



The University of Greenwich at Medway
Central Avenue, Chatham Maritime
Kent, ME4 4TB
44 (0) 1634 883915
Fax: 44 (0) 1634 883706

**COFFEE AND COTTON MARKET DEVELOPMENT
AND TRADE PROMOTION IN EASTERN AND
SOUTHERN AFRICA**

Monthly Report: April 2005

GIDEON ONUMAH & RUTH BUTTERWORTH

TABLE OF CONTENTS

1.0	Introduction	1
2.0	Tanzania.....	2
2.1	<i>Planned Activities for Tanzania for April 2005.....</i>	2
2.2	<i>Activities undertaken in Tanzania in April 2006.....</i>	2
2.2.1	Analysis of long-term implications of WRS on commodity sectors.....	2
2.2.2	Final selection of pilot locations for WRS.....	4
2.2.3	Setting up inspection and monitoring system for WRS – appointment of collateral managers.....	4
2.2.4	Consultations with banks.....	5
2.2.5	Design and printing of standard warehouse receipts.....	5
2.2.6	Warehouse legislation.....	5
2.2.7	Market information system for the WRS.....	6
2.2.8	Training in quality assurance.....	6
2.2.9	Visit by ICAC representative.....	6
2.3	<i>Tanzania deferred activities (April) and planned activities for May 2005.....</i>	7
2.3.1	Deferred activities.....	7
2.3.1	Planned activities for Tanzania for May 2005.....	7
3.0	Uganda	8
3.1	<i>Planned Activities for Uganda for April 2005.....</i>	8
3.2	<i>Activities undertaken in Uganda in April 2005.....</i>	8
3.2.1	Study on long-term implications of WRS on Ugandan coffee sector.....	8
3.2.2	Final selection of pilot warehouses for coffee WRS.....	10
3.2.3	Appointment of collateral managers.....	10
3.2.4	Consultations with banks.....	11
3.2.5	Promoting participation by smallholder groups.....	11
3.2.6	Design and printing of standard warehouse receipts.....	11
3.2.7	Study tour of Tanzania.....	11
3.2.8	Warehouse legislation.....	12
3.2.9	Market information system for the WRS.....	12
3.2.10	Training in quality assurance and use of warehouse receipts.....	12
3.2.11	Visit by Managing Director of CFC and representative of ICAC.....	12
3.3	<i>Uganda deferred activities (April) and planned activities for May 2005.....</i>	13
3.3.1	Deferred activities.....	13
3.3.2	Planned activities for Uganda for May 2005.....	13
4.0	Zimbabwe	14
4.1	<i>Planned Activities for Zimbabwe for April 2005.....</i>	14
4.2	<i>Activities undertaken in Zimbabwe in April 2005.....</i>	14
4.2.1	Selection of warehouses for pilot WRS for soybean.....	14
4.2.2	Consultations with banks.....	14
4.2.3	Appointment of collateral managers.....	15
4.2.4	Promoting smallholder participation.....	15
4.2.5	Market information system.....	15
4.2.6	Training in quality assurance.....	15
4.2.7	Briefing sessions with Government.....	16
4.3	<i>Deferred activities for April 2005 and planned activities for May 2005.....</i>	16
4.3.1	Deferred activities.....	16
4.3.2	Planned activities for Zimbabwe for May 2005.....	16
5.0	Concluding remarks.....	17

1.0 Introduction

This report, which covers activities undertaken in April 2005, is submitted by the Natural Resources Institute's (NRI) in fulfilment the sub-contract between it and the United Nations Office for Project Services (UNOPS). The sub-contract is for the provision of technical advisory services in establishing "Commodity Trade Finance Systems based on Inventory Collateralisation and Warehouse Receipts" under projects funded by the Common Fund for Commodities (CFC). The projects are: Coffee Market Development and Trade Promotion in Eastern and Southern Africa (CFC/ICO/03FA) and Improvement of Cotton Marketing and Trade Systems in Eastern and Southern Africa (CFC/ICA/12FA). The participating countries are Uganda, Tanzania and Zimbabwe.

The focus during April 2005 was on implementing activities under Components I and IV for purposes of ensuring that the basic pre-requisites of the warehouse receipts systems (WRS) are in place for commodities to be harvested in the participating countries beginning in June 2005. The inputs from NRI included field visits to the participating countries by Dr. G. Onumah and Ms R. Butterworth, from 2nd April 2005 to 8th May 2005. During the period, substantial progress was made in carrying out planned activities, including also activities under Components II and III.

The report is structured as follows: Section 2 covers project activities undertaken in Tanzania; while Sections 3 and 4 report cover Uganda and Zimbabwe respectively. The conclusion is in Section 5.

2.0 Tanzania

2.1 Planned Activities for Tanzania for April 2005

Components I and IV: Promotion of WRS and inventory collateralisation

- Analysis of long-term implications of WRS on commodity sectors – follow-up on activity in March 2005
- Final selection of pilot locations
- Warehouse legislation: placing draft bill before Parliament and organising workshop for parliamentarians and other stakeholders
- Appointment collateral managers to undertake warehouse inspection and stock monitoring – deferred from March 2005
- Prepare promotional materials, including a brief on the WRS for the banks – deferred from March 2005
- Sensitization for producers, extension officers and banks

Component II: Market information system

- Advise on software and hardware required by commodity bodies
- Procurement of required software and hardware by commodity bodies

Component III: Quality assurance and certification system

- Prepare training materials and manuals
- Carry out training for target group in identified areas

2.2 Activities undertaken in Tanzania in April 2006

Components I and IV: Promotion of WRS and inventory collateralisation

2.2.1 Analysis of long-term implications of WRS on commodity sectors

It was not possible to obtain further comments from either the LMU or the Tanzania Cotton Seed and Lint Board (TCSLB) on the draft report by J. Coulter and Les Law on the study of the long-term implications of the WRS on the cotton sector in Tanzania. The LMU had earlier submitted comments of the first draft of the report. The final report, the main observations and recommendations from which are set out in Box 1, is attached (Annex 1).

A similar study of the coffee sector was planned for April 2005, but it was agreed with the LMU that this activity is deferred to sometime in late September or early October 2005 to ensure that there is concentrated attention on carrying out activities aimed at meeting pilot WRS targets for June 2005.

Box 1: Review of Tanzania Cotton Sector

Two NRI consultants (Jonathan Coulter and Les Law) visited Tanzania between February 6-16, 2005 to study the potential long-term implications of the WRS on the cotton sector. They were assisted, particularly during field visits, by the LMU. The team visited Dar-es-Salaam, Moshi, Arusha, Mwanza and other places in the Western Cotton Growing Area (WCGA) which accounts for over 90% of cotton output in Tanzania.

The team reviewed recent trends in the cotton sector, including the introduction of the passbook system for inputs since 2001/02; the development of contract farming in the sector; the proposed introduction of village auctions for seed cotton; and quality problems in the sector. The team also the coffee sector WRS pilot in Tanzania, which involves curing factories as warehouse operators and which makes it possible for primary cooperative societies to deposit and obtain finance against parchment coffee.

The team noted that the main quality problem is the contamination of seed cotton, particularly with polypropylene waste. They also observed that the quality problems tended to be exacerbated by intense competition, which often leads to buyers of seed cotton being somewhat indiscriminate in their procurement practices. Quality premium is rarely paid at the farmgate. They noted further that in the WCGA, inventory lending was available exclusively to the ginners, and the banks required collateral managers, based at the ginneries before financing was provided. Unlike the inventory finance system under the coffee WRS, primary cooperative societies could not access finance.

After reviewing the potential of the cotton WRS pilot planned for Moshi, the team concluded that the toll-ginning arrangement under, which primary societies could deposit and access finance against stored seed cotton, would have no adverse impact on cotton quality. It could contribute to improved incentives for expanded production if it contributed to increased household income for farmers, as has been demonstrated in the coffee sector. To assure a successful pilot, the team recommended the following:

- (1) TCSLB should assure that there is sufficient ginning capacity to handle the growing production by the Oridoy Primary Cooperative Society, which has mobilised farmers to deposit seed cotton during the pilot.
- (2) In the short-term, the WRS model under which primary cooperative societies can be depositors should not be extended to the WCGA until its viability has been proved and complementarity with other initiatives (such as the proposed village auction system) has been demonstrated. The proposed pilot is in the Eastern Cotton Growing Area and is seen by the TCSLB as part of efforts to promote increased cotton production in that area.
- (3) The project should explore supporting improvement of the existing collateral management services in Tanzania by working with stakeholders to develop suitable industry training programmes.

Coulter and Law (March 2005) – Annex 1.

2.2.2 Final selection of pilot locations for WRS

It was agreed during discussions between the NRI team and the LMU that the coffee WRS pilot will be limited to the four curing factories which have been participating in the system. These are: the Tanganyika Coffee Curing Company Ltd. (TCCCO) at Moshi in the Kilimanjaro Region; Mbinga Coffee Curing Ltd. in the Ruvuma Region; the Mbozi Coffee Curing Ltd. in the Mbeya Region and the Kanyovu Coffee Joint Venture in the Kigoma Region. The main improvements required for the coffee WRS are the introduction of an inspection and monitoring system for the participating coffee curing factories; and the issuing of standard warehouse receipts.

As stated in the March 2005 report (Section 2.2.4), the possibility of extending the cotton pilot to Kilosa was explored but the decision reached was that the focus should be on piloting at the Moshi ginnery, which presents very daunting challenges. The Moshi ginnery offers toll-ginning services, which makes it possible for third-party stocks of seed to be collateralised, but its ginning stands are very old and constantly break down. To address this problem, we explored three options, namely:

- i. Relocating the operation to a different ginnery;
- ii. Securing investment in better-performing ginning stands at Moshi; and
- iii. Suspending implementation of the cotton pilot at Moshi.

The third option could have adverse impact on the farmer cooperative at Oridoy, which is very well organised and has helped raise output by its members by over 10 times in the space of four seasons, partly through using inventory finance. The second option entailed ginning at Mandera, which is over 800 km from Moshi. The cost-benefit analysis jointly undertaken by NRI and the LMU, clearly showed that this option will not be profitable to the farmer/depositors.

The LMU/NRI team therefore held discussions with the TCSLB and the Ministry of Cooperatives and Marketing (MCM) on the second option. Following those discussions, the TCSLB agreed to arrange for five de-commissioned but serviceable ginning stands to be rehabilitated and transferred to the Moshi ginnery from the ginnery at Mandera. The TCSLB officials confirmed that the management of the ginnery at Mandera had agreed to that proposal and an Engineer from TCSLB was to follow that up. The MCM also agreed to procure four new ginning stands for the Moshi ginnery. The ginning stands will be leased to the Cooperative Union which owns the Moshi ginnery, while the TCSLB will manage the ginning operation under a management contract with the owners. The installation of the new ginning stands will increase output from the current 6 bales per day to over 20 bales per day.

2.2.3 Setting up inspection and monitoring system for WRS – appointment of collateral managers

The lead banks in inventory finance (CRDB Bank and Exim Bank) as well as the LMU were not in favour of the involvement of collateral managers in inspecting participating warehouse operators and monitoring collateralised stocks. This is because it was seen as involving additional cost without the collateral managers assuming significant liability in the event of a loss. The alternative, which was

explored, was for the inspection and stock monitoring function to be performed by the regulatory agency to be set up with the promulgation of the warehouse law. The MCM has nominated the LMU to perform inspection/monitoring functions until such time that the regulatory agency is established. NRI is arranging for the LMU staff to receive appropriate training to enable them perform this function.

2.2.4 Consultations with banks

Meetings were held mainly with the CRDB Bank, which remains committed to participating in financing coffee and cotton deposited under WRS. A locally-based DCDM consultant, who used to work with Citibank, has been tasked to promote participation by other banks.

2.2.5 Design and printing of standard warehouse receipts

The design of standard warehouse receipts has been approved by the participating banks and arrangements are being made to have them printed. NRI has provided the LMU with contact details for two printers of security documents based in South Africa to enable stakeholders make a choice. One of the printers responsible for printing receipts previously used in Zimbabwe while the other printed the receipts used in Zambia.

2.2.6 Warehouse legislation

In March 2005¹, a seminar on the WRS and draft Warehouse Bill was organised for 23 Members of Parliament (MP), followed by a public hearing on the Bill, to which a cross-section of stakeholders were invited. Another seminar was organised for all MPs as part of the preparations for placing full-scale discussion of the Bill by Parliament. The seminar took place in Dodoma on the 15th of April 2005. Two papers were presented: one on the operation of the receipt system (by the LMU) and the second on Warehouse Receipt Bill (by the lawyers). As happened during the March seminar, most of the questions raised were on the need to assure smallholder access to the receipt system as well as educating stakeholders to ensure a clear understanding of the system. The MPs also advocated replication of the system to cover other crops.

Following Parliamentary consideration of the Bill, the Warehouse Receipt Act, 2005 was passed by the Parliament of the Republic of Tanzania on 20th April 2005 with the amendments proposed by the Minister for Cooperatives and Marketing (Hon. C. G. Kahama). The Parliamentary draftsmen are revising the Act, to include the approved amendments before being submitted to the Presidential for his assent. A copy of the Bill is attached (Annex 2)².

¹ Section 2.2.2 of the March 2005 report.

² A copy of the Warehouse Receipt Act will be provided after the Presidential assent.

Component II: Market information system

2.2.7 Market information system for the WRS

A review of the market information needs of the coffee and cotton sector players in all three countries has been undertaken. Related to this, existing systems for collecting, processing and disseminating price-sensitive market information was also reviewed. The report on these reviews is attached (Annex 3). The IT component of this activity is ongoing. The expected outputs include practical recommendations on improvements to the websites of the commodity bodies, interventions to facilitate collection and processing of field information and advice on the software and hardware requirements of the commodity bodies. It is expected to be completed by end of May 2005.

Component III: Quality assurance and certification system

2.2.8 Training in quality assurance

The three-country report on quality assurance and certification systems, produced by D. Walker, is attached (Annex 4). D. Walker, in collaboration with personnel in the quality divisions of the commodity bodies and the LMUs, is also working on training manuals for the quality assurance and certification systems. The assignment is expected to be completed by mid-June 2005.

In the specific case of Tanzania, training in quality-related issues is being planned for June 2005. Based on the recommendations by D. Walker, the resource persons to be used for the training will be from the TCSLB (for cotton) and the Tanzania Coffee Board (TCB) for the coffee sector. The primary targets will be the producer groups, since in both sectors the main origin of quality problems is at the farmer level.

Other project-related activities

2.2.9 Visit by ICAC representative

Andrei Guitchounts (Economist, International Cotton Advisory Committee) visited Tanzania in April 2005. He had meetings with the TCSLB, the LMU and Dr. Onumah, who was on a mission to Tanzania at the time and briefed Andrei about progress and prospects with the cotton WRS pilots in Tanzania and Uganda. He also visited the TCSLB offices where the HVI equipment procured with project funds are maintained as well as the Moshi ginnery designated for the pilot WRS.

Andrei appeared satisfied with the approach adopted by NRI in developing the WRS for cotton in Tanzania and Uganda. However, he expressed concern about the breakdown of air-conditioners in the HVI premises, which affects the performance of the equipment and its accuracy. The issue was taken up with the TCSLB officials by Dr. Onumah and Mrs Kimambo. During the discussions, the Board indicated that it was taking measures to assure the financial sustainability of the quality operations involving the HVI equipment.

2.3 *Tanzania deferred activities (April) and planned activities for May 2005*

2.3.1 Deferred activities

- a. Publication of warehouse standards – deferred to June 2005.
- b. Production of promotional materials – deferred June 2005 to allow for additional details (including the agreed inspection system) to be included.

2.3.1 Planned activities for Tanzania for May 2005

- i. Arrange training in warehouse inspection and stock monitoring for staff of commodity boards and LMU.
- ii. Follow up arrangements for new ginning stands for Moshi ginnery.
- iii. Printing of Warehouse Receipts
- iv. Host delegation from Uganda to study coffee WRS pilot.

3.0 Uganda

3.1 *Planned Activities for Uganda for April 2005*

Components I and IV: Promotion of WRS and inventory collateralisation

- Analysis of long-term implications of WRS on coffee sector
- Final selection of two locations for piloting WRS for coffee in June 2005 – a deferred activity from March 2005.
- Contract the Collateral Manager (CM) – a deferred activity from March 2005
- Publish details on selected warehouse operator and CM for coffee
- Sensitization for bankers, producers, UCDA field officers and extension officers at two pilot locations
- Preparation of promotional materials, including a brief on the WRS for the banks – a deferred activity from March 2005.
- Identification of training needs of bankers.

Component II: Market information system

- Arrange dissemination of market information
- Provide training for UCDA staff in application of new software

Component III: Quality assurance and certification system

- Prepare training materials and manuals
- Procurement of grading equipment for UCDA

3.2 *Activities undertaken in Uganda in April 2005*

Components I and IV: Promotion of WRS and inventory collateralisation

3.2.1 Study on long-term implications of WRS on Ugandan coffee sector

Initial comments on the report by P. Greenhalgh and S. Kitchin (NRI consultants) on the long-term implications of WRS for coffee market and trade development in Uganda were provided by the Uganda Coffee Development Authority (UCDA) during a wrap-up meeting with UCDA officials at the end of the study. The report was further discussed with the LMU and UCDA officials during the visit by the NRI team (G. Onumah and Ms. Butterworth). The report has been revised based on comments received and is attached (Annex 5). A summary of the main conclusions and recommendations is provided in Box 2 below.

Box 2: Long-term implications of WRS for coffee sector in Uganda

The study was undertaken by Peter Greenhalgh and Stephen Kitching (NRI consultants) from February 9th to 15th 2005. It involved consultation with a wide range of stakeholders from the private sector, including Uganda Coffee Trade Federation (UCTF), banks, grain traders and collateral management companies. In addition the consultants met with the UCDA, NUCAFE, Uganda Coffee Roasters Association (UCRA), East Africa Fine Coffee Association (EAFCA), Government departments, and donors. Discussions were also held with UK-based coffee importers prior to and after the field visit.

The consultants concluded that opportunities exist for the establishment of a WRS in the coffee sector. They noted that Uganda's policy and economic environment is favourable for the development of a WRS but stressed the importance of promulgating supportive warehouse legislation to help create and maintain a suitable regulatory framework.

The consultants observed that many stakeholders in the sector have considerable interest in WRS, but stated in the report that, the multinational exporters have little or no interest in the use of warehouse receipts in accessing trade finance and rather see it as potentially beneficial in facilitating the procurement of coffee. They noted further that smallholders will not be able to access the WRS unless they are part of well-organised farmer organisations. The report indicates that most sector players favour setting up a WRS for coffee which targets delivery of semi-processed Robusta (FAQ) or parchment (Arabica).

The observations in the report validate the approach adopted in developing the coffee sector WRS as described in the approved Workplan for Uganda (2005-06). In implementing the Workplan, we have also taken steps to address the business and process risks associated with the system which the consultants have identified. The emphasis the consultants placed on training and sensitisation prior to the launch of the pilot is also well-placed. For this reason, the implementation team (NRI/LMU) have planned various training/sensitisation programmes for May/June 2005 for the target stakeholders.

P. Greenhalgh and S. Kitchin (2005) – Annex 5.

3.2.2 Final selection of pilot warehouses for coffee WRS

Consultations were held with officials of UCDA, coffee exporters, bankers and the LMU on the selection of two out of the four locations pre-selected for piloting the WRS for coffee beginning with the harvest in June 2005. The selection was based on the suitability of the warehouses (applying standards finalised by D. Walker and the LMU in March 2005); the volume of coffee produced; interest shown by warehouse operator; and readiness of farmer organisations in the area to participate in the pilot. The local representative of NRI (C. Baine) also carried out basic due diligence on the warehouse operators, involving the banks in the process. The selected warehouses are located at:

- Mbale, owned by Bugisu Cooperative Union (BCU) which will be used for receipting Arabica; and
- Mbarara, owned by Job Coffee Ltd, for Robusta.

Following the selection, meetings were held with the managements of two selected warehouse operators: BCU and Job Coffee Ltd. The meetings involved the NRI team (G. Onumah, C. Baine and Ms. R. Butterworth), the NPC and APC (Coffee) and officials of the two companies. The purpose was to discuss details on the role of the warehouse operators, the involvement of collateral managers in the pilot and the depositing as well as financing process. It was made particularly clear to the operators that though they could use the system to secure finance against their own crop, third-party deposits had to be allowed and such depositors should not be compelled to sell their coffee to the operators. Both warehouse operators expressed keen interest in participating carrying out activities intended to assure capacity to receipt coffee during the pilot. The estimated throughput is 2,000 tonnes at each location.

The warehouse locations will be published in May 2005, after the collateral managers who will be issuing warehouse receipts have been selected.

3.2.3 Appointment of collateral managers

The process leading to the appointment of collateral managers (CM) to take custody of the collateralised coffee and issue warehouse receipts during the pilot was initiated in April. As part of this process, the NRI team drafted scope of work (SOW)³ for participation by collateral managers, which was adopted after consultations with stakeholders. Based on the SOW, four collateral management companies, which are active in Uganda, were invited to participate in the pilot and three responded by submitting proposals. The three which responded are: Cotecna, SGS and Wakefield. ACE was invited but, after initially showing interest, declined participation.

The technical and financial proposals submitted by the three companies were evaluated by a 5-member panel consisting of two bankers (from Standard Chartered Bank and Allied Bank), a representative of UCDA, the NPC and the local NRI representative. Cotecna was unanimously selected to provide collateral management services during the pilot season.

³ Attached as Annex 6.

3.2.4 Consultations with banks

A number of meetings, both formal and informal, were held with officials of the following banks to discuss their participation in the pilot and specific activities related to that, including the selection of pilot locations and collateral managers. The banks consulted were Standard Chartered Bank, Allied Bank, DFCU Bank and Barclays Bank. Among the issues discussed was a briefing document⁴ produced by NRI and outlining how the WRS is to work during the pilot. Standard Chartered Bank and Allied Bank have made firm commitments to finance coffee stocks during the pilot. The others have generally expressed interest in the WRS but do not appear ready to participate during the June pilot season.

Messrs Baine and Onumah made a joint presentation on warehouse receipts finance at a seminar on “Agricultural Finance” organised by the Programme for Modernisation of Agriculture (PMA) in Uganda. The presentation generated much interest amongst participants, particularly the discussions on the successful case of Zambia. The PMA, which is under the Ministry of Agriculture, is playing a lead role in promoting the development of the Uganda Commodity Exchange and a programme intended to expand coverage of the WRS to commodities other than coffee and cotton. The European Union is funding that initiative, which also has the Ministry of Tourism, Trade and Industry (MTTI) represented on its Steering Committee.

3.2.5 Promoting participation by smallholder groups

In pursuit of this objective, meetings were held with the management of the National Union of Coffee Agribusiness and Farm Enterprise (NUCAFE), following up initial contacts by P. Greenhalgh and S. Kitchin during their study of the coffee sector in February 2005. NUCAFE works with farmer groups within the pilot locations and is keen to promote group marketing. A programme has been agreed with officials of NUCAFE to promote the WRS among the groups they are working with. The NUCAFE groups, as well as other farmer organisations which trade with BCU and Job Coffee Ltd, are to participate in sensitisation/training events on the WRS planned for May 2005.

3.2.6 Design and printing of standard warehouse receipts

The design of standard warehouse receipts to be issued during the pilot was discussed with the LMU, UCDA, bankers and other stakeholders and agreed. Printers of security documents are to be invited to bid to print the receipts based on the adopted design. This is expected to be completed by end of May 2005.

3.2.7 Study tour of Tanzania

This activity was originally planned for July 2005 (approved workplan for Uganda 2005-06). However, it was re-scheduled for May 2005 to enable the coffee sector

⁴ Attached as Annex 7

players gain better understanding of the WRS prior to the launch of the pilot in June 2005. Planning for the tour, which is scheduled for the week beginning 16th May 2005, was finalised in April. A delegation of about 12, to be led by the Permanent Secretary of MTTI, will participate in the tour which will include exporters like Job Coffee Ltd., and Bugisu Cooperative Union; two medium-scale traders, two representatives of farmer organisations, representatives of Standard Chartered and Allied banks; UCDA and the NPC. The LMU in Tanzania is hosting the delegation.

3.2.8 Warehouse legislation

After receiving Cabinet approval, following the presentation of the “Certificate of Financial Implications” in March 2005, the LMU, with support from the local NRI representative has been pursuing gazetting of the draft Bill. The Bill was gazetted in April 2005, thus complying with the final requirement before it is considered by Parliament for consideration. A least one MP is expected to participate in the study tour of Tanzania, to improve their understanding of the WRS and encourage them to support the bill when it is discussed by legislators.

Component II: Market information system

3.2.9 Market information system for the WRS

Progress on this component is same as has been reported for Tanzania (Section 2.2.7).

Component III: Quality assurance and certification system

3.2.10 Training in quality assurance and use of warehouse receipts

Planning for a programme to sensitise traders and farmer organisations in the target regions was initiated in April. The programme is scheduled for the week beginning 23rd May 2005. MTTI, NUCAFE, the UCA and export companies like Job Coffee Ltd., and Bugisu Cooperative Union have provided lists of traders and farmer organisations who have been invited to participate in the events. Draft training materials, produced by the LMU, have been passed on to D. Walker for revision. The material produced will be included in a generic manual on coffee quality assurance for the three project countries.

Other project-related activities

3.2.11 Visit by Managing Director of CFC and representative of ICAC

A two-member delegation from the CFC – Ambassador Ali Mchumo (the Managing Director) and Ato. Getachew Gebre-Medhin – visited Uganda (27-28th April 2005) to acquaint themselves with progress on various CFC-funded projects in the country. The delegation met with officials of UCDA and the LMU to discuss, among others, implementation of the coffee WRS project. The NRI team (G. Onumah and C. Baine)

participated in the meeting and briefed the delegation on the approach adopted and progress made in setting up a viable WRS for the coffee sector in Uganda. The MD was particularly keen on how smallholder access to the WRS could be assured and expressed his support for the approach adopted to achieve this objective under the project.

Mr. Andrei Guitchounts (Economist, International Cotton Advisory Committee) was also on a short mission to Uganda from April 29th to 30th. He had meetings with the Cotton Development Organisation (CDO) and visited a cotton ginnery operated by the Nyakatonzi Cooperative Union. He was accompanied on the visit by Ms. Ida Mkenda (UNOPS) and Ms. Kyarasiime (LMU). Later in Dar es Salaam, Mr. Guitchounts (with Ms. Mkenda) met to discuss his observations with Dr. Onumah, who was on a mission to Tanzania. His main concern was that, though there is a functional receipt system in the cotton sector, it allowed access to finance exclusively to the ginners. Smallholder groups could not use the system either to access finance or to market their crop.

Dr. Onumah explained that the NRI team was aware of the situation and would explore the potential for developing a more widely-accessible (multi-depositor) receipt system. He indicated that if the pilot WRS for cotton worked in Tanzania, the project team will encourage Ugandan stakeholders in the cotton sector to learn from that experience as part of the process of determining whether it was feasible to develop a multi-depositor system in the cotton sector in Uganda. He stressed, however, that the final choice as to which system to adopt will have to be made by the authorities in the cotton sector. Mr. Guitchounts agreed with the approach adopted by NRI.

3.3 *Uganda deferred activities (April) and planned activities for May 2005*

3.3.1 Deferred activities

- a. Publication of details on selected warehouse operators and collateral managers – deferred till June 2005.
- b. Formal identification of training needs of bankers – deferred till June 2005.

3.3.2 Planned activities for Uganda for May 2005

- i. Continue to follow-up lobbying for WRS Bill to be passed.
- ii. Finalise contracting of selected Collateral Manager.
- iii. Sensitization for producers and extension officers in the two pilot locations.
- iv. Study tour of Tanzania.
- v. Printing of standard warehouse receipts.
- vi. Improvement of market information system.
- vii. Training in quality assurance, particularly for producer groups.

4.0 Zimbabwe

4.1 *Planned Activities for Zimbabwe for April 2005*

Components I and IV: Promotion of WRS and inventory collateralisation

- Contracting a collateral manager (CM)
- Publication of details on selected warehouse and CM
- Prepare promotional materials targeted at bankers smallholder farmers
- Sensitisation for producers, traders, field officers and extension officers in the pilot locations (at least 4 events)

Component II: Market information system

- Monitor implementation of MIS project by the Ministry of Agriculture (MOA)
- Arrange for training for MOA staff in application of new (MIS) software

Component III: Quality assurance and certification system

- Prepare training materials and manuals
- Carry out training for target group in identified areas

4.2 *Activities undertaken in Zimbabwe in April 2005*

Components I and IV: Promotion of WRS and inventory collateralisation

4.2.1 Selection of warehouses for pilot WRS for soybean

Based on the recommendations of D. Walker (NRI Quality Consultant), who was accompanied on the site inspections by the Head of the LMU (D. Tawonezvi), warehouses belonging to the Grain Marketing Board (GMB) and located at the Lyons Den and Concession were selected for piloting the receipt system for soybean during the harvest beginning in June 2005.

4.2.2 Consultations with banks

The NRI team (G. Onumah and Ms. R. Butterworth) and the Head of the LMU (D. Tawonezvi) held meetings with officials of Kingdom Bank, Agribank and the African Banking Corporation (ABC) on the planned pilot WRS. A briefing document⁵ setting out how the proposed receipt system will work, and in particular how the associated process and business risks are to be mitigated was prepared and discussed with the banks. All three banks expressed interest in financing receipted stocks under the pilot, but Kingdom Bank continues to be the one most likely to be in the lead.

⁵ Attached as Annex 8.

4.2.3 Appointment of collateral managers

It was agreed with stakeholders that ITS-Socotec, which is the only locally-resident collateral management firm and enjoys the trust of the banks, should be invited to provide inspection and monitoring services for the receipted coffee while acting as collateral managers in the case of soybean. The NRI team drafted the SOW (Annex 9) which was adopted. On the basis of the adopted SOW, ITS-Socotec was invited to submit technical and financial proposals setting out how it intended to carry out the functions specified. The local stakeholders will negotiate the terms and conditions under which ITS-Socotec will provide the required services.

4.2.4 Promoting smallholder participation

Two farmer organisations have been identified as the nucleus for promoting smallholder participation in the coffee WRS. These are: the Vumba Agricultural Collective Cooperative Society Ltd. (VACCS) and the Honde Valley Coffee Growers Association. The two groups were visited by a NRI/LMU team. The VACCS, which has 23 members and 24 ha of coffee under cultivation (out of total landholding of 620 ha) is well-organised and produces high quality coffee. They receive extension support through a mentoring system which involves neighbouring commercial coffee producers. Group governance and lack of transparency, however, appear to be undermining the effectiveness of the Honde Valley group in marketing coffee on behalf of the members.

Component II: Market information system

4.2.5 Market information system

As originally planned, the project MIS will be integrated with the system at the Ministry of Agriculture (MOA), which is being upgraded. The contracting process at the MOA has been delayed and this is likely to affect the setting up of the MIS for coffee. The situation will be reviewed in May 2005 and appropriate measures taken.

Component III: Quality assurance and certification system

4.2.6 Training in quality assurance

Planning was initiated for training in quality assurance systems and the use of the WRS for the two smallholder groups, which have been specifically targeted to deposit coffee during the pilot season. The two groups are the Vumba Agricultural Collective Cooperative Society Ltd. (VACCS) and the Honde Valley Coffee Growers Association. A local consultant will be the main resource person for the training in coffee quality, which is scheduled as part two promotional events planned for the end of May 2005 in Mutare (coffee) and Harare (soybean).

Other project-related activities

4.2.7 Briefing sessions with Government

The NRI team (G. Onumah and R. Butterworth) held meetings with the Ministry of Industry International Trade and officials of the MOA to brief them on project implementation. A senior staff member of the MOA was nominated by the ministry to actively support the LMU. The MOA staff, as the representative of the NPC, participated in the field visits by the NRI/LMU team as well as in some meetings.

4.3 Deferred activities for April 2005 and planed activities for May 2005

4.3.1 Deferred activities

- a. Publication of details on selected warehouse operators and collateral managers – deferred till June 2005.

4.3.2 Planned activities for Zimbabwe for May 2005

- i. Consult Ministry of Agriculture (MOA) and the Ministry of Industry and International Trade to place promulgation of WRS Bill on Government agenda.
- ii. Finalise contracting of selected Collateral Manager.
- iii. Organise sensitization/training events in Harare and Mutare for producers, bankers, processor, extension officers and other stakeholders.
- iv. Printing of standard warehouse receipts.
- v. Follow-up on MOA's project to improve the market information system.
- vi. Training in quality assurance, particularly for producer groups.

5.0 Concluding remarks

As illustrated in the report, considerable progress has been achieved in carrying out activities planned for the month as well as some activities which were deferred from March 2005. The LMUs made invaluable contributions towards achieving these results, which NRI appreciates. The progress made in March and April have improved prospects for achieving targets set for June 2005 in the approved Workplans but significant challenges remain.

During the month of April, the most significant achievement in **Tanzania** was the promulgation of the Warehouse Receipt Act, 2005. The Act, which is yet to receive Presidential assent, will help establish a robust, but cost-effective regulatory framework for WRS in the country. It will also pave the way for mainstreaming the widely-accessible WRS model for coffee which has been successful in the country. NRI and the LMU will therefore explore opportunities to operationalise the law with the appropriate authorities, including in particular the Ministry of Cooperatives and Marketing, which is the host Ministry for the project. This will be done with the goal of ensuring a tangible project legacy but within the constraints of the existing budgetary resources.

The growing interest shown by various stakeholders, including especially the two lead banks (Standard Chartered Bank and Allied Bank), indicate good prospects in **Uganda**. Equally important is the continued support received from the UCDA. The legislative process has, however, been slow and needs to gather some momentum.

In **Zimbabwe**, there have been no major technical difficulties in implementation of the project. However, external factors (policy related) may affect national output of coffee and therefore the prospects of the coffee WRS pilot. This particular risk was alluded to in the country Workplan. It is therefore hoped that the soybean pilot will provide an opportunity to demonstrate the feasibility of the WRS in general.

ANNEX 1



Natural
Resources
Institute

**UNOPS-supported
Coffee and Cotton Marketing Development Project**

**DEVELOPMENT OF WAREHOUSE RECEIPTING
SYSTEMS IN THE TANZANIAN COTTON
INDUSTRY**

**By Jonathan Coulter, NRI
and
Les Law, Belmont Management Consultants**

CONTENTS PAGE

ACRONYMS.....	ii
EXECUTIVE SUMMARY	1
INTRODUCTION AND ACKNOWLEDGEMENTS	3
BRIEF REVIEW OF THE COTTON SUB-SECTOR.....	4
Trends in productivity and production.....	4
Trends in cotton quality	4
Trends in sub-sectoral governance.....	7
Scope for further increases in productivity.....	8
EXPERIENCE TO DATE WITH LENDING COLLATERALISED BY STOCKS OF SEED COTTON AND LINT.....	9
WCGA case: collateral managers based at ginneries.....	10
The direct marketing pilot in Kilimanjaro and Arusha Regions	11
OBSERVATIONS ON THE COFFEE SECTOR.....	13
APPRAISAL OF ALTERNATIVE STRATEGIES FOR MARKET DEVELOPMENT IN THE WCGA	15
RECOMMENDATIONS.....	17
MAIN DOCUMENTS CONSULTED.....	20
APPENDIX 1: ITINERARY.....	21
APPENDIX 2: REPORT ON COTTON QUALITY, GRADING AND GINNING	23

ACRONYMS

ACE	Audit, Control and Expertise (inspectors and collateral managers)
CDF	Cotton Development Fund
CM	Collateral management, collateral manager
ECGA	Eastern Cotton Growing Area
HVI	High volume instrument (for cotton classing)
KNCU	Kilimanjaro Native Cooperative Union
LMU	Local management unit (for the UNOPS-supported Coffee and Cotton Marketing Development Project)
NCU	Nyanza Cooperative Union
PS	Primary (cooperative) society
RCU	Regional cooperative union
TCA	Tanzanian Cotton Association
TCB	Tanzanian Coffee Board
TCLSB	Tanzanian Cotton, Lint and Seed Board
UNOPS	United Nations Office for Project Services
WCGA	Western Cotton Growing Area

EXECUTIVE SUMMARY

The purpose of this study was firstly to make proposals for the further development of stock-collateralised financing in the Tanzanian cotton sector, notably by:

- a) developing a pilot “direct marketing” system, which currently consists of a ginnery at Moshi, run by the Tanzanian Cotton, Lint and Seed Board (TCLSB) providing toll-ginning and collateral management to farmers in the Oridoy primary society in Arusha region, and
- b) if desirable, promoting it in the Lakeside zone, the Western Cotton Growing Area (WCGA).

In addition, and as far as time and resources permit, the authors would make other recommendations for the development of Tanzania’s cotton sub-sector.

The authors review recent trends in the sub-sector, noting recent increases in production and a record crop in 2004, attributable in part to the introduction of the pass-book system for inputs since 2001/02. The main weaknesses lie in the areas of cotton quality and low agricultural productivity. The authors find there have been improvements in sub-sectoral governance, involving both public and private sector players, notwithstanding which there remain significant unresolved issues.

The main quality problem is the contamination of the seed cotton used by ginners, particularly with polypropylene waste, and this is exacerbated by intense competition for supplies which causes buyers of seed cotton to be somewhat indiscriminate in their procurement practices. Concerns over quality, as well as the widespread evasion of levies and cheating on weights and measures, have prompted the industry to agree a radical change in the marketing of seed cotton, involving village auctions, and this is currently being considered by the Minister of Cooperatives and Marketing.

To remain competitive, the industry also needs to increase productivity and area cropped per farmer. The authors note that despite the virtual absence of production credits, there have been certain spontaneous improvements in this area. The auction system could potentially provide a major boost, by making it easier for lenders to recover production credit, and allowing farmers to finance both current expenditure and investments in their whole farming system.

The authors review the experience of collateralised lending in the WCGA, where the banks rely on collateral managers based at ginneries, and in the Moshi direct marketing pilot. The former operation is proceeding to the satisfaction of lenders, though reliable information on product quality is not forthcoming. The direct marketing pilot has gone well so far, but there is as yet insufficient information to say whether it is profitable enough to justify the wider application of direct marketing to cotton in Tanzania. Moreover, if the pilot is to continue, two immediate problems need to be overcome, i.e. the lack of usable ginnery capacity, and the absence of proper accounts and management information.

The authors briefly review the experience of the coffee sub-sector with a view to learning lessons relevant to cotton. Notably, the warehouse receipts (WR) system operated through the coffee curing companies has facilitated the emergence of direct marketing by primary societies through the Moshi auction. This positive experience provides encouragement to those seeking to introduce direct marketing into the cotton sub-sector, though LMU's attempt to introduce the direct marketing model into the WCGA encountered resistance from a local cooperative union. The coffee experience also suggests that the WR system has an important role to play in the development of grass-root farmer organisations, and can counter the trend away from cooperatives.

The authors consider three alternative strategies for the development of the WCGA, including village auctions, contract farming and direct marketing. They conclude that it is difficult to pursue these strategies at the same time, and that in the near term it is best if stakeholders focus on making a success of the proposed village auctions. Once these are well established, or in the event it fails, fresh consideration should be given to the other options.

The authors recommend:

- a) As regards the Moshi pilot, TCLSB should assure that there is sufficient ginning capacity to handle the growing production at Oridoy, first rehabilitating the Moshi ginnery to handle the 2004 and 2005 crops, and secondly finding an investor prepared to put up a ginnery in the Oridoy area to handle subsequent crops. Depending on the terms agreed, it may be possible to continue the direct marketing approach in this area of the country.
- b) TCLSB should run the Moshi ginnery as a separate profit centre, with its own funds and bank account, keeping a full set of accrual accounts and providing six-monthly reports for this and on the pilot direct marketing operation.
- c) For the reasons given above, the direct marketing system should not be promoted in the WCGA under the current UNOPS-funded project, though the option may be explored in the medium to long term. However, once the pilot auctions are under way, TCLSB should investigate the scope for developing agricultural production through smallholder credit, linked to the provision of technical assistance.
- d) The project should support the development of existing collateral management services in the cotton, coffee, cashew and other commodity sectors, by working with stakeholders to develop suitable industry training programmes.
- e) In supporting cotton market and credit developments in Arusha/Kimanjaro and in the WCGA, TCLSB should consider the possibility of involving a partner institution with a successful track record in development of entrepreneurship and commodity chains.
- f) As regards general industry development, the Government should seek to take advantage of the ginners' willingness to contribute to sub-sector coordination, and try to get TCA to take on additional responsibilities, for example in the ordering and distribution of inputs and by participating more in the setting of research priorities. It should also try to get more benefit out of the HVI classing machine, probably by moving it to Mwanza, educating ginners in its use for the marketing of cotton and, in conjunction with TCA, working out a fully transparent and highly prestigious management regime involving rapid sample turn-around.

INTRODUCTION AND ACKNOWLEDGEMENTS

This study was commissioned under the UNOPS Coffee and Cotton Marketing Development Project, funded by the Common Fund for Commodities (CFC), and carried out by Jonathan Coulter (warehouse receipts specialist, NRI) and Les Law (cotton ginner, Belmont Management Consultants).

The terms of reference were as follows:

1. The team would review the operation of the pilot toll ginning operation at Moshi, consider ways in which it could be further developed, and whether it was desirable (or otherwise) to promote this model in the Western Cotton Growing Area (WCGA) of Tanzania.
2. The team would propose an action plan for implementation based on its findings. As far as time and resources permit, the team would make other comments and recommendations for the development of the cotton sector, e.g. with regard to:
 - The system of seed production and supply
 - Credit systems, notably re the passbook system, the development of contract farming, and the role of primary societies and other farmer groups
 - Systems of seed cotton procurement and quality control
 - System of licensing of ginneries

The pilot at Moshi consists of a ginnery, run by the Tanzanian Cotton, Lint and Seed Board (TCLSB) which provides toll-ginning and collateral management to farmers in the Oridoy primary society in Arusha region. We henceforth refer to this in shorthand, as a “direct marketing” system.

The team visited Tanzania during the period February 6-16, 2005, and was assisted by the Local Management Unit (LMU) at the Ministry of Cooperatives and Marketing, visiting Dar-es-Salaam, Moshi, Arusha, Mwanza and other places in the WCGA. The purpose of the visit to Moshi and Arusha was both to review the direct marketing operation, and to see if lessons from the coffee warehouse receipts system could be applied in the cotton sub-sector. A list of contacts is presented in Appendix 1. Appendix 2 contains a background paper by Mr Law on the technical aspects of cotton quality, grading and ginning.

The authors wish to thank the various informants for their contribution to this study, notably representatives of the Tanzanian Cotton Seed, Lint and Seed Board (TCLSB), the Tanganyika Coffee Curing Co. Ltd. (TCCCO), the Tanzanian Cotton Association (TCA), and Colin Poulton of Imperial College UK, who provided documents and valuable comments on this report.

BRIEF REVIEW OF THE COTTON SUB-SECTOR

Trends in productivity and production

With recorded production of 636,000 bales, 2004 was a record crop year, over three times the low figures recorded in the “trough years” of 1998 and 1999, and the industry believes that the record is likely to be exceeded in 2005. The improvement is mainly attributed to a combination of increased world prices after record low figures in 2002, favourable weather, and the improved performance of the Cotton Development Fund (CDF) inputs supply system. The latter is particularly significant as it is only one of these three factors directly under the control of the Tanzanian cotton industry.

The CDF went through considerable problems in its early stages, but the introduction of the passbook system, which was first piloted in 2001, has rendered it much more effective, and resulted in large numbers of farmers spraying their crop at least once, and many twice or more¹. It is reported that yields have increased significantly, though it is difficult to obtain accurate data on this. We were quoted figures ranging up to 750 kg of seed cotton per acre, but from what we have been told, a more realistic average figure is about 600 kg per ha.

There is little production credit for farmers in the cotton sub-sector. Credit programmes performed poorly in the era of State/cooperative-control, and following liberalisation, in 1994, the few ginners who provided inputs on credit experienced serious problems of side-selling, and gave up. However, there is now renewed interest in the idea of contract-farming and the provision of credit. A few companies, notably S&C and Virian ginneries, are reported to be providing farmers with inputs on credit, over and above those provided through the CDF passbook system. Moreover, certain ginners belonging to TCA have recently imported 100 tractors which they are hiring to farmers, on cash or credit terms, to assist them to increase planted area.

Trends in cotton quality

Various players report that as a result of the TCLSB employing inspection companies at the ginneries, there has been a significant improvement in cotton quality, contrasting with a major decline in quality since liberalisation. However the numerical evidence is contradictory. TCLSB's data on the grade of lint exported shows a major improvement in quality, while the recent survey of international traders by Larsen and Poulton (in preparation) suggests that Tanzania has lost what little premium it used to gain for selling hand-picked cotton, and that its product is selling at a considerable discount to the highest quality African origin (Zimbabwe) - see Tables 1 and 2. Indeed the figures allow one to estimate that the average discount from 2000 to 2004 (give or take substantial sampling error) is US 5.8 cents per lb, or 12.8 cents per kg.

¹ Imperial College, UK, is currently carrying out a survey to quantify the level of spraying and impact.

TABLE 1: CONTRASTING QUALITY INDICATORS

	1989/90 to 1993/94	1994/95 to 1998/99	1999/00 to 2003/04
(a) Percentage by grade:			
Gany and above	39%	36%	68%
Below gany	60%	56%	31%
Yika	1%	8%	1%
(b) Average premium/discount over 'A' Index - US c per lb			
	n.a.	0.40	-1.10

Source: (a) percentage by grade, from TCLSB; (b) average premium/discount, from Larsen and Poulton (in preparation)

TABLE 2: AVERAGE PREMIUM/DISCOUNT OVER THE 'A' INDEX, 1995-99 and 2000-04, in US cents per lb

	Zimbabwe	Zambia	Uganda	Tanzania	Mozambique	Ghana
1995-99	5.1	0.3	4.4	0.4	-0.7	-2
(N=)	(4)	(3)	(5)	(8)	(3)	(1)
2000-04	4.7	2	2.4	-1.1	-0.8	-4
(N=)	(6)	(5)	(7)	(11)	(4)	(2)

Note: N refers to numbers of trading companies supplying information

Source: Larsen and Poulton (in preparation)

The explanation for this apparent contradiction appears to lie mainly with the large amount of contamination with polypropylene, originating from packing materials widely used in the Tanzanian cotton producing areas, and which is not taken into account in the formal grading system, which reflects colour characteristics. As aptly put by Mr Fille, Regulatory Manager of TCLSB, "colour is no longer an issue"; that is to say, polypropylene contamination is now the key factor limiting the price that spinners will pay for Tanzanian cotton, and besides this grade is of secondary importance. Other forms of contamination, with sand and water, also seriously affect the quality of seed-cotton purchased, while the sand also causes damage to ginnery equipment.

