

THE HAGGAR GROUP

A Diversified Group of Companies  
Cultivating Tea, Coffee and Tobacco  
in the Southern Sudan

Volume VIII

## Country Background

### The Extraordinary Potential

From the perspective of agribusiness, Sudan is unique in a number of ways. Its area is enormous--1 million sq. miles; its population is relatively small--23 million at latest count (1982). Of that population, 90% is rural, one of the highest percentages anywhere in the world. Most important, more than 200 million acres are suitable for cultivation with a wide variety of crops.

The agricultural potential of the Sudan was recognized as far back as three decades ago when the country was still administered by a UK-Egyptian consortium. Under British administration, a major agricultural project was launched in the Gezira region, located in the middle of the country, which today constitutes a major greenbelt.

### Past History

For the past decade, Sudan has been extolled as a potential breadbasket for the Middle East, and there has been much talk, and some limited action, about triangular ventures in agriculture combining western technology, Arab money and Sudanese production potential.

### Problems

Also within the past decade, a number of government projects were initiated with technical and financial support from Europe, none of which has been a startling success. The main reason for this appears to be that they were based on a plantation concept, relying for their output on agricultural workers rather than small farmers. In addition to having no long-term personal stake in the success of the enterprise, workers had to

leave their own villages and bush farms to work on these plantations. The core problem, however, is that these agricultural project workers are dependent on the government for their pay. In the Sudan, especially in recent years, this means that wages are late in arriving, sometimes as late as six months, with the result that agricultural workers tend to melt back into the bush.

One example of this type of venture is an EEC-financed tea project in Upper Talanga in Eastern Equatoria. By 1983, although 7 years old, the upper Talanga Tea Project still had no processing plant, in spite of their having spent US\$20 million on the project. Its tea crop at that stage was less than the tea produced by the nuclear estate of The Haggard Group, at nearby Iwatoka, on one-quarter of the acreage.

### Policies

Nevertheless, Sudan is out of the ordinary in that it has had a policy commitment to agricultural development for at least a decade, i.e., long before such a policy became popular among developing countries.

A concise summary of government policy vis-a-vis agriculture, and the implications of that policy, was drawn up a couple of years ago in a pre-feasibility study prepared by the UK-based agribusiness firm, Booker-McConnell. The study notes:

With its economy predominantly agricultural, and with great resources of land which are not fully used, Sudan gives priority to the development of agriculture as the sector with the greatest potential contribution to national economic development. Official policy is for continued self-sufficiency in basic foodstuffs (e.g., grain and livestock) and cotton, and for the increased export of surpluses; for achievement of self-sufficiency in other products with the aim of subsequently exporting surpluses (e.g., sugar); and for a degree of import substitution in other crops (e.g. tea and coffee) for which domestic production is unlikely, in the medium-term, to achieve

national self-sufficiency. Production increases are to be achieved by a combination of large-scale enterprises and smallholder development. In Southern Sudan the emphasis is primarily, though not exclusively, on small farm development.

In view of the limited domestic resources of capital, the Government encourages investment of foreign capital. The Encouragement of Investment Act of 1980 provides guarantees against nationalization and sequestration, and provides for exemption from business profits tax for five years and from payment of customs duties.

### Land Ownership

Finally, Sudan is extraordinary in its patterns of land ownership. For a farmer interested in producing a crop--any crop--getting land to do so is a simple process. A tribal chief in the South explains how it works:

"The farmer comes to me and tells me what land he wants and what he plans to grow there. I go with him to see whether his choice of land and product are reasonable. If they are, and if the farmer is a reliable man who knows what he's doing, I will draw up a document that allocates the land to him. A copy of this document goes to the government where it is registered officially.

"The farmer does not pay for the land. The land belongs to the tribe, and the farmer receives it on a long-term renewable lease which stays in his family for as long as the land is used for productive purposes. We have enough land to do this for a very long time."

The land allocation process is not quite as arbitrary as it sounds. While tribal chieftaincies are hereditary, public choices are made among members of the chief's family. In addition, a tribal council advises the chief and has a deciding voice in the allocation of tribal lands.

