Document of

COMMON FUND FOR COMMODITIES

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IMPROVEMENT OF COTTON MARKETING AND TRADE SYSTEM IN EASTERN AND SOUTHERN AFRICA

Uganda and Tanzania

(to be financed under the First Account Net Earnings)

FINAL APPRAISAL REPORT

Date: 6 December 1999

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CURRENCY EQUIVALENTS
(November 1999)

USD 1	=	UGSh 1485
USD 1	=	Tsh 793

WEIGHTS AND MEASURES

1 kilogramme	=	2.204 pounds
1000 kg	=	1 metric tone (mt)
1 kilometre (km)	=	0.62 miles
1 meter (m)	=	1.09 yards
1 square meter (m^2)	=	10.26 square feet
1 bale of cotton	=	185 kilogram

ABBREVIATIONS AND ACRONYMS

AWP/B	=	Annual Work Plan and Budget
CFC	=	Common Fund for Commodities
FAQ	=	Fair Average Quality
ICAC	=	International Cotton Advisory Council
ICB	=	International Competitive Bidding
CDO	=	Uganda Cotton Development Organization
PCR	=	Project Completion Report
PEA	=	Project Executing Agency
PTA Bank	=	Eastern and Southern African Trade and Development Bank
SB	=	Supervisory Body
SOE	=	Statement of Expenditure
TCLSB	=	Tanzania Cotton Lint and Seed Board
Tsh	=	Currency of Tanzania (Shilling)
TOR	=	Terms of Reference
UGSh	=	Currency of Uganda (Shilling)

UNOPS	=	United Nations Office for Project Services
USD	=	United States Dollars

Summary

The International Cotton Advisory Council (ICAC) submitted the following project proposal with its recommendation for financing through the First Account Net Earnings of the Common Fund For Commodities (CFC). The Standing Committee of the International Cotton Advisory Council agreed to sponsor the project at its 420th meeting in December 1996. The project was approved by the Executive Board of the Common Fund for Commodities at its Twenty Third Meeting held in Amsterdam from14 to 15 July 1997. A mission to Uganda and Tanzania was conducted by the Common Fund for Commodities in August 1997 to ensure that the project met current conditions and demand and to make sure that the participating governments would not exceed the limits and conditions established by the International Monetary Fund (IMF) for loan financed projects in Least Developed Countries. A revised implementation arrangement for the project was approved by the Executive Board in its meeting on 11 - 13 October 1999.

Project Title	:	Improvement of Cotton Marketing and Trade System in Eastern and Southern Africa
Sponsoring Institution	:	International Cotton Advisory Council (ICAC)
Project Executing Agency	:	United Nations Office for Project Services (UNOPS)
Collaborating Institutions	:	Uganda Cotton Development Organization (CDO) Tanzania Cotton Lint and Seed Board (TCLSB)
Supervisory Body	:	ICAC
Location of the Project	:	Uganda & Tanzania (with training and dissemination programmes in other cotton-producing countries of Eastern and Southern Africa)
Duration of the Project	:	Three years
Objective and Scope of the Project	:	The central objective of the project is to increase the benefits to cotton producers, mainly smallholders, in Eastern and Southern African countries through the establishment of a transparent and efficient marketing system within the framework of a liberalized market. The implementation of the project will lead to: improved access to the

international market; reduced technical and price risks associated with cotton trade and marketing; increased revenues for smallholder cotton producers, small to medium sized traders and cotton exporters. Additionally, the project will strengthen public and private institutions to operate in a liberalised market environment.

The project comprises the following components: (i) promotion of a privately-run warehousing system and establishment of a collateralizable warehouse receipt system; (ii) development of a basic information system for cotton production and marketing; (iii) development of a cotton quality assurance and quality certification system; (iv) development of a system of cotton trade financing based on inventory collateralization and a warehouse receipt system; and testing of the system through pilot trade financing; (v) project co-ordination, supervision and monitoring; and (vi) project execution, staff training in Uganda and Tanzania and dissemination of project results among cotton producing countries of Eastern and Southern Africa.

Total Cost of Project	:	USD 24,811,059		
Amount of Fund Financing	:	(i) Grant	USD 3,609,585	
		(ii) Loan up to	USD 5,717,250	
Co-financing	:	Regional/Local Banks	USD 14,356,755	
		ICAC:	USD	15,750
Counterpart Contribution	:	Government of Uganda:	USD	729,519
		Government of Tanzania:	USD	382,200
		Total	**USD**	**1,111,719**

I. PROJECT BACKGROUND

1. In April 1996, the Fund and ICAC had discussions on the possibility of assisting Eastern and Southern African countries in improving their cotton marketing and trade systems. At the same time, a similar proposal was received from the ICO for coffee producers in Eastern and Southern African countries. Both projects were found suitable for support within the framework of the First Account Net Earnings initiative, and complement each other in providing replicable systems for marketing agricultural crops. Cotton is an annual crop with considerable input requirements and high demand for production management and would complement the similar project for coffee, which is a perennial crop with relatively less demand for inputs and management. The two crops taken together would provide good experiences for the region in marketing and trading storable agricultural commodities. Both the ICO and ICAC proposed Uganda and Tanzania as pilot countries to test the improved marketing and trading system.

2. In June 1996, the Executive Director of ICAC visited these countries, *inter-alia*, to identify the specific issues to be addressed in each country. The Executive Director noted keen interest in the countries to promote effective cotton production, marketing and trade. The main issues to be addressed in Uganda were identified in a meeting attended by the government institutions and the private sector. The central issues identified related to (i) information at both production and marketing levels. Prior to liberalization, basic planning information was available from the government and this important service ceased under the liberalization reforms and has hampered private sector operations in planning and in carrying out their business; (ii) credit for the purchase of inputs. Cotton is a highly demanding crop in terms of cash inputs, particularly for seeds and chemicals, which most smallholders are unable to finance from their own family resources. Thus, smallholder credit is an important element to improving production. For example, a failure to spray due to financing problems, may result in a complete crop loss. Smallholder credit has been promoted in the past through linkages of production and market operations, usually through co-operatives. The liberalization of markets has meant that production and marketing operations cannot be harmonized as was originally the case, which has heightened the default rates on credit. Measures need to be developed to link the production and marketing operations and facilitate access to credit facilities to poor smallholders and small scale traders; (iii) quality standards are another problem. A system for ensuring production, processing and storage practices that will assure good quality cotton need to be established; (iv) the organization and promotion of a system of consultation between industry operators and government will facilitate the necessary co-operation between the public and private sector to develop a thriving cotton sector. The visit to Tanzania confirmed the findings in Uganda.

Consultation with the World Bank

3. Noting the World Bank's involvement in its macro-economic and policy work and in particular those affecting market liberalization, its previous work on sectoral studies touching on commodity market and trade issues, and its operational capacity to provide support in the type of project envisaged, joint ICAC/CFC consultations were held with the Commodity Policy and Analysis Unit of the International Economic Department; and units of the Operations Department responsible for the Eastern and Southern Africa

region, of the World Bank. The consultations proved to be very useful and the World Bank expressed its interest to cooperate with the Fund and ICAC in providing assistance to the countries to improve their cotton marketing and trade.

Consultation with PTA Bank

4. PTA Bank started its investigations of measures to assist its member countries in promoting effective commodity development and marketing in 1992. It has specifically initiated some pilot operations in trade finance and price risk management for coffee and cotton in Uganda and Tanzania. Discussions were held with the bank to share its experiences and to identify the specific problems of trade finance in the region. The discussions proved to be very useful in problem identification and in providing guidance on issues that the project may address in dealing with credit default and contract performance risks. The Bank expressed its willingness to co-operate with the Fund and ICAC in the formulation and implementation of the project.

Consultations with Governments and the Private Sector in Tanzania and Uganda

5. In June 1996, the Fund held detailed discussions with the two countries proposed
as participants in the project. Problems arising from commodity market liberalization, with particular reference to cotton were discussed. The points enumerated above in paragraph 2 were reconfirmed as the key areas to be focussed by the project. It was also agreed that these points were, in general, applicable to other commodities and therefore the results of the project would have applications in addressing commodity marketing issues in general, with some modifications to respond to the technicalities of specific commodities. It was therefore agreed that for cost effectiveness, the project be designed and co-ordinated with the similar project for coffee. In August 1999, a further mission was sent to the two countries in order to prepare for the start-up of the project under the new Project Executing Agency.

Review by Consultative Committee

5. The 420th meeting of the ICAC Standing Committee approved the project proposal and recommended it for submission to the Fund for financing. The proposal was submitted to the Fund in December 1996. The Fund's Consultative Committee considered the project proposal during its eighteenth meeting between 20-24 January 1997 and provided the following comments.

> "The Committee expressed satisfaction on the extensive work done to develop the project proposal. It was also encouraged by the fact that World Bank and IFAD are involved on the production side of cotton in the region, an essential complement to the cotton marketing project. The Committee felt that the project was in a maturation stage and recommended that project formulation work proceed with a view to elaborating a full project proposal. Among others, the concept of the revolving fund must be further substantiated; in this context, the possibility of a CFC loan needs to be assessed. While the Committee noted that

the co-ordination of the coffee and cotton project work is institutionalized with the establishment of a co-ordinating committee at the policy level, the need for co-ordination at the field level was also emphasized. Finally, the discrepancies concerning objectives, central issues and project components have to be solved during redrafting."

Follow-up on Recommendations of Consultative Committee by ICAC

6. Considering the need to co-ordinate project execution with that of a parallel coffee project, ICAC approached PTA Bank, the proposed PEA for the coffee project, to also serve as PEA for the ICAC sponsored project. PTA Bank agreed to act as the PEA. An Appraisal Mission organized by ICAC, in which both the Fund and PTA Bank participated, visited Uganda in February/March 1997 and produced a revised project proposal which was submitted to the Fund by ICAC in April 1997.

Recommendations and Decision of the Executive Board

7. The project was submitted to the Common Fund for Commodities' Executive Board at its Twenty Third Meeting held in Amsterdam on 14 and 15 July 1997, with the Managing Director's recommendation for approval. The Executive Board approved the project as contained in document CFC/EB/23/4 with a grant of SDR 2,595,947 and a loan of SDR 4,111,739 as contained in its Decision EB/XXIII/2. In approving the loan, the Board raised the following issues:

- CFC would have to ensure that the participating governments would not be exceeding the limits and conditions established by the International Monetary Fund (IMF) regarding borrowing by signing on this loan; the Executive Board would have to be informed about the progress in fulfilling this condition.

- Particular attention should be paid to quality control and a warehousing system, involving the private sector. The legal framework should be clearly defined;

- The ability to repay the revolving trade finance loan should be carefully evaluated;

- The Secretariat would streamline the organisational structure of the project;

- The project should be closely monitored during implementation, particularly in view of the novelty of this approach.

8. It was clarified during the discussion that the Marketing Boards involved in the implementation of the project were different entities compared to their structure in previous years, now having a more regulatory function, they cover only a small percentage (around 15%) of trade.

9. Experience from a project on Cocoa in Côte d'Ivoire, financed by the European Union, would be taken into account. The representative of the European Union would provide full information on their project.

Follow up to Recommendations and Decision of the Executive Board

10. The Common Fund undertook a fact finding mission to Uganda and Tanzania in August/September 1997 in order to establish, *inter alia*, the precise nature of the conditions established by the International Monetary Fund for loan financed projects in these two countries; to discuss the streamlining of the organisational structure; and to make an assessment of whether the project still met the current conditions and demand in the countries concerned. The mission determined that, according to the strict lending conditions determined by the IMF for Uganda, the proposal for loan financing would have to be revised.

11. It was also found that the requirement for a loan financed (pre-finance) component was no longer considered to be a prerequisite within the framework of the project but had rather become a non-essential auxiliary element. Local banks (and local branches of the larger international banks) were found to be mobilising themselves to establish specialised trade finance facilities and were increasingly attracting significant lines of credit from off-shore, international, regional and development banks, effectively acting as agency banks in the region. As a result, the requirements for any additional loan finance required from the CFC would have to be carefully evaluated during project implementation.

12. The Fund received notification from the Ugandan government, by written communication of 22 December 1997, that the revisions proposed to the terms and conditions of the loan were in line with the IMF's loan conditionality and would therefore be acceptable. Since it may still be necessary to provide some loan finance, for example during the peak in the commodity cycle when demand for liquidity is most acute, the Fund has therefore maintained its budgetary provisions for an element of loan financing. In the course of the project's implementation, the modalities for the Fund's loan provisions will be further explored and, if there is a perceived need, for example for small scale micro-credit schemes, loan agreements will be negotiated within the strict IMF criteria. Noting the concerns of the Executive Board, the associated risks and capacity of the clients to repay any loans would have to be critically evaluated and assessed.

Change of Project Executing Agency

13. The Project Agreement was signed in March 1998, but no progress was made in the start-up of project activities. The PTA Bank announced its withdrawal as Project Executing Agency in January 1999. Subsequently, the Fund and the ICAC reached agreement with the United Nations Office for Project Services to act as the PEA for the project. This was reflected in the decision by the Executive Board (Decision EB/XXVIII/13) taken in its meeting of 11 - 13 October 1999.

14. Furthermore, it was decided that the project could start initially without the commitment of financial institutions to provide co-financing through trade finance credit and in the country where otherwise the conditions for disbursement had been fulfilled .

During the initial phase, the PEA, supported by the ICAC and the Fund, will identify local and international banks to participate in the project with trade finance credit. The Executive Board wished to be kept informed about the developments.

II. DEMAND AND SUPPLY AND PRICES FOR COTTON; AND RELATION OF PROJECT TO THE ICAC AND CFC POLICIES AND OBJECTIVES

A. Overview of Cotton Production, Demand and Prices[1]

15. Cotton is a major agro-industrial crop produced in both developing as well as developed countries. As one of the world's most important textile fibres, accounting for more than half of all fibres used in clothing and household furnishings, cotton is also used in industrial fabrics and products and by-products are derived from cotton seeds and stalks for edible oils, soaps, firewood, paper and high protein animal feed supplements. The world cotton industry provides employment opportunities for hundreds of millions farmers and to allied industries such as agricultural inputs, machinery and equipment, transportation, storage, ginning, baling, seed crushing and textile manufacturing. Cotton is produced in approximately 80 countries and serves as the economic mainstay of many regions and nations. In some countries, such as Mali, cotton represents more than 50% of national export income. Over 75% of world cotton production occurs in developing countries and the farm-level value of world cotton production has been estimated at USD 30 bn.

16. Total world output of cotton was recorded at 18.47 million tons in 1994 and was estimated to reach 19.32 million tons in 1995. The United States and mainland China were expected to produce 44.5% of the 1995 output. Forecasts for increases in output during the last half of this decade from the USA, India, Pakistan, Australia, Argentina, China, Brazil, Egypt, Turkey and the Central Russian Republics, however, may not materialize due to boll-worm pest in China and leaf curl virus damage to the cotton crops in India and Pakistan. Output in Uzbekistan, one of the world's five biggest cotton producers, has fallen due to environmental degradation and economic difficulties.[2] Based on the average of the last three years' figures, cotton is one of the few major commodities whose global production more or less matches world mill consumption. In 1995, production and demand for cotton are believed to have been in balance with consumption estimated at 19.31 million tons against 19.32 million tons of production.

17. The cotton market is dominated by major consumers, with China accounting for about a quarter of the world's mill consumption. Other major buyers of cotton are South Korea, Taiwan, Japan and the EU, with USA coming out as a net exporter despite its high mill consumption. Mill consumption in the developing countries, particularly in Africa, is limited due to the lack of modern textile mills.

