

NATIONAL AGRICULTURAL PLANNING IN TANZANIA

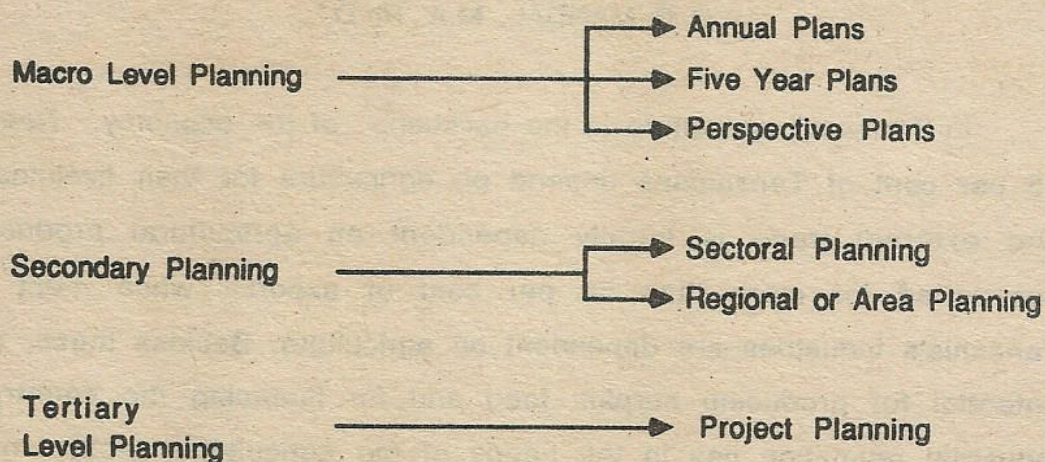
R. B. MANDAL, M.A., Ph.D.*

In Tanzania agriculture is the backbone of the economy. Nearly 85 per cent of Tanzanians depend on agriculture for their livelihood, and external trade is largely dependent on agricultural products, accounting for more than 50 per cent of exports, while most of Tanzania's industries are dependent on agriculture. Besides these, the potential for producing surplus food and for financing the country's industrial revolution lies in the hands of the agricultural sector. In a nutshell, agriculture is the cornerstone of socio-economic development, the source of food, income, foreign exchange earnings and the base for industrialization in Tanzania.

Agricultural development planning has itself a number of dimensions: macro level, meso level and micro level such as national, regional and village plans respectively. In Tanzania national or macro plans cover 5 years. These are presented against a background of 15 years perspective plan. Secondly, there is sector planning which refers to detailed planning of a specific sector. Agricultural Planning thus refers to a comprehensive set of policies for the development of the agricultural sector. Also at the secondary level we have regional or area planning where the focus of attention is a particular region or area within a country. Finally, at the tertiary level of planning there are some projects which refers to the identification of possible projects for their implementation (Fig. 1).

*Dr. R.B. Mandal is a Senior Lecturer in Geography, University of Dar es Salaam, P.O. Box 35049, Dar es Salaam, Tanzania.

Fig. 1: Three Levels of Planning



Source: Livingstone: 1980 Economics for Eastern Africa, p. 542

Hence, agricultural planning is a secondary level planning. It aims at transformation and improvement strategies. The improvement approach relies heavily on agricultural extension, the provision of technical and economic advise to formers, supplemented by efforts to improve the existing situation by removing specific bottlenecks, by construction of feeder road and improvements in marketing facilities on the provision of credit to farmers.

The transformation approach aims at a much more drastic reshaping of the conditions of agricultural production. This may involve the introduction of tractors, the extension of the public sector into agriculture through large scale state farming, the organization of major settlement schemes involving the movement of population, and the establishment of cooperative farms of production,

either among new settlements or within existing villages. The anxiety of governments and development agencies to make rapid progress away from underdevelopment has naturally inclined towards transformation approach¹ in most of the developing countries.

Conceptual Framework

Fig. 2 illustrates that in Tanzania due to primitive agricultural practices, agricultural production is low but the population is increasing at a more rapid pace-which leads to food shortage, malnutrition and food importation.

Hence, the main objectives of the National Agricultural Planning have been to improve agricultural production for food self-sufficiency, and planned development of agricultural settlements. These have been considered essential in order to provide essential services and infrastructural facilities to the majority of people living in remote rural areas.

Owing to these problems and objectives, the Ministry of Agriculture and Livestock designed various strategies and plans in order to solve the aforesaid problems and meet desired objectives. The government has formulated various policy guidelines and sought assistance of people in accordance with the targets set.