### The Question of Collateral

There is, however, a problematic aspect to the system. While producing farmers can get long-term renewable leases to the land they work, they do not get legal ownership. As a result, financial

institutions do not accept land as collateral. Haggard Ltd., which extends financing at subsidized interest rates to some 110 small coffee farmers and 2,400 tobacco farmers, sums up the reality from a financial point of view:

"The only collateral we have is the farmer and his performance."

### The South and North/South Confrontation

There is a marked difference in Sudan between the North and the South, ranging from the cultural to the structural, the religious to the economic. The differences exploded into seventeen years of civil war immediately following independence. While a political accommodation was hammered out in 1972, few of the differences have been resolved and tensions continue.

In brief, the North is Moslem and Arab, Arab defined in the Sudan as anyone, regardless of ethnic background, who speaks Arabic, identifies with Arab culture and adheres to the Moslem faith. Under this definition, between two-thirds and three-quarters of the Sudanese are Arabs.

Economically, the North is more highly developed, and has nearly all of the country's industry and a considerably better infrastructure, both physical and social. It is also the core of political power. The nation's capital, Khartoum, where the President lives, Parliament meets, and the country's major educational and technical institutions are located, is in the North.

The South is African. The population is black and organized along tribal lines. The people's religions are either Christian or animist, and cultural identification is tribal, southern, and African.

Economically, the South is underdeveloped within the Sudanese context, and the central government's policy vis-a-vis the South has historically been one of neglect. Whether or not this neglect is benign is a matter of considerable debate, with sharp and potentially explosive overtones. There are grounds for argument that any project that brings economic development to the South, and improves the living standards of people in the southern region, makes an urgently needed contribution to the socio-political stability of the Sudan.

## II

### Company Background

#### History

The Haggar Group consists of eleven companies with a combined annual turnover of approximately S£100 million. Corporate headquarters had to be transferred from Juba to Khartoum in 1963 as the Civil War raged in Southern Sudan. Regional Headquarters have since been re-established in Juba. The Group maintains offices in Port Sudan, Kosti and El Obeid within the Sudan, and has representative arrangements in Nairobi, Mombasa and London.

The corporate members of the conglomerate are:

- Sudan Tea & Coffee Plantation Co. Ltd.
- Haggar Cigarette & Tobacco Factory Ltd.
- Blue Nile Plastics Co. Ltd.
- D.K. Aviation International Ltd.
- National Air Express (Sudan) Ltd.
- Haggar Trading Co. Ltd.
- Haggar Engineering & Transport Co. Ltd.

Haggar River Transport Co. Ltd.  
Afrograph Company Ltd.  
Afrograph Trading Co. Ltd.  
Khartoum Aviation Services Co. Ltd.

While some of these companies were created as recently as the 1980s, (e.g. Khartoum Aviation Services and Afrograph, an advertising company) the core enterprise of Haggar Ltd. dates back to the first decade of the 20th century.

The two companies directly involved in agribusiness are Sudan Tea and Coffee Plantation Co. Ltd. (STCP) and the Haggar Cigarette & Tobacco Factory Ltd., which is engaged in the production, processing and marketing of tobacco, and in the manufacture of cigarettes for the domestic market.

In terms of corporate structure, STCP started as a proprietorship in the 1930s and was converted into a limited private company in the late 1970s--capital S£1 million. The intention was to make shares available to: (a) participation of any finance company through an equity/loan arrangement; (b) an international tea/coffee corporation; (c) local farmers' associations or cooperatives; (d) individual local farmers. For the long term, given appropriate growth, STCP is considering going public.

George Haggar introduced Virginia Tobacco to the Sudan in 1948, and manufactured Sudan's first cigarette in 1949 under Haggar Cigarette & Tobacco Factory Limited (HCTF). The international companies who, at that time, only imported cigarettes to Sudan, did not take an interest until later. The British American Tobacco Company (BAT) established a factory in Northern Sudan (Wad Medani) in 1957 and Rothmans of Pall Mall (RPM) established a tobacco growing company, The National Tobacco Company

(NTC), in 1965. NTC established the National Cigarette Company (NCC) in which it owned 40% of the equity, with the balance offered to the public. NCC were importers of Rothmans cigarette brands. In 1968, HCTF bought NTC, and NCC bought BAT's Sudan subsidiary.