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[1] *Cotton Review of the World Situation, published by ICAC (selected issues: September - October 1994; November - December 1994; and January - February 1995) Washington DC, USA; and World Bank Commodity review October 1995*

[2] *According to ICAC, the harvested area in Uzbekistan fell by a quarter between 1987/1988 and 1993/1994 crop seasons and reached 1.53 million hectares. The government of Uzbekistan has set a planting target of 1.5 million hectares in 1995, 2% less than the actual planted area in 1994. Less cotton will be available from Central Asia under barter arrangements and could lead to increasing prices for Central Asia cotton in Europe.*

18. Due to the decline in China's production in 1995, this country is expected to import 600,000 tons of cotton to meet its domestic demand. This is a considerable volume, representing 10% of world exports. Three years ago, China was a net exporter but this shift in China's trade accounted for up to one half of the 70% increase in world prices over the past three years.

19. The trend in African cotton production has been rising over the period 1991/1992 to 1995/1996 and ranged from 1.26 million tonnes of ginned lint in 1991/1992 to 1.54 million in 1995/1996. The major producers of cotton in Africa are Egypt, Mali, Côte d'Ivoire, Benin, Zimbabwe, Sudan, Burkina Faso, Chad and Cameroon. These countries accounted for about 77.5% of African cotton production in 1995/1996. In Eastern and Southern Africa, fourteen countries are cotton producers including Sudan, Angola, Central African Republic (CAR), Madagascar, Burundi, Ethiopia, Kenya, Mozambique, the Republic of South Africa, Tanzania, Uganda, former Zaire, Zambia and Zimbabwe. These countries accounted for 23% of Africa's output in 1995/1996. The major producers in the sub-region are Mozambique, Sudan, Angola, South Africa, Tanzania, Ethiopia, Zambia, Zimbabwe and Uganda and account for over 90% of the sub-regions output in 1995/1996.

20. ICAC's cotton consumption estimate for 1995 was 18.9 million tons, 400,000 tons above forecast 1995 production, and hence global stocks were expected to fall from 6.9 million tons in 1994 to 6.8 million tons in 1995. Although production was expected to rise to 19.3 million tons in 1996, consumption was also expected at about the same level as anticipated output. Thus, strong market pressures on global cotton stocks was expected as world economic growth gained momentum. The expected 10% drop in Chinese cotton production for 1995 to about 4 million tons was also expected to keep China's imports high during the 1995/1996 season. Despite the expected increases in production, as a result of previous year's high prices, the increased output of cotton in 1995/1996 was projected to be marginal. This was a result of lower yields in USA following insect damage in Alabama and Mississippi and bad weather in Texas. The USDA estimated 1995/1996 crop at 4.17 million tonnes was about 3% below the 1994/1995 crop. China was not expected to record increased production as projected, although production in Africa, Latin America and South Asia could continue to sustain increases. The estimate for world production in 1995/1996 was about 19 million tons.

21. The prices of *medium staple* cotton declined in the first half of the third quarter of 1995, but rose again in the second half of that quarter in response to lower than forecast output. When adjusted for inflation, however, cotton prices have declined dramatically since the 1950's, reflecting growth in the use of chemical and man-made fibres and rapid increases in the yields and productivity, not matched by consumption. More recently, as world population and income growth have contributed to increases in the demand for natural cotton, lower production in the 1990's resulted in an average Cotlook quote between 1994/95 to 1997/98 of 84 US cents/lb. Expressed in 1997 US dollars, the Cotlook A index has fallen from close to USD 4/lb in the early 1950's to its average of about 80 cents/lb in 1997/98. *Extra fine* cotton prices were quoted in the third quarter of 1995 at more than 20% above the 1994/1995 average and supplies of extra-fine cotton were expected to remain tight in 1995/1996 as a result of low stocks, although a slight increase in output of 4% was expected. India was expected to import more extra-fine

cotton due to its poor cotton harvest. The general outlook is that world cotton production and consumption of cotton are rising and appear to be in relatively close balance, resulting in little change in the ratio of end-stocks outside mainland China. If this holds through the 1997/1998 season, cotton prices may remain fairly stable. On the other hand, the rise in cotton prices to record levels in 1994/95 may signal a continued decline, despite the relatively tight stocks and continued imports by China.

B. The Relation of the Proposed Project to the Objectives and Policies of the Common Fund's First Account Net Earning Initiative

22. The project seeks to address the main constraints to the effective marketing of cotton. The system to be developed will be applicable, in general, to other field crops in the region and will therefore be replicable, with the necessary adjustments to respond to the specific technical production and marketing needs of other agricultural commodities. The results of the pilot project proposed will therefore find applications in other commodities as well as other developing countries, particularly in least developed countries. The constraints to be addressed have been identified by the countries concerned, major international cotton traders, financing institutions, local traders and producers. Such constraints cover institutional weaknesses, lack or inadequacy in the legal framework, inadequate quality controls and quality certification, poor access to trade credit particularly by the small to medium scale local traders, and other market imperfections. The project will provide a replicable approach to address these problems. The measures to be introduced will enhance commodity market performance; and increase the earnings of farmers, local traders and producing countries from cotton production and exports. These are the central objectives of support envisaged under the Net Earnings of the First Account.

23. The policy, in particular the micro-policy aspects, will focus on operational measures to: strengthen the relevant institutions, including human resource development; update the legal and policy framework; and expand commodity trade finance, so that the foundations will be laid for more effective marketing and trade in cotton in the future. The project will provide tested measures to minimise the technical and market risks. The project will catalyse assistance from other donors and financiers and domestic financing institutions in support of measures to enhance cotton market development and trade in developing countries. The proposed project therefore supports the Fund's general objective and policy of using its assistance as a catalyst in promoting wider support to commodity development efforts.

C. The Relation of the Proposed Project to the Objectives and Strategy of ICAC for Cotton Development

24. The development and maintenance of a sound world cotton economy is one of the major policy objectives of ICAC. The proposed project is designed to improve cotton marketing in countries of Eastern and Southern Africa, where cotton is an important part of the economy. The project will address issues relating to the legal framework and improve access to production and trade credit to farmers, traders and ginners. Price risk management mechanisms will be enhanced and adequate provisions for quality control measures will be made. Improved access to credit will lead to increased plantings, wider and improved use of inputs and modern cotton growing technologies. As a result, the project will enhance the sustained production of high quality cotton which will contribute to the world cotton economy, through improved productivity (better yields, quality and higher volumes of output per unit of inputs) leading to reduced unit costs of production and increased revenues for cotton producers, traders, ginners, merchants and governments. The reduction of risks associated with cotton production and marketing and wider dissemination of basic market information, will enhance market performance and the competitiveness of cotton in relation to man-made fibres. ICAC will actively promote the results of the project among cotton-producing developing countries and

thereby enhance a more stable cotton market. As a result, cotton producers, traders, ginners, merchants and other stakeholders in the world cotton economy will benefit from more stable and improved cotton market. The objectives of the project are therefore in full conformity with ICAC’s strategy for cotton development.

III. COTTON PRODUCTION, DEMAND, FUTURE PROSPECTS, POLICIES AND ISSUES IN UGANDA

A. Review of Production and Demand Over the Last Ten Years and Structure of Production (smallholder/estates)

25. Cotton was introduced into Uganda in 1903 and dominated the economy as a leading cash crop and foreign exchange earner until the 1950's, when it was superceded in its importance to the agricultural sector by coffee. With intensified research efforts and extension services during the 1960's, the cultivated area was expanded to over one million hectares by the end of the decade, the yield (of seed cotton) per hectare reached a peak of 440 kg/ha in the 1972/73 season and Uganda produced over 75,000 tons of cotton lint that year.

26. However, the subsequent political and economic turmoil reversed this progress to such an extent that total production during the 1987/88 season, at just over 11,500 bales (or 2,000 tons), was the lowest recorded cotton output in Ugandan history. The cultivated area fell further, from the 300,000 ha planted in the early 1980's to just 70,000 ha in 1993/94. Since this historical low, production has begun to recover, doubling from 5,000 tons in 1993/94 to 10,000 tons in 1995/96 and was expected to rise to 18,000 tons in 1996/97. The total value of the 1996/97 cotton lint output, ex-ginning mill, was estimated at close to USD 25 million at prevailing international prices.

27. Domestic demand for cotton reached a record peak of about 65,000 bales in the 1973/74 period. In the years between 1965 and 1973, annual local consumption ranged between 40,000 and 65,000 bales. By 1969, Uganda had at least 3 reputable textile mills, one spinning mill and several weaving and garment industries. The country has satisfied its domestic requirements for cotton over the last ten years, while exporting a substantial volume of high quality cotton. The political and economic turmoil during the 1970's and 1980's disrupted local processing capacities and led to a reduction of domestic cotton consumption, declining from 15,000 bales in 1987/88 to just 2,800 bales in 1994. Although cotton consumption averaged close to 2,000 tons during the 1980's and declined to less than 1,000 tons during the first half of the 1990's, it was projected to rise back above 2,000 tons in 1996/97.

28. The textile and spinning sectors shared equally in the macro-economic decline of the period. They gradually ground to a halt up to 30 June 1995 when the last surviving Nytil Jinja wound up its operations. Under the government divestiture policy, some of these mills were sold off to the private sector, raising hopes of an increase in domestic demand. Prospects for setting up other cotton related industries have also improved. In 1996/97, 26 ginneries were in operation under the ownership of co-operatives and private sector companies and/or individuals. Textile mills have also started to be reconstituted. The demand for cotton seed for planting and crushing is determined by the number of crushing mills in operation and several more are due to start operation over the next few years.

29. Cotton production in Uganda is mainly carried out by smallholder families, which operate on average land holdings of 0.5 to 2.0 ha. There are estimated to be some 4.5 million farmers in Uganda accounting for more than 90% of agricultural output, of which it is estimated there are between 100,000 and 300,000 farming families engaged in cotton production. Cotton is usually inter-cropped with other cash and food crops and competes for the limited resources of land and family labour, typically absorbing the highest proportion of family labour. Traditional farming practices are based on hand-hoes, pangas and axes as the predominant mode of cultivation. A few farmers now adopt oxen-based cultivation practices and, in even fewer cases, tractors are utilized. No fertilizers are used in cotton production, which is typical of the agricultural sector in general, where despite diminished soil fertility and the recommended use of pesticides, few farmers can afford to buy the necessary inputs.

30. The average cotton growing household allocates between 10% and 25% of his farm land to cotton to complement other crop and animal production activities. Income generation remains the overriding objective for inclusion of cotton in the farming system. Cotton is often used in crop rotation cycles: Cotton-Cereals-Cotton-Legumes-Fallow. Alternatively, other crops including sim-sim, millet and groundnuts may be incorporated. For most of the cotton growing districts of Eastern and Northern Uganda and regions of Mara, Mwanza, and Shiyanga in Tanzania, there are no reliable alternatives to cotton as cash crop.

31. Efforts have been made to revive cotton production since 1986/87 in Uganda but a steady rise only became apparent from the 1993/94 season. The low prices paid to farmers in earlier years, *inter alia*, constituted a major disincentive to farmers increasing their output. It has been estimated that Uganda has the potential to cultivate over one million ha of cotton, engaging up to 2 million farming households in cotton production, provided that adequate improvements are introduced to the production and marketing systems. Poor production technologies have been one of the principal reasons for the low average yields in the Ugandan cotton sector but, even under existing conditions, cotton remains a crop of significant economic importance.

32. The impacts of government efforts in promoting cotton production during the last ten years remained limited as these programmes, including Ginnery & Textile Restructuring (1980) and the emergency Cotton Production Programme (1985), focussed only on production aspects. The marketing problems and pricing issues were not addressed. The government, concerned about the poor cotton sector performance, despite considerable resource allocations in the period between 1987/88 and 1993/94, changed its approach of promoting production without adequate attention to the benefits to producers in 1994. The same year, the government introduced the Cotton Sub-Sector Development Project (CSDP), which adopted a comprehensive balanced strategy to overhaul the cotton industry from research and development through to exports. As a result, the yield and output of cotton has shown a modest but steady increase since 1994.

33. The yields and costs of seed cotton vary across regions according to agro-climatic conditions, varieties of cotton planted, inputs used and cultivation practices employed. Yields of seed cotton vary between 600 and 1500 kg/ha, depending on cultivation practices and pesticide applications. Farmers' production costs range from a

base cost of USD 90/ha, using manual labour and with no pesticides, up to USD 170/ha, using tractors for land preparation with the recommended (three) pesticide applications. This corresponds to an approximate production cost of US cents 15 to 17/kg for seed cotton and an equivalent cost of US cents 45 to 51/kg for cotton lint. The result is a highly variable net income to farmers, estimated at between USD 83/ha and USD 360/ha, within the range of prices US cents 30/kg to 35/kg received by farmers in the 1996/97 season.

34. Agro-climatic factors and management practices have a significant impact on observed variability in yields. Seed cotton yields as high as 2,600 kg/ha have been recorded in the rich volcanic soils at the foothills of Mount Rwenzori, in the Kasese region and as low as 400 kg/ha in the infertile and nutrient exhausted soils of Eastern Uganda. Yields in the Northern and North western regions average 700 kg/ha.

35. There are 3 principal varieties of cotton produced in Uganda, including 2 types of BPA, BPA 85 and BPA 89, which are predominantly cultivated in the West, Central and Eastern regions; and SATU, which is produced mainly in the drier North, Northeast and West Nile regions. Both types are of a medium long staple length averaging 30-35 mm but BPA is an average 2 mm longer and finer than SATU. In the Western region, BPA 89 is distributed in Kasese District and BPA 85 in Masindi and Hoima Districts, respectively. The Central region has BPA 85 distributed across all its districts while BPA 89 is distributed through all the districts of the Eastern region, except for Soroti and Kumi Districts, which both cultivate BPA 85 and Serere county, which has about 10,000 ha of SATU currently being multiplied. In the Northern region, BPA 89 is grown in Apac and Lira with the exception of 2 counties which grow BPA 85. Gulu and Kitgum Districts both grow BPA 85 while the West Nile region has a mixture of BPA and SATU varieties.

36. Measures which could be employed to ameliorate some of the constraints to production include: increased application of (in)organic manure, particularly where soil fertility is low; adoption of improved production technology; breeding high yielding/ginning clones; sensitising farmers on improved planting practices; improved crop management, weeding, spraying etc; strengthening extension services. Additionally, new procedures for seed certification are being introduced but there is a lack of experienced staff and adequate facilities for the work. This could be improved by short training of staff from CDO and the national seed certification service in a country like Zimbabwe, with a well developed/established service of this kind.

37. The other principal factors which (in)directly affect or constrain average returns to farmers include, *inter alia*: pricing incentives; proximity and access to markets; transportation costs; pre- and post-harvest handling techniques; quality; access to finance and input supplies; (high) costs of borrowing; vulnerability to volatile prices and no price risk management; basic market information; poor bargaining position; and (low) incomes. Farmers' returns could be improved by a combination of adoption of improved production techniques; improved on farm storage facilities to improve quality; improved access to production and trade finance; lower cost of borrowing; access to basic market information; and improved prices.

38. The related issue of quality assurance and quality control will be the responsibility of the private sector including farmers, small local buyers, processors, medium scale

traders and exporters. The CDO, in conjunction with the National Seed Certification Services, will remain responsible for quality certification to ensure consistency and quality of seed for planting. The CDO will, however, be primarily responsible for certifying quality of cotton lint. It is essential that quality is assured at primary production levels, primary buying stations and at the processing stage. In order to facilitate this, training (of trainers) will be required at all levels.

