RURAL DEVELOPMENT STRATEGIES: THE CASE OF TANZANIA

by

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DEDICATION

To my husband, Abdul, who endured a long year of baby-sitting for our beloved Achi to give me time for my graduate work. His encouragement, moral support, and patience throughout my studying were the preconditions for all my efforts and achievements.

To him, I say:

"You are a very special person. I'm glad you're my best friend.
Thank you for everything."

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CHAPTER I

INTRODUCTION

1.1 The Need for the Study

Tanzania, like many developing countries has its share of problems associated with developing its rural sector where the majority of its population live. Since independence the government of Tanzania has proclaimed the development of the rural sector the cornerstore of the country's development strategy. Nobody has explained this principal development objective better than President Nyerere; when he stated:

> While other countries aim to reach the moon, we must aim, for the time being, at any rate, to reach the villages. (Julius K. Nyerere, December 1961).

A number of approaches have been tried in Tanzania. Some of them abolished and then re-restablished in an effort to pave a smooth road towards rural development through improved agricultural performance and provision of essential social services. Besides the provision of social services such as clean water, schools and dispensaries to about half of the rural population by 1982, none of the approaches has led to the anticipated transformation of production structures and productivity of the rural sector. Thus, an analysis of the approaches taken will attempt to identify those areas which need strengthening or further study to improve the performance of the rural sector.

1.2 Objective of the Study

The principle aim of this paper is to provide some insights into the rural development policies and operations put into practice by the government of Tanzania since independence (1961) and discuss their success and/or failures. The specific objectives of this study are the following:

(1) to identify the major constraints to rural development,

(2) to identify and describe rural development policies implemented in Tanzania and evaluate their impact on; agricultural development, farmers' participation in communal production activities, and the availability of social services to rural people,

(3) to draw some lessons from Tanzania's experience in rural development which may be useful for future policy action in Tanzania, as well as for rural development in Africa.

1.3 The Method of Analysis

The method of analysis employed in this study is descriptive and diagnostic. To accomplish the stated objectives, the relevant data is compiled and organized in statistical and descriptive summaries to show the structural trends in the development of the rural sector.

1.4 Data and Information Sources

The data and information used in this study was drawn from the following major sources:

(1) The basic policy document: the "Arusha Declaration of 1967". This document charts out the ideology of Ujamaa in Tanzania.

(2) A policy document on Socialism and Rural Development of September 1967. This was a follow up of the "Arusha Declaration" with respect to the development of the rural sector. It laid down guidelines for the establishment and management of Ujamaa villages.

(3) The Tanzania National Agricultural Policy Document of 1982. This document gives a critical review of the recent trends in agricultural development, thoroughly indicates the overall sectoral priorities and maps out a course of action towards the improved performance of the agricultural sector.

(4) The author's experience and knowledge on the subject since she has lived in the rural sector and her family was affected by the villagization program of 1973/74.

1.5 Data Limitation

Due to the crude system of data collection in Tanzania, considerable caution must be exercised in its use. Overall, there appears to have been a tendency to exaggerate crop production figures at the regional levels and budgetary allocations at the national level (possibly for political reasons) and it is probable that this weakness applies also to data used in this study. Therefore, the data used here should be regarded as indicative of general trends rather than accurate estimates. Also, since it is a problem to obtain recent data in some instances, the author has used data collected over five years ago.

1.6 Organization of the Paper

The paper acquaints the reader with Tanzania as a country and outlines a general survey of the rural sector. The second part covers issues of particular importance to rural development, followed by an identification and discussion of constraints to Tanzania's rural development. The fifth part of the study discusses rural development strategies put to use in Tanzania from the time of independence to Post-Arusha Declaration era. This part is followed by the evaluation of the impact of the Ujamaa policy on the rural population, while the last part discusses lessons gained from Tanzania's experience in rural development.

CHAPTER II

TANZANIA: BACKGROUND CONDITIONS

2.1 Country and People

The United Republic of Tanzania came into being on April 24, 1964 after merger with The People's Republic of Zanzibar and the Republic of Tanganyika. The latter gained its independence from the British on December 9, 1961.

Tanzania is situated just south of the equator. It covers an area of 363,000 square miles (about 36 percent larger than Texas). The country boarders Kenya on the northeast, Uganda on the north, Rwanda and Burundi on the northwest, Zaire on the west, Zambia and Malawi on its southwest and Mozambique on the south (see the map of Africa).

The outstanding geographical features of Tanzania include Africa's highest mountain, Kilimanjaro which stands at 19,656 feet; the world's second largest lake, Victoria, and its second deepest lake, Tanganyika.

The topography to a large extent determines the rainfall pattern; higher altitude areas in the south and north have relatively high rainfall, while other areas in the interior receive less than 800 mm of rainfall annually. The rainy season generally extends from November through May.

Only about five percent of Tanzania's total land area is used for crop production. The remainder consists of rough grazing areas (52 percent) and of woods and forest (43 percent). Smallholders cultivate about 87 percent of the area under crop production. About 31 percent of the cultivated area is devoted to major export crops, with the remaining 69 percent reserved for basic food crops (Agricultural Survey, 1972).

Although the manufacturing sector is still in an early stage of development, it has grown rapidly in the last few years. Its contribution to GDP averages about 13 percent annually. Tanzania's industrial growth seems to follow a similar pattern to that of many developing countries. This pattern has four stages (Rweyemanu, J. 1973):

(1) Primary processing of crops, both for local consumption and for export. These processes include such activities as the preparation of sisal leaf for fibre, the ginning of cotton, the drying and hulling of coffee, etc.

(2) The second phase is the provision of services and subsidiary materials, essential to the harvesting of the main cash crops. This includes the development of repairs and maintenance facilities, both for mechanical and electrial engineering, and for vehicles, the manufacturing of packaging materials of all sorts, etc.

(3) The third stage, through which a developing industrial complex passes, is the activity, associated with the building industry.

(4) The final stage is the manufacture of consumer goods with the emphasis on the goods, made of local materials. Tanzania is entering simultaneously into the third and fourth phase of her industrialization, though the effort is hampered by a shortage of both capital and trained manpower.

The population of Tanzania is estimated to be growing at a rate of 2.7 percent per annum (Population Census, 1978). In 1982, the population was estimated at 20 million.

2.2 General Survey of the Rural Sector

With more than 90 percent of Tanzania's population dependent on agriculture, the importance of the rural sector to the economy should not be underestimated. A brief analysis of the importance of agriculture will reflect the contribution of the rural sector to the economy of Tanzania.

Agriculture is central to the Tanzanian economy and will continue to be for the foreseeble future. Its major activity is divided between subsistence farming and cash

crop farming. The cash crop farming accounts for nearly 40 percent of the total agricultural output and includes crops such as coffee, cotton, tobacco, tea, sisal, and cashew nuts. The majority of Tanzanian peasants, however, are engaged in traditional agriculture growing mainly maize, beans, sorghum, cassava, sweet potatoes, bananas, and other crops for subsistence economy. This type of farming accounts for about 60 percent of the total agricultural output.

Agriculture contributes about 50 percent of the Gross Domestic Product and more than 75 percent of the foreign exchange earnings. It provides about 90 percent of the food consumed in the country and raw materials for the expanding industrial sector. In turn, the agricultural producers are the major market for the industrial goods produced. Livestock also provides living to a good proportion of the people, although only a small portion of the animals are sold commercially. Tanzania has a total cattle population of about 12 million, 5.5 million goats and about 3.6 million sheep (1978 Census).

According to the Agricultural Survey of 1972, over 80 percent of all farm holdings are below 2 ha. -- indicating that Tanzania is basically a country of small farmers.

Table 1.

Size Distribution of Farm Holdings 1972

Farm Size (ha)	No. of holdings	% of Total Holdings
< 0.49	771,954	31.5
0.5 - 0.99	651,386	26.6
1.0 - 1.99	605,291	24.7
2.0 - 2.99	218,375	8.9
3.0 - 3.99	88,696	3.6
4.0 - 4.99	49,985	2.0
5.0 -10.0	53,252	2.2
> 10.0	11,625	0.5
Total	2,450,564	100.0

Source: 1972 Agricultural Survey

Nevertheless the importance of large-scale farming should be appreciated. This segment of the agricultural sector contributes about 25% of coffee, 90 percent of tea, 50 percent of sugar and sisal, 80 percent of wheat, 70 percent of rice and about 25 percent of maize and milk production, representing export earnings or import savings at 1982 prices of over US $100 million annually.

Increases in agricultural production since independence has barely kept pace with the rural population growth rate. The average annual food crop production increase for the period 1965/80 has been 3.7 percent, but this growth was not even. However, in the second half of this period (1972/80) the growth was only 2.4 percent (Structural Adjustment Program Report, 1982), a growth rate far below the rural population growth rate of 3.3 percent annually. The fact that Tanzania changed from a net exporter position prior to 1970/71 to a large net importer position (Table 2) bears testimony to this contention. There is, however, considerable potential for increasing agricultural production through effective agricultural research, extension, pricing policies and other support services (The Tanzania Agricultural Policy, 1982).