The high level of contamination can partly be explained by the nature of the existing marketing system. There is fierce competition between 36 ginneries in the WCGA, with the consequence that Tanzania within the Southern and Eastern Africa, Tanzania is the country where farmers get generally favourable prices compared to those paid to farmers elsewhere in the Region². Some of the ginneries have very limited

² Poulton *et al* (2003) notes that during the period 1998-2002, Tanzanian prices were on average considerably higher than those in Mozambique, comparable to those in Zambia, but below those in Zimbabwe. However, because of exchange rate distortions, it is difficult to compare Tanzanian prices

understanding of the world market and quality parameters, so they are not very discriminating as to the quality of raw material they will accept. Others are believed to be systematically evading taxes and this puts them in an advantageous position to pay more to the farmers. All this puts pressure on other (more discerning/more legitimate) buyers to ease quality standards with a view to using the capacity of their ginneries.

There is general recognition that contamination is a major constraint to development. The employment of inspection companies may have led to some improvement, but there is friction with some ginneries who resent their presence, and are often unwilling to cooperate with the rejection of unfit seed cotton. This is particularly difficult when the cotton has been financed, purchased and transported to the gin. Apart from this, inspectors placed at ginneries are being called on to catch the problem late in the chain where problems are difficult to monitor and remedial work is costly.

Concerns over quality have prompted leading industry players to propose a radical change in the existing system of seed cotton marketing, involving *weekly village auctions*. All cotton will be sold through the auctions which will be attended by the agents of the different buyers. The auctions will be managed by the local primary societies (making use of their existing warehouses) under the supervision of the district authorities. It is envisaged that there will be around 500 auction sites in the WCGA, compared to some 4,000 private buying posts which presently exist; most villages will have a single auction site but when villages are close together there may be a single auction covering the two villages.

Auctions will rotate between neighbouring villages on a daily basis. The inspectors contracted for by TCLSB will be redeployed to provide staff to assess the quality of produce at the auction sites before buying starts. Whereas presently the inspection companies are required to post around six inspectors to a single ginnery, this number will now be reduced to two and the other four will be posted to auctions. Each inspector will be responsible for five auctions which he will attend one day a week; hence a total of 100 inspectors can cover the 500 auction sites.

Apart from improving grading, the auction system is expected to bring other benefits. All sales will be registered, and this will provide better production and marketing statistics, permit fuller collection of levies, and create a more level playing field among ginneries and traders. The scales used at the auction will be assized, hopefully eliminating problems of under-weighting of which farmers complain bitterly in their dealings with middlemen. The system should moreover reduce buyers' costs in running the large number of private buying posts, and the new auction sites can also be used for a number of other purposes, including farmer registration, passbook endorsement and input distribution. It may also assist in developing the rural credit system – we discuss this further below.

with those in Zimbabwe. Notably, Tanzanian buyers responded much more fully to a brief upturn in world prices in late 2003 than companies in Zambia, delivering the highest prices paid in all countries of the Region at that time (Poulton *et al*, forthcoming).

The Ministry of Cooperatives and Marketing has just completed a survey which shows farmers to be favourable to the auction concept. Apart from this, we were able to ascertain that TCLSB, the ginners association (TCA) and the leading bank lending to the industry (CRDB) are also supportive. Given such widespread consensus, proposals have been prepared to implement the auction on a pilot basis in six districts of Nyanza, Mara and Shinyanga Regions during the 2005 harvest.

Trends in sub-sectoral governance

We detect that there has been a significant improvement in sub-sectoral governance since the end of the 90s. This is evident on the one hand in certain official measures, like the hiring of inspectors, the passbook system and a plan to create a centralised seed delinting and dressing in conjunction with the Zimbabwean company, Quton; one ginner pointed out that TCLSB staff have been stimulating farmers to grow cotton, and done a good job in the distribution of seed. At the same time the ginners, working through the TCA, are taking a greater interest in the way the sub-sector is managed, liaising with TCLSB for this purpose. The acquisition of the 100 tractors is moreover evidence of the ginners' willingness to coordinate horizontally to advance their collective interests – not an easy task in an industry where there are close to forty players.

However there remain certain weaknesses and areas of dissent:

- Despite the presence of inspectors at the gins, it is widely believed that the quantity of seed cotton passing through the gins remains under-reported, with considerable quantities of lint being shipped to neighbouring countries evading payment of levies. Three different parties estimated this to be in the range of 10 to 15%. There is much scepticism about the ability of inspectors, who are generally young and low-paid, to resist pressures from the ginners to under-declare quantities. Notwithstanding this, the system has been more successful in providing information on quantity than on the quality of seed lint processed.
- According to some reports, the role of official quality testing is little more than perfunctory, and results are not provided to the ginners in a timely manner. However TCLSB replies that the information is posted back to ginners, and that they are not making use of this data to their advantage. There are in fact various parties with an interest, or a potential interest, in the operation of the HVI (see Box 1). Later, we go on to suggest that a possible remedy to this situation might be to place TCLSB's HVI machine in Mwanza, to ensure quicker turn around of results, and to stimulate the interest of ginners who are located there.

BOX 1: PARTIES INTERESTED IN THE OUTPUT OF THE HVI CLASSING MACHINE

Various parties have an interest in the operation of the HVI classing machine, including ginners, international traders, spinners (mainly in importing countries) and Government. We shall deal with each of these in turn:

- According to Larsen and Poulton (2005), *the spinners* are very interested in obtaining HVI classing information on lint offered for sale. Moreover it is becoming increasingly important for them to obtain this information, and in the not-to-distant future it is possible that there may be no market for the untested lint.
- *The international traders* are notwithstanding somewhat reluctant to put this information on the Liverpool Cotton Association (LCA) certificate because it increases the possibility of claims against them. However, one international trader (Wakefield) pays to utilise the HVI testing facilities in order to provide its customers with lint of high quality specification. Moreover, nine out of thirteen traders who responded to the above-mentioned survey already perform HVI testing of lint that they buy from Southern and Eastern Africa.
- The information can be of great assistance to *the ginners* in determining the true value of their lint; however many of them do not seem to have the background knowledge to be aware of this. Consequently, there is a disparity of information between the ginner and the international trader, which allows the latter to earn a higher margin than might otherwise be the case. The information is also potentially of use to both ginners and buyers in settling trade disputes, and the ginners can use it to prove that their lint meets the required specification.
- *The Government* is interested in obtaining the taxes and levies associated with higher value lint; however, some industry sources suggest that ginners are able to influence the outcome of the results in their favour.
-

- TCLSB manifests that it is understaffed and underfunded. However, there are reports from ginners/buyers that it is heavily involved in details of implementation, such as prescribing insecticides to be used in particular zones. TCLSB might offload such decisions on to industry players, while focusing more on core regulatory roles. For example TCLSB could prescribe a list of permitted insecticides and thereafter let the industry players, working through the CDF, obtain the best deals. Similarly much of the work of seed multiplication might be offloaded onto the industry, though with TCLSB carrying out strict monitoring so as to ensure quality.
- Some people are unhappy about the number of ginneries in particular areas, and felt there should be tighter licensing controls, and that these should be applied more evenly across the industry. As we discussed above, ginners who are desperate to buy seed cotton of any quality in order to cover their fixed cost burdens tend to soft-pedal quality requirements.

Scope for further increases in productivity

While needing to urgently address its quality problems, the Tanzanian cotton industry also needs to increase productivity and area cropped per farmer if it is to compete in the World market. The gradual increase in the use of animal traction (which according to staff of Ukiliguru Research Station is employed by 40% of farmers and on more than half the area cropped), the recent moves towards the development of contract farming, and the decision of certain input suppliers to establish outlets in Mwanza, show that spontaneous forces are at work to increase productivity and overall production levels.

Staff at Ikiliguru indicate that there is still considerable uncultivated land and potential to greatly intensify crops, notably cotton and rice, with appropriate application of inputs, including pesticides and fertiliser³. The proposed auction system can potentially provide a large boost to this process, by helping establish rural credit systems, not only for the production of cotton, but for rice, maize and other crops produced in the WCGA. In most areas of the WCGA fertiliser is not used on any crops, but this is likely to change if lenders – notably CRDB which is interested in lending for agriculture – can be assured a high level of repayment. The system might involve some sort of two-tier guarantee. The bank could lend to sub-groups of jointly liable farmers, and their debts could be further guaranteed by the primary society which runs the auction through which it can deduct payments.

In this way Tanzania could seek to emulate the performance of the most highly productive cotton industries in Africa, notably Mali and Burkina Faso, where banks lend to village associations or *groupements*, except that a different system would be used to ensure repayment: the auction system rather than a monopsony buyer. This could lead to the phasing out of the CDF and the passbook system, in favour of regular credit financing, and the redeployment of TCLSB staff in more vital areas. The francophone experience also suggests that banks could practice term lending, for the purchase of machinery, implements and other fixed assets.

Of course there are certain preconditions to establishing such a system: the auctions need to be well established and respected as the single channel for primary marketing of seed cotton, and there would need to be effective technical assistance on the agronomic, farm management and organisational aspects.

EXPERIENCE TO DATE WITH LENDING COLLATERALISED BY STOCKS OF SEED COTTON AND LINT

In the WCGA, banks are lending to cotton ginners on the security of collateral managers (CMs), which are the same inspection companies hired by TCLSB to collect statistics and carry out quality control. This system is less developed in the ECGA, which only accounts for 5% of production, and where TCLSB is still running several small ginneries. One of these is based at Moshi where it is toll-ginning for farmers who obtain inventory credit against stocks held there. We now deal with these two cases in turn.

³ Mrs Ramazani, Head of Cotton Research, spoke of farmers doubling their yields through application of superphosphate. However, to be more affirmative on this point, we would need further data on the returns to application of fertilisers on cotton varieties used in Tanzania. The experience of francophone countries suggests that, with suitable varieties, it should be possible to use fertilisers profitably.

WCGA case: collateral managers based at ginneries

There are 36 operational ginneries in the WCGA, and collateral management is handled by ACE, Baltonic and SGS, the same three companies which TCLSB has contracted to collect statistics and carry out quality control. It should be noted that the banks have a high level of trust in a few ginners to whom they lend without the security of a CM, similar to the way they lend against stocks held by coffee curing companies (see below). Ginners belonging to multinational companies obtain finance from their parent company and can likewise avoid working with CMs. For this reason, ACE and Baltonic collect statistics for TCLSB at 25 ginneries, but only provide CM services in 11 of them. Baltonic also provides collateral management service at one ginnery where SGS collects statistics for TCLSB.

The bank provides an initial loan against the ginner's fixed assets, and disburses subsequent tranches against stocks held at the ginnery under the surveillance of the CMs. The banks have varying requirements as regards the qualifications the CMs must meet. All require some sort of professional liability insurance, usually specifying minimum cover of \$2 million, but have different requirements as to the credentials of the companies issuing this insurance.

As far as we could tell, none of these ginners appears to be providing toll-ginning and storage services on behalf of independent buyers, except for the Manawa ginnery, which is presently under administration by the Presidential Parastatal Reform Commission, and is prohibited from buying cotton to gin in its own right. Consequently it has been toll ginning on behalf of a private company, Nyanza Cotton Oil, and the Nyanza Cooperative Union (NCU). A new company is currently being formed, two thirds owned by NCU and one third by Nyanza Cotton oil, and this will allow these two players to continue their toll-ginning arrangements. If this company could toll gin for the primary societies in the area, it would provide an incentive for them to break free from their current relationship with the NCU, avoiding charges of approximately Tsh 25 per kg of seed cotton (including the Union Levy of Tsh 10 per kg, the Apex Levy of Tsh 0.5 per kg and the Union Employees Fund of Tsh 14.5 per kg). Not altogether surprisingly, NCU is unwilling to allow this to happen and it appears that the ginnery's services will remain restricted.

NCU by contrast would like to get out of the ginning business and for Government to grant them exclusive rights to buy in the villages. In this matter, it appears to be seriously out of touch with the mood of farmers, and the realities of the liberalised marketing system.

The main lender (CRDB) is satisfied overall with the performance of the CMs, but wants to obtain better information on quality, both to ensure that collateralised stocks are not allowed to deteriorate and to increase the amount they can lend. Presently they "hair cut" conservatively, advancing only 65% of the value of the collateral at its indicative price. This, contrasts with the situation in the coffee industry where they obtain weekly or fortnightly print-outs of stocks by grade and can advance a higher value based on the exact grade of the product in store and current auction prices. It is also significant that the bank's own team of inspectors make regular visits to ginneries to countercheck reports by the CMs.

The Bank is also concerned about the cost of collateral management, and has therefore encouraged the entrance of a local company (Baltonic) to compete with subsidiaries of Swiss companies (ACE and SGS), even though the former cannot match the latter in terms of credentials of companies providing them with professional liability cover. As a result of the increased competition, CMs' charges have fallen from around \$2,500 per site to between \$1,200 to \$1,500 per site. So far CRDB and TCLSB are satisfied with the performance of this new entrant.

Bank staff in Mwanza feel that the CMs are also of assistance to the ginners, to whom they provide a means of independently collecting data and supervising ginnery staff.

The direct marketing pilot in Kilimanjaro and Arusha Regions

Theoretical pros and cons of direct marketing

Before we discuss the pilot, it is worth noting that the success of direct marketing should not be treated as a foregone conclusion. By selling their cotton as lint, farmers stand to gain a trading margin, otherwise gained by market intermediaries. However, trading margins are tight in Tanzania and farmers may prove less skilled than intermediaries in getting the best price for their lint – brokers may however emerge to help farmers with their marketing. Direct farming may allow farmers to sell their lint when prices are higher – typically before the arrival northern hemisphere crop – but they may also lose out because the ginner decides to gin his own seed cotton first, leaving the toll customers to last.

These is reason to believe that farmers stand a better chance of making profits from direct marketing in the ECGA, since there are few ginners and markets for cotton seed are relatively thin, than in the WCGA where markets are highly competitive. By accumulating a large quantity of cotton lint in a single location, farmers can more easily attract bids from buyers from outside the ECGA, than is the case with more bulky seed cotton.

Experience with the pilot

The Kilimanjaro Native Cooperative Union (KNCU) owns an old roller ginnery in Moshi, but found it unviable to continue operating it due to lack of adequate supply of raw material. As a result it made an arrangement to cede it to TCLSB, which operates it so as to provide a service to those farmers in Kilimanjaro and Arusha Regions who still wish to produce cotton. TCLSB also promoted production with certain primary societies in this area, and as a form of encouragement exempted them from the payment of normal levies totally around Tsh 45 per kg of seed cotton.

Production has increased rapidly, mainly among farmers at Oridoy in Arusha Region. The quantity of cotton produced was 239 tonnes in 2003/04 season, and 852 tonnes in 2004/05 season, over 90% of the latter amount coming from Oridoy and the remainder from 5 other primary societies (PS). Oridoy PS has a core of 30 farmers each producing on around 10 ha (25 acres), ploughing with tractors (part owned by members), spraying 6 to 8 times per season and claiming to get 750 kg of seed cotton per acre – this is an extraordinary figure compared to standard Tanzanian yields of around 600 per ha.

The farmers of Oridoy ship their seed cotton to Moshi where it is toll-ginned for a charge of Tsh 160 per kg of lint⁴. While it is held at the ginnery, it is financed by a loan from CRDB, and after that they sell the lint to a private buyer and pay the bank. The existing ginnery is some 220 km from Oridoy, is in poor condition and can probably not cope with a further increase in cotton production. The present ginning season is likely to extend about 9 months, which is long by industry standards. The operation is very costly both in terms of financing the stocks (19% compound interest per annum), and in charges for shipping seed cotton to the ginnery (TSh 26-30 per kg, or approximately 10% of the national indicative price for seed cotton).

The direct marketing operation has allowed Oridoy farmers to make a handsome profit, on paper, in the 2003/04 season. Farmers received Tsh 275 per kg of seed cotton, in two payments, the first of Tsh 225 in line with TCLSB's indicative price and a second payment of Tsh 50 when they had sold the lint. In addition to this, the PS was able to set aside Tsh 13 million as savings, equivalent to a further Tsh 57 per kg; hence farmers' total remuneration, including retained profits, was Tsh 332 per kg of seed cotton. However, in comparing this to regular market prices, one should make an allowance for the extraordinarily high shipment costs from Oridoy to Moshi, and subtract the Tsh 45 per kg subsidy. We do this in Table 3:

Item	Tsh per kg of seed cotton
Price paid to farmers:	
First payment	225
Second payment	50
Total	275
Value of retained profits	57
Farmers' total remuneration	332
Plus notional allowance for high transport costs	15
Less value of public subsidy to Oridoy farmers	45
Farmers' adjusted remuneration adjusted for transport costs and subsidy	302
Average price paid to farmers in WCGA	280-290
Farmers' profit imputed to the direct marketing system	12-17

Farmers' remuneration, adjusted for abnormal transport costs and subsidy, are Tsh 302 per kg of seed cotton, which is in the range of Tsh 12 and Tsh 17 more than the

⁴ This rate is equivalent to approximately 6.6 cents per lb of lint produced, which is by no means a nominal charge compared to international prices for cotton lint (Index A) in recent years which have mainly been in the range of 40 to 60 cents per lb. The Manawa ginnery currently charges Tsh 85 per kg of lint, just over half TCLSB's rate. However it should be noted that NCU's client (Nyanza Cotton Oil Co. Ltd.) was having much larger quantities ginned (around 22,000 bales in the 2004/05 season, vis à vis 1,500 by Oridoy) and was having to pay separately for collateral management services. Moreover, NCU was using saw gins, which are generally associated with lower quality and ginning out-turns than roller gins of the type installed at Moshi. NCU indicated that in the (hypothetical) case that it ginned for smaller clients it would charge a rate of Tsh 170-180 per kg of lint, and this suggests that TCSLB's charge is broadly in line with the market.

average price which buyers paid farmers in the WCGA in the 2004 season, between Tsh 280 and Tsh 290 per kg⁵. In percentage terms the difference is between 4% and 6%.

Oridoy farmers have responded impressively to the opportunity that TCLSB has provided, and CRDB has provided strong support. However, this does not mean that direct marketing is, *per se*, a profitable activity. Our figures suggest that profits attributable to direct marketing were between 4 and 6% of the overall price paid for seed cotton. The farmers in Oridoy believe that the operation was much more profitable than this because they are comparing the price they receive to TCLSB's indicative price of Tsh 225 at the beginning of the season. However they may not be aware of the competitive pressures that drove prices in the WCGA to between Tsh 280 and Tsh 290 per kg. For this reason, and given the lack of comparative data for other years, we cannot say whether direct marketing is likely to be attractive to Tanzanian farmers as a whole over the long term.

In addition to this, there are two problems calling for urgent attention:

- a) the Moshi ginnery is unlikely to provide sufficient capacity beyond the next season, even if comprehensively rehabilitated. TCLSB has made enquiries with private investors who might put up a ginnery in Oridoy, but these indicate a minimum economic scale of 2,000 to 2,500 tonnes (i.e. approx 5,000 bales), vis à vis 2004 production of 783 tonnes. It is therefore necessary to rehabilitate the Moshi ginnery as a temporary measure so that it can handle 2005 production, but it is unclear how much this will cost and how it is to be funded. Moreover TCLSB has no contract with KNCU to continue this operation, and doesn't even have one for 2004/05.
- b) None of the parties to whom we spoke – the ginnery manager, KNCU or the accounts department at TCLSB in DSM – is keeping separate accounts for this ginning operation, and can say whether the revenue will allow it to break even and cover costs of rehabilitation.

OBSERVATIONS ON THE COFFEE SECTOR

The Tanzanian coffee sector succeeded in developing its own WR system. The activity started in 1997, with the involvement of Equator Bank as a lender, and the depositors now include the Regional Cooperative Unions, Primary Societies and private companies. LMU statistics show that a total of US\$ 7.6 million of finance was provided in 2005/06, and 47% of this was for cooperative unions, 39% for primary societies carrying out “direct marketing” as defined in this report⁶, and 14% for private companies.

⁵ Poulton (pers. comm.) reports on raw data he had recently received from a farmer survey carried out in 2004. The mean seed cotton price was Tsh 260 per kg, but after separating out the sales which are clearly grade B, he expected the figure for grade A to lie in the range of Tsh 280 and Tsh 290 per kg.

⁶ This should not be confused with another definition of direct marketing of coffee, whereby farmers' organisations gain special permission to market their coffee directly to overseas buyers, without going through the Moshi auction.

Generally speaking, in countries north of the Limpopo, banks will only lend against the security of commodities if a CM is involved, and these are usually the subsidiaries of European companies. Tanzania has succeeded in developing a system whereby pre-existing cooperatively-owned coffee curing companies provide depositors an all-in service involving storage, curing, bulking, blending, colour sorting, bagging and collateral management service, all prior to the auction. The same curing companies and other warehouses licensed by the Tanzanian Coffee Board (TCB) also hold coffee on a similar basis after auction and prior to export. However, the banks still require two coffee curing operations, which account for a large percentage of the total crop, at the Kagera and Karagwe Cooperative Unions, to work in conjunction with one of the CMs (ACE). The same company also acts on behalf of EXIM Bank to hold the stocks of a private buyer in Mbeya.

The coffee industry's achievement can be attributed to the unusual circumstances of the industry, notably:

- ◆ The non-trading status of the coffee curing companies, except for those of Kagera and Karagwe, means that there is no potential for conflict of interest between the warehouse operator's storage and trading functions.
- ◆ The linkage between the curing companies and the auction provides a system for ensuring that debts are repaid at the moment the farmers' coffee is sold
- ◆ A high level of trust within the cooperative movement, which helps keep business above-board and ensure that levies are paid. Lending decisions are often made on the basis of character.

This, contrasts with the cotton industry where: (a) there is no mandatory auction mechanism and, as we noted above; (b) a significant percentage of production evades payment of levies.

Notwithstanding the successful development of the WR system, the system only has a limited non-cooperative clientele. The LMU indicates that this is because banks and curing companies are afraid of the possibility of fraud, which they consider more likely if private for-profit enterprises start depositing coffee with the system (there has already been one fraud). Hence it appears that concerns over integrity and a lack of financial safeguards and surveillance mechanism are holding back the development of the coffee WR system.

In order to avoid the expense of having a CM in each curing factory and warehouse, the Coffee and Cotton Marketing Development Project will be seeking to establish a tougher licensing and inspection regime, probably through the TCB, which presently licenses coffee warehouses. This would involve the warehouse operators being required to insure against potential losses and an inspection system involving one of the collateral management companies. If the system is made sufficiently rigorous, it may ultimately be possible to license trading companies to hold stock for third parties as an adjunct to their normal trading business.

The WR system has facilitated the emergence of "direct marketing" by primary societies through the Moshi auction, and this is challenging the traditional marketing chain through the cooperative union. The Unions claim that this weakens the cooperative movement and farmers' overall bargaining position, but this view is

widely challenged by the primary societies and the banks lending to them. Primary societies avoid Union levies and get paid much more quickly, since they do not have to wait for the determination of the Union's annual trading surplus. At the same time, there is evidence that direct marketing is revitalising the primary societies, since the farmers now have a much stronger rationale for working together. This, together with the experience of the Oridoy Primary Society with cotton (see below), suggests that the development of WR systems may assist in the development of strong grass-roots farmer organisations, and help reverse the trend away from cooperative forms of organisation. By cooperating together through their primary societies or alternative village-level organisations, farmers are able to cut out intermediaries and sell further down the marketing chain than was previously possible.

It is worth noting that one primary society, in the Mbinga area, defaulted on its loan, as a result of overpaying its members at the time of receiving the loan. This is a possible hitch for which the cotton sector needs to be prepared; the Oridoy primary society has been making a first payment that represents about 82% of the Government's indicative price, leaving limited scope for manoeuvre if world market prices drop. As emergent entrepreneurs and risk-takers in their own right, it is to be hoped that these farmers will adopt a prudent approach in this regard.

APPRAISAL OF ALTERNATIVE STRATEGIES FOR MARKET DEVELOPMENT IN THE WCGA

Three possible strategies can be considered:

- ◆ Auctions, as the industry is currently proposing
- ◆ Contract farming, as increasingly practiced by a few ginners and farmers in the vicinity of their gins, and
- ◆ Direct marketing of cotton lint by farmers, along the lines of the Oridoy PS, involving toll ginning and the WR system

If the **village auction system** is implemented as planned, it should be possible to radically improve quality of seed cotton and lint, and gradually recover and enhance the country's hand-picked premium. As we discussed above, it should also make it easier to lend to farmers, assisting in the process of agricultural intensification. For the industry stakeholders to have reached consensus on this measure is a landmark achievement.

Notwithstanding this achievement, the industry will be navigating in uncharted water, and problems may occur. For example auctions may not be properly supported and trade will continue through one-to-one contacts between farmers and buyers. It is conceivable that there will be widespread collusion among buyers, leading to an end of Tanzania's status as a country which pays high prices to producers. The costs of the system may also be greater than the promoters currently envisage. Mr Filli, Regulatory Manager at TCLSB, believes that it will be necessary to establish a much larger number of auction centres than the promoters envisage. Given the substantial sums of cash involved, and the consequent risk of robbery, security measures have still to be worked out. This may involve payment in vouchers or cheques that will be

honoured on sight. However, if these problems can be dealt with adequately, the auction system should put Tanzania cotton industry onto the road to increasing productivity, production, quality and value added.

Contract farming and **direct marketing** are alternative approaches to achieving these same ends. However it is difficult to pursue these approaches at the same time and in the same area where one is trying to establish a single primary marketing channel through auctions. There is already significant momentum behind the move toward contract farming, with some ginners wishing to give farmers a “full package” of support. However under this system, buyers will naturally seek exceptions from the auctions, and demand that contracted farmers deliver directly to themselves. With direct marketing, farmers will wish to avoid the auctions and get their cotton ginned before they sell. In the long run it is possible that various approaches can coexist, but in the near term – when the auction system is novel and fragile – we feel it would be better to avoid developing other models which can detract from the industry’s main thrust. On the contrary all stakeholders should work towards the success of the auction system.

Apart from this it should be noted that only the auction system offers a strategy for reducing under-reporting and tax evasion. All buyers will be registered, and all product passing through the auctions will be counted, the buyer noted and the information entered on a data-base. This is somewhat analogous to the coffee auction at Moshi through which coffee must pass before being exported or consumed on the domestic market, and which has prevented tax evasion in large parts of the coffee industry.

There is a further reason for caution in trying to implement the direct marketing system in the WCGA. As we noted earlier, it is as yet unclear whether direct marketing will, in the long term, prove more profitable than selling seed cotton to ginners. It probably makes most sense in isolated areas of the ECGA, where there are few cotton buyers, and the attempt will not affect the development of auctions in the WCGA. For these reasons it would probably make sense to thoroughly prove the approach, technically and financially, in places like Oridoy, and only after that consider the possibility of introducing it into the WCGA.

RECOMMENDATIONS

Re: the pilot direct marketing operation in Kilimanjaro and Arusha regions

We recommend that TCLSB continues to assist the farmers in farmers in Oridoy, in view of the strong response they have so far shown and the scope this offers for thoroughly testing the direct marketing approach.

As a matter of priority, we recommend that TCLSB assure that there is sufficient ginning capacity to handle the growing production at Oridoy. It should first rehabilitate Moshi ginnery (including all ten gin stands) to allow it to handle the remainder of the 2004 crop, and the 2005 crop. In assessing the required throughput, it should be noted that farmers at Oridoy PS have purchased sufficient dressed seed to plant 2,300 acres, which at a yield of 500 kg per acre will produce 1,150 tonnes of seed cotton. In addition there may be other groups planning to supply significant quantities; the Moshi ginnery has sold a total 81.65 tonnes for planting and this suggests that as many as 8,165 acres could be planted in the zone.

TCLSB should also identify candidate investors prepared to put up a ginnery at Oridoy to handle the 2006 harvest. Here it will need to explore with farmers the alternatives of: (a) an investor who buys the seed cotton from the farmers outright, or: (b) one who toll gins for the farmers and acts as CM, allowing the farmers to engage in direct marketing. After evaluating the options and making financial projections for the ginnery and the farmers, it will be necessary to negotiate terms and conditions. These may involve a simple bilateral arrangement between the farmers and the investor, or a tripartite arrangement including TCLSB – depending upon whether the latter sees fit to provide any special incentives (such as temporary exemption of levies or provision of a generator, to operate up to the time when Oridoy is connected to the national grid).

We would recommend that while it is running the Moshi ginnery, TCLSB manage it as a separate profit centre. This will involve endowing the ginnery project with its own operating funds and bank account, keeping full accrual accounts (including cost and management aspects), and produce six-monthly reports with financial statements and key information about marketing, technical and financial aspects. The LMU should also produce reports on the operation of Oridoy PS and any other group in the area which enjoys collateral management services and duty exemptions and emerges as a significant player. These reports will assist in monitoring the progress and impact of the pilot toll-ginning/collateral management operations.

The LMU should follow up with a view to ensuring action is taken in these areas.

Re: the development of credit in the WCGA

For reasons discussed in the previous section we do not propose promoting direct marketing to farmers in the WCGA under this UNOPS-funded project. However, the option can be explored in the medium to long term, once the auction system has

become firmly established, or in the event it fails. With the development of direct marketing option, TCLSB will need to encourage the primary societies to act independently of the cooperative unions, following the positive example of those in coffee producing areas.

We propose supporting the development of existing collateral management services through the provision of training. However this should be developed for agro-industry as a whole, and not be exclusively focused on cotton industry – we discuss this further in the next sub-section.

Once the pilot auctions are under way, TCLSB should investigate the scope for developing agricultural production in the WCGA through smallholder credit for farmers and farmer groups, linked to provision of technical assistance and using the auctions as a secondary means of ensuring repayment.

Training in warehousing and collateral management

The LMU should work with the various commodity boards (for coffee, cotton, cashew-nuts etc.), financiers and CMs to develop training programmes for warehousing and CM in general, and containing industry-specific modules. Tanzania has broken with practice in most other African countries, by getting locally-owned companies deeply involved in CM activities. Training is appropriate so as to build the pool of talent upon which both these firms and international operators can draw. It will also allow the industries to set and enforce qualifications required of staff at different levels. Courses can be developed at local colleges in conjunction with attachments or in-service training in local companies. The LMU may also consider approaching Bandari College in Mombasa, which has organised warehousing courses in conjunction with the Kenya International Freight and Warehousing Association (KIFWA).

Working with a partner organisation in entrepreneurial development

The proposed activities in Oridoy area and the WCGA involve working with entrepreneurs and developing commodity chains, and for this purpose TCLSB may wish to involve a partner institution specialised in this kind of work. We would suggest as a possible candidate the NGO, TechnoServe, which has a successful track record in assisting in the development of a marketing system for speciality coffee, in Tanzania, and the cashew processing industry in northern Mozambique. However, we do not know whether TechnoServe is able to work in the cotton sub-sector, and there may be other candidates.

General industry development

From the point of view of the State, the industry appears to be at a unique moment of opportunity, where a number of leading ginners are seeking to work together to address common problems (this is in stark contrast to the situation in a neighbouring country where the cotton ginners' association does little more than lobby Government to reduce levies). In view of its limited resources, we suggest that TCLSB take advantage of this window of opportunity, and try to get the TCA to take on additional

responsibilities (e.g. for distribution of insecticides and seeds) while retaining for itself key supervisory and regulatory roles.

In a similar vein it may be useful for some of the private stakeholders to get more involved with the setting of priorities at Ukiliguru Research Station. Presently, the Zone Executive Committee which governs the Station includes representatives of the Regional Government (in the Chair), farmers, ginners (represented by Nyanza Cooperative Union), NGOs (represented by CARE-Tanzania), and extension staff. One would expect this to allow all relevant research issues to be properly aired and resolved. However, there appear to be some unresolved issues, with research staff expressing concern at the lack of proper safety regulations affecting seed production, and attempts by traders to import seed directly without the proper authorisation. The existence of these outstanding issues suggests the need to enhance the status of the committee and make sure stakeholder concerns are represented there and that the issues are fully discussed, and as far as possible resolved to the satisfaction of all parties. We suggest that TCLSB discusses the matter with the interested parties, to see if ways can be found to improve dialogue over priority-setting and other research-related matters.

TCLSB should seek to ensure the country gets more benefit out of the HVI classing machine. This might involve: (a) moving it to Mwanza, where it will be more visible to the overwhelming bulk of the ginners, and lead to less delay in getting results; (b) educating the ginners about the use of the HVI data in the marketing of their cotton, and; (c) working out, in collaboration with the TCA, a fully transparent and highly prestigious management regime involving rapid sample turn-around. There may of course be reasons for retaining the machine in DSM, which as TCLSB mentions, is closer to the market. However, we feel it is important the industry is made fully aware of this machine's potential and thoroughly debates how it can be put to best use for the benefit of the nation.

MAIN DOCUMENTS CONSULTED

Baffes, J. (2002) *Tanzania's Cotton Sector: Constraints and Challenges in a Global Environment*. World Bank. Mimeo.

Ministry of Coops and Marketing (2004) *Progress Report for the Period Sept., 2000 to Oct 2004*. Coffee and Cotton Marketing Project

Larsen, N. and Poulton, C. (in preparation) *Survey of International Cotton Trading Companies*. Mimeo.

The Rates Center (undated) *Cotton, Textile, Apparel Value Chain Report Tanzania*. Available on the internet at rates@ratecentre.org

Onumah (2005) *Action Plan for Improving Marketing of Coffee, Cotton and other Agricultural Commodities through a Warehouse Receipt System in Tanzania*. Report to UNOPS under the Coffee and Marketing Development Project.

Poulton, C., Gibbon, P., Hanyani-Mlambo, B., Kydd, J., Maro, W., Larsen, M.N., Osorio, A., Tschirley, D. and Zulu, B. (2004) Competition and Coordination in Liberalized African Cotton Market Systems. *World Development*, 22, 2: 159-173.

Poulton **et al** (forthcoming) *Competition and Coordination in Cotton Market Systems of Southern and Eastern Africa: Project Synthesis Report*. Report to DFID, Imperial College London.

World Bank (2004) *Tanzania Crop Boards Study*. Draft

APPENDIX 1: ITINERARY

Date	Organisation	Person
5-6/02	Fly to DSM	
7/02	LMU	Sabuni Mbagi, Assistant Project Coordinator, Cotton Fidelis Temu, Assistant Project Coordinator, Coffee Elizabeth Kimambo, Coordinator
	TCLSB	Dr Joe C.B. Kabissa, Director General
	CRDB	Philip Alfred, Director, Dept of Corporate Banking Robert Pascal, Senior Relationship Manager, Corporate Banking Department
	Cargill Tanzania	Murtaza Raschid, Country Manager
8/02	Fly to Moshi	
	KNCU cotton ginnery	George Shauri, Ginnery Manager
	Kilimanjaro Cooperative Bank	Mr Kullayar, General Manager Mrs Makwabe, Marketing Officer Mrs Angela Moshi, Credit Officer
	Tanganyka Coffee Curing Co. Ltd.	Mr Zebediah Moshi, General Manager
9/02	Tanzania Coffee Board	Leslie D. Omari Mr Desideri Mboya, Chief Liquorer & Auctioneer, Acting Director of Marketing Musa Kopwe, Corporation Secretary
	KNCU offices	Patrick Shiliwa, Senior Procurement Officer
	Tanganyka Coffee Curing Co. Ltd.	Plant visit with Felix Simon Olendukai, Chief Engineer
	Drive to Arusha	
	Oridoy Primary Coop Society	Mr Ramadan, Clerk
	TechnoServe	Thomas Dixon, Country Director
10/02	Fly to Mwanza	
	TCLSB	Mr Sunga, Zonal Manager
11/02	Lintex Ganners	Prem Kapoor, MD and Vice-Chairman of TCA
	Audit Control and Expertise (ACE)	Salema Joseph, Business Development Officer
	Baltonic	Zdiheri Mohamed Mshawa, Supervisor
		Mussa Paul Mabelele, Ginner Supervisor
	Nyanza Cooperative Union	Moses Kaseko, General Manager, and various other managers
12/02	Manawa Gineries Co Ltd	Mr Mapanda, GM
	Ukiriguru Agricultural Research Station	Mr Frank, Acting Zonal Research Director Mrs O.S. Ramazani, Head of Cotton Research Mr Ngendelo, Research-Extension Liaison Officer
13/02	Copcot Cotton Trading Ltd., Geita	Mr Magobeko, Transport Manager Mr Donald Max, MD
14/02	TCLSB, Mwanza	Mr Sunga Mr Epaphra Swai, Chief Ginning Inspector
	CRDB	Sekou Touré Mndeme, Branch Manager Fred Mwanyala, Manager Business Banking
	Fly to DSM	
	Kiran Patel	MD, Vegetable Oil Industries Ltd. (VOIL)
15/02	LMU	

	Baltonic	Jacob Muro, Executive Director Christdine Mshawa, Collateral Management Specialist Ali Ngongolo, Director
	ACE	Alex Kwayu, Regional Head of Risk Management Ezekiel Seme, Country Manager John Kidele, Marketing Manager Jimmy Msemo, Marketing Officer
	TCLSB	Mr Remwire, Accountant Thomas Fille, Regulatory Manager
	By phone	Mr Shashi, PS, Min of Coops and Marketing (Dodoma) Rhia Ketting, EU
16/02	Wrap-up meeting at TCLSB	Staff of LMU (see above) Thomas Filler, Regulatory Manager of TCLSB, and Acting Chairman Cliff Shredack, Credit Support Manager, ACE Robert Pascal, CRDB
	By phone	Responsible officers of Kenya Commercial Bank and ExIm Bank

APPENDIX 2: REPORT ON COTTON QUALITY, GRADING AND GINNING

By Les Law, cotton ginning and management specialist

OBJECTIVES OF THE MISSION

The following paper is the result of a visit to Tanzania in February 2005 as part of a team to investigate the possibilities of introducing a Warehouse Receipt system within the Tanzania Cotton Industry in the hope of ultimately being able to operate a collateral management system.

APPROACH

The team consisting of Mr. Jonathan Coulter, economist, and Mr. Les Law cotton ginning and management specialist visited various organisations in Dar-es-salaam such as Tanzania Cotton Lint and Seed Board, various banks and lending organisations and some major lint trading companies and the main collateral management companies working in the cotton industry at the moment, a list of all interviewed is attached.

The team then visited Moshi to observe a ginning company operating on toll basis i.e. ginning seed cotton for a fee, the extent of this operation was observed and discussed with management with the aim of determining whether or not it could be utilised in the lake Zone of Tanzania where 90% of Tanzania cotton is grown and processed. As a result of this visit some serious questions arose in relation to this ginnery being able to process next years expected cotton crop. Discussions took place with the TCLSB accounts manager and the Regulatory manager of TCLSB who are operating the ginnery on behalf of the RCU.

Over and above this the LMU expected to set up a similar programme in Mwanza but this has hit a snag, the head of the proposed village is also the chairman of the Nyanza Co-operative Union and he does not agree with the proposal.

The team then proceeded to the town of Mwanza which is the second biggest town in Tanzania and the heart of the cotton in the Western Cotton Growing Area.

The three main areas of production are Mwanza, Shinyanga and Mara Regions. The TCLSB have an office within the process area in Mwanza and smaller offices and representatives in the other zones.

Various other organisations are based in Mwanza such as Nyanza Co-op Union, Vegetable oil Industries, Inspection Companies and a short distance out of Mwanza is the Ukiriguru Cotton Research Station and the Manawa Saw Ginnery. All of these and other organisations and private companies were visited to enable us to determine the feasibility of introducing a collateral management system and to determine the possible problems to be encountered according to their experience.

Many reports have been produced since liberalisation in 1994 suffice to say that the approach taken by the ginning specialist of the mission was to highlight some of the

more practical technical aspects appertaining to the introduction of a W.R system and the likelihood of such a system being able to operate in the present conditions within the industry at the moment and make recommendations for the longer term.

Les Law was based in Mwanza as the Team Leader on the Dutch Cotton Assistance project throughout it's entire eleven year period and represented the main consultant the Netherlands Economic Institute (NEI) and the British Cotton Growing Association (BCGA) who were the main consultants on the project between 1983 to 1994. He has made numerous visits in connection with the industry in the years following liberalisation in 1994, the most recent in December 2004 during the ginning season and visited Manawa ginnery to observe the present operational difficulties.

CONSULTANT'S OBSERVATIONS

Prior to liberalisation the cotton industry was operated through primary societies at village level and the seed cotton was ginned at the ginneries belonging to the Regional Co-op Unions (RCUs)

Since liberalisation many private ginners/buyers have been operating within the industry to such an extent that the ginning capacity far exceeds the crop. On the one hand this is a good situation in as much as the crop can be ginned within 12 to 16 weeks and is therefore on the market very early which is as it should be, however this excess in ginning capacity has brought with it many other problems, the main one being the mad scramble to purchase seed cotton to keep the ginneries in operation.

The result of this is that the quality of the seed cotton being purchased is not being seen as the priority it should be. I have given details later in this report of what it means to a ginner if he has to process poor quality seed cotton in terms of machine breakdown and high usage of machine spares but in a market that is saturated with ginning companies sometimes as many as five companies in very close proximity to each other the ginner/buyer has little choice but to purchase seed cotton in any condition.

The end result would normally mean poor quality lint, which is not the case and the reasons for this is as follows.

At the end of the season when a ginner is ginning the very last remains of the crop which could be wet or worse still when the cotton has been wet and left to dry the deterioration is massive and damages the machinery badly and the resulting lint will be the lowest grade in Tanzania.

In normal ginning conditions the crop in Tanzania is being presented in quite good condition and very little attention is in fact being paid to the grading at the buying post.

Results of the cotton crop sold on the world market show a rise in the standard of GANY or ABOVE (See the attached paper presented by TCLSB) so in general terms it can be said that quality is not a big issue and indeed it is coming up. The problem however lies in the contamination found in the lint after the bales have been sold and opened up.

Some people cannot see the need to take samples from every bale, they think ten percent would be sufficient. Under normal conditions this argument could stand up because as already stated the standard of GANY or ABOVE is in fact being achieved.

When the quality issue is one of contamination it can be argued that taking samples from every bale is also useless if you do not know exactly what is inside the remaining lint.

I explain in detail later what contamination is and what it means to the spinner, in short it means that a spinner will never be quite sure of what he is buying if the sample is not a true representation of what is in the rest of the bale. He could be lucky and get good quality lint throughout the bale when it is opened up, but on the other hand it could have polypropylene contamination in the lint, and because of the white colour it will not be detected till the whole process is finished and the dyeing takes place, the dye will not take to the PP this will downgrade the quality of the finished product.

Some spinners have even stated, as noted later in the survey carried out, that the main problem is contamination and that it is even putting them off hand picked cotton and they are now leaning toward machine picked cotton that does not have this PP contamination problem, this could be a disaster for the Tanzania cotton industry.

I told the chairman of the wrap-up meeting that before I came out to Tanzania I had been reading reports stating that Tanzania no longer received the marketing premium it used to enjoy for hand picked cotton, I could not understand this situation because I know the cotton is all hand picked and if it got a premium before, how is it possible it does not get it now. The answer became clear when I saw the contamination problem for myself.

This also answered a question I had from reading previous reports before going out on this mission of some sources saying the quality was better while other sources such as TCLSB stating the quality is coming down, on the one hand the figures show good GANY but what we do not see is the contamination problem which only comes to light some months later in reports from buyers and spinners and can result in very serious claims against the ginner.

There now seems to be some recognition that this problem needs to be addressed and the plan is to introduce an auction system at the existing primary societies whereby the village farmers will bring their seed cotton at designated times to the auction and the buyers will have been informed beforehand of the dates. This will hopefully encourage the farmer to sort out his cotton beforehand and he will get a better price, if he sees his neighbour getting a better price than him the reasons will become apparent and he will be in a position to do something about it in the future.

The one point I have emphasised in this process is that in order to address this issue of contamination the buyers must be prepared to offer less for seed cotton, since while it may be good in grade quality it is poor in contamination, resulting in the cotton having to be picked through again before dispatch to the ginnery.

The one point that has come through very strongly from the visits to the ginneries is that by the time the seed cotton gets to the ginnery it is almost too late to find all the contamination because of the large volume that is required in the process and the numbers of staff required to pick through all this volume is prohibitive from a cost point of view but almost impossible from a physical point of view. This job must be done by the farmer and by the inspection staff at the buying post.

It has become clear that of the average six people employed at the ginnery by the CM companies they would be better of using only two for a collateral management stand point and dispatch the remaining four to the buying point where they can witness the quality problem at source. This idea has been discussed and has been met with some approval but only time will tell if it will be implemented, but it is certainly a very good step in right direction.

There is little doubt that the warehouse receipt system being operated in the Moshi ginnery on behalf of the Oridoy farmers is a success. This year's crop is three times the previous year, the farmers' interest in growing more cotton is on the increase and with the introduction of tractor hire from private people the workload for the farmer is greatly reduced, it is clear that with a good system of payment the production is on the increase. There is however a process problem in the making that needs to be resolved otherwise it could happen that next year the farmer is going to grow more but the present ginnery is not going to be able to gin the crop. It's possible that if the crop reaches 1000 tonnes then the ginnery may cope but only if it is overhauled after this season and as many gins are brought into operation as possible.

It's sometimes not possible to bring some of these old machines into operation because the foundations may now be damaged and the gin just can't operate there.

If for example eight gins could be made to operate the capacity would be 8 gins time's three shifts for six days with a capacity of 1.5 bales per gin per eight-hour shift. 1 gin for 8 hours is 1.5 bales per shift times 8 gins = 12 bales per shift x 3 shifts = 36 bales times 6 days = 72 bales per week or the equivalent of 532 KG of seed cotton at 34% Ginning out-turn per bale (the ginning out-turn is explained in a separate section of this report) making $72 \times 532 = 38,329$ kg of seed per week so to process 1000 tonnes of seed cotton would take $1,000,000 \text{ kgs} / 38,329 = 26$ weeks.

We know from the figures presented to us at the ginnery that's it's not quite possible to get this optimum level of production, the machines break down frequently, when we were there only four gins were in operation and it would appear that they will be ginning this crop of 852 tonnes for some time yet, even up to June. They started in September so it will have taken them ten months to gin this crop, at this rate it will take a year to gin 1,000 tonnes.

A plan is needed for the future beyond next season because the interest on the bank loans when processing takes so long is very high not to mention the fact the farmer will again become disillusioned with this situation and the crop will fall again.

There is a very successful coffee project in Moshi run by TechnoServe, the country director is Mr Thomas Dixon, we spoke to him about his project and sounded him out

on the possibilities of doing the same for cotton, there seemed to be some interest and this needs to be followed up.