Improvement and transformation approaches have been adopted. The improvement approach considered the improvement of material structure such as seeds, fertilizers, implements, etc. besides infrastructural improvement, whereas transformation approach included the formation of planned Ujamaa Villages after discarding the primitive abode of dispersed living.

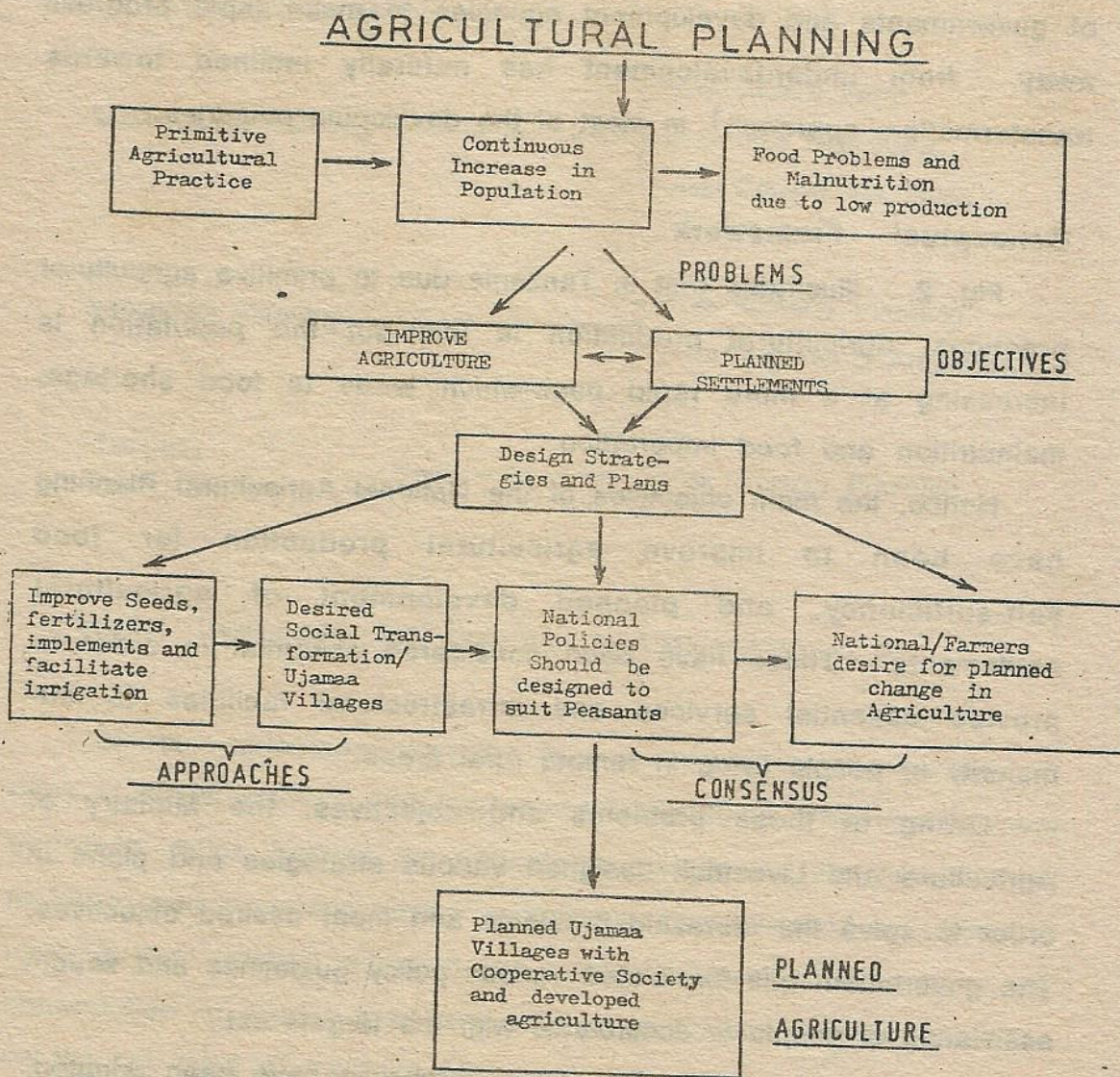


Fig.2 PERSPECTIVES OF NATIONAL AGRICULTURAL PLANNING IN TANZANIA.

