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Survey of the Ethiopian Textile Industry in Relation to a Title III Program

Prepared for USAID/Ethiopia

by

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Capacity of Industrial Plants

The National Textile Corporation (NTC) is a state enterprise under the direction of the Ministry of Industry. It was established on July 21, 1975, by regulation 7/1975, issued by the former Ministry of Resources Development pursuant to authority that was vested in it by article 10 of Public Enterprises Proclamation 20/1975. The purpose was to organize, manage, and operate government-owned textile factories to manufacture yarns, thread, and all kinds of cloth from cotton and filaments.

Ethiopia has eight integrated textile factories with spinning, weaving, finishing, and yarn manufacturing machinery, and Eritrea has two. All factories and mills sell directly to the Ethiopian Domestic and Distribution Corporation (EDDC) at a fixed rate. The factories employ about 31,461 people (Table 1).

Table 1. Factories Under NTC, June 1991

Factory	Yr of Establishment	No. of Employees
	Ethiopia	
Akaki Textile	1957	6,030
Bahr Dar Textile	1961	2,909
Dire Dawa Textile	1942	6,344
Ediget Factory	1953	956
Awassa Textile[a]	1989	1,160
Arba Minch Textile[a]	1991	1,500
Kombolcha Textile	1986	2,225
Adei Ababa Factory	1961	4,087
Subtotal		25,211
	Eritrea	
Asmara Textile	1954	3,500
Eritrea Textile	1943	2,000
Merab Textile[b]	1965	750
Subtotal		6,250
Total		31,461

[a]Not under NTC.
[b]Not in use—lack of cotton.

Equipment

The principal machinery in the spinning, weaving, and knitwear plants is summarized in Table 2. The plants also have various kinds of machinery and equipment to finish, dye, and print cloth as well as support production.

Table 2. Principal Machinery in Plants
(No.)

Spindles	301,232
Looms	3,610
Sewing Machines	1,299
Knitting Machines	186

The performance and capacity of the factories' equipment were evaluated on three major criteria—overall condition, usefulness, and technology (Table 3). The evaluation was based on access to the sites, NTC personnel, and plant managers. Ratings were relative to standards of acceptability in Asia and the United States. African factories and machinery will have less stringent and rigid requirements than will factories and machinery in industrialized nations.

Table 3. Evaluation of Equipment

Factory	Overall Condition	Usefulness	Technology
Akaki	Passing	Average	Low
Bahr Dar	Passing	Passing	Low
Dire Dawa	Passing	Passing	Low
Ediget	Low	Low	Low
Awassa	Average	Average	Average
Arba Minch	Average	Average	Passing
Kombolcha	Passing	Passing	Passing
Adei Ababa	Passing	Passing	Passing
Asmara	Passing	Average	Low
Eritrea	Passing	Passing	Low
Merab[a]	Low	Low	Low

[a] Not in use—lack of cotton.

There is room for improvement of factories' technological standards throughout Ethiopia's textile industry. In all but two existing factories (Awassa and Arba Minch), old and obsolete machinery can be replaced by modern high-speed machinery. The machinery is outdated in most cases. General cost estimates of repairs and upgrading are not possible at this time, because of the technological sophistication of current machines and the their rapidly changing designs and prices. The wide ranges of the machines' countries of origin and their purchase dates (Table 4) indicate the complexity of the problems.

Table 4. Countries of Origin and Purchase Dates of Machines

Machine	Country of Origin	Yr Purchased
	Ethiopia	
Gao	China	1991
YFJ	China	1991
Goiier	Germany	1962
Schlafhorft	Germany	1962
Crosrol	Great Britain	1970
Morzoii	Italy	1971
Galileo	Italy	1987
Rotal	Italy	1987
Picanol	Italy	1988
Rampaiivmin	Italy	1988
Howa	Japan	1962
Sakamoto	Japan	1965
Hiraiwa	Japan	1989
Toyota	Japan	1989
Stork-Boxmeer	The Netherlands	1960
Leharer	Switzerland	1959
Lescona	United States	1960
Morrison	United States	1971
	Eritrea	
Unerware	Germany	1968
Alca	Italy	1970
Mezzera	Italy	1977
Morzoli	Italy	1978
Singer	United States	1950

Personnel

Ethiopia's growth will depend greatly on successful personnel. However, the level of qualified managers is very low. Although no statistics on unemployment or underemployment are compiled, companies operating in Ethiopia experience no difficulty in obtaining unskilled labor. For example, one manufacturer noted that there are 1,000 candidates for each entry-level job available. In contrast, the availability of technicians and management-level personnel is seen as extremely limited.

