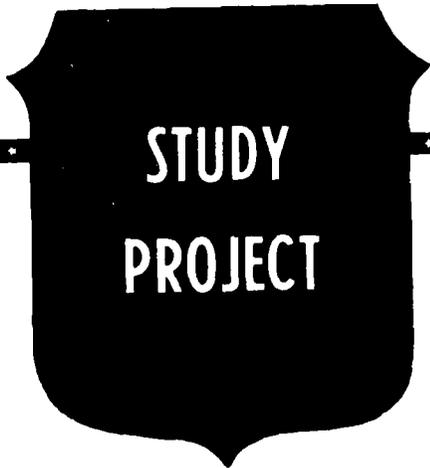


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NATIONAL FOOD STRATEGY:
KENYA'S APPROACH TO THE PROBLEM OF FEEDING THE NATION

BY

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KENYA

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This is Kenya's challenge--to be able to feed the nation by itself. This paper therefore will examine the problem facing the country, give it a historical perspective, highlight current situations and trends, and suggest, where relevant, the role that the military can play in enhancing food production during peacetime this contributing to domestic security and harmony of the Kenyan people.

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NATIONAL FOOD STRATEGY:
KENYA'S APPROACH TO THE PROBLEM OF FEEDING THE NATION
AN INDIVIDUAL PROJECT

by

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ABSTRACT

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What Africa needs in terms of real development is milk powder and food grains, not gun powder. There is a dire need for the political and military leadership in Africa to focus on agricultural growth and be able to feed her population and stop relying on famine relief, food importation and aid while they continue to amass arsenals of military equipment, thus draining their meagre foreign exchange. Kenya's political leadership, having realized the profound impact of insecurity which is usually caused by poverty and hunger, has refocused her renewed economic growth up to the year 2000 on agriculture and self sufficiency in food grain. The current population of 23.1 million people will be approximately 38.3 million people by the year 2000 and this trend requires advancement in agriculture production. President Hon Daniel T. Arap Moi has set the pace for the renewed growth by stating that "The most important 'ism' for Kenyans is the 'Tumbo' (stomach) ideology. Application of other 'isms' when stomachs are empty is irrelevant." This is a simple political message--that the country has to produce food to feed her people. (SPW) *te*

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NATIONAL FOOD STRATEGY:
KENYA'S APPROACH TO THE PROBLEM OF FEEDING THE NATION

CHAPTER I

INTRODUCTION

Preamble. What the third world countries need is food powder and not gun powder. Why are third world countries so poor and politically, socially, and economically unstable? We read in every economic review of the third world, of impossible and unmanageable debts. Can they make a start and at least feed themselves? Most of these countries are not desert in nature; they have a tropical climate where the rainfall, although not guaranteed, will grow basic food with hardly any human effort. What the third world countries need is a reassessment of priorities in their social-economic development and, in turn, the developing world should promote self reliance on food and not perpetual trade in military armaments that drain third world meager resources.

Before governments satisfy the basic human needs of food, shelter and elimination of diseases, they should never think of guns and airplanes. These tools are meant to protect the national wealth and its people and, if they are acquired in the reverse order (where there is no national wealth and the people have no stable society), the same will be used against its own society. This is the order of the day in third world countries--changes of government brought about by poor economic policies and borrowing programs. Countries should think of feeding their people for

internal stability. Food and shelter in a third world environment are so important that we cannot start talking of national security and defense to a hunger community. I therefore propose to tackle food problems and relate it to internal and regional security of Kenya and, where relevant, comment on the part the military can play within the constraints of the mission of the armed forces. People in most African countries cannot think about food reserves because they are not sure that they will survive another military government within a harvesting or planting season which is usually 3 months for vegetables and 4-5 months for grains. It has been a normal phenomena for some African governments to change hands in the form of military coups with the same frequency. So unless the military sets a healthy environment for its people to have a stable and social economic order, agriculture cannot flourish. The core for a stable social-economic order is the food strategy. In order to bring this subject into focus, the paper will examine the history of hunger, look at hunger today, discuss the food strategy and programs, highlight research programs and projects in Kenya, and comment, where relevant, on the security implications and the role of the military.

CHAPTER II
HISTORY OF HUNGER

Before examining the current situation, it is vital to have a frame of reference based on the historical perspective of the earliest records of hunger and why it occurred. Despite a disparity of several thousand years, the description of the economic roots of hunger in the Bible will be helpful in understanding the present world food crisis. A passage in the book of Amos illustrates:

Hear this, you who trample upon the needy, and bring the poor of the land to an end, saying, "When will the new moon be over, that we may sell grain? And the Sabbath, that we may offer wheat for sale, that we may make the ephah small and the shekel great, and deal deceitfully with false balances, that we may buy the poor for silver, and the needy for a pair of sandals, and sell the refuse of the wheat?" The Lord has sworn by the Pride of Jacob:

"Surely I will never forget any of their deeds. . ."¹

This passage was written during Israel's territorial expansion prosperity under Jeroboam II (785-746 B.C.), a capable leader and a strong military figure. Israel pursued a successful policy of foreign expansion by exploiting the poor and the war-inflicted neighbors. At this time Israel controlled the old trade routes of the ancient world. This can be compared to the developed world of today which controls the world trade because of its technological development (United States, Japan, Germany). In the old time, the new prosperity transformed the typically rural culture of Israel

into a structure where the more powerful and rich became urban and they established market places where peasants could sell their grain. This created social inequality. The Book of Amos continues to condemn this new social change. The merchants continued to amass power and James Luther Mays writes, "Urban merchants appear to have monopolized the market; they were able to sell to landless peasants at a high price." Also, they "had the resource for stockpiling grain," so that in a time of poor crops [they] were in a position to control the economy separately."²

This monopoly meant that the merchants sold their food products to the highest bidder. This also meant export to the exploited neighbors and the Israelites went hungry. This is not an abnormal occurrence. We hear of food smuggling across third world common borders of commodities like sugar, flour, and maize grain, and yet the urban community are seen lining up to purchase foodstuffs. An example of this was revealed in the local Kenya paper dated August 1, 1989, page 1, "Ration Sugar for Border Towns."

President Daniel Arap Moi said yesterday the government will ration sugar supplies to frontier towns to curb illegal export of commodity. He was addressing the delegation of Kajiado District. The President noted that some frontier towns like Namanga, Kenya, and the Tanzania border received 4,000 bags of sugar per month while their need is 500 bags. The President continues to assure the country has enough domestic supplies. He reiterated the need for efficiency in parastatal³ and any lazy and corrupt individual will be replaced.

It is not only the sugar shortage but meat products as well. The local paper dated August 12, 1989, "Big Shots Behind Illegal Cattle Deals," states:

The minister for livestock development, Mr. Elijah Mwangale, said yesterday the ministry was concerned about certain influential people flouting livestock movement. Other traders, he said, had found a lucrative business in importing cattle from neighboring countries--he was addressing a press conference in his office.

Events narrated above demonstrate that the food crisis can be a result of unfair trade. Foreign trade generally concentrates today on the export of luxury goods (cars, stereos, TVs) in exchange for agricultural products from the Third World such as coffee, tea, sugar, etc. This was true even in Israeli history as recorded in Revelations 18:11-15. Foreign trade was made possible by an aggressive foreign policy, e.g., Israeli foreign policy under Jeroboam and the foreign policy of the Roman Empire. We find food was exported while poor people were hungry. The ability to afflict poor nations with foreign debts was a powerful tool of oppression (Amos 8:6), and from the Biblical point of view, hunger was a consequence of social injustice and not some fateful accident as narrated in the Book of Amos (Chapters 5:21-24; 3:13-14; 4:4-5; Hosiah 10:1). This is true today; shortages are caused by inefficient organizations and corrupt practices. What role can the military play to curb illegal smuggling across borders? This can be in the form of border surveillance and patrols. Exercises can be planned on a regular basis along the border to deter massive smuggling. Although the role of internal security is a

police business, the military can assist the police force in border patrols and also provide security for the local people to herd their domestic animals in peace. The military should provide escorts for movement of grains to border towns to stop possible smuggling by dishonest traders. This coordination should be done at district level through the district security committees.

ECONOMICS OF HUNGER

Most poor countries affected by food crisis have a policy of free trade system, an economy where individuals, group or companies decide what to grow and what is economically viable, disregarding the food nutrient requirements for the peasants. The best agricultural land in most cases is reserved for growing coffee, tea, cocoa, rubber, sisal, etc., for markets in the United States, China, Japan, and Europe, and are exchanged for computers, cars, etc., for the few rich people in the third world. Thus the agricultural products sold in developing worlds do not help in future crop production since the money is not recycled to the farmers. Colonialism and new colonialism also played a part and continues to play a part in hunger today. The European colonialists reserved the best land for tea, coffee, sugar, cotton, cocoa, and the marginal agricultural land was given to the natives. This was true in Kenya, Gambia, Tanganyika, and Uganda. Liberia was turned into virtual rubber country by Firestone Tire and Rubber. Even today, Kenya and Tanzania continue to depend on coffee, tea, and sisal to earn foreign exchange. These crops are grown in wetlands, the prime areas where other food crops could have been

grown to feed the population; but due to current social economic values, this trend will continue. Multinationals (Lieberg Limited) still continue to control the growing of tea in Kenya and therefore the market pattern, distribution of wealth, and traditional markets are still the same (Europe, United States and Japan). Multinationals play some role in extension of foreign policy, and the third world countries really have no options in changing the current trends. This is also manifested in U.S. Public Law 480, one of the "tools of foreign policy" mentioned in the Senate report on technical assistance (as P.L. 480) (also referred to as "Surplus Agricultural Disposal Policy Act of 1954"). It stated that its principal goal was to market surplus agricultural commodities to poor countries. The sole purpose of P.L. 480 was to create a food dependency. In 1957 a State Department official told the Senate:

We have a real problem in connection with dependency created by some of these programs. If dependence upon the U.S. goes too fast. . .We may be helping weaken a country and its economy in the long run.