Importance of Agricultural Planning

The need for agricultural planning is vital due to the fact that:

- (a) rural development (agriculture) has to receive top priority, as most of our latent wealth lies in our under utilized land and energies of the rural population.
- (b) agriculture being the backbone of our economy produces food for both rural and urban population. It also produces raw materials for our industries and for export. Also the majority of our people (90 per cent) live in rural areas where agriculture is the chief occupation.
- (c) planned and desired social change will be achieved in the context of a programme of planned output expansion, based upon a system of crop priorities and improvement of productivity through promotion of modern agricultural techniques. With the above points, there is a need to plan for our agricultural development.

Objectives of Agricultural Planning

According to Tanzanian development plans, the objectives of agricultural planning in relation to national planning are as follows:

1. To diversify production in areas of monoculture - where markets are limited or uncertain.
2. Investment programmes in the rural sector to be geared at capital intensity forms of production so as to maximize utilization of local resources such as labour force.
3. To develop the rural infrastructure, so as to increase rural productivity and diversify rural economy.

4. To extend principles of socialism and extend the scope of cooperative and group activities - for attainment of socialist type of agriculture.
5. To formulate crop priorities for all major livestock and agricultural commodities with the aim of increasing self-sufficiency and improved nutritional levels, expansion of local market for agricultural products at reasonable prices and maximum exploitation of export markets. High priority crops should be emphasized i.e. tea, flue-cured tobacco, cotton, rice, wheat, cashew-nuts, oil seeds, some fruits, vegetable, fishing and livestock.
6. Expansion of small scale industries and crafts to provide consumer goods - hence generating an incentive for agricultural expansion. For all these to be achieved, the involvement of village, district, and regional levels is urgently needed.

The agricultural objectives are related to the national objectives. The former have been derived from the latter. So they are more or less the same.

In order to achieve these objectives which have been set, in its development plans, the government has emphasized on several measures to be taken as follows:

1. The first emphasis was on the need to use fertilizer both chemical, compost, and green manure so as to increase production.
2. Another area was on seed production. Seed production farms and seed laboratories were to be established under the Ministry of Agriculture so as to produce better and high yielding seeds to be distributed to farmers

3. Crop research units and crop experimental units were also emphasized so as to carry out research on agriculture.
4. Extension services were among other things which were emphasized too. Advises were to be given to farmers on crop management and animal husbandry.
5. Another area was that of agricultural mechanisation. This aimed at enhancing production by providing tractor hire services, training on the use of agricultural machineries at selected institutions.

In most of these plans the government simply puts it on papers and does not make a thorough follow up to ensure its implementaion.

Trends and Approaches

Agricultural planning first of all got a priority place in 1946 development plan. The 1951 plan aimed at improvement of agriculture in Tanganyika. The 1964 - 1969 First Five Year Plan aimed at increasing output by 6.7 per cent, while the Second Five Year Plan (1969 - 1974) aimed at boosting up crops with provision of research, extension services and training to the staff. The Third Five Year Plan (1976 - 1981) also aimed at self-sufficiency in food production. The 1982 - 1985 structural Adjustment Programme aimed at more production of each crops for export.

It has been identified that there are two methods by which agriculture should be planned. First is the improvement approach undertaken by the Ministry of Agriculture, Food and Cooperative through guidance and extension services provided to the farmers. Second is the transformation approach by the Ministry of Land,

Settlement and Water Development involving the resettlement of people on newly provided land with all the infrastructure that goes to make a modern farmer.

What was the real situation in 1970's? The mass of our farmers lives on scattered small and uneconomic holdings along with primitive agricultural implements. In this situation, the country finds itself caught up in a vicious circle of poverty - little production, little surplus for investment, and low incomes to farmers.

Hence after 1969 our national agricultural planning took a transformation approach. The policy has been spelled out on paper in the original and later policy documents, and in the Second Five Year Plan. First, it emphasized the social as well as technical transformation of peasant agriculture and not just its marginal improvement. The objective is the development of Ujamaa villages through the country. The Second Plan especially eschewed a 'project' approach and opted for a frontal approach moving towards Ujamaa on all possible front rather than selective approach of providing a high level of service to small number of Ujamaa communities. The socialist villages must grow from an application of the principles of self-reliance through the efforts of their own member.²

In this way, the sole aim of the national agricultural policy is to facilitate the path to socialism to which Tanzania is committed, and the State should take the initiative to establish large scale modern State Farms, combining the production element of research and demonstration to farmers in the surrounding area. Agricultural development in rural areas through smallholders in cooperative

production units (Ujamaa Villages) for selected crop priorities is regarded as critical in making development truly national and democratic.

Thus revolution of agriculture in the villages means socialist and modern agriculture which has the following attributes. First, big socialist farms which are owned and run by villages; second, it is based on the use of modern inputs, implements, expertise and skills; and third, it is a planned agriculture based on proper work plans which facilitate greater productivity.