39. The current process of quality assurance and control incorporates a variety of different checks and inspections at various stages of the marketing chain:

- All seed for planting is sampled to ascertain its viability, at a minimum of 75% germination, and dressed with fungicide to ensure it is free from bacterial blight and similar soil and seed borne disease;

- Seed is properly packed and clearly labelled with instructions to the farmer and properly stored;

- Periodic inspections of farms are carried out to ensure they are free from off- types and pest/disease infestation;

- Measures to ensure timely harvesting, sorting and storage;

- Measures to ensure proper handling of seed cotton, use of hessian and other cellulosic fabrics for packing to avoid contamination with extraneous and non- cellulosic materials, and appropriate modes of delivery to the store/ginnery;

- Purchase of seed cotton in line with pre-determined FAQ standards;

- Storage according to type and variety in adequately ventilated sheds;

- Correct setting of gins and separate ginning on the basis of storage type and moisture content;

40. Quality Certification is based on sampling bales by CDO staff using samples of about 300g, drawn at 4% intervals. The samples are sealed by CDO Seed Assistants at the ginneries to ensure they cannot be tampered with or contaminated. These are all delivered to the Classification section for classing and appraisal. A quality certificate is issued based on colour, staple, leaf content, ginning (preparation). Testing for other parameters like micronnaire, strength, elongation and spinability are carried out at the laboratory in Namulonge. Further steps needed to ensure consistency of quality certification include the following measures:

- At the ginnery level, the number of bales sampled should be increased from 4% to 100%, requiring the use of a High Volume Instrument (HVI) to ensure an accurate determination of the grade and commercial characteristics demanded by the market. The CDO has a provision for this under the CSDP and it should have been installed by December 1997. Training of technical staff in classing cotton, testing and general quality control; equipping the testing laboratory with modern testing machines like HVI so that 100% sampling can be handled and exporters obtain a more comprehensive quality statement of each bale.

41. In order to ensure that the above-mentioned processes of quality assurance are followed, additional measures may be required:

- At the primary production level, there is a recognised need for extension support to cotton farmers to improve their husbandry, management, harvesting and primary processing technology. Poor handling and storage at the primary marketing stages can be equally detrimental to quality by mixing different grades and varieties, contamination and the introduction of extraneous matters to increase weight. Buyers will have to be trained to grade cotton effectively prior to purchase and information disseminated on price and quality differentials and international specifications.

42. Additional measures to ensure quality assurance and controls could include:

- complementary financing to the seed certification services for the cotton component; provision of agricultural credit in the form of pesticides; erection of appropriate stores to minimise post-harvest contamination; training of gin fitters in order to equip them with proper gin setting and ginnery management skills. Collateral managers will be trained to supervise ginning, packaging and storage of cotton lint and seed. A sustainable system for the selection of seed for planting, processing, certification, storage, distribution and monitoring has to be developed.

B. Marketing of Cotton, Prices, Transparency of Marketing Systems, Benefits to the Producers, Traders and National Economy

43. With the enactment of the Cotton Development Statute (1994), marketing of cotton was completely liberalised. The monopoly once enjoyed by the co-operative movement over primary marketing and ginning; and by the Lint Marketing Board over lint and cotton seed sales was scrapped. As a result, private companies and/or individuals registered by CDO compete side by side for the purchase of cotton from the farmer, processing and thereafter marketing of lint and cotton seed locally and overseas. Farmers and traders have gained considerably from this open competition after almost two decades of poor market performance. They have benefited from both cash receipts and an improved share of the export prices for the two seasons 1994/5 and 1995/6, respectively.

44. The farmers sell their seed cotton to private ginners, traders and cooperative unions, who in many cases provide inputs to farmers on credit on the condition that the farmers sell any seed cotton produced to them and repay the credit plus interest accrued. The rate of interest charged can be as high as 5% a month. However, the major problem for traders and ginners is to obtain financing for seed cotton purchases and minimization of the associated risks. The inability to finance seed cotton purchases and ginning leads to substantial unsold stocks in farmers hands and discourages replanting in the following season(s).

45. Kenya, exploiting its proximity to Uganda, is also a strong market for Uganda's

Cotton, particularly for second grade (BR) cotton. During the 1994/95 crop, Kenya imported about 15% of AR grade and up to 80% of BR grade cotton.
The other major importing countries of Uganda cotton in 1994/95 season were:-

United Kingdom	-	50%;
Switzerland	-	20%;
Kenya	-	15% (mainly BR);

Minor importers of Uganda cotton include Germany, Italy and the Far East.

46. Ugandan cotton attracts a premium of up to US cents 3/kg to 5/kg above world prices on the international market, owing to its intrinsic quality characteristics, including a medium to long staple length and due to its handling, hand picking and roller ginning. The shorter staple fibre of the SATU variety blends exceptionally well with artificial fibres, hence the high demand for these varieties from Far East countries.

47. The liberalization of the cotton industry, through the establishment of the Cotton Development Organisation, has led to better services for cotton farmers and buyers. By December 1995, CDO had licensed up to 450 cotton buyers. Cotton farmers have benefited from this increased competition. However, liberalization of the cotton industry has also introduced certain problems. Due to the stiff competition, the quality of seed for planting and lint has deteriorated. Many private buyers and ginners have bought unsorted cotton, which has led to lower quality cotton. Cotton sector finance has been inadequate due to the increased risks of default arising from the break-down of linkages between the production and marketing systems; and the prices received by farmers are not yet satisfactory when considering prevailing world market prices and the costs of cotton production.

C. Project Related Institutions

48. The following key institutions will play major roles in the proposed project:

Cotton Development Organisation

49. The Cotton Development Organisation's statutory mandate is to implement the regulatory framework for the sustainable growth of the cotton sub-sector by:

- setting official standards for seed cotton, cotton lint/seed;
- collection, analysis and dissemination of market information;
- rendering advice to government on the cotton sub-sector policy;
- co-ordinating seed multiplication activities, in liaison with research and extension; and
- performing any other regulatory and promotional duties.

50. CDO performs these duties in conjunction with other related institutions and stake holders indicated below:

- Agriculture Policy Committee and Ministry of Trade and Industry, responsible for policy issues;

- National Agricultural Research Organization (NARO), responsible for research;

- Ministry of Agriculture, Animal Industry and Fisheries, responsible for extension;

- Other stakeholders - cotton farmers, buyers, ginners, exporters and users.

6. Improvements to the cotton sector require the following initiatives from CDO:

- creation of an efficient institution and infrastructure for the effective discharge of its responsibilities and functions;

- implementation of a regulatory framework for the sustainable growth of the cotton sub-sector by setting standards for Ugandan seed cotton, cotton lint/seed, registration of sector participants; dissemination of market information to the cotton industry, and providing advice to government on cotton sub-sector policy;

- supervision of the distribution of seed for planting to farmers;

- co-ordination of seed multiplication activities and support to research and extension activities for the cotton sub-sector;

- establishment of a system of collection of cess and other revenues.

51. The project will require close collaboration between CDO, the Ministry of Agriculture, Animal Industry & Fisheries (MAAIF) and the Ministry of Trade and Industry. The relevant roles of these two key institutions are described below.

Roles

52. Under the Cotton Sector Development Programme (CSDP), the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) is involved in the following activities, which will be important in achieving the objectives of the project:

National Extension Programme; and Rehabilitation of Cattle Holding Grounds to Promote Oxen-based Cultivation Practices.

53. The National Extension Programme includes the following activities:

- the extension services are provided to all cotton growing areas, including seed multiplication in segregated areas;

- a unified extension approach is followed to promote a “farming systems” approach, which emphasises the integration of various crops and livestock based on the ecological and socio-economic conditions of an area. The CSDP has adopted the *farming systems* approach in line with the national extension and research programme strategies.

The National Extension Training Programme also supports the rehabilitation and equipping of Agricultural Colleges and training of personnel. MAAIF conducts short term training courses for farmers. These facilities will provide the base for training activities under the project.

54. Under the rehabilitation of Animal Holding Grounds, MAAIF is responsibile for rehabilitating the physical structures of selected animal holding grounds and for re-stocking draught animals in areas where oxen are traditionally used as a means for land preparation. The targeted holding ground to be rehabilitated for animals is 6,730 Ha. Through the improved extension services, MAAIF has plans to gradually make cotton more viable and profitable to farmers by:

- producing better yielding seed varieties with higher ginning lint outturn through the services of its research arm, NARO;

- training farmers on better crop husbandry techniques, including pest management to enable them to realize improved yields;

55. Following the successful implementation of the above programme, MAAIF expects to achieve a minimum yield of 230 kg/ha of lint cotton (or about 700 kg/ha of seed cotton, reflecting a 75% increase from current levels) and to increase the area planted under cotton from 180,000 ha to 500,000 ha by the year 2000. This is a modest target, noting that cotton cultivation reached 1 million ha at the peak of production in 1960.

Ministry of Trade and Industry

56. Among the mandated functions of the Ministry of Trade and Industry are to:

- promote and facilitate the expansion and diversification of trade, with particular emphasis on export promotion;

- facilitate the effective marketing of commodities;

- foster the growth and proper functioning of the co-operative movement, through measures that enhance the efficiency, transparency and accountability of operations in the Co-operative Unions and primary societies;

- ensure quality products through provisions of national standards and quality control services.

57. Within the above-mentioned mandate, the Ministry of Trade and Industry will provide policy direction to the project and supervise the co-ordination of project activities between the private sector stakeholders and public sector organisations in Uganda.

D. Issues and Prospects for the Cotton Sector

58. Uganda has adequate land resources, labour, and conducive weather for the production of high quality cotton. It has in the past demonstrated its capacity to produce quality cotton and, with appropriate incentives to farmers, Uganda could regain its prime position in the world market. The achievement of its cotton potential will, however, require a satisfactory resolution of certain constraints, of which the key constraints are summarised below:

Competitiveness of Cotton in the Farming System

59. Cotton competes with other crops in the allocation of smallholder resources, particularly land and labour. The allocation of smallholder resources to cotton will depend on the comparative returns from cotton compared with the returns from competing crops (maize, sorghum, millet, oil seeds, etc.,). It remains to be demonstrated that cotton, with yields of 185 kg/ha cotton lint, at an average price of USh 350/kg for seed cotton, will be competitive with other crops. Urgent measures are required to improve the yields and quality of cotton and hence the price received by producers. The government of Uganda has taken some measures to facilitate the attainment of better yields and quality. The Ministry of Agriculture is laying the foundations for improved yields through the Cotton Sub-Sector Development Project (CSSP). CDO is seeking to improve Uganda’s quality controls and quality certification. CDO has already established Ugandan Official Cotton Standards, recognised internationally. Locally, CDO has established FAQ grades at primary buying points and ginneries. To be able to effectively control quality and guarantee that Uganda's cotton quality regains its former status, CDO requires training of personnel in quality certification services, and for monitoring the quality assurance process of cotton seed and lint. The pricing mechanisms that will assure fair, more equitable shares of the benefits to smallholder producers deserve further attention and will be more achievable through improved market performance.

Access to Services, Markets, Credit and Inputs

60. The liberalization of markets and privatization of services provide additional opportunities for producers and other operators to benefit from developments in the cotton sector. However, they have limited capacities to exploit these opportunities. An enabling environment is required. Smallholder cotton producers need to organize themselves to improve their market access and secure the necessary support services, including access to inputs and credit. CDO needs to play an active role in providing technical services, organising training and developing the necessary capabilities to facilitate the emergence of an enabling environment and the necessary incentive oriented policy framework.

Access to Basic Market Information for both Inputs/Outputs

61. Commodity markets are typically volatile and timely access to basic market information is therefore essential to ensure the potential benefits of a free market are fully exploited. CDO needs to develop its capacity to effectively monitor both the commodity and the price outlook, publish indicative prices and regularly disseminate basic market information. Similarly, a domestic capacity should be developed to collect basic market and production data. Besides the logistical support services, such as the internet and e-mail, to create more efficient communication links with important international cotton markets like Liverpool and New York, CDO requires additional staff training in data management and related fields, including exposure to international cotton exchange markets. This can be achieved through short term training programmes. Such training will facilitate the establishment of a basic market information system and the capacity to manage the system.

Risk Management

62. In view of the inherent volatility in world market prices, farmers, traders, ginners, exporters, bankers, insurers and other private sector stakeholders have to be exposed to price risk and other aspects of risk management. CDO, being the focus for cotton sector development, needs to co-ordinate activities and train the parties concerned on basic marketing operations, including the use of appropriate risk management tools, cotton financing and linkages to the warehousing system and appropriate insurance schemes. In the case of smaller producers and traders, the organization of their efforts to pool and share risks will be crucial in their ability to manage technical and price risks.

IV. THE PROJECT DESIGN CONSIDERATION

63. Producers, ginners, traders and consumers will benefit from a more efficient marketing system for cotton and a more equitable distribution of the potential benefits between primary producers, processors, and market operators. In order to promote greater efficiency in cotton marketing and to ensure adequate returns to participants in the production, processing and marketing chain, measures need to be introduced to: promote improved cotton yields, high quality products and enhanced market competition; reduce the risks of operations; minimise the costs of production and marketing; and enhance the sanctity of contracts.

64. In order to introduce these measures, the general chain of cotton production, processing and marketing has been established; the participants identified; and the constraints, risks and elements of operational costs have been specified. Chart 1, on page 22 illustrates the general cotton production, processing and marketing chain, identifies participants, the risks and bearers of risks. Table 1 on pages 23 to 26 identifies the various constraints, the different operators in the chain, indicates the feasible solutions and the expected output from the solutions proposed. This Chart and table provide the basis for the project’s design. The key project design issues arising from the table and chart, which will be addressed in the project are discussed below.

Quality Assurance and Certification

65. Quality assurance and certification is at the heart of ensuring the necessary returns from cotton. Quality assurance can only be guaranteed if farmers ensure this at the onset by: planting suitable varieties, undertaking adequate farm management, avoiding mixing different types of cotton and minimising contamination during harvesting and storage. Therefore, the most important group of participants in the production and marketing chain are primary producers, most of whom are smallholders. The sustainable production of quality cotton can only be enhanced by responding to the needs of these farmers. Guaranteeing more adequate returns to farmers and making provisions for technical support and training will facilitate the necessary incentives for farmers to produce quality cotton. Although the project will not provide technical support services to farmers, it emphasizes the need for extension services to provide training in sound cultivation practices, harvesting and in the primary processing of cotton. The project, building on the government’s efforts to raise cotton production and productivity, seeks to improve the quality of cotton and hence increase the returns to farmers. Farmers will be provided with basic market information to facilitate their negotiations with traders/buyers and ginners. Trader practices at primary levels will be monitored to ensure that farmers are fairly treated and obtain an adequate premium for quality cotton. Emphasis will be placed on quality assurance by farmers, processors and traders and certification of quality will be assured by CDO to re-establish the reputation of cotton with Ugandan origin. The information on cotton quality by region will be fed-back to extension services to promote corrective actions where required.

Market Competition

66. Market competition will be facilitated by promoting increased participation of local traders and exporters in the domestic cotton market. The project design includes arrangements for linking the different categories of traders but not at the expense of market operators wishing to undertake a complete cycle of market transactions. Financial support services to small and medium sized traders will be enhanced by introducing measures to minimise the risks of default, such as the introduction of an appropriate legal framework and the promotion of supervised credit in kind, linking production to the marketing of cotton.