Since 1968, interrupted only from June 1970 to January 1973 when the Sudan government's policy of confiscation was in force, HCTF and the National Cigarette Company (NCC) have jointed owned the National Tobacco Company (NTC). NTC grows tobacco, under the chairmanship of George Haggard, and sells its leaf to the three cigarette factories of the Sudan, two owned by HCTF and one by NCC.

The cigarette company, also originally owned 100% by the Haggard family, has already spun off 16% of its equity to its employees, and one member of the staff union and one member of the labor union sit on the company's board of directors. Employees of the cigarette company are encouraged to invest their dividends in other enterprises of The Haggard Group.

The constructive relationship of the employees to the company is illustrated by the fact that there have been no strikes in the company's history and, in a recent demonstration of community spirit and company loyalty, employees volunteered to work two shifts without pay on a Friday, the legal weekly holiday, during which workers are paid double time. Employee turn-out for this voluntary effort was 100%, comprising a total of 700 people. The company, in turn, contributed the wages it would have paid to a national charity. Also, in September of the same year (1983), the company paid each employee a bonus of five months salary, consisting of one month as a contribution to the celebration of the religious festival of Ramadan, one month as a personal gift, two months as a bonus and one extra month for productivity.

Employees own a substantial equity share in all companies associated with The Haggar Group.

#### The Haggar Group Agribusiness Enterprises

The Haggar Group's agribusiness enterprises, which employed a total of 5,000 people in the 1950s, fell victim to the civil war and subsequent political action. In 1970, the Sudanese Government expropriated STCP, and the army occupied the nuclear estate at Iwatoka. A year after the Addis Ababa agreement ended the civil war in 1972, STCP was denationalized and returned to private ownership.

In 1973, returning to the plantations for the first time after an absence of 10 years, George Haggar wanted to divide the land under tea and coffee among the people of the area, enabling them to form the revived nucleus of a new outgrower program. The intention was for STCP to take on management, procurement of fertilizers and chemicals and, above, all, the capital intensive area of factory processing. However, the ravages of Civil War had taken their toll, and people were more concerned about who would pay them their next month's wages and bring foodstuffs to the canteens than they were with owning and cultivating tea or coffee for themselves. STCP immediately tackled the production aspect of the tea and coffee areas and embarked on an outgrower scheme. Some 110 farmers were participating in the scheme by 1983, the rate of expansion being proportionate to available in-house financial resources.

Since deconfiscation, the cigarette company has established a network of 2,343 farmers in the South who grow tobacco in addition to their food crops, while STCP has organized a network of 102 farmers who have added coffee, with its much longer pay-out period, as a cash crop to supplement

their food production. The land holdings these farmers work are called "bush plantations," but are in fact family farms, averaging about 5 feddans in size (1 feddan = approx. 1 acre).

By 1982, STCP had also successfully demonstrated on its nuclear estate the potential of tea cultivation. STCP had been growing tea for nearly 40 years, apart from the Civil War-interrupted decade of 1963-73. Additional processing machinery had been installed, increasing capacity and improving quality. The time had come to expand tea production by again involving family farmers. The company's plans are to involve family farmers in tea production along the organizational lines already developed for coffee production, i.e. with the company providing technology, inputs, supervision, and financing for farmers who will add one or two feddans of tea to their present holdings of food crops.

The commercial potential of STCP activities is sizable. At present, domestic tea production in the Sudan ranges between 70 and 100 tons, while domestic consumption totals 19,000 tons. Domestic production of coffee is about 1,000 tons per annum, of which STCP produces 100 tons. Domestic consumption is reported at 16,000 tons. Supplying this wide open domestic market from domestic sources would save Sudan the considerable amount of hard currency now expended on coffee and tea imports.

In addition, the company's expansion plans include processing and packaging of tea and coffee, and marketing both products directly to supermarkets and other retailers. This plan is facilitated by the fact that Haggar Ltd. already has a nation-wide distribution network that sells the cigarettes produced by the conglomerate's cigarette company.