The data showing the growth and distribution of rural incomes is fragmentary, but estimates can be deducted from various sources. According to the Household Budget Survey of 1969, the average annual income of an adult in a farm household was estimated at Tsh 308 (US $43) of which 78 percent was from agriculture. In contrast, the income of a non-farm person in the urban areas was four times higher. No later household survey information is available on incomes, but GDP data for 1973 shows an agricultrural income per person of Tsh 387 and a derived total income of Tsh 500 (US $70). For 1981, GNP data indicate an agricultural income of Tsh 562 per rural household.

Table 2

Total Imports of Cereals--1969/70 to 1981/82

(Thousand tons)

CEREAL	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82
Maize	47.9	—	92.3	78.9	291.1	225.4	107.0	41.6	34.3	—	32.5	274.6	234.6
Rice	—	—	—	—	72.6	14.3	21.0	5.0	49.0	41.0	55.0	65.2	70.2
Wheat	35.7	11.6	45.4	8.2	91.0	28.8	6.1	34.0	41.0	62.0	33.0	48.7	83.1
Total	83.6	11.6	137.7	87.1	454.7	268.5	134.1	80.6	124.4	103.0	120.5	388.5	387.5

Export from Tanzania were as follows:—

Maize: 1968/69—32.0
1969/70—28.0
1970/71—24.0
1971/72—29.0

Wheat: 1967/68—1.0
1971/72—0.1
1973/74—0.3
1974/75—0.3

Rice: 1966/67—2.0
1967/68—0.4.
1968/69—0.1
1970/71—0.5
1971/72—4.0
1972/73—7.0
1973/74—2.0

Source: Marketing Development Bureau Report --various years.

CHAPTER III

REVIEW OF ISSUES OF RURAL DEVELOPMENT

Rural development involves a process of mobilizing and organizing the rural population to undergo socio-economic changes which enables them to improve their conditions of living and satisfy their own needs. Thus, the people are both subjects and the objects of the development process.

A policy analysis of rural development in developing countries should focus on three key areas (Johnston and Clark, 1982); (a) production-oriented intervention, dealing with agriculture development and rural employment opportunities; (b) consumption-oriented interventions, dealing with health, nutrition, and family planning; and (c) organization-oriented interventions, dealing with rural institutional structures and managerial procedures.

Thorbecke (1979, p. 198) identifies four alternative agricultural development strategies which have been attempted by various countries.

(1) A "unimodal" or progressive modernization strategy, whereby the efforts to increase agricultural productivity are characterized by small-scale, labor-using, capital-saving technologies which rely heavily on the "green revolution" type of innovations.

(2) A "bimodal" or dualistic strategy. This approach is characterized by the co-existence of both small-scale labor intensive farming and large-scale commercialized farming, although efforts to increase agricultural productivity by the governments are concentrated mainly on a subsector of agriculture employing large-scale, labor-savings, capital-using technologies.

(3) An "industrialization first" strategy. This is the protectionist import substitution strategy of industrialization whereby the agricultural sector is discriminated against through price distortions, overvalued exchange rate, and under-pricing of capital. All these result into inappropriate choice of capital intensive industrial development strategy, and agriculture receives a disproportionate small share of investment in research, extension, mechanization, irrigation, and rural infrastructures, etc. This strategy normally leads to increasing poverty among the rural population.

(4) The fourth alternative in Thorbecke's typology--the "collectivization, or socialization, of rural areas"--really embraces two alternatives namely, unimodal and bimodal patterns of agricultural development. In a socialist economy like Tanzania, the two approaches are regarded to a large extent, as mutually exclusive, i.e., promoting one mode of agricultural development precludes the successfully pursuing of the other.

The experiences of Taiwan, Japan, South Korea and a few other countries demonstrate the feasibility and desirability of pursuing a unimodal pattern of agricultural development for the good of the smallholders who are the majority. In a late developing country, the great majority of farm households inevitably are by-passed when a bimodal pattern of agricultural development is pursued (World Bank, 1978). Two interrelated factors bear much of the responsibility for the tendency of developing countries to pursue policies that result in a bimodal agricultural development. First, it is often assumed that the technical superiority of "modern inputs" such as tractors and even combine harvesters means that capital intensive, mechanized technologies, which are best adapted to large-scale farm units, are superior in terms of economic efficiency as well. Second, large farmers and those who identify with them for personal or political reasons have a vested interest in strategies that continue to concentrate scarce

resources in a large-scale, highly commercialized subsector.

Tanzania's pattern of agricultural development, however, appears to be essentially unimodal. With the launching of Ujamaa villages since 1967, the government encourages smallholders to join their efforts on communal activities such as farming and small-scale industries.

Striking a balance between production and consumption-oriented activities is important in designing an effective and practical model for rural development. Improvement in health, water supply, diet, education and family planning can improve the welfare of the rural population. These are also sound economic reasons for introducing social welfare services, since better health, reduced domestic chores, and higher levels of education can contribute to increases in agricultural productivity through increases in the quantity and quality of labor. In fact, production and consumption-oriented measures complement each other.

The planning of social services, however, poses the most difficult problem of resolution between economic, social, and technical choices. This is because demand for a wide range of social services is substantial in many rural areas, while the financial, manpower, and organizational resources for effective delivery of social services are often extremely limited. Consequently, there are a number of interrelated questions to be addressed in planning rural development programs. First, given that resources are limited, how should additional fiscal, organizational, and manpower resources be raised from within the rural areas? Second, are such resources likely to be mobilized more easily if the services to be provided lead to a measurable impact on productivity or if they generate substantial enthusiasm for development programs among rural people? Third, how can low-cost delivery of services be organized? Is mass participation in planning and/or implementation of programs more conducive to a low-cost delivery of services?

In Tanzania, self-reliance programs--whereby the villagers communally provide their labor free for the implementation of the social welfare programs, such as building of schools, health centers, and roads--help to reduce the cost to the government of providing these services to the rural population. The government is then required to provide the technical manpower and equipment necessary to run the programs.

The existing information on social services is sparse and provides little systematic evidence, either on the impact of these various social service interventions on rural welfare or on productivity. Nor does much systematic analysis exist for alternative technical and administrative choices in provision of social services as for the effect of these choices on the costs of organizing social services. The data that do exist are largely of a suggestive nature, underlining the need for more research in this critical area.

The organization of people for the implementation of production and consumption intervention is actually a central element of a successful development strategy. Attempts to change what things are done should be followed by appropriate changes in how things are done. As Uphoff and Esman (1974) noted:

> Those cases in which there was more organization reaching down to the local level...and involved with rural development functions have accomplished rural development objectives more successfully than those with less rural organization.

Rural Cooperatives in most developing countries and Ujamaa villages in Tanzania are examples of organizing the rural people for participation in the development process.

Tanzania's population is overwhelmingly rural with the economy highly dependent on agriculture. National development means rural development. Many writers on rural development in Tanzania have observed the element of continuity in rural development policies from the time of British Colonial rule to the post-independence era (e.g., Hyden, 1980; Luttrell, and Mapolu). The main concern of both colonial and independence governments has been, how to increase the productivity of the agricultural sector and thus increase national output.

Increasing the productivity of the agricultural sector was the main objective in all the development policies implemented in Tanzania. This objective was complemented with the provision of social and economic services to the people. The egalitarian objective is being implemented through reliance on four major principles: social equality; cooperative activities within a village structure; self-reliance; and the economic and social transformation of the rural society (see Chapter V for further discussion).

CHAPTER IV

CONSTRAINTS TO RURAL DEVELOPMENT

As indicated earlier, Tanzania's economy is mainly dependent on the development of the agricultural sector. Thus, any attempt to improve the performance of the agricultural sector and improving the social welfare of the rural population will constitute a forward step towards rural development.

This section will discuss key issues which need critical review and adjustment in order to bring about rural development in Tanzania. The issues discussed include: budgetary allocations for agricultural development, farmers' incentive system, research and extension services.

4.1 Government Investment in Agriculture

Despite the fact that over 90 percent of the population live in the rural sector and 85 percent earn their living through agriculture, this sector has not been receiving the priority it deserves in terms of resource allocation for its development. A comparison of the agricultural sector contribution to GDP against budgetary allocations for agricultural development over the period 1976/82 shows that while on average agricultural sector contributed about 50 percent of the GDP, it got only nine percent of the budget (Table 3).

Within agriculture itself, over the period 1974/82, food crops received the highest share of development expenditure (45.9 percent). Cash crop development was allocated 25.9 percent of the total expenditure. The rest of the development funds were distributed between research (2.7 percent), pest control (2.1 percent), irrigation (4.0 percent), seed production (2.2 percent) and others (17.3 percent), (Tanzania National Agricultural Policy, 1982).

Improvement in resource allocations, i.e., financial resources and manpower to irrigation and agricultural mechanization as well as constructiye adjustment in the management of research, extension, and the farmers' incentive system, might significantly improve agricultural performance.