The main objectives of the Five Year Plans have been to boost up agricultural production of various crops with provision of research, extension services and training, better quality seeds, construction of irrigation schemes and storage facilities.

It has been realised that resources available for agricultural development are scarce, efficient utilization is therefore of great importance. The nature of resources to be mobilized is also extremely diverse. The efforts of farmers should be gained towards the extension services, research, credit facilities, investment programmes of the Parastatal and Public sectors both directly in agriculture and also in infrastructure.³

Early Agricultural Planning Experiences

Tanzania came under German's rule in 1884 which introduced a number of cash crops including sisal, coffee, tea, cotton and rubber. They began concerned effort to develop the production of these crops on a plantation basis. To serve the expanding estate sector, the Germans constructed two railways: Dar es Salaam to Kigoma and

Tanga to Moshi. Food crop production was left to the individual's initiative. Cooperatives for coffee, cotton and tobacco were established between 1930 - 1940's.

1. In 1946, the development plan (1946 - 1951) for Tanzania prepared and presented by the Development Commission of the Tanganyika Government, laid stress on the conservation and development of the country's natural resources.
2. In this period research projects undertaken included tsetse control, veterinary services, fisheries and agricultural research besides countrywide improvement of stock routes, rinderpest control, the establishment of stock farms for the selection and testing of improved breeding stock and their multiplication and distribution.
3. In the field of crop production rice and cotton were helped by the construction of small dams for irrigation in the lake area where rainfall is deficient. For cotton, Ilonga and Ukiriguru Research Stations provided cotton breeding services as well as assistance in cotton pest control and eradication. Coffee was helped by the Bukoba investigation centre, groundnut farms at Nachingwea, flue-cured tobacco at Urambo, and cattle including pasture improvement at Kongwa.
4. In 1951 plan special attention on improvement of agriculture and veterinary practice was given in four areas namely Sukumaland, Ulanga district, Mbulu district and parts of Morogoro district, besides training programmes of agriculture, veterinary and forestry assistants.

First Five Year Plan (1964 - 1969)

All agricultural activities were designed to help farmers to increase their output. "If we produce more meat our people can have better diet, if we catch more fish people's health will improve, and if we produce more sisal, cotton, coffee, and so on we can get more money from overseas with which to buy the other goods we want"⁴. This can be achieved through improvement and transformation approaches and new village settlement schemes. The target was of increasing agricultural output by 6.7 per cent per annum but the achievement was 4.9 per cent during this plan period.

Second Five Year Plan (1969 - 1974)

1. Agricultural contribution to total GDP during the Second Five Year Plan increased at an average rate of 2.2 per cent per annum. Agricultural output did not keep pace with population increase of 2.7 per cent per annum during the same plan period.
2. Agriculture, forestry and fisheries were allocated Shs.1088 million which was 13.5 per cent of the total planned investment.
3. Efforts were made to boost production of various crops mainly through provision of research, training and extension services. However, production of major food crops declined drastically due to drought. Self sufficiency was achieved in maize and paddy in certain years only before the Second Plan Period and even surplus for export was realised although not at remunerative prices. In 1974 and 1975 food production was far below national requirement which resulted in food importation at very high prices.

4. Production targets of some cash crops were achieved during the Second Five Year Plan. The aim was to expand production of cotton, cashewnuts, tea and tobacco. Cotton production did not increase as planned whereas the coffee production increased during the first three years of the Plan and then started to decline. Pyrethrum and sisal production declined in accordance with unfavourable market trends.
5. In short, during the Second Plan, cash crop production strategies were on the average successful. The production performance was in accordance with World market trends.
6. The performance of various crop sub-sectors was as outlined below:

In Tanzania maize, paddy, wheat, sugar, oil seeds, sorghum, millet, cassava, coffee, tobacco, sisal, tea, cashewnuts and pyrethrum were under the planned target in Second Five Year Plan, but this was not achieved in case of any crop.

Third Five Year Plan (1976 - 1981)

It has been designed to mobilise people to adopt socialist agricultural. Agricultural production has been planned to grow at 5.1 per cent per year (1976 - 1981) in comparison with 3.2 per cent per year in 1969 - 1974. In order to achieve these targets the following measures have been taken:

1. Motivative prices were fixed to produce enough to satisfy both local demand and export.
2. Better farm implements were used e.g. ox-drawn plough, etc.
3. Research were centres established to do research on seeds, crop productivity and training to field extension staff;

4. Provision for seed-multiplication forms have been made to meet the nation's demand for high yielding variety of seeds;
5. National, regional and local irrigation schemes were introduced to facilitate farming during the dry season by the government and individual farmer.
6. Serious attention was given on the production of neglected crops such as millet, cassava, oil seeds, and fruits;
7. A plan has been formulated for the construction of national, regional and village storage facilities to minimise food wastage. Vermin control also got priority.
8. For all crop authorities farms have been arranged.
9. District Development Councils entrusted the task so that every able-bodied person could be gainfully employed.