Management of Risks

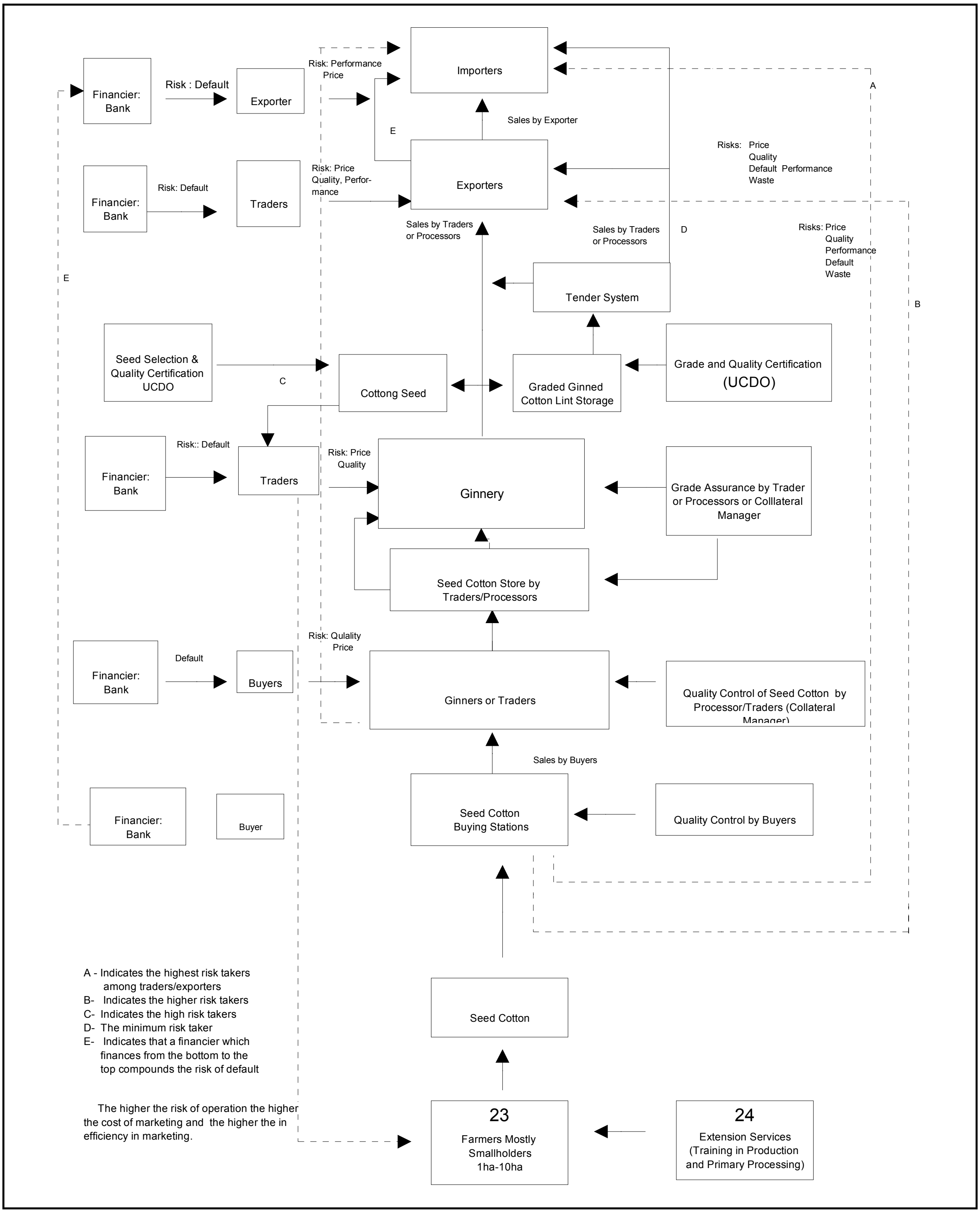
67. Several risks have been identified in the cotton marketing chain. The principal risks to individual players can be minimised by limiting operations to those areas of their competence and dealing directly with known counterparties. For example, the credit default risk to financiers (banks) can be limited by banks limiting their financing to levels at which cotton stocks can be collateralised, and through a clear understanding of the transaction cycle. The project will develop a system of warehousing and issuance of warehouse receipts that can be used as collateral. The default rates and costs of finance can be also ameliorated through financing operations with a shorter transaction cycle, sound price risk management, and supplementary steps to guarantee the insurance of stored products. Traders and processors can limit their price risk exposure through timely access to basic market and price information and by undertaking measures to protect themselves against price fluctuations.

Contract Performance

68. Contract performance will be enhanced by a clear definition of marketing procedures, legal safeguards, information and training of market operators.

Chart 1

Cotton Production, Processing/Storage and Marketing Flow Chart and Analysis of Risk



COTTON MARKETING SYSTEM - CONSTRAINTS, FEASIBLE SOLUTION AND OUTPUT

Constraints of Production, Processing and Marketing	Feasible Solutions/Activities	Output

FARMERS

· Assurance of homogenous cotton	· Strengthen extension services to train, educate and supervise producers; provide good quality and homogenous seed	· Homogenous cotton; monitoring system; quality products
· High input prices	· Provide price information	· Better returns to farmers through ability to buy at best sources
· Low product prices	· Provide price information	· Improve capacity to negotiate prices with better returns to farmers
· Security of product	· No feasible solution	· ----
· Access to market	· Establishment of buying stations close to farmer 5-7 km radius	· Better production data; basic market information at farm level; market awareness at farmer level and minimisation of technical risks through standardization at primary level
· Credit	· Arrangement with buyers under satisfactory bonds; or stop-order certificates; or crop hypothetication	· Availability of credit to farmers, minimisation of default rate
· Labour	· Limit size of operation (capacity of family) safe finance, or provide finance for hiring labour	· Production of quality product
· Price fluctuations	· Provide price information	· Price information available at farmer level for negotiation with buyers.
· Packing materials; incorrect weight measures.	· Link to the buyers who will provide bags; correct/control buyers scales.	· Cleaner seed cotton; and producer confidence in marketing system.

Constraints of Production, Processing and Marketing	Feasible Solutions/Activities	Output
	LOCAL SMALL BUYERS	

· Transport	· Arrangement with ginneries/traders; and establishment of buying stations in accessible places	· Better market competition; timely delivery of cotton for processing, quality enhancement
· Quality Control	· Train buyers on grading and provide access to suitable equipment (scales)	· Improve capacity for buying quality cotton; quality control at the primary level which determines the quality of end produce.
· Price fluctuations	· Avoid stocking operation; provide price information and education on price risk management	· Regular delivery to ginneries, minimisation of price risk
· Price information	· Obtain from ginneries or government or private establishment - traders, banks etc.	· Reduction of technical and price risks
· Security of stored product	· No solution other than to avoid stocking (stock levels too low to attract insurance)	· Regular delivery to ginneries and traders; reduction of storage cost and avoidance of deterioration during storage
· Access to market	· Establish contract with ginneries, traders, and/or co-operatives	· Assured sales at specified prices
· Credit	· Advance arrangements with ginneries/traders with satisfactory bonds	· Access to suitable working capital
· Packing material	· Linkage to the ginneries/traders who will provide suitable cotton bags.	· Facilitation of transportation; clean cotton delivery.
· Weight/assurance	· Control weighing scales and impurities	· Minimisation of technical risks - adulteration, loss of weight and quality assurance.

Constraints of Production Processing and Marketing	Feasible Solutions/Activities	Output

GINNERIES/REPROCESSORS

· Quality of product and grading	· Provide training, control of weighing scales and provision of bags. Certify quality upon receipt from buyers at ginning station or store; train quality controllers; and obtain quality certificate from appropriate agency after laboratory test; supervise closely the ginning process.	· Certified quality on a consistent basis; standardization of product
· Price information	· Obtain from banks, private/ government	· Minimisation of price risks
· Price fluctuations	· Hedge	· Assured future price at a known minimum cost
· Security at store and during transport	· Insurance of product	· Avoidance of insurable losses
· Transport	· Establish advance contract with transporters or provide own transport.	· Timely delivery of product; minimisation of transport costs
· Access to market	· Establish contract with exporters or importers	· Assured sale at pre-determined prices or at better prices
· Credit	.· Establish financing arrangements with a bank using stored products as collateral under the supervision of collateral manager; or using the warehouse receipt. Training of local banks in trade finance.	· Access to trade finance facility at minimum cost; human resource development and institution strengthening (strengthening of trade finance unit and trained staff of local banks)
· Weight assurance	· Control weighing equipment and certify weight and contents upon receipt; check impurities	· Quality control and avoidance of weight losses and product deterioration.
· Functioning of machinery and equipment	· Regular certification of weighing equipment and education on proper maintenance of machine and equipment.	· Human Resource development (operators trained on proper functioning of machinery and equipment and education on impact of poor functioning machinery on quality); trained quality controllers, warehouse managers.
· Storage and store adequacy; Deterioration of quality	· Establish adequate storage or lease; train store managers and provide specification for storage requirements for cotton; establish store inspection programme and carry out store inspection regularly.	· Creation of the basis for the development of warehousing system and the use of warehouse receipt as collateral for credit; minimisation of contract default; creation of potential for secondary market development; prevention of quality deterioration; provision of basis for policy information on management of stored products.

Constraints of Production, Processing and Marketing	Feasible Solutions/Activities	Output

TRADERS/EXPORTERS

· Price fluctuations	· Hedge product in terminal markets directly using brokers or through financiers (banks)	· Improve returns to producing countries (tax revenues, F.E. earnings); development of price risk management tools.
· Price information	· Obtain quotes on terminal market through reuters or local sources, analyse to determine price at various levels of market chain and disseminate	· Access to spot and future prices
· Quality	· Grade and establish quality; certify product quality after lab test	· Certified quality products; standardized products for international markets
· Access to market	· Establish contract with importers	· Assured sale at pre-determined prices or better prices at minimum cost
· Security in store, transport	· Insurance - take adequate insurance in convertible currency	· Minimisation of risk of contract default and losses
· Transport	· Sell FOT or FOB; or establish contract with reliable shippers to sell CIF	· Improved basis for contract performance; transport cost minimisation
· Credit	· Establish credit arrangements with a bank with stock as collateral (Bank to ensure stock insurance, monitor stock, price guarantee, and repayment arrangement through escrow Account)	· Assurance of trade finance; and minimisation of credit default risk; better repayment cycle; lower cost of trade finance
· Storage	· Secure adequate own storage or lease; follow cotton store specification, and inspection guidelines	· Assured quality improvement of infrastructure; improvement of general store services, maximisation of private sector involvement in market support operations; human resource development (store manager)
· Non-performance by importers	· Ship product against irrevocable L/C issued by reputable international bank; ensure appropriateness of contracts including proper arbitration arrangements; and documentation	· Counter-party risk minimisation; approved contract performance

V. PROJECT DESCRIPTION

A. Project Rationale and Objectives

69. Cotton prices have experienced something of a resurgence in the last two years. However, noting the speed with which supply can adjust to price changes, the risks of falls in prices and increased volatility remain. Under these circumstances, improved efficiency in production and marketing, product quality and consistency and the ability to manage price risk will be important for cotton-producing developing countries to ensure that the potential benefits to producers, processors, and traders of cotton are realised. The Eastern and Southern African countries have an established reputation in the world cotton markets. However, either as a result of internal hostilities and/or reduced technical support services and supervision in recent years, the basis for producing quality cotton has been greatly eroded in several of these countries. The governments need to undertake measures, including a policy framework which provides the necessary incentives to encourage increased cotton production and exports. Such measures include effective support services for quality assurance, financial services to producers and local traders, promotion of market competition to ensure improved market performance, including fair prices to producers, and quality certification to ensure consistency. The project will, *inter alia,* address the issues of quality assurance; production and trade finance; market and price risk management; and quality certification.

70. The Eastern and Southern African countries have liberalized their markets in recent years and cotton is one of those commodities which is now freely traded. However, due *inter-alia* to a weak institutional base, an inadequate legal and policy framework, inexperienced local private traders, and the limited exposure of financial institutions to commodity trade finance, most developing countries have not been able to maximise the potential benefits from liberalized commodity markets. These factors have greatly increased market and technical risks and are hampering effective cotton production and trade. No major efforts have been made to clearly identify the multitude of risks involved in cotton production and marketing nor on the measures and actions necessary to ameliorate them. The risk management tools available to market participants are neither clearly understood nor applied. Risk management issues need to be addressed in a systematic and co-ordinated way to promote efficiency and more effective cotton production, marketing and trade. The project, through the co-ordinated efforts of both public and private sector players, seeks to define and test measures to address the constraints and risks identified.

71. Although cotton prices have been trending upwards in recent years, producing countries have not derived proportionate benefits from any increases in prices. Due to growing local market imperfections, revenues have been unnecessarily lost. Measures need to be explored to enhance market competitiveness and thereby ensure a more equitable share of the potential benefits from the cotton trade to producers, traders and exporters. The project will promote market performance and pay particular attention to developing a system that will better remunerate farmers to promote sustained increases in production of quality cotton.

72. Cotton production and quality have plummeted in the region over recent years. For example, Uganda, at its peak production, produced about 500,000 bales of high

quality cotton. This production has now dropped to only 60,000 bales, representing just 12% of its estimated potential. In Tanzania, cotton production dropped by about 50% between 1995/96 and 1996/97 and its quality has significantly deteriorated. Cotton production, in terms of both quality and quantity, could be resuscitated by introducing a number of measures: to ensure the timely availability of, and farmers' access to, production inputs, particularly to high quality seeds and chemical sprays; to offer more remunerative prices at farm level; to introduce an appropriate system of quality assurance and certification; and improve access to financial services at a reasonable cost. Under the liberalized economic system, the private sector should undertake the required commercial operations, but supportive public services such as extension, market information and a legal and policy framework that will minimise the production and market risks are required. The increased benefits to the private sector will be sufficient to enable them to contribute to financing the necessary supportive services. A rational and sustainable introduction of such services need not, therefore, impose unnecessary burdens on government budgets. The project will promote the establishment and implementation of such services on a fully costed and self-financing, sustainable basis. Such a system, once tested by the pilot phase under the project, could therefore be replicated widely in the countries with a minimum cost to the government.

73. Cotton is a smallholder crop in most of the countries in the region. A great number of smallholder families are involved. In Uganda, for example, over two million poor rural families depend on cotton for their cash and income requirements. Since cotton is part of the smallholder rotation system, the inputs used have residual effects on increasing the yields of food crops. Thus, the promotion of cotton production is a strategy which has additional (external) benefits for food security and poverty alleviation in the region. The project will place an emphasis on improving the prices (and reducing the costs) to smallholder producers. In the recent past, smallholders obtained just 20% of the market value while they payed about 40% of the cotton costs, when denominated in FOT ex-ginnery terms.

74. The main objectives of the project are:

(1) to improve and increase the potential benefits from cotton production and marketing to countries in the region, within the framework of a liberalized global market;

(2) to develop and test systems of cotton marketing and trade that can be replicated in other developing countries;

(3) to strengthen public and private institutions and improve local human resource capacities to operate effectively in a liberalized global economy;

(4) to develop and test a financing system for cotton production and marketing; and

(5) to increase the income of poor smallholder producers of cotton.

B. Description of Project Components

Project Summary

75. The project will be implemented on a pilot basis, to test measures and systems that can be introduced to minimise the various constraints hampering effective production and marketing of cotton in Eastern and Southern African countries. The project design includes the development of the new systems during the first year and testing of the systems in the two subsequent years so that replicable systems can be established by the end of the project. Within the period of the project's implementation and finance, all cotton producing countries in the Eastern and Southern Africa will be exposed through on-the-job training to the measures to be developed and established under the project. By the end of the project, these measures will be evaluated, costed and their impact established to provide a replicable and tested system for cotton production and marketing in a liberalized market economy. The private sector, including small farmers, small to medium sized traders, local processors, exporters and commercial banks will fully participate in the implementation of the project to facilitate the adoption of the measures introduced to improve their operational capacity beyond the lifetime and duration of the project. On the basis of the issues discussed above, it was concluded that countries of the region require assistance in the areas discussed below.

(1) Promotion of a Privately Run Warehousing System and the Establishment of a Collateralizable Warehouse Receipt System.