In light of the Transitional Government of Ethiopia (TGE) plan for privatization, there is a positive, useful, and specific role that a training program can play. It would be geared to assist all levels of personnel. To be successful, Ethiopian textile industry personnel will have to be nurtured and assisted because of their relative inexperience in financial planning and with capital markets and their lack of technical, project design, and marketing skills. Ethiopian plant managers often lack qualitative feedback about their cotton production. They are often unable to properly select, grade, and market their cotton processes. Therefore, important technical and marketing skills must be addressed in any training programs that are implemented.

Production Output

Ethiopia's textile industrial sector is weak. The majority of textile firms are uncompetitive and badly in need of repairs and replacement. The factories surveyed by NTC operated at only 40 percent of installed capacity in Ethiopia and 30 percent in Eritrea, on average, in 1991–92. Production, but not employment, has been reduced by 60 percent.

The textile manufacturers in Ethiopia noted that the quality of their products is lower than that of goods produced in Egypt, Morocco, and Tunisia. Nonetheless, the speed of production lags behind more industrialized nations. The fact that most Ethiopians work 45 rather than 40 hours per week increases productivity levels to some degree.[1]

Six firms are integrated textile factories, with spinning, weaving, and finishing capabilities. The major products of these firms are cotton fabrics, blanket yarn, bedsheets, and knitwear. Their combined major production capacities are listed in Table 5. The cotton factories have poor quality and machinery. They are counterproductive in providing a well-balanced textile sector.

The textile industry is a state monopoly and the largest employer in the country, with some 32,000 employees. The industrial sector is unproductive, inefficient, and uncompetitive. Some of the major factors that contribute to poor performance and underproduction are political instability, recession, drought, obsolescence of machinery, equipment in need of repair, war, shortage of foreign exchange, and scarcity of cotton, chemicals, and dyestuff. Table 5 summarizes the annual production capacity of all factories.

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[1]NTC (Addis Ababa).

Table 5. Annual Production Capacities of All Factories

Product	Capacity
Cotton Fabrics	126 million m^2
Sacks	11.5 million kg
Knitwear	6 million pieces
Garments	3.5 million pieces
Hessian Cloth	1.3 million kg
Twine	0.7 million kg
Thread	0.4 million kg
Blankets	3 million pieces

Source: Data compiled by NTC.

Marketing Present Production

Export Prospects

The availability of financing for export-oriented activities can be an important catalyst for or constraint on export production. The lack of credit is an obstacle facing Ethiopia's textile industry. A further apparent impediment is a lack of venture capital. The level of domestic savings in Ethiopia and Eritrea is very low.

Ethiopia's exports to other countries decreased steadily in terms of both value and volume from 1987 and 1991, reaching their lowest level, EB22 million (US$10.6 million), in 1989. Furthermore, many of the basic cotton products that Ethiopia currently produces are also produced by a number of other countries with high quality and at more favorable prices owing to the sophistication of their factories.

There are a number of factors that weigh against an Ethiopian cotton textile export industry in the next 2 to 3 years. These factors do not mean that regional export growth is not possible in the next 4 to 6 years and cannot be encourage; rather, they mean that expectations should be extremely modest regarding significant export growth.

Cost of Production

The ability to produce or obtain consistent and adequate raw cotton to meet production needs is a problem. Table 6 shows the estimated requirements, supplies needed, and shortfalls for the domestic market. The textile factories' underproduction is due to a shortage of cotton coupled with a scarcity of parts and chemicals and the obsolescence of equipment caused by a lack of foreign currency and unrealistic foreign exchange rates.