It would of course help if a study was carried out to determine the feasibility of such a project both from a financial and technical standpoint because such information would be required by any potentially interested party whether TechnoServe or some other private investor.

It is clear that something will have to be done soon or the project there will fail which would be a great pity. The banks involved have shown great interest in the project and have supported it throughout.

There are not sufficient accounting details to determine the overall position of the ginning fee against the lint sales to determine the financial viability of the operation through TCLSB. Sales and ginning fee are clear enough but the overall costs of running the operation were not available. All we were able to get was the number of bales sold so far and the amount of money received so far from these sales and the rate the TCLSB charge for the services.

A similar WR project is planned for the WCGA but to my mind it is doubtful if anybody would be interested in toll ginning as a business on it's own, it could be possible to have a private ginner/buyer to offer toll ginning to buyers who have no ginnery but perhaps the risks are too high for a buyer to buy seed cotton in the hope it will be ginned for him by somebody else who is in competition in the buying business himself.

One possibility was the Manawa area where the present saw ginnery operates on behalf of two buyers of seed cotton at the moment and the introduction of a small project by the LMU seemed a good idea for this area but it has hit snags already.

To finalise I see many positive improvements, the introduction of the auction system will hopefully be the answer to the contamination problem, the ginning season is shortened which is good, the farmer is getting paid, they have set up a Cotton Association (the TCA) which is helping the industry, they have set up a development fund which is showing a positive effect and helping the farmer. The TCLSB is doing it's bit to encourage farmers and for sure there needs to be some organisation to monitor what is happening in the industry, there are still some dodgy buyers/ginners out there that need to be monitored, one ginner last year had to have his licence suspended so there is some policing of the industry going on that is helpful.

On the downside there are too many ginneries badly positioned in relation to the crop, some travel 200 kilometres to buy and transport cotton, and I doubt if this is sustainable in the long run. Many people complain they do not get service from TCLSB in relation to the information from the HVI machine, they say they get the information too late to be useful to them, the bales are already sold by the time they get the results. The TCLSB counter by saying some of these people deliberately send their samples in late therefore the time to get results back to the ginnery will of course be delayed. There are various reports of under reporting bale production in order to avoid some taxes etc.

We have discussed with the ginner and the associations the idea of having the HVI machine moved to Mwanza, if it would be helpful in getting them a better price for their lint and speed up the whole system of utilising this very expensive machine to the benefit of all concerned. Everybody seems to think it would be a positive step to have the machine in the heart of the growing/processing area. TCLSB however disagree, they say all the bales have to come through the port of Dar anyway and the HVI results have to be put on the export licence so it makes sense for the machine to be in Dar. Whether or not the machine can or should be moved is a matter for the authorities to determine but some discussion between all the interested parties should be undertaken to reach a suitable conclusion.

INTRODUCTION TO THE TYPES OF GINNING USED

The engineer feels that in order to determine the needs for a collateral management system some detailed technical and gin management information is required the basis of which the ginning out-turn test (GOT) which if used properly, is the start of a collateral management system and has been used in Uganda by a private gin management company with great success.

Documents pertaining to the system are not part of this report, this would require to be set up on the basis of the findings of this mission.

The information attached to the report is based on a management structure implemented by a private company based on the cotton engineer and management specialists experience throughout many years in the cotton industry both in private ginning companies and national and co-operative bodies.

A pilot project is in operation in Moshi and this project has been studied to determine if it is possible to have it extended to the WCGA of the country

THE PROCESS

The processing of seed cotton is done in two ways in Tanzania, by saw ginning and by roller ginning. Both these types of ginning are suitable for cotton grown in Tanzania but should only be used in specified areas according to variety and staple length of the cotton being grown in that area.

Saw ginning can be used in any of the regions but should if possible not be used on longer staple cottons i.e. cotton with a staple length of 1 3/32" and above, such as was grown in the Mara region. It was grown, because it is widely recognised that with the introduction of liberalisation the requirements for maintaining seed cotton within its designated zone have largely disappeared with the opening up of the market and with stiff competition between many smaller buyers of seed cotton.

On top of this there is now an excess of cotton processing machinery in the country reported to be about double what would be expected in a very big season.

It would be advisable to have a study carried out in this respect to determine the actual capacity of the WCGA machinery, which could be used to determine future plans for the industry. The installed capacity and available utilisation due to downtime can be very different to the actual capacity; past Dutch Cotton project figures show the difference to be considerable.

Prior to liberalisation in 1994 all the ginneries in the Mara Region were roller ginneries, because of the type of cotton being grown there, which was Tanzania type 1. Type 2 being being grown round the rest of the lake-zone and type 3 being grown further south in Shinyanga region.

QUALITY GINNING

The basis of quality ginning is to handle good clean seed cotton as gently as possible and with as little pre-ginning as possible, pre-ginning meaning not using excess cleaning machines than is needed to end up with a good clean sample of seed cotton prior to ginning.

It follows that saw ginning by it's very nature of high capacity output is handling the seed cotton in a much rougher fashion than a roller gin.

When the ginneries were under the control of the RCUs they built roller ginneries with the aim of reaping the benefits of higher quality lint and up till 1994 there was only two saw ginneries belonging to the RCUs of Mwanza and Shinyanga. In the early 90s a new saw ginnery was built by the Dutch Cotton project at the Manse Co-op site of Manawa where an old and obsolete roller ginnery already existed.

At the time of the building of this saw ginnery the main objective was to get the cotton crop finished within a target period of 16 weeks, prior to this Tanzania had great difficulty in finishing a crop with the year and cotton was carried over to the next season with all the resulting deterioration that that entails.

When the ginnery was completed and operational the intention was to build another two ginneries under the cotton project however after the building of the Manawa ginnery it became clear that there was opposition to the idea of private / RCU collaboration and due to poor management the new ginnery was not being operated as originally envisaged. The plan for the remaining two ginneries one of which was to be a roller ginnery at Bunda in the Mara region was shelved.

The project finished at the start of the liberalisation in 1994.

BASIC COSTS OF GINNERIES AND CAPACITIES FOR CLARIFICATION

At this point it is important to clarify what is entailed in the building of a saw ginnery as opposed to a roller ginnery which will show why so many saw ginneries have been built since liberalisation by private owners.

Tanzania uses a Platt type double roller gin, which has a maximum capacity of 40 kg of lint per hour. This means that to get a production of between 8 and 10 bales per hour they need a ginnery of between 30 and 50 double roller gins The average ginnery in Tanzania has 30 gins, some such as Manonga had 50 gins.

The figure of 8 to 10 bales per hour is based mainly on how fast labourers can reasonably maintain the feeding of the suction pipes used to transport the seed cotton to the ginnery from the holding stores and the capability of filling 50 kg bags of seed after the ginning operation.

A saw gin of the type used in Tanzania on the other hand can process as much as 2000 kg per hour which is a rate of 10 bales per hour per machine and a typical saw ginnery will consist of 3 or 4 gin machines sometimes 5 depending where the ginnery was purchased. This means that the saw ginnery has the capacity of 30 bales per hour against the roller ginnery capacity of 10 bales per hour.

The obvious question would be why build a saw ginnery of such high capacity if it can't be fed in sufficient quantities to utilise all its capability. In the case of Manawa where the new equipment was installed by the cotton project is that the suction and seed bagging facilities and associated machinery were also installed to assist in working near the capacity but it would also be true to say that the consistency with which the gin machines could be fed varied wildly from hour to hour.

The saw gin machinery is mainly designed for bulk delivery of seed cotton as used in South Africa or USA where seed cotton is sucked out of specially designed trailers direct into the ginnery machinery or to holding stores and then sucked to the ginnery on demand, seed is usually blown to a bulk source and not bagged at the ginning point.

In the case of saw ginneries built after liberalisation it would be safe to say that most of them would be second hand brought as in the case of Cargill from Malawi or even as far as USA where the cost of such saw gins of low capacity are readily available. Because of the availability of such machines it would be reasonable to assume as stated in a recent report some of the machinery was even brought in as scrap. In USA machines capable of processing 35 bales per hour per machine are replacing these machines and what is obsolete to them is useful for others at a very reasonable cost. In such cases the machinery is purchased as a complete factory, which means that although two gins might be sufficient you need to take all the machinery because of the matching ancillary equipment.

Another aspect in taking machinery with such a high capacity is a quick turnover in ginning when you can get sufficient seed cotton meaning less storage is required at the ginnery again reducing costs.

Although Tanzania is now reputed to have double the capacity it now needs, even with the best possible crop it could expect, it now means that it has a better possibility to get the lint onto the market earlier which as reported is now happening.

Whether or not this early cotton lint can justify the premium against better quality later in the season is a matter for the processors and traders to determine. The longer the season drags on the higher the costs to the ginner.

The end result of this overcapacity and excess saw ginning is that so far as funds are available the seed cotton can be purchased and ginned fast with the minimum of storage for seed cotton, the bales are removed quickly for export on an early market and the seed is removed to the oil mill immediately, again without a lot of storage and because of the extra oil mills that have been built this is also processed quickly.

AFFECT ON ZONING AND QUALITY

Under these circumstances the zoning of seed cotton has had to be abandoned because the ginneries are eating cotton at a high rate, the buyers have to travel further a field to

capture seed cotton. Types are now all mixed up and on top of this the grading no longer exists because of the competition. One ginnery manager told me if I don't take even the dirtiest of cotton one of the neighbouring four saw ginneries will and I will have done no ginning at all.

It's possible that the quality of some of the crop has deteriorated however against that I have to seriously consider that since the whole crop can be ginned so much faster then it stands to reason that the quality of the seed cotton early in the season does not suffer the same quality deterioration as it does for example when the rains come. I can however believe that the old premiums for roller ginned and longer staple will have gone forever under these conditions.

We always have to consider that if the crop is not sprayed at the correct times the pests can discolour the fibres and also the quality of the seed for the next season will suffer in for instance germination, the yield will also decline.

A new variety of seed has been introduced through the WCGA by Ikirguru cotton research station and within the year it is hoped that it will be fully multiplied and in full use in all the regions.

Saw ginning will also reduce the value of the lint because invariably the saw gin reduces the staple length of the fibre, meaning in theory, everything that was in the past roller ginned in the Mara region and was 1 3/32" will now only be 1 1/16". Since the types are all mixed up anyway you have to ask yourself, does it matter any more other than that traditionally roller ginned cotton has always commanded more on the market than saw ginned lint, experience has shown that with the world market usually saturated with saw ginned then lint it does matter. Some ginners are changing from saw to roller because of this.

Again with private enterprise a quick turnover for all concerned must be a very attractive proposition regardless of what it means in terms of the countries reputation for traditionally hand picked roller ginned lint, the niche market could be a thing of the past, the mighty dollar rules.

I visited a saw ginnery in mid December 2004 belonging to NCU and the quality of the seed cotton was as poor as I have ever seen being accepted into a ginnery, it was the very end of the season and he was toll ginning so it's possible this cotton was quite old and had been very wet at some time, the consequences of this to the ginner are discussed later.

CONSEQUENCES OF GINNING POOR QUALITY SEED COTTON

As stated earlier, the engineer visited a saw ginnery during the month of December 2004; the ginnery was in operation ginning a very poor quality of seed cotton. The manager asked me to observe the damage that was being done to the machinery due to the sand blasting nature that dirty seed cotton has on the machines. The machinery is being virtually sand blasted by the large quantity of sand and stones that are in the seed cotton and this damages the casings of the suction fans and pipes used to transport the seed cotton from the stores to the ginnery.

The saw gins themselves are severely damaged by this sand as not all of it can be taken out in the seed cotton cleaning machines, the main gin saws become so blunt that they tear the fibre off the seeds instead of cutting them of cleanly. This results in fibres that are damaged, fibres that are shorter than they could be if removed efficiently, a poor ginning out-turn and this all combines to make it almost impossible for the gin management to determine if the machinery is at fault and needing adjustment

NOTES ON GINNING OUT-TURN

The ginning out-turn is the heart of the whole operation, it determines the ultimate quality of the lint and highlights the areas that need attention throughout the whole operation for grading/ buying through ginning to the final sample of lint for sale. Ginning out-turn is the term used by the gin management to determine the condition of the gin settings for the particular type of seed cotton being ginned at a particular time. The gin settings need to be set according to the staple length of the cotton being ginned otherwise the GOT will be poor.

The figures obtained from a GOT tell the ginnery management if for example there is too much lint being left on the seed, whether too much waste is being indicated and whether the type of seed being ginned is producing the expected yield.

The figures are also used to determine if the volume of seed cotton weighed into the store equals what was purchased, the amount of seed and bales produced by weight and all properly recorded and signed off by management.

This procedure is the heart of a properly managed collateral management system.

Normally a ginning inspector will carry out a GOT at the beginning of the season before a ginnery is given a licence to continue, this enables the management to have a reference point with which to observe the required parameters for the whole season. It follows therefore that the GOT can be used throughout the entire ginning season to determine if there is any doubt about cotton supposedly weighed into the ginnery and the produce weighed out, a bankers guide if you like.

A GOT should be carried out each week or immediately a store is emptied and the figures calculated against the produce produced, where poor figures are found the ginnery should be stopped to determine if the fault lies either in the machinery, the delivery of the seed cotton to the ginnery against the purchases, if the seed being bagged is being done properly, if the bales are being properly recorded and most importantly if all the scales being used in the process are properly checked and in good operation i.e. hand scales for the weighing of seed cotton at the buying centres, the weighbridge for receiving into the ginnery, the bale scale for the lint bales and the seed scales for the bags of seed.

SAMPLE PAPER A **QUALITY CONTROL**

A Paper is attached on what is required within a ginning company to maintain Quality.

SAMPLE PAPER B

FACTS GINNERS AND QUALITY MANAGEMENT SHOULD KNOW ABOUT CLASSING OF LINT.

A paper is attached on this subject.

SAMPLE PAPER C

GINNING INSTRUCTIONS PRIOR TO SEASON COMMENCEMENT

A paper is attached on this subject that was in use in a private company in Uganda

SAMPLE PAPER A

SAMPLE PAPER ON GINNERY QUALITY CONTROL

GINNERY QUALITY CONTROL PROCEDURES

OBJECTIVES

To reduce to the lowest possible level the incidence of contamination in lint

CONTAMINATION DEFINITION

This is any material such as pieces of clothing, slippers, nails, stones, excessive leaves, twigs, twine, Hessian or any other material other than the original product of seed cotton and lint, but most importantly polypropylene contamination.

STAFF INVOLVED

All staff employed in the company should see it as part of their duties to better the overall quality of the product within the confines of their particular part of the operation.

Since the ginning operation depends on a good quality of seed cotton before the ginning can take place it is necessary that field staff pay particular attention to the quality of seed cotton both at the buying point and on delivery to the ginnery for storage.

Particular attention to Hessian and polypropylene mixed with the seed cotton is the biggest problem at this stage along with stones and sand that damage machinery.

The ginnery manager, head and shift fitters should be watching for contamination from within the seed cotton stores and the ginnery during the ginning operation and should give good feed back to all operators within the ginnery covering gins, seed cotton suction and seed cotton platform and ginnery yard where off loading takes place and back down the line through the operations manager, cotton classer, cotton co-ordinators, extension officers and buying centre quality inspectors.

BUYING CENTRES

Specific buying centres should be identified for the purpose of this quality control exercise but the system should be extended to all centres within the company network to increase awareness for total quality control.

TIME SCALE

The buying season will probably continue throughout the entire ginning season. As the season comes to an end the quality of seed cotton presented for sale and sent to the ginneries deteriorates, as such the inspectorate has to be even more vigilant and not let standards slip. It should be remembered that poor cotton mixed with good cotton would downgrade all the cotton in the bales that are produced and detected by the sample removed from the bale after ginning

WHAT IS QUALITY

*Produce that is, **FIT FOR THE PURPOSE**, which it is sold.*

If we sell lint at a certain standard that does not meet these standards the customer will complain and make financial claims against the company.

These claims are not only financially damaging, they give us a bad name on the international market in which we compete, the result is the customer looks elsewhere for his lint and we go out of business.

A copy of the Ginners Quality Control Log is attached to this plan. We in the ginnery must see this log as the tool by which we control quality from a ginning aspect. The log is simple but used properly and filled in diligently it means that the head fitter can track the hourly progress of the quality. It gives him the opportunity to rectify faults in machinery or in any particular section before the fault gets out of hand.

There is not enough attention being paid to the ginning quality log. The shift fitter is responsible for this log, it should be filled in using an ink pen and the necessary notes should be logged showing the action taken to rectify faults as and when they occur, opposite the actual hour they occurred.

An action plan has been drawn up that indicates what should be done to better the quality of the lint at all stages of the operation.

ACTION PLAN

Starting from the end product, the lint samples, taken from each bale, and working back to rectify any deficiencies found to be contributing to contamination.

A sample will be drawn from every bale and split into two, one will go to the classer for official classification, the other will go to the ginnery head fitter or the shift fitter.

The shift fitter will check each sample associated with every bale produced throughout each hours production and he will log each bale number showing the time the bale was produced, the faults found in the sample such as broken or whole seed, oil contamination, etc. and note the action taken to remedy the fault.

This part of the system allows the ginner to keep on top of quality problems resulting from ginning defects and enables the fault to be rectified immediately by not having to wait for a classer's report which will follow some time after the event.

The fitter should note on the quality log any foreign matter found on the seed cotton platform or from the seed cotton store and the examples should be kept and given to the classer who will compile a sample box showing such contamination.

This contamination record will be handed back down the line to the operations manager, co-ordinators, extension officers and buying point inspectors to educate and train the farmers to eliminate all possible contamination in the future.

A Ginning fault such as oil contamination is under the complete control of the head and shift fitters but the machine staff must see it as their duty to rectify these faults as they see them at the time, they should not ignore oil on the ginnery floor, it should be removed immediately.

A pre-determined number of complete bales will be broken open in the presence of the head classer and the contamination if found will be put into plastic bags and shown to the head fitter and the operations manager to enable them to check the progress of this exercise. The broken bales having been completely sorted through will then be re-baled using the original bale number.

Under no circumstances should the baled lint be put back into the press boxes unless it has been properly teased out otherwise we will get uneven bales that are difficult to store, look very uneven, usually cause bale ties to break and can cause undue stress on the press and pumping machinery.

If the technical staff are in any doubt about this they should refuse to put the lint into the boxes for pressing till such time as their doubts have been cleared. No senior member of staff should force staff to rebale if there is any doubt about this.

Boxes have been made to contain tools; spare parts etc. and should be used at all times when machinery is under repair. At no time should any item be left on the ginnery floor.

Boxes have been made to contain footwear (slippers); no footwear or clothing is to be allowed in the suction store or the seed cotton platform otherwise they could be sucked through the system of fall into the feeders.

Some old oil drums should be cut in half and put at various places in the gin yard and staff should be encouraged to use them for collection of general rubbish.

The biggest danger of contamination results from oil on the gin floor, foreign material such as nuts, bolts, pieces of shim etc. falling into the conveyor. Polypropylene strands and coloured material used to tie cotton squares and bags. All of this contamination must be eliminated.

The overhaul in preparation for this season has been expensive due in part to the damage done to the machinery because of contamination such as nails, stones and various other pieces of metal, and due in part to poor fitting by staff.

Encourage all staff to report to you any possible contamination problem whether it is from cloth or pieces of broken machinery.

There will be reluctance for a member to report the fact that he has for example dropped a slipper into the feeder for example or for one of the technical staff to admit that he has just dropped a nut into the conveyor.

It is much better that we work together on this rather than for some staff to keep quiet. We must create an environment whereby the staff will not be afraid to say if they see something going wrong, we will all benefit in the end from such observations and honesty.

We request you all for your co-operation in this exercise to enable us to build a good reputation and to sell a product we can be proud of.

SAMPLE PAPER B

FACTS GINNERS SHOULD KNOW IN THE CLASSIFICATION OF COTTON

QUALITY ASSURANCE, TANZANIA COTTON GINNING INDUSTRY

Cotton fibre and processing

Cotton possesses its highest fibre quality and best potential spinning performance when it is on the stalk. Lint quality of the cotton in the bale coming from the bale press

Depends on many factors, including

1. Variety of cotton
2. Soil type and weather conditions
3. Cultural and harvesting practices
4. Moisture and trash content
5. Ginning treatment and processes

Usually the first four factors exert greater influence on lint quality than extremes in ginning treatment.

Nevertheless, any mechanical handling, up to and including spinning, may modify the natural qualities or characteristics of cotton.

Ginning is a series of thermo pneumatic and mechanical processes and, can only reserve qualities and characteristics inherent in the cotton when it enters the ginning plant.

Lint grade, staple length, fibre fineness and maturity (micronaire) and fibre strength, in the order listed, are the factors that determine the selling price of cotton.

Lint grade is determined principally by colour and amount of foreign matter present.

Ginning processes may do little to change the colour of cotton, and they can change the staple length to only a limited extent.

Ginning does not affect fineness and maturity

In addition to its principal function of separating lint from seed, the modern cotton gin is equipped to remove from the cotton a large percentage of foreign matter that would significantly reduce the selling price of the ginned lint. Today's ginner must have a three fold objective.

- To produce ginned lint of grades satisfactory to the grower
- To gin the cotton with minimum loss in fibre spinning quality so that it will meet the demands of the ultimate users, i.e. the spinner and the consumer.
- To be commercially viable and cost conscious.

Processing requirements

In order for the ginner to achieve the three factors mentioned above it is necessary to have the following:

- Clean and properly graded seed cotton from the farmer
- Machinery that is properly maintained and set for the type of seed cotton being ginned.
- Sufficient good quality spares to enable trouble free processing to take place.

Other factors are of course important such as proper management systems, control, accountability, quality assurance etc.

1 COLOUR GRADE

There are 25 colour grades for American upland cotton plus five categories for below grade colour. Fifteen of these grades are represented in physical form by samples prepared and maintained by the USDA. In the form of sample boxes. For practical considerations the colour and leaf grade standards are contained in the same box. For instance the box containing the strict low middling colour grade also contains the size and amount of leaf that would be described as leaf grade 4.

Each descriptive standard provides a description for cotton that lies above, below, or between certain physical standards. Copies of this physical standard are normally provided by an authority connected to the agricultural department or body responsible for this.

Example for practical purposes only.

Tanzania cotton is sold on the basis of grade, type and staple length. The basic selling grades are Gany for the WCGA and Dars for the ECGA, as adopted by the Liverpool Cotton Association. There are three physical grades for each of the cotton areas namely:

WCGA	Tang	good middling
	Gany	middling
	Yika	good ordinary
ECGA	Bord	good middling
	Dars	middling
	Elam	good ordinary

Tang and Bord are the highest grades for WCGA and ECGA respectively. Yika and Elam are the inferior grades.

Colour grades fall into five groups as follows: white, light spotted, spotted, tinged, and yellow stained. The colour is affected to a great extent by the weather and exposure to the weather conditions after the bolls are open. It may also be affected by varying characteristics and by harvesting and ginning practices. When upland cotton opens normally it has a bright white colour. Abnormal colour indicates deterioration in quality. Continued exposure to weather and the action of micro-organisms can cause white cotton to lose its brightness and become darker in colour. When plant growth is stopped prematurely by frost, drought or other weather conditions, the cotton may have a yellow colour that varies in intensity. Cotton may also become discoloured or spotted by insects or fungi.

2 LEAF GRADE

This is the leaf content of the cotton from the farmer. There are seven leaf grades in American upland cotton which is machine harvested. Since Uganda cotton is hand picked the leaf content is very low and not much of a problem. Leaf content is a very bad factor in terms of the financial cost to the spinner as it takes many machines to remove this kind of contamination. The amount of leaf after ginning is dependant on how much there is in the cotton when it comes to the gin and the kind of equipment installed to deal with this problem.

3 PREPARATION

Preparation is a term that refers to the degree of roughness or smoothness of the ginned lint cotton. As a general rule, smooth cotton has less spinning waste and produces a smoother and more uniform yarn than rough cotton. Various methods of harvesting handling and ginning can produce readily apparent differences in preparation.

4 EXTRANEEOUS MATTER

In a cotton sample extraneous matter is any substances that is not cotton fibre or leaf material that is not discernible in the official cotton standards. Examples of this are bark, grass, spindle twists, seed coat fragments, dust, and oil.

5 HVI DETERMINATIONS

FIBRE LENGTH

Fibre length is measured by passing a small tuft of parallel fibres through a sensing point of the HVI system. The tuft is formed by grasping the fibres with a clamp and paralleling them by combing and brushing. Reported length is the average or mean length of the longest one half of the fibres (upper half mean length). Results are reported to the nearest one hundredth of an inch i.e. 1.06 equals 1-1/16". Length is also reported in thirty seconds of an inch.

Fibre length is a varietal characteristic. The length decreases when the temperature during the early stages of fibre development exceeds the optimum for the variety or when moisture is limited.

LENGTH UNIFORMITY

Length uniformity is the ratio of the average mean length of the fibres to their upper half mean length and is expressed as a percentage. If all of the fibres of a sample were the same length the uniformity index would be 100. The following gives a general indication of what length uniformity means. The presence of short fibres or those fibres less than one half inch in length adversely affects the utility and quality of the cotton. Short fibres tend to aggregate during drafting (grasping and pulling with increasing speed) and cause thick places in yarn. Yarn with thick spots is not uniform and cannot be used in high quality products. Short fibres do not add strength to ring spun yarns. And thick places are frequently points of weakness in yarns. This causes disruption in processing and is called ends down.

When fibres are removed from the seed in ginning some fibres break at a point other than near the seed cote and must be removed in two pieces. Lint cleaners can also break fibres. Machines that are operated or set improperly contribute to fibre breakage, shorter staple length and lower length uniformity. Immature fibres have less resistance to breakage than mature fibres. Low micronaire cotton has comparatively lower length uniformity than high micronaire cotton. Fibre strength also affects resistance to breakage. Stronger cotton has higher length uniformity than weaker cotton.

FIBRE STRENGTH

Fibre strength is determined by the HVI system on the same tuft of fibre used for length measurement. The jaws of the breaking clams are spaced 1/8" apart. Results are reported as grams per text. A text is equal to the weight in grams of 1,000 M of fibre. The strength reported is the force in grams required to break a one-text bundle

of fibres. Fibre strength is a varietal characteristic and is less influenced by adverse growing conditions than are length and micronaire. A general description of fibres of different strengths is: Very strong 30 and above, strong is 27-29, intermediate is 24-26, weak is 21-23, very weak is 20 and below.

MICRONAIRE

The term micronaire refers to an airflow measurement that indicates fibre fineness and maturity. This is determined by passing air compressed to a standard volume through a cotton specimen of standard weight and standard volume. The volume of airflow through the specimen is expressed as the micronaire, which may be referred to as the Mike. Optimum micronaire is dependant on many things, including the variety of the cotton, and the relative importance of strength and appearance in a yarn or fabric. Different varieties vary in micronaire at full maturity.

COLOUR

The HVI machine colour determinations are in terms of greyness, measured in Rd. And yellowness measured in +b, Greyness or % reflectance indicates the lightness or darkness of the sample. Cotton Rd values are usually within the 48 to 82 ranges. Yellowness indicates the amount of yellow colouration in the sample and is usually within 5.0 to 17.0 ranges. Normally opened cotton will have an Rd of 70 or higher and a +b of 9 or lower. The various combinations of greyness and yellowness can be converted into colour values by plotting the Rd and +b values on an official chart.

TRASH

In addition to the classers leaf grade the HVI machine can measure the trash content. This is done by scanning the sample surface and recording the particles present. Results are reported as the percentage of the sample surface covered by non-lint particles. The maximum is less than 5%. The leaf grades are:

<u>Classers leaf grade</u>	<u>Trash meter reading in %</u>
1	0.08
2	0.12
3	0.18
4	0.34
5	0.55
6	0.86
7	1.56

SAMPLE PAPER C

GINNING INSTRUCTIONS

1.0 GENERAL

The purpose of ginning instructions is to ensure that all ginneries operate according to the standards laid down by the company.

Our aim is to gin for quality while maintaining a predefined level of production and to ensure the spares consumption is kept to the minimum.

Safety within the factory must be considered at all times, on no account should any inexperienced person be allowed to operate the machinery, only the head pressman should operate the bale press. Guards for machinery should be fitted at all times during machine operation.

Only personnel employed within the company should be allowed inside the ginnery, smoking and any naked lights within the ginnery compound, stores, and ginnery is strictly forbidden.

This is the second year of operation for the new company; as such it is even more vital that personnel adhere to the company regulations to avoid accidents to themselves and to fellow workers.

The company gateman is authorised to stop any member of the staff or any vehicle from entering or leaving the premises if he has reason to believe further investigation is required. Personnel and visitors are requested to respect the authority of the security staff and to assist them to carry out their duties diligently.

2.0 GINNING TEST

Prior to ginning commencing a gin test should be carried out using a known weight of seed cotton. The weight of both lint and seed should be determined to reach the percentage out-turn. Gin tests were carried out last season, follow the instructions given to you previously and you should have no difficulty. Should an error be found in the GOT figures you should refer to the possible reasons for G.O.T. error sheet previous issued to you.

Before ginning commences we should have put some seed cotton through the system to determine if the gin machinery has been properly set and that all fire safety precautions have been set up and are ready to operate.

The head fitter should be satisfied that the seed cotton he is using is grade "A" and will be suitable to ensure the test results will show the maximum possible ginning out-turn. If he is not satisfied the seed cotton is suitable he should report the fact to the ginnery supervisor who will be responsible for taking the necessary action.

The ginnery supervisor should first check and log the fact that the weighbridge, bale and seed scale have been checked and that he is satisfied with the results, he should sign the log books after checking each scale.

A bale weight and seed weight recording book should be available along with the standard ginning out-turn test form. The test should be carried out in the presence of both the head fitter and the ginnery supervisor who should sign the GOT form and submit this to the MD before further ginning can take place. A copy of the GOT is also required by the CDO.

3.0 BALING

Baling material comes in a continuous roll and should be cut into two pieces of 140 centimetres for the top and bottom cover of the bale. The end covers should be cut from one piece of material 94 centimetres and halved. It is possible that the material used this season will be changed and may be wider than that used last year, if so it may be possible to cut only two pieces which can be folded over and tucked into the bale ties, if so this will mean no end caps will need to be sewn on.

Bales should be uniform in shape and weight. The bale weight should be maintained as close as possible to 185 Kilograms, or, at any weight predetermined by the MD. Excessively heavy weights are not good for the bale press and exert pressure on the bale ties while light bales mean that a container holding 56 bales will not reach the most economical weight for shipping purposes. Weights of 0.5 KG should be rounded up i.e. 194.5 should be recorded 195 KG.

The bale should be completely covered by the hessian and tied with 7 tie wires. The tie wire knot should be evenly positioned along the top quarter of the bale. Rejected ties should be put into two categories, that of broken, and that of out of form, making them difficult to fasten. Bale ties are expensive and it is necessary to monitor failures to allow us to pass the information to the manufacturer. Bale end cover stitching should be single strand and not more than one inch apart.

The bale should be dressed before it is weighed by removing the excess lint from the two ends of the bale in order to make the ends square before the hessian end caps are sewn on. Doing this makes the bale look square but it also helps in packing into the container.

Rebaling should only be carried out in the most extreme circumstances and should only be done on the instructions of the MD or his representative. If rebaling is necessary the lint from the bale should be teased out before feeding it back into the press box, on no account should large slabs of lint be put into the box, this causes the ram to exert uneven pressure on the press table and is not good for the uniformity of the lint.

The bale press table is fitted with a box knife for the purpose of removing a uniform sample of lint from the soft side of the bale i.e. the side of the bale on the press table and press head.

The classing department have already issued separate instructions as how the sample should be recorded and packed for classing. It is essential that the recording of all samples be carried out as previously instructed.

4.0 BALE RECORDING

A bale-recording book should be kept by a bale clerk at the bale scale. Each bale should be weighed individually over the scale and the bale lot number running number and weight should be recorded in the book.

When the ginnery supervisor checks the bale book and the bale scale by testing, using a fixed weight, the bale book should be initialled by the ginnery supervisor. Any error in the scale should be remedied before any further bales are weighed.

Because of the fluctuation in the bale weights there should not be more than 4 bales unweighed at any one time, alteration to the bale weight mechanism should be carried out by the head fitter or electrician because alteration needs to be monitored till the new required weight settles down.

During the start of the ginning season when the humidity is high the bale press will be able to produce excessively heavy weights without too much effort, about 2400 lbs/sq" on the press gauge. As the season progresses and the moisture in the air decreases the cotton in the press box is not so easy to press and the press may go up to 3500 PSI in order to make a bale of 185KG. at this point in time the bale clerk must ensure the required bale weight is maintained, deviations should be reported to the head fitter immediately.

5.0 GINNERY HOUSEKEEPING

This means keeping the internal ginnery clean and free from various trash, nuts, bolts, spanners etc lying on the floor. To ensure there is no contamination in the lint going to the press you are requested to pay attention to the following advice. The ginnery sweeper should ensure all dirty lint etc is gathered together and not put into the press. Staff working on the gin machines should install a board between the lint slide and the lint conveyor to prevent any object from falling onto the lint conveyor, especially when the line of gins adjacent to the one being worked upon are still in operation. Boards have been made for this purpose and should be used at all times. Nuts bolts screws etc taken from a gin should be put into a wooden tray or other suitable container, nothing should be left on the floor that could be kicked or knocked into the lint conveyor. Oil from gearboxes etc should not be allowed to go on the floor, oil that seeps into the gin stand foundation bolt holes will weaken the gin foundation, any oil that has been spilled by accident should be wiped up immediately. If a part of a machine breaks such as a feeder spike or any other part where all the broken pieces are not collected the bale that preceded this and the bale that follows the incident should be kept aside. At a later date both these bales should be opened up and all the lint teased out for inspection before rebaling can take place. Last seasons bales contained large amounts of hessian strands and small pieces of plastic, the staff working on the seed cotton platform and in the suction stores should keep a look out for this foreign material and keep it aside.

The head grader should be informed when foreign matter is found. Any foreign object in a bale will cause damage to the mill owners machinery this will involve us in an expensive claim against the company.

6.0 BALE STORAGE

The bales should be clearly stencilled showing the company initials, the ginnery code number, the lot number and the running number. Contract labour should be employed to move the bales from the ginnery and stack them in the store allocated for the purpose. Lot number must stack the bales with a space of about one foot between each lot. The store floor should be clean and well prepared before stacking begins.

7.0 SEED STORAGE

Seed should be bagged in 50KG Jute bags. The bag should be stitched with double stitching not more than one inch apart.

The contract labour employed to move and stack the bags should stack in bundles of 250 bags (125 Tonnes).

The seed clerk should have a recording book and he should record the weights in quantities of 10 bags before the contract labour remove the bags for stacking. The reason why we request 10 bags per entry is because there is less possibility of an error, which would affect our GOT.

Last year some errors were found at the end of the season in the quantity of seed produced, the seed clerk must pay particular attention to the number of bags and the recorded weight to avoid such an error this season.

Any excess lint found in the seed should be reported to the head fitter immediately because this normally means that a seed grid on one of the gins needs attention.

No seed should be loaded out of the store without specific instructions from the ginnery supervisor. The ginnery supervisor should not allocate any seed without specific written instructions from the MD or his representative.

8.0 SEED COTTON AND SEED STORAGE

Both grade A and B seed cotton should be stored separately. They should be ginned separately and the bales and seed should be stored separately. Different types of seed cotton i.e. BPA and SATU should also be kept separate and should not be ginned or mixed with each other in any way.

9.0 STAFFING

Prior to ginning commencing the ginnery supervisor will be given a list of staff to be employed in the ginnery along with the prevailing rates of payment for each person or group of people. No other staff should be employed unless authorised and such instructions to the ginnery supervisor should be given in writing. There is a standing order showing the number and payment of staff along with seed cotton buying, transport and commission rates.

A separate sheet will be attached to the ginning instructions showing the general duties of all the staff in the ginning process.

10.0 GINNING CAPACITY RATE

The type of gin installed in our ginneries, the Middleton double roller gin (MDRG), is capable of producing 3 bales of lint per 12 hour shift under the most ideal conditions, however this requires constant and even feeding to the gin feeder. The head man should ensure the casual labour employed in the suction store and the ginnery seed

cotton platform take their tasks seriously to enable us to maintain the highest possible output.

The ginnery staff should aim for a target of not less than 2.5 bales per gin per shift. Roller cutting, which forms a great part in the production, should be carried out every double shift and should preferably be done outside the ginnery.

11.0 WEEKLY MAINTENANCE

In order to maintain the required level of production it is necessary to ensure the machines are maintained properly on a Sunday. This will ensure the maximum gin output and it will reduce the downtime in other pieces of ginning equipment, which would cause stoppages.

The head fitter should satisfy himself that the planned weekly maintenance has been completed before the staffs finishes for the day.

12.0 PRODUCTION AND EFFICIENCY FIGURES

A daily production and downtime form should be filled in by the head fitter and summarised each week. The weekly summary should be transferred to the weekly sheet and should allow the MD to ascertain the efficiency of the gins and the overall factory efficiency at any time without having to search through paperwork. This year it is most likely the figures will be required daily by the financial controller, they will possibly be included in the daily flash report.

13.0 ENGINEERING PARTS AND CONSUMABLE RECORDS

The storekeeper will record all spares and consumables such as bailing materials that are needed for continuous ginning. A system of recording all spares receipts and issues has been developed and should be strictly adhered to. The figures will be the basis for determining the needs for continuous ginning and will serve as the basis for the following years overhaul and process season. The storekeeper should ensure the list is comprehensively prepared and submitted each month to the office of the MD. Should he observe any shortages that may affect production he should report it to the ginnery supervisor immediately.

14.0 CDO SAMPLES

The CDO regulations require that we allow them to take two samples per lot, the system we use now with the cutter on the bale press means they can have a sample for each bale. The CDO also require purchasing and production data that should be submitted each week to their office, the ginnery supervisor is responsible to ensure this information is prepared and submitted as requested.

15.0 ELECTRICITY READINGS

Readings from the electricity meter should be taken each day and recorded in the production and downtime sheet. A separate recording book has been issued and should be kept up to date. These readings include the Kw units used and the KVA units used, a separate instruction has been issued regarding the reading of the meter, the ginnery supervisor should be present during the readings by UEB and he should write the readings in the ginnery log book to enable us to counter check the UEB invoice when it is presented.

16.0 FIRE DRILL

Every two weeks the fire pump should be tested and each member of the permanent staff should be aware of his or her duties during such an emergency. The head fitter and the ginnery supervisor share joint responsibility in ensuring this is the case and the weekly summary production sheet should be initialled when the drill has been carried out. The ginnery mechanic is responsible to ensure the overhead and ground tank are full in case of such an emergency. He should also run the fire pump engine from time to time out with the above-mentioned fire drill. Fire is one of the greatest hazards in the industry it is our responsibility to ensure everything is done to prevent it by observing the NO SMOKING and NO NAKED LIGHTS rule.

17.0 WEIGHBRIDGES

Both the weighbridges have been serviced, the Kabole weighbridge has been converted to an electronic readout system, both scales should be monitored throughout the season and the ginnery supervisor is responsible for the scale recordings. The ginnery supervisor should keep the weighbridge locked and the keys should be in his possession at all times.

It is essential that the supervisor signs the test recording sheets and returns them to the head office daily.

The senior management will determine the need for any further weighbridge checks should it be necessary.

ANNEX 2

ISSN 0856-035X THE UNITED REPUBLIC OF TANZANIA

BILL SUPPLEMENT

No. 3

14th *January, 2005*

to the Gazette of the United Republic of Tanzania No, 2 Vol. 86 dated 14" January, 2005
Printed by the Government Printer, Dar es Salaam, by Order of Government

THE WAREHOUSE RECEIPTS ACT, 2005

ARRANGEMENT OF SECTIONS

--

Section

Title

PART I

PRELIMINARY PROVISIONS

1. Short title and
2. commencement Application.
3. Interpretation.

PART II

ESTABLISHMENT OF THE WAREHOUSE RECEIPTS BOARD

4. Establishment of the Board.
5. Functions of the Board. Powers
6. of the Board. Managing
7. Director.
8. Other Staff.

PART III

FINANCIAL PROVISIONS

9. Sources of Funds.
10. Duty of the Board to operate on sound principles. 11. Estimates.
12. Accounts.
13. Audit.
14. Financial year.

PART IV

LICENSING PROCEDURES

15. Conditions for operating under the Act.
16. Licensing Procedures.
17. Prohibition for granting and validity of licence.
18. Conditions for granting licences.
19. Applicant to execute bond.
20. Action of bond by a person injured.
21. Designation as a license and bonded warehouse.
22. Casualty insurance recovery of loss.
23. Additional insurance.
24. Cancellation of insurance, suspension of license.
25. Schedule of charges.
26. Revocation, suspension and denial of license.
27. Operation after revocation, suspension, or expiration of Licenses. 28.
- Power to appoint inspectors.
29. Functions of inspectors.
30. Power of entry, inspection, etc.

PART V

WAREHOUSE RECEIPTS

31. Who may issue a warehouse receipt.
32. Warehouse receipt as evidence of proprietary rights. 33.
- Contents of the warehouse receipt.
34. Negotiable warehouse receipt.
35. Non-negotiable warehouse receipts.
36. Altered warehouse receipts.
37. Rights of purchasers of altered receipts against warehouse operator. >
38. Lost or missing warehouse receipts.
39. Duplicate warehouse receipts.

PART VI

RIGHTS AND OBLIGATIONS OF WAREHOUSE OPERATORS

40. Obligation of warehouse operator to deliver goods.
41. Obligation to deliver in accordance to the demand of the holder. 42.
- Justification for delivery of goods.

Warehouse Receipts

43. Liability for misdelivery.
44. Exception to obligation to deliver.
45. Liability for failure to cancel warehouse receipt after delivering goods.
46. Liability for failure to cancel or mark warehouse receipt when part of the goods have been delivered.
47. Liability after a warehouse receipt has been lost, stolen or destroyed.
48. Delivering goods to persons' with valid titles or right.
49. Ascertaining valid titles to goods.
50. Liability for misdescribed goods.
51. Warehouse operator's duty of care.
52. Duty to keep goods separately.
53. Co-mingling of fungible goods.
54. Warehouse operator's right to lien.
55. Enforcement of lien.
56. Loss of lien.
57. Statement of charges under lien.
58. Refusal to deliver goods until lien is satisfied.
59. Warehouse operator's lien loss does not preclude other remedies. 60. Methods of enforcing the lien.
61. Perishable and hazardous goods.

PART VII

NEGOTIATION AND TRANSFER OF WAREHOUSE RECEIPTS

62. Different ways of negotiating a warehouse receipt.
63. Negotiation by endorsement.
64. Effect of endorsement to non-negotiable receipt.
65. Persons capable of negotiating a warehouse receipt.
66. Rights acquired after due negotiation of a warehouse receipt. 67. Rights acquired in the absence of due negotiation of a warehouse receipt.
68. Rights of a transferee of a warehouse receipt.
69. Rights and obligations of transferors and transferees of negotiable warehouse receipts.
70. Warranties on negotiation of the warehouse receipt.

Warehouse Receipts

PART VIII

OPENCES AND PENALTIES

71. Issue of receipts for goods not received.
72. Issue of receipt containing false statement.
73. Issue of duplicate receipts not so marked.
74. Issue for warehouse operator's goods of receipts, which do not state that fact.
75. Delivery of goods without obtaining negotiable receipt.
76. Negotiation of receipt for mortgaged goods.
77. Obstructing a Warehouse Inspector.
78. General penalty.

PART IX

MISCELLANEOUS PROVISIONS

79. Powers to make Regulations.

SCHEDULE

NOTICE

This Bill to be submitted to the National Assembly is published for general information to the public together with a statement of its objects and reasons.

Oar es Salaam,
10¹. January, 2005

MARTEN Y. C. LUMBANGA,
Chief Secretary

A BILL

for

An Act to provide for the establishment of regulatory framework for warehouse receipt, to provide licensing procedures and to provide for other related matters.

[.....]

ENACTED by the Parliament of the United Republic of Tanzania.

PART I

PRELIMINARY PROVISIONS

- | | |
|--|------------------------------|
| 1. This Act may be cited as the Warehouse Receipt Act, 2005 and shall come into operation on such a date as the Minister may, by notice published in the <i>Gazette</i> , appoint. | Short title and commencement |
| 2. This Act shall apply to Mainland Tanzania in respect of all agricultural commodities and to such other goods as the Minister may declare by order published in the <i>Gazette</i> . | Application |
| 3. In this Act, unless the context requires provides otherwise "Act" means the Warehouse Receipt Act, 2005; "Board" means the Tanzania Warehouse Receipt Board established | Interpretation |

Warehouse Receipts

- under section 4 of the Act;
- "commingle" means the binning and storage of commodities by class, under circumstances other than identity preserved;
- "conditioning" means, but not limited to, the drying or cleaning of commodities;
- "depositor" means any person who deposits a commodity in a warehouse for storage, handling, or shipment, or who is the owner or legal holder of an outstanding warehouse receipt, or who is lawfully entitled to possession of the commodity;
- "failure" with regards to warehousing receipt; means
- (a) inability of the warehouse operator to cover the storage obligations; .
 - (b) public declaration of insolvency;
 - (c) revocation of a license and the leaving of an outstanding obligation to a depositor;
 - (d) failure to redeliver any commodity to a depositor in the ordinary course of business and where a *bona fide* dispute does not exist between the warehouse operator and the depositor;
 - (e) failure to make application for license renewal within sixty days after the annual license renewal date; or
 - (t) a denial of the application for a license renewal;
- "delivery" means voluntary transfer of possession from one person to another;
- "fungible goods" means goods of which any unit is, from its nature or by mercantile custom, treated as equivalent of any other unit;
- "goods" means agricultural commodities and such other commodities as may be specified in the First Schedule;
- "holder" means a person who is in possession of a warehouse receipt, whether negotiable or non-negotiable, and who has proprietary right therein; .
- "identity preserved" means the handling of a commodity in such a manner that guarantees the return of the actual quantity and quality of the commodity to the depositor;
- "license" includes any and all renewals and amendments thereof unless the context clearly indicates the contrary;
- "licensed warehouse" means any warehouse for which the Board, subject to other terms and requirements of the Act, has issued a license;
- "minister" means, the Minister for the time being responsible for marketing of agricultural commodities;

Warehouse Receipts

- "order" means, an order by endorsement on the warehouse receipt;
- "person" means, any individual, corporation, two or more persons having a joint or common interest, or other legal or commercial entity;
- "prescribe" means prescribe in the regulations;
- "revocation" means the permanent removal of a warehouse operator's license following a hearing on violations of the Act;
- "shortage" means that a warehouse operator does not have a sufficient amount of commodities by kind, class, and quality, to cover his outstanding obligations for that commodity;
- "station" means a warehouse located not more than three kilometres from, the central office of the warehouse, for which a warehouse license may be issued listing two or more stations on the same license however, a fee shall be charged and collected for each station;
- "suspension" means, the temporary removal of a warehouse operator's license pending a hearing for violations of this Act. Corrections of the violations prior to a hearing consequent upon violation of the provisions of the Act; "
- "warehouse" means any building, structure or other protected enclosure approved by the Board to be used or useable, for the storage or conditioning of commodities or buildings used in relation thereof or including operation of the warehouse;
- "warehouse operator" means any person engaged in the business of operating a warehouse for receiving, storing, shipping or handling of commodities for compensation include the agent or employee the scope of whose actual or apparent authority renders such person to exercise rights or become liable under the Act;
- "warehouse receipt" means a receipt issued by a warehouse operator in respect of storage, handling or shipment of the commodity. ~

PART 11

ESTABLISHMENT OF THE WAREHOUSE RECEIPT BOARD

4.-(1) There is established a Board to be known as the Tanzania Warehouse Licensing Board. Establi-
shment
of the
Board

(2) The Board shall be a body corporate, with perpetual succession and common seal, and in its corporate name be.

