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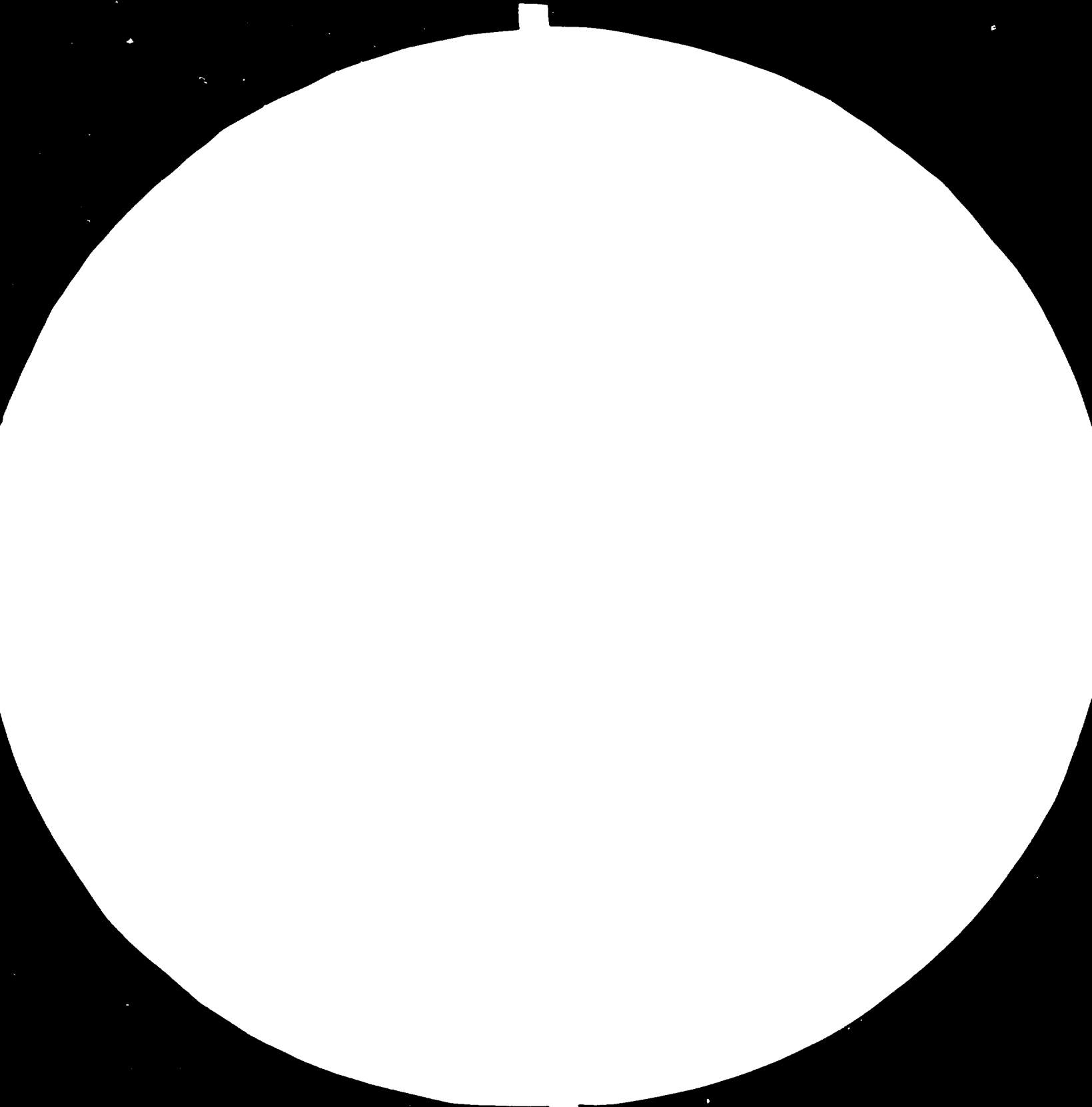
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MICROCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS  
STANDARD REFERENCE MATERIAL 5000  
(ANALOGUE TO TEST CHART No. 2)

RESTRICTED

13187

DP/ID/SER.B/433  
29 December 1983  
English

Tanzania.

STRENGTHENING OF THE NATIONAL TEXTILE CORPORATION (TEXCO)

DP/URT/78/018

TANZANIA

Terminal Report\*

Prepared for the Government of Tanzania by the  
United Nations Industrial Development Organization,  
acting as executing agency for the United Nations Development Programme

Based on the work of R. Ryder  
Team Leader and Industrial Engineer

United Nations Industrial Development Organization  
Vienna

\*

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1.

## NATIONAL TEXTILE CORPORATION

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### ORDER ESTABLISHING TEXCO

Government Notice No. 268 Published on 21.12.73 (No. 17 of 1969)

#### THE NATIONAL TEXTILE CORPORATION (ESTABLISHMENT) ORDER, 1973

1. This Order may be cited as the National Textile Corporation (Establishment) Order, 1973.
  2. In this Order, unless the context otherwise requires –
    - "the Act" means the Public Corporation Act, 1969
    - "Board" means the Board of Directors provided for in Paragraph 5.
    - "the Corporation" means the National Textile Corporation established by paragraph 3.
    - "Minister" means the Minister for the time being responsible for Industries.
    - "Textile products" means products made out of soft or coarse fibres and includes garments of all description.
  3. (1) There is hereby established a public corporation to be known as the National Textile Corporation.
    - (2) The authorized Share capital of the Corporation shall be five hundred million shillings and shall be divided into 50 shares having a par value of 10 Million shillings each.
    - (3) All the shares in the Corporation shall be subscribed to and held by the Treasury Registrar or such person as the President may designate.
    - (4) The shares shall be issued in such number and in such manner and shall be paid in such manner, as the President may direct.
  4. The functions of the Corporation shall be –
    - a) to conduct and engage in the business of manufacturers, processors, producers, importers and exporters of textile and textile products.
    - b) to buy, sell, import and export textiles and textiles products and also raw materials and textile products.
    - c) to establish branches and carry on business either within the United Republic or elsewhere.
    - d) to acquire by agreement and hold interests in any undertaking, enterprise or project associated with the textile industry.
    - e) to manage the affairs of any corporation, company, firm or other body the interests of which are transferred to or acquired by the Corporation under the provisions of the Act or any subsidiary legislation made thereunder:—
    - f) to do all such acts and things as may be necessary to uphold and support the credit of the Corporation and to obtain and justify public confidence and to avert or minimize any loss to the Corporation.
    - g) to do anything or enter into any transaction which, in the opinion of the Board is calculated to facilitate proper and efficient carrying on of its activities and the proper performance of its functions as specified in this paragraph.
-

## NATIONAL TEXTILE CORPORATION

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### FRIENDSHIP TEXTILE MILL LIMITED

P.O. Box 20842  
DAR ES SALAAM  
Telephone: 49101

Cable: "URAFIK!"