Provided adequate and appropriate financing can be secured, expansion could proceed at the rate of 300-400 acres a year for the first three years, with a possibility of adding 1,000 acres per year thereafter. With the average family farmer planting 1-2 acres of tea, this would constitute a profitable undertaking for STCP, and an appreciable important substitution project for the Sudan. It would bring some 3,000 family farmers into the market economy within five years.

### III

#### Motivation

The outreach program of the agribusiness activities of The Haggard Group is traditional in most ways. It includes a carefully supervised transfer of appropriate technology employing experts and trained extension agents; the supply at cost of relevant inputs; the financing of these inputs and, in the case of tobacco, the financing of such special farmer requirements as tools and barn construction for flue-curing of tobacco. It comprises as well some social outreach activities (contributions to dispensaries and the operation of non-profit stores and canteens, village schools, the extension of special loans for personal requirements). These activities are circumscribed by government policies and attitudes and also by the company's resources.

There is, however, one unique ingredient to the outreach program of STCP: The company finances coffee growers--and intends to finance tea growers--not only for a comprehensive package of production inputs, but also advances to the farmers cash for their own labor and the labor of their families.

The motivation for this has a practical as well as a social aspect. In the Sudan, and particularly in the southern region, the constraint on agricultural productivity is not land (See Section I, page 2) but labor.

Typically, small farmers, cultivating 1-5 acres of "bush plantation," grow a variety of food crops, in the main for their own use, with just a little left over for trading against such basic necessities as salt, oil, fish and minimal clothing. The only augmentation to this rock bottom subsistence farming is the illegal but widespread distillation of alcohol brewed from corn and bananas, which is made and marketed by the women of the family.

All in all, these activities employ members of the extended family at a level that clearly constitutes underemployment by any economic yardstick, but is both traditional and acceptable to subsistence farmers in the bush. Offering these farmers an opportunity to cultivate a cash crop, in addition to their basic food crops, means that extra labor is required from all members of the family. Coffee cultivation requires three to four years of such extra effort before the farmer gets any cash return for his labor. For bush farmers four years is a long economic horizon, to which they are not attuned mentally and emotionally, and which they are in no position to finance on their own. The extra labor is, therefore, financed by the company on a "piecework" basis, i.e., geared to the number of coffee trees planted, and the amount of land allocated to the production of either coffee or tea. The company encourages farmers to add the cash crop to their food crops, with the average ratio of 1 feddan of cash crop to 4 feddans of food crops, but not to replace the food crops with cash crops.

The social aspect of this ingredient of the outreach program focuses on a situation where traditional subsistence practices have created an apathy which is intensified by the widespread availability of rotgut booze, and the fact that local markets offer very little to buy. A cash income stimulates both the desire and the possibility for these bush farmers to spend their money on consumer items other than drink, beginning with the opportunity to buy transportation to market centers that offer such items as clothing, bicycles, transistor radios, torches, salt, dried fish and canned goods, entertainment in the form of movies and sports events, and, perhaps most significant from a developmental viewpoint, higher and better education.

This financing of the farm family's labor does not apply to tobacco planters, who can produce a cash crop in the first season they plant tobacco. Tobacco takes 5-6 months from land preparation to sale of leaf. NTC therefore does not finance growers' labor, but does provide hand tools, implements, chemicals, fertilizers and funds for the construction of tobacco curing barns. Also, most small farmers who grow tobacco do so on a 3-year rotation basis, i.e., they grow tobacco one year, using between half an acre to two acres of their land, on which they alternate other crops for the two subsequent years, to put back into the soil the nutrients that tobacco depletes. Crops for this rotation procedure include groundnuts, millet, maize, sesame, casava, sorghum and sweet potatoes: all food crops, and all marketable.

## IV

### Strategy

Corporate strategy, technical as well as managerial, differs for tobacco on the one hand, and coffee and tea on the other.