Warehouse Receipts

- (a) capable of suing and being sued;
- (b) subject to this Act, may borrow money, acquire and dispose of property; and
- (c) do all such things as a body corporate may lawfully do.

(3) The composition procedure at the meeting and tenure of office of members of the Board shall be as stipulated in the Schedule to this Act.

Functions of the Board

5. The functions of the Board shall be to:

- (a) license warehouses;
- (b) license warehouse operators;
- (c) license warehouse inspectors;
- (d) approve negotiable warehouse receipts books; and
- (e) carry out or perform such other functions as are conferred or imposed on it by this Act.

Powers of the Board

6.-(1) For the purpose of carrying out its functions, the Board shall have power to

- (a) investigate the receiving, storing, conditioning, shipping and handling of commodities and complaints with respect thereto, including the inspection of any warehouse, commodities stored and all property and records pertaining thereto;
- (b) determine whether the warehouses for which licences are applied for or have been issued, are suitable for the receiving, storage, conditioning, shipping, and handling of the commodity stored or expected to be received, stored, conditioned, shipped, or handled;
- (c) require such reports as it may deem necessary in the administration of this Act;
- (d) require licensed warehouse operators to terminate ~ receiving, storage, conditioning, shipping, and handling 1J\1) agreements upon revocation of their license;

I ~

Warehouse Receipts

- (e) administer oaths and issue summons to compel attendance and testimony of witnesses and/or the production of records in connection with any investigation or hearing;
- (f) prescribe all forms, within the limitations set forth in this Act, including the forms of receipts and applications for licenses;
- (g) propose to the Minister all necessary rules and regulations for proper carrying out the provisions of the Act;
- (h) investigate the storage, warehousing, classification
ff(. according to grades and otherwise, weighing, and certification of goods;
- fi!(i) at any time, with or without application, inspect or cause to '0 be inspected all warehouses licensed under this Act;
 - (j) to classify warehouses licensed or applying for a licence in accordance with their ownership, location, surroundings, capacity, conditions, and other qualities, and as to the kinds of licenses issued or to be issued for them;
 - (k) to prescribe, within the limitations of the Act, the duties of warehouse operators conducting warehouses licensed with respect to their care of and responsibility for the goods stored;
~
 - (l) to provide guidelines and standards for the suitability for the proper storage of the goods for which a license is applied;
 - (m) suspend or revoke any license issued to any warehouse operator conducting a licensed warehouse or any
~ contravention of or failure to comply with any provision of the Act or regulations and other legislative instruments made under the Act;
 - (n) charge, assess and collect fee for every examination or
~ inspection of a warehouse and the issuance of licences;
 - (o) examine all books, records, papers, and accounts of warehouse operators licensed under this Act and of the
~ warehouse operators conducting the warehousing business relating to them;

Warehouse Receipts

- (p) to retain the charged fee for the purposes of improving the services provided under this Act;
- (q) borrow for the purposes of carrying out its functions under this Act;
- (r) approve negotiable warehouse receipt books to be used under this Act; and
- (s) carry out any other activity incidental or conducive to the carrying out of its functions under section 5 of this Act.

(2) The Board may delegate to the Managing Director, Officer or any other employee of the Board, performance of and function or the exercise of any of its powers except for powers with regards to approval of budget and approval of the balance sheet, audited accounts and statement of account.

Managi
ng
Director

7.- (1) There shall be a Managing Director of the Board who shall be appointed by the Minister from among three names recommended by the Board.

(2) The Managing Director shall be the Chief Executive Officer of the Board and shall be responsible for the day-to-day operations of the Board.

(3) Subject to the provisions of this Act, the Managing Director shall be responsible for the management of the funds, property and business of the Board and for the administration, organization and control of the staff of the Board.

(4) The Managing Director shall be a Secretary to the Board.

(5) The Managing Director shall, from time to time, in writing, keep the Board informed of the progress of the business of the Board.

(6) In addition to any other functions that may be conferred upon him by the Board, the Secretary shall

- (a) keep the custody of the seal of the Board;
- (b) take minutes of the meetings of the Board; and

Warehouse Receipts

(c) keep records of all activities of the Board.

8-(1) The Board may employ such number of employees and such other officers as it may determine to be necessary for the efficient performance of the functions and the exercise of the powers of the Board.

Other staff

(2) The Board may, on the terms and conditions as it may deems fit, fix remuneration, grant pension, gratuities or other benefits on retirement or termination of services of the officers and employees of the Board.

(3) The Board may delegate any of its powers of appointment under this section to the Managing Director, subject to such terms and conditions as the Board may determine.

PART III

FINANCIAL PROVISIONS

9. The funds of the Board shall consist of

Sources of funds

(a) such sums of money as may be appropriated by Parliament;

(b) all moneys received by the Board from licensing;

(c) all moneys received by the Board from inspecting and supervising warehouses;

(d) all moneys borrowed by the Board;

(e) all moneys derived from approving warehouse receipt books; ;

(f) any other moneys received by or donated or made available

10. The Board shall perform its functions in accordance with prudential financial principles.

Duty of the Board to operate on prudential principles

Warehouse Receipts

Estimates

11.-(1) The Managing Director shall, not later than three months before the end of each financial year, prepare and submit to the Board for its approval estimates of income and expenditure of the Board for the next following financial year and may, at any time before the end of each financial year, prepare and submit to the Board for approval any estimates supplementary to the estimates of the current year.

(2) No expenditure shall be made out of the funds of the Board unless that expenditure is part of the expenditure approved by the Board under the estimates for the financial year in which that expenditure is to be made or supplementary estimates.

Accounts

12.-(1) The Board shall ensure that the management keeps proper accounts and records of its transactions and affairs and shall ensure that all moneys received are properly accounted for, all payments of its moneys are correctly made and properly authorized and that adequate control is maintained over its property and over the incurring of liabilities by the Board.

(2) The Board shall cause to be prepared in respect of each financial year, and not later than three months after the close of the financial year, a statement of accounts which shall include a report on the performance of the functions of the Board during that financial year; comprising of

- (a) a balance sheet and a statement of income and expenditure of the Board in respect of that financial year; and
- (b) any other information in respect of the financial affairs of the Board as the Minister may in writing, require.

Audit

13.-(1) The accounts of the Board shall, in respect of each financial year, be audited by the Controller and Auditor-General or by an auditor appointed by the Controller and Auditor-General.

(2) Within six months after the close of each financial year, the accounts including the balance sheet of the Board in respect of that financial year shall be audited and the balance sheet be placed before the Board for approval.

Warehouse Receipts

(3) The Controller and Auditor-General and any auditor appointed by the Controller and Auditor-General shall access all books of accounts, vouchers and other financial records of the Board and is entitled to have any information and explanations required in relation thereof.

(4) The Controller and Auditor-General shall, within two months after receipt of the statement of accounts under subsection (2) of this section, audit the accounts and deliver to the Board a copy of the audited accounts together with a statement on matters which in his opinion should be brought to the attention of the Minister.

(5) The Board, shall as soon as possible upon receiving report of the Controller and Auditor General, deliver to the Minister a copy of the audited accounts together with the auditor's report.

14-(1) The financial year of the Board shall be the period of twelve months beginning from the 1st day of July and ending on the 30th day of June in the year following. Financia
l year

(2) Without prejudice to subsection (1) the first financial year of the Board may be a shorter period commencing on the date on which the Board is established and ending with the next following 30th day of June.

PART IV
LICENSING PROCEDURE

15-(1) The Board may, upon application, issue a warehouse license for the conduct of warehouse business.

(2) Two or more warehouses which constitute a station may be licensed under a single licence.

(3) All warehouses licensed under a single licence shall be treated as a single warehouse for all the purposes of this Act, including issuance of receipts, and delivery of commodities.

16-(1) Any person who requires a licence to conduct warehousing operations or business shall apply to the Board in the manner VJ prescribed by regulations. Condi-
tions for
opera
ting a
ware-
house
under the
Act

Licensi-
ng pro-
cedure

Warehouse Receipts

(2) The Board shall, before granting a warehouse licence, either by itself or any other authorized person, inspect any warehouse in respect of which a license is applied, to determine whether the warehouse is ~ for the storage of the particular goods for which the license is applied.

(3) The Board shall, upon being satisfied that a warehouse is suitable for the storage of the goods in question, grant a warehouse license to the applicant.

(4) The applicant shall, upon being granted a licence pay a fee prescribed by the Board.

Prohibition for granting and validity of licence

17.-(1) The Board shall not grant any licence, unless the applicant has satisfied all the conditions prescribed by the Act.

(2) The validity of the licence shall be twelve months and shall be renewable subject to the provisions of this Act.

Conditions for granting of a license

~ 18.-(1) Before the Board grants a licence to any person it shall satisfy itself of the following:

- (a) that the applicant is in possession of a Warehouse whether as a tenant or owner;
- (b) that upon inspection the warehouse is suitable for warehousing of respective goods in accordance with the regulations made under this Act;
- (c) that the applicant's Director or Manager is of good business management records and has not been involved in any criminal proceedings involving business impropriety;
- (d) that the warehouse and the goods therein are fully insured, in respect of fire, theft and burglary or any other damage; and
- (e) that the applicant is financially capable of conducting the business of warehousing.

Applicant to

19.-(1) Each warehouse operator applying for a license under this Act shall, execute and file with the Board sufficient to the faithful performance by him of the o~s as a warehouse

Warehouse Receipts

operator under this Act and regulations and other statutory instruments made under this Act.

(2) Where the Board determines that a previously approved bond is, or for any cause has become insufficient, it may require an additional bond or bonds to be given by the warehouse operator concerned, conforming with the requirements of this section, and, unless the additional bond is given within the time fixed by a written demand made by the Board, the license of the warehouse operator may be suspended or revoked by the Board.

20. Any person injured by reason of the breach of any obligation for which a bond is given, shall be entitled to sue on the bond in his or her own name in any court, not lower than the Court of a Resident Magistrate to recover the damages for injury sustained because of the breach.

Action on bond by person injured

21.-(1) Upon execution of a bond, the Board may designate the warehouse in respect of which a bond was executed as both licensed and bonded.

Designation as a licensed and bonded warehouse

(2) Notwithstanding anything in this Act, no warehouse shall be designated as licensed and bonded under this Act and no name or description conveying the impression that any of such warehouse is licensed and bonded, shall be used

(a) until a licence has been issued and a bond has been filed and approved by the Board; or

(b) unless the licence issued under this Act remains unsuspended and not revoked.

22.-(1) Each applicant for a license to operate a warehouse in accordance with this Act shall, as a condition to the granting, file or cause to be filed with the Board a certificate of insurance evidencing effective policy of insurance issued by an insurance company authorized to do business in Tanzania in the name of the applicant insuring all commodities which are or may be in such warehouse for

Casualty insurance; recovery for loss

their full market value for loss by fire, theft, burglary, arson or any other risk which the Board may direct to be included under this category.

Warehouse Receipts

(2) In the case of outbreak of fire, burglary, arson or any other risk categorized under sub-section (1) destroys or damages any commodities in any licensed warehouse, the warehouse operator shall, upon demand by the depositor, and upon being presented with the receipt or other evidence of ownership and after deducting the warehouse operators charges and advances at the market value of the

v- The warehouse operator shall make complete settlement to all depositors having commodities stored in any warehouse, damaged or destroyed, within ten days' after settlement with the insurance company.

(4) Failure by the warehouse operator to make settlement shall be the grounds for suspension or revocation of the warehouse licence.

Additional insurance

23.-(1) Where the Board shall determine that a previously approved insurance is insufficient, it shall require additional insurance to be given by the warehouse operator, conforming to the requirements of this Act.

(2) Without prejudice to subsection (1), the warehouse operator shall be required to upgrade the insurance policy with a view to maintain sufficient policy all the time arising from settlement of loss through insurance, the warehouse operator shall meet the amount that falls short of the value of the loss enabled to be settled through insurance.

Cancellation of insurance or suspension and revocation of licence

24.-(1) A licensed warehouse operator shall not cancel or suspend an approved insurance policy or arrange for substitution of insurance policy without prior written approval of the Board. ~

(2) The insurance company may cancel insurance required by this Act only after the expiration of a thirty day period from the date of mailing, by registered or certified mail, of the notice to the Board of the intention to cancel or suspend the insurance policy.

(3) The insurance company shall, at the time of giving notice to the Board send a copy of the notice to the warehouse operator.

Warehouse Receipts

(4) Notwithstanding any other provision of this Act, failure by the warehouse operator to provide new evidence of insurance within thirty days after the Board receives the notice of cancellation shall cause the warehouse license to be suspended or revoked.

25.-(I) Every applicant for a licence to operate a warehouse under this Act shall, as a condition to the granting, file or cause to be filed with the Board the commodities from among the notified list proposed to be warehoused and a copy of the schedule of charges as a warehouse operator.

Schedule of charges

(2) A licensed warehouse operator shall not make a change in the charges unless a notice of such change and the reasons thereof have been filed with and the Board approves the change.

(3) The Board shall refuse to approve any change, which it finds to be unjust, unreasonable, or discriminatory.

(4) Where the Board receives a proposal for changes of charges it shall afford opportunity to the warehouse operator to substantiate reasons for changes.

26.-(I) The Board may revoke, suspend, or deny a license in any case, in which it determines, after providing opportunity for a hearing, to the warehouse operator that there has been violation of or failure to comply with the requirements of this Act.

Revocation, suspension, and denial of licenses

(2) Any person aggrieved by the suspension or revocation of a license by the Board, may appeal to the Minister.

27.-(I) Where a license is revoked, suspended or has expired, the warehouse operator shall terminate, in the manner prescribed by the Board, all arrangements covering the receiving, storing, shipping, conditioning, or handling of commodities in the warehouse stations covered by such license, but shall be permitted, under direction or supervision of the Board to deliver commodities previously received.

Operation after revocation, suspension, or expiration of licenses

(2) During any suspension of a license, the warehouse operator may, under direction or supervision of the Board, operate the warehouse, station, but shall not receive any commodities for storage,

Warehouse Receipts

conditioning, shipping, or handling during the term of such suspension.

Power to
mspe
ctors *
,

28. The Board may appoint *or* otherwise authorize persons or a group of persons to be warehouse inspectors.

Functions
of Inspe-
ctors

29. The inspectors appointed pursuant to the provisions of this Act shall have power to inspect warehouse premises and goods kept to ensure that the warehouse operator observes the conditions in this Act, regulations and those appearing on the issued license.

Power of
entry,
inspection,
etc.

30. A warehouse inspector *or* any other person duly authorized in writing in that behalf may, at any reasonable time during the day, enter a warehouse premises *for* the purposes of ensuring that the provisions of this Act, are observed.

PART V

WAREHOUSE RECEIPTS

Who
may
issue a
ware-
house
receipt

31. A warehouse receipt shall only be issued by a warehouse operator duly authorized and licensed to do so under the provisions of this Act.

Ware-
house
receipt
as evi-
dence of
propri-
etary
rights

32.-(1) Subject to the provisions of this Act, any warehouse receipt drawn and issued by a warehouse operator in accordance with the provisions of sections 5 and 16 shall be a proof of the holder having proprietary rights in the goods same as of that person in respect of which such warehouse receipt was issued.

(2) In relation to warehouse receipts a person acquires proprietary rights in the goods if that person is entitled to the ownership of the goods:

- (a) in return *for* a binding commitment to extend credit *or for* extension of an immediately available credit, whether or not drawn;

Warehouse Receipts

- (b) as security for or in total or partial satisfaction of a pre-existing claim;
- (c) by accepting delivery under a pre-existing contract for purchase; or
- (d) in return for any consideration sufficient to support a pre-existing contract.

- ~ 33.-(1) The warehouse receipt shall contain the following - Contents of the warehouse receipt information, and terms:
- (a) the location of the warehouse where goods are stored; (b) the date of issue of the receipt;
 - (c) the serial number of the receipt;
 - (d) a statement whether the goods received will be delivered to the bearer, to a specified person or that specified person's order;
 - (e) a short description of the goods or of the packages containing them;
 - (f) the registered signature of the authorized warehouse operator;
 - (g) the nature and fact of ownership of the goods, whether solely or jointly or commonly owned with others; and
 - (h) a statement as to the amount of advances made and of . liabilities incurred.

(2) A warehouse operator shall be liable to the person injured thereby, for damages caused by the omission of any such term required to be included in the warehouse receipt under this Act.

(3) A warehouse operator may insert in a receipt any other terms and conditions which are not contrary to the provisions of this Act and which do not impair obligations of delivery or duty of care.

(4) Any provision appearing in a warehouse receipt, purporting to contain any condition which is contrary to this Act, shall not be capable of enforcement by the court.

Warehouse Receipts

Negotiable warehouse receipts

34.- (I) A warehouse receipt in which it is stated that the goods received will be delivered to the person named in the receipt or his order shall be known as a negotiable warehouse receipt.

(2) No words shall be inserted in a negotiable receipt with the effect of rendering that receipt non-negotiable.

(3) The Minister may prescribe in the regulations the procedure and limits of negotiation of negotiable warehouse receipts.

Non negotiable warehouse receipts

35. A warehouse receipt on which it is stated that the goods received will be delivered to the bearer shall be treated as a non-negotiable receipt.

Altered warehouse receipts

36. An alteration to a warehouse receipt shall be regarded as

- (a) immaterial if the alteration does not affect ex-ante proprietary rights of the holder;
- (b) authorized when made with an implied or direct permission or connivance of the Warehouse operator and which render a warehouse operator and the perpetrator liable under the provisions of this Act; or
- (c) unauthorized but made without fraudulent intent, when made without an implied or direct permission or connivance of the warehouse operator and which render the warehouse operator liable according to the terms of the receipt, as they were before alteration.

Rights of purchasers of altered receipt against warehouse operator

37.-(1) A purchaser of a warehouse receipt for value without notice of alteration shall acquire the same proprietary rights against the warehouse operator which the purchaser would have acquired if the receipt had not been altered at the time of purchase.

(2) A purchaser of a warehouse receipt shall be regarded to have had notice of alteration, if before the purchase of the warehouse receipt, he or his agent took part in or influenced the alteration of the said warehouse receipt.

Warehouse Receipts

(3) A purchaser of an altered warehouse receipt who has been found or who could be reasonably imputed with possession of notice of alteration commits an offence and shall be proceeded against under section 74 in the same footing with the operator.

38.-(1) Any loss, theft or destruction of the warehouse receipt, shall be reported by the warehouse operator to the Board.

Lost or missing warehouse receipts

(2) If a warehouse receipt has been lost, stolen or destroyed, a duplicate may be issued by the warehouse operator provided that the request of the holder is accompanied by:

(1) a police report of the loss, theft, or destruction of the receipt

(b) a bank guarantee covering the current market value of the goods; and

(c) an affidavit sworn before the resident magistrate; and

(d) a copy of a notice of loss, theft, or destruction published in a newspaper of nationwide circulation.

(3) The Minister may, by order published in the *Gazette*, prescribe some of the requirements under subsection (2) which shall not apply to a certain class or category of warehouses.

(4) An appeal regarding the issuance or otherwise of a duplicate receipt shall be made to the Board.

(5) Any person dealing in warehouse operation using the original receipt after a duplicate receipt has been issued commits an offence for issuing false information.

39.-(1) A warehouse receipt upon the face of which the word "duplicate" is plainly placed shall be a representation and warranty by the warehouse operator that such warehouse receipt:

Duplicate warehouse receipts

(a) is an accurate copy of the original receipt; and

(b) has the same rights as the original receipt properly issued and outstanding at the date of issue of the duplicate.

Warehouse Receipts

(2) A duplicate receipt issued shall have the same standing as the original and shall not impose upon the warehouse operator any additional liability.

PART VI

RIGHTS AND OBLIGATIONS OF WAREHOUSE OPERATORS

Obligation of warehouse operator to deliver goods ~ **40.** Except as provided in this Act, a warehouse operator shall deliver the goods upon demand made by the holder of the warehouse receipt or depositor, if the holder or depositor:

- (a) offers to effect payments for the warehouse operator's lien on the goods;
- (b) offers to sign relevant documents proving the delivery of the goods.

Obligation to deliver in accordance to the demand of the holder 41.-(1) Subject to section 40, the warehouse operator shall have obligation to deliver the goods in accordance with the demand by the warehouse receipt holder or, as the case may be, the depositor.

(2) Where the warehouse operator refuses to deliver the goods as demanded by the warehouse receipt holder or depositor, the burden shall be upon the warehouse operator to establish the existence of any lawful excuse for the refusal.

(3) Where the warehouse operator refuses to deliver the goods as demanded by the depositor or holder of warehouse receipt because of the reason that the warehouse receipt was altered, the holder or depositor who had notice of alteration shall be, estopped from demanding more or less proprietary rights in the warehouse receipt than those provided on the altered warehouse receipt.

Justification for delivery of goods **42.** Subject to provisions of sections 40 and 41, a warehouse operator shall deliver goods only after being satisfied that:

- (a) the person receiving the goods is lawfully entitled to the possession of the goods;
- (b) by the terms indicated in the warehouse receipt issued for the particular goods, that person is entitled to delivery,

Warehouse Receipts

either by himself or on his written authorization, to another person.

43.-(1) A warehouse operator shall not deliver the goods if, prior to delivery, he receives information or otherwise becomes aware that a person to whom delivery is about to be made is not legally entitled to the delivery.

Liability for mis-delivery

(2) A warehouse operator who:

- (a) comes to know that the person who claim delivery of the goods is not in fact lawfully entitled to the possession thereof;
- (b) ignores the request not to make delivery of the goods, made under paragraph (a) and delivers the goods;
- (c) had information or knowledge that the delivery about to be made was to one not lawfully entitled to the possession of the goods, and continues to deliver the goods shall be liable for conversion to all persons having proprietary rights in or possession of the goods.

44. The warehouse operator shall not be liable for failure to, deliver the goods to the depositor, or owner of the goods, or to a holder of a receipt given for the goods when they were deposited, even if such receipt is negotiable, in a situation where goods have been lawfully sold or disposed of

Exception to obligation to deliver

- (a) because of their perishable or hazardous nature; or,
- (b) to satisfy the warehouse operator's lien.

45.-(1) Except as provided for under this Act, where a warehouse operator delivers goods for which he had issued a negotiable receipt shall take up and cancel the receipt.

Liability for failure to cancel warehouse receipt after delivering goods

(2) A warehouse operator who delivers goods for which he had issued a negotiable receipt, and fails to take up and cancel the receipt he shall be liable for failure to deliver goods to depositor or to anyone who purchases such -receipt for value and in good faith.

Warehouse Receipts

(3) If the receipt is not taken up or cancelled as provided for under subsection (1) of this section, the fact that the purchaser acquired title to the receipt before or after the delivery of the goods by a Warehouse Operator shall not exonerate the warehouse operator from liability.

Liability for failure to cancel or mark warehouse receipt when part of the goods have been delivered

46-(1) Except as provided under this Act, where a warehouse operator delivers part of the goods for which he had issued a negotiable warehouse receipt, he shall

- (a) take up and cancel that receipt and issue a new receipt for the remaining goods; or
- (b) place conspicuously upon it a statement of what goods and packages have been delivered.

(2) A warehouse operator who delivers part of the goods for which he had issued a negotiable warehouse receipt and fails to:

- (a) take up and cancel that receipt and issue a new receipt for the remaining goods, or
- (b) place conspicuously upon it a statement of what goods and packages have been delivered, shall be liable for failure to deliver all the goods specified in the receipt to anyone who purchases for value and in good faith such receipt.

(3) If the receipt is not taken up or cancelled as provided for under subsection (1), the fact that the purchaser acquired title to the receipt before or after the delivery of any portion of the goods by a warehouse operator shall not exonerate the warehouse operator from liability.

Liability after a warehouse receipt has been lost, stolen or destroyed

47. Subject to the provisions of section 38, a warehouse operator shall be liable for failure to deliver goods to a person to whom the lost, stolen or destroyed warehouse receipt has been or shall be negotiated for value in good faith and without notice of the fact that a duplicate receipt has been issued or goods have already been delivered.

Warehouse Receipts

48.-(I) The warehouse operator shall take all necessary precautions to ensure that the delivery of goods are made to a person who has lawfully obtained a warehouse receipt.

De liver-
nng
goods to
persons
with
valid
titles or
right

(2) The warehouse operator's title or right to the possession of goods shall only be derived directly or indirectly from

(a) a transfer made by a depositor at the time of or subsequent to deposit of goods; or

(b) lien.

(3) Unless the title or right to possession of the goods by a warehouse operator is obtained in accordance with the provisions of subsection (2) no title or right to possession of goods shall exonerate the Warehouse Operator from liability for refusing to deliver the goods according to the terms indicated on the warehouse receipt.

49.-(1) In cases where more than one person are claiming title or possession of the goods, the warehouse operator shall, before making delivery of those goods to either of them, require all known claimants to goods to interplead in accordance with the Civil Procedure Code Act, 1966.

Ascerta-
ning
valid
titles to
goods
Act No.
49 of
1966

(2) The suit for which the warehouse operator shall request claimants to interplead referred to under subsection (I), may be filed as an action against the warehouse operator for non-delivery of the goods, or as an original suit.

(3) The warehouse operator shall not be liable for non-delivery if he has evidence to believe that someone other than the depositor or person claiming under him, has a claim to the title or possession of the goods, and that because of that evidence the warehouse operator is taking reasonable steps to ascertain the validity of the adverse claim or to initiate legal proceedings to compel **all** claimants to interplead.

(4) The ascertainment of the right claimant of the goods by interpleading or any other manner shall be initiated within twenty four hours of initial notice to the warehouse operator and the procedure shall be completed within seven days.

Warehouse Receipts

(5) Except as is allowed under this section the fact that a third person has right or title to goods shall not be a defense to an action brought by the holder of the warehouse receipt or person claiming under him against the warehouse operator for failure to deliver the goods according to the terms indicated on the warehouse receipt.

Liability
for mis-
des-
cribed
goods

50.-(1) Subject to subsection (2), the warehouse operator shall be liable to the holder of the warehouse receipt for damages caused by non-existence of the goods or by failure of the goods being delivered to correspond with the description thereof in the receipt at the time of deposit.

(2) The warehouse operator shall not be liable for goods which are being conditioned or processed and such conditioning or processing is noted on the warehouse receipt.

(3) A mere description in the warehouse receipt by a statement of marks or label, or upon packages, or by a depositor's statement that the goods do contain goods of a certain kind, or by words of like purport, though found to be true, shall not render the warehouse operator liable.

Ware-
house
operator's
duty of
care

51.-(1) A warehouse operator shall exercise such care in regard to the goods kept by him as reasonably and as carefully as a reasonable and careful owner of similar goods would exercise.

(2) In addition to other conditions that may be imposed to the warehouse operator's license, the warehouse operator shall be liable for breach of duty of care if he acts contrary to subsection (1) of this section in keeping safe custody of the goods.

Duty to
keep
goods
separate-
ly

52. Except as provided in this Act a warehouse operator shall keep goods of each depositor separate from goods of other depositors and from other goods of the same depositor for which a separate receipt has been issued as to permit the identification and re-delivery of the goods deposited.

Comm-
ing of
fungible
Goods

53.-(1) A warehouse operator may, with the approval of the holder of warehouse receipt or the depositor, mingle fungible goods with other goods of same kind and grade.

Warehouse Receipts

(2) In case the warehouse operator has mingled the goods in accordance with subsection (1) of this section, various depositors of the mingled goods shall own the entire mass in common and each depositor shall be entitled to such portion thereof as the amount deposited by him bears to the whole.

(3) The warehouse operator shall be severally liable to each depositor for the care and delivery of his share of the mass to the same extent and under the same circumstances as if the goods had been kept separate.----- 7..5lt .

- (a) for all lawful charges for storage and preservation of the goods;
- (b) lawful claims for money advanced, interest, insurance, transportation, labour, weighing, cooping and other charges and expenses in relation to such goods;
- (c) also, for all reasonable charges and expenses for notice and advertisements of sale; and
- (d) for sale of the goods where default has been made in satisfying the warehouse operator's lien.

55. A warehouse operator's lien may be enforced subject to the provisions of section 57

Enforce
ment
otlien

- (a) against all goods, whenever deposited, belonging to the person who is liable as debtor for the claims in regard to which the lien is asserted; and
- (b) against all goods belonging to others, which have been deposited by the person who is liable as a debtor for the claims to which the lien is asserted if such person has been entrusted with goods at the time of deposit just as person who takes the goods in good faith and for value.

56. A warehouse operator shall lose right of his lien upon the goods by

Loss of
lien

- (a) surrendering possession thereof; or

Warehouse Receipts

(b) refusing to deliver the goods when a demand is made with which he is bound to comply under the provisions of this Act.

Statement of charges under lien

57. Where a negotiable receipt is issued for goods, the warehouse operator shall have no lien thereon, except for charges of storage of those goods, subsequent to the date of the receipt, unless the receipt expressly enumerates other charges for which a lien is claimed in which case there shall be a lien for the charges enumerated so far as they are within the terms of section 54, although the amount of the charges so enumerated is not stated in the receipt.

Refusal to deliver goods until lien is satisfied

58. A warehouse operator having a lien valid against the person demanding the goods may refuse to deliver the goods to him until the lien is satisfied.

Warehouse operator's lien does not preclude other remedies

59. The fact that a warehouse operator has or has not a lien upon the goods, shall not affect entitlement to all remedies allowed by law to a creditor against his debtor, for the collection from the depositor of all charges and advances which the depositor has expressly or impliedly contracted with the warehouse operator.

Methods of enforcing the lien

60.-(I) A warehouse operator's lien may be satisfied by

(a) sale of goods;

(b) other remedies allowed by the law for the enforcement of a lien against personal property or;

(c) any other action for recovery of the warehouse operator's claim.

Perishable and hazardous goods

61.-(1) Where the goods are of a perishable nature and likely to deteriorate greatly in value, or by their odour, leakage, inflammability, or explosive nature, are likely to injure other property or endanger the life of persons legally likely to come into contact with the goods, the warehouse operator may give such notice to the owner, or to the person in whose name the goods are stored, as is reasonable and

Warehouse Receipts

possible under the circumstances, to satisfy the lien upon such goods, and to remove them from the warehouse, and in the event of failure of such person to satisfy the lien and to remove such goods within the time so specified, the warehouse operator may sell the goods at public or private sale with or without advertising.

(2) If after reasonable efforts have been made the warehouse operator is unable to sell such goods, he may dispose of them in any lawful manner, and shall incur no liability by reason thereof.

(3) The proceeds of any sale made under the terms of this section shall be disposed of in the same way as the proceeds of sales made under this' Act.

PART VII

NEGOTIATION AND TRANSFER OF WAREHOUSE RECEIPTS

62. A negotiable warehouse receipt to the order of a name of person may be negotiated by endorsement and delivery

Different ways of negotiating a warehouse receipt

(a) after endorsement in blank or to the bearer; or

(b) after endorsement to a specific person.

63.-(I) Negotiation of a negotiable warehouse receipt after it has been endorsed to a specified person shall require endorsement of the endorsee as well as delivery.

Negotiation by endorsement

(2) An endorsement made pursuant to subsection (1) shall be paid to a specified person and may be again negotiated to another specified person and subsequent negotiations shall be done in the like manner.

(3) For the purposes of this section, a negotiable warehouse receipt shall be regarded as "duly negotiated" when it is negotiated in the manner stated under this section to a person who purchases it in good faith, without notice of any defect or claim to it on the part of any person and for value.

Warehouse Receipts

Effect of endorsement no effect on non-negotiable receipt

64. Endorsement of a non-negotiable warehouse receipt shall not render it negotiable.

Persons capable of negotiating a warehouse receipt

65. A negotiable warehouse receipt may be negotiated by any person in possession of the same irrespective of the manner the warehouse receipt was acquired, if, by the terms of the receipt, the warehouse operator undertakes to deliver the goods to the order of such person or if at the time of negotiation the receipt is in such a form that it may be negotiated by delivery.

Rights acquired after due negotiation of warehouse receipt

66.-(1). Subject to the provisions of this section, a person to whom the receipt has been duly negotiated, shall acquire

- (a) such title to goods as the person negotiating the receipt to him had ability to convey to a purchaser in good faith for value and also such title to the goods as the depositor or person to whose order the goods were to be delivered by the terms of the receipt had or had ability to convey to a purchase in good faith and for value;
- (b) the direct obligation of the warehouse operator to hold possession of the goods for him according to the terms of the receipt as fully as if the warehouse operator had contracted direct with him; and
- (c) all rights accruing under the law of agency, estopped, including right to good delivered to the warehouse operator after the warehouse receipt was delivered.

(2) The negotiation of a warehouse receipt in good faith and the acquisition of title by a person to whom a warehouse receipt has been negotiated, shall create a direct obligation to the warehouse operator to hold possession of the goods for him according to the terms of the receipt as fully as if the warehouse operator had contracted directly with him.

Warehouse Receipts

67.-(1) A warehouse receipt may be transferred without negotiation if it has thus been transferred by

- (a) the holder to another person under a separate arrangement or agreement; or
- (b) order of the court.

Rights acquired in the absence of due negotiation of a warehouse receipt

68.-(1) A transferee of a warehouse receipt, which is not duly negotiated shall acquire thereby against the transferor, the title of the goods.

Rights of a transferee of a warehouse receipt

(2) The title acquired by the transferee shall be subject to the terms of the agreement with the transferor.

(3) The court may order a warehouse receipt to be transferred where it is proved that there was an agreement to that effect between the transferor and the transferee.

(4) Where a warehouse receipt that has been transferred becomes non-negotiable, in order to acquire title to the goods, the transferee shall notify the warehouse operator of the transfer to him of such warehouse receipt.

(5) Proceedings instituted for the purpose of enforcing rights of a transferee of a warehouse receipt shall be made by way of summary procedure provided for under Order XXXV of the Civil Procedure Code Act, 1966.

Act No. 49 of 1966

(6) Where a warehouse receipt that has been transferred is not negotiated before the transferee notifies the warehouse operator of the transfer to him, the transferee's claim of title to the goods may be defeated by an attachment order or execution upon the goods by a creditor of the transferor to the extent of such order or execution.

Warehouse Receipts

Rights and obligations of transferors and transferees of negotiable warehouse receipts.

69.-(1) The transferee of a negotiable warehouse receipt for value and in good faith shall have the right to compel the transferor of such receipt to endorse the receipt in a case where endorsement is essential for negotiation.

(2) In a case where it is essential that the warehouse receipt should be endorsed before it is transferred, that warehouse receipt shall not be regarded as negotiated until the transferor endorses it.

(3) The endorsement of a warehouse receipt in good faith shall not make the transferee liable for any default or fraudulent acts on the receipt occasioned by the warehouse operator or previous endorsers.

Warranties on negotiation of the warehouse receipt

70.-(1) The negotiation or transfer by endorsement or delivery, or assignment of a warehouse receipt for value shall be an adequate proof or warranty that the person who negotiates, transfers or assigns that warehouse receipt, does so because:

- (a) the receipt is genuine;
- (b) has a legal right to negotiate, transfer or assign it;
- (c) knows no fact which would impair the validity or worth of the receipt; and
- (d) has the right to transfer the title to the goods.

(2) If the contract of the parties is in respect of the transfer of goods to which such warehouse receipt is involved, the fact that goods are merchantable or fit for that particular purpose, would have been implied.

(3) Warranty shall not be implied in cases where a creditor of the transferor demands in good faith or receives payment of the debt for which such receipt is security.

PART VIII
OFFENCES AND PENALTIES

Issue of receipts for goods not received

71. A warehouse operator, or any officer, agent, or servant of a warehouse operator, who issues or aids in issuing a receipt knowing that the goods for which such receipt is issued have not been actually received by such warehouse operator, or are not under his actual

Warehouse Receipts

control at the time of issuing such receipt, commits an offence and upon conviction shall be liable for a term of imprisonment for a term not exceeding five years, or to a fine not exceeding five million shillings or to both.

, 72... A warehouse operator, officer or agent or servant of a warehouse operator, who fraudulently issues a receipt for goods: knowing that it contains any false statement, commits an offence" and shall be liable on conviction to imprisonment for a term not exceeding one year, or to a fine not exceeding one million shillings or both.

Issue of receipt containing false statement

7:3.-(1) A warehouse operator, or any officer, agent, or servant of a Warehouse' Operator; who issues or aids in issuing a duplicate or additional negotiable receipt for the same goods or any part of them which is outstanding and cancelled without clearly placing upon the face thereof the word "Duplicate" commits an offence and shall be liable on conviction" to imprisonment for a term not exceeding five years or to a fine not exceeding five million shillings or both.

Issue of duplicate receipts not so marked

(2) The provision of this section shall not apply where a duplicate of a warehouse receipt is issued in accordance with the provisions of Section 38.

74. Where there are deposited with or held by a warehouse operator goods of which he is owner, either solely or jointly or in common with others, then such warehouse operator or his' agents or servants who knowing" this' ownership, issuing a negotiable receipt for such goods and omits' to' state" any fact with respect to ownership, commits an offence shall be liable for imprisonment for a term not exceeding one year or to a fine not exceeding one million shillings or both.'

Issue for warehouse operator's goods of receipts, which do not state that fact

75.' A warehouse operator, or any officer, agent, or servant of a Warehouse Operator who delivers goods out 'of the possession of such warehouse operator, knowing that a negotiable receipt the negotiation of which would transfer, the right to the possession' of such receipt is outstanding without obtaining possession of that warehouse receipt, at or before the time of such delivery; shall be liable for imprisonment for a term not exceeding one year, or by a fine not exceeding one million shillings or to both.

Delivery of goods without obtaining negotiable receipt

///

Warehouse Receipts

Negotiation of receipt for mortgaged goods

76. Any person who

(a) deposits goods to which he has no title, or upon which there is a lien or mortgage;

(b) takes for such goods a negotiable receipt which he afterwards negotiates for value with intent to deceive and without disclosing his want of title or the existence of lien or mortgage,

commits an offence and shall on conviction be liable to imprisonment for a term not exceeding seven years or to a fine not exceeding ten million shillings.

Obstructing a warehouse inspector

77.-(1) Any person who obstructs the warehouse inspector or any other authorized person in the exercise of the power conferred upon him by this Act or who neglects or refuses to produce to the warehouse inspector or any authorized person any books, records, information or anything which the inspector or any other authorized person may request to be produced for inspection, commits an offence and shall be liable on conviction to imprisonment for three months or to a fine not exceeding one million shillings or to both.

General penalty

78. Any person who commits any offence against any of the provisions of this Act, to which no specific penalty is provided shall be liable on conviction for every such offence to imprisonment for a term not exceeding three months or to a fine not exceeding five hundred thousand shillings or to both.

PART IX

MISCELLANEOUS PROVISIONS

Powers to make Regulations

79.-(1) The Minister may make regulations for the better carrying out of the provisions and purposes of this Act and may, in particular make regulations

(a) prescribing the procedures and limits of negotiation of a negotiable warehouse receipt;

(b) prescribing a standard format of a warehouse receipt;

Warehouse Receipts

- (c) determining the standards or requirements for allowing a warehouse operator to sell or dispose of goods, which are perishable or hazardous;
 - (d) determining the manner of keeping depositors goods in a warehouse;
 - (e) prescribing the classification of warehouses;
 - (f) determining goods which may be commingled in the warehouse receipt;
 - (g) ways of recovering the warehouse operator's lien by sale of goods;
 - (h) prescribing conditions for the registration of the warehouse;
 - (i) prescribing conditions that may be inscribed on the warehouse license;
 - (j) prescribing warehouse registration and license application procedure;
 - (k) prescribing warehouse registration and license application appeal procedure;
 - (l) prescribing the qualifications of the employees that may be employed by a warehouse operator;
 - (m) prescribing fees that may be paid for warehouse registration and licensing;
 - (n) prescribing for anything which may be prescribed under this Act.
- (2) Regulations made pursuant to subsection (1) shall be published in the *Gazette*.

Warehouse Receipts

SCHEDULE

(Under Section 4(3))

COMPOSITION, TENURE AND PROCEDURE OF MEETINGS OF THE
BOARD

Composi
tion of
the Board

- 1.-(I) The Board shall comprise of (a)
the Chairman; and
(b) other seven members,
all of whom shall be appointed by the Minister.
- (2) The persons to be appointed as members of the Board shall comprise of the following
- (a) one member representing the Ministry responsible for crop marketing;
 - (b) representative of the co-operatives, as recommended by the Umbrella Cooperative Society;
 - (c) a representative of the organization of Tanzania private farmers;
 - (d) a representative of the Tanzania Bankers Association recommended by the Association;
 - (e) a representative of the Tanzania Insurers Association, recommended by the Association; and
 - (f) a representative of MVIWATA; and
, -----
 - (g) one member representing the Tanzania Chamber of Commerce Industry and Agriculture. ~
- (3) A person shall not be qualified to be a member of the Board unless he is of high moral character and proven integrity.

Tenure of
Office

- 2.-(I) A member of the Board shall hold office for a term of three years and shall be eligible for re-appointment but shall not hold office for more than two consecutive terms.
- (2) A member of the Board shall vacate office
- (a) by resignation;
 - (b) on written recommendation of the body which he represents to revoke his nomination;

Warehouse Receipts

(c) upon removal by the Minister on the ground of:

- (i) misconduct, misbehaviour or abuse of office;
- (ii) failure to attend three consecutive meetings without reasonable excuse as certified by the Board;
- (iii) inability to perform the functions of that office arising from infirmity of body or mind; and

(d) on a fixed term of office.

(3) The Chairman shall hold office for three years but shall be eligible for re-appointment.

(4) The Minister may remove the Chairman from that office on ground of incompetence or abuse of office.

(5) Where a vacancy occurs in the office of a member of the Board, the Minister shall consult the body which recommended that member for the purpose of appointing an alternate member of the member who vacated office.

(6) An alternate member shall assume responsibilities of the outgoing member and enjoy all the privileges until the expiration of the term of office of the member who vacated the office.

3. Members of the Board shall be paid such sitting and other allowances as the Board may, with approval of the Minister, determine.

Remuneration of members of the Board

4.- (1) The Chairman shall convene the first meeting of the Board as soon as is practicable after the appointment of the Board and thereafter the Board shall meet for the transaction of business at times and places that may be decided upon by the Board but the Board shall meet at least once in every four months.

Convening meetings

(2) The Chairman or, in the absence of the Chairman, a member of the Board appointed by the Board to act as Chairperson may at any time call a special meeting of the Board, or shall call a special meeting upon a written request by a majority of the members of the Board.

(3) The Chairman shall preside at all meetings of the Board and in his or her absence the members present may appoint a member from among themselves to preside at that meeting.

5. The quorum at a meeting of the Board shall be five members

Quorum

6. Questions proposed at a meeting of the Board shall be decided by a majority of the votes of the members present and if there is equality of votes the person presiding shall have a casting vote in addition to his deliberative vote.

Making decisions

Warehouse Receipts

Disclosure of interest

7.-(1) A member of the Board who has any pecuniary interest in a matter being considered or about to be considered by the Board shall, as soon as possible after the relevant facts have come to his knowledge, disclose the nature of his interest to the Board.

(2) A disclosure of interest under sub-paragraph (1) shall be recorded in the minutes of the meeting of the Board and the member making the disclosure shall not in respect of that matter

(a) be present during any deliberation on the matter by the Board; and

(b) take part in the decision-making of the Board on the matter'

Cooption of persons to meetings of Board.

8.-(1) The Board may co-opt any person to any meeting of the Board to assist it on any matter if the Board is satisfied such person's qualifications and experience are likely to benefit the Board in making a decision on any particular matter;

(2) A person co-opted to assist the Board under subparagraph (1) is entitled to take part in the proceedings of the Board at the meeting concerning the matter in connection with which he is co-opted, but shall not be entitled to vote or take part in any other proceedings of the Board.

Minutes of proceedings

9. The Board shall cause the minutes of its meeting to be recorded kept and the minutes of each meeting shall be confirmed by the Board at the next meeting and signed by the Chairman of the meeting.

Board to regulate its own procedure

10. Subject to the provisions of this Schedule, the Board shall regulate its proceedings.

OBJECTS AND REASONS

This Bill is intended to enact a Warehouse Receipt Act, 2005 that will introduce and govern the commodity warehouse receipt system in order to - facilitate participation of smallholder producers in agricultural commodities trade and accessibility to bank credits. Thus, the warehouse receipt system is a sustainable mechanism for ensuring increase in agricultural production, availability of good quality commodities and financial services and hence, improving agricultural commodity marketing. The Bill proposes a legal mechanism that will enable smallholder farmers to get credit from banks by using receipts they will obtain from licenced warehouse operators, after depositing their crops in the licenced warehouses. The Bill, on the other hand, is also intended to legalize what has been regarded as "*dead capital*", by establishing a mechanism whereby agriculture commodities will be used as collaterals for credits obtained from the banks through negotiation of legally recognized warehouse receipts.

The Bill is divided in Nine Parts. Part I contains preliminary provisions while Part II proposes to establish the Warehouse Licensing Board, which shall be the regulatory body of the warehouse system in Tanzania.

Down wards Part IV which comprises of sections 11 to 32, provides for the Warehouse licensing procedures, whereby persons intending to operate warehouses under the warehouse receipt system shall be licenced and have their warehouses licenced as well. Part IV also contain provisions for licensing Le the requirement for insuring the warehouse and assurance of proper and professional operation'

through professional indemnity insurance. There are also provisions on inspection requirements.

Part V contain provisions which details the Warehouse receipt system and explains on who may issue receipts and type of receipts that maybe used under any one of the system. The Warehouse

receipt are non-negotiable and negotiable receipts. The Part VI elaborates the rights and obligations of warehouse operators, while Part "VII elaborates on the procedure for negotiation and transfer of warehouse receipts.