Activities to be pursued will include: (a) development of a system of registration and supervision of privately run cotton warehouses; (b) development of an appropriate legal and policy framework to facilitate the cotton trade and the utilization of warehouse receipt as collateral for trade finance; (c) design of appropriate accounting and reporting rules, including arrangements for government supervision; (d) identification of sources of commercial and non-commercial risk and designing appropriate measures to alleviate them. Such measures may include bonding and insurance of cotton stocks; (e) development of appropriate specifications for cotton warehousing and management; and (f) implementation of pilot operations with a selected number of warehouse operators and financial institutions.

(ii) Development of a Basic Information System for Cotton Production and Marketing.

This will involve the development of a system and institution arrangements for the provision of appropriate market and production information; provision of the appropriate software for collation, analysis and dissemination of the required information; and the establishment of a mechanism for sustainable financing of the system.

(iii) Development of Cotton Quality Assurance and Certification System.

Activities covered include a review of the existing quality assurance and certification system; the introduction of improved measures to assure quality at the different levels (production, processing and marketing) and certification of cotton quality before export; training the various actors involved; an evaluation of the costs of running the system developed; and the introduction of a cost recovery system and policy framework to make the system self-financing.

(iv) Development of a System of Commodity Trade Finance based on Inventory Collateralization and a Warehouse Receipt System; and Testing the system through Pilot Trade Financing.

This component includes provisions for strengthening of capacity of local financing institutions, through appropriate training and trade finance support facilities; provisions for pilot trade finance tied to simple risk management instruments and facilities, including the use of the underlying commodity as collateral; strengthening the link between production and marketing sectors; and improvement of the legal base for commodity financing.

(v) Project Co-ordination, Supervision and Monitoring.

Adequate project co-ordination, supervision ad monitoring will be essential to ensure that the required co-ordination, project management and technical supervision of project activities in the two countries are effectively in place, including measures to avoid duplication of activities and to ensure efficient project implementation. The project will have to be closely monitored and supervised and regular progress reports prepared, particularly bearing in mind the novel and innovative nature of the project. Annual work programmes and budgets will have to be prepared and regular reviews of progress recorded, including submission of six-monthly progress reports, annual supervision reports and interim reports on significant developments which may influence the project's effective implementation.

(vi) Project Execution, Staff Training in Uganda and Tanzania; Dissemination of Project Results among other Eastern and Southern African Countries.

Based on the project experiences and drafts prepared by participating countries, this component includes provisions for the preparation of technical training manuals and brochures: to carry out training of staff from identified participating institutions, agencies; traders and exporters in the implementing countries and other cotton producing countries in the region; to carry out a terminal workshop for dissemination of the project findings in Africa; the preparation of Project Progress Reports, Annual Audits and Accounts and the project Completion Report.

Detailed Project Description

(i) Promotion of Privately Run Warehousing System and Establishment of Collateralizable Warehouse Receipts

76. Prior to the introduction of economic liberalization, warehouses and many rudimentary commodity stores were run centrally by designated government institutions, mostly by Commodity Marketing Boards (CMB's). The extent of privately-run warehouses was effectively limited to the rudimentary farm or village level stores. Since liberalization, no major efforts have been made to privatize the centrally run warehouses

and supporting services in an orderly manner and the consequence is lower quality of stored cotton and higher post-harvest losses. There is an urgent need to take action on warehouse privatisation. Consultations held with government institutions and the private sector, including local banks, illustrated that the problem is less the availability of storage infrastructure but more the lack of a system that will ensure the security and quality of stored cotton and thereby minimise the risk to traders and financing institutions. The focus of this component is therefore to provide a tested system of warehousing that will assure the quality and security of stored cotton. Such a system will be supported by a more appropriate legal and policy framework, a documentation system for stored products so that the ownership of stored products can be readily identified, and bonding and insurance schemes that will facilitate the use of stored products as collateral for trade finance. In the first two years of operating such a system, warehouse services and collateral management will be jointly operated to minimise the risks to financiers but also because time is required to establish and test the necessary framework that will permit confidence in the use of warehouse receipts as collateral for trade finance.

7. The objective, outputs and activities of this component are specified below.

Objective To establish a framework for operating a privately run warehousing system that enables the use of such stored products as collateral for trade finance.

Output A tested and replicable framework of privately run warehousing system; replicable warehouse receipt or inventory collateral system for commodity finance; technical manuals and training brochures that can be used in expanding the systems to other countries wishing to establish such systems; a nucleus of technical and professional personnel trained in operating the new systems and who can train others; trained warehousemen and collateral managers.

Sub-Objective 1 To define the existing system of commodity warehousing, establish ownership and security problems of stored commodities.

Output 1 A complete record of warehouse stores and their ownership; the identification of operational, legal and security weaknesses; and recommendations for improvement.

Activity 1.1 Enumerate and document warehouses and stores and establish their ownership at various levels of the cotton market sub-sector.

Activity 1.2 Review and analyse the data collected; produce a report, including recommendations for improvement.

Activity 1.3 Establish the chain of warehouses and stores to be used as case studies under the project.

Activity 1.4 Submit a report to the respective governments, CFC, SB and PEA for further action under the project.

Sub-Objective 2 Based on the output from sub-objective 1, establish the legal framework for operating a warehousing system by drafting the appropriate legal framework and passing a Warehousing Act through Parliament.

Output 1

(a) Collateral Management Arrangements Suitable for Pre-export Finance

Under a suitable Tri-Partite Agreement between a professional collateral manager, and exporter or trader and a local bank, a system will be developed for issuing non-negotiable warehouse receipts on the basis of stocks received by warehouse managers against specified criteria of quality, price and quantity. Such warehouse receipts will have applications at all levels of the marketing chain, from farmers up to traders and exporters, since the receipt will be associated with strict stock acceptance criteria. Warehouse receipt forms will be developed that will provide a basis for possessory collateral for the bank and exporter or trader; and a stock information system will be put in place to strictly monitor and keep the bank and insurer constantly informed of asset values.

(b) A Warehouse Act and Policy Framework with Detailed Specifications Allowing Warehouse Receipts to be Issued and Used at both Local and International Levels.

(c) Guidelines for Establishing and Operating a Privately Run Warehousing System.

Activity 2.1 Establish a National Advisory Committee (NAC) representing all the key participants in commodity marketing and trade, including collateral managers, warehouse agents, freight forwarders, trade financiers, government and public bodies, commercial banks, insurance houses, producer and trader organizations, etc., to fully participate in the process of developing a Warehousing Act and supporting policy framework.

Activity 2.2 Identify reputable warehouse firms to provide the necessary technical support to develop a collateral management system and warehouse receipt system.

Activity 2.3 Recruit local legal consultants to review existing laws and regulations from village through to national level; evaluate the issues to be addressed including, *inter alia*, the legal protection required by contracting parties; the collateralization of stored products, the liquidation and rights of holders of lien on stored products.

Activity 2.4 Draft the required statutes consistent with internationally recognized warehousi ng systems, laws, rules and regulations and provide a supporting policy framework for operating warehouses and issuing warehouse receipts on a secured basis.

Activity 2.5 Recruit an internationally recognised expert to review and/or propose any changes that will make the warehouse system and warehouse receipt internationally acceptable.

Activity 2.6 Convene a review of the draft statute and related policy framework by the National Advisory Committee.

Activity 2.7 Facilitate a review of the draft statute and related policy framework by the concerned government agencies.

Activity 2.8 Obtain the comments of government agencies and the NAC, and prepare a final draft for review by the Attorney General's Office for enactment.

Activity 2.9 Process the draft statute for enactment and assist its passage into law.

Activity 2.10 Issue the final laws, rules and regulations for warehousing, the issue of warehouse receipts and a system of monitoring and control.

Activity 2.11 Draft the guidelines for establishing and operating a privately run warehousing system.

Activity 2.12 Draft the regulations for establishing warehouses, including storage specifications for cotton and the relative locations and specifications for warehouse operators.

Activity 2.13 Draft the regulations for operations, including the design of appropriate accounting and reporting rules and regulations, supporting documentation and format for warehouse receipts, insurance, bonding and indemnity guidelines and monitoring and supervision arrangements, including specification of responsible agencies.

Activity 2.14 Publish the required supporting policy framework.

Activity 2.15 Define and establish a programme for registration and tracking of warehouse receipts and stock records, including quantity, quality and specific locations.

Sub-Objective 3 To test the established policy framework and legal system on a pilot basis.

Output 3 A validated warehouse system; technical manuals for an orderly system of establishing the warehouse system, supervision and control; training materials and a core of trained staff in the two participating countries.

Activity 3.1 Train the warehousemen under the pilot programme.

Activity 3.2 Train the financing institutions and insurance firms participating in the pilot project to operate the new system developed.

Activity 3.3 Carry out a workshop for the generality of interested parties.

Activity 3.4 Establish and operate a monitoring/supervision system, including provisions for the supply of equipment and consultancy services to establish the system and train local staff.

Activity 3.5 Run the pilot warehousing system for at least three cotton seasons.

Activity 3.6 Monitor and evaluate the technical and financial feasibility and the impact on cotton marketing and trade; make adjustments to the warehouse system and legal framework as may be required.

Activity 3.7 Prepare guidelines for the various forms of insurance required, the modes for determination of insurance premiums and warehouse bonding. Provide consultancy services for the preparations and train local staff to operate within the guidelines established.

Activity 3.8 Review the technical training brochures and manuals in light of the experiences from pilot operations. Prepare a comprehensive report on establishing, running and monitoring the warehousing system and for the use of warehouse receipts as collateral for commodity finance. Print and publish the technical manuals and training brochures.

77. The total base cost of this component is estimated at USD 681,300.

(ii) Development of Information System for Cotton Production and Marketing

78. Another important aspect in cotton production, market planning and trade is the access to timely and reliable information. The project will strengthen this aspect of cotton development through reorganizing and strengthening the data collection, analysis and dissemination services. The system to be established will ensure that data is collected in respect of cotton plantings by varieties, regions and districts; cotton production by grade; internal mill consumption and exports; stocks, with analysis of age of stocks; and prices at various sectors of the market. The data will be analysed and the resulting information regularly disseminated. The institutions to be charged with these responsibilities will rely for most of their data collection on the services of production and marketing agents at various levels. They will, however, as occasion demands check the sources of local data collection to ensure its reliability. It's own staff will collect supplementary data, particularly on grades and market prices at various levels of the market chain. Prompt dissemination of production and market information will be ensured to enable the effective use of such information by producers and traders. The price information will include a break-down of terminal market prices into related prices receivable at lower levels of the market chain to ensure adequate reflection of world market prices in local price formation. The price information will be presented in usable forms to farmers and local traders in their cotton operations. Another important aspect of the data and information system will be the maintenance of registers of processing centres, warehouses (and their owners), documentation of warehouse and store receipts, together with information on the underlying cotton stocks. The implementing institutions will be provided with technical assistance, any necessary equipment, and will have their staff strengthened through training. Major efforts will be directed at ensuring that the system to be established will be both sustainable and replicable.

79. The objective, outputs and activities of this component are specified below.

Objective To reorganize and strengthen the data collection, analysis and dissemination services to support the cotton industry and to develop a replicable and sustainable cotton production and basic market information system.

Output An updated, strengthened data and information system which will be both replicable and self-financing; technical manuals and training brochures for use in expanding the systems to other countries wishing to establish such systems; and a nucleus of technical and professional personnel trained in operating the new system and who can train others.

Activity 1 Prepare and reorganize an information system for data collection, analysis and dissemination and plan of operations. This plan will include detailed specifications of the responsibilities of different actors, formats for data collection, an analytical framework, staff constraints and training requirements, an inventory of equipment and materials, dissemination procedures and controls.

Activity 2 Establish and reorganize the data and information system.

Activity 3 Operate the system, including collection of data, data analysis and dissemination of information.

Activity 4 Evaluate the system after one year of operation to introduce any desired improvements.

Activity 5 Provide a detailed cost analysis for maintaining an effective data and information system and provide recommendations for methods of financing the system on a sustainable basis with minimum burden to government recurrent budgets.

Activity 6 Disseminate the system to other countries and train at least 2 senior staff from these countries to carry-out similar developments in their respective countries.

80. The total base cost of this component is estimated at USD 517,030.

(iii) Development and Testing of Cotton Quality Assurance and Certification System

81. In most cases in developing countries, before liberalization, responsibility for quality assurance and certification were shared between the agricultural extension services and centralised government agencies, including the Cotton Marketing Boards (CMB's). Cotton grading and quality certification were the sole responsibility of government agencies, typically including a produce inspection service which took an active interest in the quality assurance activities of producers and provided technical support through the extension services. These agencies frequently also provided supplementary finance for quality assurance services. The existence of a central co-ordinating agency facilitated adequate controls which enabled exports of quality products. The privatization of marketing, introducing a multiplicity of operator, requires a clear definition of the responsibilities for quality assurance, control and certification necessary to guarantee quality product with strong market access and potential to generate increased returns to producers, traders and processors. The focus of this component is to define and test a sustainable system of quality assurance, control and certification. The system to be developed will involve maximum inputs from the private sector and will be self-financing to ensure sustainability without placing an unnecessary burden on government's recurrent budgets.

82. Consistency of product is another important export requirement, since importers need some degree of consistency assurance. This means that exporters should guarantee not only that every consignment or parcel is sound but also that the quality will be comparable to previous deliveries. This is an important requirement for any cotton, which must suit the purpose for which it is bought for an exporter to create confidence in the importer of its cotton. Higher consistency also reduces cost of spinners and an exporter who satisfies the consistency requirements therefore has a market

advantage over those who do not. A country, (including the producers, traders and exporters) could derive considerable additional benefits by ensuring both satisfactory quality and consistency of quality. A suitable national cotton authority should provide clear guidelines for producing quality cotton, monitor the process of production and processing, provide any additional training required and establish procedures for quality certification. This component will provide support to define such a system and the means to finance it. The system to be put in place will harmonize local quality standards with world market standards; provide adequate specifications for quality to producers and processors; and train producers and processors on how to attain the best quality cotton. It is important to note, however, that unless farm-gate prices are related to quality, there will be no incentive for farmers to produce quality cotton.

83. The assurance and control of quality will be the responsibility of the private sector including farmers, trader, processors, and exporters. A public institution will be responsible for quality certification and to ensure that quality specifications are met on a consistent basis.

84. The quality of cotton is to be assured at the primary production level, including storage of seed cotton, ginnery operations and the accompanying storage of cotton lint. Another aspect of cotton quality assurance is to ensure a high quality of seed for planting and to educate farmers not to mix varieties in their cotton plots. The basic issues related to ensuring quality at various levels are discussed below.

The Primary Production Level.

85. The inherent characteristics of cotton is determined by the varietal character and field management of cotton by the farmers. In order to ensure the desired characteristics of cotton, varieties with desirable market requirements should be selected; and support to the extension services is required to train farmers on effective cotton management, including appropriate pest controls and methods for harvesting, particularly on measures to avoid the introduction of extraneous matters. It is important to educate farmers on the need to plant a single variety in a plot and not to mix cotton from different plots during harvest, unless it is certain that the same varieties have been planted in these plots. The crucial aspect of quality assurance at production level is the selection and planting of high quality cotton seed, of the same variety, in plots and appropriate control of insects through spraying. Homogeneity of cotton staple and colour are important and mixing of varieties, insect contamination and poor storage at farm level should be avoided at all costs. The project will introduce a system for cotton seed selection, storage and distribution. Clear guidelines on varieties to be distributed by region will be provided and the distribution of seeds by the private sector carefully monitored. An appropriate agency such as CDO in Uganda and TCLSB in Tanzania should provide seed certification services.