### KILIMANJARO TEXTILE CORPORATION LIMITED

P.O. Box 9561  
DAR ES SALAAM  
Telephone: 20251-2 3 (Dar)  
3941 (Arusha)

P.O. Box 3170  
Arusha  
Telex and Cables  
"KILTEX" 41032

Manufacturers of textile fabrics and garments

### MWANZA TEXTILES LIMITED

P.O. Box 1344  
MWANZA  
Telephone: 40466-2391

Telex and Cables  
MWATEX 46118

Manufacturers of textile fabrics

### TANGANYIKA DYEING AND WEAVING MILLS LIMITED

P.O. Box 2621  
DAR ES SALAAM  
Telephone: 42535

Telex and Cables  
"KANGAKING" 41061

Manufacturers of textile fabrics

### TANZANIA BAG CORPORATION LIMITED

P.O. Box 504  
MOSHI  
Telephone 4911-2628

Cables "TABCO"

Manufacturers of agricultural bags

### MUSOMA TEXTILES LIMITED

P.O. Box 652  
MUSOMA

Cables "MUTEX"

Manufacturers of textile fabrics

### BLANKETS MANUFACTURERS LIMITED

P.O. Box 9523  
DAR ES SALAAM  
Telephone 64471 63676  
Manufacturers of blankets

Cables "BMLTD"

### UBUNGO GARMENTS LIMITED

P.O. Box 55168  
DAR ES SALAAM  
Telephone 53001  
Makers, marketers of garments

Cables "UGL"

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## THE NATIONAL TEXTILE CORPORATION

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### GROUP PROJECTS

TABORA SPINNING MILL PROJECT  
P.O. Box 272  
TABORA

MBEYA TEXTILE MILL PROJECT  
P.O. Box 950  
MBEYA

UBUNGO SPINNING MILL PROJECT  
P.O. Box 9531  
DAR ES SALAAM

TEXTILE TRAINING AND RESEARCH INSTITUTE  
P.O. Box 9531  
DAR ES SALAAM

MOROGORO SISAL BAG PROJECT  
P.O. Box 9531  
DAR ES SALAAM

TERRY TOWEL & SEWING THREAD PROJECT  
P.O. Box 9531  
DAR ES SALAAM

MOROGORO POLYESTER TEXTILES PROJECT  
P.O. Box 9531  
DAR ES SALAAM

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The National Textile Corporation (Texco) was the counterpart agency for Tanzania, appointed by the Ministry of Industries, for this project. The Texco group of companies in fact accounts for approximately 90% of the Tanzanian Cotton Textile Industry, and the project was concerned solely with this group. The national team leader was Mr.S.H.Nkya, Managing Director of the Texco group and the UNIDO team leader was Mr.R.A.Ryder. National counterpart personnel were to be appointed, one or more for each member of the UNIDO team, to continue at Texco in the respective functions after the completion of the project.



## 2. INTRODUCTION

This terminal report should be considered in the light of the summary of findings and conclusions in the report of the preparatory assistance mission of September 1978.

The relevant part of page 6 of that report is reproduced hereunder as an aide memoire to the project concept.

" Noting TEXCO's shortcomings in its technical capability to effectively monitor and control the work of the management teams operating its factories and considering that TEXCO, by its own admission, does not intend to resort to the World Bank loan to finance the actual implementation of the capacity utilization study, it seems that UNIDO could play a useful role by giving TEXCO at least part of the tools it needs to properly carry out its supervisory task. We are, therefore, recommending a project that consists essentially of a team of OFAS experts to be attached to the TEXCO headquarters. The task of the team would be to initially assist TEXCO to monitor and supervise the Ten Cate study and, subsequently, to monitor and supervise the implementation of the final recommendations of the study using the present management teams in the mills as a vehicle."

The project was thus agreed as an OFAS operation and commenced on the arrival of the Industrial Engineer in March 1980.

However, from the beginning of the project there appears to have been some misunderstanding, on the part of all parties, regarding the functions and responsibilities of the OFAS personnel of the team, particularly in respect of accountability. To clarify this there is appended as follows, the relevant parts of the administration instruction of November 1982 from the Under Secretary General for Administration and Management at U.N. Headquarters.

" 37. OFAS officers are individuals whose services are provided by the United Nations to requesting Governments under the terms of a Standard Agreement on Operational Assistance, to perform functions of an operational, executive and administrative character as civil servants or other comparable employees of the Government.

"They are, therefore, not United Nations officials or experts on mission in any sense, but government employees solely accountable to the employing Government. The Government, however, recognises their international status and provides for them terms and conditions of service comparable to those civil servants of the same rank, and in certain respects (e.g. leave, privileges and immunities) not less favourable than those provided by the Organisation to its own officials.

34. Additionally the United Nations under a separate contract, provides the CPAS officers with administrative facilities including:

- (a) The net payment of a stipend and of allowance to supplement their government pay, and
- (b) Travel and transportation and other prerequisites to match those offered to project personnel, with the exception of participation in the United Nations Joint Staff Pension Fund (UNJSPF)

The contract does not give CPAS officers the status of staff members of the United Nations. Except as specified in paragraph 39 below, CPAS officers are therefore not eligible to participate in the UNJSPF which is only open to staff members of a member organisation.

35. While they are accountable only to the Government, and can neither seek nor accept instructions from any other authority in the performance of their duties, CPAS officers are also bound to observe the standards of conduct set by the United Nations in their separate contract."

This situation notwithstanding, the CTA/Industrial Engineer provided written monthly reports from the start of the project to the Managing Director of Texco with copies to the Senior Industrial Development Officer responsible for this project at UNIDO, and to the Senior Industrial Development Field Adviser at UNDP, Dar es Salaam. These reports indicated the monthly progress and continued until February 1982 after which time the CTA was appointed Director of Operations to Texco. Additionally the standard UNDP half yearly project progress reports were completed according to schedule. However, on the appointment of the CTA to the post of Director of Operations and as a substantive director on the Boards of all Texco Group Companies, the monthly reports were discontinued.

The legal requirements of company directors precluded, in the view of the CTA, reporting on company matters to an outside body. A copy of the service agreement between the CTA and Texco is shown in Appendix 1 and details quite clearly the duties and responsibilities of the appointment. Nevertheless the half yearly progress reports and internal evaluation system reports have been continued throughout. Also personal contact has been maintained between the CTA and the SIDFA at UNDP Dar es Salaam.

The project document, signed in September 1979, before the project commenced, showed a UNDP input of US dollars 899,150. The last project revision "L" showed a figure of US dollars 982,188. The increase of US dollars 83,038 is due to the introduction in 1983 of the Mechanical Engineering post.