Senator Hubert Humphrey responded:

I have heard this morning that people may become dependent on us for food. I know that was not supposed to be good news. To me, that is good news, because before people can do anything, they have got to eat. And if you are looking for a way to get people to lean on you and be dependent on you, in terms of their cooperation with you, it seems to me that food dependence would be terrific."

Indeed, during the severe famine in 1966, India experienced a food shortage and depended on the United States. Kenya experienced a drought in 1984 and had to import U.S. wheat and maize.

These events only serve to demonstrate too well that food aid is often a tool of national interest. Third World leadership must always keep this in view. The governments must always promote self-sufficiency in food production. We must intensify production of staple food grain and stop worrying about the weather. We should never depend on food aid as there are always strings attached to the food aid. Nations can minimize heavy debts by fully supporting the peasant farmers. Monies earned through sales of coffee should be used to purchase machinery, farm equipment and fertilizer to grow more food and enable the country to be self-reliant. What can the military do to ensure that the defense of the country does not become a liability but an insurance for agricultural growth? The senior leaders must think about priorities of food production when force structuring: the need for buying planes, tanks, etc., versus farm machinery; the size of the military against other competing priorities like food security. Senior military leaders must have a proper focus on the food strategy as they will find that a hungry nation is usually problematic and no amount of armament can stop civil uprisings caused by lack of food strategy in a country. They also must focus on smuggling problems which are security issues along borders. Smugglers of food stuffs usually trade the food items for weapons, and these weapons are used for cattle rustling or robberies in urban areas.

CHAPTER III

CLIMATE

Unlike temperate climates where rain and weather in general are fairly predictable, the tropical weather is highly unpredictable. The seasons in Kenya are marked by the short and long rains. The long rains come around March, April and May; and the short rains in October, November and December. The rest of the months are dry and sunny all year around. Farmers usually prepare their land before the long or short rains and plant shortly after the first week of 2 or 3 inches of rainfall. However, if the rains do not continue after planting, there is usually a crop failure. Sometimes rains may not come at all or, if they do, not in sufficient quantity to provide necessary moisture. If there is insufficient rainfall in a fiscal year, then droughts result and the country therefore has to plan for bad years. Experience has shown that every ten years there is usually a drought period; e.g., 1964, 1974 and 1984 were dry years.

Rain, however, is not evenly distributed in the land mass of Kenya's territory and out of 569,253.5 square miles, two-thirds is semi-arid. See the attached map for the rain distribution pattern. The government, therefore, has mapped a strategy for increasing food production in the arid and semi-arid districts and also improved livestock grazing methods. This program is called "Development Plan 1989-1993" and emphasizes food security based on national food reserves and storage. To enhance food production

and alleviate problems of drought, the Kenyan government, in Sessional Paper No. 1 of 1986, mapped out the water management technology approach. As of 1986, the country had the potential for irrigating 500,000 hectares of land and reclaiming 300,000 hectares. Currently, 36,000 hectares of land in Bunyala, Kano Plains, Mwea, and Bura are being irrigated under public management. An additional 23,000 hectares is under private management. These figures reveal that the country is utilizing only 4 percent of its irrigation potential.

Due to management problems, small scale irrigation programs are preferred to the public management schemes. The government therefore intends to encourage small scale irrigation in the future. Priority will go to irrigation in coffee, tea, rice and horticultural crops as they earn required foreign exchange. Table 6.4 shows the projected land use by the year 1993.

Table 6.4 Irrigation Development Targets 1989-1993
(Hectares)

<u>Targets</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>
Present	33,000	34,380	35,760	38,440	41,800
Increment	1,380	1,380	2,680	3,440	3,670
TOTAL	34,380	35,760	38,440	41,880	45,550

NOTE: To effect this program, priority will be given to:

- a. Establishment of operational irrigation units in Kisumu, Taita, Taveta, Elgeyo Marakwet, and Meru;
- b. Maintenance of training programs;
- c. Creation of career structure for irrigation staff; and,
- d. Encouragement to lending institutions and commercial banks to assist in the scheme.

Apart from increased acreage in irrigation, the government has plans to improve the quality of animals in the dry areas. Currently the pastoral habits are poor and, coupled with overgrazing, the animal herds (cattle, goats, sheep) are reduced each year due to diseases. There will be construction of dips, dams and excess watering points to improve animal husbandry in these dry areas. The grazing of cattle in Kenya's outskirts of national parks is being considered as this also will create a buffer between wildlife and domestic farming areas.

There also will be increased government programs to educate rural farmers on methods of intercropping, agroforestry, prevention of soil erosion and rural afforestation. The new Arid and Semi Arid Lands Authority (ASAL) will establish irrigation units in potential areas around the country (see Annex A) in Kisumu, Taita, Tavetta, Elgeyo Marakwet, and Meru.

What role can the military play in facilitating the irrigation and reclamation of new lands? The military can transport food items produced by new schemes to the storage areas. The roads in these areas are extremely rough and the military can use their 4x4 wheeled vehicles to facilitate easy mobility of transport. The engineers can work with the ASAL to construct dams, cattle dips, and roads to the new areas. The military can provide physical security to the remote arid and semi-arid areas to promote crop production and settlement by civilian farmers.

CHAPTER IV
LAND USE POLICY

Since agriculture is the most important part of the economy, producing 35 percent of GDP, 75 percent of exports, and employing 70 percent of the labor, land use policy therefore should be extremely organized. The high population growth rate of 4 percent necessitates that agriculture should play a more important role.⁷ As discussed earlier, rural development will continue to be the major challenge for the government in order to attract young people to work in rural areas. About 80 percent of this land mass is marginal, consisting of 44.6 million hectares inhabited by pastoral communities (Masai, Samburu, Somali, Boran). The land is extensively used for grazing, and also parts of it are taken by national parks.⁸ Only 8.6 million hectares (about 20 percent) is good land in the Kenyan highlands. Important crops such as tea, pyrethrum, vegetables, wheat, and potatoes grow at an altitude of 2,000-3,000 m and maize and coffee grow at 1,500 m-2,000 m altitude. Other crops like cotton, sugar, rice, and pineapples grow at lower altitudes.⁹ This therefore means that land must be properly utilized and properly planned.

In 1960, prior to independence, the 20 percent good land was owned by white farmers organized into large-scale farms, producing the bulk of tea, coffee and maize. After independence in 1963, the land policy changed and most of the land was subdivided into small farms ranging from 5 to 100 or 200 acre plots in order to

resettle the African communities. There were fears that this subdivision would lower production, but now the system has proved that the system of smaller farms expressed in relationship to intensity of land use provides more employment and greater production per hectare.¹⁰ Many small-scale farmers now keep high grade cattle under the zero-grazing system (animals are raised in a small enclosed area and not in open fields) which is highly productive and leaves the open land mass for food crops.¹¹ The problem facing the government is to develop the marginal land mass used by pastoral tribes and also to create attractive infrastructure for entertainment and commercial centers to attract the young and growing population to the rural areas. Provision of electricity, clean water and road networks to enable profitable trade and easy communication would require huge sums of money.

What can the Department of Defense contribute? First, since these areas are remote and dry and mostly inaccessible by vehicles, the annual exercises held by army brigades can be so planned that the Army Engineers can construct roads and bridges in coordination with government development plans. The engineers also can build dams and cattle dips as part of their training and put up piped water in coordination with the water department. Second, the strategic development of military bases, or barracks, should be in conjunction with rural infrastructure development so that the military community can help boost the economy of rural emerging civilian communities in various districts. This would also create physical security to the remote rural districts and encourage settlement.

CHAPTER V
CONSERVATION

Along with the land reforms, the green revolution is one of the most debated aspects of rural development. In Kenya the government has continued to appreciate the roles of nongovernmental organizations (NGOs) in development activities. In forestry management, many NGOs, including the green belt movement and National Christian Council of Churches, have contributed to rural afforestation programs which increase general awareness to the general public.¹² Also, the contributions of international organizations such as the International Council for Research in Agroforestry (ICRAF) has been beneficial.¹³

To preserve Kenya's forests, the country needs trained manpower and proper planning. The Kenya Forestry School at Londiani has evolved from a certificate-awarding to a diploma-awarding institution. There is also an increased demand for trained graduates in forestry and this has resulted in the establishment of the Department of Forestry at Moi University (ELDORET).¹⁴ This program will provide enough expertise on conservation of the environment and Kenya's forests as manifested in Tables 1 and 2. In 1986, Kenya had conserved a total of 1,388,000 hectares of forest land which was under government control and 412,000 hectares under private or county council control.