The Structural Adjustment Programme (1982 - 1985).

The Structural Adjustment programme (1982/83 - 1984/85) focused on the following objectives and targets in National Agricultural Planning:⁵

1. expand export earnings through restoring the volume of traditional agricultural exports raise the volume of output of cashewnuts, coffee, cotton and tobacco;
2. reduce the foreign exchange costs of agricultural production;²
3. reduce food imports through increased national maize reserve etc. and handling capacity to insure overall food security;
4. improve agricultural marketing system and thereby reduce the fiscal and monetary strains arising from inefficiency;
5. ensure a secure and reasonably priced food supply to consumers and adequate incentives and opportunities for producers to expand their incomes;

6. restore agricultural infrastructure to the standards of the early 1970's ensure its maintenance.

In Tanzania, "agriculture policy considers that the present backwardness can be eliminated through socio-economic transformation and the implementation of economic development measures such as the improvement in the techniques of production. The ultimate aim is to produce enough for food, for industrial raw materials and for export".⁶ But the share of agriculture in the total government expenditure is not satisfactory in terms of its GDP contribution and volume of export.

In 1985 - 1986, the agricultural sector has been allocated 30.7 per cent of the development budget mostly for food and cash crop production in comparison with 24 per cent in 1983 - 84 and 13 per cent in 1982 - 83. It is an encouraging step towards easing the situation.

Table 1.1 shows that although the contribution of agriculture to the national economy is relatively high but the share in total investment is disproportionately low. This suggests that Tanzania should invest more in agriculture in order to make this country self-sufficient in food supply.

Agriculture contributes around 51 per cent of the gross domestic product in 1981 and employed more than 80 per cent of the total labour force. The main export crops are coffee, cotton and sisal which account for 35 per cent, 11 per cent and 6 per cent respectively of export earnings in 1983 (Table 1.2).

Table 1.1 Share of Agricultural Investment and Contribution of Agriculture in GDP in Tanzania

Year	Total Investment (in T.Sh. Million)	% Share of Agriculture	%G.D.P. Contribution
1973	526	10	36
1974	666	13	38
1975	609	19	41
1976	785	4	45
1977	943	26	50
1978	1103	24	53
1979	1273	10	52
1980	2257	5	51
1981	2286	13	51
1985	3000	31	55

Source: Bureau of Statistics, Dar es Salaam, 1985.

Table 1.2 Principal Export Crops of Tanzania (1983)

Item	Million
Coffee	127.8
Cotton	51.6
Gloves	42.6
Cashewnuts	26.2
Tea	21.6
Sisal	12.9
Tobacco	11.1
Total including Others	363.3

Source: Quarterly Economic Review of Tanzania Mozambique, No. 3, 1985, p. 2.

The purchase figures (Table 1.3) indicate the expected increase in production following the rise in state controlled producers producer prices in 1984, and favourable weather conditions for good harvest in the first quarter of 1985.

The reduction of food imports to 197,839 tons of cereals in 1984 - 1985 in comparison with 322,666 tons in 1983/1984 indicate an improvement in the country's food position.

Table 1.3 Cash Crop Purchased in Tanzania ('000' Tones)

Crops	1982/83	1983/84	1984/85
Sisal	46.2	38.6	56.0
Coffee	53.8	49.7	53.0
Cotton	129.1	140.4	152.9
Tobacco	13.6	11.0	14.0
Pyrethrum	1.7	1.4	2.0
Tea	84.2	57.3	72.6
Cashewnuts	32.5	48.4	50.0

Source: Quarterly Economic Review of Tanzania and Mozambique, No. 3, 1983, p. 12.