Part VIII establishes offences and penalties for contravening the provisions of the: Bill. Particularly, it is an offence to issue

Warehouse receipts for goods not received or issuing a receipt that contains false information. It is also an offence for a depositor to negotiate a warehouse receipt for the mortgaged goods.

Part IX covers provisions stipulating matters arising From the substantive provisions of the proposed Act. The provisions aimed 'at empowering the .Minister responsible for marketing to make regulations for the better carrying out the provisions and purposes of the Act

Lastly the Bill contains a Schedule which provides for the

Composition, tenure and meetings of the Board. The Board shall be comprised of eight members to be appointed by the Minister from different constituencies of stakeholders. Members shall hold office for, a term of three years, but will be eligible for re-eligible for re-election.

ANNEX 3



**COFFEE AND COTTON MARKET DEVELOPMENT
AND TRADE PROMOTION IN EASTERN AND
SOUTHERN AFRICA**

Market Information Systems Report – Tanzania, Uganda, Zimbabwe

Ulrich Kleih and Ruth Butterworth

April 2005

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	4
1.0 SUMMARY AND RECOMMENDATIONS	5
2.0 INTRODUCTION.....	6
3.0 INFORMATION NEEDS BY STAKEHOLDER GROUPS	7
3.1 INFORMATION SYSTEMS BY COMMODITY BOARDS AND MOA (ZIMBABWE).....	7
3.2 FARMERS' INFORMATION NEEDS.....	8
3.3 TRADERS' INFORMATION REQUIREMENTS.....	12
3.4 BANKERS' INFORMATION NEEDS.....	13
3.5 WAREHOUSE OPERATORS.....	14
4.0 OTHER ORGANISATIONS INVOLVED IN MIS	16
4.1 TANZANIA.....	16
4.2 UGANDA.....	16
4.3 REGIONAL WEBSITES.....	18
5.0 WAY FORWARD	19
5.1 MARKET INFORMATION BULLETINS.....	19
5.2 COMMUNICATION CHANNELS.....	23
5.2.1 <i>Uganda</i>	23
5.2.2 <i>Tanzania</i>	26
5.2.3 <i>Zimbabwe</i>	26
5.3 COST IMPLICATIONS.....	28
APPENDICES	30
APPENDIX 1: REFERENCES.....	30
APPENDIX 2: THE IMPORTANCE OF INFORMATION FOR AGRICULTURAL MARKETING.....	32

ABBREVIATIONS

ACE	Audit Control and Expertise
AREX	Agricultural Research and Extension
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
CBOs	Community Based Organisations
CFC	Common Fund for Commodities
CDO	Cotton Development Organisation
CFU	Commercial Farmers Union
CPHP	DFID Crop Post-Harvest Programme
DFID	United Kingdom Department for International Development
FAO	Food and Agriculture Organization of the United Nations
GoT	Government of Tanzania
GoU	Government of Uganda
GoZ	Government of Zimbabwe
HVCGA	Honde Valley Coffee Growers Association
ICO	International Coffee Organisation
ICT	Information and Communication Technology
ICAC	International Cotton Advisory Committee
IICD	International Institute of Communication and Development
IITA	International Institute for Tropical Agriculture
KCB	Kilimanjaro Cooperative Bank
KNCU	Kilimanjaro Native Cooperative Union
LC	Local Council
LG	Local Government
LIFFE	London International Financial and Futures Exchange
LMU	Local Management Unit
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MIS	Market Information Service
MoA	Ministry of Agriculture
NAADS	National Agricultural Advisory Services
NARO	National Agricultural Research Organisation
NGOs	Non-governmental Organisations
NRI	Natural Resources Institute, University of Greenwich
NYCE	New York Commodity Exchange
PEAP	Poverty Eradication Action Plan
PMA	Plan for Modernization of Agriculture
PM&E	Participatory Monitoring and Evaluation
PRA	Participatory Rural Appraisal
TCB	Tanzania Coffee Board
TCCCO	Tanzania Coffee Curing Company
TCLSB	Tanzania Cotton Lint and Seed Board
UCDA	Uganda Coffee Development Authority
UCA	Uganda Cooperative Alliance
UCE	Uganda Commodity Exchange
UGT	Uganda Grain Traders Ltd
UNFFE	Uganda National Farmers Federation
UNHS	Uganda National Household Survey

WRS Marketing Information Systems

UNOPS	United Nations Offices for Procurement Services
USAID	United States Agency for International Development
VACCS	Vumba Agriculture Collective Cooperative Society
WFP	World Food Programme
WRS	Warehouse Receipts System
ZCM	Zimbabwe Coffee Mills
ZNFU	Zimbabwe National Farmers Union

Exchange Rates

(January – April 2005)

1US\$ = TSh1,050

1US\$ = USh1,750

1US\$ = ZW\$ 6,200

Acknowledgements

The authors would like to thank all those who have contributed with their information and time to this report. In particular, we are grateful to the representatives of the Local Management Units in Tanzania, Uganda, and Zimbabwe, and the members of CDO, TCB, TCLSB, UCDA, and Ministry of Agriculture in Zimbabwe.

1.0 Summary and Recommendations

- It is recommended that the coffee and cotton commodity boards play a lead role in providing market information to farmers, their associations, and other stakeholders in the WRS. In Zimbabwe the Ministry of Agriculture is expected to play this role with the assistance of the LMU.
- In the case of other crops such as maize, rice, and soyabeans, other organisations will have to be identified to operate the market information system. For example, Foodnet in Uganda, and Business Information Services or the Ministry of Cooperatives and Marketing in Tanzania are well placed to undertake this task. The terms of such an arrangement need to be discussed with these organisations. Also, it ought to be mentioned that in Zimbabwe soyabeans form part of the project instead of cotton. Therefore the MoA will also cover this commodity.
- Dynamic websites and databases need to be established at CDO, UCDA, TCB, TCLSB, and MoA in Zimbabwe with the project's support. As far as possible, the websites should display daily price information from international commodity exchanges. Furthermore, these organisations need assistance for the continuous maintenance of these websites and databases.
- Weekly market information bulletins appear most appropriate for the dissemination of market information to small-scale farmers and traders. The bulletins should be about two pages long, and contain sections on international and local indicative prices, market trends, Warehouse Receipts System (WRS) related information, buyer and seller information, and seasonal crop related messages including quality and grading standards.
- It is proposed to use a multi-media approach to communicate market information between the commodity boards and farmers. This is likely to require a two-stage approach in that the market bulletins need to be sent to intermediaries (e.g. via internet, e-mail, fax, mail) who will then disseminate and broadcast the information to farmers (e.g. via extension services, radio, and newspapers). Other stakeholders with access to computers will be able to obtain the bulletins from the commodity boards' websites or through e-mail.

2.0 Introduction

This report has been prepared as part of the Common Fund for Commodities (CFC) project on Warehouse Receipt System (WRS) executed by the United Nations Offices for Procurement Services (UNOPS) to develop marketing systems for cotton, coffee and other commodities in the period 2004 to 2006 for South (Zimbabwe) and Eastern Africa (Tanzania and Uganda). This report was written based on primary and secondary data consulted during the period December 2004 to April 2005. A visit to Uganda was undertaken by R. Butterworth and U. Kleih in December 2004, followed by a visit by U. Kleih to Tanzania in March 2005, and a trip to Zimbabwe by R. Butterworth in April 2005.

The first part of the report provides an overview of the market information needs of the main stakeholders involved in the WRS project. This is followed by a brief review of other organisations involved in market information systems in the respective countries.

The way forward recommends the use of market information bulletins in order to reach small-scale farmers and traders. Communication channels as well as cost implications are analysed.

3.0 Information Needs by Stakeholder Groups

3.1 Information Systems by Commodity Boards and MoA (Zimbabwe)

The commodity boards are central to the market information systems to be established as part of the WRS project. In particular, in the long-term, once the project has ceased it will be them who will have to continue the running of the market information systems related to the commodities they are representing. This may take place with or without external assistance.

Some of the commodity boards (UCDA, TCLSB, TCB) already have relatively comprehensive management information systems in place whereby different types of information (e.g. production figures, auction trading figures, international prices, etc) are collected and compiled in a database. At the same time it has been observed that these systems need to be made more streamlined, dynamic and user friendly. Mr David Wagacha of DCDM has collected relevant information in the form of hard and electronic copies.

When tests were undertaken regarding the accessibility of the commodity boards' websites, it was easy to access the sites of UCDA (www.ugandacoffee.org), and Tanzania Cotton Lint and Seed Board, which has recently changed its name into Tanzania Cotton Board (www.tancotton.co.tz). Both sites have substantial amounts of relatively up-to-date information about their roles and the industries they are representing. Unfortunately, market information (e.g. latest prices) was either not available or could not be easily found. It was not possible to locate the website of the Uganda Cotton Development Organisation (CDO). The website of the Tanzania Coffee Board could only be accessed via another site (www.dreamweaver.co.uk/tcb). In addition, the information it contains appears to be out of date (e.g. auction results from January 1999). According to Baffes (2004), TCB "should take full responsibility for collecting, monitoring, and improving the quality of all coffee statistics, especially on production, exports, and export prices, which are currently unacceptable. That will help the public sector take the proper policy actions and the private sector to make correct investment decisions".

This points to the need that the websites of the four organisations (i.e. CDO, TCLSB, TCB, and UCDA) should either be newly created or updated into dynamic websites. The latter would be directly fed by data collated in summary spreadsheets. For example, price data from international markets would have to be shown on a very up-to-date basis, bearing in mind that most exporters likely already have direct access to international commodity exchanges (e.g. LIFFE or NYCE), whilst smaller traders or farmer associations may be more in need of data available through the boards. Market reports and price data made available by international organisations such as ICO may also be considered if it is found to be more user-friendly.

In Zimbabwe, where the WRS focuses on coffee and soyabeans during the pilot phase, it is planned to establish a website at the Ministry of Agriculture.

WRS Marketing Information Systems

In view of longer-term requirements, local service providers will have to be identified that can maintain the websites on a regular basis. For example, the Dar es Salaam based Business Information Service (www.bistanzania.com) may be an option.

Ultimately, the commodity boards will have to provide the hubs for the market information systems in the cotton and coffee sectors. They will have to collate the information, and make it available to the target population through the most appropriate means of communication. Websites and e-mail play an important part in this as they facilitate communication with other stakeholders (e.g. radio stations).

The setups may be different in the case of alternative crops which are to be included in addition to cotton and coffee in the WRS. For example, Foodnet are well placed to cover crops such as maize, rice or beans through their market information system in Uganda. As for Tanzania, the Dar es Salaam based Business Information Service is an option whilst it is understood that the Ministry of Cooperatives and Marketing is also operating a market information service through which data can be made available.

In Zimbabwe, MoA wishes to develop a website which can be accessed by the public. A consultant from SIRDC Development Associates has been hired to assess the software, hardware and training needs of developing systems for irrigation, AREX (Agriculture Research and Extension, formerly Agritex), and for marketing.

From a meeting held with the consultant from SIRDC Development Associates (Mr Ruben Chinyakata) it was revealed that the consultancy will end in May (2005), hardware procurement activity should be completed by June and the system to be established by December 2005. This however was seen as unrealistic targets by the consultant.

3.2 Farmers' Information Needs

The information required by farmers can be categorised as follows:

- Functioning of a warehouse receipt system;
- International commodity prices and, based on this, indicative local prices;
- Buyer information;
- Information on warehouse operators, banks' conditions;
- Information on the whereabouts and state of their commodity once it has been deposited at a warehouse;
- Information that is related to the cropping season, plus training in collective marketing activities.

Functioning of a warehouse receipt system

At present, most farmers (and also many other stakeholders) are unaware of warehouse receipt systems and how these function. For example, a NRI-led team surveying farmers' market information needs in North-West Uganda in April '05 have met farmers and LG staff who were recently told by traders affiliated to UGT Ltd and WFP about the existence of a WRS in the country (pers. comm. Barry Pound). However, although the farmers felt the idea sounded interesting, they also requested more background information on how the scheme operates.

As a result, it is important that farmers are provided with the relevant information, which should be packaged in an appropriate format. This implies that the information should be easy to understand (i.e. not too long, little technical jargon, and appropriate language) and that the benefits of a warehouse receipt system are clearly stated. In order to avoid confusion it may be necessary to indicate the existence of several WRS models which may be operated by different projects and stakeholders in the same country (e.g. Tanzania).

Price information

Farmers need to be aware of commodity prices on international markets and how this translates into indicative farm-gate prices. In particular, this applies to the traditional cash crops coffee and cotton. Also, farmers living relatively close to border areas are interested in commodity prices in neighbouring countries and exchange rates. For example, members of Karansi R.C.S near Mt Kilimanjaro are interested in prices in Kenya and exchange rates of the Tanzanian Shilling against US Dollars and Kenyan Shillings.

In light of this it is suggested to provide farmers with the following price related information:

- International commodity prices (e.g. London or New York), including futures prices;
- Regional commodity prices;
- FOB prices of processed commodities (e.g. ex- Kampala, Dar es Salaam, or Harare);
- Indicative farm-gate prices in the major production zones;
- Exchange rates.

In this context, farmers would like to understand how indicative farm-gate prices are obtained based on world market prices, trading and processing costs, and margins. This would involve the preparation of case studies showing for the main commodities all the different cost elements involved in calculating these prices. The related calculations should be made by the commodity boards and associations (e.g. TCLSB already have prepared such a calculation together with the cotton association of Tanzania). Regular up-dating of these case studies will be required (i.e. at least at the beginning of the harvesting season).

As far as possible, comments on potential future price and market trends ought to be made available at regular intervals. For example, the International Coffee Organization (www.ico.org) publishes relevant reports on its website on a monthly basis.

UCDA in Uganda already provide stakeholders with daily price information from international exchanges such as London and New York, however the information is primarily targeted at exporters, and difficult to access and understand by farmers and their cooperative representatives. The information needs to be made more “consumer-friendly” for producers and their organisations and disseminated through media which are widely accessible in rural areas. Communication channels will be discussed in more detail below.

Information on buyers

If farmers and their co-operative societies are the depositors of commodities then they require information about potential buyers once the processed crops are released from the stores. In particular, they expressed interest in buyers belonging to higher value and niche markets. Obviously, the system is more transparent if there is an established auction or commodity exchange. For example, there already exists a coffee auction in Moshi, although, according to Baffes (2004), the mandatory nature of the Tanzanian coffee auction leads to increased marketing costs. A commodity exchange is about to become operational in Uganda.

If farmers need to take a decision on whether to store as part of the WRS or to sell on the spot to private buyers, then they would need relevant information. Also, if traders are the main depositors of crops as part of the warehouse receipt system, then farmers ought to be aware of them and their conditions, given that they rely on these traders for the sale of their produce. In particular, this may apply to crops that will be introduced into the WRS project in addition to coffee and cotton. For example, maize and rice traders would have to publish business conditions such as buying prices, their location and transport arrangements.

Information on warehouse operators, banks' conditions, and potential buyers

Potential depositors need to have information related to the location of accredited warehouses and their requirements if commodities are to be stored over a certain amount of time (e.g. quality requirements, minimum quantities).

Farmers and traders alike, who are interested to make use of the WRS need to be aware of banks that participate in the project and their conditions (e.g. credit available, interest rates).

Information on the whereabouts and state of their commodity once it has been deposited at a warehouse

Farmers and co-operative societies need to be informed about the whereabouts and state of their deposited commodities. Although, at present, they appear to have little say concerning the sale of their cotton or auctioning of their coffee, they would like to be better informed when related actions are taken.

For example, Tanzanian coffee growers participating in the WRS have stated that they would like to observe the sale of their coffee at the auction in Moshi. At present, they are only informed once their coffee has been sold. They have to travel to Moshi to collect hardcopies of related documents from banks, TCB or TCCCO. They currently use their mobile phones in order to obtain information about the whereabouts of their coffee and related correspondence.

As a result, it is suggested that the warehouse operators should nominate a member of staff who is easily accessible by phone or otherwise to inform farmers and co-operative representatives of the state and whereabouts of their deposited crops. In

addition, the inclusion of relevant information in radio broadcasts may be considered. Communication strategies will be analysed in more detail below.

Seasonal information related to production and post-harvest issues

In this category, farmers need to obtain information related to production, harvesting and processing of a crop. For example, in the case of cotton, growers need extension material on:

- The start of the cropping season; sources of inputs and their use; and recommended agricultural practices;
- Start of the harvesting season; recommended harvesting, handling and grading practices, including the use of scales;
- Quality requirements in the context of the WRS, and how the quality of produce can be improved;

In the case of coffee, farmers would require more information on processing such as washing and related equipment. Also, for example, members of the Karansi R.C.S. near Mt Kilimanjaro would like to know more about coffee grading (e.g. what makes a coffee class A or B) and, in addition, they would like to participate in a cup test of their coffee and obtain the results of the test.

In Zimbabwe, during the pilot phase the project is going to work with two cooperative groups, the Honde Valley Coffee Growers Association (HVCGA) and the Vumba Agriculture Collective Cooperative Society (VACCS). Both these cooperatives have no functioning computers, although The HVCG has a computer purchased for that purpose by the project. Both cooperatives have access to radio and telephone (mobile phone at VACCS). Amongst other things, these coffee producers requested information on quality and grading standards, prices and general season by season crop management information.

Ultimately, as part of the WRS, coffee growers would like to sell their coffee on their own, preferably on the world market (i.e. to exporters). As a result, farmer groups and cooperative societies need to be well organised as far as marketing of larger quantities of produce are concerned. For example, the Karansi R.C.S. had 350 members when it was formed in 1988, and has doubled its membership until 2005.

In Uganda, the reputation of the co-operative movement has suffered during recent decades, as a consequence of which more efforts are spent on the formation of smaller farmer groups and associations. Nevertheless, there are pockets in the country where Co-operative Societies and Unions are functioning, in particular with the assistance of the Uganda Co-operative Alliance.

In this context, farmers need more training on co-operative / group formation and collective marketing activities. As stated by some traders, this may include education about the functioning of the market and the marketing costs involved. A bank manager stated that producer societies are interested in competitions and would like to be informed on which ones have performed best.

3.3 Traders' Information Requirements

In general, traders tend to be well informed of what is happening in the market. In particular, owing to the use of modern means of communication larger traders and processors have access to up-to-date information on international and local markets.

Nevertheless, some traders are also likely to find it useful to have additional market information sources. In particular, small buyers may not have reliable access to up-to-date information.

As for additional information, traders are particularly interested in topics which they find difficult to access or where reliable information is short in supply. For example, production forecasts are frequently requested by traders (e.g. Uganda Grain Traders Ltd) and processors such as ginners or coffee curing companies. Although they may have a rough idea of how production patterns are developing in their area of influence, they still demand more precise information, preferably for the entire country.

In the case of cotton, Cargill Tanzania make their own estimates regarding production based on the sale of seed cotton in the areas they are covering with their gineries. However, they are keen on more precise production figures for the entire country, based on parameters such as weather conditions, amount of seed sold, diseases, etc.

The production of perennial crops such as coffee is equally dependent on weather conditions and disease prevalence but also planting of young trees. Obviously, the latter provides indications of production in the longer-term.

Production of other crops such as maize depends on factors such as selling prices in the previous season, food security situation, weather, and disease conditions. Traders may be aware of some types of information but lack others (i.e. in particular production related information). At the same time, it needs to be borne in mind that many of the traditional staple crops are increasingly also becoming cash-crops for small-scale farmers.

In addition, Uganda Grain Traders Ltd (UGT) have expressed an interest in information related to cross-border trade between Uganda and Kenya. In particular, large amounts of maize and other crops are traded informally across the border between the two countries near Busia. Traders require some knowledge of these commodity flows for their planning purposes.

Technical information needs by small-scale processors

Besides market information, whilst large-scale processors (e.g. Cargill's cotton gineries) tend to have access to state-of-the-art information, small-scale processors are likely to require information on new technological developments, sources of equipment, and credit conditions.

3.4 Bankers' Information Needs

As part of their inventory credit business, bank managers stated that they required the following basic types of information on produce that is deposited in a warehouse, namely:

- Depositor and location of stocks;
- Quantity of stocks, and related movements;
- Quality of the produce deposited;
- End markets of the produce.

This information can be made available by warehouse operators in the form of spreadsheets. It ought to be mentioned that auditing companies such as ACE make certified spreadsheets available to banks when they are involved in a warehouse receipt scheme.

In the case of the CFC warehouse receipts project, forms (i.e. 'proper' warehouse receipts) need to be designed and made available to those involved. Bank managers (e.g. CRDB) are keen to be involved in the design of these forms to ensure that their requirements are met. In particular, reliability of information is important and the potential for tampering needs to be excluded.

Banks also analyse the markets of commodities for which they give inventory credit, and, as a consequence, would be interested in prices published in a Marketing Bulletin. For example, as stated by CRDB, such a bulletin could be made available on a website, should be downloadable, a couple of pages long, and in pdf format, so that the information cannot be tampered with.

Some bank managers (e.g. KCB) stated that they are looking for potential buyers of the commodities stored as part of a warehouse receipt scheme. In particular they would like to have information about 'niche' market buyers, e.g. fair trade buyers, or buyers of higher priced products.

Where auctions exist bank managers require information related to transactions (e.g. sellers, buyers, volumes traded, grades, prices). For example, at present KCB appear to receive regular statements indicating this information from the coffee auction in Moshi. Also, bank managers are interested in the amount of losses and the reasons why these losses have occurred. This information is required so that it can be passed on to the primary societies for explanation.

Some banks (e.g. KCB) co-operate with coffee curing companies to train farmers to improve their production and quality. Apparently, there are a lot of shortcomings in extension (e.g. related to the use of chemicals).

In Zimbabwe, the financial institutions with interest in participating in the WRS are Kingdom Bank, ABC, and Agribank. Market information required by these banks includes short and long-term price trends.

3.5 Warehouse Operators' Information Needs

According to the warehouse operators, they need information on the following aspects:

- Expected production levels before harvesting and processing starts. This is required for planning purposes.
- Information about depositors. This may include confidential information about potential depositors, e.g. their reliability and quantities produced. The commodity boards may be well placed to maintain a register of depositors and their attributes.

Given that both cotton and coffee are normally not stored for longer periods of time, it is the warehouse operators (e.g. KNCU and TCCCO Ltd) that prepare the produce for sale, and it appears, currently also determine when it is sold. Coffee is sold to exporters at the auction, whilst cotton is sold via TCLSB to the export traders.

Farmers ought to know what is happening to their produce once it has entered the ginnery or coffee curing company. There is an issue of transparency in that they need to be kept up to date on the 'state' of their commodity. This needs to take place through the most appropriate means of communication. It is suggested that the warehouse operators should nominate a member of staff who is easily accessible by phone or otherwise to inform farmers and co-operative representatives of the state and whereabouts of their deposited crops.

In Zimbabwe, the WRS project is for the pilot phase working with the Grain Marketing Board (GMB) to store soyabeans and Zimbabwe Coffee Mill (ZCM) so store coffee. These warehouse operators need information on both local and international markets that they can pass on to farmers who have deposited these commodities.

Table 1 provides a summary of the information requirements outlined above by stakeholder group. In addition, the most suitable channels of communication are suggested.

Table 1: Summary of Information Requirements in the Warehouse Receipts System

Players	Type of information required	Most suitable channels of communication
Commodity boards	Production info (quantities, crop forecasts) Local and intl. prices, trends Buyers and sellers Location of warehouses and stocks Quality requirements (standards and grades) Participating banks and conditions	Printed media Internet / web E-mail Fax
Farmers and associations / cooperatives	WRS Functioning Intl. and local prices, market trends Buyer information Info on warehouse operators, banks, and deposited stocks Seasonal extension information and training in collective marketing	Rural radio Extension officers Printed media Mobile phones Video
Traders and processors (e.g. millers and ginners)	Production info (quantities, forecasts) Local and intl. market prices Buyers and sellers Location of warehouses Quality requirements (standards and grades) Participating banks and conditions	Mobile phones Printed media Internet / E-mail Radio
Banks	Stock movements, quality Local and intl. prices, market trends Government policy and regulations Production info / forecasts	Printed media Internet / E-mail Mobile phones Fax
Warehouse operators	Production forecasts Price information Insurance Quality requirements Pest and disease control Government policy and regulations Information on depositors	Printed media Internet / E-mail Mobile phones Fax

4.0 Other Organisations involved in MIS

4.1 Tanzania

Business Information Services (BIS) was established with support from the International Institute of Communication and Development (IICD), mostly in the acquisition of computer equipment. They have institutional links with Business Care Services and Business Times, which is a leading business newspaper in the country.

They currently have agricultural market information on their website, mainly from Dar es Salaam, and Mbeya. They used to cover more regions but had to stop this due to financial constraints. They mostly cover the principal food crops such as maize. Some of the historic data seems somewhat out of date. The importance and difficulty of keeping a website up-to-date was discussed.

The **Ministry of Cooperatives and Markets** operates an agricultural market information service which covers 27 commodities and 44 markets all over the country, according to Mbiha et. al. (no date). It was not possible to locate a website on the internet. Other agencies involved in the provision of agricultural market information in Tanzania include the Food Security Unit (FSU).

The Arusha based **Agricultural Marketing Systems Development Programme (AMSDP)** also have a market information component, however it is understood that they are still in their early stages of operation. Apparently, the setting up of a website is planned. In addition, they are planning to promote warehouse receipts systems in collaboration with ACE.

4.2 Uganda

In Uganda, a number of organisations both public and private (several supported by donor funding) are undertaking market information services as it is seen as one of the important missing links for an efficient commodity marketing system. These organisations are collecting both primary information (off-lorry prices, wholesale and retail prices, e.g. IITA's Foodnet, Central Government's Area-Based Agricultural Modernisation Project) and secondary information (national, regional and world market prices e.g. Uganda Commodity Exchange, Uganda Cooperative Alliance, Uganda Coffee Development Authority, Cotton Development Organisation).

Although there are a number of organisations involved in MIS, their effectiveness varies in their capacity to reach target audience, dissemination efficiency and the quality of transmitted information as most are in their early stages, fragmented and/or operating on small scale in their project areas, for example AAMP (Mbarara, and other South-Western districts), and North-West Smallholder Agricultural Development Project (Western Nile districts). Foodnet currently operates countrywide and has a well established system running as well as owning the most advanced MIS compared to other organisations in the country. Many of the other organisations tap into Foodnet's system at different levels of their MIS.

Foodnet, a project developed by the International Institute of Tropical Agriculture (IITA) with funding from ACIDI-VOCA (USAID) until 2006, is one of the leading MIS organisations in Uganda. It was established in 1999 with an overall focus of developing tools and methods which improve the collation, analysis and dissemination of market information to cater for the needs of local, national, and regional information users.

Foodnet, through its marketing field officers who collect, analyse and send information to Foodnet's main office in Kampala for further analysis and dissemination, works in Kampala (3 markets) and 16 districts (Gulu, Iganga, Jinja, Kabale, Kasese, Kitgum, Lira, Luwero, Masaka, Masindi, Mbale, Mbarara, Rakai, Soroti, Tororo, Hoima) collecting wholesale, retail and, in some markets (e.g. Kampala) off-lorry daily prices on agricultural commodities including livestock and livestock products (e.g. milk, meat), fish and poultry.

The data is collected by the district market information officers and sent on a weekly basis to the Information Processing Centre (IPC) in Kampala using e-mail or fax. In addition to the standard measures of prices and volumes, detailed comments are provided on production, harvesting, post harvest handling and trade of agricultural produce; weather conditions, road conditions, etc. The IPC is documenting and processing the market information from the field sites. Simple analysis, for example a comparison of data and comments from the various markets are prepared before the information is relayed back to the field sites and the Macro MIS for dissemination via radio and other means of communication.

The **National Agricultural Advisory Service (NAADS)** with Foodnet support, launched its pilot MIS in 2003, aimed at meeting the needs of farmers and traders at district level. The six NAADS trail-blazing districts are: Arua, Mukono, Soroti, Tororo, Kibaale, and Kabale. However, project funds ended in 2004, and the future of the NAADS MIS project is unclear.

The **Uganda Co-operative Alliance (UCA)** supported by the Swedish Co-operative Centre, collects prices from the main buyers (including processors) of food crops and coffee from other secondary sources and sends it to the Area Co-operative Managers in ten districts. Their sources include; Kenya Commodity Exchange, Kampala markets, and Foodnet. The information is disseminated to the area managers once or twice per week via telephone linkage and through notice boards for farmers.

The **North-West Smallholder Agriculture Development Project** covers the Western Nile Districts and is funded by the African Development Bank. Information is collected from 36 produce markets within the area. Information is broadcast through FM Radio as well as notice board displays. North-West Smallholder Agriculture Development Project also provides Foodnet with market prices from their areas for further dissemination.

Area-Based Agricultural Modernisation Project (AAMP) are based in Mbarara and funded by IFAD. The AAMP project recently introduced a MIS component covering seven major markets. It collects price and other information (e.g. quality, source and main buyers) on all agricultural crops but coffee and cotton. Price

information is collected in major markets in the sub-counties, and the information is sent for collation and dissemination to coordinators. Dissemination channels used include newspapers and notice boards as well as Foodnet's dissemination channels.

The **Uganda Commodity Exchange (UCE)** has plans to collect and disseminate data once the exchange is in full operation. The first phase of the UCE MIS was funded by the International Institute of Communication and Development (IICD) with the main aim of investigating the flow of information to and from UCE. The second phase is underway, designing a software system to handle the data once the exchange is in use. The expected start date is March 2005.

4.3 Regional Websites

WRS information can potentially also be presented on regional websites such as www.ratin.net (i.e. Regional Agricultural Trade Intelligence Network) and www.ratescenter.org (Regional Agriculture Trade Expansion Support program) which cover mostly Eastern and Southern Africa and are USAID sponsored. Both websites appear to have more data and price information on food crops such as maize, beans, and rice, whilst the following two sites are on cotton and coffee (<http://www.cottonafrica.com/>; <http://www.eafca.org> The Eastern African Fine Coffees Association).

5.0 Way forward

This section will present the outline of market information bulletins, which are considered the most appropriate for small-scale farmers and traders, followed by a discussion of communication channels and cost implications.

5.1 Market Information Bulletins

When deciding about the most appropriate market information system, the following questions need to be answered: (a) who is the target population, (b) what type of information is required, and (c) what are the most appropriate means of communication. In the context of the CFC project, it is primarily farmer associations (e.g. primary societies) and traders, but also other stakeholders such as the banks and the commodity boards who require market information (see Table 1 above)

As part of the project, it seems most appropriate to use weekly market bulletins to disseminate relevant market information to farmers and other stakeholders. Given that the bulletins require regular updating they should be kept relatively short, i.e. 2 pages long. The bulletins would be fed by market information data bases which exist at the commodity boards. The latter would require dedicated staff who will maintain the market information data base and prepare the weekly bulletins.

As outlined in Fig 1, a range of communication channels (e.g. web, e-mail, fax, mail) will be used to disseminate the market bulletin to other sources of information generally used by farmers. These “communication intermediaries” include radio stations, newspapers and extension personnel and are necessary because the commodity boards cannot easily reach the majority of producers. On the other hand, other stakeholders such as large-scale traders, bankers, and warehouse operators are likely to be in a position to access the bulletins directly from the commodity boards.

Language issues need to be taken into account. For example, most farmers in Tanzania only speak and understand Swahili. As a result, it seems appropriate that, for a start, 2-page bulletins would be prepared in Swahili and English in Tanzania for both coffee and cotton. In particular, the Swahili version would be targeted at cooperative societies, whilst the English version would be targeted at the other players and contain certain information that farmers may not require. The bulletins will be prepared by the respective commodity boards with assistance from the project.

In Uganda, the situation is somewhat different in that more local languages prevail. As a result, it is suggested that a market bulletin will be prepared in English and disseminated to radio stations or extension staff who will translate the material into the local vernacular.

In Zimbabwe, there are three main languages, i.e. Shona, Ndebele, and English. Given that the WRS project predominantly operates in Shona speaking areas, it appears sufficient to have market bulletins prepared in both Shona and English.

All bulletins should have a standard section at the beginning which contains the basic market information farmers and other private sector operators are interested in. This

WRS Marketing Information Systems

should start with a summary of weekly updated price information highlighting international prices (e.g. in New York or London); and, based on the above, Fob prices for processed products (e.g. ex-Dar es Salaam, Kampala, and Harare) and indicative farm-gate prices in the major production zones.¹

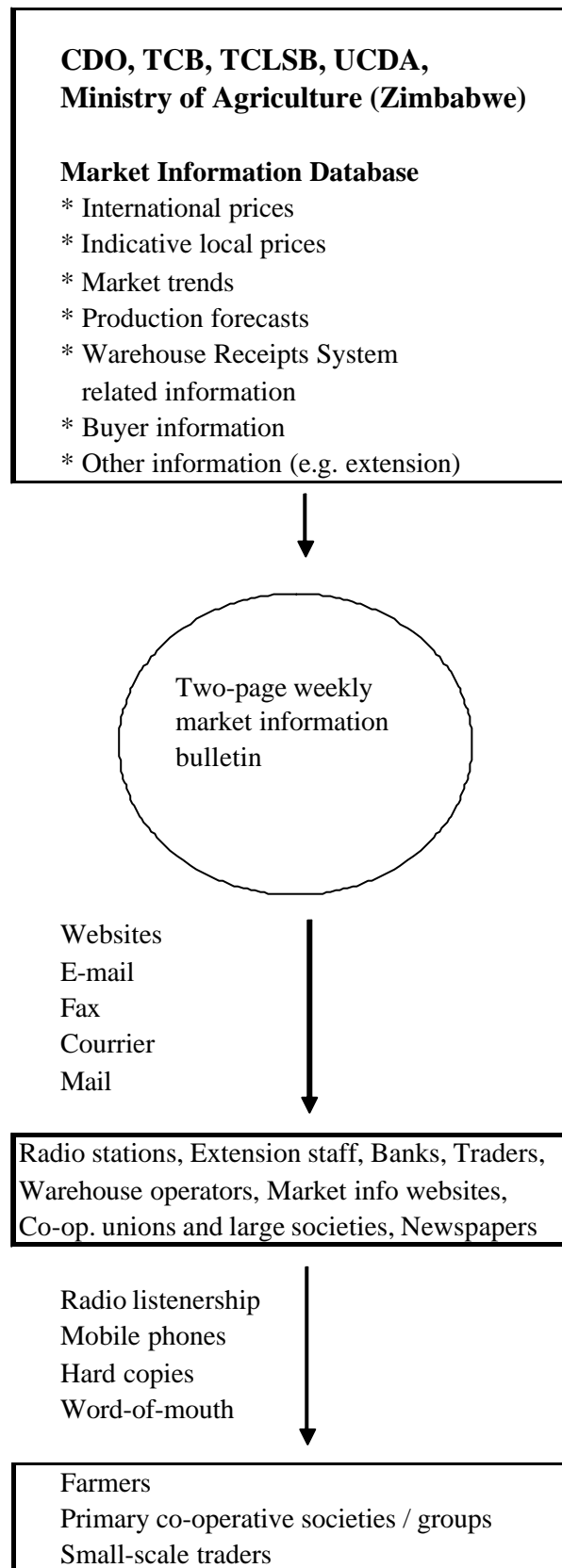
This would be followed by sections on market trends, warehouse receipts systems related up-dates, buyers and sellers, and information related to the seasonality of the crop (e.g. production or harvest advice and quality issues). Additional information such as on the functioning of WRS or collective marketing would have to be disseminated through other channels including printed media, extension staff, or also radio.

¹ Also, an attempt should be made to display daily, international commodity prices on the websites of the respective commodity boards. As far as possible, price data from international commodity exchanges should feed directly into the websites. Obviously, the information would only be accessible to those who have access to computers in their offices, internet cafes, or telecentres.

Table 2: Outline of the Market Information Bulletin

<p>Section 1: Prices</p> <p>International coffee and cotton prices (e.g. London and New York).</p> <p>Based on this, FoB prices (i.e. Dar es Salaam, Kampala, and Harare) of processed commodities, and indicative local prices, using standardised measures (e.g. kilograms).</p> <p>This information can also be displayed on the websites of the commodity boards.</p> <p>Source of information: International commodity exchanges, bodies such as International Coffee Organisation (ICO) or International Cotton Advisory Committee (ICAC), and local auctions (e.g. Moshi).</p>
<p>Section 2: Market trends</p> <p>Market trends. This may include international or local trends related to supply and demand, and prices.</p> <p>Source of information: organisations such as ICO, ICAC, Food and Agriculture Organization of the United Nations (FAO), etc for international market trends;</p> <p>Local market trends and production forecasts can be established by the commodity boards based on trader and extension information. Also, regional projects such as FEWSNET (Famine Early Warning System, USAID funded) have relatively reliable information on weather conditions based on, amongst other things, satellite imagery (www.fews.net).</p>
<p>Section 3: Warehouse Receipts System related information</p> <p>This may include conditions of participating banks, location of a new warehouse, quality stipulations, etc.</p> <p>Source of information: Project LMUs, banks, warehouse operators.</p>
<p>Section 4: Buyer and seller information</p> <p>Source: Buyers who want to buy can announce their buying prices, location, transport arrangements, etc. Equally, potential sellers can announce their intentions.</p>
<p>Section 5: Seasonal crop related information</p> <p>This can include information related to the cropping cycle such as production and inputs, harvesting, processing, and product quality. In some areas, the start of the planting or harvesting seasons will be announced (e.g. cotton).</p> <p>Source of information: Commodity boards and their extension staff.</p>
<p>Section 6: Any other remaining information.</p>

Fig 1: Market Information System for Coffee and Cotton Targeting Farmers and Small-scale Traders



5.2 Communication Channels

It is proposed to use a multi-media approach to communicate market information between the commodity boards and farmers. As outlined above this is likely to require a two-stage approach in that the market bulletins need to be sent to intermediaries (e.g. via internet, e-mail, fax, mail) who will then disseminate and broadcast the information to farmers.

5.2.1 Uganda

Radio. Uganda has seen a rapid growth of FM radio stations recently. However, the cost of broadcasting messages on these FM Radios is considered to be high. A quotation by Radio West to UCDA in 2004 totalled 6.318 million Uganda Shillings for twenty-seven - fifteen-minute slots. Table 3 below shows the costs of radio broadcasting in 2000 as documented by Foodnet for disseminating information in four languages in 15-minute slots, each costing UgSh 100,000 plus UgSh40,000 production cost for each programme.

Table 3: Radio Programmes and Costs

Language	Radio Channel	Day	Duration	Radio Uganda costs: Airtime/ programme	Per quarter	Per year
Kapsabiny	Butebo FM	Monday	15 minutes	100,000	1,300,000	5,200,000
Lumasaba	Butebo FM	Tuesday	15 minutes	100,000	1,300,000	5,200,000
Lusoga	Butebo FM	Sunday	15 minutes	100,000	1,300,000	5,200,000
English	Red Channel	Tuesday	15 minutes	100,000	1,300,000	5,200,000
Kapsabiny	Butebo FM	Monday	15 minutes	40,000	520,000	2,080,000
Lumasaba	Butebo FM	Tuesday	15 minutes	40,000	520,000	2,080,000
Lusoga	Butebo FM	Sunday	15 minutes	40,000	520,000	2,080,000
English	Red Channel	Tuesday	15 minutes	40,000	520,000	2,080,000

Source: Okoboi (2000)

Although expensive, FM radio is considered to be the most effective way to disseminate information targeted at smallholder farmers. This has been based on a number of literature reviews. In their survey of farmers' sources of information in Uganda, Campbell and Garforth (2001) found that listening to radio was by far the most frequently mentioned communication channel (i.e. 89% of respondents from subsistence farming households and 98% of semi-commercial and commercial farmers, respectively). Furthermore, Robbins and Ferris (2004) note that approximately 90% of Ugandan households own, or have access to, a radio receiver. Janowski et al (2003) found that about 70% of farmer households in Lira District owned a radio (Appendix 2 figure 3) and that in most cases it was working and that radio was the second main source of information after neighbour and relatives (Appendix 2 figure 4). Of those without a working radio, 20% of households indicated that they do not own a radio but had access to one if required. The cheapest radio on the market in Uganda can cost from only around US\$5. Radio reception is available in almost all parts of the country.

In Uganda, there are broadly two types of radio stations:

- National radio station (i.e. Radio Uganda)
- Local FM radio stations (e.g. Radio West, Voice of Toro)

Amongst other things, Radio Uganda is used for informing the rural population with messages related to agriculture or health issues. The main advantage is the large coverage national radio stations can achieve. This is partly due to the fact that listeners are used to the programmes and schedules of the national radio and therefore prefer to tune in despite the existence of new stations. On the other hand, the downside of national radio stations is that airtime is usually expensive and that they find it difficult to cater for information needs that are more localised.

In 1999, there were already about 10 commercial FM stations covering the bulk of the country (Kleih, et al, 1999). By 2004, the state broadcasting service (radio and television) has been commercialised and broadcasting licences have been issued to over 50 other radio stations, notably local FM radio stations, which have the option of broadcasting in the local vernacular (Robbins and Ferris, 2004).

Printed Media. The use of printed media has played an important role in market information systems. Often, information is disseminated in newspapers, newsletters, and bulletin boards. Key problems with printed media include literacy and language. The majority of farmers in isolated communities are unlikely to read English. Other constraints with printed media such as newspapers are delays in reaching remote villages. On the other hand, posters written in vernacular languages have proved to be effective in communicating straightforward technical messages.

Mobile phones. Three companies in Uganda have established mobile telephone networks in the country although reception is only available in more densely populated rural areas and in the main towns. At least 80% of the rural areas of the country are not covered by mobile telephone networks although the extent of coverage is expanding. Approximately 50,000 mobile phones are owned in Uganda. A mobile phone can be purchased for about US\$ 50 and peak-time calls in urban areas cost about 1.5 US cents per minute rising to about 5 US cents in some rural areas. Market price information on particular crops and the main markets is made available through SMS by one network provider.

An evaluation survey carried out in 2004 in Lira, Apac and Soroti Districts, confirms that ownership of mobile phones is very low in the sub-counties (Kleih et al, 2004). Only those who are better off can afford them, e.g. civil servants and traders. Although the few existing phones are likely to be used by their owners for price and market enquiries, it appears that the use of SMS price information is close to non-existent at sub-county levels. Larger traders in towns such as Lira, on the other hand, have revealed that they use the SMS facilities to obtain price information around the country. They would then follow up on interesting leads through personal enquiries.

Internet and telecentres. The internet is most suited to traders, processors, millers, warehouse operators, banks, commodity boards, and government agencies who are most likely to have user knowledge and are located in urban areas where access is not an issue. Uganda has seen new communication technology developments in ICTs

such as cellular phones, e-mail connections and the internet development in recent years. The number of privately-run internet cafes has been increasing rapidly in Uganda. Following their start in Kampala around 2000, they are now rapidly spreading to the districts even if there are slight technical problems at times (e.g. electricity failures or servers may be down). In particular, in larger district towns such as Jinja, Soroti or Lira, several internet cafes are competing with each other for business. These internet cafes are also offering services similar to those of telecentres. For example, in addition to internet and e-mail access, internet cafes often also offer printing services. The success of private internet cafes is likely to be due to where they are located, i.e. in urban centres where there is a minimum of infrastructure and demand for their services.

During the visit by NRI consultants to the Ugandan component of the WRS project, there was high anticipation of the establishment of telecentres by the International Institute of Communication and Development (IICD). Many of the organisations concerned (i.e. UCE, UCDA, CDO) were enthusiastic about the benefits those telecentres would bring as a way of disseminating information. Based on hear-say about 12 telecentres in 12 districts would be set up.

According to Oestmann and Dymond (no date), telecentres may be defined as - strategically located facilities providing public access to ICT based services and applications. They are typically equipped with some combination of:

- Telecommunication services such as telephone, fax, e-mail, and internet (via dial-up or ISDN, high-speed telecommunications network);
- Office equipment such as computers, CD-ROM, printers and photocopiers;
- Multi-media hardware and software, including radio, TV and video; and
- Meeting spaces for local business or community use, training, and so on.

Although it has been shown that they can be very useful for the population of the area where they are located, the overall experience with telecentres has been mixed. Problem areas include funding of the centres and choice of appropriate ownership models, which, in turn, manifest themselves in implementation shortcomings (Oestmann and Dymond, *ibid*). To some extent, this may be due to the fact that they are often initiated by development agencies and run by local NGOs. Also, a major limiting factor is that only a relatively small number of farmers can benefit from telecentres unless they are followed by another communication channel which is accessible to farmers.

Bay Petersen (quoted in Robbins 1998) highlights the limitations of modern ICT by saying "in our enthusiasm of what electronic information systems can do, we must not forget the problem of equity. If this is overlooked, it seems likely that unequal access to highly effective information systems is going to follow and reinforce the present inequalities of wealth. If we emphasise electronic technology too much in agricultural information we may find that we are helping only those who already have the best access to information to get more of it."

5.2.2 Tanzania

As in Uganda, radio broadcasts are also important in Tanzania in reaching farmers. For example, they generally listen to the TCB programme on Radio Tanzania. However, sometimes they miss this programme, which is currently broadcast once a week. As a result, they would like a repetition of the programme during the week. Other comments received on the TCB programme include: “The programme should be run on several stations - 15 minutes programme length is not enough – sometimes the programme is monotonous and repetitive”.

Farmers generally do not use the internet in that internet cafés are often out of reach or they are not familiar with their operation. However, according to members of Karansi R.C.S., they would be prepared to walk several kms (i.e. 7kms) to the nearest internet café if they were trained in its use. Also, the village youth could also visit the internet café and download marketing bulletins or e-mail attachments, perhaps on their way home from secondary school.

According to the KCB manager, the following are appropriate means of communication with farmers and primary societies:

- Flyers / circulars,
- Meetings,
- Radio announcements (farmers need to know the time of broadcast)

Radio ownership is high in Tanzania. According to a report by Steadman Research Services (2004), radio ownership “stands at 100% in Mwanza, 95% in both Moshi and Arusha, and 79% in Mbeya. Overall, it is estimated that 93% of Tanzanians own radio receivers. Around Moshi a lot of people tend to listen more to the local FM stations (e.g. Radio One, Radio Sauti Ya Injili). Apparently not so many people listen to Radio Tanzania, and, apparently its ‘packaging’ of programmes could be improved.

KCB indicated that they could sponsor a radio programme for farmers in the Kilimanjaro area. Perhaps input suppliers could also be interested. In addition, traders / ginners such as Cargill Tanzania expressed some willingness to sponsor a radio programme on cotton marketing. Apparently, they also have video equipment “sitting” at the port, which is destined for farmers (it seems the equipment has not been released due to a customs issue). As a result, they might be interested in being involved in the preparation of a video on the functioning of warehouse receipts systems.