3. ANALYSIS OF PROJECT CONSTRUCTION AND CONSTRAINTS

With reference to the initial project intention of following up the Ten Cate study and monitoring the implementation of its recommendations, all the study reports were examined by the CTA during the first two weeks of the project. Whilst, as consulting survey reports, the details were satisfactory, in fact they were not a schedule of implementable recommendations as expected by Texco. Consequently it was not a suitable proposition for the UNIDO team to commence supervising implementation. Nevertheless the general terms of the project with regard to activities and outputs were absolutely correct given the economic climate at the time of the mission in 1978. There had been a definite downward trend in the general situation before the project commenced in 1980 and the continuing deterioration of foreign exchange availability has made it impossible to achieve all the outputs in the terms originally specified.

To give some idea of the extent of this problem, the calculated requirements of foreign exchange for the whole of the Texco Group is approximately forty (40) million US dollars per year, equivalent to t.shillings 390 million. This covers the cost of imported chemicals, dyestuffs, spare parts and consumables. The actual situation for the past three years is as follows:-

<u>YEAR</u>	<u>AMOUNT REQUESTED</u>	<u>AMOUNT ALLOCATED</u>
1980	Tan.Sh. 344 million	110 million
1981	" " 390 million	29 million
1982	" " 453 million	13 million
1983		
Jan -		
June	" " 281 million	4½million

This puts the constraints and outputs of the project into perspective.

Output No.1. "Capacity Utilization" has come in for some criticism, particularly at Tripartite Review meetings, in terms of it being, by definition, not an output but an objective.

However the term itself has been widely misinterpreted by most of the involved parties. From the following clarification, and early substitution of an alternative definition, it may be seen that results were obtained and could be regarded as either output or objective although the scale of achievement has been depressed by conditions outside the control either of the project or Texco itself.

#### CAPACITY UTILISATION

This term was used in the original project document as a measure of operating performance, and the first output specified was an increase to be achieved of a quoted magnitude.

This was also a term used in previous surveys of the textile industry by other consultants before this project was conceived. This was always quantified as a percentage figure and allied to a number of metres woven.

During the first two months of this project it became apparent that this term meant different things to different parties, mainly being taken to be loom efficiency - also quoted in percentage form. Loom efficiency itself in the Texco group was subject to interpretation and the percentages quoted varied, depending on the custom and practice of the various group companies. Figures quoted were "working efficiency", "shed efficiency", "pick efficiency" etc. and all calculated in ways particular to each mill. Changes in product mix were overlooked in some cases. Many of the figures transpired to be totally misleading for a variety of reasons. The 100% figure was variously exclusive of loom stoppages for breakdowns, repairs, lack of spare parts, routine maintenance, shortage of material, absenteeism, electricity interruptions etc. Error was also made due to breakage or misuse or malfunctioning of pick clocks fitted to looms. This of course is not peculiar to the Texco group nor to Tanzania.

In May 1980 a standard method was introduced into Kilimanjaro Textile Corporation and established in all group mills during the next month. The quoted figure was entitled "overall efficiency" and was calculated on a weekly basis.

This figure is obtained from the actual metres measured at the inspection point, taken as a percentage of "absolute capacity". The definition of absolute capacity is - the calculation of the theoretical metres which could be produced if all the looms ran non-stop for the whole week, i.e. 168 hours on a 3 shift system or 168 hours on a 4 shift system, based on the product mix for that week. No allowance is made for stoppages of any kind other than official holidays or total closure for shortage of fuel, power, or water supply. Consequently since that time overall efficiency figures have been disciplined, and comparable between group companies. The figures also reflect the absolute performance of the company at a basic level. Necessarily these figures will appear considerably less than the usual efficiency figures generally bandied about in textile mills and due note should be taken of this in considering performance levels. The trend in these performances in the various mills, subsequent to the industrial engineering operations in weaving sections, are shown under item 6.1.

Apart from the consistently improved performance of Milltex, Dar es Salaam, other mills improved initially then fell away. The main reason for this difference is the spare parts requirement. Milltex, being equipped with very old looms, had become reasonably self sufficient in spare parts, whereas the other mills required much more in the way of imported spares.

Considering the gap between foreign exchange requirements and allocations, of over one thousand million Tanzanian shillings (equivalent one hundred million US dollars) in total during the first 3 years of the project, it is not surprising that mill performances generally suffered badly.

If the Milltex improvement of some 25 percentage points were obtained in the other mills then the project objective of achieving 70% efficiency would have been realised.

4. INPUTS

One particular problem suffered by the project was that of inputs of personnel, both international and national. Experts from UNIDO arrived in a staggered manner, initially, over the first year and replacements did not necessarily arrive immediately after the first experts left. Counterpart national staff were not appointed immediately to the experts due to severe shortage of suitable personnel (hence the CPAS principle) and delays in finalising appointments when the counterparts had been identified. A bar chart showing arrivals and departures of personnel is shown in Appendix 2, and a list of international staff and counterpart staff is shown in Appendix 3. It will be seen from the bar chart that the major counterpart deficiencies were as follows:-

The Industrial Engineering counterpart was not made available until thirty(30) months after the start of that function and then on a half time basis for the next ten(10) months. Thus this counterpart was only working full time for five(5) months before the UNIDO expert left the project in October 1983.

The Textile Technology counterpart was appointed sixteen(16) months after the start of the first UNIDO technologist and in fact was transferred from that position after only twenty(20) months, leaving Texco without a national textile technologist from October 1983.

The Mechanical Engineering post has had no counterpart at all since the post commenced in January 1983. This leaves only eight months technology transfer even if the appointment were to be made immediately.

## 5. ACTIVITIES AND OUTPUTS

The listed project activities for the CPAS personnel were as follows:-

- 1) Participate in coordination of production and related improvement programme.
- 2) Support production management to achieve improvement in product quality and quantity.
- 3) Monitor and report on progress and results achieved by management.
- 4) Installation of effective training programme.
- 5) Improve marketing and distribution systems.

The expected outputs were:-

- 1) Increased capacity utilization.
- 2) Improved procedures and written guidelines on quality and process control.
- 3) Improved procedures and written guidelines on preventive maintenance.
- 4) Improved marketing and distribution systems.
- 5) Effective training programme.

The clearest way to describe the performance of this project and the achievements, is in a post oriented presentation, the above outputs being individually relevant to each specific post. In addition, due to the executive nature of the positions, other outputs were produced and are recorded in the post descriptions. For each post/output this report covers the period from the commencement up to the end of October 1983. Some of the posts are continuing thereafter up to mid 1984. Apart from post/output No.1. the other posts will be the subject of additional and completed detail in the final reports of the experts concerned.



6. CPAS POSTS

6.1. CHIEF TECHNICAL ADVISER/INDUSTRIAL ENGINEER/ DIRECTOR OF OPERATIONS.

OUTPUT NO.1 - INCREASE IN CAPACITY UTILISATION.

This post commenced in March 1980 concluding in December 1983. From the beginning until the end of 1981 the concentration was on Industrial Engineering Operations in the group mills.

1982 was a year spent as Director of Operations and a Director on the Boards of all group companies.

1983 was an extension over the original project post life and was in adviser capacity.

The industrial engineering counterpart did not become available until August 1982 and then part time only. He did not become full time until June 1983.

