris Dunford</td>
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<td>Soil Conservation Workshop</td>
<td>Thomas Dunne</td>
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<td>Resource Information Materials Report</td>
<td>Christine Dodson</td>
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<td>Resource Center Assistance</td>
<td>James Feaster</td>
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<td>Agriculture Workshop</td>
<td>Douglas Carter</td>
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<td>Organic Agriculture Workshop and Report</td>
<td>Douglas Maher</td>
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<td>Team Building</td>
<td>Michael Hayes</td>
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<td>Transport Economics, Road Planning Report</td>
<td>Edward Holland</td>
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<td>Agriculture Sector Paper</td>
<td>Donald Humpal</td>
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<td>Livestock Sector Paper/Village Profile Survey</td>
<td>Michell Jacob</td>
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<td>Internal Evaluation</td>
<td>Jerry Silverman</td>
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<td>Aerial Photography</td>
<td>Dana Slaymaker</td>
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<td>Forestry Workshop and Reports/Soil Conservation Workshop</td>
<td>Timothy J. Synnott</td>
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<td>Initial Planning and Project Development/Government Structure-Institutional Capacity Report</td>
<td>Garry Thomas</td>
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<td>Health Sector Assessment/APVDP</td>
<td>Stanley Yoder</td>
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<td>Health Component Project Paper</td>
<td>Robert Alger</td>
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<td>Logistics and Procurement</td>
<td>Bishay G. Bishay</td>
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<td>Victoria Morss</td>
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<td>Liz Wily</td>
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<td>Aerial Land Use Census/Wildlife Census and Report</td>
<td>Ecosystems, Ltd.</td>
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<td>Spider Tractor Testing</td>
<td>John Kilgour</td>
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<td>Historical Papers/Land Use Discussion Papers</td>
<td>Henry Fosbrooke</td>
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<td>Agricultural Extension Papers/Rural Productivity Project Paper</td>
<td>Robert Dodd</td>
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<td>Extension Communications Workshop and Report</td>
<td>Bruce Lundeen</td>
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<td>Revenue Generation Report</td>
<td>Larry Schroeder</td>
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<td>Health Services Survey</td>
<td>Edith Alger</td>
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<td>Extension Communications/Photography</td>
<td>Robert Maust</td>
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<tr>
<td>Fisheries Survey and Report</td>
<td>Phoenix Development Services, Ltd., Keri Dickie-Clark, Sally Wilton</td>
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<tr>
<td>Village Dialogue Model Seminar</td>
<td>Ann Hope</td>
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<td>Regional Comworks Management Report</td>
<td>John Morrison</td>
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<td>Satellite Imagery Processing</td>
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<td>Lime Pozzolana Cement Feasibility Report</td>
<td>Peter Schaefer</td>
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<td>Small Industry Survey of Arusha Town</td>
<td>Patricia Harris</td>
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<td>Data Collection for Regional Planning</td>
<td>John Moran</td>
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<td>Resource Center Consultant</td>
<td>Adam Msilaji</td>
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<td><strong>Total Person-months</strong></td>
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## TANZANIAN CONSULTANTS TO APVDP

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<th>Major Task</th>
<th>Name</th>
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<tr>
<td>Computer Programming and Operation</td>
<td>Thadeus M. Chikoti</td>
<td>24.0</td>
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<td>Financial Infrastructure Report/Urban Informal Enterprises Report</td>
<td>M.S.D. Bagachwa</td>
<td>5.0</td>
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<tr>
<td>Population Monitoring Report</td>
<td>C. Lwechungura Kamuzora</td>
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<tr>
<td>Migration Report/Arumeru Population Pressure Report</td>
<td>Wilfred Mlay</td>
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## ROADS COMPONENT PERSONNEL

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**Total Person-months**  
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## DAI HOME OFFICE STAFF

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**Total Person-months**  
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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


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


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


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.


c) Fourth Quarter Progress Report, April-June 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.

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


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


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

4. ISSUE PAPERS

A. Agriculture


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


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


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.


C. Health


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


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


E. Livestock


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

F. Manpower


G. Natural Resources

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


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


H. Population


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

I. Small Industries (Community Development and Cooperatives Development)


5) Formal Industries in Arusha Town (Inventory.)