The factories produce 126 million m^2 of fabric (cotton fabrics, yarn, blankets, terry towels, sheeting, hessian cloth, carpets, and shirting) for 50 million Ethiopians. This converts to 2.5 m^2 per person per year. This domestic market is in short supply of cotton products. All these products are sold to the parastatal EDDC at fixed prices. The Akaki textile factory in Addis

Table 6. Anticipated Raw Cotton Requirements for the Domestic Market

Fiscal Yr	Requirement	Estimated Supply	Shortfall	Unmet Requirement (%)
1991–92	35,000	12,000	23,000	65.7
1992–93	37,500	10,000	27,500	73.3
1993–94	37,500	21,600	15,900	42.4
1994–95	37,500	28,200	9,300	24.8
Avg	36,875	17,950	18,925	51.3

Ababa is considered above average (rated third best). Its price for inferior canvas cloth is EB4.50 (US$2.12 at an exchange rate of EB2.07 per U.S. dollar) per m^2. In the international market, the average price is US$1.00/$m^2$. This wide gap is created by an unrealistic fixed exchange rate. Under the current system, the prices on all products in the manufactured sector are inflated. The unofficial exchange rate is between EB7 and EB8 per U.S. dollar. This is more in line with the actual prices of products.

Production at the factories is mostly labor-intensive, inefficient, and low quality. The factories surveyed are bankrupt and still maintaining full employment. Output and value added per employee are low. There is far too much inefficiency in the system.

Prices should be fixed by a free market rather than by the current government regulations. A free market should be created to take the place of government regulations to fix prices. Price-fixing, wages, exchange rate controls, and the lack of productivity incentives account for the uncompetitive prices in today's Ethiopian textile industry. The manager at the Awassa factory, Mekonnen Legesse, informed me that he has had the same salary, EB900/month, for years. There is no incentive for overproducing.

Domestic Distribution

The present channels of distribution are NTC and EDDC, which are government regulated. Deparastatalization must occur under the Title III program before a free market can be created. The only great source of private activity being generated at present is the 50,000 loom weavers, who are suffering because of a lack of cotton for yarn. These entrepreneurs and their families are experiencing hardship. Each weaver has four or five dependents who work on the loom, extending the hardship to between 200,000 and 250,000 people.

EDDC currently regulates all distribution with its network of 90 outlets. This parastatal is not adequate for the establishment of an appropriate market system. Supply-and-demand systems cannot be channeled toward a free market until privatization occurs. Eritrea has dissolved EDDC.

The appropriate recommendation is to establish a private exchange. Trading personnel will include principally cotton merchants, manufacturers, and entrepreneurs who buy and sell. Exchanges supply a continuous and ready market where changes in supply and demand are promptly reflected in price changes. Consequently, there is a rather close correlation between the prices received by farmers in local markets and those quoted in the exchanged. As it is, however, the exchange is EDDC, which regulates distribution, and prices are set by the government.

The same theory would apply to NTC. A cotton exchange market where contracts are bought and sold should be created. Such contracts provide for delivery or receipt of stated quantities of cotton during a specified future period at a fixed price for the basis grade and staple length. They are standardized with respect to the size and the manner of delivery, the grade and staple length of the deliverable, and weighing and other considerations. In the United States, the unit of contracts is 50,000 pounds, gross weight of cotton in 100 square bales. Adoption of such

standards would help standardize an international price for Ethiopian cotton that reflects its true market value.

The first step in the flow of cotton from farm to mill involves concentration of the raw cotton. This is done in a machine called a compress. The primary function of the compress is to press the bale into a smaller, more compact package and thus make it possible to place more bales in a given space. The savings in space and in freight and storage fees are greater for a compressed than for an uncompressed bale. Currently there is no compressing being done. It is recommended that privately owned facilities be established where the farmers could bring raw cotton to be compressed and baled. It is further recommended that the cotton be warehoused and stored to protect the cotton from weather, fire, and theft.

In summary, the current distribution channels are state farms selling their cotton at fixed prices to NTC, which sells it at a fixed price to EDDC, which makes an 8- to 10-percent profit and sells it to wholesalers. This process is all government controlled.

Constraints on Production

To assess a nation's constraints on production, a variety of factors must be taken into consideration. This section provides an evaluation of Ethiopia's basic factors of production: labor, wages, electricity, transportation, and technology.

Labor

The process required to terminate workers remains highly structured and time-consuming. To release an employee, an employer must still follow the old-regime policy of giving three warnings. As a result, some employers complain that it can take 2 months to 1 year to remove problem employees. Everyone is on a fixed pay scale, without regard to production. No incentive plan is operational.

Managers who were interviewed differed in their assessments of the productivity of Ethiopian labor. Absenteeism is typically less than 5 percent, although a few factories experience absenteeism as high as 15 percent. Turnover rates appear low—less than 5 percent per year. The training period for new unskilled workers varies according to the factory, but Ethiopian workers were generally considered eager and easy to train. Labor-management relations were generally characterized as good, particularly in Eritrea.