The counterpart Director of Operations was appointed in October 1982 and succeeded to the post in January 1983.

6.1.1.

During the first period of concentration in Industrial Engineering, work was carried out in several of the group mills with emphasis on improving the weaving operations primarily.

KILBEX - DAR ES SALAAM.

By the end of May 1980 an incentive scheme had been prepared and was introduced on 2nd June. The overall efficiency progress is shown below.

May 1980	22%	overall efficiency
June 1980	30%	" "
Dec. 1980	36%	" "
May 1981	38%	" "
June 1981	42%	" "
Dec. 1981	43%	" "
Oct. 1983	48%	" "

The jump in efficiency between May and June 1981 was due to the termination of the 4 shift system and introduction of 3 shifts (135 hours per week).

With the machinery being extremely old in this factory, locally fabricated parts can be used more extensively than on newer, sophisticated machines. Also this particular plant has developed good foundry and workshop facilities during the past 4 years. The main problems at this factory have been caused by water shortages. Nevertheless the present efficiency is commendable for such an old plant.

#### TANZANIA BAG CORPORATION

An incentive scheme was prepared and agreed for the weaving sections in both mills of this company by December 1980. The management at that time wished the whole factory - all sections, all personnel to start on incentive schemes at the one time. Although not normally practicable this was given some consideration. However at that time the production information returns were not reliable and a postponement was agreed for six months. By mid 1981 however the spare part position had become crippling and the lack of satisfactory operative training had conspired to bring down the performance of both mills to a level where it was not advisable to introduce incentive payments. Both mills in this company have had great difficulty continuing at all. There has been developed a good workshop in one of the mills and together with a potential inflow of imported spares and a nearly established training centre the situation may improve enough to implement the incentive scheme soon.

#### KILTEX - ARUSHA

A scheme was developed by October 1980 and after some delay was introduced at the end of December 1980. For a time the performance improved then shortage of polyester yarn caused that 60% of the weaving plant normally producing polyester/cotton cloth to be forced to weave 100% cotton fabric. This caused an immediate reduction in performance. The older looms originally weaving cotton cloth then started to deteriorate due to lack of spares and consumables. The average performance has held up to around 50% overall efficiency until late 1982 but has since suffered badly for the same problems, plus diesel and water shortages

MWANZA TEXTILES

Although this company has suffered badly from shortage of electrical power due to problems at the electricity supply generating plant, an incentive scheme was prepared and introduced in 1981. Almost coincidentally with the application of the scheme the power situation, already bad, worsened and the scheme was withdrawn in September. This mill is the subject of discussion later in this report.

FRIENDSHIP TEXTILE MILL

A scheme had been prepared and was introduced into the two mills in this company in July 1981. Already into spare parts and consumables problems the average performance over the 10 weeks reference period prior to the scheme is shown below with the subsequent trend thereafter.

	<u>Overall Efficiency</u>	
	<u>Mill One</u>	<u>Mill Two</u>
Reference Period	47.5	49.0
September 1981	59.0	54.0
December 1981	49.0	55.0
June 1982	44.0	44.0
December 1982	52.0	44.0
March 1983	53.0	43.0
September 1983	48.0	41.0

Around June 1982 the shortages of shuttles in this factory began to cause difficulties, exacerbated by shortage of dyes and chemicals. Lack of other spare parts has also caused the situation to deteriorate to the present level.

From the middle of 1980, weekly reporting of production information from all group companies was established, thus giving Texco better monitoring ability than with the usual monthly reports.

6.1.2.

Upon appointment to Director of Operations, the range of responsibilities was vastly changed, as can be seen from the requirements specified in the service agreement. This post, held until the end of 1982, covered all aspects of the general management by Texco of its Group companies. In addition a considerable amount of time was spent in the performance of the duties involved in Directorships of the individual companies. A few of the major outputs from this post are listed -

1. Strengthening Texco Operations Department

Texco manpower strength had been below the agreed structure level for some time. During the period March to December the strength of the Operations Department was increased with technically trained personnel recently returned from Textile Technology Training abroad. Some of these technologists have become operations officers with responsibility for monitoring performances in several group mills.

2. Ten Gate Study

The purpose of this study was to provide a clear statement of the current state of the industry and to define in detail actions to be taken to improve both the capacity utilization and the overall performance of the Texco Group. The reports from the consultants did not meet sufficiently the terms of reference of the study, nor were the details up to the standard expected. Consequently negotiations were entered into with that company regarding the invoiced fees. By the end of June agreement had been reached to pay only 80% of the total fee, resulting in a saving of over 27,000 US dollars.

3. Management Agencies

Texco had set itself a programme of localisation of management in all the operating companies to be completed by phasing out the managing agents as follows:-

- Tanganika Dyeing & Weaving Mill - Tootal out by June 1983
- Kwanza Textiles Ltd - Saigols out by Aug. 1984
- Kiltex - Dar & Arusha - Saigols out by 1985
- Musoma Textiles Ltd. - Schaeffer out by 1985

Tootal's contract was in fact concluded by the end of May and localised management took control of the company.

#### 4. Production Cost Reduction

In view of the shortage of dyestuffs resulting from the lack of foreign exchange, all the group mills were directed to give consideration to the quantity of dyes used in the finishing processes. A critical approach in designing to reduce the dye cover was taken and resulted in a meaningful reduction of the total weight of dyestuffs consumed, without impairing the quality of the production.

Additionally, sales of grey cloth were increased, further reducing the reliance on dyestuffs in reaching sales targets. Discussions were also undertaken with the Tanzania Industrial Research and Development Organisation on the development of the use of natural dyestuffs, domestically produced. This is still being followed up.

#### 5. Energy Saving

An energy audit was promoted in conjunction with the Tanzania Industrial Research Organisation resulting in a study by the Irish Institute of Industrial Research and Standards, in two of the group factories at the beginning of December. The results indicated potential annual savings of T.Shs.900,000 and T.Shs.150,000 respectively. Efforts are now in hand to have a full energy survey on all the mills in the group carried out by the same organisation and paid for by I.D.A. grant through the Tanzania Investment Bank. This could be instrumental in estimated savings of at least T.Shs. 5.0 million, much of this in foreign exchange, if carried through completely.

#### 6. Shuttle Manufacture

Discussions were started with a British Shuttle Manufacturer with a view to setting up a shuttle making plant in Tanzania. This would ensure a regular uninterrupted supply of shuttles to the group factories and a consequent reduction in the foreign exchange allocation currently required for importation of this item. Trials with locally obtained woods have been underway since mid 1982 and efforts are being made to have this development sponsored through the United Nations Capital Development Fund. However there is considerable difficulty being experienced in obtaining wood samples for trial as the Tanzania Wood Industries do not seem to have a sense of urgency in this matter.