One bank manager feels computers are not useful for primary societies (e.g. due to lack of telephone lines, expertise required to operate and maintain them, cost). Communication with the ginneries should ideally take place by e-mail; password protected. However, there are ginneries in remote areas that do not have computers. With regard to the ginnery in Moshi, it seems best to use a fax machine. If required the information can also be hand-carried to the local branch of CRDB.

5.2.3 Zimbabwe

In Zimbabwe information dissemination which benefits agriculture can be broadcast on radio, TV, newspaper or through AREX free of charge if it meets approval of the

ministry of agriculture. For this reason and for the sustainability of the project after phase-out it is advised that the MoA should be involved and will disseminate coffee and soyabean market information as part of its general agricultural extension services. It is also recommended that the project should make a contribution to the training of the MoA personnel (if required) in the coffee and soyabean specific MIS activities.

Currently Zimbabwe Coffee Mills (ZCM) staff monitors international coffee prices, which is disseminated to financing institutions and the Commercial Farmers Union <http://www.cfu.co.zw/commodities/coffee.htm>. However, smallholder coffee growers are not effectively reached as they lack the means of communication. Soyabeans are mainly a commercial crop that is grown mainly by A2 farmers (formerly commercial farmers). Information is distributed through the Commercial Farmers Union (CFU) and the Zimbabwe National Farmers Union (ZNFU) which represent primarily smallholder farmers. Smallholder farmers' main source of information is through AREX.

5.3 Cost Implications

It is expected that the commodity boards and the Ministry of Agriculture have staff in place that can take over the running of a market information system. However, certain “external” costs such as radio broadcasts and newspaper adverts will require extra funds. Also, the boards may require assistance in getting the system up and running, including maintenance of websites and the preparation of well-packaged radio programmes. At the same time, it needs to be borne in mind that the cotton boards (i.e. CDO, TCLSB) have resources available as part of their cotton development funds which can be used for the dissemination of market information.

Table 4 outlines some costs which have been quoted for the operation of different elements of a market information system.

Table 4: Potential costs involved in setting up a market information system

Function / Organisation	Cost (US\$)
Weekly broadcasts (15 minutes) by Radio Tanzania, countrywide; commodity boards such as TCB and TCLSB may have a special arrangement for these broadcasts;	\$1,900 p.a. Apparently, TCB already pay this sum from their own funds.
Radio broadcasts, quote by Radio West in Uganda to UCDA for twenty-seven 15-minute programmes	\$3.610 for approx. half a year
Cost of webspace on www.bistanzania.com (Business Information Services, Tanzania); approx. 20 – 25% of their web-page (i.e. homepage); Smaller amounts of information (e.g. up to 8 items of price info could go free); also, they would be interested to publish / attach articles on the WRS project on their website for free	\$150 per month
Web design by Business Information Services (BIS, Dar es Salaam)	Approx. \$800 for a static website; and \$2,000 for a dynamic website
Full support package by an organisation specialised in setting up a market information service, such as Foodnet in Kampala. This should include assistance in the preparation of market information bulletins and related radio programmes, and perhaps allow reduced broadcasting costs if the same stations can be shared by Foodnet and the commodity boards.	Estimated at \$10,000 - \$20,000 per annum.
In Zimbabwe, information targeting agricultural development can be disseminated free of charge on communication channels such as radio, television, newspapers, and extension services.	
In Zimbabwe, the development of a dynamic website with automated dial-up options by SIRDC	Approx. \$4,000

NB: Exchange rates used: 1USD = TSh 1,050, USh 1,750, ZW\$6,200

APPENDICES

APPENDIX 1: References

Janowski, M., Kleih, U. and Okoboi, G., 2003. Baseline Study carried out in Five Sub-Counties of Lira District on Farmers' Livelihoods and Needs and Sources of Information. Research Project on Decentralised Market Information Services in Lira District. Foodnet, Kampala, and Natural Resources Institute, Chatham Maritime, UK.

Baffes, J. (2004) Tanzania's Coffee Sector: Constraints and Challenges in a Global Environment; Findings - Environmentally and Socially Sustainable Development 237, April 2004, World Bank.

Bagnall-Oakeley, H. and Ocilaje, M., 2002. A special study on "Development of Procedures for the Assessment and Management by Farmers of their Agricultural Information Networks and Needs at the Sub-County Level in Uganda", NARO/DFID Client-oriented Agricultural Research and Dissemination Project.

Campbell, D. and Garforth, C., 2001. Communication Strategy for the Plan for the Modernisation of Agriculture; Report for the PMA Steering Committee – Government of Uganda; The Mediae Company, Nairobi.

Ferris, S. and Robbins, P. (1999) Stakeholder Meetings for Strengthening the Market Information Service in Uganda, IITA, Foodnet and CMIS, Kampala.

Foodnet and Natural Resources Institute (2002) Transaction Cost Analysis, Study undertaken for the PMA, Kampala. NRI Report No: 2708.

Kleih, U., Odwongo, W. and Ndyashangaki C. (1999) Community Access to Marketing Opportunities: Options for Remote Areas; Uganda Case Study; Research report funded by DFID project R7148; Natural Resources Institute/Chatham and Agricultural Policy Secretariat/Kampala.

Kleih, U., Okoboi, G., and Janowski, M. (2004) Farmers' and Traders' Sources of Market Information in Lira District; pp 693–700, Uganda Journal of Agricultural Sciences, Vol.9 No.1 September 2004, ISSN 1026-0919.

Kleih, U., Okoboi, G., Janowski, M., Omony G., Taiwo, B., and Bisase D. (2004) Synthesis of an Evaluation Survey in Seven Sub-counties of Lira, Apac, and Soroti Districts – Draft report for research project "Decentralised Market Information Services in Uganda".

Lynch, K., and Ashimogo, G. (1999), Tanzania Country Report; Overcoming informational constraints: Improving horticultural marketing and technical information flows to smallholders; Report for research project R7151; DFID Crop Post-harvest Programme.

Mbiha, E.R., Ashimogo, G.C., Temu, A.A., and Nyange, D. (no date) A review of Agricultural Market Information Service in Tanzania: The Changing Role of Market Information System; A Pilot Study for the Improvement of the Agricultural Market Informaion Services in Tanzania ; available on Foodnet website:
<http://www.foodnet.cgiar.org>

Okoboi, G. and Ferris, S., (2000). Micro-Market Information Services Project – Uganda; First Progress Report Sept. – Dec. 2000; IITA/Foodnet, CMIS, CTA.

Oestmann, S. and Dymond A. C. (no date) Telecentres – Experiences, Lessons and Trends; (website: col.org/telecentres/chapters%2001.pdf)

Pickstock, M. (2005) Communication to energise agriculture; in The Harvester Volume 1, Issue No 6, January – March 2005, Harare.

Robbins, P., Bikande, F., Ferris, S., Hodges, R., Kleih, U., Okoboi, G., Wandschneider, T., (2004), Advice Manual for the Organisation of Collective Marketing Activities by Small-scale Farmers; Chatham, UK: Natural Resources Institute. ISBN 0 85954 565 2.

Robbins, P. and Ferris, S. (2004), Appropriate ICT and the Farming Community in Developing Countries: Wider implications drawn from the Ugandan experience; Report for research project “Decentralised Market Information Services in Uganda”. DFID research project R8250.

Steadman Research Services (2004) Tanzania Audience Research Report; prepared for the Mediae Company, Nairobi.

Turrall, A., Mulhall, A., Rees, D., Okwadi, J., Emerot, J., and Omadi, R., (2002). Understanding the Communication Context in Teso and Lango Farming Systems: The Agricultural Information Scoping Study, NARO / DFID Client-Oriented Agricultural Research and Dissemination Project, Soroti, Uganda.

APPENDIX 2: The Importance of Information for Agricultural Marketing

The need for market information as part of an efficient agricultural marketing system is unquestionable. According to Shepherd (1997) “Up-to-date, or current, market information enables farmers to negotiate with traders from a position of greater strength. It also facilitates spatial distribution of products from rural areas to towns and between markets. Well-analysed historical market information enables farmers to make planting decisions, including those related to new crops. It also permits traders [and producers] to make better decisions regarding the viability of intra and, perhaps, inter-seasonal storage.”

Shepherd (ibid) distinguishes between market information and marketing information. The former emphasises collection and dissemination of prices, and, in some cases, quantities, whereas the latter represents a much wider concept, including information on market channels, potential buyers and their contacts, payment requirements, quality standards, etc.

In particular larger-scale traders usually have their own information networks relying on more or less modern communications technology (e.g. mobile phones, e-mail, fax). On the other hand, despite being generally quite well informed of local markets, small-scale traders often lack the resources to monitor markets on a regular basis.

According to Marter, (2005), “a market information system can be defined as having the following characteristics: to collect, process, and analyse market data systematically and continuously and to ensure delivery of information on a timely basis to all market participants (Poon 1994 quoted in CTA 2001). To this could be added the need for systems to be driven by and ultimately operated by stakeholders, notably small scale producers (CTA 2001) and that it needs to be affordable”.

At the same time it is important to bear in mind that provision of information alone, however good its quality, is not sufficient. Markets must be sufficiently competitive so that farmers or small-scale traders can take advantage of opportunities offered. Aside from the availability of production factors, farmers must have the entrepreneurial spirit and knowledge to be able to make use of information. Obviously, if increased market orientation would lead to unjustified risk to their livelihoods then farmers cannot be expected to adjust production accordingly.

Although it is increasingly argued that users should pay for information, in the context of resource poor farmers this may not seem realistic. “Part of the reason for this is that information can often be regarded as a public good – since the market will not provide dispersed small scale producers on an equitable or regular basis” (Marter 2005). On the other hand, larger traders, commercial farmers and well endowed producer associations are likely to be in a better position and, more importantly, be prepared to pay for information if it is of value for their business. For example, information provided through mobile phones (e.g. SMS), e-mail services requiring subscription, and the printed media (e.g. newsletters or newspapers) can be charged directly or indirectly to the user. For FM radio stations it may be difficult to charge listeners that are dispersed over large rural areas, the same stations may also benefit from the dissemination of market information in that this may lead to increased advertising

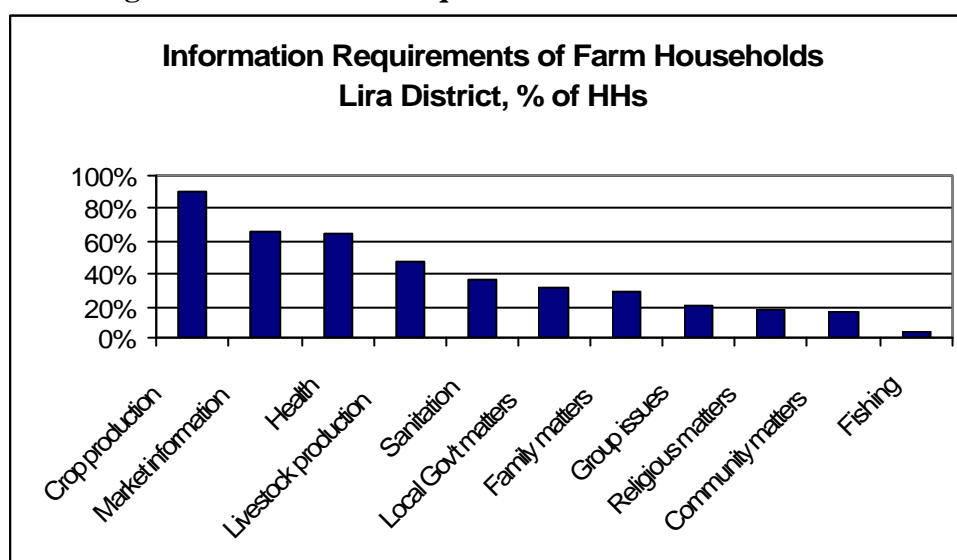
income. As a result, there appear to be situations where private-public partnerships can be explored to a greater extent.

Types of information required

According to Robbins (1998), “farmers need to be able to compare local market conditions with those further away, prices between one grade of product and another, ...and they need information on individual traders’ track records so that they can avoid those that are untrustworthy”.

According to Janowski et al (2003), crop production (90.3%), market information (66.3%), health matters (65.1%) and livestock production (47.4%) are the main topics on which farmers requested information during the course of a questionnaire survey in Lira District, Northern Uganda (Figure 1). Other topics indicated include, sanitation (36.0%), Local Government matters (32%), family matters (29.7%), group issues (21.1%), religious matters (16.6%), community matters (16.0%), and fishing (4%).

Figure 1: Information requirements of households in Lira



Source: Farmer questionnaire survey, Lira District 2003, N = 175

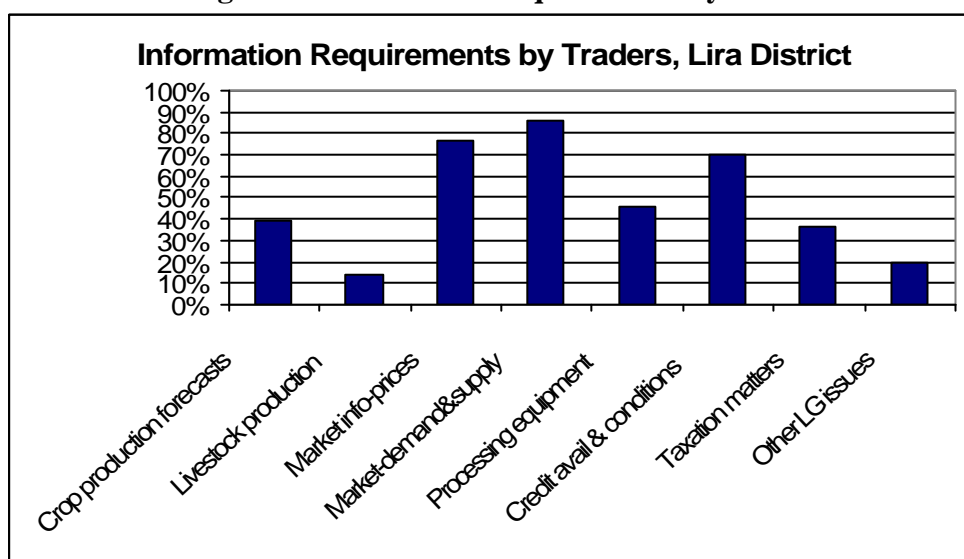
While in some areas men and women expressed similar information needs, in others there were differences. Table 2 shows how the male and female respondents prioritised their information needs in Adwari Sub-county, Lira, during the course of a PRA exercise which was carried out in parallel to the aforementioned questionnaire survey (Janowski, *ibid*).

Table 1 – Information needs of farmers by gender in Adwari, Lira District

Type of information	Preference by Gender	
	Male	Female
Price of produce and markets	50%	50%
Price of equipment and inputs.	75%	25%
Proper time of planting/harvesting different crops	60%	40%
Demonstration of new technology in farmers' fields.	60%	40%
Names of available chemicals (fertilisers, pesticides and fungicides) their prices and location.	75%	25%
Traditional ways of preserving crops e.g. use of red pepper, ash etc.	20%	80%
Fruit tree nursery establishment and management	90%	10%

Source: PRA data (Janowski, et al 2003)

Traders' information requirements as expressed during the survey in Lira are mainly related to market prices, and demand & supply (Janowski et al 2003, Kleih et al 2004). As indicated in Figure 2, other categories indicated include information on availability and conditions of credit, processing equipment (cost and availability), crop production forecasts, taxation matters, and other local government issues. Traders in Lira complain about high local council taxes.

Figure 2: Information requirements by traders

Source: Trader questionnaire survey Lira District, 2003, N = 56

In Mali, the execution of needs assessment studies was one of the first activities when the "Observatoire des Marchés Agricoles" was established (Kleih, et al 1999). Target groups for this exercise included, farmers, traders, processors, and institutional decision-makers.

WRS Marketing Information Systems

According to Sanogo (1998), the Malian farmers requested the following types of market information: Different food security and cash crops (i.e. not only cereals should be covered), Supply and demand situation and prices on markets, Availability and prices of inputs (including transport, equipment, fertiliser, etc), Availability and conditions of credit.

As for processing and storage, the following information needs were expressed by producers: Storage technologies, Availability and price of chemicals, and demand for processed products. Livestock producers requested information on, disease control, availability and price of inputs such as drugs and feed, livestock prices.

The survey also revealed that farmers have a preference for local radio stations broadcasting in vernacular language. This indicates that at least part of the information should be related to the context of a specific locality (i.e. Commune or region) rather than the nation as a whole. This may in particular apply to farmers operating in remote areas.

Traders expressed the following information needs: Traders buying and selling on the domestic market, prices, demand and supply volumes, contacts of other traders, information on storage technology.

Export traders requested information on prices, supply and demand situation, contact details of traders, quality standards, regulations, market opportunities. In the context of traders it is important to mention government policies affecting domestic and export markets. For example, unannounced subsidised imports of cereals or inputs such as fertilisers can create problems for traders.

Processors require three types of information related to raw material supply (prices, volumes, sources, production statistics), processing technology (prices and suppliers of machinery, new technologies), and sales (price, demand and distribution of products, information on competing imported products).

Decision makers require information on: Commodity systems, agricultural statistics, food aid, food security stocks, regulations on national and international markets, support programmes for operators active in the respective commodity chains, availability and conditions of credits, prices of agricultural products on the national, sub-regional, and international markets.

This shows that farmers and traders require more than market information, which is primarily based on prices. Technical information includes both pre- and post-harvest aspects of farming. Traditionally, extension services were given a leading role in providing this information, however, at best, their results have been mixed.

Means of Communication

Rural Radio

“Radio is clearly the most effective and appropriate means of communicating information in remote areas to farmers many of whom have poor literacy skills.” (Robbins, 1998). This certainly also applies to the dissemination of market information if large numbers of farmers in relatively remote areas are to be reached.

Broadly, there are two types of radio stations in Uganda:

- National radio station (i.e. Radio Uganda)
- Local FM radio stations (e.g. Radio Lira, Voice of Toro)

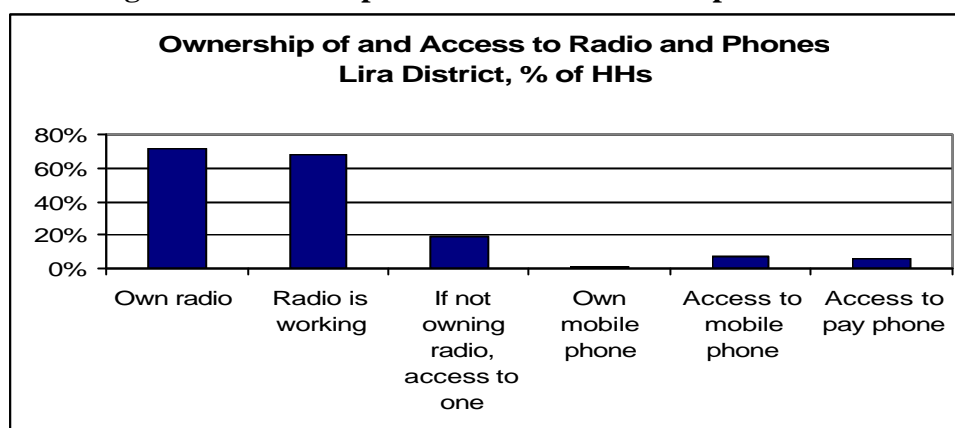
Amongst other things, Radio Uganda is used for informing the rural population with messages related to agriculture or health issues. The main advantage is the large coverage national radio stations can achieve. This is partly due to the fact that listeners are used to the programmes and schedules of the national radio and therefore prefer to tune in despite the existence of new stations. On the other hand, the downside of national radio stations is that airtime is usually expensive and that they find it difficult to cater for information needs that are more localised.

Commercial FM Stations. In 1999, there were already about 10 commercial FM stations covering the bulk of the country (Kleih, et al, 1999). By 2004, the state broadcasting service (radio and television) has been commercialised and broadcasting licences have been issued to over 50 other radio stations, notably local FM radio stations, which have the option of broadcasting in the local vernacular (Robbins and Ferris, 2004).

According to Robbins and Ferris (ibid), approximately 90% of Ugandan households own, or have access to, a radio receiver the cheapest of which cost around US\$ 5. Radio broadcasts can be received on simple receivers in almost all parts of the country from one or more local stations.

In their survey of farmers' sources of information, Campbell and Garforth (2001) found that listening to radio was by far the most frequently mentioned communication channel (i.e. 89% of respondents from subsistence farming households and 98% of semi-commercial and commercial farmers, respectively).

Based on a survey in 2003, Figure 3 indicates that about 70% of farmer households in Lira District own a radio and in most cases it is working. 20% of households indicated that they do not own a radio but had access to one if required.

Figure 3: Ownership and access to radio and phones in Lira

Source: Farmer questionnaire survey, Lira District (Janowski et al, 2003)

According to Turrall et al (2002), radio is adequate for raising awareness but has limitations when used for education and training purposes due to low ownership, language problems, and the nature of the interface. The same source (Turrall et al, *ibid*) suggests that written materials, visual dissemination, and radio all have limited effectiveness for up-taking research technologies, and that a multi-media approach to dissemination reinforces lessons learnt.

New ICTs

New communication technologies, which started only to exist during the 1990s can be very useful. Examples include cellular phones, e-mail connections and the internet.

At the same time, according to Bay Petersen (quoted in Robbins 1998), "in our enthusiasm of what electronic information systems can do, we must not forget the problem of equity. If this is overlooked, it seems likely that unequal access to highly effective information systems is going to follow and reinforce the present inequalities of wealth. If we emphasise electronic technology too much in agricultural information we may find that we are helping only those who already have the best access to information to get more of it."

Three companies have established mobile telephone networks in the country although reception is only available in more densely populated rural areas and in the main towns. At least 80% of the rural areas of the country are not covered by mobile telephone networks although the extent of coverage is expanding. Approximately 50,000 mobile phones are owned in Uganda. A mobile phone can be purchased for about US\$ 50 and peak-time calls in urban areas cost about 1.5 US cents per minute rising to about 5 US cents in some rural areas. Market price information on particular crops and the main markets is made available through SMS by one network provider.

An evaluation survey carried out in 2004 in Lira, Apac and Soroti Districts, confirms that ownership of mobile phones is very low in the sub-counties (Kleih et al, 2004). Only those who are better off can afford them, e.g. civil servants and traders. Although the few existing phones are likely to be used by their owners for price and

market enquiries, it appears that the use of SMS price information is close to non-existent at sub-county levels. Larger traders in towns such as Lira, on the other hand, have revealed that they use the SMS facilities to obtain price information around the country. They would then follow up on interesting leads through personal enquiries.

According to Pickstock (2005), the liberalisation of telecommunications in Uganda has transformed the sector in that since 1997 the country's "tele-density has risen ten-fold from 1 per 1000 to 1 per 100, and the situation is being exploited by farmers' associations through radio, telecentres and the internet".

Telecentres have been started in some sub-counties of Uganda during the 1990s. According to Oestmann and Dymond (no date), "Telecentres may be defined as strategically located facilities providing public access to ICT based services and applications. They are typically equipped with some combination of:

- Telecommunication services such as telephony, fax, e-mail, and internet (via dial-up or ISDN, high-speed telecommunications network);
- Office equipment such as computers, CD-ROM, printers and photocopiers;
- Multi-media hardware and software, including radio, TV and video; and
- Meeting spaces for local business or community use, training, and so on."

Although it has been shown that they can be very useful for the population of the area where they are located, the overall experience with telecentres has been mixed. Problem areas include funding of the centres and choice of appropriate ownership models, which, in turn, manifest themselves in implementation shortcomings (Oestmann and Dymond, *ibid*). To some extent, this may be due to the fact that they are often initiated by development agencies and run by local NGOs.

On the other hand, the number of privately-run internet cafes has been increasing rapidly in Uganda. Following their start in Kampala around 2000, they are now rapidly spreading to the districts even if there are slight technical problems at times (e.g. electricity failures or servers may be down). In particular, in larger district towns such as Jinja, Soroti or Lira, several internet cafes are competing with each other for business.

This is an interesting development in that internet cafes are offering services similar to those of telecentres. For example, in addition to internet and e-mail access, internet cafes often also offer printing services. The success of private internet cafes is likely to be due to where they are located, i.e. in urban centres where there is a minimum of infrastructure and demand for their services.

Mobile video vans are an effective form of audio-visual tool in areas with easy road access. However, they are less appropriate in remote areas and where large population numbers need to be reached. Cost and maintenance of equipment can be an issue.

Due to their cost, and lack of reception / infrastructure, television is hardly used outside the major urban centres.

Printed media

Traditionally, printed media have played an important role in market information systems. Often, information was disseminated in newspapers, newsletters, and bulletin boards. Key problems with printed media include literacy and language. The majority of farmers in isolated communities are unlikely to read English. Other constraints with printed media such as newspapers are delays in reaching remote villages. On the other hand, posters written in vernacular languages have proved to be effective in communicating straightforward technical messages.

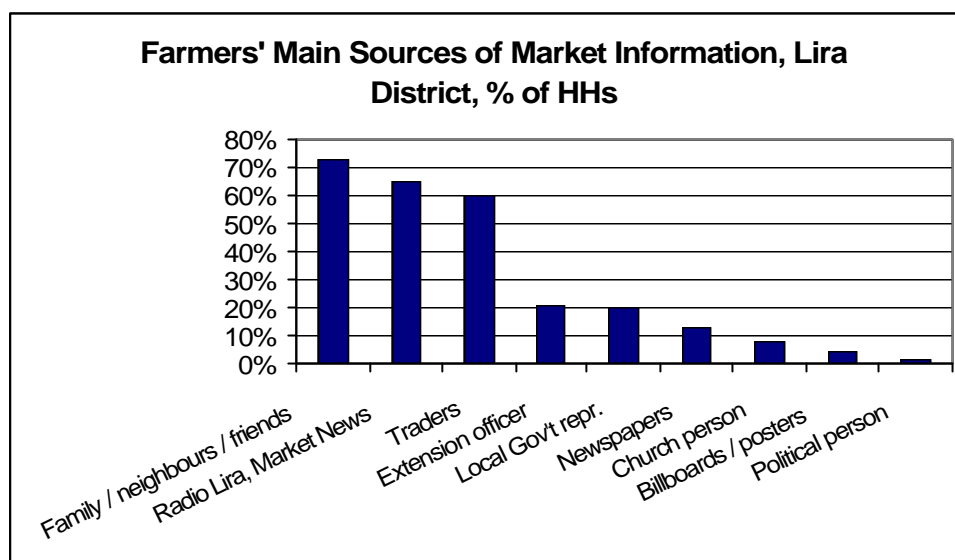
Oral communication

Word-of mouth communication plays an important role in most parts of rural Africa. This type of information flow is influenced by the volume of traffic and movement of people, which in turn is a function of road infrastructure, availability of means of transportation, etc. Markets and other centres of social gathering are places of high turnover of word-of-mouth information.

Dialogue is the type of communication used at workshops or seminars where, for example, members of medium and small-enterprise associations benefit from an exchange of information on various aspects of their business (MSEPU, 1998). At the same time, this type of communication is commonly used by agricultural extension staff providing farmers with information. Exhibitions, trade fairs, and study tours are a form of communication where farmers and traders mainly benefit from the visual impression of an object. Although it can be very useful, it is unlikely that the majority of the population in remote, rural areas will be able to benefit from this type of communication.

Sources of Information

Figure 2 shows the main sources of market information according to the questionnaire survey in Lira 2003, i.e. mainly family / neighbours / friends, Radio Lira market news (i.e. sponsored by Foodnet), and traders. Other sources such as extension officers, local government representatives, newspapers, church persons, billboards / posters, and political persons are comparatively less important as sources of market information for farmers in Lira District.

Figure 4: Farmers main sources of MI in Lira

Source: Farmer questionnaire survey, Janowski et al, 2003

Field studies carried out by Bagnall-Oakeley and Ocilaje (2002) in Lira and Soroti districts, “revealed considerable differences in the number and quality of information sources between differing wealth groups, but not much difference between farmers in the ‘poor men’ and ‘poor women’ groupings:

The poorest groups obtained most of their agricultural information from farmer-farmer sources (other farmers and neighbours, family, friends and ‘contact farmers’), whilst the middle and wealthy groups obtained more information from local government sources, public extension, agri-business sources and NGOs. The more wealthy groups tend to discount farmer-farmer information sources as not always reliable.

Public extension and FM radio were cited as important information sources for all wealth categories, but more wealthy groups gave higher assessments in terms of frequency & quality of information flow to these sources than did the poorest groups. Problems noted with radio-broadcast information included uncertain reliability (few broadcasts use professional agricultural staff), difficulties in knowing when agricultural broadcasts will occur, and choice of commodities and enterprises to be discussed made according to sponsors’ interests rather than users’ needs. Newspapers were reported as occasional information sources by the more wealthy groups.

Public meetings and participation in groups were cited as important information sources by the poorest group (especially women), much more than by the medium and wealthy

ANNEX 4



The University of Greenwich at Medway
Central Avenue, Chatham Maritime
Kent, ME4 4TB
44 (0) 1634 883915
Fax: 44 (0) 1634 883706

**COFFEE AND COTTON MARKET DEVELOPMENT
AND TRADE PROMOTION IN EASTERN AND
SOUTHERN AFRICA**

**REPORT ON VISIT TO REVIEW AND ADVISE ON
COMMODITY AND WAREHOUSING STANDARDS
AND IDENTIFY TRAINING NEEDS IN
UGANDA, TANZANIA AND ZIMBABWE**

BY

DAVID WALKER

April 2005

TABLE OF CONTENTS

1. Introduction.....	3
2. Uganda	4
2.1 Introduction.....	4
2.2 Uganda coffee sector.....	4
2.3 Uganda cotton sector.....	6
3. Tanzania.....	7
3.1 Introduction.....	7
3.2 Tanzania coffee sector	7
3.3 Tanzania cotton sector	8
4. Zimbabwe.....	10
4.1 Introduction.....	10
4.2 Zimbabwe coffee sector.....	10
4.3 Soybean sector in Zimbabwe	11
5. Conclusion	12
5.1 Coffee.....	12
5.2 Cotton.....	12
5.3 Soybean.....	13

1. Introduction

This report covers activities undertaken under the sub-contract between the Natural Resources Institute's (NRI) and the United Nations Office for Project Services (UNOPS) for provision of technical advisory services in establishing "Commodity Trade Finance Systems based on Inventory Collateralisation and Warehouse Receipts" under projects funded by the Common Fund for Commodities (CFC). The projects are: Coffee Market Development and Trade Promotion in Eastern and Southern Africa (CFC/ICO/03FA) and Improvement of Cotton Marketing and Trade Systems in Eastern and Southern Africa (CFC/ICA/12FA). The participating countries are Uganda, Tanzania and Zimbabwe.

As part of the approved Workplans (2005-06) for the participating countries, NRI is required to provide technical advice to the commodity bodies and local management units (LMU) in instituting measures to improve quality assurance and certification systems for the target commodity sectors. A review visit was undertaken by the author (David Walker, NRI Quality Consultant) in March 7-23, 2005 and visit report is structured as follows: Section 2 covers Uganda; Section 3 is on Tanzania; Section 4 is on Zimbabwe respectively; and Section 5 is the concluding section.

2. Uganda

2.1 Introduction

1. On arrival I had an initial meeting with Project Team comprising Mr Fred Mwesigye (Commissioner of Co-operatives in Ministry of Tourism, Trade and Industry), Mr Apollo Kamugisha (Uganda Coffee Development Authority), Chris Baine (Financial adviser), and Mr Hans Muzoora (Cotton Development Organisation). I was accompanied on visits in the east and west by Apollo Kamugisha and in the west by Chris Baine. Regrettably, Hans Muzoora of CDO was only present for the initial meeting and the final wrap up session.

2. I had discussions with Mr Amos Tumwesigye (Country Manager) and Mr Stephen Mugisha (Manager of Risk Management Services) of Audit Control and Expertise (ACE). This was a very tense meeting with ACE being very negative about NRI and the project.

2.2 Uganda coffee sector

3. I met Mrs Doreen Rweihangwe, senior quality controller at the UCDA to discuss coffee quality issues in general and the specific quality assurance role of UCDA. The authority appears very well organised with competent staff and good grading facilities. It functions under the 1994 Coffee Regulations which provides the authority with ample means of ensuring that the coffee factories have the equipment and competence to operate effectively. The only apparent anomaly in the quality assurance system is that some coffee factories appear to have their own individual company grading systems for parchment coffee. This ought not to be a problem. All exporters have to register details of their contracts with the UCDA. The authority has the national coffee moisture content reference machine with which other moisture meters are checked. The reference machine itself is calibrated against an approved oven method.

4. The harvest is May/June for the fly crop in the east and north, and Oct/Nov/Dec/Jan for the main crop in the east. In the west the fly crop is April/May and the main crop is harvested Oct/Nov/Dec.

5. I visited 5 coffee organisations (Bugisu Co-operative Union in the east, and Kabonera Farmers Association, Muhame Co-operative Society, Bakwanye Trading Co. and Job Coffee in west).

6. None of these organisations had a full understanding of the differences between the proposed WRS and their routine current operations. Specifically, misunderstandings included the fact that the duration of storage was not at the discretion of the warehouse operator, that the ownership of the commodity did not initially move to the warehouse operator, that warehouse capacity over and above

current operations was most probably required, and that quality was more important than normal because the owners would have little or no other collateral.

7. The two producer organisations did not have suitable warehouses at village level. In any case the production at Kabonera was too small - only 80 tonnes in a good year and much went to briefcase traders. Muhame was much bigger (500 tonnes from member co-ops) but once again I understood that there were no warehouses at village level. Therefore I looked at the facilities of their two export processors (hullers) used by these two organisations. Unfortunately, neither of these had weighbridge (or access to one), security, spare capacity, or good warehouses.

8. Bakwanye Trading Company was involved with several commodities, had limited warehouse spare capacity because it moved continually from one commodity to another in accordance with the season, and had no access to a weighbridge.

9. Therefore, of the organisations visited, the only candidates for programme involvement were Job Coffee (Mbarara - west) and Bugisu Co-operative Union (Mbale - east). Both of these have excellent facilities and deal in many 1000s of tonnes. Job would store robusta and arabica as FAQ (from dry processing), and Bugisu would store arabica as parchment.

10. If we are to move for a May/June fly intake then local action to work with both the producer groups (who I did not meet) and the warehouse operators (with whom nothing concrete appears to have been agreed) has to be initiated without delay.

11. Quality issues for WRS operation can generally be taken care of by UCDA. They can work on quality issues at producer level. It will be helpful for parchment to arrive at the factory in bags of standardised weight.

12. It will be necessary to raise levels of awareness about WRS with all warehouse depot staff. UCDA has an established regulatory role in this sector, but I recommend that they be specifically commissioned to regulate the operations of the WRS warehouses by unannounced physical/quality audits etc. In general UCDA could provide a policing and physical audit role.

13. My only specific concern about quality centres on accepted moisture levels with dried cherry (kiboko), parchment and green coffee stages. Some people spoke very loosely about the maximum levels acceptable. The Coffee Act specifies maxima moisture contents as 14 to 15% for kiboko and 13 to 14 % for parchment. In practice these should be considered on the high side and operators should be aiming to work with a maximum of 13% for parchment (ideally 12.00 to 12.5%) and a maximum of 14% for kiboko.

14. More general quality considerations at the producer level include berry picking procedures and timing, pulping and drying facilities, communication and transport. UCDA might be able to assist.

2.3 Uganda cotton sector

15. I visited 3 cotton ginneries in the west (Cottco Cotton, Nyakatoni Growers Co-operative Union and Rwenzori Cotton Ginneries).
16. Seasons for cotton harvest are Oct/Nov/Dec in the east and Jan/Feb/Mar in the west. Hence there is plenty of time to organise a pilot in 2005 if it is in the east. Unfortunately no visits were made to cotton organisations in the east
17. Both Nyakatoni and Cottco are good candidates for WRS. The former has old and poor facilities; the latter is a new ginnery.
18. Areas of concern on quality centre on insurance (neither appears to insure against water ingress), use of polypropylene as seed cotton packaging by producers, role of ACE and potential role of CDO.
19. Seed cotton is normally stored for a short time therefore there is no history of insurance against water ingress into warehouses that could take place during longer storage periods. In general, ginnery staff are not used to storing seed cotton for any length of time. Normal storage periods are currently stated as being from one to two months.
20. Polypropylene bags were observed in both ginneries. If users of the WRS are to get the best economic return on their commodity it would be helpful if they did not use polypropylene.
21. ACE are contracted through Uganda Ginners Cotton Export Association to provide quality checks and tallying in the ginnery system. It will be necessary to obtain details of the contracted technical services including sampling of seed cotton because at the two ginneries visited it appeared that sampling was *ad hoc* and there were no measurements of moisture (a critical factor) other than a subjective feel in the hand. Other quality assessments appeared to be based on sample boxes. It was very useful to visit the ginneries during seed cotton intake observe quality checks first hand.
22. Hans Muzoora informs me that 17 moisture meters have been purchased by the WRS project but none were present at the two candidate ginneries.
23. I asked Hans if the CDO could provide a regulatory/policing service (as per UCDA for coffee) but he was negative and not reassuring. It appears that CDO has staffing constraints (and might have warned not to interfere with ACE activities).
24. If CDO are not supportive on this, there has to be a question mark as to whether they can be relied upon to work effectively with candidate WRS producer groups who will need so much awareness creation re the operational/financial side of the project and technical capacity building?
25. Staff of participating ginneries will require awareness training.

3. Tanzania

3.1 Introduction

26. I was accompanied and ably supported by Elizabeth Kimambo (Project Manager), Sabuni Mbaga (cotton) and Fidelius Temu (coffee).

3.2 Tanzania coffee sector

27. I met staff of the Tanzanian Coffee Board (TCB) including the Director General, Chief Liquorer and Auctioneer/Acting Director of Marketing, and the Procurement and Extension Co-ordinator. The TCB appears well placed to support and regulate the Tanzanian coffee sector. I also met the General Manager of the Kilimanjaro Co-operative Bank. I visited the Tanganyika Coffee Curing Company Ltd, and a primary coffee producing society.

28. The arabica coffee harvesting season is April onwards and sales take place during July/August through to the following May. The robusta season can be a little earlier.

29. I was informed that producers know how to produce good quality coffee beans but do not always achieve this. This appears to be an area where training and support could be useful. The TCB has potential to supply and support this type of training.

30. The project has done well to get moving with issuing receipts by the TCC Co Ltd – through around 32 societies with the Kilimanjaro Co-operative Bank. The company has spare warehouse capacity and is primarily a service curer. Warehouse receipts appear to be used to obtain earlier cash flow with earliest possible sale of commodity rather than storing for longer to play the market.

31. The TCB has solid regulatory, inspection and licensing procedures which have effect from hulling onwards.

32. Curing losses appear to be in the range of 18 to 22 %. Although this spread appears narrow it can have significant financial implications for depositors. Low curing yield can arise from either product characteristics or curing process. More details of curing losses would improve transparency.

33. Moisture content requires clarification (as with Uganda above). At all stages of processing I was provided with non definitive and varying maximum tolerances. There is a need for accuracy and consistency.

34. Quality of primary processing appears to be an issue – although it will need investigation and clarification to be more precise – and the needs could be society or location specific. It was not clear during this visit as how best to meet these needs in the field. Options are TCB, agricultural extension specialists, or even research staff. These choices involve three separate ministries and linkages appear weak.

3.3 Tanzania cotton sector

35. I had meetings with the Acting General Manager of Tanzania Cotton Board (TCB), Senior Cotton Classifier, Ginnery Inspector (Moshi), cotton trader Mr Murtaza Rashid of Cargill Tanzania Ltd, and Director of Credit at CRDB. I also visited the Moshi Ginnery operated by Kilimanjaro Native Co-operative Union, and the TCB lint stores in Dar es Salaam.
36. The cotton harvest begins in July and continues through to October. Deliveries to ginneries can continue through to February.
37. The project has done extremely well to get going with issuing warehouse receipts on Oridoy cotton from the elderly Moshi Ginnery. Most cotton on warehouse receipts is ginned and sold as quickly as possible.
38. Many of the large ginneries use ACE for quality and quantity assurance. Moshi has no such support. A great deal of polypropylene was observed in this ginnery.
39. If the project is to scale up or widen activities it will need to strengthen certain aspects of quality and quantity assurance. This is also the opinion of the CRDB which is prepared to go along with present operations at Moshi because of the small-scale and the TCB guarantee of sales outlet. The bank also specifically requests professional indemnity against a warehouse providing false information if activities are scaled up.
40. The method used for separately seed cotton at time of purchase, or arrival at ginnery, into Grades A and B appears to be totally subjective – based on sample display boxes. To me this appears unsatisfactory because of the large difference in prices offered for A and B. However, I was assured that the system works – so perhaps best left alone. All grades appear to find a market. It is probably that the “scramble for cotton” undermines the application of quality criteria.
41. Moisture content is an issue. I understand that the project has purchased moisture meters. However, I understood that they are not used at point of purchase of seed cotton or prior to storage of seed cotton. The moisture meter at Moshi was still in its packaging and I was informed that no instruction on its use had been provided. Tanzania traditionally does not have a moisture problem with its seed cotton. However, if the banks are to be safe guarded then moisture content should be checked objectively where warehouse receipts are involved. Also there are always instances where farmers might deliberately add water to increase the weight of seed cotton. I examined the terms of reference, circulating during my visit, for the new contract for collateral managers to provide technical support at the Western District ginneries for the TCB. Despite the TCB informing me that they are expecting the collateral managers (mainly ACE, with some Baltonic, plus the odd SGS) to assure water content no reference to this function has appeared in the tender for the past three years. I mentioned this to the Acting General Manager of the TCB.

42. Insurance is commonly provided against fire and theft. However, for the WRS it will be necessary to have cover against water ingress. I was led to understand that this is not the present position at Moshi. Such insurance at Moshi is needed because of the poor condition of the warehouses. It appears that seed cotton is not stored for any length of time, in fact the owner's request appears to be to gin as soon as possible. However, to protect the bank the warehouse facilities and the warehouse management competence need to be of a high order.

43. Seed cotton is stored as a loose mass of cotton bolls. The tendency is to stuff it loose into the warehouse. Hence it is difficult to separate it from any other lot of seed cotton in the same warehouse and there is the potential for interchange of stocks if seed cotton of various sources is stored in the same warehouse. Therefore IP could be difficult, and there could be constraints on undertaking a physical audit. These issues are best overcome by using ginneries that have spare warehouse capacity and can afford to close and lock warehouses that are less than full. I was not sure this could be achieved at Moshi which has only 3 warehouses, notwithstanding differences in harvest time between Moshi area and Oridoy.

44. The TCB should provide greater support to the existing WRS and very much greater support for any expanded system. However, the cotton board appears weaker than the coffee board and I understand it has staffing limitations.

45. However, technical training and project conceptual awareness are required at all levels.

4. Zimbabwe

4.1 Introduction

46. I was supported by the Project Co-ordinator Mrs Veronica Mutiro, Chief Agricultural Economist for Policy and Planning at Ministry of Agriculture and Rural Development, and accompanied by the Project Manager Mr Dagmore Tawonezvi

47. I met Mr Pedzisai Matamba of Socotec who appeared open and helpful and was clearly interested in his company participating in the project as much as possible to grow additional business.

4.2 Zimbabwe coffee sector

48. I visited Mutare to meet staff and view facilities at GMB's coffee depot. Mr B F Makimbe, Depot Manager, was very helpful and is clearly desperate for throughput in any form to boost GMB's declining coffee business. Most coffee received presently is buni. Surplus warehouse capacity would appear to guarantee IP stacking for project coffee.

49. Discussions in the GMB grading laboratory and with the chief liquorer revealed a lack of transparency, and possibly confusion, as to how coffee is graded. There was no chart or any written form of grading procedure. Equipment was old and staff were struggling with an inappropriate moisture meter. If the GMB Mutare depot is used by the project then additional technical supervision is recommended.

50. Warehouses are basically good but in the absence of coffee have been used for storing grain. This poses no problems. However, an apparent lack of pallets could be a cause for concern, but the real worry is the current use of the main warehouse for maize milling without an effective means of exhausting dust to the outside. The result was a warehouse covered in a growing layer of fine maize meal – not a good idea for a commodity such as coffee which readily takes up odours – an issue which will increase as the maize dust eventually becomes rancid and ultimately mouldy.

51. I visited the Zimbabwe Coffee Mill Ltd facility at Mutare. I was very impressed with everything I saw and the staff met. Grading procedures were displayed in wall charts and all were very transparent. This is clearly an excellent candidate organisation for the project. No inputs or support would be needed for ZCM.

52. The only training needs are with the producers to ensure that coffee deposited is of the highest quality. An offer by GMB to provide this training appeared based more on wishful thinking than sound field training competence. It was generally believed that ARDA would be the best option – time during this visit did not permit me to meet ARDA.

4.3 Soybean sector in Zimbabwe

53. I visited GMB's depot at Lions Den. It is a standard soviet style 1970s concrete silo complex that appears to be reasonably well maintained. Grading facilities are basic but adequate for determination of physical factors. I was informed that when Socotec are involved with quality assurance at this depot they use the same equipment. GMB uses its own soyabean standards which differ from those published in 1995 by the Standards Association of Zimbabwe. The GMB standards appear fine. However, there were two implementation issues at Lions Den. The first was that the laminated grading chart used in the grading room had two lines of text missing from the full GMB grading standards. This meant that there was no measure of "defective" soyabeans or "other coloured" soyabeans. The former being a very significant omission. However, I pointed out the omission and GMB agreed to rectify the mistake. The second issue concerns oil content. Generally, whilst physical factors determine the "storability", the soyabeans are valued and traded very much on their oil content, and oil content tolerances feature prominently in all soyabean grading standards. However, there are no facilities at GMB rural depots to determine oil content. In theory oil content can be determined at the Harare Aspindale depot but in practice this appears not to happen. This aspect of quality needs further investigation – in particular with the buyers and/or processors of GMB soyabeans to determine how this deficiency is overcome in practice and to clarify how commercial pricing is determined. Ultimately, the value of any soyabeans on WR must be related to their actual oil content.

54. With silo storage it is not normally possible to store as IP. However, it will be necessary to discuss with GMB whether IP could be offered at an increased fee, and how they would cope with "shrinkage" if commodity lots on WR were co-mingled (pooled). Silo storage, because of its mechanical handling equipment, always has some losses. These were said to be 0.5%. Shrinkage would need to be factored into the WR system. Options would be for GMB to guarantee an outturn on the WR that is 0.5% less than gross weight received. Alternatively, GMB could guarantee the full outturn through a "topping up" system factored into its fees – if this is preferred by the banks. However, I was not sure that the figure of 0.5% was realistic because typically combine harvested soyabeans contain around 1% light-weight trash that is taken out by the silo cleaners. The precise extent of "shrinkage" will need further discussion and close attention during WR operations.