#### Tobacco

The growing of tobacco requires substantially more financing over a very short growing season. Total financing for the company's tobacco farmers in the South amounted to roughly S£100,000 (S£1.23:\$1) in the 1983/84 season. The average advance to a farmer planting tobacco in his first season amounts to approximately S£260. This breaks down into S£200 for the construction of curing barns and tools (with repayment expected in 2-3 years), and S£60 for crop materials (with repayment expected at the end of the season). In tobacco, the company extends all its financing to the farmers interest-free.

The major NTC corporate expenses in tobacco are: (a) management and field extension officers; (b) tobacco storage facilities; (c) the holding of tobacco after purchase from farmers for a minimum 12-month period, while the leaf matures and (d) transport from South Sudan to the factories in the North. Total expenses amount to approximately S£1.2 million per year.

Payroll cost for the extension staff in the 1984/84 season amounted to S£250,000. The Haggard Group tobacco-growing activities in the South, for the 1983/84 season, encompassed 1,793 feddans, cultivated by 2,434 farmers. This called for a staff of 60 extension agents and experts at various levels. Moving up the managerial ladder, this staff included 40 crop supervisors, with a primary and/or secondary education; 8 area supervisors, with a secondary education and specialized company-supplied

training; 4 tobacco officers of whom one is a university graduate; 6 senior tobacco officers all with agricultural college backgrounds; an assistant leaf manager with a Bachelor of Science degree from the University of Khartoum and a Masters Degree from the University of California; and--the sole expatriate in the managerial roster--a leaf manager from the UK. The company used to operate a training center in the North but, after building a nucleus of supervisors, now does most of its training on the job.

Crop supervisors are recruited locally--they are often the sons of farmers who grow tobacco--and live in one of the villages which they supervise. Both the crop supervisors and the area supervisors are usually from the same tribe as the farmers with whom they work, and speak the language of the tribe both literally and figuratively.

The managerial ladder is characterized by the type of transportation the extension agents command, as well as by their salary and authority. Crop supervisors move around on bicycles; area supervisors have motorbikes; tobacco officers and senior tobacco officers have pick-up trucks; and leaf managers have Suzuki or Land Rover four-wheel drive vehicles.

Crop supervisors are hired on a three-month probation basis, and there is considerable shake-out during these three months. Thereafter, turnover is minimal. The crop inspectors who turn out to be right for the job think of the position as a career path, as does the company. Except for the top job, which is held by an expatriate with decades of experience in tobacco growing, all promotion is from the ranks.

## Coffee

For coffee and tea, direct financing costs are considerably higher than for tobacco, while the expenditure for extension agents is lower.

Coffee and tea farmers sign individual ten-year contracts with the company which call for the following:

The farmers undertake:

- a) To furnish evidence of clear and unencumbered ownership of the land, or evidence of legal authorization to act fully on behalf of the landlord.
- b) To provide evidence of the exact location of the land and its quantity, in feddans.
- c) To show evidence of sufficient work force to farm the land.
- d) To keep whatever books and accounts may be required of them and to make these records available for inspection by officers of the company.
- e) To deal with the company on an exclusive basis.

The company undertakes:

- a) To finance the farmer specifically for the payment of salaries and wages of the work force.
- b) To supply the farmers with suitable seedlings at cost, plus cost for transportation of these seedlings.
- c) To supply the farmers with tools and implements needed to cultivate the crop.
- d) To supply the farmer with fertilizers and insecticides at cost plus transportation.
- e) To clean, process, pack and transport the crop at cost.
- f) To market the crop.
- g) To maintain correct books and records of its transactions with the farmers.
- h) To provide the farmers with a fair financial return.

Unlike tobacco, which is used entirely by the cigarette factories of the Haggar Group of companies, coffee and tea are sold by the company on the open market. The farmers get their proportionate share of the market price, minus a 20% charge the company levels for transportation, marketing and other overhead costs.

In the case of coffee and tea, the company supplies all inputs at cost and, as noted above, finances the farmer's labor. It does charge interest at a subsidized rate. Commercial borrowing rates in Sudan in 1983 were 21%. The company offered its farmers a financing cost subsidy of almost 100%, i.e. its interest charges to the farmer ranged from 10.75-12%.