86. The participating countries have taken policy decisions to privatize cotton seed production, treatment and distribution. While this policy is laudable, the technical and pricing issues will also need to be carefully addressed. Cotton seeds are composite seeds which do not need annual replacement. The quality is maintained through appropriate selection, chemical treatment and storage. Cotton seeds have to pass through the ginning process, which places ginneries at an advantage to produce seeds

from their normal ginning processes. Ginneries with extensive contacts established with producers may therefore have a considerable advantage in processing and treatment of seeds. The policy issue to be determined is how such seeds should be priced, noting that smallholders are not typically paid for the inherent value of cotton seeds when selling seed cotton to the ginneries. In many cotton-producing countries, pricing policy for cotton differentiates between the price of cotton lint and cotton seeds and farmers are either paid separately for both, or seeds are returned to the producers for their disposal. A careful review of the issue of non-payment to farmers for cotton seeds needs to be addressed, particularly the practice of re-selling seeds to smallholder farmers at a premium price for replanting. The project will provide opportunities for such policy reviews in the region. The systems for seed certification and distribution and adequate controls for planting cotton to avoid varietal contamination will be strengthened under the project.

Primary Buying Stations and Storage

87. The importance of primary operations cannot be overemphasised. Cotton of excellent inherent quality can be damaged by poor handling and storage at primary marketing levels. Such damage can only be corrected at later stages of processing, but at significantly higher costs. The most common quality problems at primary buying stations are the result of mixing different types and varieties of cotton and contamination in storage by the introduction of extraneous matters, either accidentally or deliberately, to gain weight. Training cotton buyers to avoid such bad practices will be one of the priorities under the project. Storage specifications and guidelines will also be further developed and education provided on quality requirements, emphasising the relation of quality to prices received, to both traders and farmers. Export quality grade should be specified according to international specifications and the respective international prices by quality classification should be clearly indicated at buying stations.

Ginning, Grading and Storage of Cotton Lint and Cotton Seed

88. The ginning process includes the separation of the seed cotton from the lint, the packaging and storage of cotton lint and cotton seeds. Grading and quality certification using cotton grading services will be assured after ginnery and cotton destined for export will receive the quality certification stamp from designated institutions (CDO in Uganda and TCLSB in Tanzania). These same institutions will assist in operating the system for the selection of seed for planting, dressing, certification, storage and will monitor the process established for seed distribution. The guidelines for storage and supervision of warehousing to be developed under Component (i) will ensure the proper storage specifications for cotton lint are complied with after certification of quality.

8. The objective, output and activities of this component are specified below:

Objective To develop and test a quality assurance and certification system for cotton lint and cotton seed. Such a system will ensure the quality and consistency of cotton lint to importers, the availability of quality seeds for planting by smallholders and develop a pricing system that will improve the returns to producers, processors and traders and increase the foreign exchange earnings of producing countries.

Output A sustainable system of quality assurance and certification for cotton lint and cotton seed for planting; production of technical manual and training brochures and dissemination of information for replication of the system in other interested producing countries.

Activity 1 Review existing quality assurance and certification systems and propose any necessary changes to strengthen existing institutions in charge of monitoring quality and certification through the provision of appropriate training and logistic support.

Activity 2 Define carefully the quality assurance processes and monitor quality controls at all stages.

Activity 3 Train *trainers* to train operators at all levels (production, processing, storage, and trade) of the marketing chain.

Activity 4 Provide access to suitable quality control equipment and introduce a basic control system for quality certification and calibration of equipment to ensure satisfactory quality and out turn.

Activity 5 Certify and monitor cotton quality in terms of internationally traded grade and stamp export packages with stamp of origin.

Activity 6 Run the system on a pilot basis for at least two years and evaluate the operations in terms of costs, market reactions and returns.

Activity 7 Evaluate the efficiency of operations, estimate the unit costs of monitoring quality and certification and provide recommendations for self-financing to ensure operations are sustainable, while ensuring fair costs to end-users.

Activity 8 Prepare technical manual and training brochures for operators and the staff of the quality assurance and certification unit.

89. The total base cost of this component is estimated at USD 887,100.

(iv) Development of a System of Cotton Trade Financing based on Inventory Collateralization using a Warehouse Receipt System and Testing the System through Pilot Trade Financing

9. A major factor which has limited the effective participation of local traders and exporters
in cotton marketing has been the lack of access to affordable credit. The high risks of

default have constrained the extension of sufficient credit by local financing institutions. The default risk is high due to a perceived lack of adequate collateral, coupled to the limited experience and exposure of financing institutions to the fundamentals of the cotton trade, production and marketing transaction cycles - hence their limited capacity to structure credit for the cotton trade. Further constraints include an inadequate legal and policy framework, poor quality controls, price risks and the lack of a clear and transparent marketing system. Under the prevailing high risks of default, it is unlikely that private financing institutions will provide finance to small operators, unless measures are introduced to reduce the risks of default.

90. Commercial banks are, however, willing to finance cotton processing and trade on a trial basis, if a system that will minimise the risks of default can be introduced. The system envisaged under the project will adopt a supervised credit in kind approach which will incorporate quality certification, price risk management and the use of an inventory collateral system. Components (i) to (ii) described above will contribute to the development of such a system. Since the farmers are important in ensuring sustainable production of quality cotton, the project includes the linkage of producers to specified ginneries or traders who will finance them under personal bonds, crop hypothetication and/or legally binding marketing stop-orders. A more preferable alternative would be the introduction of a flexible marketing order, permitting producers to sell to any trader or buyer who will have the responsibility to deduct loan and interest from any sales revenue and paying the lender the recovered amount plus a specified surcharge. Such linkages will make use of existing mechanisms, personal business relationships between borrowers and lenders and employ socio-cultural pressures at village level. Since liberalization, traders and processors have been involved in developing such a system in Uganda and a similar system has been successfully operated in Tanzania in the past. These experiences in structuring credit systems for both cotton production and processing will be further developed and legally established under the project.

91. The pilot credit structure to be tested will involve two stages of financing. The first level of finance will include the extension of production credit by traders/processors to smallholder producers under a specific contract, involving close supervision and existing local social systems of bonding. The operations of such a system was carefully reviewed during project appraisal and was found to be promising although it requires further refinements, trials and evaluation under the project before its wider replication. The project will seek to provide a sound legal basis for such operations, including legally binding marketing stop-orders which give priority of cotton delivery by borrowing farmers, of at least the equivalent value of credit and interest to the lender. The lender will, however, be obliged to pay normal market prices to the producer. The borrower will be subject to a penalty for default following existing practices of lenders. The current penalty involves immediate capital repayment plus 100% interest instead of the normal rate of 30%. A record of borrowers and their lenders will be maintained by CDO and TCLSB at the district level and will be available to operators in the district. A penalty to buyers may be introduced in the legal framework to be developed under the project. The second segment of credit will be for cotton processing and marketing built on inventory collateralization and warehouse receipts described in component (i) above. The two segments will be inter-linked to constitute the credit structure under the project. The first segment, with higher risks of default and costs will need to be financed by a

development credit at the pilot stage, while the second segment will be fully collateralized and therefore suitable for financing by commercial credit through participating commercial banks.

92. Under this pilot project, it is not envisaged that commercial banks will have enough confidence to accept warehouse receipt as collateral and therefore inventory collateralization, with appropriate supervision by the financiers through an appointed collateral manager, will be required. It is envisaged, however, that after the three year pilot trial of the system, sufficient confidence will have been established to enable the use of warehouse receipts backed by stored cotton as collateral.

93. Another risk that must be addressed to minimise the risks of default is the price risk. Traders/processors wishing to participate in the pilot trade finance should demonstrate a capacity to hedge their commodity on the international market, or use facilities to be provided by the financiers under the project.

94. It is envisaged that the transaction cycle for the first tranche of credit will be a maximum of 180 days, while the transaction cycle for the second tranche will be a maximum of 60 days. Under the first tranche, a unit credit of USD 160 is estimated to be sufficient for financing the ploughing, chemicals, cotton seed and spray pump input needs for a participating smallholder cultivating the equivalent of 0.5 ha, which will be the maximum threshold to be supported under the pilot operations. In addition, a processing and marketing credit of USD 1,007,325 may be extended to each of the 4 participating exporters and/or processors. At least six pilot operators under the project are expected to handle 48,400 tons of seed cotton (equivalent to 14,520 tons of cotton lint and 31,950 tons of cotton seed). An estimated 96,800 smallholders and 300 small traders will be involved in these operations. The revolving credit requirement for the first tranche has been estimated at USD 5,445,000 while the estimated credit requirements for the second tranche are USD 12,705,500 yielding an estimated total revolving credit requirement of USD 18,150,500 for the 97,100 beneficiaries. The total credit to be extended over the three year period of project implementation is estimated at USD 54,451,500, assuming three cycles of the revolving fund. The precise details and financing arrangements for the first stage of transactions will be established during project implementation, while participating private commercial banks will finance the second segment, initially using the underlying cotton in a supervised warehouse (and appropriately insured) as security, but subsequently using the warehouse receipts to be developed under the project as collateral. This may be supplemented by the need for small scale micro-credits for input supplies from the Common Fund for Commodities which will be established and evaluated during the course of project implementation and/or to supplement the financing available during peaks in the demand for liquidity at the height of trading operations. The need for such loans and/or credit, the *modus operandi* and the associated risks and capacity to repay any CFC loans will be carefully evaluated during implementation before entering into any loan agreements.

95. The objectives, output and activities of this component are detailed below.

Objective To develop and test sustainable systems of cotton trade finance based on the use of warehouse receipts backed by underlying cotton stocks as collateral, the use of crop hypothetication, personal bonds and flexible marketing stop-orders; and to develop the institutional capacity to manage such a system.

Output A tested system of cotton trade finance and improved institutional capacity to manage and disseminate the system in other cotton producing countries in Eastern and Southern Africa, including technical manuals and training brochures for dissemination of the project results.

Activity 1 Define a detailed programme for structured cotton trade finance with selected co-operating banks. Such a programme will include arrangements for collateralisation, disbursement and repayment schedules in consonance with the cotton transaction cycle and a structured credit system for smallholder cotton producers and buyers. Not less than two commercial banks will be selected in each country to participate.

Activity 2 Develop a training programme for cotton trade finance including, *inter alia*, clear exposure to: cotton production, processing and quality requirements; the fundamentals of the transaction cycle in the cotton trade and related requirements to structure credit; the initial use of inventory collateralization under collateral management arrangements; and subsequently warehouse receipts backed by underlying cotton stocks; repayment arrangements; records and accounts; risk management principles and practical applications.

Activity 3 Organize a trade finance system in participating banks, carrying out intensive training for the selected staff and key managers of participating banks, traders, ginneries and exporters and arranging for close supervision of the pilot credit programme.

Activity 4 Select traders, ginneries and exporters to participate in the pilot scheme. Participating banks will support at least six clients under the pilot project.

Activity 5 Agree a rolling programme of finance under the pilot project, including the extension of short-term pre-export trade credit to local cotton producers, buyers, small scale traders, processors, exporters, co-operative societies and unions.

Activity 6 Draw-up a system for utilising marketing stop-orders for application by co-operatives, traders and exporters wishing to extend credit to smallholder farmers and small traders..

Activity 7 Establish the legal basis for the use of crop hypothetication and flexible marketing stop-orders as collateral. Carry-out pilot production and trade financing operations for 3 crop years.

Activity 8 Define the credit insurance scheme for the pilot project.

Activity 9 Carry out the pilot trade financing operations for at least three cotton seasons.

Activity 10 Provide on-the-job back-stopping support to the trade credit staff of participating banks.

Activity 11 Based on the experiences under the pilot programme, update the training brochures and produce trade finance manuals.

Activity 12 Carry out a training and dissemination programme for other national banks that may be interested in the programme.

Activity 13 Provide on-the-job training for the staff of banks from other cotton producing countries in the region wishing to extend commodity trade finance through a programme of attachments with participating banks.

96. The total base cost of this component is estimated at USD 604,400 excluding the credit requirement for trade financing.

(v) Project Co-ordination, Supervision and Monitoring

97. The project will include activities which require participation from public institutions and several enterprises from the private sector (farmers, traders, processors, exporters, warehouse companies, collateral managers, insurance houses and commercial banks). The project will also address legal and policy issues which are important for effective commodity production, marketing and trade. The co-ordination of implementation by different actors will therefore be crucial in meeting the projects objectives. Co-ordination will also be required between this project and a similar project on coffee, which are expected to be implemented simultaneously in the two countries. In particular, the legal and policy activities will need close co-ordination to ensure adequate responsiveness to the needs of both commodities. In each of the countries, a supervisory ministry will be charged with overall responsibility for aspects related to legal, regulatory and policy issues, while the key players in the private sector will participate in an inter-professional National Advisory Committee to monitor trade and market developments in the cotton sector and provide any recommendations and advice for legal and policy reforms to co-ordinating ministries. Local Management Units will be established in each country and a project co-ordinator designated to supervise and manage the effective national implementation of the project, including recruitment and training of staff, contracting local consultants with the required technical skills, the acquisition of equipment and materials and production of operating training manuals. The PEA will co-ordinate project activities in the two participating countries and provide any technical back-stopping that may be required, in conjunction with the coffee project.

98. Each country has identified the supervisory ministry as follows: Ministry of

Agriculture, Livestock and Fisheries in Tanzania and the Ministry of Trade and Industry in Uganda. These Ministries will be responsible for overall supervision of the project's implementation, providing support to the local Management Units, in particular with respect to office space and manpower, and ensuring effective co-ordination of the policy, regulatory and legal aspects as well as ensuring effective collaboration between the private and public sector stakeholders under the project.

99. In each country, the project co-ordinator, as head of the local Management Unit, will be responsible for ensuring effective monitoring, co-ordination and supervision of operations, will prepare and execute the Annual Work Programme and Budget and will provide the regular Progress Reports and Project Completion Report (PCR). It will also be responsible for ensuring timely action on developments requiring proposed reforms to the policy, regulatory and legal framework under the project. The full participation of the private sector will be assured.

100. The objectives, outputs and activities are detailed below:

Objective: To provide effective arrangements for co-ordinating project activities to ensure that the project objectives will be achieved; and to provide appropriate support in developing the legal and policy frameworks, which have implications beyond the cotton sector.

Output The development of a supportive legal and policy framework and regulatory system, with inputs from key stakeholders and ultimate beneficiaries and end-users of the project; the preparation and execution of Annual Work Programmes and Budgets, regular Progress Reports, Project Completion Report, Annual Accounts and Audits.

Activity 1 Provide technical support to organize and carry out effective co-ordination of project at the national level.

Activity 2 Strengthen the local capacity to co-ordinate project activities through the provision of adequate local staff, office facilities and equipment.

Activity 3 Prepare an Annual Work Programme and Budget and closely monitor project implementation.

Activity 4 Prepare regular Progress Reports, a mid-term Evaluation Report, Annual Accounts, Audits and Project Completion Report at each country level.

Activity 5 Organize the meetings of the National Advisory Committee (NAC) referred in component (i).

Activity 6 Ensure the preparation of the legal and policy framework, its review and passage to law.

101. The total base cost of this component is estimated at USD 833,650.

(vi) Project Execution, Staff Training in Uganda and Tanzania and Dissemination of Project Results among other Eastern and Southern African Countries

102. The procedures, techniques and systems to be developed under the project will have considerable potential for region-wide applications since the other cotton-producing countries in Eastern and Southern Africa have experienced similar problems in financing cotton production, marketing and trade. The project will therefore make provisions for training of *trainers,* both through formal training and practical exposure to on-the-job training. Training will be provided in four areas: (a) the establishment and management of privately operated warehouses and development of a warehouse receipt system to be used as collateral for cotton trade finance; (b) quality assurance, control, monitoring and certification; (c) cotton trade finance and risk management; and (d) production and basic market information systems.