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


J. Transportation/Works


2) Transportation in Arusha Region -- Edward Holland, January 1980.
3) Problems of Agricultural Transportation in Rural Areas (A Case Study of Seven Villages in Mbulu District) -- W. E. Maro, Economic Research Bureau, University of Dar es Salaam, June 1980.

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


8) Rural Road Planning: A Training Program for District Engineers in Arusha Region, Tanzania -- Castor Tingirawanyuma, May 1982 (Cornell University thesis.)

K. Water


L. Wildlife and Tourism

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

5. ISSUE PAPER SUMMARIES (ENGLISH AND SWAHLI)

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


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  
c) Information Activities of the APVDP: Present and Future Potentials -- Elliott Morss, March 1980.  
e) Integrating Regional Development Objectives into the Regional Planning Process -- Elliott Morss.


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.


m) Summary Strategy Paper.


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


q) APVDP Briefing Paper -- July 1981.


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


8. EVALUATION PAPERS


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


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


9. DISTRICT STRATEGY AND PRIORITY PAPERS


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


b) Workshop on RIDEP/Arusha, September 1979.

c) Manyara Workshop Papers, October 1979.


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


11. REGIONAL AND DISTRICT PROJECT PROFILES

A. Regional Projects

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</tr>
<tr>
<td>28</td>
<td>Mbulu</td>
<td>Natural Resources Training and Extension Support</td>
</tr>
<tr>
<td>29</td>
<td>Mbulu</td>
<td>Soil Conservation Along District Roads</td>
</tr>
<tr>
<td>30</td>
<td>Mbulu</td>
<td>Bicycle Purchase Scheme for Extension Staff</td>
</tr>
<tr>
<td>Project Number</td>
<td>District</td>
<td>Project Name</td>
</tr>
<tr>
<td>----------------</td>
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</tr>
<tr>
<td>31</td>
<td>Mbulu</td>
<td>Dongobesh Ox-Cart Production Unit</td>
</tr>
<tr>
<td>32</td>
<td>Mbulu</td>
<td>Tlawi Tile Production Project</td>
</tr>
<tr>
<td>33</td>
<td>Mbulu</td>
<td>Dongobesh Oil Seed Pressing Project</td>
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<tr>
<td>34</td>
<td>Mbulu</td>
<td>Kuta Village Maize Mill</td>
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<tr>
<td>35</td>
<td>Mbulu</td>
<td>UCDA Training Course</td>
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<td>36</td>
<td>Mbulu</td>
<td>Training for CDA's and Village Leaders</td>
</tr>
<tr>
<td>37</td>
<td>Mbulu</td>
<td>Shallow Wells Survey and Construction</td>
</tr>
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<td>38</td>
<td>Mbulu</td>
<td>Ring Wells Construction</td>
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<tr>
<td>39</td>
<td>Mbulu</td>
<td>Yaeda Chini Gravity System Rehabilitation</td>
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<tr>
<td>40</td>
<td>Mbulu</td>
<td>Harsha Gravity Water System Rehabilitation</td>
</tr>
<tr>
<td>41</td>
<td>Mbulu</td>
<td>Upper Kitete Gravity System Rehabilitation</td>
</tr>
<tr>
<td>42</td>
<td>Mbulu</td>
<td>Kilima Tembo Gravity System Rehabilitation</td>
</tr>
<tr>
<td>43</td>
<td>Mbulu</td>
<td>Training of Village Water Technicians</td>
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<td>44</td>
<td>Mbulu</td>
<td>Murray-Kuta Community Center</td>
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<tr>
<td>45</td>
<td>Mbulu</td>
<td>Maretdau Bridge Construction Project</td>
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<tr>
<td>46</td>
<td>Mbulu</td>
<td>Construction of Grade 'B' House, Mbulu Town</td>
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E. Roads Projects