The political leadership of the country has shown great enthusiasm in conservation of the environment, as manifested by

the president, who created a permanent Presidential Commission for Soil Conservation and Afforestation. Since its inception on January 26, 1981, it has been an active body on soil conservation and afforestation campaigns. The program has also taken the initiative and involved Kenya's youth as needed for conservation of soils and forests. The President himself has been involved in campaigns for building gabions on badly denuded top soils in the Machakos District. The emphasis has been that unless Kenya conserves her forests and top soils, the balanced tropical rains will be insufficient due to disturbed ecology, therefore causing food shortages as occurred during the year 1984:

President Moi, as usual, has been concerned with long term planning and foresight in all aspects of national life. He has constantly reminded Kenyas that unless they conserved their forests and water, the rivers and streams that flow very freely today would dry up and the lakes that are now full, complete with their fish, would similarly dry up or disappear.¹⁵

Various other corporations, national water conservation and pipeline corporations have all been set up to conserve Kenya's sources of water and control wastage of topsoil into the Indian Ocean by building dams along the main rivers. Some of the pictures (See A, B, C, D and E) further enhance the activities of yesteryear and demonstrate how the Kenyans are conserving top soils. The government has also set one day in the calendar year, normally in April, as National Tree Planting Day. During this day, free seedlings are offered to "Mwananchi" (citizens) and each

person is supposed to plant a tree. The President usually leads the nation on Tree Planting Day (see Photo X).

What can the military do to enhance conservation programs and intensify food production? First, they do participate in National Tree Planting Day and this contributes to the afforestation programs. Second, the military can construct gabions using the engineers as part of their training of digging and covering "fox-holes." The military can get involved in controlling destruction of forests and wasting of trees in coordination with the administration. Lastly, the military can afforest the dry areas where the weather is hostile, such as Garbatulla, Wajir, and Turkana districts, through organized programs to enhance the survivability of planted trees by use of mobile water container vehicles. This would set an example to the local communities. The program should be coordinated with the District Development Committees to develop forests in harsh climates.

CHAPTER VI
POLICY ON FOOD PRICES

Despite the struggle to conserve Kenya's forests, the country is faced with limited fertile agricultural land. Only 7 percent of the total land area has good soil and adequate rainfall to grow food.¹⁶ Most of this area has been monopolized by the cash crops such as coffee and tea owned by Brooke Bond Liebig, Ltd., the major agribusiness corporation in Kenya which has been closely involved in coffee and tea growing for 60 years.¹⁷ The food crops such as maize, wheat, and beans have to compete with those cash crops and, if farmers are to grow enough food to feed the 23 million Kenyans, then there has to be a pricing policy that provides incentives to the large and small scale farmers. Traditionally Kenya was always self-sufficient in food, but a major setback occurred in 1980 and 1981 when she had to import maize for the first time. This prompted a new approach to the food policy.¹⁸

While the policy has been to encourage an export-oriented agriculture, and to see agribusiness advice and investment, Kenya's own food supplies have been hit. Food imports have been rising steadily since 1969, although, like many of the food crops grown for cash sale, imports are used mainly to feed the increasing population in the cities, rather than the majority in the rural areas. However, the situation deteriorated significantly in 1980, when for the first time since Independence, people had to queue to buy maize and large quantities were imported. Maize output had fallen from the 1977-78 record of 2.2 million tons to around 1.4 million tons in 1978-80, and over 300,000 tons were imported to cope with the food shortage. In December 1980 the government was forced to order a further 128,000 tons from abroad.

The reasons for the poor harvest were mixed. The national purchasing bodies could not absorb the heavy crops of previous years; poor or insufficient storage facilities had made it difficult to store the bumper crop; farmers left with a surplus reduced the area planted in the following year; a drought, shortages of farm inputs (especially fertilizers), and low farm prices compounded the problems. In addition, large quantities of maize were still being exported in 1979, even after the crop failure has been predicted.¹⁹

The above study therefore necessitated the Kenyan government to come out with policy issues involve incentives to enhance real growth. Table K (attached) shows real growth from 1.8 in 1983 to 3.9 in 1987 in the agricultural sector. In order to promote growth, the government began to implement an agricultural sector adjustment program. The main objectives were to improve the use and distribution of inputs, especially fertilizers among smallholders; maintain producer incentives while speeding up payment to farmers and reducing consumer subsidies; reduce the public sector role in marketing; reform and divest selected parastatals; improve agricultural credit lending policies and rationalize public expenditures in the sector.²⁰

To implement the policy of providing incentive, the government announced new prices for major agricultural commodities. The new prices usually should come in February each year. In 1986, for example, the producer prices increased from 4.3 percent for sugar to 22.4 percent for seed cotton²¹ (see table). The basmati rice price increased by 45.2 percent. The consumer and producer prices of milk rose by 25 percent. For coffee, the government prepared proposed prices for the year 1988 since the producer

prices are effected by International Coffee Organization (ICO) policy. In September 1987, the government increased the retail price of fertilizer by 20 percent.

As part of this incentive on prices, the government improved the availability of fertilizers to local towns by 40 percent in 1984. On the marketing side, the National Cereals and Produce Board was highly reformed in efficiency. The local farmers also were encouraged to trade in grain direct to Kenya Grain Growers Cooperative Union and have the National Cereals and Produce Board deal with the strategic reserves and buy only if necessary. This was consistent with national food security policy to avoid adverse shortages of maize as in 1980. It can be seen therefore that the government policy to create initiatives for the farmers is in top gear.

What can the military do to be part of this program? First, they can grow food grain, raise cattle around their base areas and become self sufficient in their welfare projects, and they can product surplus and market it to the National Cereals Board. Second, the maintenance of good posture to provide confidence to the farmers and attract foreign investors like Liebeg and Del Monte to continue investing in the country will promote food security. This is a vital role for the military in promoting food security. They should continue to provide the current posture of confidence based on sound discipline and ethical behavior, non-interference with political issues, etc., and let farmers invest and prosper without fear. Where there is no peace, the farmers will not grow food and the result is hunger and reliance on food

aid such as in the cases of Ethiopia and the Sudan, where the people are dying of hunger and relying on food aid due to military instability. As demonstrated in Standard Paper No. 23377, Nairobi, dated Friday, July 21, 1989, page 5, Garang's conditions for talks:

Colonel Garang's statement, published by the newspaper, Al-Qabas of Kuwait, was largely a demand to know the government's intentions regarding previous peace accords made between Khartoum and the rebels, who have been fighting since 1983 to free South Sudan from Muslim domination by the North. A meeting with Lieutenant General Omar Hassan, Al-Bashir, who seized power in Khartoum on June 30, cannot take place until real goals of the young officers in the north have been clarified. . .LTG Bashir has proposed peace talks with SPLA and indicated discussions will start from scratch.²²

Therefore, there is no way that the farmers in southern Sudan can grow food under such turbulent conditions, and the military situation has caused food production and the famine situation.

CHAPTER VII
MARKET POLICIES

Although the government is able to regulate the local markets of food productions, it cannot have a control of regional, continental or global control of its exports, coffee and tea products because traditionally these markets are controlled by multinational corporations or their local subsidiaries. These are usually termed "downstream" agribusiness; because the flow of their profits is always one way--from producer to consumer countries. The consumer countries do not necessarily plough the profits back to producer countries because their interest is not in developing the local situation.

By the mid-1970s, over 100 transnationals had more than 600 investments in developing countries, subsidiaries processing and marketing branded food locally. Over 100 were in the dairy industry, but their important areas were canned fruit and vegetables, dried soups, breakfast cereals, margarine and table oils, confectionery, soft drinks, beer, coffee and cocoa products. Apart from tropical fruits, all other products are generally for export.²³ Table 1.4 (Annex B attached) shows how these transitional food processings have established subsidiaries in Africa thus controlling the regional and continental market. Out of 16 industries covered, the foreign investment has attracted investment as follows: Kenya (14), Zimbabwe (12), Nigeria (11), Ghana (7), Ivory Coast (6) and Zambia (6).²⁴ A United Nations report

states that these big foreign companies can have an undesirable effect on local enterprise and may even force out local competition by means of advertising and marketing.²⁵ This is done by cutting prices only to raise them again once they have achieved a monopoly. So these are the conditions that the Kenya government and other third world countries have to operate in. The soap industry in Kenya is a typical example of where the East African Industries manipulate and control the detergent business and the country has little control on soap products.

With these facts in view, one can see that the government is faced with the problem of regulating the markets and prices of most important agricultural products. However, the political goodwill of Kenyan leadership provides an incentive for outside investment manifested by 14 multinational subsidiaries established in Kenya for food processing. Although the government does not control the marketing of these products 100 percent, there has been gainful revenue and creation of employment as shown in Annex C attached. Total agricultural markets have grown from 243.5 million Kenya shillings in 1987 to 508 million Kenya shillings in 1989.²⁷

The military may have little to do in marketing policy, but as discussed earlier, they provide a favorable peaceful situation where foreign investors are attracted to invest. At the moment they country is leading in foreign investors who are dealing with agribusiness and this is a healthy situation which should be maintained in order to attract further investment by foreign corporations.

CHAPTER VIII
POPULATION

At the end of this century, Kenya will have a population of about 35 million people, 78 percent more than 1984. This population rise will include a work force of 16 million people, 6.5 million more than 1984.²⁸ This means that the government is faced with three problems: one, the unemployment issue by the year 2000. If the work force does not find meaningful employment in rural based agricultural industry, they will flock into the urban areas, thus creating a state of insecurity in the state. Two, the almost doubled population has to be fed; otherwise, there would be general unrest created by hunger or alternatively reliance on food aid from elsewhere. Third, the poverty issue created by increased population.

This phenomenon is explained further by George Kent in his book, The Political Economy of Hunger. Although the population growth may not be the primary cause of hunger as there are other factors like weather, drought and lack of fertilizers, there is definitely a direct relationship between poverty and population. The best way to understand this is explained as, "Rapid population growth and inadequate food supply have a common origin and a joint explanation or, in other words, rapid population growth does not cause the food problem--they share common causes of poverty and inequality."²⁹ The conventional view of this alternative view is represented in Figure 2.