Table 3

Agricultural Sector Contribution to GDP, 1976/82, Tanzania

	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82
Total (Tsh. Million)	7,007	9,537	13,341	16,255	17,461	18,380
% Share of Agriculture in Total GDP	41	46	51	54	53	52
Budgetary Allocation to Agriculture ('000,000 Tsh.)	500	420	580	530	590	523
% of Total budgetary Allocation for Agricultural Development	14.7	10.2	4.8	7.7	9.3	8.9

Source: Tanzania Central Statistical Bureau (National Accounts 1976-1981)

4.1.1 Irrigation

Irrigation farming is an important input in crop production because it reduces the effects of erratic rains, drought and can potentially double the harvest.

Although irrigation development has been occupying a high position in the agenda of all government talks about agricultural development, progress in constructing irrigation facilities to serve smallholders or rehabilitating the existing ones has been meager. At present, approximately 144,000 hectares (less than one percent of cultivated land) are under partial or full-scale irrigation, with traditional smallholder irrigation

accounting for 120,378 hectares (Ministry of Agriculure: Irrigation Report, 1983).

Ecological surveys undertaken by various agents estimate the potential irrigable land at 933,000 hectareas (Table 4). It is unfortunate that the advantage of irrigation farming have not been adequately tapped. The main problems which have hindered rapid progress of irrigation on a wide scale in Tanzania can be summarized as follows:

(a) absence of an irrigation policy,

(b) reliance on sophisticated irrigation techniques, which demand heavy investment, highly trained manpower and a big component of foreign exchange,

(c) lack of manpower experienced in the designing and constructing large-scale irrigation schemes.

(d) poor planning of irrigation projects, particularly the peasants' irrigation schemes.

(e) The effort to forge an appropriate agricultural technology for irrigated farming has been virtually non-existent.

Although the required investments to bring all of the irrigation potential to productive use is beyond the country's ability at the present time, the tapping of these irrigation resources forms part of the long-term strategy for agricultural development.

4.1.2 Mechanization

Since independence, attempts have been made to introduce mechanization in the form of tractor and ox-cultivation in the country. These attempts have been made with a view to relieve seasonal labor bottlenecks and raise labor productivity. The experience of mechanization with the use of tractors in Tanzania indicates that, although it offers some benefits through more efficient use of labor, particularly where land is abundant and available, the costs associated with the purchase, administration and management of the machinery (tractors), declining soil fertility and the resultant decline in yields have been considerable. Besides these costs, the use of tractors by smallholders is not economical for a variety of reasons. First, the farm sizes are small (over 80 percent of

Table 4

Estimated Irrigation Potential in Tanzania

Basin/Area	Studied By	Area Suitable for Irrigation (ha.)
1. Rufiji River Basin	FAO	700,000
2. Lake Victoria Basin	Alexander Gibbs	29,000
3. Smith Sound	Alexander Gibbs	88,000
4. Wami River Basin	FAO	32,000
5. Ruvu Basin	FAO	20,000
6. Kagera River Basin	UNDP	20,000
7. Luiche River Basin	FAO	10,000
8. Ngono River Basin	WD & ID	16,000
9. Pangari River Basin	FAO	10,000
10. Ruvuna River Basin	NAV International	8,000
	Total	933,000

Source: Ministry of Agriculture Report, 1983.

farm holdings are less than two ha. Table 1) and scattered making it difficult to use tractors on an individual basis. Second, since the labor bottleneck in peasant farming is largely seasonal, tractor services are needed at only the few critical periods of peak labor demand. Third, tractors are most useful in field preparation but often are of little utility in weeding or harvesting. Tractors may, therefore, only postpone rather than break the labor bottleneck while doing little to alleviate the problem of underutilization of farm labor at periods of slack agricultural activity.

Under some circumstances tractorization has aggravated labor bottlenecks rather than relieve them. For example, when tractors are used for land preparation but not for weeding, as is frequently the case, tractorization increases weeding requirements. This is because tractorization allows expansion of cultivated hectarage and, hence, of the area to be weeded.

All the above factors led the government to look into the possibilities of introducing animal-powered equipment as a more feasible alternative than tractors especially for smallholder agriculture. Since much of the necessary equipment can be produced and the oxen raised locally, this type of mechanization avoids strain on foreign exchange.

However, the use of ox-plows faces several of the same difficulties encountered with tractors. The first is the fact that, as with tractor use, ox-plow cultivation may aggravate the seasonal labor bottleneck. Because of the heightened weeding bottleneck that may result from using draft animals for field preparation, yields per hectares are sometimes no higher for ox-plow cultivation than for hoe cultivation (Ruthernberg, H., 1964).

The promotion of draft equipment is, however, also limited by its cost, which though far lower in cost than motorized equipment on a per unit basis, still represents a considerable investment for farmers. Agricultural production in Tanzania is carried out by the following three methods:

(a) hand-tool cultivation	80-85%
(b) animal-powered cultivation	10-15%
(c) tractor cultivation	5%

Hand tool farming is still the common method used. This calls for the government to further encourage the use of animal drawn farm implements especially in the areas where cattle are available. There is also a need to review the agricultural credit system (discussed further under Section 4.3) to find ways of making credit available to small

farmers so that they can afford the draft equipment.

4.2.1 Extension and Research Services

This section will discuss Tanzania's extension system and its effectiveness in terms of its ability to disseminate a range of profitable innovations to a mass of the rural population, in particular to the relatively poorer sections of the farming population.

To counter the problems of the traditional extension approach widely used in Tanzania, primary emphasis should be put on achieving a higher intensity of extension. The intensity of extension in this paper is defined in terms of extension worker/farmer ratios. Assuming that technology exists, increasing the number of extension agents will increase the number of farmers effectively reached so as to stimulate agricultural development.

The ratios of extension worker/farmer in Tanzania over the years have not been very encouraging. In 1968, Tanzania with a rural population of 11.5 million, employed 2,455 extension workers. Assuming that six people make a farm family, this is a ratio of one extension worker to about 800 farm families. The strength of the extension staff by 1981 was increased by 88 graduates, 1712 certificate holders and 1511 non-certificate holders, improving the ratio to one to 770. However, Tanzania is striving to achieve a ratio by the year 1992 of at least one extension agent for each of the 8300 designated villages which form the basis of the contemporary administrative structure of the rural economy (Tanzania Agricultural Policy, 1982).

In considering the intensity of extension, another factor which might be taken into account is the investment in training of extension agents. Extension staff must be trained to solve the specific and diverse farm level problems faced by the farmers. In Tanzania, most of the field assistants have a certificate in agriculture or animal husbandry while the field officers have diplomas or equivalent experience. The agricultural and livestock officers are mainly graduates or diploma holders in agriculture or veterinary science.

The certificate field staff are based in villages and are expected to provide agricultural and technical advice to the peasants in the villages. Any difficulties or specialized problems are referred to the district, region and research institutions for advice. To this end, the field staff work closely with the agricultural and livestock officers at district or regional levels. At national, regional and district levels, the government is planning to have subject matter specialists whose duty will be to advise on the development of particular aspects of improved agriculture--for example, irrigation, mechanization, horticulture, nutrition, and land planning.

The regional extension officers report to the Ministry of Agriculture for instructions and professional guidance. In addition to the government extension service, specific crop authorities, mainly those handling the export crops such as coffee,tea, tobacco, cotton and cashew nuts, provide specialized extension services.

The Party policy pape,"Siasa ni Kilimo", (Politics is Agriculture) of 1972 led to a belief that extension could be undertaken by all political leaders and administrators and was not a prerogative of technically trained people. With this belief a number of unqualified personnel were recruited sometimes on political merit to fill vacant field assistant posts. Extension work came to be equated to the political mobilization of peasants to expand their acreages or cultivate communal farms instead of assisting farmers to improve their farming techniques.

With the establishment of the Agricultural Policy of Tanzania in 1982, it was noted by the task force that extension services have deteriorated beyond acceptable levels. The government directed the emphasis be placed on quality rather than quantity. The objective was to follow the scientific approach to extension services. With the scientific approach the existing field staff are required to attend refresher courses which are offered as frequently as possible to bring them up to date on changes in the organization of production and services for the farmer.

Efforts to intensify the extension service should simultaneously include: (1) efforts to impart a technological package that is sufficiently profitable at the farm level to provide an incentive for the farmers to adopt innovations; and (2) an incentive system to encourage the extension service to perform its task efficiently.

It is a known fact that extension agents in developing countries, Tanzania being no exception, are poorly paid, inadequately trained, and seldom can offer a viable technical package. Thus, farmers often know more about what is wrong with the new innovation than the extension agent. Transportation services available to extension agents are very minimal. Few agents have access to vehicles and good roads, while the majority cover their areas on foot. Improving transportation facilities will increase the mobility and the initiative of the extension staff. The extension agent will be able to reach more farmers or reach the same farmers more often. It will also help to motivate the agent to get his messages across. The government stipulated in the agricultural policy document that a system of providing loans to extension workers for bicycles, and motorcycles and then pay mileage or use allowances so that these can be used on duty and maintained by the owners will be introduced in an effort to curb the field transportation problem.