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<tr>
<td>1</td>
<td>Hanang</td>
<td>Dareda-Mbulu Border Road (27 Miles)</td>
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<tr>
<td>No.</td>
<td>Location</td>
<td>Road Description</td>
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<tr>
<td>2</td>
<td>Hanang</td>
<td>Single-Gallapo-Mamire-Babati Road (29 miles)</td>
</tr>
<tr>
<td>3</td>
<td>Hanang</td>
<td>Babati-Nakwa-Riroda Road (10 Miles)</td>
</tr>
<tr>
<td>4</td>
<td>Hanang</td>
<td>Bashnet-Madunga Kati Road (11 Miles)</td>
</tr>
<tr>
<td>5</td>
<td>Hanang</td>
<td>Gitting-Endasak Road (8 Miles)</td>
</tr>
<tr>
<td>6</td>
<td>Hanang</td>
<td>Bashnet-Ufana Road (10 Miles)</td>
</tr>
<tr>
<td>7</td>
<td>Mbulu</td>
<td>Karatu-Mbulu-Dongobesh-Hanang Border Road (81 Miles)</td>
</tr>
<tr>
<td>8</td>
<td>Mbulu</td>
<td>Dongobesh-Haydom Road (30 Miles)</td>
</tr>
<tr>
<td>9</td>
<td>Mbulu</td>
<td>Oldeani-Mang'ola Road (30 Miles)</td>
</tr>
<tr>
<td>10</td>
<td>Mbulu</td>
<td>Njiapanda-Oldeani Road (6 Miles)</td>
</tr>
<tr>
<td>11</td>
<td>Mbulu</td>
<td>Mbulu-Kainam-Hayloto-Murray Road (15 Miles)</td>
</tr>
<tr>
<td>12</td>
<td>Arumeru</td>
<td>Tengeru-Mbguni Road (22 Miles)</td>
</tr>
<tr>
<td>13</td>
<td>Arumeru</td>
<td>Usa River-Ngarenanyuki-Oldonyosambu Road (10 Miles)</td>
</tr>
</tbody>
</table>
ANNEX C

PROJECT PROPOSALS AND COORDINATION WITH OTHER DONORS
ANNEX C

PROJECT PROPOSALS AND COORDINATION WITH OTHER DONORS

A major objective of APVDP was to assist the regional government of Arusha in obtaining additional resources for development. To accomplish this objective, APVDP assisted the region in the development of a number of project proposals to major international donors and in the completion of feasibility studies for additional long-term investments. Furthermore, APVDP has stressed coordination with other donor projects, as a means of increasing its effectiveness and that of other donor activities in the region.

PROJECT PROPOSALS SUBMITTED TO DONORS

A number of project proposals were developed and submitted to various donors during the implementation of APVDP. Those submitted to submitted to the U.S. Agency for International Development were:

- The Masai Districts Water and Transport Development Project, funded in 1981/82 for $590,000;
- The Mbugwe Division Water Supply Project, funded in 1981/82 for $150,000;
- The Kisongo Water Catchment Development Project, funded in 1981/82 for $80,000;
- Land Resources Planning and Management, funded in 1982/83 for T. Shs. 1,785,000. This was a USAID PL-480 (Food for Peace) generated local currency project;
- Small Scale Irrigation Systems, funded in 1982/83 for T. Shs. 1,025,000. This was a USAID PL-480 local currency project;
- Crop Storage and Processing Project, funded in 1982/83 for T. Shs. 280,000. This was a USAID PL-480 local currency project;
- The Promotion of Small Industries, funded in 1982/83 for T. Shs. 200,500. This was a USAID PL-480 local currency project;
- Water Supply, funded in 1982/83 for T. Shs. 1,840,000. This was a USAID PL-480 local currency project;
• UMATI Family Planning Project—Arusha Region, $500,000. Revised in 1982/83. Project Identification Document submitted to USAID, but not yet approved. Original proposal for this project, called the Arusha Population Project (1981/82, $927,000) was not approved;

• Women in Production Project, Arusha. Submitted to USAID in 1981/82 for $500,000. Approved but not funded; and


The following project proposals were submitted to other international donors.

• Arusha Rural Productivity Project: Productive Sectors Component Design. Submitted to the International Fund for Agricultural Development in 1981/82 for $21,956,000. Not funded; and

• The Arusha Region Industrial Extension Project. Submitted to the Swedish International Development Agency, 1982/83, for $1,240,000. Approval of the project is pending and funding anticipated for May 1983.