#### 7. Reduction of Shifts

A decision was made in May to reduce from 3 shift working to 2 shift working in both factories of Tanzania Bag Corporation Ltd. A carefully controlled programme of releasing the poorest performers on each shift was undertaken. When the requisite number of persons had been removed from each shift, at the beginning of August, both factories reverted to 2 shifts. The total production from these 2 shifts was maintained at the same level as that from the previous 3 shifts. The difference in authorised staffing resulting from this was a reduction over the whole company from 1752 to 1310 i.e. a saving of 442 staff.

Due to the ineffective supply of electric power to Mwanza Textiles a decision was taken in August to terminate 1 full shift. After identifying the lowest performers and most recent employees the equivalent of 1 full shift, approximately 900 staff, was released and the factory commenced operation on a 2 shift system from 14th September 1982.

#### 8. Mill Closure

In view of the continued interruption in electricity supply still causing enormous losses at Mwanza Textiles a decision was taken at the end of September to close the factory completely and send the remaining 2 shifts on unpaid leave until sufficient power was resumed. This was effected from 18th October 1982, and the factory remained closed until mid January 1983 when a firm commitment was given by the Tanzania Electric Supply Co. to provide uninterrupted power.

#### 9. Reduction of Staff.

There was a reduction of 350 personnel at Cungefarax in December 1982. This number consisted partly of the balance of workers left from the 4 shift to 3 shift reduction, of whom natural wastage had not taken care, plus a sharp cut back in the general administration and office personnel to trim the overall staffing to a lean and effective team.

10. Garment Manufacture

Ubungo Garments Ltd. had been in financial difficulty for some time, and assistance was given to avoid the possibility of liquidation. An arrangement was made to have cloth, imported under a protocol with Mozambique, financed by a loan against a guarantee by Texco. 80,000 metres of this cloth was immediately resold at a total profit of 2.0 million shillings, mostly to a company debtor against the recovery of over 1.0 million shillings previously outstanding for over a year. This showed an overall improvement within the month of August of 3.0 million shillings. Later in the year a deal was struck with a private garment maker, returning to him jeans material which had been purchased by a Texco company when that garment maker had defaulted on payment previously. The material was sold through Ubungo Garments, but at the made up jeans price thus netting a further 2.0 million shillings profit, as less than 20% of the material had been made up by U.G.I.

The overall profit of 5.0 million shillings (over half a million dollars) gave this company a welcome financial boost for 1982.

11. Kwanze Textiles Rehabilitation

The rehabilitation of the No.1 mill of this company was commenced during 1981, using funds available from the Kuwait Fund for Arab Development. Negotiations were opened with the Fund to extend the withdrawal period from its termination date of December 1982. It was agreed by the end of the year that an extension would be granted, involving approximately 5.0 million US dollars, until the end of 1985.

6.1.3.

During the whole of 1983 this post was in an advisory mode. The first quarter was spent in close contact with the national Director of Operations, appointed to that post from the beginning of the year, effectively handing over the post. During this year also more time has been spent dealing with the Managing Director on day to day management problems.

Halfway through the year the industrial engineering counterpart became available full time and has been mainly involved in the development of an incentive payment scheme for spinning and associated sections in the Killimanjaro Textile Corp.

A full time Work Study Officer training course has been promoted starting mid October and concluding mid December. This will provide a trained work study officer for each of the operating companies together with four trained personnel to work in the companies under development as they are commissioned.

During their first year, 1984, the newly trained personnel will be supervised on their assignments in their individual companies by the counterpart industrial engineer at Texco.



5.2 GROUP TEXTILE TECHNOLOGIST  
OUTPUT NO.2. - IMPROVED PROCEDURES AND WRITTEN GUIDELINES  
FOR QUALITY AND SUCCESS CONTROL.

This post started in early December 1980 and the first incumbent, S. Thorpe, stayed only until mid October 1981. However, whilst that period was not as productive as expected, nevertheless quality controls were instituted on woven cloth processes in Kiltex and Sunguratex in Dar es Salaam. These resulted in specific quality improvements, for example at Kiltex the first grade percentage was increased from 26% to 77% by the end of April 1981. Subsequently a revised weekly information sheet was implemented and all mills commenced using this report. No counterpart was available during the whole of this time.

The replacement expert, T. Hoshiyama, succeeded to the post in early December 1981. During December, January and February visits were made to the textile mills in the Dar es Salaam area, then in March and April visits to Mwanza and Musoma mills took place. Subsequently a programme was agreed based on assessed priority needs for assistance.

The counterpart technologist was finally appointed in March 1982. Apart from immediate recommendations and instructions at the time of and directly after initial visits at all mills, written guidelines were issued after in-depth study at the following companies.

Musoma Textiles	April 1982
Tanzania Bag Corporation	August 1982
Kilimanjaro Textile Corp.(Arusha)	December 1982
Musoma Textiles	January 1983
Musoma Textiles	March 1983

These guidelines in fact consisted of extensive, comprehensive, detailed instructions on measures to be taken and operating procedures to be followed to improve qualities and efficiencies of production in all processes.

Copies of these are available at each relevant company and at Texco headquarters.

All of these instruction manuals have been followed up assiduously by the expert to ensure that correct action has been taken.

Difficulty arose in the case of Lusoma Textiles in the implementation of the improvement programme, where much effort was put in because of the export oriented nature of the output. The managing agency team at that company proved surprisingly deficient in their performance and resistant to instructions or advice. An inordinate amount of time was spent on this company by the expert.

Other group companies in which guidelines have been issued, or are currently being worked on, have been more receptive.

In general there has been great emphasis on the quality improvement of the yarn and cloth intended for the export trade. Texco has been endeavouring to have the product quality standards raised to meet the demanding requirements of the European markets, where considerable amounts of foreign exchange can be earned.

Two other major activities developed for this post, extra to those foreseen by the project document -

- 1) Involvement in the rehabilitation undertakings in two companies.
- 2) For the projects under development, assistance on the preparation of tender documents, evaluation of tenders and recommendation of new machinery and processes.

The companies involved in the rehabilitation work are Mwanza Textiles and Kilimanjaro Textile Corp. in Arusha. At Mwanza alone technical scrutiny and evaluation of machinery and equipment of some five(5) million US dollars value has been involved.

The projects concerned with tenders, evaluations etc. are

Tanzania Sewing Thread.	Terry Towel Project.
Ubungu Spinning Mills.	Tabora Spinning Mills.
Morogoro Polyester Textiles.	Mbeya Textiles.

Recently the expert has been involved in discussions relating to possible cooperation between Texco and the Tanzania Sisal Authority regarding a mill owned by T.S.A. at Korogwe.

The expert reverted to adviser status at the beginning of June 1983. An extension is being sought for this post which is contracted to end early December 1983.

6.3. GROUP TRAINING EXPERT/ DIRECTOR OF MANPOWER DEVELOPMENT  
OUTPUT NO.5. - EFFECTIVE TRAINING PROGRAMME FOR  
SUPERVISORS AND MACHINE OPERATORS.