In addition to changing or improving the quality of information disseminated, there is a need to change the traditional approach of disseminating the extension message used both in the villages and elsewhere and opt for a dialogical approach.

According to Friere (1973) the traditional approach, also called top-down or directive approach is based on the assumption that the extension agent is an expert because of his/her education, and the farmers, who are seen as ignorant, are supposed to accept this knowledge from the agent. This results in a vertical relationship with a one-way flow of information, i.e., from the top (the researchers and extension agents) to the bottom (the peasants). The extension worker tries to provide farmers with solutions to their problems in much the same way as a doctor prescribes for medical problems. Because farmers know that objections are not welcome, they accept the role of the

ignorant and passive listener. If the farmers don't agree with comments by the agents in the farmers/extension staff meetings, no objections are raised openly; rather, they will keep silent and go home to fail to put into practice what may have been suggested.

The failure of farmers to follow the "advice of experts" is discouraging to the extension agent and reinforces the feeling that farmers irrationally resist change. As a result extension agents tend to work with those few progressive farmers who seem more open to their suggestions, and advocate the use of pressure to force other farmers to use recommended practices for their own good. A comparison is always made that a farmer who refuses to follow recommended practices is like a sick person who must be forced to eat and he will be grateful for it when he gets better. Unfortunately the farmer often does not "become better" in the sense that he/she obtains a significant benefit from the forced practice.

This shows the importance of understanding the farmers' present knowledge, skills, attitudes, etc., as these form the foundation of new learning. Farmers should be made to understand why the new practice is superior to their old method. Failure to do so may result in farmers developing "defense mechanisms" since they see their old ways being challenged without understanding their inadequacy.

The dialogical approach demands an active involvement of the learner. Its essence is the horizontal sharing of ideas between extension/research worker and farmers, in the process of analyzing the farmers' problems, to understand them and evolve appropriate solutions cooperatively. This approach assumes that both the "teacher" (extension agent) and the student (the farmer) know something about the subject. The teacher's role in dialogue is not to present knowledge to the learners, but to lead the farmers in an examination of their problems or their immediate needs. Action is a crucial part of dialogue and self education, as ideas can only be tested in action or practice. The farmer will never learn the benefit of a new practice and the problems associated with it until he actually tries it and has thought about his experience critically. Neither will the

extension agent know the value of his ideas until he has shared them with the farmers and tested them against the farmers' perceptions and experience.

4.2.2 Research and Extension Linkages

The lack of an effective linkage between the National Research Service and the regional extension service is serious in its consequences. First, the development of agriculture in any country demands an effective agricultural research system. For some years scarcely any agricultural research has been conducted in Tanzania, despite the fact that there are research institutions existing in most agro-ecological zones and for most of the important food and export crops. Reasons for this dormancy of research can be attributed to both gross-underfunding of research programs and the break-up of the East African Community (EAC) in the 1970s. Prior to the breakdown of EAC, most research was conducted jointly for three member countries, i.e., Tanzania, Kenya and Uganda. After the EAC broke up, Tanzania was left without adequate financial resources or manpower to take over the research programs of the EAC relating to Tanzania. However, there was a great need to establish Tanzania's own research centers, and by 1979 there were 15 agricultural research stations. However, other than the Wheat Research Station, financed by the Canadian government, and the Uyole Agricultural Centre, which received 10 percent of its financing from the Nordic countries, other centers had no resources for research.

The National Agricultural Policy of 1982 stipulates that research centers will be given considerable priority in the allocation of the required resources to enable them to perform their vital functions. In recognition of the importance of continuity in research work, a package of incentives will be worked out to attract, motivate and retain competent research staff. Coordination of research activities and research information between research centers within the country and with the outside world will be further developed, and an Agricultural Research Data Bank will be established and maintained at the national level.

With its Research Service and Regional Field Extension, Tanzania has two potentially useful resources. However, for either to be effective, viable linkages with each other is essential. That linkage does not effectively exist. Thus, there is a need to establish a central Extension Service to link these two components into a system which can be thought of as the technology system. The Central Extension Service has two responsibilities; one of these is to provide technical support to the field extension by:

1. preparation of publications that put technological information together in packages to provide a ready reference to field extension workers.
2. preparation of lesson plans, visual aids, and other communications materials used by field extension workers.
3. giving in-service training to field extension staff. It needs to be clearly understood that no amount of final pre-service training will carry a field worker very long if technology is dynamic.
4. helping field staff with unexpected problems encountered in their work.

The second major responsibility of Center Extension is to encourage farmers in identifying problems of most significance to them and to help researchers structure research programs to solve, or at least address them. In the United States, these two functions are embodied in the County Extension Agent and the Extension Specialist. The activities listed above not only will help the extension workers to understand farmers' problems, but will also help evaluate the current technological recommendations of the research service. Attempting to put technology to use on farms provides another test of the technology and provides useful data to feed back into the research service.

The best location in the technology system for the Central Extension is to place it as an integral part of the research services. Although this would require extra administrative structure, the greatest advantage of this model is that, it provides the

means by which the research service is made sensitive to the needs and problems of farmers and is able to respond to them.

There is still another component that must be integrated into the technology system in Tanzania. That is, the component made up of the Agriculture Training Institutes (ATIs). Thus, there are three components of the Technology System--Research, Training and Extension. The only missing factor and almost a fatal inadequacy is that these components are not linked to form a system. The linkage between training and research is incomplete, as is the insulation of research from extension.

In the Technology System, research plays the central role. Individuals in research centers may perform dual functions of generating or testing new technology and extending that from the center to the field extension workers. The same relationship can work with teaching. The same individual can generate and/or test new technology as well as teach students. This is one efficient and effective way to link research with training. Since much of the training in the agricultural institutes is either for future extension personnel or for people who will work with farmers in some way, this is another effective linkage between research and extension. With the present situation whereby research and training are separated there is a danger that teachers are not up to date in technological developments and thus the graduates are also out of date upon leaving school.

There are many things about the Tanzanian situation which suggests a U.S. land-grant type of linkage. The research centers and training institutes are located in close physical proximity to each other and there is considerable decentralization of these facilities. The dispersion of locations for these institutes facilitate response to local or site specific problems. Field extension in Tanzania also has a local response channel through the districts and regions, similar to the multiple response channels of the U.S. field extension service. There are only two changes needed to significantly improve the chances of achieving the major advantages of the U.S. linkage system: efficiency and

relevancy. These are the creation of the central extension service and to establish the linkage between teaching and research. It is appropriate to point out that the analysis of the U.S. personnel may show that they perform no better than anyone else at the individual tasks involved in teaching, research and extension, but it is the system that makes the difference. The system puts the functions of each entity together so that they can benefit from each other.

4.3 Farmers' Incentive System

Short of natural disasters such as drought and floods, farmers' incentive system is typically the single most important factor influencing the pattern of agricultural production. Producer prices, agricultural credit and availability of essential consumer goods are the main components of the incentive system herein discussed.

4.3.1 Producer Prices

An increase in producer prices is considered by many observers as the principle catalyst in the process of increasing agricultural production. Since the operational efficiency of the marketing system is a major determinant of the level of producer prices in Tanzania, it is appropriate to discuss the agricultural price policy within the specific context of the marketing structures.

Up until 1976, agricultural marketing was undertaken by a system of farmers co-operatives and Crop Marketing Boards. With the dissolution of co-operatives, the Marketing Boards were reorganized into parastatal crop authorities which took over the marketing functions of co-operatives. These Boards were also responsible for production development, collection of crops from the villages, transport, storage, processing and final sale--either to domestic consumers or export markets. Crop authorities were created for domestic food crops, oilseeds and export crops.

The general mechanism of price policy implementation from 1976 to 1981 was that a single, pan-territorial, producer price for each crop was established. Differentials in this

uniform price were fixed for different qualities or grades but no distinction was made with respect to location or transport costs.

The financial position of the crop authorities played a large role in determining the level of recommended producer prices. The marketing margin had to be sufficient to cover the projected marketing costs of the crop parastatals.

Actually, the producer price was regarded as a residual to be obtained by deducting the estimated future cost of the parastatal from its estimated future sales. In the case of export crops this approach derived its theoretical legitimacy from the principle of export parity pricing. The above arguments could have been appropriate if the crop authorities were operating at optimal levels of efficiency.

However, at the severely sub-optimal level of efficiency at which these parastatals were operating, the producer prices recommended were always lower than their efficiency levels. Even when there was an increase in the world price of export crops, the increase was not passed on to the producer; instead it was swallowed by the huge operational costs of the parastatals. The agricultural producer prices for the period 1970/80 have been declining in real terms as has been the trend for agricultural production (see Table 5). The table indicates that for the period 1974-80, the real producer prices for export crops have fallen heavily relative to food crop prices. This can be explained partly by the fact that export crop producers can rarely avoid delivering their produce to crop authorities and thus financially supporting their inefficiencies, while food crop producers can and mainly have resorted to the parallel markets whenever the official prices are lower than prices in the "black markets." This tends to force the government to raise the official food crop prices to attract the farmers to sell their food crops to the government parastatal responsible for food distribution.