Irrigation Plans

At present in Tanzania about 30,000 hectares of cultivated land is under irrigation in which paddy, sugar cane and other crops are grown. Feasibility study has been undertaken over 15,340 hectares more cultivated land. The implementation of seven national irrigation projects covering 9,765 hectares has started from the

beginning of 1985. The seven projects include the Kiting rice project in Tanga which cover 600 hectares, Mwamapuli cotton/rice project in Tabora 625 hectares, Bugwesa cotton project 1700 hectares, Bugwesa solar powered project in Mara region 40 hectares, Lower Moshi project 2300 hectares, Usangu in Mbeya 1200 hectares and Bahi/Kintinku project in Dodoma region 400 hectares. Tanzania has targeted to put 125,000 hectares of land under assured irrigation and 255,000 hectares under partial irrigation by 2000 A.D.⁷

High-Yielding Variety of Seeds

Agricultural production could be substantially increased with the introduction of high-yielding variety of seeds. Some quantity of HYV seeds are available from research stations but in most cases even the research stations lack experienced personnel, funds and have poor technology. Farmers know the importance of HYV but they are getting either inadequate supply or sometimes they are not getting anything at all due to lack of a proper machinery for distribution. Even if the farmers are get HYV seeds that alone will not do a miracle⁸ unless the crop is supplied with sufficient water, fertilizers and insecticides for these are the essential components for the growth and protection of crops.

Plan for Fertilizer Use

Fertilizers are used, to provide the nutrient elements most subjected to deficiency under intensive farm cultivation. They may be divided into three groups, namely those which supply nitrogen; those which supply phosphorous; and those which supply potash.

They are called NPK respectively. Fourth one are those which supply magnesium. Fertilizers are generally appraised on these four points according to their nutrient, solubility or action to the soil, residual value, and reaction or effect on soil acidity.

In 1962 the consumption of fertilizer in Tanzania was negligible but with the introduction of several agricultural development projects in 1985 the annual requirements has reached more than 50,000 tonnes. The Tanga Fertilizer Company is producing about half of the above amount and the rest requirement is met by friendly countries. TFC has been entrusted with the distribution of both indigenous and imported fertilizers.

In 1984 a total of 42,522 tonnes of fertilizer was distributed throughout the country but the actual regional demand stood at 108,725 tonnes.

It has always been feared that lack of all weather roads, vehicles, tyres, tubes and timely supply of diesel are the main hindrances of the supply of fertilizer to the needy people along with the timely haulage of harvest up to the market.

For 1985-86 season, for example, Tanzania needed 50,000 tonnes of urea, out of which Canada provided the biggest amount of 20,550 tonnes and the rest was arranged locally from TFC.

Marejea: Fertilizer substitute

Sun-hemp (Marejea) which was brought to Tanzania from India in 1942 is considered as the wonder plant because it can be utilized as the animal feed, a fertilizer, a weed killer, an insecticide and its fibre can make fine and strong ropes. Marejea is abundantly found in Songea, Dodoma, Mbulu, Tanga, Rukwa and Kigoma.

The village committee of Namanguli in Ruvuma Region gave the information that 'the 150 acre village farm had an average production of less than 650 bags of maize since 1980. But in January, 1984 sun-hemp (Marejea) was sown into alternative furrows of 100 acres at the time of the first weeding, and the production shot up to 1404 bags'.

Similarly, the Kitai Prison farm was harvesting 25 bags of maize but has now regained fertility by planting sun-hemp. Mbozi Maize Farms Limited (NAFCO) has an excellent bean harvest after ploughing in sun-hemp and plans to plant 20 hectares with sun-hemp in order to produce seed for the Mbozi district.

Farmers in Ruvuma Region have started planting sun-hemp in the wet areas with the intention to plough it in before planting rice. This method has produced excellent result. Nowadays many peasants in Songea district are taking to Marejea farming in full force because it increases the soil fertility, controls weeds and checks soil erosion in the farm. In this way, it saves peasants' weeding time and energy.

Plans for Some of the Cash Crop Production

Cocoa: In a crop projection estimate of the Ministry of Agriculture, it is said that the production of cocoa will increase by 400 per cent to reach 6000 tonnes in 1993. This target will be achieved through the expansion of farms in Tanga and Morogoro regions which are the leading cocoa production centres in the country.

Sugar: In Tanzania, in 1983 about 128,000 tonnes of sugar was produced and production was planned to increase in subsequent

years. Sugar factories are located at Arusha Chini, Kagera and Kilombero. Tanganyika Planting Company, Moshi was established in 1930 by Danish enterprises. It has 7000 hectares of sugar plantation, from which the factory is getting sugar cane. In Moshi 4 old and 2 new units of cane crushing plants are working. Total number of workers are 2400 and the production is 150 tonnes daily. The entire farm is under reliable sprinkler irrigation.

Coffee: In Tanzania Arabica coffee is grown both in plantations and on peasant holdings in Tanga, Mbinga, Kilimanjaro, Bukoba and Mbeya highlands. The total area planted with coffees was estimated at 220,336 hectares (1984-85) with 95 per cent under smallholdings. Coffee production and marketing in the regions are organised around cooperative societies and unions. Coffee is finally cured, graded and packed for export in Moshi under the Coffee Marketing Board.