103. In each country in the region, at least five selected staff will be trained (one in storage and warehouse receipts; two in quality assurance and certification systems, one in market information systems and one in trade finance). Training will be conducted in the participating countries by the private and public institutions involved in the respective activities. The criteria for selecting institutions and staff will include, *inter-alia*: institutions already engaged in a limited way in the types of operations for which they have requested training, or wishing to initiate such operations; a commitment to use their staff after training in initiating or strengthening cotton production and marketing operations; a commitment to provide training or workshops on local operations . One, two week training programme for warehousing will be run in the first year; and one, two week training programme will be run in each of the last two years of the project in the four areas identified above. Thus, a total of nine training sessions will be carried-out during project implementation.

104. The 14 cotton producing countries of the region will participate. The first group of (28) trainees will be trained in warehouse management and the use of inventory and warehouse receipts as collateral. The training in the first year will be held in Uganda since it may be the only country already prepared to conduct such training having carried out the required preliminary work to introduce a warehouse receipt system. A total of 168 officers will be trained by the project from Sudan, CAR, Madagascar, Angola, Burundi, Ethiopia, Kenya, Mozambique, South Africa, Tanzania, Uganda, Zaire, Zambia, and Zimbabwe.

105. At the end of the project, a regional dissemination workshop will be carried out for policy makers and private sector operators, exposing the potential for using the system developed for cotton in other countries and for other commodities. Each country will be allowed to sponsor three senior level officers, possibly from the Ministry of Finance, Ministry of Trade and Industry and Ministry of Agriculture. The project will finance the participation of these (42) officers. Other participants from the private sector will be self-financed.

106. The PEA will provide technical backstopping to the implementing countries to facilitate effective project implementation. It will organize and execute the training programmes and dissemination workshops. It will also ensure the effective co-ordination

of project activities across countries and arrange for the sharing of experiences through the inter-exchange of experiences and visits *in situ* for officers of participating countries.

107. The objective, output and activities of the component are detailed below.

Objective To ensure adequate technical support, monitoring and supervision for the execution of project activities and expand the regional capacity for effective cotton production, processing and trade through the provision of training in the development and management of the trade finance system and supportive services.

Output Trained officers and enlightened institutions; comprehensive technical manuals and training brochures derived from the practical regional experiences in various aspects of cotton marketing and trade.

Activity 1 Appoint Technical Assistance staff to assist in the back-stopping for project planning, execution and provide support to the PEA in executing the project.

Activity 2 Organize and arrange for the effective co-ordination of the project across countries through the establishment of mechanisms to share experiences, review progress in project implementation and arrange for exchange visits of officers to facilitate the exchange of experiences.

Activity 3 Prepare a detailed training programme, including formal training sessions and practical exposure through on-the-job training, specification of sites and institutions for training, production of training materials and practical work experience.

Activity 4 Organize and carry out nine training sessions involving at least 168 people.

Activity 5 Evaluate the training and propose follow up programmes.

Activity 6 Prepare comprehensive technical training manuals and brochures drawing on project experiences in the four areas identified above, draft technical manuals and training brochures from the two participating countries.

Activity 7 Publish the technical manuals and training brochures.

Activity 8 Undertake a terminal dissemination workshop (42 country participants expected).

Activity 9 Prepare and submit the project's Annual Work Programme and Budget.

Activity 10 Annual supervision by ICAC.

Activity 11 Monitoring of implementation and financial disbursements by the Fund.

Activity 12 Prepare and submit to the Fund and SB six-monthly Project Progress Reports, Annual Accounts and Audit, Project Completion Report, final Project Audit Report and Terminal Workshop Proceedings.

10. The total base cost of this component is estimated to be USD 988,000.

C. Benefits

108. The project would result in substantial benefits to producers, traders, processors, financial
institutions and the government. The producers will receive support services that will assist them in producing quality cotton that can attract better prices. The increased availability of market information at buying station levels, an increased number of buyers and the regular monitoring of trade and market practices will contribute to improved market transparency and will enhance the capacity of farmers to negotiate better prices. Traders, exporters and processors will benefit from an improved organization of cotton marketing and trade, better access to trade finance and up-to-date market information, and an assured process of quality control and quality certification which will reduce their costs of operation and improve prices received for their cotton. Traders and exporters will have access to hedging facilities to protect them against price risks. Financing institutions will strengthen their capacity to undertake trade finance and their exposure to the risks of default will be greatly reduced through a sound understanding of cotton transaction cycles, and the use of inventory and supporting warehouse receipts as collateral. Governments will benefit from the increased revenues that will arise from an expanded commodity trade and the enhanced capacity to monitor and regulate the internal cotton market and international trade.

109. The institutional strengthening and human capacity development will have a major impact on commodity market development and, in particular, for cotton marketing and trade. The two countries will improve their capacity to monitor quality controls and quality certification; data collection, analysis and dissemination of information on cotton production, export prices and stocks; and will be in a better position to advise on reforms to the legal, policy and regulatory framework that will enhance the benefits to countries and private sector operators from cotton marketing and trade. Financing institutions will also receive training to enhance their capacity to engage in cotton trade finance. Governments will improve their capacity to formulate policy, monitor industry developments and recommend any adjustments that may be required in response to a dynamic and changing market environment.

110. The intensive quality control and certification process will ensure the production of quality cotton that can attract premium prices. A general application of the systems to be developed under the project will have much greater financial benefits through the proposed improvements to market efficiency and cotton quality, not only in the two participating countries, but also in the other twelve cotton producing countries in the sub-region as a result of the training that will be provided to their officers under the project. Technical training manuals and brochures will benefit other developing countries

outside the region and these documents will have more general applications beyond the African continent.

111. The effective privatization of warehousing services will create new lines of business which will be expanded after the pilot experience. Substantial employment opportunities will be generated in the rural areas as a result of the increased processing and marketing activities.

112. Smallholder farmers will derive significant financial benefits from reduced financial charges and the higher share of export prices which are expected to be received. The interest rates charged to these producers are estimated at a minimum of 5% per month, which translates into a rate of approximately 60% per annum. Under the pilot project, an interest rate of not more than 12% will be assured, generating potential savings of at least 50% from reduced costs of finance. The experiences under the project will be replicable, bringing potentially mush wider benefits to poor smallholder farmers, who typically account for between 60% and 80% of Africa's total cotton production. The percentage of world cotton prices received by farmers has been estimated at no more than 20%. A liberalized market, coupled with the necessary rationalization of pricing policy, involving producer prices estimated on the basis of *both* cotton lint and cotton seeds could raise producer prices considerably. It is suggested that producers should receive a share equivalent to at least 50% of the world market price for cotton lint. This would translate to an increased income equivalent to USD 0.30 per kilogram for a smallholder farmer cultivating one acre of cotton.

113. The technical support, finance and reduction of post-harvest losses to be provided is expected to result in a doubling of the yields of participating farmers. This translates to an incremental output of 250kg from one acre. This increase in yield, combined with the improved producer prices indicated above could result in an incremental income equivalent to USD 75 and may well be higher when farmers benefit from reduced financial costs.

114. The traders, exporters and processors will benefit equally from increases in the quantity of cotton produced and improved quality as well as from the resulting increases in utilization of their ginnery capacities. The estimated incremental incomes cannot be estimated at this stage but they are expected to be substantial even after discounting for potentially higher producer prices.

115. Building on the experiences of the project and the training to be provided under the project, commercial banks will be in a position to considerably expand their trade finance activities. Under the project, these banks will disburse at least USD 36.25 mn over the 3 year period. Assuming a net margin of 2%, this translates to a minimum of USD 725,000 over the project period.

116. On a national scale, if the systems developed by the pilot project are widely adopted a significant increase in cotton output is expected from the improved yields and reduction of post-harvest losses. The incremental output, combined with quality improvements in cotton, are expected to result in a significant increase in the export earnings for participating countries.

117. The institutional strengthening and human capacity development are expected to have a major impact on commodity market development in general and cotton marketing and trade in particular. In Uganda and Tanzania, the Cotton Development Organization Tanzania Cotton Lint and Seed Board will improve their capacities for monitoring quality controls and certification; collation, analysis and dissemination of data on cotton production, export prices and stocks; and will also be in a better position to advise on legal, policy and regulatory reforms that could enhance the benefits to cotton industry operators and for the wider interests of the country in general. The policy and legal framework to be established will be applicable in general to agricultural commodity marketing and trade and will provide a clear basis for contract sanctity and facilitate private sector investments in agricultural production and trade.

D. Beneficiaries

118. The main beneficiaries of the project will be the cotton producers, over 90% of whom are smallholders cultivating no more than 2ha, of which 0.5 ha is planted cotton and are estimated to include over 2 million families in Uganda and in Tanzania. An estimated 96,800 families or 450,000 smallholders will directly benefit from the activities under the pilot project. An estimated 300 small to medium scale traders (employing over 1,500 persons) will benefit from the project directly, while six exporters and processors will be involved. They will provide employment opportunities for over 5,000 people during the 4 to 6 month period of the cotton processing and marketing season. These beneficiaries will directly benefit from improvements to the support services and access to finance and price risk management tools. Insurance companies will also be potential beneficiaries as they will receive advice on the various forms of insurance necessary for the cotton trade and will be able to apply this advice in expanding their business. The Ministry of Trade and Industry, Ministry of Agriculture, Livestock and Fisheries, CDO, TCLSB in Uganda and Tanzania, respectively, and at least four local commercial banks will receive training and technical support to strengthen their trade finance capacity and expertise under the project. The fourteen cotton producing countries in the region will also receive training which will assist them to establish similar operations. A total of at least 210 officers of different categories will be trained under the project.

E. Project Cost and Financing

119. The total project costs over the three year period are estimated at USD 24,811,059. The project costs are summarised in table 1 below. The costs have been kept to a minimum by the elimination of overlapping activities in participating countries.

120. The Common Fund is expected to finance USD 3,609,585 in grant and has made budgetary provisions to finance up to USD 5,717,250 in loans. The governments and collaborating institutions of participating countries will contribute counterpart funds equivalent to USD 1,111,719 in local currency. Participating banks are expected to provide trade finance credit in amounts to be determined by the scale of the developing project activities and subsequent credit requirements. This total contribution is expected to be in the range of USD 14,356,755. The summary of the proposed financing plan is presented in table 2.

Table 1
Summary Cost Table
(USD)

Project Component	**Total**	**% of Total Cost**
(i) Promotion of privately run warehousing system and establishment of collateralizable warehouse receipt system	681,300	2.77%
(ii) Development of information system for cotton production and marketing	517,030	2.10%
(iii) Development of cotton quality assurance and certification system	887,100	3.61%
(iv) (a) Development of a system of commodity trade finance based on inventory collateralization and a warehouse receipt system	604,400	2.46%
(b) Testing of the system through pilot trade financing	20,074,005	81.65%
(v) Project co-ordination, supervision and monitoring	833,650	3.39%
(vi) Project Execution, Staff training, dissemination of project results among Eastern and Southern African countries: Preparation of Technical Manual and Training Brochure	988,000	4.02%
Total Base Cost	24,585,485	100.00%
Unallocated/Contingency (5%) , excl. for loan provision	225,574	
Grand Total	24,811,059	

Table 2

Proposed Financing Plan

Project Component	CFC	ICAC	GOT	GOU	Partic. Banks	Total
(i) Promotion of privately run warehousing system and establishment of collateralizable warehouse receipt system	367,815		118,650	228,900		715,365
(ii) Development of information system for cotton production and marketing	395,273		66,150	81,459		542,882
(iii) Development of cotton quality assurance and certification system	679,455		40,320	211,680		931,455
(iv) (a) Development of a system of commodity trade finance based on inventory collateralization and a warehouse receipt system	634,620					634,620
(b) Testing of the system through pilot trade financing	5,717,250				14,356,755	20,074,005
(v) Project co-ordination, supervision and monitoring	495,022	15,750	157,080	207,480		875,332
(vi) Project Execution, Staff training, dissemination of project results among Eastern and Southern African countries: Preparation of Technical Manual and Training Brochure	1,037,400					1,037,400
Total	**9,326,835**	**15,750**	**382,200**	**729,519**	**14,356,755**	**24,811,059**

121. Detailed cost tables with the indicative allocation of funds of CFC grant resources and committed counterpart funding are given in Section VI. The tables are given by country activity for each component. For both Uganda and Tanzania, these tables are summarized in one table reflecting the CFC budget for each country. The central PEA budget for overall project activities is given in a separate table. A “total summary” table reflecting the CFC budget for project activities is also given in the same Section. It is to be noted that the balance between the total CFC budget in that latter table (USD 3,339,063) and the approved total for the CFC grant contribution (USD 3,609,585)is earmarked for CFC-controlled monitoring, evaluations, reviews, etc.

122. It is understood that the grant financed components of the project could stand on their own and that the loan would be auxiliary to the project. The Project's loan financing requirements to be supported by the Fund and regulated by separate Loan and Guarantee Agreements will be evaluated during implementation up to a maximum of USD 5,717,250 to be shared between Uganda and Tanzania. The *modus operandi* for the Fund’s loans will be established and evaluated during implementation but it is proposed that they be administered by the PEA and be on-lent by the respective governments to participants under the project (traders and farmers) through the participating local banks. The loans may be made to the respective governments , which would entrust the loans to the PEA for loan administration and specific credit finance facilities to be established and evaluated under the project. The terms of the loan would attract a rate of interest of 4% and include a repayment period of between 5 to 7 years, with a 2 year grace period. The terms of these loans would have to be negotiated between all the parties to a Loan Agreement but it is envisaged that governments may charge a 1% service fee to cover any guarantees in respect of the loan, the PEA may charge up to 1.5% for its loan administration, while participating banks may charge a spread of up to 2% to cover their administration costs. Under the above conditions, lending terms to farmers would not exceed 10% to 12%, leaving a margin of up to 3.5% to cover project costs and risks. This margin would be paid into a revolving credit account and used to augment any credit extended under the project. At the end of the project, the accumulated revenues from the interest margins would be repaid to the Fund, together with repayment of the principal. Although borrowers would be expected to repay the loan and interest within 9 months of withdrawal, the Fund would maintain any capital repayments in the revolving credit account until the end of the project, to allow for continued credit operations to be established during the project. Interest payments would be levied by the Fund on an annual basis. The Fund's loan finance would be tied to participating commercial banks' funding to minimise the risks of default. The specific credit arrangements made under the project would be derived from the mechanisms for supervised credit in-kind already widely practised in the region.

F. Procurement, Disbursement, Accounts and Audit

123. **Procurement** will be in accordance with the Fund's Regulations and Rules for the Procurement of Goods and Services for items financed by the Fund. Equipment and materials will be bulked as much as possible to attract International Competitive Bidding. Contracts costing the equivalent of USD 100,000 or more will be by ICB procedures. Contracts costing less than USD 100,000 but more than or equivalent to USD 5,000 will be procured through local competitive bidding or international shopping

procedures satisfactory to the Fund. For contracts costing less than the equivalent of USD 5,000 or for specialized equipment, prudent local or international shopping procedures will apply. Contracts to be awarded to consultants, institutes, or companies will require the prior agreement of the Fund which will ensure that the contracts are relevant and based on clearly defined Terms of Reference (TOR). The consultancy services under the project will follow internationally acceptable guidelines; consultants shall have experience and qualifications, and be recruited under conditions of service, satisfactory to the Fund.