The new national agricultural policy established in 1982 promises an improvement in the producer price formulation. It states that:

Table 5

Trends in Agricultural Producers Prices for Selected Crops,

1969/70--1979/80 (Money and real terms)

Crop	Producer prices (T.Shs/kg)			% increase/decrease			
				1969/1970–1973/1974		1973/1974–1979/1980	
	1969/1970	1973/1974	1979/1980	Money terms	Real* terms	Money terms	Real* terms
Export crops†							
Cashew	0.91	0.91	1.74	0.0	−38.4	91.2	−24.0
Coffee	5.41	5.80	11.87	7.2	−33.9	104.7	−18.6
Cotton	1.06	1.10	2.83	3.8	−36.0	157.3	+2.3
Pyrethrum	3.00	2.75	5.51	−8.3	−43.5	100.4	−20.3
Tobacco	4.09	5.28	8.35	29.1	−20.5	58.1	−37.1
Domestic crops							
Maize	0.28	0.33	1.00	17.9	−27.4	202.9	+20.4
Paddy	0.52	0.57	1.50	9.6	−32.5	163.2	+4.6
Wheat	0.57	0.57	1.35	0.0	−38.4	136.8	−5.8
Groundnuts	0.92	1.15	4.00	25.0	−23.0	247.8	+38.3
Sunflower	0.42	0.55	1.40	31.0	−19.3	154.5	+1.2

* Deflated by the modified NCPI

† Average prices paid for all grades.

Source: World Development, Vol. 10, No. 4, pp. 268.

(1) There will be differential regional pricing of crops to encourage specialization in crops according to regional relative advantage in crop production.

2. Farmers' co-operatives are being re-established which will take over the marketing functions, input distribution and credit administration from crop authorities which will continue to run and control the major processing plants for the relevant crops.

3. To make sure that a large part of any increase in agricultural prices goes to producers, the government will see that co-operatives are operated at optimal efficiency. This might be possible because unlike before, the government now has control over the operations and the management of these cooperatives.

4. The formulaton of producers prices will be based on production costs, the demand for the products both domestically and for export (where applicable) and the marketing expenses.

5. Re-evaluation of foreign currency of June 1983 (20 percent) and June 1984 (26 percent) has helped halt the decline in the real value of official producer prices for export crops. The measure increased the price incentive offered to all exporters.

Although there are no reliable estimates of the total supply response of agricultural production as a whole to changes in real producer prices and the fact that there are other reasons for declining agricultural production, such as unfavorable weather, shortage of inputs, plant diseases, etc., it is difficult to avoid the conclusion that producer prices have contributed greatly to poor agricultural performance over the past decade, resulting in Tanzania's increasing dependence on food imports and a declining capacity to generate foreign exchange.

4.3.2 Agricultural Credit

In many countries including Tanzania very little of the institutional agricultural credit has been directed toward the development of smallholder subsistance farmers. In

1971, credit records of the Agricultural Finance Corporation in Kenya showed that 88 percent of the gross loans outstanding had gone to large-scale farmers (Lele, 1979). In Tanzania, between 1971/72 - 1978/79, the Tanzania Rural Development Bank (TRDB) created to deal with the administration of agricullturaI credit, gave on average, 61 percent of total loans to large-scale tobacco producers (Africa Now, May 1982). Because of its minimum loan collateral and other security requirements, over 80 percent of the farming population in the country has not been eligible for credit from TRDB. The issue of credit repayment is the main problem discouraging agricultural credit institutions from extending loans to small farmers. However, an analysis of the repayment figures in TRDB annual reports shows that small-scale farmers are by no means more in default than are large-scale farmers. In fact, a higher percentage of those defaulting were found to be the larger farmers, probably because being politically powerful, they feel they can renege on their debts with inpunity.

The repayment rates of agricultural credit are directly related to crop profitability. The farmers who produce cash crops (mainly large-scale farmers) are normally in a better position to get the loans as well as make repayments. Since Tanzania needs an increase in the production of food crops as well as cash crops, a new philosophy of lending should be worked out so that small-scale farmers can quality for credit. In addition, large-scale farmers are likely to contribute more to production from their own resources (equity) and borrow less from the bank. With the re-establishment of the co-operatives the repayment problem could be handled as follows: TRDB could issue loans to cooperatives which will be responsible for the repayment of the loans to the bank. Because cooperatives will have direct contact with the farmers through the marketing arrangments, it will be possible to deduct part of the farmers' sales as loan repayments.

4.3.3 Availability of Essential Consumer Goods

During the 1970s the state took control of the wholesale and distribution of consumer goods from privates business through the creation of parastatal, Regional Trading Companies (TRCs), in major towns. An attempt was also made after villagization to abolish private retailing in the rural sector. Villages were obliged to open communal shops despite their lack of managerial ability to run cooperative shops. The overall effect of this was a severe shortage of consumer goods such as soap, salt, cooking oil, clothing, sugar, as well as durables such as radios, bicycles and small farm implements. This leaves little incentive to increase production when the producers know there will be little to buy with the money received from the sale of surplus production.

4.4 Summary

The key areas identified for review and adjustment in order to improve the performance of the agricultural sector include irrigation, mechanization, extension, research and training linkages, and farmers' incentive systems.

There is need to rehabilitate all of the existing irrigation facilities and to look at the possibilities of having two or more crops from these irrigated areas. As far as mechanization is concerned, it seems that both tractorization and ox-plow cultivation have a potential to increase productivity of smallholder agriculture, provided the appropriate associated inputs and innovations, especially those regarding weeding, are introduced simultaneously. However, in most conditions ox-plow cultivation may be preferable due to the relatively greater flexibility, lower cost and the growth linkages with other sectors of the rural economy.

Farmers' incentive system, particularly the pricing policy, agricultural credit system and also the research, extension and training linkages need critical review, adjustments and strengthening so that all work together to bring about rural development.

CHAPTER V

EVOLUTION OF RURAL DEVELOPMENT POLICIES

5.1 Introduction

So as not to go into lengthy and historical complexities, the discussion here will focus on the post-independence era (i.e., after 1961). This is not a denial of the efforts by the German and British Colonial Administration towards the development and improvement of the rural sector in the then Tanganyika. Rather, it is primarily because of the fact that the vision of the colonial administration and that of post-independence were fundamentally different. Previously, the colonialists had primarily been interested in producing agricultural commodities strategic to their own economies. Commodities such as cotton, sisal, tobacco and coffee were encouraged at the expense of food crops to safeguard their own industries and creating what Clive Thomas terms as divergence between consumption and export (import all your consumption needs, export all that you produce, Thomas, 1972). On the contrary, the new government was determined to restructure the economy to conform to the country's medium- and long-range objectives; two which were the attainment of food self-sufficiency and the building up of a strong manufacturing sector.

Because of the major political and economc changes in 1967 with the institutionalization of the Arusha Declaration, the post-independence era is divided into two main parts corresponding to their respective rural development strategies.

5.2.1 the Period from 1961-1967

This was a period of continuity of the colonial policies. It was characterized by the establishment of Village Settlement Schemes, later to become primary cooperative societies. All the establishment costs were externally funded (First Five-Year Plan 1964-69).

The Settlement Schemes involved the selection of a few potentially "progressive" farmers from a number of villages (and even urban centres) later to be re-settled into government built settlements supplied with a whole range of infrastructures including housing, water, schools, dispensaries, feeder roads, carefully planned farming plots as well as a variety of agricultural machinery. It was expected that given these facilities the settlers would easily become early adapters. Substantial increases in agricultural output were anticipated within the first few years. Part of the capital outlay, especially that of agricultural machinery, was expected to be repaid once the settlement was self-sustaining (Ministry of Agriculture, Food and Cooperatives, 1964).

The originator of the settlement plan was the 1960 World Bank Mission Report on the economic status of the country (then Tanganyika). The mission recommended the establishment of such schemes through what it terms as a "transformation" approach, that is, initiation of settlements in completely new areas in the various parts of the country. This was conceived as one of the best alternatives to modernize agriculture and consequently a way of living. There was also an "improvement" approach in those traditional villages not affected by the new approach. Primarily it involved simple but proper crop and animal husbandry practices, extension and mixed farming.

The ideas were adopted by the Colonial administration at the time and incorporated in the Three-Year Development Plan of Tanganyika for the period 1961/62--1963/64. Much of the implementation of the plan was to be left in the hands of the new local administration which took office in December 1961.

Not all the schemes were new, however. Some of them were inherited from the colonial period established as early as the 1920s during the concentration policy whose aim was to move people into "concentrations". By September 1965, five types of settlement schemes could be differentiated, namely: the Pilot Vilage Settlement Schemes, Assisted Schemes; EX-TAC (Tobacco) Schemes; EX-TAC (mixed farming); and the AGRIDEV Schemes (Table 6).