Perspectives on the Role of Population Growth

Conventional View:



Figure 1.

Better View:

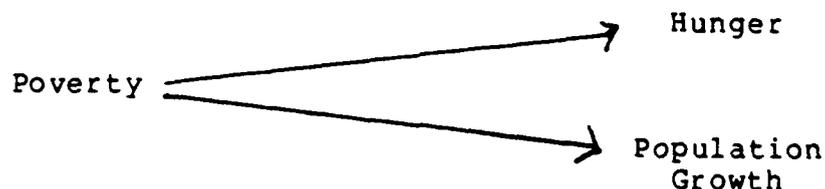


Figure 2.

Source compiled by the author (George Kent)³⁰

So one can see from Figures 1 and 2, the conventional view is that population causes poverty, then hunger. But while this is true, a better perception for the government planners or the control of population growth is represented by Figure 2; that is true in Kenya or elsewhere in the world. The people living in ghettos and slums in New York, Calcutta, East London, Nairobi (Mathare Valley) have the highest number of children per family. Why? These people are living in poverty; they have no value of life; no form of entertainment, gainful employment, etc. In turn, they resort to human reproduction. By contrast, people living in well developed and rich nations have zero population growth (Germany, Switzerland, or the affluent societies of the United States). Therefore, there is a direct linkage between poverty and

population, and for the Kenyan government to control the rapid population growth, she must control poverty first.

How can this poverty be controlled? This can be done only by increased productivity in agriculture, job creation in rural areas, to absorb the work force by the turn of the century, provide export revenues, and widespread rural nonfarm activity to provide jobs and good living outside central cities. A dynamic informal sector must create jobs at low cost and cater to the needs of the people at all income levels.³¹

This type of renewed growth and alleviation of poverty will ensure that the basic human needs--food, shelter and clothing--are met. This is further enhanced by the President's view on building of the nation as expressed in his book, Kenya African Nationalism. Nyayo (the word used to describe the President's visionary leadership) philosophy and principles state that "We in Kenya hold the view that development of a country must mean the development of all its people, and consequently, whatever development program or project is implemented must have the development of the people as its main objective."³²

Therefore, there is no escape from stark realities and Kenya has seen this is her economic management for renewed growth. To be able to contain population growth, she must raise her people's standard of living. Family planning methods in themselves just treat the symptoms to reduce the numbers but the real disease of population growth is the poverty issue. As agriculture will continue to be the leading sector in stimulating economic growth and job creation, new jobs will have to be created in rural areas,

farms, and small scale industries. In the cities, the industries will have to be highly productive to accommodate employment of workers at low cost and capable of competing in world markets for their products. The Kenya Sessional Paper also proposes in Chapter 4, "The development strategy is firmly set in the context of improved economic balance between rural and urban sectors."³³

Having stated all these facts about population growth and poverty, it is important to relate them to national security. First of all, poverty creates a state of insecurity in the country and this, in turn, can be exploited by internal disgruntled groups or external forces. For a country to be stable, it needs to have people living above the poverty level because hungry people are ripe for intrusion of any "ism" or ideology by getting some form of assistance to live from hand-to-mouth. The President, however, has stated categorically that any "ism" without food policy in its content is hollow. Therefore, for a country to avoid foreign ideologies which might interfere with internal security, it must have a comprehensive "feeding plan" for its population. This has been identified by the government through the "Economic Planning for the Renewed Growth Up to the Year 2000." This food security alleviates poverty and enhances internal security.

What role can the military play in alleviating poverty and population growth? The military in its planning should consider seriously force structure versus threat and reduce the commitment of resources that would otherwise be used in the development of rural industries and agriculture sector to alleviate people's standard of living. Poverty at the moment is the number one enemy

because it causes population explosion, and efforts to prioritize what the military needs is a requirement in arms procurement and force structuring for now and in the future up to the year 2000-- and beyond.

CHAPTER IX
NUTRITION AND FOOD SECURITY

If the growing population learns to eat the African traditional foods like cassava, millet, sorghum, maize, sweet potatoes, and bananas, which are rich in food value and easy to grow, then the Kenyan population will not be undernourished. The problem at the moment is the adaptation of the European food habits by the majority of the urban population who have tended to believe that European food habits are an indication of class and development. This attitude developed through the years of colonization when the Europeans brought their culture, education, religion and food habits with them. For the Europeans to survive, they suppressed the African culture which included their food habits.

The affluent urban dwellers will have their sausage, cereals and eggs, and bread for breakfast; beef, rice, potatoes and salads for lunch and dinner. Wheat and meat products are the main components of the food habits of the urban people where these commodities are scarce. Consequently, Kenya has to import wheat to feed the urban people with bread and other wheat products. If, however, people adapted the traditional foodstuffs previously mentioned, there would not be a need to import wheat, thus depleting the scarce foreign exchange and making the country dependent on the United States for wheat imports. The traditional crops are very hardy and can grow under extreme climates. There is,

therefore, a need for efforts to be directed to young generations to change their food habits. As can be seen in Table 1.9, per capita availability of cassava in the year 1981-85 was 54.3 kilograms, which is locally grown, compared to wheat (import/local) of 19.2 kilograms in the same period.³⁴ It can also be seen in Table 1.9 (Annex D attached)³⁵ that since 1965, there has been considerable growth in the availability of major foodstuffs, but the problem has always been food habits as most people rely on wheat products. Because of the lessons learned from the food shortages of 1978-80 and the 1984 drought, the government formulated, in its Sessional Paper No. 4 of 1981, a food policy whose aim was self-sufficiency in food production through provision of incentives to farmers and avoidance of consumer subsidies. This has improved agriculture.

To also improve the quality of nutrition for primary school children, the President instituted the Nyayo School Milk Program on Jamhuri Day in 1978. This program was intended to provide milk to school children free of charge because their parents could not afford a balanced diet. The President observed that:

They would be vulnerable to diseases and deformities associated with poor feeding and, consequently, would not be able to play their roles in nation building effectively. The President appealed to Kenyans to meet the challenge by producing milk in sufficient quantities to enable the government to supply it at no cost to school children.³⁶

This program was very successful, and now all school children in grades 1 to 8 get free packets of milk at school so that they

can grow to be healthy adults. These are the national efforts to reduce malnutrition in young people.

Can the military play a role in the food malnutrition program? Yes, this is possible through the unit's Barazas (conferences) to educate the military community on food habits. The military live in closed communities and, since the majority of military families live in barracks, the unit commanding officers can have comprehensive programs on a monthly basis to educate the service community on the need to develop the taste for traditional food dishes and not rely on foreign wheat products. Since agricultural land is available around the barracks which can be cultivated, the servicemen's families should be encouraged to cultivate quarter-acre plots and grow cassava, vegetables, and sorghum for their foods, and therefore become self-sufficient. This will also enhance the national efforts of food security and self-sufficiency in food. The second-order effects of such programs would be healthy and contented families who work to feed themselves, which will provide benefits even after retirement as they will eventually end up farming when they leave the military. A happy military family will also enhance productivity of the soldier at work and improve the quality of the military as a whole, thus enhancing the national security by having a contented military.

CHAPTER X
POLITICAL GOODWILL

In his forward for the Development Plan 1989-1993, President Hon Daniel Toroitich Arap Moi stated:

Kenya's sixth development plan covering the period 1989-1993 ushers the nation into the second decade of the Nyayo era and the period beyond the Silver Jubilee of our Independence. Our achievements so far have been remarkable by any standards, and have been facilitated by the unbroken run of political stability and peace which we have enjoyed over the last twenty-five years (December 1963 to 1989). During the same period, the welfare of our people has improved tremendously in all fields and it is our desire and hope that this positive trend will continue in the years ahead.

It is evident from the above profound statement that there has been strong political will steered by the head of the government and the President of the Kenya African National Union (KANU) political party (who is also the Commander-in-Chief of the Armed Forces). The political stability and policy of good neighborliness and noninterference with other countries' internal affairs lends much to Kenya's current posture of peace and stability--a model democracy in the whole African continent. Kenya can boast of being one of the few remaining democracies in Africa since gaining independence in the early 1960s. This has been accomplished through the rule of law and wise leadership of the founding father, President Jomo Kenyatta, and the smooth political transition to the current leadership. With his ability to identify in his first ten great years of the Nyayo Era (1978-88), President

Moi has stated in his policy of food, education and self-sufficiency that:

While peoples of the world subscribe to the various established "isms," and continue to coin new ones, President Moi has taught Kenyans to be 100 percent practical in matters pertaining to food. Any "ism" that excludes the basic need for food is hollow!! The most important "ism" for Kenyans, so says President Moi, is the TUMBO (stomach) IDEOLOGY. Application of other "isms" when stomachs are empty is irrelevant. The President's message is simple: whatever we individually believe in as our political persuasion, every Kenyan has a national duty to ensure that the country produces enough food for itself.

It can therefore be seen that the strong political vision of the President has been manifested in his guidance for the developed plan in renewed growth. The people of Kenya have enjoyed peace and stability since independence and therefore have enjoyed an environment where they continue to alleviate poverty which causes hunger and overpopulation; this is all due to clear political objectives. The military has continued to be loyal and efficient by supporting the political leadership of the country and upholding the constitution.