This post was first filled at the end of December 1980. The expert concerned was J.S. Kristensen. During January 1981 this expert returned home briefly for medical treatment. In June 1981 he was medically evacuated and did not return until August, and after a final deterioration was again medically evacuated in early October. During this period only a small amount of effective work was completed. The post remained unfilled for over six months whilst a replacement was selected, interviewed and appointed.

R. Blackburn was the second expert, arriving at the end of April 1982. It had been agreed previously with the Managing Director of Texco that the new expert would not be appointed, on arrival, to the post of Director of Manpower Development in view of the problems arising with the first expert. However, within two months the performance of Mr. Blackburn was sufficient to indicate that this would be a satisfactory appointment. This was agreed and Mr. Blackburn was confirmed in that position in July 1982.

Again, due to the requirements of this post the activities and outputs covered a much broader spectrum than originally specified. The range of current activities is as follows:-

- 1) LOCALISATION scheme which identifies the progress of counterpart training to replace foreign management, is ready.
- 2) MANAGEMENT DEVELOPMENT and appraisal scheme for all management levels is being prepared.
- 3) IDENTIFICATION OF TRAINING NEEDS system for employees at all levels, throughout the organisation has been provided.
- 4) TRAINING AND DEVELOPMENT PLANNING system to accommodate the identified training needs and the methods to be used has been passed by the training committee.
- 5) MONITORING REGISTERED TRAINEES system for "long term" trainees, i.e. in excess of one year, is ready for implementation.

- 6) SYSTEMATIC OPERATIVE TRAINING manuals are at second draft stage at Tanzania Bag Corp. and first draft at Ubungo Garments.
- 7) MANPOWER PLANNING multi-structure system, indentifying terms of performance for management personnel, labour statistics, job improvement areas and also serving a corporate planning function, is partially complete.
- 8) EDUCATION AND EXTERNAL COURSES information resource has been completed.
- 9) RETRAINING SCHEME on fault tracing, indentifying faults associated with lack of skill at operative and technician level, and provision of remedial training, is ongoing.
- 10) SCHOLARSHIPS maximisation, appropriate to the needs of the organisation is fully implemented with satisfactory results.
- 11) GOVERNMENT POLICIES - liason with Ministry on policy matters affecting manpower development activities.
- 12) EXTERNAL RESOURCES - liason with training agencies, government sectors, machinery makers and similar bodies is promoting facilities beneficial to Texco manpower development.
- 13) PROGRESS REPORTING systems in various manpower development activities are available.
- 14) TRAINING POLICY statements covering the total workforce have been developed and are ready for introduction.
- 15) AT TEXCO HEADQUARTERS a lecture room was designed and the construction and installation of equipment was closely supervised. There are now first class facilities for conducting training courses for all levels of management.

Several counterpart/support staff have been in office since the arrival of the expert, although a national Director for this function has not yet been appointed. The expert reverts to adviser status in November 1983 and the post is due to terminate in June 1984. At that time a full final report will be issued by the expert.

6.4. GROUP MARKETING AND/ OR  
CUSTOMER NO.4. - IMPROVED DISTRIBUTION SYSTEMS.

An unusual situation existed in marketing assistance to Texco. From the beginning of 1980 there was an International Trade Centre marketing expert attached to the Board of External Trade, working specifically for Texco, and very close liaison was maintained with this project.

In September 1980 the first candidate for the UNIDO marketing post was in Tanzania for one month and proved totally unsuitable. The finally selected expert, M. Yashokari, arrived in April 1981, assuming the post of Group Marketing Manager at Texco.

By this time the export marketing developments were underway, and the counterpart had in fact already been working with the ITO expert and had been involved in export marketing missions as follows:-

Southern Africa	September 1980
Selected European Countries	November 1980
Subsequently other missions followed again with the ITO expert as follows:-	
Federal Republic Germany	May 1981
" "	September 1981

Several European Countries  
and U.K. May 1982.

This counterpart worked with both experts as Deputy Group Marketing Manager until the ITO expert left Tanzania and the UNIDO expert reverted to adviser status, both in October 1982. The counterpart at that time succeeded to Group Marketing Manager having been judged competent by Texco, a decision which has since proved successful. Indeed this was the post best served by counterpart appointment amongst all the posts in the project.

The adviser left the project in April 1983. This post was forestortened by 12 months consequent upon the decision, presented by the Government at the Tripartite Review meeting in September 1982, that there was no further requirement for the expert. A well established and competent marketing section has continued since.

A full terminal report on his activity was submitted by the expert in April 1983, which is available at Texco and UNIDO.

6.5. GROUP MECHANICAL ENGINEER

OUTPUT NO.3. - IMPROVED PROCEDURES AND WRITTEN GUIDELINES  
PREVENTIVE MAINTENANCE, ENERGY CONSERVATION AND SPARE  
PARTS SUPPLY.

This was not a post conceived in the original project proposal and design. However the need for such a post became apparent and this was proposed by the CTA early in 1981. The inclusion of this post was agreed at the Tripartite Review meeting in July 1981 and a period of 18 months duration was recommended. Subsequently some considerable time passed before a suitable candidate was identified, accepted and became available.

In fact the expert arrived to take up his appointment mid January 1983. Consequently only ten months have elapsed since the start of this activity. Initial visits were made to all Dar es Salaam mills in January and February and to upcountry mills in May. Each visit resulted in a report giving a complete assessment of the existing state of affairs in each mill from the mechanical engineering aspect and brief recommendations. Subsequently the following outputs have been produced:-

- MARCH Complete, comprehensive routine and preventive maintenance programme and manuals for preparing and spinning machinery for all Dar es Salaam mills.
- APRIL Supplementary manuals explaining maintenance cost control, required staffing, work routines and control system. Foundry and workshop procedures.
- JUNE Maintenance seminar at Dar es Salaam for maintenance staff and storekeepers from all group mills.
- AUGUST Comprehensive maintenance manuals for boiler houses and air conditioning plants for all group mills.

In preparation - preventive maintenance manual for Blankets Manufacturing Co. Ltd.

Maintenance programme for all processing machinery for all group mills.

No counterpart has yet been made available. The expert reverts to adviser status in January 1984. This post is currently planned for termination in June 1984 although efforts are in hand for an extension period.

A full final report on this activity will be presented by the expert on completion.

## 7. RECOMMENDATIONS

The essence of these recommendations can be summed up in the one word CONTROL.

The theme of this project throughout has been to strengthen the National Textile Corporation to ensure control of group companies and to achieve optimum return on their investment as sole or major shareholder.

The Operations Division at Texco is the main vehicle by which this control is exercised. This division, during the past two years, has been strengthened considerably in its technical capability, initially by the appointment of national textile technologists to positions of operations officers and subsequently by the appointment of a technical man to the post of Director of Operations. There is also a strong financial ability now in this division.