Table 6

Village Settlement Schemes: September 1965

Village	District	Year Founded	Approximate Population
Pilot Village Settlement Schemes:			
1. Upper Kitete	Mbulu	1963	400
2. Rwamkoma	Musoma	1963	456
3. Mlale	Songea	1963	880
4. Kingongurundwa	Lindi	1963	600
5. Kabuku	Handeni	1964	724
6. Kerege	Bagamoyo	1964	764
7. Bawakria Chini	Morogoro	1964	120
8. Kiwere	Iringa	1963 under TAC	936
Assisted Schemes:			
1. Buyombe	Geita	1963	304
2. Matwiga	Chunya	1964	400
3. Mkata	Morogoro	1963	364
4. Galu	Ukerewe	1964	316
5. Amani	Muheza	1965	(a)
Ex-TAC (Tobacco):			
1. Urambo	Tabora	1956	5180
2. Lupatingatinga	Chunya	1962	720
Ex-TAC (Ranching):			
1. Kongwa	Mpwapwa	1962	600
2. Matongoro	Mpwapwa	1962	360
Ex-TAC (Mixed Farming):			
1. Ichonde	Ulanga	1960	1000
2. Sonjo	Ulanga	1960	1000
3. Kichangani	Ulanga	1960	1000
4. Nachingwea[b]	Nachingwea	1952	528
AGRIDEV:[c]			
1. Nyatwali	Musoma	1963	200
2. Kalamera	Mwanza	1963	400
3. Mbarika	Mwanza	1963	200
TOTALS: 24 schemes			15,412

Source: McHenry, D. C. (1978), p. 26.

The outcome was disappointing considering the schemes' inability to repay and stand on their own. Productivity was low according to the schemes' governing body--the

Village Settlement Agency. Many reasons have been put forward for their disappointing performance (Kawawa, 1966; Cliffe and Cunningham, 1973; McHenry, 1979; Coulson, 1982; ERD, various years).

(a) There seems to have been unrealistic cost versus revenue projections during the project preparation stage. However, profitable the crop enterprises would have been, the cost structure of the settlement schemes was too heavy to bear. Most of the cost-consuming items like schools, tractors and housing gave little or no economic returns even in the long run.

Besides cost overruns there were other reasons for the unsatisfactory performance of the schemes. Chief among them were:

(b) Poor selection of the would-be settlers. Despite the pre-determined recruitment criteria (farming experience, receptivity to new ideas, willingness to work and live together, capacity to work hard, ages between 25 and 40, married with children), those selected from small townships and urban centers were the unemployed, presumably with little or no expertise in (mechanized) agriculture. To the local leaders the issue was one of solving unemployment problems in their own areas rather than striving to make schemes sound economic production units. To the settlers, the schemes were regarded as providing social security.

(c) Lack of politicization on the part of the settlers. Politicization would have instilled a sense of responsibility and values necessary for the schemes' positive economic returns.

(d) Lack of firm leadership. At the national level the village settlement schemes were under the umbrella of the Village Settlement Agency (VSA). At the village level no one was charged with responsibility for running the scheme with the exception of a committee who delayed decision making and execution of policy directives which impaired the attainment of the schemes' desired goals.

(e) Lack of production targets. While the objectives of the schemes with regard to agricultural production were clearly stated, there were no physical production targets set out by the governing body to the settlers. Besides binding the settlers to the economics of the settlement schemes, the targets would also have provided a monitoring base from the outset.

The target during the First Five-Year Plan (1964/69) was to establish 69 settlements at a unit cost of £-150,000. But for those reasons and the fact the settlements affected only a tiny proportion of the rural population, the government decided to stop their further establishmnet in 1966. No one gives a more precise account for their abandonment than Prime Minister Kawawa who said:

> In the first place they have been heavily over-capitalized and the need to repay this great debt will be a lifetime burden on the settler farmer and will swallow up his crop proceeds.
>
> The second major conclusion is that the settler farmers on such pilot schemes in general show far less enthusiasm, and are less hardworking than settlers in spontaneous and unassisted schemes. They are also full of complaints and expect the government to give them everything. (Kawawa, April 1966).

At the same time he hinted what future government programs would be:

> Instead of establishing highly capitalized schemes and moving people to them, emphasis shall be on modernizing existing traditional villages by injecting capital in order to raise the standard of living of the villagers. It is envisaged that such improvement might take the form of provision of water supply, better lay out of villages, improved farming and production methods, and reorganization of land holdings.

In content this approach was similar to the World Bank "improvement" approach.

Some experts have criticized the government's move to stop the schemes arguing that "the difficulties experienced were not as a consequence of the policy but of the techniques used to implement the policy." (McHenry, 1979). In other words, they are of the view that instead of discarding the programs the government would have altered the methods of implementation. Still others argue that it was because of financial crisis that "forced" the government to take such a move. Had it not been for the crisis, it is probable that settlement schemes would have formed official policy up to the time of the

Second Five-Year Plan (1969-74). The financial crisis was a result of strained relations and diplomatic drift with the west over the Rhodesian Issue (Unilaterial Declaration of Independence in 1965). Foreign donors withheld and cut back their aid to Tanzania, rendering it financially unable to undertake major social and economic ventures envisaged in the First Five-Year Plan (1964/69). About 70 percent of the total planned capital expenditure was expected to come from outside sources, mainly western countries. Since the expectations did not materialize, the government was forced to drastically cut back some planned economic ventures including the settlement schemes whose financing was externally dependent.

Whatever the case, two major issues--the undependable nature of external funding sources and lessons from the settlement scheme policy--had an important part to play in the charting of a revised economic policy and a new rural development strategy, both of which came in the wake of the Arusha Declaration of February 1967.

5.3. Ujamaa Villagization Era: 1967-1976

5.3.1 Voluntary Villagization Period: 1967-73

In 1967 Tanzania official economic, social and political philosophy came to be known as "Socialization and Self-Reliance" or simply referred to as "Ujamaa."

The philosophy was formulated in a policy paper of January 1967 known as the Arusha Declaration, named after this northern Tanzanian town of Arusha where the ruling party conference took place. Hitherto, the official economic policy (during the first six years of independence) has been that of "mixed economy" with capitalism (in its infancy stage to say the least) co-existing hand-in-hand with some "socialistic" ideals--as shown by the extent of state ownership and control and by a significant number of producer and marketing cooperative societies in the countryside.

The reasons for the shift are two-fold (Arusha Declaration, 1967)

1. Internal Factors

With the dangers associated with widening and extreme income disparities in

developing countries among regions and between ethnic groups, the government aimed at "preventing" the emergence of a strong "kulak" class in the countryside and that of industrial capitalists in the urban areas; and at the same time striving for equitable income redistribution through various policy measures including cooperative production in agriculture, pooling land into the hands of the government, provision of employment opportunities in rural areas particularly by way of small-scale industries; and a deliberate policy of relocating government-sponsored industries away from Dar-Es-Salaam. The emergence of a kulak class is said to have been evident during the village settlement policy. Further continuation of such a policy would have entrenched this small class; and by its very economic power amass more wealth at the expense of the poor majority. Such disparities in wealth have often created social upheavals in many developing countries.

2. External Factors

Earlier there was an excessive reliance on private and external financing as in the case of the First Five-Year Plan. However, in the political and diplomatic turmoil which occurred in 1965 the government realized that such dependence is dangerous since those sources of financing were undependable and not without political ties--hence, "self-Reliance." Self-reliance as described in the Arusha Declaration can be interpreted to mean reduced dependence on external funding sources and instead there should be effective utilization of the available local resources, however limited they may be. This had the implication of discouraging import-substitution type of economic ventures which tended to use foreign exchange and earned little or none in return, but encouraged the development of labor-intensive program.

With respect to the rural sector, the Ujamaa policy centers on the Ujamaa Village. Details for establishing Ujamaa villages were contained in a separate policy

document of September 1967 called Socialism and Rural Development. In his later writings and speeches, Nyerere noted:

> ...in a socialist Tanzania, our agricultural organization would be predominately that of cooperative living and working for the good of all. This means that most of our farming would be done by groups of people who live as a community. They would live together in a village, they would farm together, market together and undertake the provision of local services and small local requirements as a community. (Nyerere, 1968).

The Ujamaa villages were thus to become cooperative production and marketing units thereby fostering both socialist principles and rural transformation.

The document also provided guidelines for the establishment of Ujamaa villages:

(a) the move towards Ujamaa villages was to be voluntary and spontaneous (presupposes a non-compulsion process),

(b) there was to be a step-by-step transformation of Ujamaa production. This assumed an evolutionary process, starting with limited numbers of activities on a communal basis and extending to many others at a later stage.

(c) democratic decision making by every village member (mass participation in decision making). Ujamaa villages, like the settlement schemes, were to be provided with the essential social services--schools, clean water supply and dispensaries. These investments were considered necessary as they had direct linkages with a person's future productive capacity.