So far, so good, for the military support--but what should they continue to do in the future to support the political leadership and the constitution? They should always remember their oath and the allegiance, "To be loyal to the President and Commander-in-Chief of the Armed Forces." They should support political leadership in the future, then the goals set for food production. The President always advocates the combined efforts of the member of the Armed Forces and the civilians. When he addressed a

passing-out parade of Armed Forces cadets at Lanet on August 11, 1989, he stated that:

Members of the Armed Forces and civilians should combine their efforts in activities that could improve living standards of "wananchi" (citizens). On the need for relevant education, the President called on the universities to offer degrees in basic sciences, thus equipping the youth with skills for promoting agricultural output in all ecological zones in the country--noting that large portions of the country are arid or semi-arid, we must find ways and means of feeding₃₉ the population which is over 20 million people.

CHAPTER XI
INFRASTRUCTURE

When planning for food security, storage, transportation and distribution process are vital aspects for the government to consider. The storage of grains in the country is handled by the National Cereals and Produce Board (NCPB). "Currently the NCPB and Millers have a storage capacity of 19.8 million bags. The NCPB has 42 for maize and 12 stores for wheat, representing a capacity of 11.06 million bags of maize and 1.50 million bags of wheat. The desired capacity is 14.96 million bags of maize and 2.09 million bags of wheat."⁴ In order to meet the targeted storage capacity of 17.05 million bags by 1993, the NCPB has a current program of constructing grain silos at Kanum, Kisumu, Kericho, Bungoma, Narok, Nairobi, Moisi Bridge, Mosoriot and transshipment silos at Mombasa, to be completed by the 1990/1991 financial year. The aim of having these constructions is for holding food surplus and distribution to deficit areas of the country, strategic reserves, and adequate import and export storage capabilities. Also on a similar storage program, coffee and tea are regional exports, and the Kenya Coffee Board intends to expand its storage capacity from 400,000 bags to 1.3 million bags by 1993. The Kenya Tea Development Authority intends to expand its capacity warehouse in Mombasa.

Apart from government storage of strategic reserves, the farmers are encouraged to store their grain reserves on the farms

to supplement the strategic reserves. It is estimated that 62 percent of the maize produced in the country is stored on farms.

In order to enhance food distribution, there is a need to construct access roads to the farms so that the food grains can get to the stores. Through the District Development Committees, the priority of rural access roads are planned in each district. It is the hope that in the same fiscal year, all District Headquarters will be connected with tarmac road systems where food storages are planned.

Can the military participate in storage and transportation programs? The answer is yes--the military has transported food grains from farms to storages in the past and this is a worthwhile military contribution. The engineers can also participate in rural road construction if coordinated with their training cycle. It would be worthwhile for them to construct roads or grade dirt roads to enable food transportation to the storage areas. The U.S. military officers have also identified the effects of U.S. participation of their engineers in third world countries--participation in programs that help alleviate poverty. This is manifested in a Military Study Project Paper which states that "A successful, developmental assistance program will serve to make basic subsistence, clothing, and shelter easier to obtain. It must foster hope for better life in the future. An effective program will create jobs, thus promoting a country towards reforms that will move the country toward increased social justice and democracy."⁴⁰ Therefore the U.S. engineers can, in cooperation with Kenyan engineers, construct rural roads, boreholes, dams

and cattle dips, schools and health centers to enhance security and quality of life. This is a cooperation that is perhaps a more relevant civil-military project that can improve the quality of life through the U.S. dollar and enhance security in third world regions.

CHAPTER XII
RESEARCH PROGRAMS

Because of the growing population which is currently at 23.1 million people, the land resource is shrinking and hence the need to optimize on per-acre grain productions. To this end, the Kenya Agricultural Research Institute (KARI) has been tasked to establish a network of research stations to serve the farmers. In the last 80 years, the country has made major breakthroughs in regard to maize, sugar cane, wheat, pyrethrum, coffee and horticultural crops by improving the quality of hybrid seeds. Currently, the Director of KARI, Cyrus G. Ndiritu, BVM, MSC, Ph.D., in his review in Standard Paper dated Friday, 21 July 1989, page 26, stated:

KARI's response to country's needs: The National Food Policy Paper No. 4 of 1981 and the Sessional Paper No. 1 of 1986 address the issue of an ever increasing demand for food. The government's efforts to meet this need require back-up contribution from research. KARI has therefore identified the following research programs: Animal Diseases Research at Kabete and Muguga; Range Management at Kiboko and Marsabit; Animal Production at Kitale, Muguga, and Naivasha; Crops, Soils and Water Research at Kitale, Mtwapa, Kakamega, Tigoni, Molo, Lanet, Katumani, Kabete, and Mwea Tabere.

KARI has been able to develop strategies for dry lands, identified epidemic plant and animal diseases, developed vaccines for foot and mouth diseases, improved crop variety, identified the changing land use and water balances, developed livestock for dry areas, and finally, identified genetic resistance by individual animals against ticks and also established the role of wildlife in

maintenance of tick population. The work force for research is currently 6,000 employees composed of 600 research scientists, 214 technical officers, 500 technical assistances, 160 laboratory technologists, 212 laboratory technicians, 4,300 administrative support. "It is hoped that the agricultural production will benefit from this human resource by raising production of animals and crops."⁴² It can be seen, therefore that there are total concerted efforts by researchers to increase production of food for the increasing population. The problem facing the researchers is to market their findings to the farmers through manageable programs at local levels. To this end, educating the rural farmers in new technology is vital for the enhanced food production.

The military can participate in veterinary programs by raising animals for research on the land reserve for military use and also growing seeds for research in areas where the climate is suitable, like in the Eldoret or Nakuru areas.

CHAPTER XIV

FOOD ETHICS AND POLITICS

As discussed earlier, the production of crops such as coffee, tea, and cocoa in most African colonies during the colonial era was mainly for European markets. The governments then imported industrial products such as clothing or machinery in exchange for their crops. This type of trade did not consider the draining of the economies and the fact that it would create a dependence on European markets indefinitely. This was politically sound for the colonialists since they could manipulate the colonies and influence politics and production to serve their interests. The system did not consider the problem of food self-sufficiency, and African countries continue to suffer because of this phenomenon. Ethically, this was heinous for the colonialists; no wonder slaves were traded for European beads as observed by Reporter Neil Henry, The Washington Post, dated Sunday, October 1, 1989, below:

"Starting All Over in Uganda":

For 500 years, Museveni said, African leaders traded Africans (slaves) for beads. Today, he said, the outflow of resources largely continue in the form of precious and irreplaceable raw materials traded for liquor, toys, cars, and other manufactured goods from developed countries. One day this will change, he said, this economy must be transformed from one that produces raw materials to an economy that produces finished products--first for ourselves, secondly for export! I don't think anyone can ever come again and say, no more. We're going back to the old ways in Uganda, he said, the people are internalizing change. They are getting a new point of historical reference.

The above is a profound policy statement by African President Museveni of food production. He is reflecting on the need for African leaders to remember their political developments, avoid fixation on the colonial history by blaming the colonialists for failures, and start food production--first for ourselves, then for export. Currently most of the African economies lack ethics; they grow coffee, tea and cocoa for exports. Then they import cars, liquor, toys and luxury European goods that do not benefit the poor rural farmer who cannot afford to buy the Scotch whiskey or the Mercedes car imported through exported raw agricultural products or minerals. This is definitely poor ethics for the leaders, and there is need to reflect and see that first, we need to produce food for ourselves, then export finished products and buy the machinery that will enhance food production. President Moi also noted in his first Great Years of the Nyayo era that "The most important 'ism' for Kenyans is the 'TUMBO' (Stomach) ideology and whatever we believe in our political persuasion, every Kenyan has a national duty to ensure that the country produces enough food for itself."⁴⁴

It can therefore be seen that most visionary leaders in Africa are reflecting on the need for a "stomach" philosophy and self-sufficiency in food production. This is the new type of political leadership for renewed growth. They have observed that it is folly to continue with the politics of the past and continue to import luxury goods like liquor when their people are dying of hunger. A tourist to Africa from the North American continent or Europe usually cannot understand why people are dying in Sudan or

Ethiopia due to hunger and yet in their cities there is liquor and luxury imported items! The reason is because the African leadership does not consider food ethics and politics and link them with export/import production and self-sufficiency in staple foods. Hence there is a need for all African countries to take historical lessons as a frame of reference; stop blaming the colonialists and start growing food to feed the increasing population.

There are other ethical, political issues connected with food production like famine relief, food and cash. We must adapt the policy of "If you want to help a hungry man with food, teach him how to fish but do not give him fish." Philosophically, this is what is wrong with famine relief. The African countries, once given "fish" food, will never learn how to "fish" and thus feed themselves.

However, the problem of food ethics is not only aggravated by political leadership of developing countries; the developed countries have an ethical and political issue to think about as observed by John W. Mellor, Director of Food Policy Research Institute.

Unfortunately, in the modern world we find few steps have been taken to ensure adequate levels of food intake for all poor people. . . .Why is this continuing disjunction between our ethical principles concerning food and food production, and the reality of food needs in the developing world?⁴⁵

He suggests two reasons, "technical and political." On the technical side, it is indeed difficult to transfer food that is in surplus in one area of the world to the poor in another area. There are physical problems of transporting food from one place to

another. There are institutional problems, especially in Africa, where poor people live in rural areas (as during the famine in the Sudan in 1985) where they would die of hunger while food was available in towns. On the political side, it is even unclear as to what extent developed countries are committed to meeting the food requirements of poor countries. In the United States, public opinion polls over the last 20 years have consistently shown that some 55 percent of the general public favors economic assistance to other countries (What Americans Think, 1987). Yet in the United States, such support for foreign assistance is far more passive than active. There are a number of reasons for this. On the one hand, many Americans are more concerned with fighting poverty at home than abroad. At the same time, a large majority of Americans feel that much foreign aid is wasted--by the American bureaucracy or by the recipient governments (What Americans Think, 1987).⁴⁶

With the above insight of how the developed world views hunger in Africa, there is a need for the African leadership to establish a new approach to food production. I would suggest that there is a requirement to about-face and stop relying on exporting raw products from Africa and receiving luxury goods and, like any new scientific leap in the past (discovery of the atom bomb, computers, airplanes, internal combustion engine), scientists had to get out of the normal paradigm in order to make a scientific discovery outside common human beliefs! The African leaders have to come out with a visionary idea of how to feed their growing population and process their raw materials. This will, of course,

require ethical leadership and political goodwill. The military will also have to play their part by providing the desired security environment for food production. We have to join efforts together--peasants, merchants, scientists, politicians and the generals--and create a new paradigm to the rest of the world. I think President Moi hit it on the mark when he stated that "any 'ism'--political belief--without food production in its clause is hollow!" We must stop importing gun powder and instead process food products from agricultural production.