Wages

TGE Labor Code sets minimum wages for three levels of employees. The lowest allowable minimum wage is EB1.50/day (US$0.12/hour) in Addis Ababa. This rate has not changed since 1987. Wages for unskilled workers typically range between EB2.05 and EB4.50/day. A rate of EB3.00/day is equivalent to US$0.24/hour (Table 7). The practice of paying at a piece rate is legal and used.

An often overlooked aspect of labor cost is a country's fringe benefit ratio, that is, the ratio of fringe benefits to total salary (Table 8). In Ethiopia, employers provide the standard holiday and vacation package (20 vacation days after 12 months of employment, and 8 holidays).

Electricity

Table 9 shows electricity rates for Ethiopia and Eritrea and for other countries. Reports of electrical outages vary. Although most textile managers interviewed considered the supply of electricity sufficient, a few stated that cutoffs occurred as often as five or six times per month. There is a discrepancy in Ethiopia, as some areas are served better than others. Eritrea Electrical Power is a constraint in Eritrea; the most it can generate now is about 17 megawatts. Eritrea Electrical Power could hook up with existing Ethiopian power lines and save on costly reconstruction and expansion (Table 10). Diesel fuel is supplied sufficiently.

Table 7. Prevailing Wages
(hourly rate, U.S. dollars)

Ethiopia	0.24
Kenya	0.26
Haiti	0.58
Dominican Republic	0.59
Mauritius	0.70
Jamaica	0.88
Costa Rica	1.15
Hong Kong	2.62
Taiwan	2.88
South Korea	3.04

Note: It has been my observation that it takes three or four employees to stand around a circular knitting machine or perform other simple functions that could be done by one person. In Eritrea the number of employees to perform comparable work is more like two or three.

Source: Chamber of Commerce data.

Table 8. Fringe Benefit Rates
(percent)

Ethiopia	29
Honduras	29
Togo	35
Mauritius	40
Dominican Republic	45
Costa Rica	49

Note: Combining the median wage rate with the fringe benefit ratio yields an all-inclusive prevailing wage of EB4.10/day, or US$0.31/hour. This rate compares very favorably with other locations, as shown in Table 7.

Source: NTC data.

Table 9. Industrial Electricity Rates
(U.S. dollars per kilowatthour)

Kenya	0.03
El Salvador	0.05
Dominican Republic	0.06
Sri Lanka	0.07
Taiwan	0.09
Ethiopia	0.10
Mauritius	0.10
Togo	0.11
Eritrea	0.12

Source: Various sources.

Table 10. Reconstruction and Expansion of Electricity Supply in Eritrea
(cost in U.S. dollars)

Step	Cost
Interconnected System for Asmara-Belesa-Massawa	
Reconstruction of powerplants and erection of additional generating sets with a total capacity of 30 MW, including switching equipment	30,000,000
Reconstruction and expansion of substation and distribution network system	5,000,000
Subtotal	35,000,000
Self-Contained System for Decamare, Mendefera, Adi Caieh, Keren, Tessency, Tegombia, and Agordat	
Reconstruction of powerplants and erection of additional generating sets:	
3 × 150 kW	412,770
9 × 500 kW	2,167,200
Civil works and expansion of distribution network system	1,319,854
Subtotal	3,899,824
Self-Contained System for Adi Quala, Segeneti, Senafe, Nacfa, Barentu, and Afabet	
Construction of powerplants and erection of generating sets, 14 × 150 kW	1,926,260
Civil works and expansion of distribution network systems	3,796,360
Subtotal	5,722,620
Total	44,622,444

Transportation

Transportation has not presented any major problems. Roads are maintained, and trucks do not present a problem (with the exception of obtaining some spare parts) for transporting 4,500 metric tons (t) of cotton. The Title III program calls for 9,000 t, so two shipments must be made. Eritrea has more than enough trucks to meet the requirement for 1,750 t.

Technology

One of the keys to success in the textile industry is technology. The semi-plain variations used today—for example, such simple geometric patterns as diagonals, vertical stripes, and herringbones—coupled with color arrangements in the yarn rack or side creel may be achieved mechanically by the multitrack technique. Two or more tracks may be built in the cylinder cam

section of a single-kindle latch needle machine to form continuous raceways through which vasileveled needle butts may travel. The United States, through such companies as Union Special, is a key leader in this textile development.