How these guidelines fundamentally differ from the previous policies is not all that clear. The settlement schemes were established almost in the same premises--especially with respect to voluntarism, democratic decision making and the provision of social services. There also was cooperativism of some farming activities. Nevertheless, it has been argued that the Ujamaa villages represent a new approach to rural development in that they are based on different assumptions about the behavior of the peasantry--that the peasants

> ...want and can sustain economic progress themselves as soon as they have been shown the advantages and that the changes must and will come

> democratically and through voluntary participation, that is, in response to the felt needs of the (Ujamaa) villagers. (Goran Hyden, 1975).

However, the implementation of Ujamaa village establishment was not all that smooth. The voluntary aspects of Ujamaa village formation did not live long. In 1971, four years after the reference document was released, there came what was called an "operational approach" whereby the government would initiate and assist Ujamaa. The "operations" involving the movement of people en mass, were carried out in low-density and economically poor areas of the country. Such movements facilitated the government efforts to provide low cost social services with much more population coverage. But additional change in approach, including the use of force, was to come in 1973.

The change followed a party conference of October of that year whereby the National Executive Committee--the supreme decision making body of the party--called for full villagization of the country as contrasted to previous operations which were only confined to a few, selected areas. The committee was also unhappy about the pace by which Ujamaa village formation was progressing. Following this conference, the President announced in November 1973 that it was an order to live in villages and that everyone was to be in villages by 1976.

5.3.2. Forced Villagization: 1974/76

The President's order began to be implementd in 1974. Given the short duration between decision and execution, the approach of establishing the Ujamaa villages changed almost instantly. As of March 1973 the total population living in Ujamaa villages was approximately 2 million, representing about 15 percent of the entire population (Table 7). Some 70 percent or about 11 million people lived outside the Ujamaa system. How would these 11 million people settle in villages in three years time? Certainly voluntary enrollment would not work given the time limitation.

Instead, there was to be a massive and forced villagization. In the first year of implementation, the Ujamaa population jumped from 17.6 to 61.6 percent (Table 7). With

such massive resettlements, there were problems associated with site location/selection, agricultural planning and land allocation, feeder road system and

Table 7

Number of Villages and Resident Population: 1967-76

Year	Number	Resident Population	% of Total Population
1967	48	5,000	0.05
1968	180	58,000	0.50
1969	809	300,000	2.5
1970	1,956	531,000	4.5
1971	4,484	1,545,240	12.5
1972	5,556	1,980,862	15.5
1973*	5,628	2,028,164	15.5
1974	5,008	2,560,472	18.0
1975	6,944	9,140,229	62.0
1976	7,684	13,067,220	85.0

*March

Sources: 1967/71: Prime Minister's Office, Annual Report (Tanzania)
1972-76: The Arusha Declaration: 10 Years After, Dar Es Salaam

Notes: (1) The percentage figures have been approximated to the nearest decimal point.
(2) The fall in number of villages between 1973 and 1974 suggest amalgamation of some villages.
(3) A sudden jump in resident population during the first year of massive villagization (1974/75).
(4) The high number of villages in 1971/73 are a result of "operations."

provision of social services. In these newly and haphazardly formed villages, the idea of communal production (being the core of the Ujamaa System) was abandoned, and a new form of farming was instituted. It was called "block farming." Essentially block farming involves a large land area subdivided into individual family plots usually of a single crop. The preparation of the block farm (cleaning and plouging) is done centrally by government provided or village owned mechanical aids.

In the majority of the villages, the government's primary role continued to be the provision of social services. But this role was drastically reduced in 1974/75 following serious shortfalls in food production as a result of a devastating drought. Massive imports of food grains were to be made to supplement domestic production. In addition to drought, it is most likely that mass villagization had also contributed to the situation for this process disrupted the agricultural system. Drought was only an addition to an already unmanageable situation.

By 1976, as directed, almost the entire rural population was in "Ujamaa" villages. Except for those villages formed prior to 1974, very few of the post 1974 villages had "socialistic" content in them primarily due to the nature by which they were formed. There was no "Ujamaa" spirit and in that case it was then instituted not from within but "from above" (Boesen, 1976/79).

5 4. Summary

The implementation of the Ujamaa policy in Tanzania has evolved through three phases over a ten-year period:

1. voluntary villagization,
2. operations (with social service inducements)
3. forced villagization

The policy has been successful insofar as causing people to move into villages (living together). The second objective of "working together" is yet to be realized. There has been continued existence of the private plot as the basis of production at the village level; this accounts for more than 90 percent in terms of labor input, income and food supply (details are found in Chapter VI). In these two aspects the Ujamaa policy is very similar to the previous village settlement policy. Whether the present policy will prove superior to the earlier settlement policy in terms of agricultural productivity is not easy to tell. As one writer points out:

...none of these policy shifts has lead either to the transformation of production structures and relations in the rural areas or brought about any substantial increase in the productivity of the rural areas. The pre-occupation and mode of thinking with regard to the rural areas have remained the same. The means intended to transform the rural areas have not changed, all that has changed is the terminology under which similar programmes have been advanced. (K. Miti, ERB 91.2, University of Dar Es Salaam).

CHAPTER VI

IMPACT OF UJAMAA POLICIES

6.1 On the Rural Population

The target for villagization policy was that by 1976 all people in rural areas should be living in established villages. This has been well achieved and since 1977 about 95 percent of the rural population have been living in the government recognized Ujamaa villages.

The village framework encompasses three main forms of agricultural production: the traditional smallholdings; the allocated family holdings on the village block farm; and the communal farm. Contrary to government expectations or objective that communal production will be the dominant mode of all economic activities in the villages, a nationwide survey of 514 randomly selected villages conducted in 1979 by the office of the Prime Minister show that the individual family smallholdings has continued to be the major form of agricultural production. While no precise national time series data are available, Table 10 suggests that communal production is not on an upward trend. On average communal production accounts for no more than eight percent of the total land under village crop production (Ellis, 1982).

Various studies have been undertaken to measure production efficiency in communal farms as compared to individual smallholdings. Boesen, et al (1975) found poor yields in communal farms relative to private holdings in 21 selected villages in Kagera region. Sumra, S. (1975) also found that average yields on communal crops were lower than on smallholdings in Handeri district. Likewise A. T. Mohele (1975) found in a survey of 14 villages in Iringa that the average yield of maize for the 1973/74 season was almost 600 kg. per ha., while in the private holdings the average was 870 kilos. This is

Table 8

Percentage of Adults Participating in and Average Duration of Participation in Communal Farming/Fishing in 1974 (Four Region Survey)Tanzania, 1975[a]

Region	Percentage of Adult Population in Region Participating	Percentage of Adult Population in Ujamaa Villages Participating	Average Duration of Participation per Adult in in Region (days)	Average Duration of Participation per Adult in Ujamaa Village (days)
Dodoma (N = 9)	13.6%	22.7%	2.1	3.5
Iringa (N = 19)	10.7	48.5	5.9	26.4
Kigoma (N = 8)	1.9	8.9	1.1	5.3
Kilimanjaro (N = 5)	0.2	54.5	0.2	58.6

[a]Table is based on the calculation of village-level means.
N = Number of villages surveyed.

Source: McHenry (1979(, p. 156.

despite the fact that communal plots applied fertilizers while individual farms did not. A cross-section of Ujamaa villages in five different regions showed very low returns to village members. In the Iringa region, DeVries and Fortmann (1974) found that returns on communal farms averaged Tshs. 5.00 per man-day as compared to Tshs. 7.00 on individual plots. In the four remaining regions, the lowest payment to the village member was computed at shs. 5.05 and the highest payment was shs. 109.76 (Table 9).

Table 9

Average Income Distributed From Communal Farming/Fishing Activities in 1974 (Four Region Survey) 1975

Region	Income Distribution per Village[a]	Income Average per Participant
Dodoma (N = 6)	Shs. 1,008/- ($144)	Shs. 5/05 ($.72)
Iringa (N = 15)	Shs. 10,202/- ($1457)	Shs. 65/61 ($9.37)
Kigoma (N = 7)	Shs. 1,536/- ($219)	Shs. 3/87 ($.55)
Kilimanjaro (N = 1)	Shs. 8,998/- ($1285)	Shs. 109/76 ($15.68)

[a]Rounded off to nearest shilling or dollar.
N - Number of villages surveyed.

Source: McHenry (1979), p. 156.

Great success has been realized in nonagricultural communal activities. Villages have joined to build schools, dispensaries, water-supply facilities and shops (Table 10).