Kenya as a third world country has realized therefore the need to focus on food production and that is why, in its Economic Management for Renewed Growth, Sessional Paper No. 1 of 1986, it has seen that it must look after its national interests and only seek assistance in cases of climatic disaster. Kenya must be able to feed the population of 35 million by the year 2000. Any food assistance from the developed world will be based on emergency requirement as outside nations only serve their national interest, as indicated various times in this paper. Food as an economic element of power is used by the developed world to influence the political and regional interests of the superpowers. This is a fact that Kenyan planners must take into consideration in planning for food strategy and rural development.

CHAPTER XIV
PEACE AND FOOD

Experience has shown that countries that take farming for granted come to grief sooner or later. It is no good for the statesmen in third world countries to perpetually blame their food problems on the weather and past colonial history. Socrates probably gave us the answer, "Nobody is qualified to be a statesman who is ignorant of the problem of wheat." This hope was also expressed by President Roosevelt when he convened the 1945 conference that led to the birth of the Food and Agriculture Organization of the United Nations.⁴⁶ Many global conferences continue to be held even today, all for the good cause of peace. Dr. Martin Luther once, at his breakfast table, said:

All life is interrelated. . . We are caught in an inescapable network of neutrality. . . . Before you finish eating breakfast in the morning, you've depended on half the world. This is the way our universe is structured; this is the interrelated quality. We aren't going to have peace on earth until we recognize this basic fact⁴⁷ of the interrelated structure of all reality.

So there is some awareness by the world's leadership of the need to have food sufficiency in poorer nations. The problem is how to have scientific, political linkages between the developed and developing world to eliminate hunger. Statesmen have not fully utilized the potential of the rural "farmer" who is key to food self-sufficiency. The farmer should be supported 100 percent so as to achieve food production. Some statesmen such as Dr. J.

Nyerere (Tanzania) advocate that they are tired of hearing from the expatriates that Tanzania has a great potential in production --"What he wants to hear is how to improve production by the rural farmers because, unfortunately, governments in developing countries tend to exhibit strong urban bias in the resources allocation process." Rural areas get little basic provision in the infrastructure.⁴⁸ This is further explained when President Corazon C. Aquino of the Philippines saw the need to reverse development allocation of funds and decided that her government's aim would be to increase in real terms the outcome of the Filipino farmers from \$60 a month at present to \$100 per month by 1992.⁴⁹ So unless we reorient the thinking of governments in farmers' terms, we cannot achieve meaningful food production. Also, President Moi emphasizes that any "ism without food in its clause is hollow."

Coupled with the third world government efforts for achieving food security, the global community must also combine efforts to preserve the environment from such mechanisms as deforestation, soil erosion, desertification, water pollution, overpopulation, atmospheric pollution, acid rain, contamination of water through toxic wastes and environmental mutagens and carcinogens, destruction of the ozone layer, nuclear fallout, and carbon dioxide accumulation which are all real threats to the global environment, hence the security of mankind.⁵⁰

In the context of the expenditure on arms, the Brandt Commission which dealt with interrelationships among ecological health, food security and arms expenditures observed that "the global expense for arms is now estimated at \$2 million per minute, or

nearly \$20 billion a week." In spite of such expenditures, international surpluses in terms of cash, commodities and commercial technology are abundant in developed countries. A study by the World Institute for Economics points out that during the next five years, Japan alone could easily transfer resources worth \$125 billion (U.S. dollars) to developing nations. Resources can thus be available if there is a political will to help the poor.⁵¹

There are, therefore, enough resources to feed the hungry world, but the distribution, political, and food ethics are the disconnect. This requires the vision of the developed world's leadership to view the need for a peaceful global community in terms of nutrition, as had been envisioned earlier by 1945 by President Roosevelt and later on by Martin Luther King. Nations need to stop spending billions of dollars on arms and instead divert some dollars to enhance food production in the Third World. In turn, the leadership in third world countries needs to stop spending dollars on the purchase of gun powder and instead diversify technology on food production in their rural areas by supporting the farmer and developing incentives and infrastructures. This will, in turn, increase food production in the Third World, stop food importation and increase regional stability. Stop basket cases like Ethiopia and Southern Sudan where they are now heavily dependent on food aid. Real peace cannot be achieved in these regions because the poor masses are dying of hunger daily, and yet the same governments maintain large armed forces instead of diverting their energies to agricultural "revolution."

Regional food sufficiency would lead to continental food sufficiency (Africa, Asia) and hopefully stop and ease regional conflicts by preoccupying the masses and the leadership in meaningful agricultural production and stopping their reliance on food imports from the developed world.⁵²

CHAPTER XV

CONCLUSIONS

In conclusion, this paper has discussed issues on food strategy with particular emphasis on the Kenyan approach to the renewed growth. There can be no meaningful peace in any community if the majority of the people are hungry, ignorant and poor. Any real development strategy must attempt to eradicate these ills. There has to be a strong political will and security for governments to be able to conduct their development programs. The military provides the security required for the political leadership to be on a free planning mode of food strategy. This concept has been realized in Kenya, and the military provides a suitable climate for other developments. The government, in turn, has projected the development program up to the year 2000 based on rural development, i.e., the farming communities are the target for this development. The program for renewed growth has identified that, first, the history of hunger is as old as colonialism itself. The British set aside the good lands for production of cash crops (coffee, tea, sisal) to support their homeland. This did not encourage the peasant farmer to grow food and feed himself. After independence in 1963, the rich agricultural land was reallocated to indigenous Africans, and there is now more maize, wheat, and milk production per acre of land than there was in 1963. The government realizes the need to establish food reserves in cases of drought because history has shown that every 10 years, there is

always some kind of drought such as in the years 1964, 1974, and 1984.

Secondly, since we are in the tropical belt, we consequently depend on tropical climates where rains are heavy, but unpredictable. The climate dictates that farmers grow mixed crops so that if some of the crops require more rain and the rain is insufficient, then we do not have total crop failure. The farmers then rely on crops that require less rain. Such programs as irrigation and research to develop drought resistant seeds are in real programs like the Katumanis' maize (Katumani-drought resistant maize seed) which requires minimal rain. There is much potential of lake and river water and irrigation around Lake Naivasha, Tana, and the Kano plains, thus reducing the total reliance on direct rainfall. The paper has discussed at length the potential the country has of 500,000 hectares of land for irrigation and 300,000 hectares of land for reclamation. At the moment, only 4 percent of the potential is being utilized. Therefore, with proper management and funds availability, political goodwill and military stability, the country is able to export to European markets such items as fresh fruits, vegetables and other perishables. For example, in 1986 all developing countries sold horticultural produce worth \$15 billion to Western Europe, and Kenya was able to get \$1.5 billion of the total.⁵³ This proves that we have potential if more land is irrigated.

Third is the land use policy. Kenya's history is that the good land was reserved for white farmers for cash crops to support their home countries. However, after independence, the political

leadership had to balance between oversubdivision of these large-scale farms and the allocation of land to the landless African communities. The government policy was, and still is, the subdivision of the agricultural land, which caters to economic viability and manageability in a sense that the overall production per acre does not drop. This policy has proven that there is more grain production per usable land than there was before 1963, especially the maize grain which is the staple food.

Fourth, the environmental issues have been taken seriously by the political leadership and by the involvement of nongovernment organizations to enhance food productivity by balancing the forest land and the land being cultivated. By 1986, the government had preserved more than 1.3 million hectares of forest land and had a total ban on the harvesting of bamboo and cedar trees. The government is also busy on soil conservation, and it is common to see the President leading the campaign to build gabion-construction to prevent soil erosion. Each year in May there is a National Tree Planting Day, and free seedlings are distributed to "Wanachi" for planting. This increases the tree population each year, and the military also participates in such programs. This is intended to improve the environment.

The fifth issue discussed is the incentive and improvement of prices for the farmers. We realize that we cannot control the prices of coffee, tea, etc., on a world market, but we can control the prices of food grain within the country. In this respect, the government reviews the producer and consumer prices of food crops each season to provide incentives to the farmers. In turn, there

has to be a healthy climate of security which motivates the farmer to grow his food without fear of being molested, or his food crop being destroyed, or even requisitioned by the military without payment. The security is provided by the Kenyan armed forces; the farmers have confidence in the soldiers, and food production has increased tremendously. Production of maize has completely exceeded storage capacity, and the government has exported maize to Zambia in the past or donated it to drought-stricken countries like the Sudan.