Dyeing is another key factor in the textile industry. Atlantic Chemical Corporation, of Nutley, New Jersey, has derived a method for applying color to yarns without using conventional dyeing machinery and procedures. Atlantic technicians have developed the Padogoic Dyeing System, which has a continuous-warp dyeing process that produces a variety of colors. Dyes may be applied to the open-width warp sheet, using a conventional size box as a dye vat. This can greatly improve dyeing in Ethiopia and Eritrea.

The technology of machinery in Eritrea is slightly below that of the machinery in the top three textile factories in Ethiopia. However, Eritrea's industrious people give it the edge, producing textiles of higher quality. Two of the primary factors contributing to the current failure of the textile industry are centralized government control and lack of entrepreneurs to develop new ideas, machines, spare parts, and policy changes. Special efforts must be made to encourage Eritrean private capital under the Title III program. Ethiopia as a whole currently will not produce employment, privatization, and advancement of a viable textile manufacturing sector as rapidly as will Eritrea. The culture of Eritrea is unlike that of the rest of Ethiopia. Eritrea's people, from management on down, have an entrepreneurial spirit and are better organized for industry.

Constraints on Selling at a Profit

The previous government of Ethiopia provides a classic example of the crippling disease of state involvement in the textile industry. Nationalization and public procurement have put Ethiopia in a nonprofitable position. The following are serious constraints on selling for profit:

- Limited profit-selling experience, skills, and financial resources of the local private sector
- Reluctance of foreign investors
- Price controls (EDDC)
- Unavailability of spare parts
- Underutilization of capacity
- Lack of a true maintenance system
- Low productivity
- Limited production
- Shortage of cotton
- Excessive labor
- Low quality of products

To ease constraints on the development of a free market, EDDC must abandon its role in pricing and start providing feedback to the factories. A strong effort should be made for free-market production and manufacturing in the textile sector. Private investors must be able to buy and sell at market prices. EDDC has been abandoned in Eritrea, where more free market development is encouraged.

Conclusions

TGE will benefit greatly by supporting the needed changes of the Title III program. The current status of the textile industry has been reviewed in this report. Answers and problems center on the lack of cotton, government control, factory efficiency, and no reward policy for workers' improvement of the quality of production.

Donations of 9,000 t (1992), 20,000 t (1993), and 20,000 t (1994) of cotton to Ethiopia and 1,750 t (1992), 5,000 t (1993), and 5,000 t (1994) to Eritrea (Tables 11 through 13) will help the industry transform its market. The 10 factories surveyed are operating at between 30 and 40 percent of capacity. They are producing low-quality cotton goods because of poor, lint cotton. The Title III requirement for cotton should read:

Grade	*Staple Length*
GM (Good Middling)	¼ in.
GM (Good Middling)	1 3/16 in.
SGM (Strict Middling)	1⅛ in.

These specifications are important for USAID/Addis Ababa's ordering requirements.

Table 11. NTC Planned Distribution of Lint Cotton for the First 9,000 t
(metric tons)

	Distribution		
		Staple Length	
Factory	Total	5/32	1⅛
Ethiopia	8,900	2,200	6,700
Dire Dawa Textiles Factory	2,070	800	1,270
Akaki Textiles Factory	1,800	—	1,800
Bahr Dar Textiles Factory	1,080	300	780
Kombolcha Textiles Factory	990	—	990
Awassa Textiles Factory	900	500	400
Arba Minch Textiles Factory	720	400	320
Adei Abeba Yarn Factory	900	—	900
Ediget Yarn Factory	540	300	240
Eritrea	1,750	950	800
Asmara	1,000	500	500
Eritrea	750	450	300

Table 12. NTC Cotton Requirements and Supply Mix for Fiscal Year 1993
(metric tons)

Factory	Requirement			
		Staple Length		
	Total	1 1/32–1 5/32	1 1/16–1 1/8	1 3/32–1 1/6
Ethiopia	18,990	5,000	8,990	5,000
Dire Dawa Textiles Factory	4,600	1,800	1,800	1,000
Akaki Textiles Factory	2,940	—	1,540	1,400
Bahr Dar Textiles Factory	3,300	1,600	1,100	600
Kombolcha Textiles Factory	2,270	—	1,270	1,000
Arba Minch Textiles Factory	1,750	1,000	750	—
Awassa Textiles Factory	1,950	1,000	950	—
Adei Abeba Yarn Factory	2,030	—	1,030	1,000
Ediget Yarn Factory	1,160	600	560	—
Eritrea	5,000	1,700	1,700	1,600
Asmara	3,000	1,000	1,000	1,000
Eritrea	2,000	700	700	600

Note: Subject to revision.