The average yield on state sector is 810 kg/ha and smallholders only 238 kg/ha for Arabica. In 1980-81 the production was 66,800 tonnes. In 1984-85, however, the Marketing Development Bureau estimated a production of about 55,000 tonnes. Since 1984 Tanzania has been a member of the International Coffee Board and hence she has a greater chance of increasing international coffee trade. As a result coffee production has been planned to increase by 149 per cent to reach the production target of 100,000 tons in 1993 through a combination of measures including crop husbandry improvement in the southern and western zones.

Cashewnut: Under the regions' agricultural development plan a new variety of cashewnut seeds resistant to various types of weather

and diseases has been developed by the Mtwara-based cashewnut Research Centre at Naliendele. The seeds have been distributed to different regions and some 6,000 hectares have been planted with new cashewnut seedlings in Mtwara Region as part of the national strategy to revive the crop.

Coconut: In 1984, Tanga Region launched coconut campaign under the "Farmers Field Days" programme by agricultural extension staff. The campaign was on planting a new variety of coconut seedlings along with other food crops, controlling the dangers of bushfires, adopting the measures of controlling diseases and on the importance of replacing old trees. Muheza and Pangani districts managed to establish 12,000 hectares under coconut plantation, capable of producing more than 12 million coconuts annually.

Tea: The Ministry of Agriculture and Livestock Development proposed to invest T.Shs. 175 million in the new tea industry projects between 1985 and 1989. Tea production was projected to increase by 162 per cent which would be 30,000 tonnes annually by 1993.

The level of tea production in Tanzania's smallholder farms increased appreciably since 1984/85. Among the five growing zones, Rungwe district topped the list by producing 973,917 kgs in comparison with 917,421 kgs in 1983/84. The second, Lushoto district produced 596,478 kilograms in comparison with 350,474 kgs. The third, Njombe district produced 424,834 kgs compared to 312,052 kgs. The fourth, Muheza district produced 223,765 kgs as compared to 193,436 kgs. The last, Bukoba district produced 86,493 kgs compared to 68,320 kgs.

The Broke Bond Tanzania Limited which in 1984 earned 150 million shillings in foreign exchange by export of tea, has recently announced development programme with a view to increase tea production. Up to 1988/89 the company aimed to expand tea plantations by 383 hectares. Near its headquarters in Mufindi, Iringa Region has a total of 2,040 hectares of tea plantations out of which 1,200 is managed by irrigation. Under the expansion programme, tea harvests could rise from 4.5 million kgs of green tea to 4.9 million kgs annually by 1988/89. The plan is also underway to rehabilitate its tea factory at Lugoda to process 80,000 kgs of tea annually as against the present capacity of 63,000 kgs.

In Mufindi district new smallholder areas to be developed include Retengano Rungwe 400 hectares, Ukalawa (400), Luponde (640) and Lushoto (175). Three modern factories of 2,000 tonnes capacity each will be constructed in these areas to process the additional leaves envisaged from the production expansion at an estimated cost of T.Shs. 131 million. Other tea projects to be consolidated include Bulwa and Kwamkoro tea companies in Tanga which will be rehabilitated.

In Kagera region - Bukoba and Muleba districts have owned small and large tea plantations which opened in 1962 in one hectare farm by 11 peasants. The Tanzania Tea Authority (TTA) begun its activities in 1975 when 34 hectares were grown. But now in this area tea production is drastically falling because the peasant did not properly attend to their fields. For instance, out of 1,209 hectares owned by smallholders, about 912 hectares had been completely abandoned. The production dropped to 962,298 kgs from 1,576,434

kgs of tea leaves in 1982/83. Peasants claim that the crop authority is demoralising them by not purchasing the harvest quickly, producer price is very low, fertilizer is not delivered in time, alternative crops such as vegetables and tomatoes give quick profit, labourers are not available and the tea factory is quite often closed due to power failure.

But even after all these grandeur plans unfortunately tea prices in the world market dropped by 50 per cent between March and May, 1985. The prices, fell from an average of 250 cents a kilogramme in March to 125 cents a kilogramme in mid May, 1985.

Sisal: Tanzania intends to raise sisal production by inviting more private participation in the development of this 'Tanzanian white gold'. Nowadays, the Tanzania Sisal Authority (TSA) in Tanga Region is the only largest sisal zone in the country. These days some of the estates look as if they had been abandoned such as Kumburu estate in Muheza district has only one-third (770 hectares) is under sisal while the rest had been offered to surrounding villages to plant food crops. A very poor state of affairs is recognised in Muhinduro (2450 hectares) which was sold to the private investors in 1985.