PROPOSALS DEVELOPED FOR THE INTEGRATED DEVELOPMENT PLAN

A number of long-term investment proposals were also developed and included in the Arusha Region Integrated Development Plan, completed in 1982. These proposals were geared to addressing a number of objectives. The first objective was that of increasing food crop supplies to feed adequately the growing population of Arusha Region, and to provide a surplus for national consumption. Although the Arusha Region has been a predominant food-exporting region in the past, it will become a food deficit area by 1990 due to its growing population and low levels of productivity. The following priority long-term investments were proposed to address the food crop supply problem:

• Agricultural Workshop and Farm Service Centers (P 1.1), T. Shs. 17.7 million;

• Kiru Valley Irrigation and Agricultural Development (P 1.2), T. Shs. 278 million;

• Mang'ola Irrigation/Flood Control and Agricultural Development (P 1.3), T. Shs. 240 million.

• Mbuguni-Moshono Irrigation and Flood Control Project (P 1.4), T. Shs. 35 million; and
The second investment objective of the region is to develop the livestock industry for the purpose of local and national consumption, as well as for export. Currently, the sector is characterized by the use of traditional livestock management practices, with most of the animals held for family consumption and wealth. Project proposals call for major development of the beef and dairy industries, based on improved long-term planning. They also call for a major investment in the small ruminant industry, in terms of both production and processing, which reflects a potential of the region that has not yet been developed. The proposed investments are:

- Regional Range and Dairy Improvement Program (P 2.1), T. Shs. 53.8 million; and
- The Arusha Agro-Industrial Project (P 2.2), T. Shs. 371.2 million.

The region's third investment objective is to generate employment and revenue, including foreign exchange earnings, through the production of export crops, tourism, and industries that add value to the region's natural resources. Priority projects under this long-term plan propose major investments that will achieve these objectives. Specific projects include:

- Vegetable and Fruit Canning and Processing Industry (P 3.1), T. Shs. 10 million;
- Lime Pozzolana Cement Production (P 3.2), T. Shs. 30 million;
- Salt Extraction and Processing - Lake Balangida (P 3.3), T. Shs. 10 million;
- Soda Ash Production - Lake Natron (P 3.4), T. Shs. 3000 million;
- Private Sector Tourism Development (P 3.5), T. Shs. 80 million; and
- Wildlife Utilization Project (P 3.6), T. Shs. 30 million.

The development and maintenance of the region's transport network represents the fourth investment objective. The priority investment proposals listed emphasize the development of the regional roads network, with an emphasis on modernizing operations and maintenance facilities. Also a village transport project is proposed to overcome the constraint of lack of transport. The proposed investment projects are:
Upgrading the Region's Primary Roads Network (P 4.1), T. Shs. 296.4 million;

Modernizing Regional Maintenance Workshop Capabilities (P 4.2), T. Shs. 50 million; and

Village Transport Services (P 4.3), T. Shs. 48 million.

The fifth investment objective of the region is to establish and maintain water supply systems that would promote productivity and improve the quality of life in villages. The projects proposed are major, long-term efforts aimed at improving the economic and social welfare of specific geographic areas. They include:

- Central Kiteto Trunk Main (P 5.1), T. Shs. 70 million;
- Dongobesh Trunk Main (P 5.2), T. Shs. 80 million;
- Kansay-Endabash Pipeline (P 5.3), T. Shs. 10 million;
- Mto wa Mbu - Mbuyuni Trunk Main (P 5.4), T. Shs. 40 million;
- Monduli Town Water Supply (P 5.5), T. Shs. 5 million; and
- Ng'arwa Wasso Water Supply (P 5.6), T. Shs. 2 million.

Increasing the availability of energy supplies is the region's sixth investment objective. This will involve such resources as forestry and hydro-electric power. The main emphasis of the proposed investment efforts is in the development of wood resources, with an aim to sustaining the production of fuel to meet future demands. Currently, 90 percent of the region's fuel comes from wood. In addition, the plan proposes the implementation of a major hydro-electric power project.

- Forestry Development (P 6.1), T. Shs. 85 million; and
- Hainu River Hydro-electric Power Project (P 6.2), T. Shs. 282 million.

The seventh regional investment objective is the development of the capacity of district councils and villages to make investments that will increase their self-reliance and improve the quality of life in the rural areas. This involves building the planning, implementation, and management capabilities of villages and cooperatives, improving health education, and developing the government infrastructure to support village development activities. The main projects proposed under this category are:

- Rural Development Fund (P 7.1), T. Shs. 65 million;
- Rural Housing Improvement (P 7.2), T. Shs. 36 million;
The final investment objective is to improve and protect the environment of the region through the more careful management of its natural resources and by decreasing the rate of growth of its population. Specific investments include:

- Karatu Soil Conservation (P 8.1), T. Shs. 18 million;
- Arusha Integrated Population and Family Planning Program (P 8.2), T. Shs. 10 million; and
- Ngorongoro Conservation Area: Tanzania World Heritage Site Investment Fund (P 8.3), T. Shs. 10 million.