Next is the population trend. Kenya has the highest population growth in the world (4.1 percent) which is equalled only by Gaza in Western Asia. The current population (as of 1988) is estimated at 23.3 million, and by the year 2000 is projected to be 38.3 million.⁵⁴ This is indeed a large population to feed and unless there is a new approach to food strategy, there will be food shortages and hence insecurity. This rationalization of food production is reflected in Kenya's Economic Management for Renewed Growth Sessional Paper No. 1 of 1986, which states that we must be able to feed our population which is estimated to be 38.3 million by the year 2000. Any assistance of food from outside will only be based on an emergency. Alongside the food strategy, there is a great awareness of the effects of large families and overpopulation. There is great political will but these efforts are always affected by cultural beliefs, religious beliefs, ignorance and lack of purpose for the need for quality of human beings and not quantity. The government effort is directed through the churches

and other nongovernment family planning organizations to educate Wananchi on the effect of overpopulation.

As nutritionists will advocate, the quantity of food intake, like population, should be evaluated on quality and not quantity. Most urban societies in Kenya have a strong belief that wheat products are the most nutritious. This originated from the colonial period belief that bread is widely used by the white farmers, so it must be good and also must be a sign of class, based on European culture. The urban and part of the rural community have to relearn that wheat products provide starch which is abundantly available in other traditional crops like cassava which they do not eat. The school free milk program is intended to improve the health of young children who do not often otherwise get milk at home. This is a gesture towards a healthy nation through the Nyayo milk program. So the political will is there to have a well-fed nation and what remains to be done is the reeducation of economic resources to educate the people on nutritional needs and food habits. Green vegetables can grow almost anywhere there is water and soil, and people are encouraged to eat the famous "sukuma wiki" green vegetable for the urban dweller which is rich in vitamins and also cheap in price.

The other aspect of food strategy is political goodwill. For the 25 years since independence, there has been a stable political leadership which has been uninterrupted by armed forces in the form of military coups. The "ballot box" has prevailed, and democracy has facilitated investment by foreign firms, encouraged a free market, and created incentives for the farmers to grow more

food. In turn, the military organization has been reliable throughout the same period. This political stability and military goodwill have made the country an example of a young growing country, able to feed itself. And it is hoped this will prevail in the future as the President has emphasized in the past that the most important "ism" for Kenyans is the "TUMBO" (stomach) ideology, and that applications of other "isms" when stomachs are empty are irrelevant.

Apart from political and military goodwill, the country needs infrastructure, as discussed previously, to facilitate food production. These infrastructures are in forms of food storage facilities, roads, and processing and purchasing centers. The government effort has been directed to the construction of food grain stores in Nakuru, Kisumu, Kericho, Bungoma, Nandi, Nairobi, Mois Bridge, and Mombasa. These stores are scattered around the country and ease food distribution to various parts of the country. It has also been in the government's plan to construct permanent roads connecting all 41 district headquarters, which are the major food distribution points, by the year 2000. Apart from government food storage facilities, farmers are encouraged to store their year's consumption of grain in their traditional granaries in their rural homes until the next harvest. This program will ensure that the strategic reserves stored by the government are not used up by the people before they exhaust home reserves. The military does play a big role in the transportation of food grain from farms or from one government store to another, thus enhancing the food distribution program and food security.

For any meaningful increased production of food, there is a need for constant research to produce more efficient plants. To this end, the Agriculture Research Institute has made major breakthroughs in more efficient maize crops, by propagating hybrid maize at Kitale, the improved sugar cane and wheat breeds at Njoro, and pyrethrum, coffee and horticultural crops. In harsher climates, the Katumani maize has changed the value of life in semi-arid districts as Kitui in Ukambami. There are also better beef and milk production animals that have been developed at the Naivasha and Kabete research stations. The problem, however, has been to disseminate the information to the rural farmer on how to nurture better plants and animals. This remains the major area of concern for the agricultural extension workers in the future; they must reach the rural farmer with the new technology to enhance the national food strategy.

Although unable now to control the world prices of her agricultural products like coffee and tea, it is important for the Kenyan government to consider the ethical and political issues of food production that are domestic in nature. First, the farmer is the core of production and must be given the necessary attention in monetary aid and also fair prices for his products. The government must stop trading coffee, tea, etc., for luxury goods such as liquor since this is unethical and such luxury goods are never for the peasant farmers. The government must endeavor to process and export finished agricultural products and control the sale of these finished products from multinationals. We must be able to dictate coffee and tea prices by processing them

in-country. We must continue to have political goodwill that promotes foreign investments and encourages free markets. We must seal our borders to stop the smuggling of food commodities because the people may go hungry while smugglers are making profits in sugar or other agricultural products. We must have a strong political will to grow food and feed ourselves and not rely on food imports from the western world. It is time we realize that surplus food transfers from the developed world are only done in the interests of the donor nation and are not necessarily ethical in nature. The government must make a great leap forward in food production technology in order to be able to feed the growing population, estimated to be 38.3 million by the year 2000. We must understand, as President Moi says, that "any 'ism' without a food clause in itself is 'hollow'," and this, I believe is where the strong political will lies in feeding the nation. The political leadership must therefore about-face and stop looking for food aid from the Western world. Instead, we must go back to the land and support the farmers who produce food. The military, in turn, must provide a healthy climate for the political leadership to function and the farmer to flourish.

Finally, history has shown that countries that have revolutionized agricultural production, such as China, are peaceful nations. Political leadership in Africa must stop blaming the current hunger situation on weather, colonialists, or the Western world. African nations therefore must plan for bad years caused by drought; and during the bad years, nations must have strategic food reserves. African nations continue to get arms assistance,

thus draining their meager agricultural resources. A country cannot have real peace if part of the population is starving like in Ethiopia. No matter how good the economic strategies are, how much potential the countries in the Third World have in mineral resources, how strong their armed forces are, or how well they get along with the Western or communist world, the bottom line is the capability of the Third World to feed itself and not to rely on food aid or famine relief year after year as food sufficiency has a profound impact on domestic, regional and global security.

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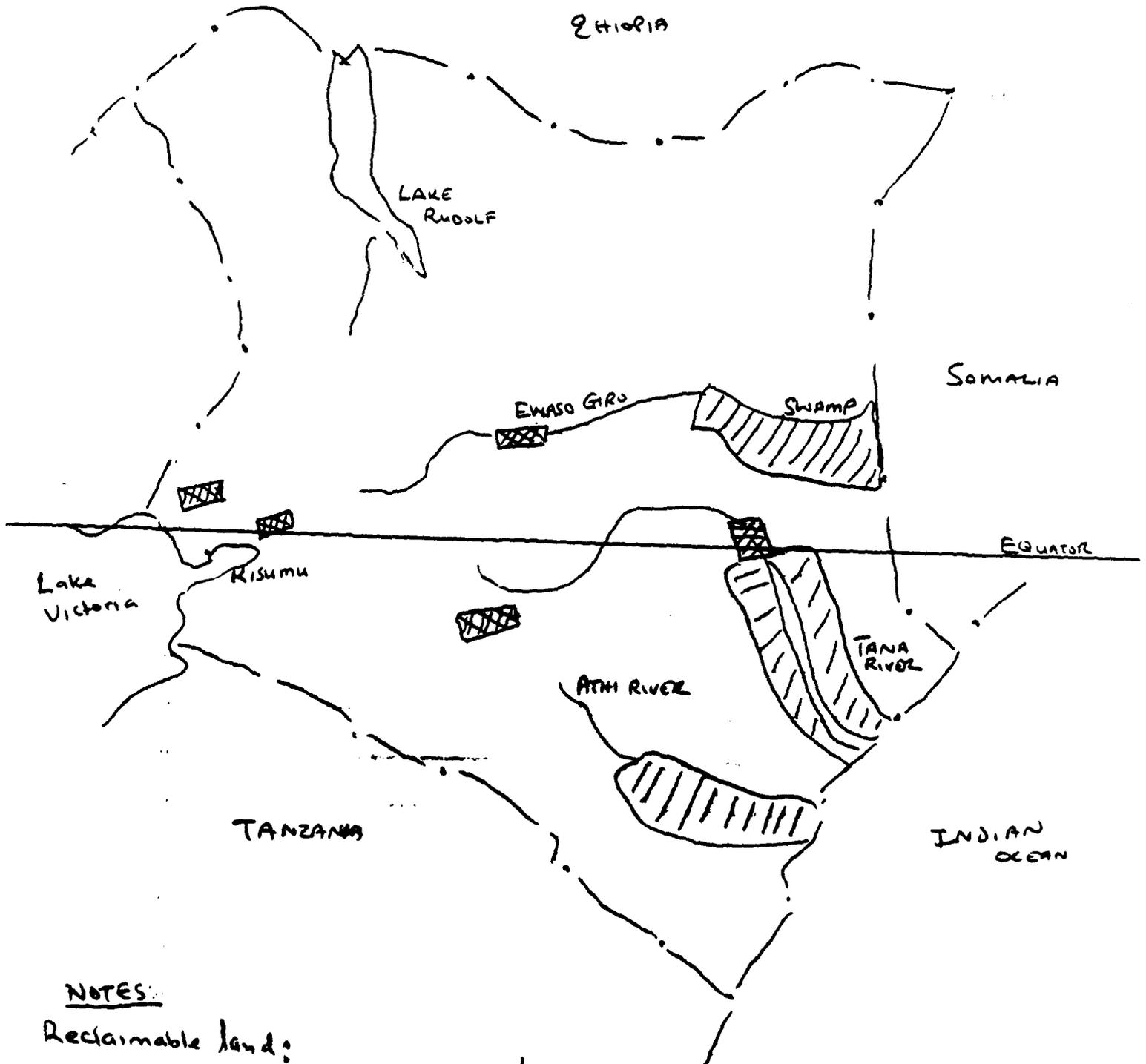
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KENYA - IRRIGATION MAP