Table 13 Resources in Ethiopia

Industrial Sector	Raw Materials			Spare Parts		Employees (thousands)	
		Percent					
	Total (birr)	Local	Foreign	Birr	Percent	1988–89	1990–91
Food	52,218,685	63.20	36.80	247,178	4.12	1,791	374
Beverage	18,374,461	12.23	87.77	838,477	13.96	1,183	1,047
Tobacco	4,540,940	10.85	89.15	165,000	2.75	543	369
Textile	31,546,823	3.31	96.69	2,829,495	47.12	6,970	4,627
Leather and Shoes	28,311,966	58.62	41.38	674,907	11.24	2,139	1,652
Metal and Wood Products	9,222,102	8.71	91.29	125,121	2.08	1,053	905
Printing	2,681,353	33.95	66.05	41,643	0.70	402	333
Nonmetallic Mineral Products	5,691,874	48.26	51.74	892,045	14.86	820	445
Chemical	11,689,371	47.61	52.39	190,600	3.17	355	338
Total	164,277,575	38.60	61.40	6,004,466	100.00	214,145	209,181

The business climate undoubtedly has the potential to improve considerably. The private businesspersons as well as plant managers are generally optimistic (of course, many of these people have little or no free market experience). In general, Ethiopian factories produce low-quality products. Unfortunately, only a few individuals understand the workings of the free market. This is why the factories should be returned to their original owners.

The pattern of trade is such that traditional Ethiopian products (blankets, sheeting, fabrics, and knitwear) are traded in developed countries for products that are of higher quality while exports of finished goods are hampered by regional barriers, lack of hard currency or exchanges between neighboring countries, and low purchasing power in the subregion. Therefore the domestic market, which needs these goods, should be greatly utilized.

Recommendations

Statements made by many factory managers suggest a keen appreciation of the Title III program. Implementation should proceed according to the following seven steps:

1. The most valuable step is to develop a free-market business plan, including a detailed marketing plan for entrepreneurs. The Labor Code must be changed so that people may be fired quickly.
2. Many new policy changes must take place to give opportunities to the private sector. Awareness of the basic constraints and barriers must be overcome by decentralizing the textile sector. Private investors should be able to buy and sell in the market freely. Exchange controls must be abolished.
3. A new concept, the cotton exchange, must be presented. If incentives are augmented and administrative procedures are streamlined, entrepreneurs can benefit from establishing profit.
4. The key role of the government would be to eliminate fixed birr exchange rates. Investment policies must change for entrepreneurs to operate in a free market. The commercial banking system should be restructured to provide for nonrestrictive investment incentives. The ability of the private sector to obtain financing is important.
5. Technical assistance must be made available to the cotton sector for marketing, production, quality control, management standards, and financial accounting statistics.
6. Factories should be 100 percent privately owned. The Title III program should be established for privatization to take place. The entrepreneurs' environment must be free from government constraints. Above all, the cotton donation under Title III will provide a framework for a free-market economy that includes private property rights, profits for investors, freedom of movement for employees, minimal government intervention, consistent business codes, and contracts between individuals. Prosperity and assistance should be effective.

   The Ethiopian economy has been heavily regulated during the last 17 years. The regulations caused distortions in the textile economy. The Title III program can abolish government controls by privatizing the parastatals and help to create a free market. All factories must revert to their original owners. The private sector achieved fundamental growth in the past; it can restore it in the future.
7. The basic tax system of 90-percent tax on profit should be reduced to 50 percent so that investment by entrepreneurs may have a chance to grow. The present tax is a disincentive for expansion.

Findings

TGE and the Provisional Government of Eritrea plan to develop a new economic policy under the Title III program. Over a 3-year period, cotton will be donated for deparastatalization. This transition will be conducted in stages, as democratic openness is incorporated. The key contribution of USAID/Addis Ababa will be to serve as a guide to help the textile private sector construct a recovery.

Today, many daunting obstacles must be overcome. Ethiopia's economy is in a deficit, with more than US$3 billion in outstanding foreign loans, and state subsidies assisting the present parastatals are in excess of US$20 million. The unprofitable parastatal factories are mismanaged and out of money.