Operations Officers are responsible for monitoring and influencing the performance of the individual companies which have been assigned to their care. Strong action is frequently required and there must be sound support for this from the highest authorities in Texco. Resistance is sometimes encountered from managing agents, where there is a tendency to gloss over matters which reflect adversely on their management ability and capacity, or when they consider that they know better and ignore recommendations or instructions. The same is also true of national general management but generally to a much lesser extent. The substance of Group company reports to Texco must be checked diligently, and nothing taken for granted.

A system of weekly production reporting has been in operation for almost three years but lapses on the part of some of the Group companies are encountered. These reports must be presented accurately and on time. Figures received a month or more late can only be regarded as "production reminiscences" and have little value in a dynamic situation where remedial measures frequently require immediate initiation or support by Texco Operations Division. Moreover, late presentation of those figures to Texco may indicate that management in the company itself is also not aware of the operating situation early enough.



The individual group company Boards of Directors should be accurately advised of the situation obtaining in their companies and are an ideal body through which to channel instructions and advice to company management. This is all the more relevant as the Director of Operations holds the position of a Director on all the group company Boards and in some cases the Chairmanship.

In the immediate future strong follow up must be made by the Operations Officers on the currently introduced quality and maintenance control systems to ensure compliance with the recommended procedures.

Strong support should be given to Texco's Industrial Engineer who will have an onerous task for the next twelve months following up the operations of the newly trained Work Study Officers on their return to their own companies and in the initial assignments there.

A Director of Manpower Development must be appointed soon to ensure that the progress being made does not falter and that future effort does not become diluted.

## 8. CONCLUSIONS

The project has been underway for over three and one half years now and will continue as planned with experts in some activities for another seven months. There is, however, the probability of further extension for a short period, again only in one or two activities.

A considerable amount has been achieved by the project staff due to their concerted efforts as a team, notwithstanding the individual, OPAS nature of the posts. A good measure of cooperation and support has been afforded by all Texco management and staff, and, with few exceptions excellent relations and cooperation have been the theme with group company managements.

The problems encountered due to the country's recent and present financial difficulties should not be underestimated and it should be understood that these difficulties will continue for the foreseeable future. Texco will continue to encounter these problems and, no doubt, others not previously experienced. It is certain that Texco has improved the management of its affairs in no small measure due to this project.

It may be suitable for Texco to review its general situation after a period of one or two years and consider how a further phase of assistance could be useful, possibly in a different mode, through the United Nations Development Programme, finances permitting.

Texco controls the leading industrial undertaking in Tanzania and should feature largely in any industry assistance plans of the Government.

Finally the CTA records his appreciation of the support and assistance afforded to him by all the UNIDO team members.

Appendix 1  
NATIONAL TEXTILE CORPORATION  
SERVICE AGREEMENT

AN AGREEMENT made the                    day of                    One thousand  
Nine hundred and                    BETWEEN THE NATIONAL TEXTILE  
CORPORATION a Corporation established under the Public  
Corporation Act, 1969 (hereinafter called "the Corporation"  
and invariably referred to as "Texco") of the one part and  
REGINALD AUDEN RYDER of Tenbury Wells, Britain (hereinafter  
called "the officer") of the other part.

WHEREAS the United Nations Organisation hereinafter referred  
to as " the Organisation" had on the 13th May 1965 (as revised  
on the 29th May 1971) concluded an Agreement with the  
Government of the United Republic of Tanzania (hereinafter  
referred to as "the Government") concerning the provision  
by the Organisation of officers to perform functions of an  
operational executive and administrative character, as civil  
servants or other comparable employees of the Government.

AND WHEREAS Mr. Reginald Auden Ryder had on the 3rd March 1980  
signed a contract with the Organisation as one of the aforesaid  
officers, to provide the services of an Industrial Engineer  
to the Government on the terms spelt out in the said contract  
a copy of which is attached hereto as an Annexure 1.

AND WHEREAS the Government has designated the Corporation  
as an institution in which the officer is going to provide  
the said services, and the officer in his personal capacity  
and with the approval of the Organisation wishes to enter into  
this Agreement to provide to the Corporation the services of  
Director of Operations in addition to duties of an Industrial  
Engineer.

NOW IT IS HEREBY AGREED AS FOLLOWS:

1. FUNCTIONS OF THE OFFICER

The officer who is designated by the Organisation as an Industrial Engineer undertakes in his personal capacity and with the approval of the Organisation to perform in the Corporation duties of Director of Operations.

As Director of Operations the officer will report to the Managing Director and is responsible for ensuring that the Corporation's investments in the Group Companies are safeguarded and that these Companies are managed so as to achieve the maximum rate of return to the Corporation.

The officer will head the Directorate of Operations and will supervise the Group Management Accountant, Group Production Controller, Senior Operations Officer, and Group Marketing Manager.

1.1

Without prejudice to the generality of the foregoing, the officer's principal duties will be as follows.

1.2.

To review with Group Company Management capital expenditures, to ensure that these are evaluated thoroughly and consistently.

1.3.

To recommend to the Director of Planning and Finance a Group Companies Budget consistent with overall planning guidelines.

1.4.

To ensure that Group Company Managements prepare and transmit realistic target levels of performance (production, sales and profits) for incorporation in Texco Annual Plan.

1.5.

To participate in the preparation and review of implementation schedules for approved projects.

1.6.

To direct and co-ordinate the establishment of enterprises, in accordance with agreed project development procedures, including the training and briefing of Management and formulation of plans, policies and targets to ensure operations reach

projected levels.

1.7.

To participate as a member of their Boards, in direction of Group Companies, to ensure that Management is achieving planned levels of performance and supporting national policies.

1.8.

To prepare reports and present to the Managing Director and Texco Board to indicate the financial and operating performance of companies and the action being taken by Management to improve that performance.

1.9.

To make recommendations on matters of operating policy requiring the Managing Director's and Texco Board's decision or approval (e.g. the dismissal of incumbent management, major capital expenditures etc)

1.10

To provide, or assist in obtaining, advice to the Boards and management of Group Companies in preparing and implementing plans and programmes to improve the profitability of their operations.

1.11.

To assist Group Companies in solving specific management and financial problems (including negotiations or liaison with Government and parastatal bodies, Banks and financial institutions, overseas suppliers, etc)

1.12.

To investigate and evaluate possible services or forms of assistance that Texco should provide to Group Companies and to recommend to the Managing Director those that can make a significant contribution to company performance or can be provided most economically or effectively on a centralised basis.

1.14

To perform other duties appropriate to his qualification and experience which the Corporation may call upon him to perform.

2.0 COMMENCEMENT AND DURATION OF AGREEMENT

This Agreement is made for a period of one year from the 1st of March 1982.

3.0 RENEWAL

Three (3) months prior to the expiry of this Agreement the officer shall indicate to the Corporation in writing whether or not, it is his intention to renew the contract and if it is the Corporation's intention to renew this Agreement, the Corporation shall inform the officer of its intention within one month of the receipt of the officer's indication of intent to renew the Agreement.

4.0 PLACE OF EMPLOYMENT

The officer shall be stationed in Dar es Salaam and will be required from time to time to travel Up country and visit Mills under the Texco Group of Companies.