ANNEX A TO
MSP
DATED FEB 1990



NOTES:

Reclaimable land:

1.  Under Irrigation
2.  Irrigation Potential

ANNEX B

MULTINATIONALS OPERATING IN AFRICA

Company Name & Where Based	African Operations
COFFEE:	
Brooke Bond Liebig, UK	Kenya
East Asiatic, Denmark	N/A
Nestle, Switzerland	Ivory Coast
COCOA PRODUCTS:	
Cadbury Schweppes, UK	Kenya, Ghana, Nigeria
Gill & Duffus, UK	Ghana
Interfood, Switzerland	Ivory Coast
Hershey Foods, USA	Ghana
Nestle, Switzerland	Ghana, Kenya, Zimbabwe
TEA:*	
Brooke Bond Liebig, UK	Kenya, Malawi, Tanzania
J. Finlay, UK	Kenya
Lonrho, UK	Malawi
Unilever, UK	Nigeria
*This may only indicate basic processing necessary to preserve the crop.	
OILS, FATS, MARGARINE, COOKING OILS:	
East Asiatic Co., Denmark	N/A
Lesieur, France	Senegal
Lonrho, UK	Nigeria
Unilever, UK/Nld	Cameroon, Ghana, Gabon, Kenya, Malawi, Nigeria, Zaire, Zimbabwe
FRUIT AND VEGETABLE PROCESSING:	
Beecham, UK	Nigeria
Brooke Bond Liebig, UK	Kenya, Nigeria, Zimbabwe
BSN-Gervais Danone, France	N/A
Castle & Cooke, USA	Senegal
CPC, USA	Kenya
Del Monte (now Reynolds), USA	Kenya, Liberia
Nestle, Switzerland	Ivory Coast, Kenya, Nigeria, Swaziland
SCOA, France	Ivory Coast, Senegal
Unilever, UK/Nld	Kenya, Zimbabwe
SUGAR:	
Tate & Lyle, UK	Nigeria, Zambia, Zimbabwe
Lonrho, UK**	Malawi, Mauritius, Swaziland
Booker McConnell, UK**	Malawi, Nigeria (16%)

**All manage further factories

Company Name & Where Based	African Operations
WHEAT FLOURS AND MIXES:	
Dalgety, UK	Zambia, Zimbabwe
Associated British Foods, UK	Between them, these companies have
Continental Grain, USA	subsidiaries in: Cameroon,
Grand Moulin de Parks, France	Lesotho, Liberia, Nigeria, Sierra
Seaboard Allied Milling, USA	Leone, Upper Volta, Zambia, Zaire,
Tiger Oats, South Africa	Zimbabwe
CORN MILLING:	
CPC, USA	Kenya
BREAKFAST CEREALS & BAKERY:	
Nestle (breakfast cereals), Switzerland	Ghana, Kenya, Zimbabwe
Associated British Foods (bakery), UK	Zimbabwe
ANIMAL FEEDS:	
(Generally a by-product of processing grains, sugar or other food products)	
CPC, USA	Kenya
Dalgety, UK	Zambia, Zimbabwe
MEAT INDUSTRIES (Packing and Canning):	
Brooke Bond Liebig/Lyons (Joint Venture)	Kenya, Nigeria, Sudan, Zambia, Zimbabwe
Brooke Bond Liebig, UK	
Imperial Foods (Poultry), UK	Kenya
Unilever, UK/Nld	Nigeria
Pfizer, USA (Poultry)	Nigeria
DAIRY INDUSTRY:	
Carnation, USA	Cameroon, Ivory Coast, Senegal
BSN-Gervais Danone, France	Nigeria
Co-op Condensfabrick Friesland, Nld	Nigeria
East Asiatic, Denmark	Nigeria
Foremost-McKesson, USA	Nigeria
Unigate, UK	Kenya, Nigeria
Unilever, UK/Nld	Ghana, Kenya, Malawi, Nigeria, Zaire, Zimbabwe
Nestle, Switzerland	Ghana, Ivory Coast, Kenya, Nigeria, Senegal, Swaziland, Zimbabwe

Company Name & Where Based	African Operations
FISHERIES:	
Ralston Purine, USA	Ghana, Ivory coast, Senegal, Sierra Leone
Heinz, USA	Congo, Ghana, Liberia, Senegal
Ward Foods, USA	Ivory Coast, Liberia, Nigeria
General Mills, USA	Liberia
Nippon Suisan Kaisha, Japan	Guinea, Liberia, Senegal
Taiyo Fisheries, Japan	Kenya, Ghana, Mauritius
Kellogg's, USA	Somalia
SOFT DRINKS CONCENTRATES:	
Beecham, UK	Nigeria
Cadbury Schweppes, UK	Zambia, Zimbabwe
Lonrho (Coca Cola bottling), UK	Zambia
Coca Cola, USA	Kenya
Nestle, Switzerland	Ghana
Norton Simon, USA	Kenya, Liberia, Zimbabwe
Pepsico, USA	Kenya, Sudan
CONFECTIONERY PRODUCTS:	
Cadbury Schweppes, UK	Kenya, Tanzania
Nestle, Switzerland	Ivory Coast
Standard Brands, USA	Zimbabwe
Wrigley, USA	Kenya
BEER:	
Allied Breweries, UK	Kenya, Uganda, Zimbabwe
Arthur Guinness, UK	Cameroon, Ghana, Kenya, Liberia, Nigeria, Sierra Leone, Uganda
Heineken, Nld	Burundi, Chad, Congo, Ghana, Nigeria, Rwanda, Sierra Leone, Zaire
Grand Metropolitan, UK	Kenya, Malawi, Tanzania, Zimbabwe
Lonrho, UK	Zambia
Unilever, UK/Nld	Chad, Ghana, Nigeria, Sierra Leone
United Breweries (Carlsberg) Denmark	Malawi
Whitbread, UK	Kenya, Zambia

Sources: Computerized material from the UN Centre for Transnational Corporations, various Annual Reports and company materials.

Table 1.4 Selected Food Processing Industries TNCs
With Subsidiaries in Africa²⁶

ANNEX C

	1979	1980	1981	1982	1983	1984	1985	1986	1987
Coffee	110.6	108.1	109.4	144.6	160.1	203.6	230.6	388.5	109.6
Tea	62.8	58.0	61.1	77.6	123.4	198.5	191.4	172.8	163.4
Others	70.1	74.0	89.5	94.0	126.5	123.3	124.4	130.6	150.1
Fruits & Vegetables	21.6	25.2	32.2	38.4	54.9	54.2	52.9	66.1	77.2
of which:									
Canned Pineapple	9.3	8.9	12.0	14.5	20.9	25.9	24.4	24.2	25.8
Fresh Horticultural Produce	9.7	11.4	12.6	13.6	17.5	17.7	23.5	10.2	14.6
Hides and Skins, undressed	13.8	9.5	9.2	7.9	6.3	7.1	10.0	12.6	16.9
Sisal	4.8	8.8	8.8	10.8	12.1	12.6	14.4	10.9	9.9
Pyrethrum Products	5.5	9.0	6.0	9.6	8.9	9.7	9.5	11.5	9.6
Meat Products	2.7	1.6	2.6	4.5	4.0	7.4	6.9	1.6	0.2
Sugar and Products	3.9	4.0	13.5	5.1	2.6	2.0	1.3	0.0	0.0
Cotton, Raw	0.9	2.6	1.6	0.0	0.9	0.1	1.9	0.5	0.0
Wool, Raw	0.7	1.0	1.0	1.2	0.9	0.1	1.9	0.5	0.0
Maize, Unmilled	5.3	0.0	0.1	0.3	12.2	5.9	1.2	14.7	19.5
Animal Feeds	1.1	0.3	0.4	0.7	2.1	1.3	0.6	1.1	0.6
Live Animals Chiefly for food ('000)	0.2	0.6	1.6	1.7	4.1	3.8	1.4	0.0	0.1
Total Agricultural Exports	243.5	240.2	260.0	316.2	410.0	516.4	546.4	691.9	508.0

Source: Economic Survey 1988, and Annual Trade Reports

Table 7.9 Value of Agricultural Exports²⁷
(Millions of Kenya pounds)

ANNEX D
NUTRITION AND FOOD SECURITY

Item	1965-70	1971-75	1976-80	1981-85
Milk	74.8	56.0	62.5	70.4
Beef	--	12.5	13.5	9.0
Mutton	--	2.5	3.6	4.0
Pork	--	0.5	0.3	0.2
Eggs	2.4	1.4	1.6	2.0
Poultry	--	--	1.9	2.2
Fish	3.1	2.5	2.8	3.4
Maize	95.1	97.4	100.1	120.0
Wheat	17.0	15.7	13.6	19.2
Rice	1.3	1.9	2.0	3.0
Pulses	23.6	22.6	17.2	20.4
Sugar	12.2	15.9	19.1	18.0
Fats/Oils	4.2	6.4	7.3	8.2
Potatoes	19.2	27.0	24.8	28.0
Cassava	59.8	53.3	49.9	54.3
Sorghum/Millet	8.0	6.7	5.6	7.5

Table 1.9 Per Capita Availability of Selected Food Items*
(Including Imports)

*Kilograms per year-period average.

1.60: As indicated in TABLE 1.9, the availability of major food items has grown considerably and has kept pace with population growth. Available data also show that acute malnutrition, which was prevalent at independence, is no longer a national problem.

ANNEX E TO
MSP
DATED FEB 90

KENYA
AGRICULTURAL ACTIVITY CENTERS