5. Conclusion

55. All stakeholders in all commodities in all three countries require awareness training on the operation of the WRS.

5.1 Coffee

56. There is a need for greater accuracy, consistency and transparency with regard to maximum moisture contents. High moisture contents are attractive to producers selling on weight and troublesome for curers and warehouse operators.

57. The coffee boards in Uganda and Tanzania are well placed to support the technical aspects of centralised processing and storage functions. GMB in Zimbabwe will most probably need some technical supervision – possibly from NRI. The Zimbabwe Coffee Mill would need no additional technical support.

58. The training needs with coffee relate primarily to producers. The WRS will operate just as well with poor quality commodities as with good quality commodities. However, the greatest profit margins will arise from the best quality and for the project to be successful it is important that the use of a receipted system is seen to generate good returns. Improving quality at producer level is a logistical challenge. There appear to be no obvious candidates for the provision of this training for participating producers in Uganda and Tanzania, although ARDA appears to be a candidate for Zimbabwe.

5.2 Cotton

59. The use of moisture meters and the implantation of systems to ensure only dry cotton is put into store. Commonly the maximum limit will be 12%, but I was unable to determine a specific maximum tolerance under Ugandan and Tanzanian conditions.

60. The Cotton Boards in Uganda and Tanzania are not as well resourced or organised as their coffee equivalents. Support for ginneries in Uganda and Tanzania is commonly supported by ACE. If additional technical quality assurance support were to be sought for Moshi, Ace would be a candidate provided precise TORs were negotiated.

61. Conventional warehousing procedures for seed cotton in Uganda and Tanzania present physical challenges to maintaining IP, ensuring that lots are not inter-changed, and to undertaking physical audits.

62. Although every effort must be made to ensure that warehouses for seed cotton storage are waterproof, it would be prudent to negotiate insurance against water ingress during prolonged storage.

63. To ensure that receipted cotton secures the best market efforts must be made to reduce contamination of the lint with polypropylene.

5.3 Soybean

64. Further investigation is required into the role that oil content has in the grading, valuation and marketing of soyabeans in Zimbabwe.

ANNEX 5



**Natural
Resources
Institute**

Central Avenue, Chatham Maritime
Kent ME4 4TB, United Kingdom
Telephone: +44 (0)1634 883086
Fax: +44 (0)1634 883706
Internet: <http://www.nri.org>
Email: P.Greenhalgh@gre.ac.uk

Commodity Warehouse Receipts and the Uganda Coffee Sector

**Prepared as part of the Project
CFC/ICO/03 and CFC/ICAC/12
Trade Finance Component and Related Activities of the Cotton and
Coffee Warehouse Receipts Projects Financed by the
Common Fund for Commodities**

by

Peter Greenhalgh
(Natural Resources Institute, UK)

and

Stephen Kitching
(Belmont Management Consultants)

May 2005

TABLE OF CONTENTS

Acknowledgements	i
ACRONYMS	ii
EXECUTIVE SUMMARY	1
CHAPTER 1 INTRODUCTION	4
1.1 Introduction.....	4
1.2 Objective of Assignment	4
1.3 Methodology and Timing	4
1.3 Structure of the Report	5
CHAPTER 2 COMMODITY WAREHOUSE RECEIPTS AND UGANDA.....	6
2.1 Introduction.....	6
2.2 Policy Environment	6
2.3 Government Organisations	7
2.4 Uganda Commodity Exchange	7
2.5 Coffee Industry Bodies	7
2.6 Cooperatives.....	9
2.7 Coffee Exporting Companies.....	10
2.8 Donor and Other Related Initiatives	13
CHAPTER 3 UGANDA COFFEE SECTOR.....	15
3.1 Some Features of the Sector	15
3.2 Coffee Production in Uganda.....	16
3.3 Coffee Trade Finance.....	16
3.4 Robusta Coffee Marketing Chain	19
3.5 Arabica Coffee Marketing Chain.....	21
3.6 Quality Issues and Trends.....	23
3.7 Risks and Their Management	24
CHAPTER 4 FACTORS RELEVANT TO ADOPTION OF CWR SYSTEM	27
4.1 Introduction.....	27
4.2 Smallholders and CWR.....	27
4.3 Multinational Exporters and CWR	27
4.4 Local Traders and Exporters.....	29
4.5 Financial Institutions and Collateral Managers	30
4.6 CWR and Coffee Quality.....	31
4.7 Legal Environment including Contracts	32
CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS	34
5.1 Introduction.....	34
5.2 Some Initial Conclusions	34
5.3 Robusta and Arabica Pilot Projects.....	35
ANNEX 1 TERMS OF REFERENCE	41
ANNEX 2 ITINERARY AND LIST OF PEOPLE CONTACTED.....	43
ANNEX 3 STATISTICAL TABLES	48
ANNEX 4 DRAFT CONTRACTS	53
ANNEX 5 A SMALLHOLDER PILOT PROJECT.....	59

ACKNOWLEDGEMENTS

The authors would like to express their gratitude to the various individuals and organisations who assisted in the undertaking of this study, many of whom are listed in Annex 2. In particular, they would like to thank Mr. Apollo T. Kamugisha, Senior Development Officer, UCDA who assisted in making the arrangements and participated in the field work in Uganda.

Exchange Rates

US \$ 1.00 = 1,700 Uganda Shilling (February 2005)

ACRONYMS

ACDI/VOCA	Volunteers in Overseas Cooperative Assistance (USA)
ACE	Audit Control and Expertise
BCU	The Bugisu Co-operative Union
CBOs	Community based organisations
CFC	Common Fund for Commodities, Amsterdam
CM	Collateral Manager
CMB	Coffee Marketing Board
CWR	Commodity Warehouse Receipts
DCUs	District Co-operative Unions
EAFCA	East Africa Fine Coffee Association
EU	European Union
FAQ	Fair Average Quality
FDA	Food and Drugs Administration (USA)
FOT/R	Free on truck/rail
FT	Fair Trade
GAP	Good Agricultural Practice
GoU	Government of Uganda
HACCP	Hazard Analysis Critical Control Points
KCFSP	Kaweri Coffee Farmers Support Project
KCFSP	Kaweri Coffee Farmers Support Project
MTTI	Ministry of Tourism, Trade and Industry
NAADS	National Agricultural Advisory Services
NGO	Non Government Organisations
NKG	Naumann Kaffee Gruppe
NRI	Natural Resources Institute, UK
NUCAFE	National Union of Coffee Agribusiness and Farm Enterprise
OTA	Ochratoxin A
PCS	Primary Co-operative Society
PCU	Primary Co-operative Union
PMA	Modernisation of Agriculture
TOR	The Terms of Reference
UCA	Uganda Cooperative Alliance
UCA	Uganda Co-operative Alliance
UCDA	Uganda Coffee Development Authority
UCE	Uganda Commodity Exchange
UCRA	Uganda Coffee Roasters Association
UCTF	Uganda Coffee Trade Federation
Ug Sh	Uganda Shillings
UGT	Uganda Grain Traders
UNCA	Uganda National Coffee Association
UNFA Association	Uganda National Farmers
USAID	United States Agency for International Development
WR	Warehouse Receipts

EXECUTIVE SUMMARY

The objective of this particular component of the Common Fund for Commodities (CFC) *Coffee Market Development and Trade Promotion in Eastern and Southern Africa in Tanzania, Uganda and Zimbabwe* (CFC/ICO/03) Project was to work with various stakeholders in the Uganda coffee sector to identify, assess and propose opportunities for the use of a Commodity Warehouse Receipts (CWR) scheme in Uganda's coffee sector.

The study is made up of five chapters. Following an introductory chapter, Chapter 2 provides an overview of CWR and Uganda including the policy and institutional setting. Chapter 3 details aspects of Uganda's coffee sector, dealing with such aspects as the production base, the supply chain, trade finance, and the sector's development potential and economic impact. Chapter 4 discusses a range of factors relevant to the adoption and use of a CWR system in the Ugandan coffee sector including such aspects as quality issues, the use of CWR systems by multinational and national companies, and the legal environment. Chapter 5 contains a summary, conclusions and recommendations. In addition there are 5 Annexes which contain the TOR (Annex 1); a list of individuals and organisations contacted (Annex 2); statistical tables (Annex 3); details of draft robusta and arabica contracts (Annex 4) and a smallholder pilot project proposal (Annex 5).

Opportunities appear to exist for the establishment of a CWR scheme in the Uganda coffee sector but establishing such an operation will need careful planning and will not be straight forward.

A key objective of a CWR is to allow producers to obtain inventory finance and delay sale during the harvest season. This will enhance their bargaining position but could lead to reduced margins for traders – which could make the system unattractive to players currently in a strong position in the market.

The policy and economic environment within Uganda has become more favourable for the development of a CWR scheme but it is vital that the Warehouse Receipt Bill currently being considered by Parliament is passed, so that a suitable regulatory framework is in place. Moreover, the recent reversion of inflationary trends needs to be contained to limit local increases in interest rates.

Smallholders will not be able to access a CWR scheme unless they establish strong and well organised farmers groups and/or associations.

There are a numbers of constraints working against the introduction of a CRW scheme.

1. Local exporters have negligible interest in a CWR scheme with regard to green coffee since they want to export immediately rather than hold stock; however, there would be interest if a company had a sizeable export contract and coffee stocks could be financed until the required quantities are in stock.

2. Currently a CWR scheme can only be introduced in robusta for the stage from *kiboko* to FAQ and for arabica from *parchment* to green coffee – in both cases this is a relatively short time period. An estimated 7 to 10 days for robusta and 21-30 days for Arabica.
3. The coffee sector in Uganda (and elsewhere) is perceived as a high risk financing operation
4. Although multinational companies are having an increasing share of Ugandan exports, some of these operations have made substantial losses in some years; the sector is a very competitive with low margins.
5. Throughout the coffee marketing system there is invariably a lack of trust, which is vital to CWR system.

It is recommended that initially two Pilot Projects (PP) be set up, one handling predominantly robusta coffee the other arabica coffee. The objective of the PP would be to develop a user-friendly coffee CWR scheme which would satisfy certain issues that need to be discussed and resolved when setting up a PP and are outlined in the report. In brief:

- **Legal Structure:** Vital that the Warehouse Receipt Bill currently being considered by Parliament is passed
- **Security, theft, fraud and other losses:** Under a CWR system depositors and lenders must be certain of the security of the coffee
- **Location:** It is important the PP is accessible to coffee merchants throughout Uganda.
- **Participants:** The system must be open to all players, but the primary target depositors will be farmers belonging to primary cooperative societies and traders including exporters. The organisations involved must be legal entities – and should be subject to due diligence.
- **Warehouse facilities and minimum lot sizes:** In order to cover the costs of storage, CM and bank fees, sizeable and secure warehouse facilities will have to be available, with a storage capacity probably in excess of 1,500 tonnes.
- **Management and Economic Viability:** Close management and cost models to be prepared for each of the PPs.
- **Collateral Management:** Security of the stock will have to be guaranteed by the Collateral Manager. It is important that there are clearly defined responsibilities between the CM and warehouse operators; reflected in contracts between the CM and the banks. In addition, the CM and the warehouse operator must have the equipment and skilled personnel to enforce commodity standards.
- **Finance and Credit:** One bank or several banks could be involved in providing funding to the PP. Both depositors and lenders are exposed to price risks but there are currently no risk management instruments available in

Uganda. The volume of the coffee handled is very important in spreading costs and making the PP viable.

- **Quality:** The quality of the coffee that will be acceptable for deposit needs to be established in discussions with the UCDA and other stakeholders. Currently the UCDA does not have a standard form of contract – it would be helpful if it did. If quality standards are established and enforced under the CWR PP then there is potential for improved coffee quality throughout the value chain as producer organisations use CWR as a means to help them bulk and enforce quality standards at the farmer level. This has the potential to benefit not only local traders and exporters but also the multinational companies who frequently complain about poor coffee quality.
- **Training:** There is a need for sensitisation/understanding and training of the various stakeholders involved in the PP, including depositors; CM, warehouse and bank staff.
- **Contracts:** To make the PP bankable, appropriate contracts have to be made out and legalised or assigned to the bank.

CHAPTER 1 INTRODUCTION

1.1 Introduction

This study is a component of two Common Fund for Commodities (CFC) funded projects, namely *Coffee Market Development and Trade Promotion in Eastern and Southern Africa in Tanzania, Uganda and Zimbabwe* (CFC/ICO/03) and *Improvement of Cotton Marketing and Trade Systems in Eastern and Southern Africa in Tanzania and Uganda* (CFC/ICAC/12). These Projects aim to establish systems to facilitate access to commodity trade finance based on inventory collateralisation and warehouse receipts. The overall objectives of the Projects are to:

- Develop a system of commodity trade finance based on inventory collateralisation and warehouse receipts, initially for cotton and coffee, but expanding coverage to other storable commodities for which inventory-backed financing is feasible;
- Test the system through pilot trade financing;
- Bring about improvements in the market information and quality assurance systems, to ensure that they are sustainable; and
- Facilitate dissemination of the Project outcome.

1.2 Objective of Assignment

The objective of this particular component of the Project was to work with various stakeholders in the Uganda coffee sector to identify, assess and propose opportunities for the use of a Commodity Warehouse Receipts (CWR) scheme in Uganda's coffee sector. The Terms of Reference (TOR) for the study are contained in Annex 1.

The study is important because Uganda needs to assist in the provision of trade finance, particularly to indigenous stakeholders in the Uganda coffee sector. This is clearly recognised by the Ugandan Government (GoU) which is currently passing legislation to facilitate the development of the Uganda Commodity Exchange (UCE) and commodity warehouse receipt systems.

1.3 Methodology and Timing

The work programme was undertaken by Peter Greenhalgh of the Natural Resources Institute (NRI) and Stephen Kitching of Belmont Consultants of the United Kingdom. Field work was undertaken in Uganda from February 9th to 15th, with preliminary results being presented to Uganda Coffee Development Authority (UCDA) on 15th February. During the fieldwork a wide range of stakeholders were consulted from the private sector, including Uganda Coffee Trade Federation (UCTF) members, as well as banks, grain traders and collateral management companies. In addition, consultations were held with various parastatal organisations and associations, including UCDA, Uganda Coffee Farmers' Association (NUCAFE), Uganda Coffee Roasters Association (UCRA), East Africa Fine Coffee Association (EAFCA), Government departments, parastatal bodies and donors. The selection of companies in

the Uganda was guided by discussions with the UCDA and UCTF. Time constraints and availability restricted the number of companies that could be seen. In addition, discussions and visits were made to UK and other coffee importers. Annex 2 contains details of the various individuals and organisations contacted.

1.3 Structure of the Report

Following this introductory section there are a further four Chapters. Chapter 2 provides an overview of Commodity Warehouse Receipts and Uganda including the policy and institutional setting. Chapter 3 details aspects of Uganda's coffee sector, dealing with such aspects as the production base, the supply chain, trade finance, and the sector's development potential and economic impact. Chapter 4 discusses a range of factors relevant to the adoption and use of a CWR system in the Ugandan coffee sector including such aspects as quality issues, the use of CWR systems by multinational and national companies, and the legal environment. Chapter 5 contains a summary, conclusions and recommendations.

In addition there are 5 Annexes which contain the TOR (Annex 1); a list of individuals and organisations contacted (Annex 2); statistical tables (Annex 3); details of draft robusta and arabica contracts (Annex 4) and a smallholder pilot project proposal (Annex 5).

CHAPTER 2 COMMODITY WAREHOUSE RECEIPTS AND UGANDA

2.1 Introduction

The objective of this chapter is to provide an overview of Commodity Warehouse Receipts (CWR) systems in Uganda with particular emphasis on the policy environment and institutional setting, mainly within the coffee sector. Brief descriptions are also provided of various coffee sector stakeholders, particularly multinational and local coffee trading companies and their view on CWR.

2.2 Policy Environment

The policy environment in Uganda appears conducive to the development of Commodity Warehouse Receipt (CWR) systems and there is growing support from both the private and public sectors for the development of such a system to assist commodity financing and marketing in the country. Over the past decade the macro-economic environment has improved considerably as economic liberalisation and sizeable donor assistance has led to continued economic growth, substantial improvements in infrastructure (particularly transport and communications), falling inflation and removal of exchange controls. This overall economic improvement will facilitate the development of a CWR system. However, in recent months inflationary pressures have begun to emerge along with growing political uncertainty, both of which could hamper the development of a CWR system particularly as interest rates rise in response and make local financing even more expensive.

The Government has drafted a Warehouse Receipts Bill that will regulate the sector and this is currently being considered by Parliament. Meanwhile, the private sector has taken the lead in the establishment of a CWR system, mainly to facilitate access to credit and there is now a small-scale system in operation with non-negotiable receipts.

There are a number of warehouse receipt initiatives in Uganda. The EU, for instance, is to support, through the Plan for the Modernisation of Agriculture (PMA), a CWR system. Exact details of the proposed scheme are not available but one objective is to promote greater use of the Uganda Commodity Exchange through using the receipts to assure delivery of traded commodities. There was an initiative in 2004 to develop a pilot WRS for maize involving Uganda Grain Traders Ltd (UGT), ACE (as collateral managers) and a local bank. Under the pilot, non-transferable warehouse receipts were to be issued to depositors, who were required to sell their crop only through the UCE. The initiative was hampered by business and process risks, some of which are being discussed by the CFC-funded project team with the local banks with the view of facilitating access to inventory finance generally.

ACDI/VOCA, with funding from USAID, is also promoting WRS for the farmer groups with which they are working, especially those in the Iganga area. Care Uganda is also working on a pilot scheme for producers of beans in the Kabale district. These latter

schemes are very small scale and currently, there appears to be little co-ordination of these initiatives. While there is considerable interest in CWR there appears to be insufficient understanding of the complexities and costs involved.

2.3 Government Organisations

The lead Government Department regarding CWR is the Ministry of Tourism Trade and Industry (MTTI), which, in consultation with the private sector and the co-operative movement, has been responsible for drafting the Warehouse Receipt Bill. The Bill provides a regulatory framework to support the future development of CWR. One of the important issues to be resolved in implementing the proposed new system is the appropriate institutional arrangements and role of government.

Another Government agency involved in CWR is PMA (Plan for the Modernisation of Agriculture) which is being implemented by the National Agricultural Advisory Services (NAADS). This includes capacity building programmes for farmers' groups, particularly with regard to marketing.

2.4 Uganda Commodity Exchange

The Uganda Commodity Exchange (UCE) is seen as a vital factor in improving agricultural marketing in Uganda and it could play an important role in facilitating the development of CWR. It was registered in 1998 but inadequate capital meant that it did not begin to operate until 2002 following some support from MTTI. As yet, however, operations have been minimal and somewhat ineffective and the correct systems do not seem to be in place. The UCE is being assisted under the PMA and an EU funded project starting in 2005 plans to provide support. Efforts are being made to create awareness among smallholders and traders of the benefits that the UCE could bring but there is some doubt as to whether smallholders will be able to benefit directly from the UCE's operation. The combination of a CWR system and a market outlet for the trade of warehouse receipts should help to facilitate and improve the efficiency of agricultural trading.

2.5 Coffee Industry Bodies

Uganda Coffee Development Authority (UCDA)

The UCDA was set up in 1991 with the statutory mandate for promoting, improving and monitoring the coffee industry. This mandate is carried out by licensing processors and exporters; controlling quality; monitoring prices; supporting research and promoting Ugandan coffee on both the local and international market. In order to fulfil this mandate, the activities of the UCDA are carried out by four departments: namely

- (i) Administration and Finance;
- (ii) The Monitoring and Statistics Department, which collects and disseminates data on production (quantities, grades and crop forecasts), trade and export

earnings. It registers all export data including prices, quantity, shipment period and date of shipment.

- (iii) The Regulatory and Quality Control Department licenses coffee roasters, processors and exporters, as well as quality inspection and regulation. All coffee exports must be quality checked and certified by the Department prior to export. It carries out training of quality controllers, cup testing and some extension among processors.
- (iv) The Research and Development Department is responsible for conducting socio-economic research, the coffee nurseries programme, and coffee promotion (both locally and internationally).

Initially Government representatives dominated the UCDA's Board but in 1994 the Board's structure was changed to include a majority of industry representatives. The UCDA is funded from a 1% cess which is levied on the value of all coffee exports, 40% of the cess is allocated towards research and development.

Uganda Coffee Trade Federation (UCTF)

The UCTF established 1996 and superseded the Coffee Exporters' Association. Its members include exporters, hullers, bankers, insurers and transporters; and it aims to provide a common forum for sharing ideas, views and experiences and to lobby Government on areas of concern to the coffee industry. The UCTF hopes to ensure orderly trading by the adoption of a Code of Conduct amongst its members. The secretariat is also seeking to provide services for its members.

Uganda National Coffee Association (UNCA)

UNCA was established in the 1970s to promote the interests of private sector processors. It acted as an important coffee industry pressure group prior to liberalisation but its influence has since waned. It represents coffee processors.

Coffee Growers' Associations

A number of growers' associations being developed ranging from those concerned with specific crops to general growers' associations. There are plans to co-ordinate the roles of the various growers' associations through a National Agricultural Council. Three growers' associations have an impact on the coffee sub-sector, namely the Uganda Coffee Farmers' Association (NUCAFE), the Uganda Commercial Farmers' Association (UCFA) and Uganda National Farmers' Association (UNFA).

Uganda Coffee Roasters Association (UCRA)

This organisation is made up of the small but expanding number of coffee roasting companies that have been established in Uganda. One of its objectives is to expand roast coffee exports.

East Africa Fine Coffees Association (EAFCA)

This is a regional, non-profit association with 10 member countries including Uganda, where its headquarters are located. Its membership is wide ranging including private

and public sector speciality coffee sector stakeholders including producers, exporters, international importers, roasters, policy makers' transporters, trade representatives.

Its vision is "To enhance the quality, competitiveness and profitability of the Eastern African coffees in global markets, thereby improving the well being of the producers and ensuring customer satisfaction". Its mission is "to establish and promote partnerships and networks among those participating and having an interest in quality coffee production, processing and marketing in the Eastern African regions" The Association is working with a USAID funded RATES (Regional Agricultural Trade Expansion Support) Programme.

2.6 Cooperatives

Co-operatives have always played an important role in the production and processing of coffee but following liberalisation their importance has declined. In the past, the District Co-operative Unions (DCUs) provided inputs to farmers through farm shops and in some cases provided credit facilities. Economic liberalisation has increased the autonomy of co-operatives and removed their direct links with government. Since liberalisation the co-operatives have become financially much weaker – and, some would argue, less democratic. In 1996 there were over 6,000 Primary Co-operative Societies (PCU) registered but approximately half were dormant and a further third only partially active. Both PCSs and the DCUs have failed to meet their two major objectives, namely to establish viable markets for farmers production and provides mechanisms to accumulate sufficient capital to enable business to grow. In an effort to overcome these problems efforts have been made to re-organise, re-structure and re-direct PCSs and DCUs, in part through the development of Area Co-operative Farmer's Associations. The co-operatives operate under the auspices of the Uganda Co-operative Alliance (UCA) and their operations have become more transparent and accountable; while poorly operating Unions have been wound up. The UCA's overall mandate is to mobilise and develop farmer co-operatives and it is restructuring the co-operative movement following the collapse of the Co-operative Unions. As such it is trying to strengthen and assist in the reorganisation of the PCS by forming "area associations" of 2 to 5 PCS in order to bulk their produce and to access markets on an economic basis. Progress has been slow but there is some interest from the more remote areas, The UCA views Fair Trade as one of the strategies that could promote co-operatives and help them revive because of the incentive relating to the premium. The UCA assists UNEX – the export company set up to assist co-operatives in exporting their products (see below) with the selection of suitable PCS partners for its export activities. Sometimes UNEX will assist the PCSs with loans to finance purchases and cover processing and transportation costs.

Various community based organisations (CBOs) and farmer organisations have been established (often with NGO support) which have some similarities with co-operatives. They invariably have a wide rural development focus rather than just concerned with coffee production and marketing.

2.7 Coffee Exporting Companies

Until the liberalisation of coffee marketing in 1991 coffee exports were handled through the Coffee Marketing Board (CMB). After liberalisation the CMB was restructured and as a government export company was allowed to compete with private exporters but its market fell dramatically to below 5% by the mid 1990s. While initially the Co-operatives captured an increased export market share, rising to 19% in 1994/95, they too have suffered a severe decline and now account for less than 3% of exports. It is private sector companies, and in particular those with foreign ownership, that have been the chief beneficiaries of export liberalisation. By the mid 1990s over 100 exporters had been registered and by 1995/96 the private sector accounted for 93% of total coffee exports, of which the six largest exporters accounted for around 80% of exports. As the 1990s progressed the obtaining of an export license became easier while the rise in world prices encouraged increased entrance to the export sector. To obtain an export licence the company has to be registered in Uganda, have access to a re-grading plant and provide a performance bond of US\$20,000. The types of companies that set up export operations included

- (i) subsidiaries of multinational coffee traders;
- (ii) joint ventures between local and international coffee trading firms;
- (iii) owners or operators of hulling factories;
- (iv) co-operatives; and
- (v) wholesalers or traders of other commodities who had no experience of coffee.

In 1998/99 only 38 companies exported coffee and five companies accounted for half of exports. By 2003/04 the number had fallen to 27 companies with the top five exporters – all multinationals - accounting for 48% of exports. The list of major exporters and their market share is shown in Annex 3 (Tables 3.1 and 3.2). No single exporter has remained dominant with most companies' having sizeable year-on-year fluctuations in both the level and share of exports. For example, the leading exporter in 2003/04 was Pan Afric Impex which has recently suffered losses due to apparent poor quality deliveries.

Multinational Trading Companies

One trend over the past decade has been a growing dominance of multinational companies – which in 2003/04 account for 71% export share by volume. With some exceptions, none of the multinationals could be said to be committed to Uganda, particularly if quantity and quality does not improve. Nevertheless, some of the bigger companies have made sizeable investments in Uganda but whether their operations will remain sustainable remains questionable. These companies include:

- Ugacof, established in 1995 and is the currently the largest exporter; it is closely related to Sucafina in Geneva, Switzerland and has invested in substantial warehouse and processing plant in Kampala. It also has interests in coffee exports from Rwanda, Tanzania and the Congo with some of the logistics handled through the Uganda office. The company has a positive attitude towards a CWR scheme and indeed already employ collateral management from Cotecna and SGS. Warned however of the risk should pre-financed coffee be unsold and without hedging facilities. Therefore, it would

be necessary for banks to loan only a proportion of the coffee value, even as low as 55%.

- Kyagalanyi is part of Volcafe a privately owned trading company based in Winterthur in Switzerland and one of the world's largest coffee trading operations. Volcafe has recently been taken over by the E.D. & F. Mann Group to create the world's largest coffee trading group. Robustas account for about 2/3rd of the business, and it only buys FAQ. The balance of purchases is arabica parchment and it has a buying operation and warehouses in Mbale for these purchases. Given its ability to obtain finance from its parent company, a CWR scheme would be no interest to the company; and if a scheme is established then great care must be taken since there have been considerable difficulties in the past with coffee exporters who failed to perform.
- Kawacom, part of the Ecom Agro Industrial Corporation, a large private trading group of companies, based on Lausanne Switzerland. The company took over the coffee trading activities on the Cargill group, including its operations in Uganda. All robustas are purchased on an FAQ delivered Kampala basis. It is involved in organic coffee trading in Mbale and the Kapchorwa and Nebbi Districts and the company accounts for almost all Uganda's organic coffee exports. It is also developing Utz Kapeh sales to "improve the social, environmental and cultural conditions of coffee farms, their workers and families" and is believed to be the only company in Uganda which had an inspection by Bureau Veritas from the UK's Ethical Trading Initiative. The company would have no interest in a local CWR scheme, although it is currently using a local collateral manager to validate stocks for raising international sourced finance. In the recent past there have been several bad experiences with the financing of coffee.
- Ibero (U) Ltd – this is part of the Naumann Kaffee Gruppe (NKG) based in Hamburg, Germany and is one of the world's largest coffee trading companies. Alongside its trading interests, NKG has recently established Kaweri Coffee Plantation Ltd. with an overall investment of approximately \$10 million and covering 2,500 hectares in a prime coffee growing area in Mubende District, Uganda.
- Olam is based in Singapore and over the past decade has been expanding its commodity trading activities in Africa.
- Pan Afric Impex (U) Ltd. is one of the major exporting companies, although it did not figure in the latest monthly export data. However, the company is reported to have recently negotiated a US\$ 10 million pre-export finance facility through the South African bank ABSA (which is currently in the process of being taken over by Barclays). The collateral management of this loan was reported to be undertaken by a UK based company, Drum (although another source cited Cotecna as the CM).

Local Trading Companies

- UNEX, which handles both coffee and cotton, was established in 1990 by the Uganda Cooperative Alliance (UCA) as the export marketing arm of the co-operatives. After re-structuring in 1995, UNEX was registered as a limited liability company owned by the Co-operative Unions and UCA as shareholders on behalf of their co-operative members. Along with the co-operatives its importance as a coffee exporter has declined and in 2003/04 it exported only 42,772 bags – a mere 2% export share. The majority of Fair Trade (FT) coffee exports – currently around 3,000 bags - are handled by UNEX. Some pre-finance is obtained from overseas buyers and also the Triodos Bank. 90% of his sales are on a Free on Truck Kampala basis which greatly assists his cash flow. UNEX has a facility to borrow in US Dollars but manages cash flow between 5 and 14 days. Robusta accounts for about 90% of the company's purchases, 10% arabica but no washed robustas. Robustas are bought FAQ (fair average quality) delivered Kampala. Little coffee is kept in stock. UNEX would welcome the development of a CWR scheme but questions whether this would augment the company's ability to raise a greater financial facility.
- The Bugisu Co-operative Union (BCU) was established in 1954 and operates in Mbale district which is located around Mount Elgon in Eastern Uganda, which is the origin of the bulk of Uganda's arabica coffee. The BCU buys arabica parchment on delivered warehouse basis from local co-ops (about 40%) and traders (about 60%). Both farmers and middlemen supply parchment in quantities ranging from 1 bag (60kg) to 20 tonnes. Moisture content must not be above 16% and the bags are checked for defects and categorised into various grades. Dependant on quality – or outright rejection – the supplier is paid by cheque, not cash, within 1½ hours of delivery. In February 2005 the price paid was Ug Sh 2100/2200 per kg for premium grade.

The BCU has two warehouse systems in place giving a total capacity to prepare 20,000 tonnes of coffee annually, which represents a substantial excess capacity since BCU exports in 2003/04 totalled only 2,472 tonnes. Moreover, with arabica production in Mbale totalling about 26,000 tons per annum it is difficult to see how the BCU warehouse can be fully utilised. Between 21 to 30 days are required to prepare parchment coffee for export and stocks are always held against contracts with no stocks held own account. BCU is registered with Fair Trade and sells about 6 containers a year to the UK at a Fair Trade premium of Ug Sh 400/- per kilo which is paid to the farmers who are registered.

BCU owns substantial real estate in Mbale with a hotel, 18 flats, shops and restaurant as well as its own extensive storage and handling facility. To some observers the BCU no longer acts as a cooperative union in terms of representing and acting on behalf of its members. It appears increasingly detached from the PCS and is effectively a business rather than a co-operative union. BCU is mainly self-financing with some banking facilities including US dollar facilities. The BCU has been an active proponent of a CWR scheme, working closely with UCDA, and would welcome its establishment. However,

the BCU along with other companies was involved in previous coffee financing schemes which lead to considerable difficulties for the bank involved.

- KDS is a wholly owned Ugandan company which was the 9th largest exporter in 2003/04. It rents a modest warehouse in Kampala and has a processing plant at the farm which is partly Government finance but currently unused. The farm has 200 hectares of robusta and also KDS is trying to form 32 local villages into coherent group to supply the company. Star Café, a related company is also involved in coffee roasting. KDS buys 75% robusta FAQ delivered to the warehouse in Kampala although 15% supplied from its own farm and neighbouring farmers. Makes occasional purchases of arabica coffee. For finance, KDS is reliant on prompt turn around of coffee, otherwise dependant on local banks who lend at an annual rate of 26%. Occasional pre-finance is obtained from a UK importing company. Company is limited in its ability to finance coffee and would welcome a CWR scheme but warns that exporters, local and international banks have had difficulties with pre-finance.
- Job Coffee Ltd was started in 1999 and has been exporting since 2000. It is wholly owned by Ugandan shareholders and was the 7th largest exporter in 2003/04 with 7% market share; in January, 2005 it was the third largest exporter accounting for almost 12% of Ugandan coffee exports. The company works closely with European buyers including Socadec and sells “back to back” on a fixed price basis Sales are on a back to back basis. Robustas dominate purchases and are bought FAQ either delivered to its own warehouse in Mbarara or to Kampala. Also buys washed arabicas. Financing costs are high; the company has US dollar lending facility with rates of about 7% per year while loans in Uganda shillings are between 23-26%, all of which affects the ability to develop the business further. A collateral manager (ACE) is employed at \$1,500 per month to oversee coffee turnover and the company would welcome a CWR scheme and is already experienced in the procedures established by ACE.
- Busingye & Co. is a wholly owned Ugandan company which was with 15th largest exporter in 2003/04 with 1% market; in January, 2005 it was 10th with 3.3% market share. Buys mainly robustas FAQ delivered Kampala or at depots up-country as well as arabicas. For finance deals with one bank and about a third of the company’s suppliers draw directly on the bank. Enjoys a 14 day average for settlement and has no significant facility. A collateral manager is employed at \$1500 per month to monitor coffee movement and stock. The company would welcome a CWR scheme and experience of the procedures using collateral management from ACE.

2.8 Donor and Other Related Initiatives

Over the past few years, a number of initiatives have been made by donors and NGOs to promote CWR systems. The objective has been to ensure that the benefits of CWR can be enjoyed by producers, especially smallholder farmers. Alongside this Common Fund for Commodities (CFC) project which is trying to develop a CWR system for

cotton and coffee in Uganda, Tanzania and Zimbabwe, the European Union (EU) is supporting through the Programme for the Modernisation of Agriculture (PMA), a similar system for other commodities, including the grains. A €2.3 million project is about to be launched to “Support the Uganda Commodity Exchange and the Warehouse Receipt System”. In addition, ACDI/VOCA, using USAID funds, is promoting CWR for the farmer groups with which they are working, especially those in the Iganga area. A new USAID Project is developing a system to promote CWR and is likely to target cotton. Care Uganda is also working on a pilot scheme for producers of beans in the Kabale district. Currently, there appears to be little co-ordination of these initiatives.

A private sector pilot CWR initiative was started in mid 2004 by Uganda Grain Traders (UGT) which also involved ACE, as collateral managers, and Stanbic (as the lender). Under the pilot, non-transferable warehouse receipts will be issued to depositors, who will be required to sell their crop only through the Uganda Commodity Exchange. There are still various hurdles to be overcome in implementing this project, although warehouse receipts are being issued, with depositors of various commodities including coffee and grains.

CHAPTER 3 UGANDA COFFEE SECTOR

3.1 Some Features of the Sector

Coffee is Uganda's most important agricultural crop and export earner but its importance is declining, in part due to low world prices over recent years. Around one-eighth of the population of 26.4 million earns all or most of its income from coffee activities and coffee provides direct and indirect employment to nearly 5 million people. There are an estimated 500,000 small farms growing coffee of which 95% are small family holdings of less than 1 hectare. Many producers used to be co-operative members but their number has declined dramatically since liberalisation in 1991. Both robusta and arabica coffee varieties are produced, with the latter accounting for about 10% of production although its share is increasing. Trends in production have varied and large annual variations in output are not unusual. Current production exceeds 3 million bags - just under 3% of global production. Uganda's robusta is appreciated for its neutral quality with strong body taste and obtains a premium over many robusta origins. However, too high a price differential leads to substitutions from other origins and there is intense competition now from Vietnam and India.

The Ugandan coffee season never really ends but this does not imply that a CWR system for coffee would be able to operate effectively throughout the year. The crop year begins in October, and while robusta is harvested all year round, peak harvesting is from November to February, although coffee in some areas is available earlier. The main arabica harvest is from September to December. The season for Bugisu coffee starts in August in the low-lying areas and in October in the high lying areas and ends January/February. It peaks in November/December. There is a fly crop in May/June but of poorer quality.

Almost all coffee production is exported. However, due to various factors including coffee wilt disease and relatively low prices over recent years, exports have been showing a downward trend. Coffee exports for the year October 2003 until September 2004 totalled 2.52 million bags (60 kg) down by 100,000 bags from the previous year. In January, 2005 exports totalled 211,541 bags down from 296,301 bags in January, 2004. The January value of exports was US\$11.5 million, a fall of 14% compared to January 2004.

Trading opportunities take place against the backdrop of the world coffee market. The coffee industry is traditionally broken into three segments: producer (origin), trader (middleman) and processor (roaster, end-user). Speculative activity is essential for the health of the market but is difficult to classify as an industrial segment. Historically, all three segments either had to carry large inventories or sustain a high level of throughput. The processors and producers traditionally held large inventories; the former to meet consumer demand and the latter to control and 'moderate' the market. However, processors, for many reasons have adopted a 'just in time' approach to inventory management and no longer carry large coffee stocks. The end result is that the burden of stockpiling and financing coffee has been driven back

towards origin with the trader not only moving coffee as quickly as possible between producer and processor, but also arranging finance as well.

3.2 Coffee Production in Uganda

Uganda is particularly suited to coffee production. Most robusta is grown in a broad belt to the north and west of Lake Victoria, in Ankole and Mubende. Districts with the highest output are Masaka, Mpigi, and Mukono. Luwero, Rakai, Jinja and Iganga also produce large quantities, and production spreads as far as Masindi in the north and Rukungiri in the west. Arabica is produced mainly on the western and southern slopes of Mt. Elgon around Mbale and Kapchorwa, and to the north-west, in Nebbi, and to the south-west in Bundibuyo, Kasese and Kabale. Almost all robusta is sun dried and dry processed into Fair Average Quality (FAQ) although efforts are being made to expand the production of washed robusta. The majority of arabica is washed, but some is dry processed (mostly in the West Nile and southern-western regions). Trends in robusta and arabica production in Uganda are shown in Table 3.1. Traditional robusta and arabica varieties give low yields of 250- 350 kg per ha but higher yields of up to 1,200 kg/ha can be achieved from new clonal robusta varieties. However, yield levels along with the area cultivation are disputed by some Ugandan sources.

Table 3.1: Uganda Coffee Production

Year	Robusta '000' bags		Arabica '000' bags	
				Uganda
1989/90		1,800		100
1990/91		2,350		200
1991/92		1,979		110
1992/93		2,520		280
1993/94		2,900		300
1994/95		2,500		450
1995/96		3,000		450
1996/97		3,600		450
1997/98		2,600		300
1998/99		3,250		300
1999/2000		2,650		350
2000/01		2,850		350
2002/03		2,666		434

3.3 Coffee Trade Finance

Coffee tends to be grown in areas with high local financing costs. However, short-term interest rates in competing producer countries have fallen while Uganda's have not leading to an easing of the burden of financing on competing producers compared with Uganda.¹ Given the high local levels of interest rates, coffee exporters tend not to

¹ Data from Financial Markets indicator published in The Economist

Country	1997	2004
Brazil	21.3%	15.9%

sit with large stocks of coffee unless they can be financed from external sources at external rates. In a free market, the exporter either has the ability to pay the grower on a deferred basis (i.e. pay the farmer after the exporter has received payment) or is financed on a secure basis by large traders or a few adventurous banks. Traders and banks financing on this basis will charge up to 4% over the bank base rate (Libor) to reputable exporters against warehouse receipts and proof of contract with a known counterparty. The exporter is happy because finance is obtained well below the internal interest rate and the exporter/bank has made a generous margin on a secured loan. Large traders that extend this type of finance not only make the margin on the loan but also secure a steady supply of coffee. Multi-national companies have access to cheaper US dollar facilities abroad and are therefore at a considerable advantage over the local exporter. This has changed the face of the coffee business with smaller coffee traders disappearing because of their lack of financial muscle. However, even the larger companies as well as the banks have had major problems in providing finance to the coffee sector. At one time, in order to acquire coffee supplies, pre-finance was prevalent in the sector. This is no longer the case due to past well known defaults. Moreover, suppliers invariably now expect to be paid in cash upon delivery.

Another feature of the coffee finance is that the bulk of the world coffee trade is expressed in US dollars. However, in many coffee producing countries, including Uganda, the local currency is not pegged to the dollar. Exporters therefore face the risk that the dollar exchange rate will move adversely in relation to their own currency and this has been the situation in Uganda. Until recently the Uganda shilling (Ug Sh) has depreciated against the US dollar over the last 10/15 years so that exporters ought to have profited on stocks bought in local currency while receiving US dollars on their contracts. Exposure to potential currency risk should be monitored in exactly the same way as purely coffee trade related risk.

The Uganda base interest rate is not set by the Central Bank but by each of the commercial banks which establish their own base rate, assessed according to their views on such factors as Uganda's budget deficit and other economic factors. In early 2005, the base rate for Ugandan shillings varies between 18% to 19% while the US Dollar base rate varies between 7.5 to 8.5% according to which commercial bank one deals with. These interest rate levels explain coffee exporters' reluctance to hold stocks unless they can be financed from external sources at external rates.

Problems Related To Trade Finance²

Lack of access to favourable credit facilities is a major problem in Ugandan coffee trade, especially for local companies, which as shown above have to borrow at much higher rates of interest rates compared to multinational companies. Tables 3.2 to 3.4 based on analysis undertaken in 1997 highlight the problem, which is still prevalent today.

Colombia	23.2%	7.8%
Mexico	19.95%	5.9%
Uganda (not listed)	19%	19%

² The following section is based on article by Fred Kuwuma and *Prognosis of the Coffee Trade in Uganda, 1997* (Uganda Coffee Trade Federation)

Table 3.2 Uganda Coffee Exporters Comparison between Sources of Finance and Performance

Category	% Exporters	Market Share 1995/6
A - Own finances	10.0	2.48%
B - Pre-finance by foreign bank	3.3	0.24%
C - Pre-finance by foreign buyer or company	33.3	59.12%
D - Finance from local banks	53.3	38.17%

Source: *Prognosis of the Coffee Trade in Uganda, 1997* (Uganda Coffee Trade Federation).

Category C - one third of exporting companies, dominated by foreign companies (including some local companies) had pre-financing arrangements, and accounted for 60% of exports in 1995/96.

Category D – represent 54% of all exporters had 38% of coffee exports, and market share declining. Indigenous companies in D that have continued in business tend to be those with access to foreign capital, although funds dispensed through local banks.

Table 3.3 Interest Rates Charged on Funds Used by Uganda Coffee Exporters

Interest Rate Charged	% of Exporters*
10% or below	30%
10.1% - 15%	6.6%
15.1% - 20.0%	20.0%
20.1% - 25%	26.6%
25.1% - 30.0%	16.6%

Note: Total does not equal to 100% due to rounding off

Data on the currency (i.e. US \$ or US\$) of the loan are not available, but almost certainly 15% and below was in US\$ and 15% and above was in Ug Sh.

As shown in Table 3.3, 30% of exporters paid below 10% rate of interest; majority of exporters (63.2%) reportedly paid between 15% and 30%. Lowest rate charged by a local commercial bank was 15%. Rates of interest on funds obtained from foreign sources were reported to be below 15%, and these are the rates at which foreign companies obtained their working capital. Local companies were predominantly in the category of companies paying 15-30%. These companies have rightly argued that they do not face a level playing field, while the local banks attribute the high lending rates to the high default rate caused in part by the lack of appropriate risk management techniques by many of the coffee traders – a feature which is not only applicable to the coffee sector.

Table 3.4 Uganda Coffee: Constraints to Obtaining Credit Facilities

Constraint	% of Exporters*
No Constraint	33.0%
High Interest Rate	26.6%
Lack of collateral	36.6%
Poor credit history	10.0%
Other constraints	16.6%

**The total is greater than 100% because some respondents reported more than one constraint.*

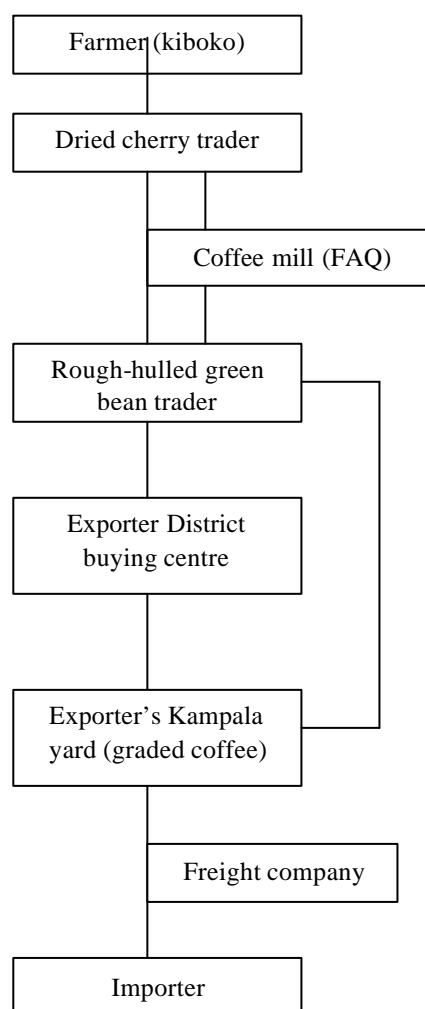
One third of respondents said they had no constraint in obtaining credit facilities, while 43% had only one constraint from those listed in Table 3.4, and 23% had two constraints. Other constraints cited by respondents was the delay by the banks in processing loan/credit applications, which could lead to missing out on peak season operations; some banks would only provide a proportion of the money required and so it would be necessary for a company to obtain credit from several banks. Another problem was the currency risk since coffee exporters buy the crop in Uganda Shillings and then sell in US dollars. Some 53% of the exporters reported that they did not cover this risk. Others said they engaged in spot selling, forward sales, or long term contracts. Some said they would borrow in US dollars and pay back in dollars from their sales proceeds, and would hedge against any risks of currency fluctuations, etc. However, there were others who did not even know that such a risk existed.