124. **Disbursements** against the purchase of equipment; materials; consultancy services; operating expenses costing USD 250 or more will be documented in a manner satisfactory to the Fund. Disbursements for credit will be on the basis of an agreed credit programme. Other expenses and expenditures will be disbursed against certified statements of expenditure (SOE). Documentation for withdrawals under SOE need not be forwarded to the Fund but will be maintained in a central location by the PEA and the collaborating institutions for inspection during supervision missions and for authentication by the Auditors. Since the PEA and the collaborating institutions will not be in a position to pre-finance expenditures eligible for Fund financing, a Project Account will be opened by the PEA and subsidiary Project Accounts will be opened by the local Management Units in participating countries in banks satisfactory to the Fund, and in convertible currency. The Fund will make an initial deposit in an aggregate amount, equivalent to an estimated three months' worth of expenditures eligible for the Fund's financing, less credit and those expenditures to be disbursed directly, into the PEA's Project Account. Based on the agreed Work Programme and allocation of responsibilities, the PEA shall provide funds from the Project Account to collaborating institutions for implementation of their respective parts of the project. The PEA, if it so desires, can request the Fund to directly transfer the required amount to the local Management Unit’s subsidiary Project Account for implementation of its part of the project. The Project Account will be replenished in accordance with the Fund's procedures for operating a Project Account.

125. In respect of any CFC loans, the required funds would be made available based on an agreed Work Programme and upon request from the authorized representative of the concerned government, to a revolving cotton credit account to be opened by the PEA for that country. The amount to be disbursed to participating banks would be determined by the PEA based on an agreed programme of pilot credit to be handled by that bank. Such amounts would be made available to participating local banks at least a month in advance under a pilot cotton marketing and trade finance facility Agreement between the participating bank and government concerned. Subsidiary Agreements would include terms and conditions satisfactory to the Fund and specific conditions requiring that participating banks could not use the funds for any other purpose. For a bank to participate, it would have to meet the eligibility criteria for the pre-export credit facility specified under the project. Similarly, the borrower would have to meet the conditions for the cotton pre-export facility

126. **Accounts and Audit.** The PEA, collaborating institutions and participating banks will maintain independent and appropriate financial records and accounts in accordance with internationally acceptable accounting practices. All project accounts, including the Project Account and, if necessary, the revolving cotton Credit Account, will

be audited annually by independent auditors satisfactory to the Fund. The Audited Accounts and Auditor's report, including separate opinions on SOEs and the utilization of the funds in the Project Account and revolving Credit Account will be submitted within three months after the end of the related project fiscal year.

G. Organization and Management, Project Implementation

127. The implementation of the project requires that the Project Executing Agency (PEA) not only has the technical skills but also has sound experience in commodity trade issues, relatingto the cotton transaction cycle and associated risks, price relationships at different transaction levels and the capacity to mitigate risks. More importantly, it must have adequate local experience which will assist in promoting operations, creating local confidence and expediting the necessary action on legal, policy and other regulatory issues requiring government attention. The PEA must not only be a reputable, independent and professional organization, with a proven record of experience in the region, but must also be willing to share its knowledge and commit itself towards meeting the objectives of the project. The United Nations Office for Project Services (UNOPS) will provide all the necessary technical backstopping to ensure effective coordination and implementation of project activities by the national institutions.

128. The objectives, activities and outputs are similar in both countries, but implementation must be carried out following a phased approach which responds to the particular circumstances and relative stages of development in each of the countries. It is proposed to carry out the final production of procedures, technical manuals and training brochures at a central level by the PEA, making use of draft proposals from participating countries and then disseminate these materials to other countries for training. Throughout the project, the PEA will monitor and co-ordinate all activities and dispatch reports and results to all other parties concerned.

129. The project design and implementation strategy outlined in this proposal has been formulated with the objective to achieve the desired project output at minimum cost. An integrated approach, which focuses on a supervisory government Ministry, a project co-ordinator and local Management Unit within each of the two countries, executed by the PEA (from the UNOPS Nairobi outpost) will be adopted. Project management will be delegated to a national project co-ordinator within each of the countries to facilitate local capacity building and promote more efficient implementation. The private sector, through the local banks, traders and collateral managers, must be targeted as the key sector for promoting the central objectives of financing cotton production, marketing and trade. At the core of the PEA, a qualified expert will co-ordinate this aspect of the project with participating local banks to strengthen their trade finance capacities. The project will be implemented by selected private sector agencies which will assume direct responsibility for the management of the system, supported by public bodies directly involved in regulating cotton sector marketing and trading. The Uganda Cotton Development Organisation (CDO) and Tanzania Cotton Lint and Seed Board (TCLSB) will provide the supporting regulatory role.

130. In the process of formulation and appraisal, considerable efforts have been made to identify local banks and private sector operators prepared to participate in the

project. These banks have expressed interest in the objective of the project and are expected to contribute their own resources to implement specific components of the project.

131. The project will receive the necessary support from the appropriate Ministries to ensure that any recommendations for policy and legal reform are carefully evaluated and closely monitored for government approval. In Uganda, the Ministry of Trade and Industry and in Tanzania, the Ministry of Agriculture, Livestock and Fisheries, will have overall responsibility for the supervision of project implementation, particularly for issues related to the legal, policy and regulatory environments. In order to ensure adequate representation from all interested parties and stakeholders, a National Advisory Committee (NAC) will be established in each of the two countries to include representatives from all private sector entities and stakeholders (banks, traders, collateral managers, insurance agents, freight forwarders, warehouse operators, farmers, co-operatives, etc.,) and public sector bodies (MOF, MOA, Attorney General's Office, Central Banks, etc.,). The National Advisory Committee (NAC) could be chaired by the Minister of the respective Ministries specified above, or a specially designated official and the Secretary will be the designated project co-ordinator. The Project Co-ordinator in his function as Secretary of the NAC will be responsible particularly for all organisational aspects of the NAC's, including inviting participants, drafting the agenda, preparing documentation, writing reports and minutes of meetings, etc. The NAC will schedule its meetings on a quarterly basis, to be held at least four times per year, to review the progress made in project implementation, make recommendations for desired legislative and policy reforms as well as proposals for operational, technical and procedural improvements and review the Annual Work Programmes and Budgets, provide expertise and respond to questions addressed to the Committee.

132. A Project Co-ordinator (PC) and local Management Unit will also be established in each of the two countries to monitor, co-ordinate and review progress in project implementation and to share the experiences of implementation in each country. The local Management Unit will be accommodated by the designated supervisory Ministry above, which will provide staff and logistical support. The local Management Unit, headed by the Project Co-ordinator, will however otherwise be independent from the relevant Ministry and will be responsible for the day-to-day management and execution of the project at the national level.

133. The PEA, in collaboration with participating commercial banks, will administer the trade finance activities as well as provide opportunities for the staff of other interested banks wishing to duplicate the project experience to receive training and practical on-the-job experience and exposure to the systems developed. The appointed Collateral Managers will be responsible for any commodities (and possessory collateral) stored in warehouses under their control and supervision with the co-operation of the regulatory bodies responsible for quality control and technical support provided under the project. All purchases and sales of cotton will be the responsibility of the private traders and exporters. Insurance companies and their agents will provide the necessary insurance for warehousing, storage, collateral management and other trade-related activities that will be promoted under the project. The market information system, quality assurance, control and certification and processes for establishing a warehouse receipt system will be the responsibility of the local Management Units. The PEA will be

responsible for the training, information dissemination, arranging a terminal workshop and the final publication of technical manuals and training brochures after the project is completed.

134. The project will be implemented on the basis of an agreed Annual Work Programme and Budget (AWP/B). The local project co-ordinator in each country will prepare national Annual Work Programmes and Budgets, in close consultation with other implementing agencies and stakeholders. The AWP/B will be in line with the objectives and targets of the project but will reflect any changes that might have occurred which may influence the project's targets and objectives. The AWP/B will be submitted to the NAC for its review and any proposed amendments and upon approval, it will be forwarded by the national Project Co-ordinator to the PEA. The PEA will consolidate the AWP/B from the two countries into the Project AWP/B and submit it to the SB and the Fund for their comments and approval, at least two months before implementation of the related AWP/B is due to commence. The comments of the SB (ICAC) and the Fund may be incorporated into the final AWP/B for the project.

135. The Fund and the SB may participate in the NAC meetings.

136. All technical manuals, training brochures and other project publications will be the property of the Fund and will be issued as the Fund's publications.

H. Monitoring, Progress Reporting and Supervision

137. The PEA will submit six-monthly progress reports on the achievements of the overall project. The PEA's report (submitted to the ICAC and the Fund) will be based on progress reports produced by the project co-ordinator and local Management Units, reflecting any concerns and recommendations of the NAC and representations from private sector stakeholders, and it will contain an assessment of project achievements in relation to the targets determined by the project document and Annual Work Programme. Any variances will be accounted for and remedial action will be proposed where required. All major constraints and problems which may hamper the achievements of the project objectives will be highlighted and suggestions to resolve them will be provided. The ICAC shall provide its comments on the report to the PEA and the Fund. The Fund shall carry out regular monitoring of the project, in co-ordination with the PEA and SB (which will carry out regular supervision of the project in its capacity as Supervisory Body).

138. Not later than 20 months after the commencement of implementation, a mid-term evaluation will be carried out to evaluate the project achievements to date. It will, in particular, review the collateral management, warehousing and warehouse receipt system, the trade finance system and quality controls. The training programme will be evaluated in terms of follow-up activities of trainees. A particular focus will be placed on the costs of operations, the mode of financing and sustainability of the systems being established. Based on the results of such a review, a decision on the future direction of the project will be taken. At the end of the project, a terminal evaluation will take place. The actual timing of the evaluations will be agreed upon by the participating countries, the PEA, SB, and the Fund.

139. The PEA will make the arrangements necessary for the publication (in English) and the distribution of all relevant documents (technical manuals, training programmes and brochures, catalogues and workshop proceedings). The PEA will prepare a Project Completion Report (PCR) to highlight project achievements, constraints encountered and experiences gained in the design and implementation of the project. The PCR will be derived from contributions of the national project co-ordinators and will reflect any resolutions and comments of the NAC. The PCR will be submitted to the SB and the Fund, together with the final Audited Accounts, not later than three months after completion of the project. The SB should submit its comments and observations to the Fund. The Fund may require, if necessary, a review of the PCR considering both the comments received from the SB as well as its own comments and observations.

I. Project Risks

140. There are a number of risks that could potentially affect implementation of the project, and hence, the achievement of project objectives. Such risks have been carefully considered during the process of project formulation and appraisal and appropriate measures have been included in the project design to mitigate against such risks. These risks are discussed below.

141. The project addresses fundamental issues relating to the sustained production and marketing of quality cotton. There are some key legal, policy and regulatory issues which would require commitments at appropriate levels of the national governments concerned and which may have to be addressed by the project. The execution of the project under the prevailing legal and policy framework would also require the commitment, support and understanding of the private sector. In order to implement the project successfully, there is a need for close co-operation between the public and private sectors. The risk that the necessary commitments may be lacking have been minimised by ensuring that the appropriate government authorities were identified and provided their commitment to the stated project objectives. Furthermore, the responsible technical and regulatory agencies of the governments and key private sector stakeholders will be closely involved in project implementation. The private sector's representatives will be actively involved and consulted in the process of defining (and making recommendations necessary for any desired reforms) to ensure a supportive policy, regulatory and legal framework.

142. The sustainability of operations after the project is crucial to achieving the ultimate objective of a more general and wider application of the systems to be developed under this pilot effort. The risk that operations will not be continued after project completion has been mitigated in a number of ways: (i) Both public and private institutions involved will participate because of the benefits they expect to derive from the project and will be committing their own resources to strengthen their operations to effectively implement those aspects of the project specifically related to their institution's objectives; (ii) other institutions which are not directly involved in the pilot effort will be exposed to the systems being developed and their staff will be trained under the project; (iii) the services to be financed by government will be paid for by the end-users of such services so that no financial burden will be imposed on the governments' recurrent budgets and to sustain the provision of these services beyond the lifetime of the project; (iv) the project will demonstrate the benefits of services established under the project so that beneficiaries will be more willing to pay for them. Measures to ensure efficient cost recovery will be put in place by the project; and (v) the project includes major training efforts to disseminate the systems developed amongst other cotton-producing countries of the region. In addition, technical manuals and training brochures will be available after the project to assist in the replication of the systems in other developing countries.

143. There is a risk that due to a weak administrative capacity and/or financial constraints of the local Management Units, the project may not be effectively implemented. This risk has been minimised by the provision of technical assistance and support to enhance the capacity of the local Management Units and project co-ordinator, while ensuring that many of the activities are implemented by private sector stakeholders. At the same time, appropriate training of local staff has been included to

strengthen national capacities to sustain their activities beyond the lifetime of project execution. Supplementary finance is also provided under the project. The identified participating public institutions have capable local staff in place who, with the technical support planned under the project, will be able to effectively co-ordinate the project. The private sector operators, which constitute the core of implementation activities, have undertaken to strengthen their own capacity to effectively implement their project activities. These efforts will be enhanced by the provisions made for technical support and training under the project. The selected PEA has the necessary experience in trade finance and has demonstrated its commitment to the wider objectives of the project.

144. There is always a pervasive risk of prices falling. A dramatic fall in prices may discourage smallholder farmers from producing quality cotton and could reduce the number of exporters. Efficiency in marketing, productivity enhancing measures, the reduction of associated technical risks and improved management of price risks, which are all integral components of the project, will be crucial in ensuring the resilience of the cotton trade to any volatility in cotton prices. Measures to promote market competition are also crucial. Fair access to financial resources and information will play key roles in this respect. It is important that a credible trade finance system be established for producers, traders and exporters or these important players may be unable to perform effectively during periods of relatively lower cotton prices. The project provides a major focus on credit delivery, information dissemination and training of operators to improve the resilience of the local cotton trade during times of potential adversity, for example, during a period of price volatility and/or a prolonged period of depressed prices.

145. A high volatility in the foreign exchange rate may hinder smooth trading conditions as trading companies would be unable to effectively plan too far in advance since they would not be sufficiently confident about the future value of stocks. However, under a liberalized cotton marketing system and under a foreign exchange policy which permits market transactions in hard currencies, this risk will have little impact on project execution. The hedging facilities to be provided under the project could also be applied to mitigate against such risks. Furthermore, the credit in-kind, which will be further developed and legally established under the project will minimise the exposure of financiers, traders and exporters to exchange rate risks.

VI. BUDGET TABLES

1. Summary Financing Plan by Component
2. Tanzania - indicative overall budget tables for Component 1,2,3 and 5
3. Uganda - indicative overall budget tables for Component 1,2,3 and 5
4. CFC Budget for Tanzania
5. CFC Budget for Uganda
6. CFC Budget for PEA/project wide activities
7. Summary CFC Budget
8. Allocation of Approved CFC Resources

Allocation of Approved CFC Resources

Approved CFC allocation	USD 3,609,585	
PEA-managed funds	USD 3,339,063	(incl. contingency allocation and tentative management fee)
Balance	USD 270,522	

Balance to be used for CFC monitoring, external evaluations and cross project reviews.

Tentative scheduling (USD):

	year 1	year 2	year 3	total
CFC monitoring	15,000	15,000	15,000	45,000
Evaluation		40,000		40,000
Cross evaluation			40,000	40,000
Unallocated	40,000	50,000	55,522	145,522
Total	**55,000**	**105,000**	**110522**	**270,522**

	Component	CFC	Uganda	Tanzania	ICAC	Part. Banks	Total
		Cotton Market Development					
		Summary Financing Plan by Component in USD					
		(including contingency provision)					
1	Promotion of privately run warehousing system	367,815	228,900	118,650			**715,365**
2	Develop. of information system for production & marketing.	395,273	81,459	66,150			**542,882**
3	Development of quality assurance and certification system.	679,455	211,680	40,320			**931,455**
4	Development of commodity trade finance system	634,620					**634,620**
	Revolving Credit Fund	5,717,250				14,356,755	**20,074,005**
5	Project co-ordination, supervision and monitoring.	495,023	207,480	157,080	15,750		**875,333**
6	Project Execution and Dissemination	1,037,400					**1,037,400**
	Total including contingency	**9,326,836**	**729,519**	**382,200**	**15,750**	**14,356,755**	**24,811,060**