At end-1983, 102 family farms were associated with the company, mainly growing coffee, and advances to these farmers ranged from S£2,000 to S£10,000.

As a rule of thumb, financing has to be extended to coffee farmers for between 5-10 years. Illustratively, of 34 farmers whose balance sheets were examined in detail by the researcher, 3 had paid off all their debts and were in a credit position with the company after 5 years.

#### Tea

Tea, which has been successfully grown on a commercial scale by STCP since the mid-1940s ("Haggar" tea has always commanded a premium price on the market over low-quality imported teas), is now ready for expansion onto family farms, following the coffee-growing model. Expansion into tea growing will be limited by a specific radius from the tea processing plant. Initially, areas of 2-3 acres will be recommended per family, and the expansion rate will be determined after early progress is assessed.

Unlike the once-a-year picking season for coffee, tea is plucked throughout the year, except for a 2-3 week period at the height of the dry season. Thus, from its third year, when a limited amount of plucking can be done, a tea bush is able to provide continual revenue. The intention is to process the tea in company facilities, and package and retail it for the domestic market. This would require a price-setting system, which the company believes should be a tripartite mechanism involving the farmers, the company and the government. This mechanism should set a price each year, on a cost-plus basis.

Expansion at this rate would require the addition of extension agents with tea expertise. While a senior tea expert is in place, additional staff would be required, consisting of graduates from agricultural faculties who would need specialized company training for an additional six months. Also, the company's tea processing facilities would have to be substantially enlarged, and packaging and distributing facilities would have to be organized.

Farmers in the area are inclined toward diversification into tea cultivation because they have suffered losses in coffee from theft and drought. One farmer visited by the researcher, who started with six feddans of land in 1974, had expanded his holdings to 29 feddans in 1983, on which he grew a sizable cash crop of coffee, in addition to such food crops as corn, casava, groundnuts, millet and vegetables, including tomatoes, cabbage and carrots, largely for family consumption. The farmer explained that since his daughter had recently married the local chief, the chief's father had given him 5 additional feddans of land on

which he was prepared to grow tea. His reasoning: In his association with the company since 1974, he had done well by branching out into the cash crop of coffee--as had his two sons--and he felt that tea would prove to be a similarly profitable enterprise. As an additional incentive for moving into tea, he cited the fact that green coffee can be stolen, and indeed is stolen, in this region of Sudan, because many people roast their own coffee blending it with spices of their choice. Tea, on the other hand, cannot be stolen because green tea leaves are worth nothing. They have to be processed professionally before they can be sold.

The expansion into tea would have to take place in circles growing concentrically from the tea processing factory, since tea leaves remain fresh only about 8 hours after harvesting. Given the limited infrastructure and transportation facilities in the vicinity, the effective range of recruiting farmers for tea growing would be a distance of 10 miles, with an outer limit of 20 miles, under current conditions.

#### V

#### Pay-Off

##### For the Farmer

Pay-off for the farmers from the cash crops they grow in association with the agribusiness enterprises of The Haggard Group has a very clear bottom line. The harvest from an acre of groundnuts is worth approximately S£250 a year. The harvest from an acre of corn is worth approximately S£500, although soil and climate within the southern region make it possible to grow two crops of corn (S£1,000 per year). Coffee retails in Khartoum at approximately S£10,000 per ton. The

wholesale/bulk price per ton varies from S£5,000-S£6,500 per ton in Khartoum. The farmer 1,500 miles away from Khartoum, is paid approximately S£3,500 per ton, and an acre of coffee should produce an average 300 kilograms. An acre of tobacco can produce a cash crop ranging from S£500-750, requiring only about 4 months of attention.

Viewed from a developmental point of view, the effect of the cash crops was clearly visible. In the tobacco growing area, bush planters who had added tobacco to their output were sporting new roofs on their huts, radios and hand calculators indoors and bicycles in the yards. They also reported extended schooling, in some cases to the university level, for their children. HCTF and NCC purchase and stock tobacco leaf to assist NTC's cash flow for development.