Ethiopia receives aid of 16.7 percent of its gross domestic product (GDP) (US$910 million), which equates to US$18.20 per capita. The total GDP is US$109, and US$30 goes for cotton products. The 49,000-t cotton donation planned for the next 3 years is vital for growth of production and value-added benefit. Total employment in the factories would grow by 10 percent and would restore employment to 50,000 loom weavers. Annual sales would grow by 30 percent.

The scope of the cotton supply problem is vital to Ethiopia. The annual production capacity of the textile factories is 35,000 t this year. NTC's supply forecast is 12,000 t by growers (state farmers), representing a shortfall of 23,000 t of lint cotton. The unmet requirement of 65.7 percent will be reduced by 9,000 t of U.S. cotton. The lint cotton supply forecast for Eritrea by domestic and regional growers amounts to 2,320 t, which will leave 73.7 percent of the requirement for lint cotton unmet. This unmet requirement will be reduced by 1,750 t of U.S. cotton.

The most important channel for lint cotton would be toward the new private owners of the factories. This, in turn, would compensate for keeping employment at current inflated levels and avoid having an increase in the already high 30-percent unemployment rate, and it would help the owners to invest in innovation in the factories.

Resources

Agreement Between the Government of the United States of America and the Transitional Government of Ethiopia for the Donation of Agricultural Commodities, April 1992.

Kulibaba, Nicolas. "Private Sector Initiative for Africa: Issues in Direct Assistance." A.I.D., 1992.

Food and Agriculture Organization/WFP Corp. and Food Supply Assessment Mission, Ethiopia, November–December 1991.

Menell, Mary. "Private Sector Initiative for Africa: Business and Professional Associations." A.I.D., 1992.

National Textiles Corporation, Ministry of Industry. *Overview of NTC of Ethiopia.* Addis Ababa: National Textiles Corporation, December 1991.

U.S. Agency for International Development. "Program Approval and Authorization Document (PAAD), Preliminary Draft." A.I.D., December 1991.

U.S. Agency for International Development. "Program Approval and Authorization Document (PAAD), Revised Draft." A.I.D., February 1992.

U.S. Agency for International Development/Addis Ababa. Documents.

U.S. Agency for International Development/Nairobi. Documents and staff (Pat Shapiro and Tom Stall).

U.S. Department of Agriculture. *The Cotton Plant: Its History, Botany and Use.* Washington, D.C.: U.S. Department of Agriculture, 1988.

Personal Interviews—Ethiopia

Hrair H. Behesnilian, General Manager, Hagbes Pvt. Ltd. Co., Addis Ababa

Geremew Berhanu, Ministry of Industry, Addis Ababa

Yohannes Der Neressian, private businessman, Addis Ababa

Mulugeta Grumu, Manager, Adei Abeba Factory, Addis Ababa

Tsegaye Habiteh-Yimer, General Manager, National Textile Corporation, Addis Ababa

Vahak Karibian, private businessman, Addis Ababa

Artin Kevorkian, private businessman, Addis Ababa

Makonnen Legesse, Manager, Awassa Textile Factory, Awassa

Manfred Schueler, Operations, German Embassy, Addis Ababa

Kuma Tirfe, Vice Minister for Internal Trade, Ministry of Trade, Addis Ababa

Tilahun Tsegaye, Production and Technical Head, National Textile Corporation, Addis Ababa

Berhanu Weldemichael, Section Head, Automotive Manufacturing Company of Ethiopia, Addis Ababa

Personal Interviews—Eritrea

Ghermai Abraham, Head of General Services, Chamber of Commerce

Zecarias Abrha, Manager, Eritrea Textile

Alem Araya, General Manager, Merab Textile Factory

Berhane Ghebre Eghziabher, Secretary of Industry

Habtu Ghebreamlak, Engineer, Eritrea Electric Authority

Richard Konig, Scania Regional Manager, Marketing Overseas

Negusse-Ogbe, Technical Head for Industry

Acronyms and Abbreviations

A.I.D.	U.S. Agency for International Development
EDDC	Ethiopian Domestic and Distribution Corporation
GDP	Gross domestic product
GM	Good Middling
kg	Kilogram
kW	Kilowatt
NTC	National Textile Corporation
m^2	Square meter
MW	Megawatt
PGE	Provisional Government of Eritrea
SGM	Strict Middling
t	Metric ton
TGE	Transitional Government of Ethiopia
USAID	U.S. Agency for International Development