In the absence of the further adoption of communal production, the nuclear village framework potentially creates severely adverse conditions for the future productivity of peasant agriculture in Tanzania. This is because the distance factor from village centers demands permanent cultivation where previous peasant agronomic practices were based on bush rotation and shifting cultivation. In cases of perennial crops, particularly cashew nuts and coffee, farmers used to plant their trees close to their homes and inter-plant with annual crops such as cassava and beans, until the trees reached a stage where they produced too much shade. During villagization, many farmers were removed from the sites of their homes and their tree crops which not only increased the travel time required to tend their trees, but also substantially affected the economics of combining

Table 10

Communal NonFarming Activities: Tanzania, 1975

	Number of Villages Engaged In:				
	School Building	House Building	Road Work	Water Supply	Health Facility
)odoma (N = 19)	15 (79%)	5 20%	11 58%	10 52%	6 32%
:ringa (N = 22)	17 77%	1 5%	11 50%	3 14%	6 27%
:igoma (N = 10)	9 90%	1 10%	3 30%	2 20%	4 40%
:ilimanjaro (N = 5)	1 20%	-	-	1 20%	-

N = Number of villages surveyed

Source: McHenry (1979) p. 152.

tree crop production with other cropping activities. Many farmers therefore had to abandon their plots. Because it takes at least three to five years before tree crops can start producing, it was not encouraging for farmers to plant tree crops again in the new settlements.

The villagization program affected food crop production adversely in its whole duration of implementation (1973/74--1975/76). This was because more time was spent in moving and settling than in farming. Table 11 shows that most food crops registered low production levels over the period 1973-76. However, production of cash crops was not as much affected (Table 12). With the exception of cashew nuts, tobacco and cotton, producers of other cash crops were not affected by the villagization movement. These farmers lived closely together in strong traditional villages though not Ujamaa villages, hence, there was no need to move them.

Table 11

Major Food Crops - Production Estimates 1965/66--1980/81

(1000 tons)

	Maize	Paddy	Wheat	Pulses
1965/66	503	84	--	--
1966/67	880	140	43	145
1967/68	750	114	48	174
1968/69	770	131	40	172
1969/70	730	144	41	159
1970/71	870	192	60	180
1971/72	850	202	77	183
1972/73	980	178	67	224
1973/74	750	193	49	193
1974/75	750	141	32	182
1975/76	825	157	46	181
1976/77	898	180	58	210
1977/78	969	203	35	219
1978/79	1000	260	37	212
1979/80	900	250	30	213
1980/81	800	180	NA	219

Source: FAO Production Yearbooks

Table 12

Production Indices of Major Export Crops
1970/71 -- 1980/81 (1970/71 = 100)

	Coffee	Cotton	Tea	Tobacco	Pyrethrun	Cashew	Sisal
1970/71	100	100	100	100	100	100	100
1971/72	112	86	126	109	157	106	90
1972/73	102	101	145	106	147	117	78
1973/74	91	85	134	153	120	135	77
1974/75	112	94	151	118	174	111	68
1975/76	116	56	141	149	144	78	59
1976/77	104	88	166	153	122	91	56
1977/78	111	66	201	143	105	64	52
1978/79	106	74	190	144	59	53	46
1979/80	102	79	188	141	59	39	40
1980/81	144	77	178	134	73	47	43

Source: Marketing Development Bureau, Ministry of Agriculture, Dar Es Salaam, Tanzania.

Tobacco and cotton are annual crops, thus, their production was temporarily affected. Once the farmers were settled in the Ujamaa villages and were allocated pieces of land for cultivation, production returned to normal. Cashew nut production on the other hand has been on the downward trend ever since. This is because when the farmers were moved far from their cashew plots, they abandoned them. The situation in the villages was not encouraging fo them to plant new cashew trees.

In addition to the above, the minimum village size of 250 families adopted during villagization campaign meant that the average village size is considerably in excess of that figure and that population growth is bound to impose increasingly severe demands on land allocated for the village farming. Alarmed agricultural scientists have already begun to speak of village "deserts" created by over-intensive cultivation, deforestation (mainly for firewood) and serious soil erosion, within a walking distance radius of each village.

Among the most notable achievements emerging from the few years of implementing the Ujamaa and villagization strategy is the outstanding progress achieved in providing the rural population with improved access to clean water, primary education, improved health services and in creating a socio-institutional environment which, when increases in production are achieved, will likely distribute the benefits of such growth widely and equitably.

Despite its poverty and with a per capita GNP of less than $300 US and a high rates of population growth (3 percent annually) social and economic development indicators show that in the post 1967 period, the enrollment rates in primary schools have almost tripled, average life expectancy has increased from 45 to about 51 years of age, and around 40 percent of the population now has access to safe water as compared to only 13 percent in 1970 (Table 13).

Table 13
Basic Needs Profile of Tanzania

Components	Position in 1970	Latest Position(1979/80)
General Indicators		
1. GNP per Capita (US $)	130	270
2. Average annual growth rate (1960-1978) GNP per capita		2.7
3. Real GDP growth rates (% per year)		
(i) 1960-1970		6.0
(ii) 1970-1979		5.0
4. Agriculture growth rate (% per year) (1970-79)		4.5
5. Manufacturing growth rate(% per year) (1970-79)		4.5
6. Population growth rate (% per year)	2.9	2.7
Basic Needs Indicators		
7. Income and Poverty		
(i) Basic need income (1981)		Tshs. 600
Percentage below:		
(a) Urban population		15
(b) Rural population		25-30
(ii) Minimum wage shs	170 pm	shs. 600 pm
8. Malnutrition		
(i) Severe PEM	4.8	2.3
(ii) Moderate PEM	22	40-60
9. Health		
(i) Life expectancy at birth	44-45	51
(ii) Infant mortality rate	145-155	115-130
(iii) Population per rural health center	234,000	83,600
(iv) Population per dispensary	81,000	6,700
10. Water		
(i) Access to safe water Supply (% of pop.)		
-Rural	9	42
-Urban	61	90
(ii) Rural household distance to water supply		0.6-3.4 km
11. Education		
(i) illiteracy (%)	67.7	10.0
(ii) Enrollment rate primary education (%)	34.7	80
(iii) Pupil-Teacher ratio in primary school	47	50

Source: Job and Skills Program for Africa (JASPA) Tanzania, Basic Needs in Danger, 1982.

In addition to these positive contributions to the welfare of the rural people, the redistribution of land brought about by the villagization process and the requirement for all able-bodied people to work has resulted in: (1) eliminating the landlessness among the rural population, (2) encouraging each peasant to produce enough food to meet at least subsistence requirements, and (3) increasing work discipline among many peasants.

Insofar as achievements of Tanzania's rural development startegy are concerned, it may be said with a fair degree of confidence that the rural development strategy adopted has given Tanzania a unique base for further improved planned and equitable rural development. And, despite the fact that returns from this strategy, especially in terms of improved production and welfare of the rural population, remain to be reaped and are clouded by some uncertainties, Tanzania is politically and economically committed to the Ujamaa strategy.

6.2 Lessons from Tanzania's Experience

The implementation of Tanzania's strategy for rural development in the past 15 years has provided a number of useful lessons. Beginning with the primary objective of rural development stated previously, that is the development of people in the rural areas, Tanzania's experience has shown that the transformation of the rural sector is possible, but there are conditions to be met. First, the consciousness of the rural society about their environment should be raised and the balance of political power should be in favor of the poorest classes. The method used to implement the Ujamaa strategy reflected somewhat less-direct farmer participation in the planning process involving their own lives and wellbeing. This resulted in the slow pace in the implementation of villagization through people's own initiatives which had to give way to compulsion as a means of accelerating the process of transforming the rural society.

Second, rural transformation is a multiple dimension process, involving simultaneously attaining social, economic and cultural transformation. Its implementation requires careful study of these features, then establishing the structural-

institutional framework as well as the ideological base. With regards to establishing the institutional framework, the Tanzanian experience has shown that the village structure provides the basic framework for the functioning of a participatory development strategy. However, for the grassroots participation to be effective, the structures are themselves not sufficient. The process of discussion and reaching decisions in the participatory organs have to be such that they accord maximum participation to those constituting them.

Lastly, a rural development strategy which seeks to affect social transformation and development of the rural areas, must aim at eradicating mass poverty, disease, ignorance and equitable income distribution and services, at the same time aim at improving production/productivity of the rural sector.

6.3 Conclusions

Tanzania's strong commitment to broad-based rural development appears to be well warranted, given the overwhelming number of rural residents and the generally low levels of incomes and services available to them. The Ujamaa village concept is an innovative and potentially effective means of realizing broadly participatory economic growth and of improving the welfare of the rural masses. Whether the Ujamaa program will be successful in the long run, however, depends largely on how effectively the government and the party can generate realistic area-based planning and ensure genuine grassroots support.

A positive feature may be the evaluations carried out by the Tanzanian government, many of which reflect concern with the shortcomings identical to those discussed in this study, such as in the mechanization policy, extension and research system and the farmers' incentive system. Tanzania's tendency towards self-criticism suggests that strategic difficulties with Ujamaa may eventually be ironed out internally, provided the political roadblocks do not prove insurmountable.

External assistance can play a useful role in augmenting Tanzania's planning and

implementing capacity. With the Ujamaa approach the emphasis of donor assistance can be on improving the long-run effectiveness of the resources provided externally and on mobilizing additional domestic resources. However, the more basic political issues will, of course, have to be resolved by the domestic policy makers.

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