FEASIBILITY STUDIES COMPLETED

In addition to the project proposals developed for each of the 181 projects included in the project profiles, the following feasibility studies were prepared by APVDP:

- Hainu River Study Pre-feasibility Report (hydroelectric power generation) by TANESCO and APVDP;
- A Preliminary Investigation into the Potential for Agricultural Production from the Kiru Valley Area of Hanang (irrigation study);
- Preliminary Investigation Report for Dongobesh Gravity Water Supply System;
- Field Investigations for Lime Pozzolana Cement Project;
- Feasibility Study on Oil Production in Dongobesh;
- Pre-feasibility Study of Soap Manufacture in Arusha Region;
- Pre-feasibility Study, Fruit and Vegetable Canning, Ngarenanyuki, Arumeru District;
- Hydrogeological Investigation Report for Olkokola Borehole;
- Hydrogeological Investigation Report for Kikatiti Borehole; and
COORDINATION WITH OTHER DONOR PROJECTS

One of the goals of APVDP was to assist the region in establishing better communication linkages, both within it and with research and development institutions elsewhere in the country and overseas. During the course of APVDP a number of study tours were made to national agricultural research stations, and consultants from the University of Dar es Salaam were involved with the project. In addition, APVDP has coordinated with and assisted many donor-funded activities in the Arusha Region, including many with AID. These have included the following AID projects:

- Project to Inventory and Assess Private Voluntary and Non-Governmental Organizations Operating in Arusha Region;
- International Population/Development Planning Project;
- Training for Rural Development Project;
- Hanang Village Health Project;
- Maasai Health Systems Project;
- Continuing Education for Health Workers Project;
- Drought Fund Projects, including:
  - Maasai Districts Water and Transport Development Project;
  - Mbugwe Division Water Supply Project;
  - Kisongo Water Catchment Development Project;
- PL-480 (Food For Peace) Generated Local Currency Projects, including:
  - Land Resources Planning and Management Project;
  - Small Scale Irrigation Systems Project;
  - Crop Storage and Processing Project;
  - Promotion of Small Industries Project;
  - Water Supply Project;
- Arusha Women in Development Project;
- Farming Systems Research Project;
- Project Development and Support Fund Activities, including:
  - Assessment of Migration in Arusha Region;
  - Monitoring of Population Growth in Arusha Region;
- Tanzania Rural Development Bank, Resources for Development Project; and

In addition, APVDP has been involved in projects carried out by other donors, including:

- The World Bank: National Maize Project;
- The Pathfinder Fund: Report on Population Pressure in Arumeru District;
- The Peace Corps: Assignment of volunteers in forestry, extension communications, and mechanics;
- The Tanzania Rural Development Bank:
  - Themis Farm Implements Manufacturing Project Loan;
  - Makumira Bakery Project Loan;
  - SIDO Small Tools Procurement Program Loan;
- Government of Italy, SACCO Corporation (Italy), and American Express International: Arusha Agro-industrial Project;
- UN World Food Programme: Commodities Aid to Arusha Region;
- International Labour Organization: Forestry, Soil Conservation, and Irrigation Projects;
- International Finance Corporation: Assistance in planning a loan for Private Sector Tourism Development;
• Dutch Foreign Aid: Dutch Gassification Project; and
ANNEX D

SUMMARY OF DAI CONTRACT EXPENSES
## ANNEX
### SUMMARY OF DAI CONTRACT EXPENSES

<table>
<thead>
<tr>
<th>Category</th>
<th>Contract Budget Amount</th>
<th>Total Expenditures</th>
<th>Difference</th>
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<td>Training</td>
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<td>Consultants</td>
<td>238,991.00</td>
<td>238,991.22</td>
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<td>Allowances</td>
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<td>355,782.42</td>
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<td>Travel and Transportation</td>
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<td>Other Direct Costs</td>
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<td>316,298.44</td>
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<td>Equipment, Materials &amp; Supplies</td>
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<td>Overhead</td>
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<td>Fringe</td>
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