5.0 REMUNERATION

The Corporation shall pay to the officer a basic salary of shs.4,100/- (shillings four thousand one hundred only) per month subject to deductions of income tax and house rent.

6.0 LIVING QUARTERS

The Corporation shall provide a house or flat furnished with basic hard furniture and the officer shall be required to pay 12½% of his salary as rent.

7.0 SERVICE AND SECRECY

7.1

During the continuance of the Agreement the officer shall devote his full time to his duties as specified in Clause 1 hereof and shall do all in his power to promote, develop and extend the business of the Corporation and shall not directly or indirectly engage and/or be concerned and/or be interested in any other business of any kind whatsoever except with the consent of the Corporation previously obtained.

7.2

The officer shall not without the consent of the Corporation divulge any matters concerning the business of the Corporation which come to his knowledge in the course of discharging his duties except so far as may be necessary and proper for the conduct of the business of the Corporation and the officer pledges himself to absolute secrecy on all such matters.

7.3

Upon the termination of this Agreement from any cause the officer shall:

- 7.3.1. Forthwith deliver to such person or persons as the Corporation shall indicate all documents, accounts and any other property of the Corporation entrusted to him and
- 7.3.2. he shall make a note of the position in respect of all pending matters with which he dealt and deliver such note to the said person or persons indicated by the Corporation:
- 7.3.3. In the event of non-observance or contravention by the officer of the provisions of this clause the officer shall be liable to the Corporation for any damage the Corporation may suffer as the result of the officer's non-observance or contravention of the said provisions.

8.0

RIGHT OF THE CORPORATION TO RECOVER FROM THE OFFICER  
PERCUNARY LOSS AND/OR DAMAGE SUFFERED BY THE  
CORPORATION DUE TO THE OFFICER'S NEGLIGENCE OR  
BREACHES OF DUTY:

Where the Corporation suffers any loss or damage as a result of non-compliance by the officer of any order, instruction or direction given to him by the Corporation or as a result of any neglect of duty whatsoever on his part, the Corporation may require the officer to make good such loss or damage (or for such part thereof as the Corporation may decide to make the officer liable) by withholding such portion of his salary every month as the Corporation may decide until the officer's liability is fully discharged.

PROVIDED HOWEVER THAT should the officer dispute liability, the matter shall be referred to an arbitration tribunal composed of three members, one nominated by the Organisation and the other by the Corporation. The Chairman of the Tribunal to be elected by the arbitrators so appointed. The decision of the said tribunal shall be final.

9.0. INSTRUCTIONS

The employee pledges himself unconditionally to follow all instructions regarding the business of the Corporation in its widest sense given or to be given to him generally and specifically either by the person for the time being holding the position of Managing Director of the Corporation or by any person whom the Corporation has placed or may place in a position of authority over him and use any power of attorney given to him by or through the Corporation only within the limits of such general and specified instructions. The officer shall be personally liable to the Corporation for any disobedience to or any deviation from such instructions.

10.0 TERMINATION OF AGREEMENT

This Agreement may be terminated by each of the parties hereto by giving a three month notice to the other in writing.

11.0 TRAVELLING ON DUTY AND TRAVELLING ALLOWANCE

When travelling on duty the officer shall be provided with such transport facilities as may be prescribed. The officer shall also be paid the prescribed subsistence allowance. The rates applicable are those prescribed by the Standing Committee on Parastatal Organisations (SCOPC) in Tanzania.

12.0 PROPER LAW

This agreement shall be construed for its meaning and effect in accordance with the laws of the United Republic of Tanzania.

IN WITNESS WHEREOF the parties hereto have hereunto set their hands this                    day of                    One Thousand Nine Hundred and                    in the presence of:



	1980					1981					1982					1983					1984																													
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D		
CTA/ Ind. Eng.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
I.F. C/part D.O.																									C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Textile Tech.						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
C/part.																		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Train. Expert.						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Supp. Staff.						S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Market. Expert.													X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
C/part.	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Mech. Eng.																									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
C/part.																																																		
Tr. Ins. Adviser																																																		

APPENDIX 3

UNIDO PERSONNEL

R. A. Ryder.	U.K.	Chief Technical Adviser/ Industrial Engineering.
K. Vaahtokari.	Finland	Textile Marketing.
S. Thorpe.	U.K.	Textile Technology.
T. Hoshiyama.	Japan.	" "
J. S. Kristensen.	Denmark.	Textile Training.
R. Blackburn.	U.K.	" "
M. Elsaadaney.	Egypt.	Mechanical Engineering.
P. Smith.	U.K.	Textile Institute Adviser.

TEXCO COUNTERPART/SUPPORT PERSONNEL

S. H. Nkya.	Managing Director.
A. P. Ng'wandu.	Director of Operations.
B. Mhina.	Industrial Engineer.
S. F. Mwalongo.	Group Marketing Manager.
N. C. Ng'homango.	Textile Technologist.
L. J. Kasulwa.	Education Officer.
I. S. Mbagile.	Technical Training Officer.
S. A. Sadallah.	Manpower Development Officer.

APPENDIX 4

MAJOR ITEMS OF EQUIPMENT PURCHASED BY UNLDC

U.S. DOLLARS.

Textile Testing Equipment (Various)	10,900
Photocopier and Accessories.	4,600
Paper Shredder.	1,000
Punch Bind Machine and Accessories.	1,900
Shuttle Truing Machine.	4,800
Voltage Regulator	1,000
Overhead Projector and Screens.	1,700
Video and T.V. Monitor.	1,300
Film Projector and Screen	1,600
Peugeot 504 Estate.	8,000
Toyota Landcruiser.	7,000
Total to date.	43,800

Transferred to this project temporarily from other projects

Toyota Landcruiser	6,400
Peugeot 504 Estate	8,700
Air Conditioner	600

APPENDIX 5

STUDY TOURS

April 1982	Study market for Textile Product in Europe	A. M. Mtandika Spinning Manager Mwanza Textiles.
Aug. 1982	Study training facilities in France/Belgium	A. Wamunza General Manager Musoma Textiles.
Sept. 1982	Study shuttle manufacture in United Kingdom.	S. H. Nkya Managing Director Texco.
Oct. 1983	Attend International Textile Machinery Exhibition in Milan.	S. H. Nkya Managing Director Texco.

APPENDIX 6.

SUB CONTRACTS

Carried out by Fielden House  
Productivity Centre U.K.

Cost  
US Dollars

September 1982 - 7 weeks duration	Sewing Machinist Instructor training course for the Group Garments Manufacturing Operations	14,000
October 1983 - 8 weeks duration	work Study Officers training course for selected personnel in all group companies	14,000
November 1983 - 3 Day duration	work Study Appreciation course for top management from Texco and group companies	

A negotiated price reduction on the first quoted course (from US dollars 19,000) subsequent to the course being conducted, enabled the quoted work study course to be carried out.