The deterioration and decline of sisal production from 80,000 tons from its 39 estates in 1973 to only 18,000 tonnes in 1983 is very disheartening. In 1983 the private investors produced more (21,722 tonnes) than the sisal estates of only 18,000 tonnes. Before the nationalisation of large farms in 1967 most of the sisal estates were in private hands and total production was 200,000 tonnes a year. Although the production of sisal had been declining in most of

TSA estates some of the private estates had recorded increased production. For example Amboni Estates Limited, Tanga with its 10 sisal estates expected a future increase in tonnage.

It has been expected that the production of sisal will increase by 47 per cent or 108,00 tonnes per annum by 1993 although even this target is below the peak production of 230,000 tonnes attained in 1964.

Cotton: The Tanzania Cotton Authority (TCA) has established its own cotton farms in different districts whose current sizes range from 40 hectares to 400 hectares, and the final objective is to increase the farm size up to 10,000 hectares. A list of all cotton farms is shown in Table 1.4.

Table 1.4. Location of TCA farms:

<u>District</u>	<u>Cotton Farm</u>
Mwanza	Mabuki
Kilosa	Muhenda
Morogoro	Duthumi
Bagamoyo	Mazizi
Handeni	Turiani
Hanang	Mwada
Manyoni	Chikola
Kahama	Kisuke
Iramba	Shelui
Biharamulo	Bunazi
Kasulu	Mgombe
Geita	Buhalahala,

At national level the production of all these farms is negligible, because peasants still produce 99.40 per cent of the total cotton production. TCA expects to expand cotton production more and more with the use of developed technologies on these farms.

National Maize Project

The project is supervised by the Ministry of Agriculture and implemented by 15 regions in selected districts. The area under maize cultivation was estimated to be 1,000,000 hectares, and by 1985 the production target was put at 1.3 million tons. This represented an increase of 57 per cent above the base years of 1970-1972. Basic requirements for this project were: fertilizers, seeds, godowns, machinery and equipment including personnel and other inputs.

National Agricultural and Food Corporation (NAFCO)

- (a) Maize Programme: To supplement the National Maize Project NAFCO would also implement 5 maize projects in Iringa, Mbeya, Morogoro, Ruvuma, Rukwa and Kagera Regions.
- (b) Paddy Programme: About 150,000 hectares of land is estimated to be under paddy. Nationally, during the 3rd Five Year Plan, the strategies for increased paddy production were inter-alia the supply of improved seeds, cultivation equipment, irrigation farming where feasible and building of permanent village stores. Besides hectares expansion, emphasis would be placed on increasing yields per hectare. NAFCO will continue to expand paddy production in Mbeya, Morogoro and Coast regions.
- (c) Wheat Programme: NAFCO will remain and continue to be a large scale wheat producer in the country. From the national point of view, small holder production of the grain will also be encouraged and emphasized. The wheat producing regions are Kilimanjaro, Arusha, Iringa and Mbeya.

National Cold Chain Operations

These operations will be strengthened in order to have an efficient system of processing and marketing of perishable commodities. This includes construction of cold storage centres in Dodoma, Mombo, Moshi, Tanga, Musoma, Mtwara, Lindi, and fish centres at Lakes Nyasa, Rukwa and Tanganyika.

Conclusion

It has been observed that in Tanzania due to some physical and cultural barriers its status in agricultural development is very low in terms of food self-sufficiency. This state of affairs has forced the government to improve the agricultural sector through planned development. Even after these realisations during the past three Five Year Plans, there continues to be lack of food production plans, inadequate investment in agriculture, increased prices, high production costs, poor producer prices and lack of credit facilities as some of the important barriers facing the planned development of Tanzanian agriculture.

In order to overcome these problems, there should be a comprehensive crop production plan which should be realised during the Structural Adjustment Programme. Besides this, the government should help peasants in getting fertilizer, transport, and the rehabilitation of agro-processing industries. Prices for agricultural commodities should also be increased according to the inflationary trend of the economy, and the working conditions of cooperatives, National Milling Corporation, and National Food Corporation should be improved while dealing with the peasants. Basically all these factors discourage farmers' productivity resulting into low crop production,

less income, less investment, low standard of living, malnutrition and indebtedness and hence a vicious circle of poverty.

Footnotes

1. Livingstone and CRD, H.W. (1980): Economics for Eastern Africa. Heinemann, London.
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