Meeting Schedules

Wednesday, May 13, 1992

0900 Bill Pearson, Mission Director
1000 Pat Shapiro, USAID/Addis Ababa Legal
1100 Thomas Staal, REDSO—Nairobi
1400 Geremew Berhanu, Minister of Industry
1500 Michael Harvey, USAID/Addis Ababa Food for Peace

Thursday, May 14, 1992

0800 Mamo W. Berhan, USAID/Addis Ababa Food for Peace
1000 Tsegaye Habtehyimer, General Manager, National Textile Corporation
1300 Triveni Shukla
1500 Mamo W. Berhan, USAID/Addis Ababa Food for Peace
1600 David Osinski, Regional Contract Officer

Friday, May 15, 1992

0900 Pat Shapiro
1000 Kuma Tirfe, Vice Minister for Internal Trade

Saturday, May 16, 1992

0830 Akaki Textile
1230 Ediget Textile

Sunday, May 17, 1992

Review draft report

Monday, May 18, 1992

1000 Berhane G. Egziabher, Minister of Industry
1100 Ato Okbe, Technical Head for Industry
1300 Richard Konig, Scania Regional Manager
1500 Martin Hanraty, USAID/Addis Ababa Policy Adviser

Tuesday, May 19, 1992

0800 Hailom Negussie, General Manager, Asmara Textile Factory
1100 Girmai Abraham, Head of Services, Chamber of Commerce
1300 Habtu Gebre Amlak, Engineer, Eritrea Electric Light and Power Authority
1500 Berhane G. Egziabher, Secretary of Industry
1700 Zekarias Abraha, Manager, Eritrea Textile

Wednesday, May 20, 1992

0800 Alem Araya, General Manager, Merkeb Textile
1000 Berhane G. Egziabher, Secretary of Industry
1200 Flight back to Addis Ababa

Thursday, May 21, 1992

0600 Left for Awassa with Tilahun Tsegaye, Head, Production and Technical Department, National Textile Corporation
1100 Makonnen Legesse, Manager, Awassa Textile
2100 Tsegaye H. Yimer, General Manager, National Textile Corporation

Friday, May 22, 1992

0800 Tilahun Tsegaye, Head, Production and Technical Department, National Textile Corporation
0900 Adei Abeba Yarn Factory
1300 Yilma Tiruneh, Manager, Gulele Garment Factory
1500 USAID/Addis Ababa

Saturday, May 23, 1992

Review draft report

Sunday, May 24, 1992

Review draft report

Monday, May 25, 1992

0800 Tilahun Tsegaye, Head, Production and Technical Department, National Textile Corporation
1000 Chamber of Commerce, Addis Ababa
1300 Yilma Tiruneh, Manager, Gulele Garment Factory

Tuesday, May 26, 1992

0800 USAID/Addis Ababa
0930 Alan Van Egmond, USAID/Addis Ababa Deputy Representative
1030 Michael T. Harvey, Food for Peace Officer
1300 Hrair Behesnilian, General Manager, Hagbes P.I.C.
1500 Artin Kevorkian, Hagbes P.I.C., Addis Ababa

Wednesday, May 27, 1992

0800 Araxy Kevorkian
0900 State farm
1100 EDDC

1300 Mr. Van Dawen and Mr. Leutinger, German Embassy

Thursday, May 28, 1992

0800 Hrair Behesnilian and Edward Behesnilian

Friday, May 29, 1992

0800 Adalberto Frezza, Director, Novio Supermarket
1000 Vahak Karibian, private businessman
1300 Jaylall Bungsy, Executive Director, ABC Coach Works
1500 Eddie Besnelian, Owner, Besco Machinery Ltd.
1600 Torben Linaqvist, Special Adviser, Danish Ministry of Foreign Affairs, DIDA

Saturday, May 30, 1992

0800 Berhane Wolde Michael, Section Head, Automotive Manufacturing Company of Ethiopia
1000 Lula Solomon, private businessperson
1200 Write/type report

Sunday, May 31, 1992

0600 Review draft report

Monday, June 1, 1992

0900 USAID/Addis Ababa briefing

Tuesday, June 2, 1992

0800 USAID/Addis Ababa
2200 Flight to Frankfurt, Germany

Wednesday, June 3, 1992

1030 Arrival in Europe—hotel

Thursday, June 4, 1992

0700 Flight to United States
2030 Arrival at Palm Beach International