In the coffee growing area, one farmer showed off a new house with a zinc roof and hardboard sheets for ceilings; a storage facility for his foodcrops; four sons and a daughter who had between six and eight years of schooling each and a radio/cassette player on which he could tune in not only the regional capital of Juba and the neighboring national capitals of Kampala in Uganda and Kinshasa in Zaire, but also the BBC and the Voice of America, along with a stack of cassettes.

#### For the Company

For the company, the payback for tobacco is immediate because all the tobacco growth is used in the blended cigarettes the company manufactures and sells itself.

The pay-off picture is different for coffee and tea. The payback period for these crops is between 4 and 5 years and, to make money, the company requires high sales volume and/or its own processing facilities

for added value. The highest pay-off is obtained when the operation is extended to packaging and retailing, which the company is planning to do both for coffee and for tea.

The existence within The Haggar Group of land, sea and air transportation companies provides an element of self-sufficiency in the Sudan, where public transport is drastically insufficient. Farmers are able to avail themselves of these transport facilities, avoiding the need to purchase or hire unreliable transportation from outside.

#### For Suppliers

For suppliers of inputs, the agribusiness activities of the company obviously offer new markets in a part of the world that has not, in the past, been a user of sophisticated agribusiness materials.

#### For Consumers

Once the horizontal integration is accomplished, consumers in the Sudan will get a quality product by international standards, at a cost no higher than imports of comparable quality, and not subject to the volatile availability of foreign exchange.

The issue of what would happen with or without the company's package of outreach services has little practical meaning in this context. Regarding tobacco, there would simply be no production of tobacco without the consistent and carefully organized extension services provided by the company, which cover the gamut of know-how from seedbed to curing. As for coffee and tea, without the technical assistance, the supervision, and, most important for "bush planters" in this region of the Sudan, the financing, these small farmers would have neither the incentive nor the facility to move beyond the rock bottom subsistence farming to which they have been accustomed for generations.

## VI

### Costs

The direct costs to the company for the production of tobacco are approximately S£260 per feddan per year for a new farmer and approximately S£100 per feddan per year for an established farmer. To this must be added the annual cost of the extension staff, which in 1983 totaled approximately S£250,000 for 2,343 farmers, cultivating 1,793 feddans, with an overall yield of 534,249 kilos of tobacco.

For coffee, the cost of the company's package of services is S£900-1,000 per feddan per year, while for tea the cost to the company runs to approximately S£1,200 per feddan per year for the 3 years it takes to get the first crop. To this must be added the annual costs of S£1.2 million to cover management and supervision, and the cost of transportation, including fuel. To meet these costs, NTC borrows approximately S£1 million, at an annual cost of some S£200,000.

## VII

### Changes

On the production side, the major technical change required for expansion into tea--in addition to the managerial, processing and marketing changes outlined in Section IV--would be the introduction of mobile teams of knapsack sprayers to administer herbicides at the appropriate time.

## VIII

### Policy Implications

#### For the Company

For the company, the policy implications are expansion into tea production as quickly as is feasible as well as expansion into

processing, packaging and marketing both of tea and of coffee to the retail level. Achieving volume production, and integrating that production into a full chain of processing and marketing, would make it possible for the company to increase profit margins, as well as to increase payment to the farmers.

#### For the Host Country

The major policy implication for the host country is clearly the upgrading, as soon as feasible, of the desperately inadequate physical infrastructure of the southern region. In addition, government encouragement of smallholder production in the private sector is desirable not only as policy, but (with administrative follow-through) as a way to convert policy pronouncements into active and concrete measures.

#### For the Donor Country

Three positive action points seem plausible:

1) To find, or create, mechanisms that will channel funds as expeditiously and inexpensively as possible to "bush planters" for the production of cash crops to supplement their food crops and raise their living standard.

2) To devise ways in which a portion of counterpart funds (which will amount to the equivalent of \$100 million in 1984) can be channeled to the private sector.

3) To use whatever policy-making leverage the US government has to persuade the Government of Sudan that encouraging private investment in agribusiness would be an effective method to make use of Sudan's comparative advantage of arable land to raise the living standards of its people, and to contribute meaningfully to adjusting the presently negative balance of payments between Sudan and other countries.