3.4 Robusta Coffee Marketing Chain

Within Uganda, as illustrated in Fig 3.1, robusta coffee operations can be broken down into three stages, namely:

- a. planting, growing and sun-drying of coffee cherries into kiboko
- b. kiboko to FAQ (fair average quality)
- c. FAQ to free on truck/rail (FOT/R) stage

Figure 3.1 Uganda Robusta Coffee Marketing Chain



The first stage is the actual planting or farming operation. Few companies have developed coffee estates as has been done in neighbouring Kenya and Tanzania. Consequently, coffee is produced predominantly by smallholders on plots averaging less than 1 ha, although there are some large farm operations. After harvesting, farmers usually sun dry the red cherry on the farm – and sometimes but rarely sell red cherry for wet processing into washed robusta. Efforts are being made to expand washed robusta production. The vast majority of coffee from farms is *kiboko* (dry cherry), which sold to “kiboko traders” who bulk the dry cherry and transport it coffee mills for hulling.

There are a large number of dried cherry traders who are involved at different levels in the chain, including “bicycle” traders, estimated to be around 100,000 in number, some 4,000 or so local traders and an estimated 400 merchants. The large number of traders operating is partly a reflection of the inadequate road infrastructure and the need to use bicycles (with 4 gallon kerosene containers on the back) as the initial means of transport. It is the bicycles traders who have contributed to the quality problems at the village level because they usually do not pay premium prices for high quality coffee. At the next level are the petty traders who use often use “bodas” (motorcycles) to transport the coffee. Current net incomes of rural traders are estimated to be low at between US\$ 1000 to 3,000 per day. As transport infrastructure and agricultural financial services improve (including the development of a CWR system) the number of traders will decline.

There are an estimated 400 coffee processors. When the moisture content approaches 12%, the dried husk is mechanically removed (hulling) and the resulting product is ungraded coffee referred to as FAQ (Fair Average Quality). Removing the dried husk results in an approximate 55% weight loss (i.e. approximately 2 tonnes of kiboko make 1 tonne of FAQ). This stage takes place on a local and regional basis at the small hulling factories found in the coffee areas themselves.

In the past, the coffee mill owners bought the kiboko, dehulled it and sold the FAQ but now mills owners do not want to take the price risk so most mill owners provide a dehulling service at a fee. After milling, these small kiboko traders sell at the mill to “FAQ” traders, who then sell to the exporters, either to their district depot or in Kampala. Rarely do kiboko traders sell directly to exporters. It was suggested that FAQ traders and millers are working increasingly together. FAQ traders are used because most exporters have a minimum buying quantity (usually 300 to 500 kg) which most kiboko traders are unable to assemble and the buying process at the exporters’ depot takes some time and the kiboko traders are reluctant to wait for payment. The prices paid by exporters to FAQ traders are based on tests they make on the beans moisture content, defective beans and extraneous matter. Moreover, kiboko traders operate on very small margins and wish to turn their working capital over as quickly as possible. Exporters’ payments are often made through bank transfers, and kiboko traders rarely have bank accounts.

FAQ green beans are trucked to Kampala where the export company undertakes further processing, namely cleaning, sorting, grading, and drying. When the FAQ has been hand-picked to remove black and broken beans, it is then graded. This process further cleans the coffee and sorts it into different screen sizes that are indicative of the size of the bean. The larger the screen size, the larger the bean. As Table A3.3

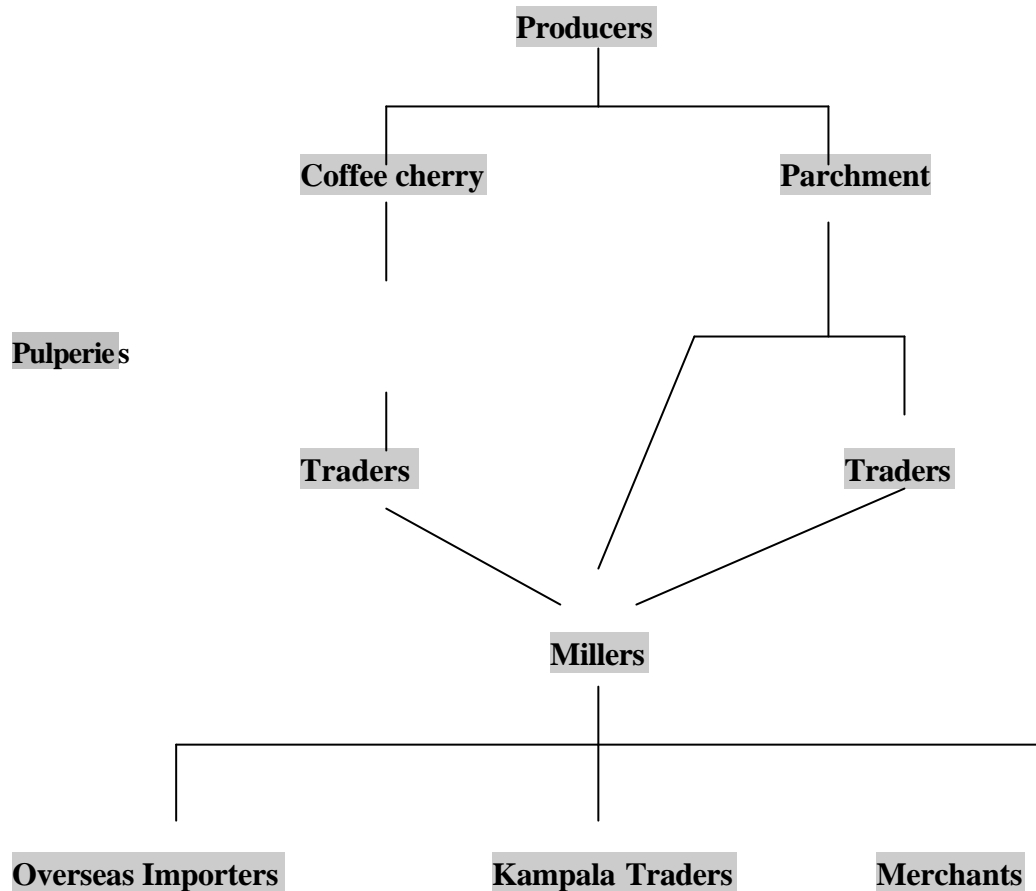
(Annex 3) illustrates, Screen 18, 15 (standard) and 12 are the three major screen sizes in Uganda. Screen 19 is also now produced in small quantities. There are several off-grades made up of broken and defective beans that are also produced called BHP (Broken Hand Picked) 1199 and 1033 along with black beans.

The third internal stage is the FAQ to FOT/R (Free on Truck/Rail) stage. The coffee is transported by truck or ferry/rail to Mombasa, Kenya and then by sea to export destinations. Most coffee is exported in bags (60 kg) in 20 ft (or occasionally 40 ft) containers. However, some exporters undertake bulk shipments, whereby coffee is blown into lined containers, which then holds a greater quantity and reduces packaging costs.

3.5 Arabica Coffee Marketing Chain

As with robusta, arabica coffee is produced by smallholders ranging from several trees to 300 hectares. Fig 3.2 illustrates the marketing chain for arabica. Farmers sell the coffee either as ripe cherry or parchment and will invariably be paid cash upon delivery. Parchment prices during the field work were between Ug Sh 2000 to 2100/-kg according to the quality being delivered with moisture content and the amount of defects and foreign matter amongst the parchment being important determinants. There are small-scale pulperies at farm level, where the cherry is washed, the pulp removed, and the resulting parchment sun dried. There are larger scale pulperies in the rural areas operated by traders, who usually sell parchment direct to “dry” millers as well as to other traders. Dry millers are located in urban centres e.g. Mbale and Kapchorwa, and these further dry the parchment, remove the “silverskin”, clean, sort and grade into exportable quality green beans. Grades produced are named Bugisu from AA, the best to AB and Peaberry.

Fig 3.2 Uganda Arabica Coffee Marketing Chain



Note: As with the robusta marketing chain (see above) there are a number of levels of coffee traders ranging from bicycle traders, petty traders to larger merchants.

Thus, arabica has to be pulped, milled, cleaned and graded and the elements of moisture (no more than 13.5%), and cleaning impose a loss of approximately 20% and grading allow for margins nearer \$75-\$95/mt before hulling and grading.

The millers sell to Kampala based traders (which are often international trading companies and/or their Ugandan representatives) or to overseas roasters and grinders or overseas located traders. Graded arabicas from Mbale are generally trucked direct to Mombasa to be sold on an FOB basis. Multinationals such as Kyagalanyi take the cleaned parchment to Kampala for hulling and grading and then sold on an FOB Mombasa or C & F basis. The arabica coffee marketing chain tends to be shorter than robusta and with more direct overseas marketing links.

Speciality Coffee Marketing Chain

The production and export of speciality type coffees e.g. organic, fair trade, gourmet, and washed robustas is very small but growing. Most of these coffees are arabicas with the exception of washed robustas. The marketing chain for these coffees tends to be short. Thus, fair trade coffee will go from the primary co-operative society (PCS)

to the union exporter or UNEX to the overseas fair trade buyer. Organic coffee will pass from the certified producer to Kawacom, which pays for certification and dominates organic exports and passes on part of the premium to the growers. No data were obtained on production (and marketing costs) for speciality coffees produced in Uganda.

Transaction Costs and Margins

Coffee marketing is extremely competitive throughout the value chain and margins are small. Thus, margins for delivering FAQ coffee to Kampala were estimated at between \$80 and \$160 per metric tonne. According to a World Bank Transaction Cost study (2002) competition is comparatively healthy at all levels of the supply chain, and coffee production, marketing and transformation are well established and understood by all participants in the chain. Quality standards are widely known but there is plenty of scope for improvement at the farm level. The main area of contention is price, and farmers often suspect that they are being cheated by traders.

3.6 Quality Issues and Trends

Local exporters and multinationals are all agreed that there has been a decline in the quality of FAQ robusta they receive. Intense competition in most areas following liberalisation meant there were few incentives to produce better quality coffee. Farmers adopted poor husbandry, harvesting and post harvest handling techniques; the kiboko often has high moisture content and is stored wet – leading to fermentation, mustiness and tainted coffee. Strip picking has increased leading to the harvesting of immature beans and black beans. An increasing concern is that kiboko or the processed coffee has been exposed to ochratoxins and other negative factors in the soil or the bean. Exporters are now required to undertake greater efforts with regard to drying, cleaning and grading. Thus, artificial drying, regrading and sorting equipment have been installed to handle FAQ quality. When prices were low 2 or 3 years ago, it was difficult for suppliers to find an incentive to produce quality but now that the market has improved, buyers of FAQ are looking for better quality, including lower moisture content.

Liberalisation of the coffee industry has meant considerable change in the way coffee is collected, processed and marketed. Quality control at the primary level can assume a number of different forms:

- the UCDA can attempt to ‘police’ harvesting, processing and drying.
- penalties can be imposed by market values for lower than average quality; however, this does nothing to encourage better than minimal or average quality.
- premiums can be offered for better than average quality which can be combined with a refusal to purchase inferior quality; this then leaves open the question of what will happen to such coffee.

While the UCDA inspects all exporters’ graded coffees, some multinational companies suggest that these standards are not as high as might be expected. The ICO’s Coffee Quality Improvement Programme called on producing members to no longer permit, from 1st October, 2002, the export of arabica coffee with more than 86

defects per 300 gram sample or robusta coffee with more than 150 defects per 300 gram. The Programme also asked members not to allow arabica or robusta of any grade to be exported whose moisture content is below 8% or above 12.5%. Exceptions are permitted for speciality coffees that traditionally have a high moisture content such as Indian Monsoon Malabar.

The Act of 1994 which governs UCDA activities gives UCDA the power to ultimately cancel an exporter's licence if quality is deemed to be too poor for the exporter to continue trading. This power appears to be rarely exercised. Also, it is felt that the tolerances laid down in the Act for defects and foreign matter could be revised so that the UCDA tolerances would be fully equal if not above both New York and London terminal markets' requirements.

If a CWR system is adopted for coffee then this can assist in improving both the level and the consistency of coffee deposited at the warehouse, since coffee meeting certain quality grades would be accepted.

3.7 Risks and Their Management

Stakeholders in the Ugandan coffee sector face a wide range of risks. These include:

Geographic – including climatic factors; Uganda does not produce a great deal of washed coffee and is therefore reliant upon sun and air drying; the lack of a distinct dry season has caused problems in the past making it difficult for some exporters to meet commitments on a timely basis; some processors have installed mechanical dryers as a result. The UCDA has been promoting washed robusta coffee and any lack of mechanical drying capacity could create problems.

Biological – especially pests and diseases including coffee leaf rust, *broca*, coffee wilt disease (*trachemomycosis*) and coffee berry disease; the UCDA has programmes aimed at overcoming these problems.

Economic – price volatility, differential price risk (basis/quality), income volatility, and exchange rate risk; for growers, processors and exporters, their transactions will incur market risk from the long side and be affected by world and local market volatility.

Infrastructure – the current shortage of sufficient physical infrastructure, compounded by inefficient transport systems creates competitive risks for all those operating in the sector and can undermine the sector's cost-competitiveness; the availability of infrastructure will be an important factor influencing the choice of location for any CWR project that is proposed.

Financial – little formal credit is available to growers although some informal networks exist and these include trader lending, rotating savings and credit associations as well as farmer to farmer lending; growers invariably lack collateral for loans and hence credit is usually linked to supply of inputs in return for the delivery of crop; in addition, there is a lack of suitable financial instruments. A recent study "Agricultural Finance in Uganda: the Way Forward" (2004) contains detailed analysis

of financial bottlenecks and possible solutions. While an affordable CWR system might provide some solutions to post harvest credit difficulties there is a definite need to improve pre-harvest finance for inputs etc since this can have a significant impact on raising the production of quality coffee.

Political instability – arising from past civil wars and the lack of democratic institutions; commodity operations are vulnerable to the politics of Uganda and the East African region as a whole given that Uganda is a land-locked country. President Museveni has been instrumental in creating stability alongside interesting commercial opportunities. However, he is currently seeking a third term of four years which is not allowed under the Uganda constitution; this has to be resolved before elections in 2006.

Institutional and Social– the lack of developed institutional structures particularly with regard to finance, banking, an inadequate judicial system and problems of contract enforcement and contract default, while corruption is common. Inadequate social capital (e.g. lack of trust and collective action and responsibility) can increase transaction costs, as can ethnic conflict. A CWR system can assist relatively easily with regard to contract enforcement and in the building up of trust.

Theft/Fraud and Operational: coffee is an expensive commodity. One container (18 tonnes) of robusta standard grade screen 15 is worth US\$ 12/15,000; arabica is around \$40,000. The opportunity for theft ranges from porter's stealing a kilo a day to gangs driving trucks through warehouse walls to steal tons to documentary clerks colluding with suppliers to falsify weight receipts. In addition, fire, water, electrical and mechanical malfunctions can adversely affect commodities in store during processing or transportation. A CWR system can assist in overcoming some of these problems. Under a CWR system depositors and lenders must be certain of the security of the coffee, and insurance against fire and theft is a pre-requisite of the system. This insurance usually costs around 2% of sum insured.

Quality - high moisture content, poor storage facilities, shipping accidents, insect infestation can all affect the quality of the commodity causing quality claims with buyers. A correctly established CWR system will enable enforcement of quality standards. If a Group/Association is delivering to a CWR warehouse they too should be able to address the problem.

Counterparty Performance - the person or entity on the other side of the commodity transaction represents another area of risk; when coffee is delivered, will the supplier be paid? If there is a contract to have coffee delivered at a fixed price at a future date, will suppliers deliver if prices go against them?

Risk Management, including Hedging

As outlined above, a correctly constituted CWR system can assist in overcoming some of the risks. In addition, various risk management techniques can be adopted to minimise some of these risks. These include:

- diversification of production,
- pest and disease control techniques including Integrated Pest Management strategies,

- greater cooperation among growers through development of groups and associations
- increased vertical integration by traders
- adoption of a range of risk management techniques (e.g. forward selling, hedging, insurance)

Hedging is a trading operation designed to transform a less acceptable risk into a more acceptable one. It serves all levels of the marketing chain from those who are exposed to the risk of falling prices (sellers), rising prices (buyers), or both. The principle of hedging is based on the idea that prices of the physical commodity and the futures contracts generally move together. It is not a form of insurance because buying and/or selling relates to a specific price. It is a form of risk management with the use of futures and options as tools for managing risk. Hedging is often confused with speculation. Hedging is a means to avoid or reduce price risk, while speculation relies on the risk element whereby price movements going up or down will hopefully obtain a profit for the speculator.

In an uncertain market, traders and roasters are reluctant to purchase physical coffee outright on a forward basis. A system has been developed therefore whereby coffee is sold without specifying a price, but at a Price To Be Fixed. The contract constitutes a firm agreement to deliver and accept a quantity of physical coffee of a known quality and under established conditions. This arrangement provides flexibility for both buyer and seller whereby the obligation to deliver remains but both parties can play the market subject possibly to stops whereby limits on the price range can be agreed by both parties until the price can finally be fixed.

A number of factors limit the use of risk management instruments by both Ugandan growers, traders and, to a lesser extent, exporters. These include a limited legal and judicial framework, which leads to a lack of contract enforcement. The financial situation including a lack of liquidity, access to short term credit at and foreign exchange, and an inability to pay margin calls. Infrastructure constraints including the lack of transport, limited local information, the lack of local intermediaries including local brokers and intermediaries and hence a lack of competition. Ignorance about the role of risk management instruments; complexity of the risk management tools offered to local users; mistrust about the instruments as well as the operators; relatively high cost of using options. The high local cost of financing coffee purchases is such that to find additional facilities to guarantee margin calls makes it prohibitive for local Ugandan exporters to contemplate using any hedging mechanism. Multi-nationals have the advantage of hedging their purchases or stock and, on occasion, selling on a 'price to be fixed' basis by utilising their overseas offices' facilities. Communications with the London and New York markets is of course not a problem and some local exporters use the internet to obtain the latest market prices on the '15 minute' screen which shows the prices 15 minutes after a trade is concluded in either terminal market.

CHAPTER 4 FACTORS RELEVANT TO ADOPTION OF CWR SYSTEM

4.1 Introduction

This chapter assesses the relevance of a CWR scheme to various stakeholders in the Uganda coffee sector, including smallholders, local and multinational exporters and banks. In addition, the relevance of CWR to coffee quality and traceability is also discussed along with some legal aspects of a CWR scheme.

4.2 Smallholders and CWR

Individual coffee growers, who are predominantly smallholders, will be unable to utilise a CWR system unless they are organised into larger farmer groups and/or associations. Some larger farmer groups have been established but it was not possible during the visit to hold discussions with them regarding the viability of their utilising a CWR scheme. However, meetings with staff of NUCAFE (National Union of Coffee Agribusiness and Farm Enterprise) in which projects were discussed whose major objective would be to enable smallholder coffee growers to access credit using their coffee as collateral. An outline of possible pilot projects (PP) are contained in Chapter 5. As discussed briefly in the following Section 4.3, there may be potential for the use of CWR by the large number of smallholder outgrowers that are proposed under the Kaweri Coffee Farmers Support Project (KCFSP) currently being established.

4.3 Multinational Exporters and CWR

Foreign-owned companies now dominate Ugandan coffee exports and local owned and operated companies find it increasingly difficult to compete. This has been a feature in nearly all countries where commodity markets have been liberalised. The reasons are not hard to find. As detailed earlier, a key factor is that foreign buyers have access to relatively cheap sources of international finance as well as the ability to manage price risk through hedging on futures and options markets. In addition, they have a number of other advantages which include: head office staff able to sell the coffee in most major markets and provide detailed market information to their overseas subsidiaries; alongside the ability to arrange competitive freight and shipping. Several of these major commodity trading houses are based or have operations in Switzerland which offers certain tax advantages; moreover, they are invariably privately owned which facilitates quick decision making as well as reducing the degree of scrutiny compared with publicly quoted companies.

While the dice appear heavily loaded in favour of the multinational exporters they are still under pressure from shareholders to return a profit. To meet this objective, they are constantly devising strategies aimed at improving profitably – and in some cases minimising losses since several have had their fingers burnt on a number of occasions.

As a result, fewer multinationals appear willing to operate outside Kampala to buy kiboko and process into FAQ and are increasingly dependent on supplies from local traders and exporters.

Some multinationals are trying to increase volumes handled in order to spread costs. The multinational Kawacom is taking the lead in the export of organic coffees and coffees accepted under Utz Kapeh standards. While this company uses a form of WR to raise finance against stocks of coffee held locally it is unlikely to use a locally established system. Using EU funds, another multinational, the Neumann Kaffee Gruppe (NKG) is in the process of setting up the Kaweri Coffee Plantation Ltd in Mubende District covering 2,500 ha with the objective of producing prime quality robusta using its own hulling facilities. As part of this \$10 million project, the Kaweri Coffee Farmers Support Project (KCFSP) is planning to facilitate the organisation of initially 5,000 coffee farmers (rising to 20,000) into viable commercially based independent production and processing units that would deliver bulk “speciality origin sustainable” coffee to the plantation. If a viable local CWR system can be established then it may be possible that these growers could utilise such a system.

Already a type of CWR scheme is in place for the multinational companies, in that their stocks are being certified by collateral managers (CM) and the multinational company is able to raise up to 95% of their value. Indeed one company stated that it did not even have to use a CM but rather it simply informed the Head Office of the level and quality of the coffee stocks held and this was sufficient for the international bank to lend money. Thus, the international banks are lending money not only against warehouse receipts (WR) but also based on the borrower’s balance sheet and reputation. In some cases there appear to be Collateral Management Agreements in place between the exporting company, the CM and the bank lending the money. This is a somewhat different type of CWR system that was envisaged under the CFC CWR Project.

Nevertheless, multinational companies may find the proposed CFC CWR scheme of interest if the WR is negotiable since it would offer an additional and secure source of coffee supply. However, multinationals are not generally interested in the development of a new CWR system within Uganda, in part because of the anticipated cost and with no advantage in securing cheaper finance compared to their traditional sources overseas. One multinational company even argued that it was not in the interest of multinational companies to have a successful CWR scheme since it would help to strengthen competition from local exporters!

Where CM provides a WR accepted by the multinational, it can provide the multinational with a defined stage at which:

- The multinational is offered or has a quantity of acceptable coffee for sale or a speculative position. This can only refer to those holding long positions. Selling short has no relevance for WR. Negotiable WR could offer the possibility of trades in WR as paper transactions.
- The multinational has acceptable coffee for onward performance or stock which can be audited for internal checking procedures or else to raise finance.

Risk management is often associated with price protection. Multinationals can buy protection against many forms of risk, whether physical loss or damage as well as quality, market risk or performance risk. At the heart of any corporate body's management of risk, is the knowledge that full legal title to the coffee is inherent by the issue of a title document such as a WR or other acceptable document of title such as a Bill of Lading. Without that knowledge, title is no longer inviolate. The question mark over hanging the WR is whether it can be accepted as an absolute title document and which is negotiable.

Most of the large players in the local market are extensions of a large Western trading company deriving a proportion of their income from speculation built around a physical book. These trade houses do not have a 'natural' position or orientation in the sense that producers are naturally long while roasters are naturally short. Given that the margins for moving coffee from producer to roaster are minimal, the trader must often speculate to make a return on capital. This is not to say that producers and roasters do not speculate, clearly they do. The differences are of degree and motivation.

4.4 Local Traders and Exporters

The local Ugandan coffee exporter is looking for a means of obtaining finance for his trading activities which offers his provider of finance a more exact means of collateral. Traditionally, banks require debentures to be issued against the stock of coffee. But these are limited in that while a debenture is a certificate of indebtedness given by a company by means of a fixed charge on the company's assets, those assets are not necessarily definable and are rarely transferable as with a negotiable title document.

A small number of local exporters, as with multinationals, do use collateral management to oversee part of their transactions. This is done usually to satisfy any pre-finance arrangements that may have been agreed at the time of entering a contract, or, as in the case of multinationals, to audit coffee stocks for compliance with their internal risk management procedures. Thus, CWR are currently used as a means to assist in transactions rather than as a sole means of collateral to raise finance.

As multinationals appear less willing to operate outside Kampala, the perception is that the local traders and occasionally exporters can provide FAQ to multinationals using their own resources and contacts in the producing regions and take advantage of the margins available in this process. A key constraint for these companies, however, remains one of finance and if export sales are to be made then some form of pre-finance from banks or an importer is often necessary; but this can be costly and further erode already tight operating margins.

Vertical integration based upon more secure primary supplies, (kiboko in particular), leading to sales FOT/R Kampala should give the local companies more scope and more margin to compete with the multinational companies. This is not a strategy being considered with much enthusiasm by most local companies, but given that WR

and the traceability of the coffee being therefore transparent, the application of WR should assist the local company in presenting his case for a financial facility.

However, the major operators in Uganda employ their capital from the top of the process downwards as the risk profile at the kiboko stage is considered too great to be viable. Local companies are constrained by lack of finance and in turn the management to oversee such a project. It will be noted that ACE has 110 staff which monitor commodities around the country while Cotecna are ready to expand their newly established operations. By investing in collateral management therefore, the local companies have the possibility of a more effective control over local operations.

In theory, a CWR system should provide an advantage to local exporters over multinationals in enabling the former to become more competitive in the local market. As such, this is of negative interest to a multinational while it is the hope of the local exporter.

There are several potential advantages that could accrue to exporters (and warehouse owners) from a CWR system. Thus, those who do not fully utilise their warehouse facilities could benefit from having depositors placing coffee at their premises. They would benefit not only in terms of sharing the cost of collateral management, but also (as exporters) having easier access to coffee.

4.5 Financial Institutions and Collateral Managers

As a result of liberalisation measures in Uganda, the multinationals have gained considerable ground at the expense of local operators. This, coupled with defaults in past years by Ugandan exporters as well as the apparent demise of a considerable contract involving what was the largest Ugandan exporter in 2004 has left the local banks wary of relying solely on coffee stocks as collateral. To this must be added the Ugandan bank's general lack of understanding of the coffee market and its operations.

Banks need the guarantee that WR will become receivables: that is, commercial invoices backed by negotiable Bills of Lading or other relevant documents of title to the goods. It is notable that among the three collateral managers in Uganda, only one, DRUM, is prepared to issue their own guarantee to the bank regarding the issue of a WR whereby DRUM will accept full risk and responsibility for the coffee. This confirmation should serve to assist a lender with their appraisal of an applicant for finance.

Guarantees need to be backed in turn by fidelity and liability insurance of a quality and level that is acceptable to the banks. Equally, the insurance policy, and the underlying collateral management contract, must be based on acceptable jurisdiction under Ugandan law.

Local Ugandan coffee exporters have had their integrity questioned many times because some have defaulted on loans which were set up for the express purpose of financing coffee for export. As a result, banks in Uganda prefer to look only at the financial profile of the local exporter. None of the three banks in Uganda involved in

the establishment of CWRs were prepared to advance funds solely against the WR as a title document. Two of the three banks interviewed appeared to have limited knowledge of risk management from the perspective of a coffee trade and regarded the coffee market as 'very risky'.

By contrast, the South African bank, ABSA, (which is currently in the process of amalgamating with Barclays) does finance against WR under conditions which it establishes and ABSA purports to have a sound knowledge of the mechanisms of 'risk management'. ABSA has conducted coffee finance trades against WR in Brazil as well as for cocoa in Nigeria and has one substantial coffee transaction under way in Uganda. ABSA also offers the possibility of financing coffee farmers using WR and is willing to explore the possibilities of a scheme in Uganda. ABSA already has a scheme in South Africa financing smallholders growing grains, sugar and soya beans. In addition, ABSA is reported to be providing a \$10 million pre-export finance facility to Pan Afric Impex (U) Ltd., a major trading company, with CM being undertaken by a UK based company, Drum.

4.6 CWR and Coffee Quality

Quality limits can only be determined by an active quality control body. Coffee is part of the modern food chain and health concerns are increasingly shaping quality controls at the receiving end. Not only may customs and health authorities in consuming countries order the destruction of 'hazardous' parcels, but they will also trace responsibility back to the source: the country, the shipper and even the individual grower. The need for 'traceability' is the outcome of consumer pressure and is reflected in stricter food safety legislation as well as stricter company and industry standards. People want to know that their food is safe. CWRs can provide an identifiable and legally acceptable stage in the traceability of a coffee's movement from grower to consumer. A warehouse issuing CWR could play an important control point in two systems that are important in quality control and traceability, namely HACCP and GAP.

Hazard Analysis Critical Control Points (HACCP) is a management system in which food safety is addressed through the analysis and control of biological chemical and physical hazards from raw food material production to manufacturing and consumption. Control points centre on controls that have to be applied where the loss of control may result in a low probability of a health risk and those which may result in a high probability of illness. For example, the coffee drying process is a vital critical point in the HACCP system and inadequate drying can be destructive to health.

There is also the Good Agricultural Practice (GAP) quality assurance system which has a different approach. HACCP concentrates on a few critical points while GAP tries to make all-round improvements. The two processes are complimentary in that GAP will improve coffee quality, whereas HACCP will provide disciplined monitoring and control that consumers now demand. More importantly, it is only through the HACCP process that one can establish where OTA enters the system and

this is essential if one is to meet European Union and United States requirements for the reduction and prevention of OTA contamination.

A particular food safety issue for coffee is concern over the presence of ochratoxin A (OTA), a mycotoxin that is believed to cause kidney damage. Although the toxicological status of OTA has not yet been settled, importing countries are increasingly paying attention to its occurrence in coffee.

Since the tragic events of 11th September, 2001, the Food and Drugs Administration (FDA) of the United States in 2002 initiated the Bio-Terrorism Act which requires the registration of not only importers of goods into the USA but also their suppliers. The inspection by US Customs of coffee containers and even coffee samples has become much stricter and the FDA Food Security Preventative Measures Guidance includes a large 'track and trace' element.

4.7 Legal Environment including Contracts

In most countries, a warrant automatically provides title to the goods but with WR this is not necessarily the case. National legislation may be unclear on the enforceability over the goods and may not accept them as negotiable documents of title. The usefulness of WR in general is well established, particularly as a source of credit for producers of seasonal crops. But for the Uganda coffee export industry, WR represent only part of the answer to the banks' concerns about debt security and debt or collateral execution. Banks, especially those in Uganda, need the guarantee that WR will become receivables: that is, commercial invoices backed by negotiable bills of lading or other relevant documents of title to the goods. While such guarantees may be backed by indemnity and liability insurance, the underlying collateral management contract must be based on acceptable jurisdiction.

Negotiable WR present a potential for fraud in that the documents themselves may be stolen or falsely endorsed. Thus, collateral managers, such as Cotecna, prefer to issue their own non-negotiable receipts as part of 'guaranteed total performance' packages which they back with liability and indemnity insurance. It could be argued that the real value of such insurance will emerge only when a large claim arises, because insurance cover is only as good as what is stated in the policy document.

The Warehouse Receipt System Bill which is to be presented to the Uganda Parliament some time in 2005 states its objectives as follows:

- provide for the licensing of warehouses and warehouse keepers
- provide for the issue of warehouse receipts
- provide for a national system of warehouse bonding for the protection of depositors
- provide for other related matters.

It should be designed for the beneficial holder of the WR to enforce his rights ahead of any claims that others such as the tax authorities or warehousemen may have. From the draft proposed legislation, this does not appear to be clearly addressed.

The test of such legislation is whether a creditor can enforce the rights which are supposedly conferred when the WR is accepted as a document of title. Where rights under a title are obtained, the execution still needs to be supported by legislation that will permit the creditor to trade or export the underlying goods. In the case of Uganda coffee, the creditor will need an export licence. The question arises as to whether one will be granted if the company is not already trading coffee under licence. Furthermore, can the execution process be interfered with or delayed? In Uganda, the execution of debt presents banks with major problems. No credit risk assessment can avoid the legal and sometimes physical difficulties surrounding the execution of the lender's rights.

It is notable that the UCDA does not issue or even suggest a standardised coffee contract. It is not clear whether the UCDA has sufficient power enshrined in the 1994 Act which lays out the UCDA regulations to enforce contractual obligations. The UCDA would appear to be able only to monitor the coffee trade by means of inspection of the coffee for export and the issuance of certificates for export. It does have the ultimate power of cancelling a coffee exporter's registration. From the Uganda bank's point of view, and indeed from the coffee trade within Uganda, a proper form of contract would be desirable. However, its enforcement would be questionable with or without current legislation.

CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter some of the initial conclusions from the previous analysis are summarised. It is recommended that two pilot projects be established, one for robusta and one for arabica; and that detailed discussions be held with regard establishing a third scheme involving farmers' groups.

5.2 Some Initial Conclusions

From the previous chapters a number of conclusions can be drawn:

Opportunities appear to exist for the establishment of a CWR scheme in the Uganda coffee sector but establishing such an operation will need careful planning and will not be straight forward.

The policy and economic environment within Uganda has become more favourable for the development of a CWR scheme but it is vital that Warehouse Receipt Bill currently being considered by Parliament is passed, so that a suitable regulatory framework is in place. Moreover, the recent reversion of inflationary trends needs to be contained to limit local increases in interest rates.

There is considerable interest in a CWR scheme by many of the stakeholders in the coffee sector – but there is not a lot of understanding of complexities and costs involved. Therefore much training is needed to sensitise various stakeholders to these needs.

Smallholders will not be able to access a CWR scheme unless they establish strong and well organised farmers groups and/or associations.

Multinational exporters have negligible interest in a new CWR scheme in Uganda except if WR Receipts are negotiable and thus can be used as a means of acquiring coffee.

There are a numbers of constraints working against the introduction of a CRW scheme.

1. Currently local exporters have negligible interest in a CWR scheme with regard to green coffee since they want to export immediately rather than hold stock; however, there would be interest if a company had a sizeable export contract and coffee stocks could be financed until the required quantities are in stock.
2. Currently a CWR scheme can only be introduced in robusta for the stage from *kiboko* to FAQ and for arabica from *parchment* to green coffee – in both cases

this is a relatively short time period. An estimated 7 to 10 days for robusta and 21-30 days for Arabica.

3. The coffee sector in Uganda (and elsewhere) is perceived as a high risk financing operation – several banks have “burnt fingers” including HSBC and ABSA (about to be taken over by Barclays) – some of the companies in Uganda that have been reported to have had financial difficulties include Nsamba, Quality Commodities, Panafric and Karimjee.
4. Although multinational companies are having an increasing share of Ugandan exports, some of these operations have made substantial losses in some years; the sector is a very competitive with low – and sometimes negligible! – margins.
5. Throughout the coffee marketing system there is invariably a lack of trust, which is vital to CWR system.

5.3 Robusta and Arabica Pilot Projects

Overall Features of the Pilot Project

It is recommended that initially two Pilot Projects (PP) be set up, one handling predominantly robusta coffee and the other arabica coffee. The objective of the PP would be to develop a user-friendly coffee CWR scheme which would incorporate the following features:

- Coffee producers (initially farmer groups) and traders would be able to deposit unhulled robusta (kiboko) and parchment arabica coffees in a designated processing unit with secure warehouse storage capacity.
- A collateral manager (CM) at the designated facilities would weigh and grade the lot to ensure it met the adopted quality standards; and then issue to the depositor a warehouse receipt (WR).
- Initially the WR would be non-negotiable; it would detail the name of the depositor, the quantity and quality of the coffee deposited, the terms and conditions under which the coffee was stored.
- The operator of the processing unit would be responsible for further processing and storage of the coffee with the CM monitoring the coffee to ensure that the quality and quantity is preserved.
- The depositor would receive a cash advance from the participating bank(s) against the WR, which would then be held by the lending bank. The coffee would not be released until the original WR is presented to the CM and the release approved by the bank.
- It would be depositor’s responsibility to sell the coffee and the CM would be responsible for delivering the coffee to buyer provided certain conditions were met (i.e. the accrued storage charges have been paid and the financing bank has authorised release of the stocks following repayment of the advance provided).

- The purchaser of the coffee would pay the lending bank which would deduct various costs (e.g. warehouse and CM costs and bank fees) and give the balance of the sale price to the depositor
- Coffee deposits would not be restricted solely to farmer groups and traders, since it is anticipated that exporters will keep stocks of processed coffee at these locations, and thus help to cover some of the costs of operating a CWR system.

Key Issues that need to be Addressed

For the success of the CFC UNOPS project it is vital that the PPs succeed and, therefore, detailed preliminary analysis of the structure of PPs and the potential pitfalls need to be analysed. The various issues that need to be discussed and resolved in setting up a PP are outlined below.

Legal Structure

The necessary legal system needs to be in place to enforce the WR warehouse receipt. Therefore it is vital that the Warehouse Receipt Bill currently before Parliament is passed. Once this is passed then a regulatory institution needs to be established to enforce the legislation.

Security, theft, fraud and other losses

Under a CWR system depositors and lenders must be certain of the security of the coffee since losses can occur for a variety of reasons e.g. theft, fire, unauthorised issuing of WR, cheating on weights and quality. Systems need to be in place to ensure that these do not occur. Thus, insurance against fire and theft is a pre-requisite of the system and this usually costs around 2% of sum insured. WRs need to be standardised and contain design features that reduce the risk of fraud. A clear audit trail and verification system for the issuance and transfer of WR and the release of coffee needs to be established to ensure that there is no unauthorised release of collateralised stocks. The scales and grading equipment used need to be checked regularly. The physical structure of the warehouse and the management skills of the staff are an important aspect of security. It is important that the warehouses used meet minimum physical and that warehouse staff are trained and certified.

Location

It is important the PP is accessible to as wide a range of players as possible, including producers' organisations, traders and exporters. Some of the possible locations identified include Mbarara in Western Uganda and Masaka in Central Uganda which are predominantly robusta-producing areas; for arabica Bigusu in Eastern Uganda and Paida in north-west Uganda.

Participants

The system will be open to all players, but the primary target depositors will be farmers belonging to primary cooperative societies and traders including exporters.

The organisations involved must be legal entities – and should be subject to due diligence. Under international and national banking regulations, all depositors receiving advances against WR are required to open a bank account. This will limit the opportunities for small farmers and traders to directly deposit coffee. Under the PP potential depositors would need to be identified and profiled, and the appropriate details provided to the bank(s). If depositors did not already have an account with one of the participating banks then they would need to open one. Possible participants so far identified include Job Coffee Ltd at Mbarara, Kibenje Coffee Farmers Ltd. in Masaka, Bigusu Co-operative Union in Bigusu, and Okoro Cooperative Union in Paidha.

Depositors may be required to provide off take sales contract to exporters before a WR could be issued in order to minimise any marketing risk. This will be less necessary if the Uganda Commodity Exchange begins successful trading in coffee. Hence it is important that there is close collaboration between the CFC-funded CWR project and the EU-funded project in support of the Uganda Commodity Exchange, as well as other CWR projects currently being implemented or considered.

A key objective of the PP is to allow producers to obtain inventory finance and delay sale during the harvest season. This will enhance their bargaining position and could lead to reduced margins for traders – which could make the system unattractive to players currently in a strong position in the market.

A serious proposal was put forward by Harry Mrema, a Tanzanian now working for NUCAFE, whereby smallholders could access credit using their coffee as collateral. This proposal is outlined in detail in Annex 5. The proposed project is designed to allow the smallholders to deliver coffee without demanding payment upon delivery. For several reasons including the severe time constraints under which the CFC project is operating, the difficulties in mobilizing the proposed project participants (individual farmers, farmer groups and associations) as well as the difficulties outlined above regarding smallholders participation in a CWR system (e.g. scale of output, access to bank accounts etc.) it is proposed that this proposal be considered once the proposed PP are underway.

Warehouse facilities and minimum lot sizes

In order to cover the costs of storage, CM and bank fees a sizeable and secure warehouse facility will have to be available, with a sizeable storage capacity probably in excess of 1,500 tonnes. The larger the lot size that is deposited then the more viable the PP is likely to be of the order of a truck load i.e. around 5 tonnes as it would be totally uneconomic to have smallholder delivery of lots of only a few 60 kg bags. This would necessitate some bulking of smallholder production prior to deposit by either a trader or farmers group. A key output of the PP would be to develop a module regarding viable lot sizes based on the various costs and benefits of operating a CWR system. Such a model would help guide decisions with regard to the overall viability of the scheme and facilitate any future roll-out of the CWR scheme.

Management and Economic Viability

Close management of each PP is vital (presumably this will be an important role for the LMU), and this requires careful consideration of the PP's management structure and the monitoring and evaluation of PP activities and outputs. It is vital that cost models are prepared for each of the PPs. This is not only in order to identify the various costs and hence potential viability of the project but also that discussions can be held as to which parties will be responsible for bearing the range of costs involved.

Collateral Management

Security of the stock will have to be guaranteed by the Collateral Manager. The appointment of a Collateral Manager (CM) for the PP needs to be agreed by the various parties involved and agreement reached on the costs involved and who will meet them. The appointment of a CM should be based on a competitive tender. Alongside CM's proposed charges to operate the scheme – which are likely to be in the range of \$1,500 to \$2,000 per month to run the warehouse - it is important to evaluate the CM previous track record in operating such a scheme. The CM must have the confidence of the banks and has professional indemnity cover.

In addition, it needs to be decided how the warehouse keeper/CM will be paid. While the depositor of the coffee (and other commodities) will ultimately have to pay it is unlikely that they will be able/willing to pay up-front and therefore the fees etc will have to be taken from the final sale proceeds.

It is important that there are clearly defined responsibilities between the CM and warehouse operators; reflected in contracts between the CM and the banks. In addition, the CM and the warehouse operator must have the equipment and skilled personnel to enforce commodity standards.

Finance and Credit

One bank or several banks could be involved in providing funding to the PP; ideally it would be preferable if several banks were jointly involved in PP thus helping to reduce individual bank exposure and support their existing clients.

The level of credit advanced against the WR will be dependent on the bank's valuation of the coffee. Price information is available from a number of sources including the UCDA, the International Coffee Organisation, various coffee exchanges and collateral managers. It is important that staff within the participating banks monitor price developments very carefully. This is not only with regard to the initial credit but also since coffee prices fluctuate widely it is possible that the value of the coffee becomes lower than the credit provided, in which case it will be necessary to sell the coffee or pay back some of the credit provided. Banks will need to closely monitor the link between market value and book value. The bank may also instruct sale of the coffee if the maximum agreed storage time has been exceeded.

Both depositors and lenders are exposed to price risks and, as discussed in Chapter 3, there are currently no risk management instruments available in Uganda.

Therefore it is important that detailed and timely coffee market information is available to the major players

Obviously the level of finance involved will be dependent on the volumes and turnover of coffee deposited and the level of proportion of the value of the crop given to depositors. Assuming 2,000 tonnes of robusta and 4,000 tonnes of arabica, valued at approximately US\$ 1.1 million and US\$4.3 million respectively, and 80% financing then an estimated \$4.0 million will need to be advanced by the banks against stored coffee.

The volume of the coffee handled is very important in spreading costs and making the PP viable. However, it has to be recognised that initially a PP will not succeed without some element of support. Ideally some initial working capital or possibly a bank guarantee will be needed to fund part of the initial activities of the PP.

Quality

The quality of the coffee that will be acceptable for deposit needs to be established in discussions with the UCDA and other stakeholders. Currently the UCDA does not have a standard form of contract – it would be helpful if it did. A correctly established PP should enable the enforcement of quality standards and help to overcome some of the current quality problems relating to high moisture content, poor storage facilities, incorrect handling and insect infestation, all of which can have a detrimental effect on the coffee. If a producer's group or trader is delivering to the PP they will need to address any quality problems – although in the short term there may be a problem of balancing the need for volume throughput with quality standards. Thus the depositors need to be trained to enable them deliver quality beans with minimum risk of rejection which would be very costly for the depositors.

If quality standards are established and enforced under the CWR PP then there is potential for improved coffee quality throughout the value chain as producer organisations use CWR as a means to help them bulk and enforce quality standards at the farmer level. This has the potential to benefit not only local traders and exporters but also the multinational companies who frequently complain about poor coffee quality.

Training

There is a need for sensitisation/understanding and training of the various stakeholders involved in the PP, including depositors; CM, warehouse and bank staff.

Contracts

To make the PP bankable appropriate contracts have to be made out and legalised or assigned to the bank. Annex 4 contains some draft robusta and arabica contracts.

Some features of the proposed contracts include:

For simplicity they should be fixed price contracts, although a bonus/premium paid for quality should be built into the contract if this is possible.

Initially the PP must be as simple as possible and must be bankable.

The *robusta* contract is between the buyer/processor of the kiboko and exporter who buys the FAQ. The need for the contract is twofold: to make transactions bankable and to encourage quality. In addition, a contract between local exporter and overseas buyer?

The *arabica* contract is between the buyer/processor of the parchment and the importer of the green coffee. With the arabica PP there will already be a contract between the Cooperative Union and the importer, which is acceptable to the bank. One issue is the currency in which the WR will be issued since contract between exporter and importer will be in US dollars - will the contract between the exporter and the Cooperative Union be in US dollars or Ugandan shillings?

The robusta contract should be in Uganda shillings but a US dollar contract could be used if both parties are agreed. To avoid exchange rate risk it is desirable that the transaction should be in one currency although with the regard to the arabica PP the problem may be that the Cooperative Union will be buying parchment in Ug Sh and selling in US dollars.

ANNEX 1 TERMS OF REFERENCE

TERMS OF REFERENCE – UNOPS/CFC WAREHOUSE RECEIPT PROJECT IN TANZANIA, UGANDA AND ZIMBABWE

PETER GREENHALGH

Peter's contribution will be in the two main areas outlined below:

1. Review of cotton and coffee marketing systems for the purpose of identifying inefficiencies in the system and providing practical advice on strategies and interventions needed to improve marketing of the commodities and returns to producers (especially the smallholder farmers). The specific activities to be undertaken include:
 - Reviewing relevant background information and literature, in order to identify gaps and other issues on which field studies will focus;
 - Undertaking field visits to review marketing systems for cotton and coffee in the participating countries;
 - Submitting practical recommendations on improvements to the marketing systems; and
 - Advising on strategies to be adopted in implementing the recommendations.

2. Undertaking studies of other commodity systems in the participating countries, for the purpose of advising on additional storable commodities to be covered under the WR projects. The specific activities include:
 - Preparing a shortlist of commodities that can potentially be receipted, based on review of previous studies, literature and, consultation with stakeholders;
 - Undertaking field studies to establish the economic case for inclusion of any of the commodities on the shortlist;
 - Preparing strategy documents, setting out phased programmes for inclusion of commodities selected in the participating countries;
 - Identifying organisations (e.g. NGOs, govt, donors) involved in crop marketing initiatives involving the selected commodities, and advising on strategies to promote collaboration with the identified organisations in facilitating access by groups with which they are working to the WR system;
 - Advising on relevant issues to be taken into account in implementing the recommended programmes, including, where possible, providing information on donors who can potentially provide financial and technical support.

3. In addition to the above, undertake any other related activities as may be agreed with the Project Leader.

**TERMS OF REFERENCE – STEPHEN KITCHING (UNOPS/CFC
WAREHOUSE RECEIPT PROJECT IN TANZANIA, UGANDA AND
ZIMBABWE)**

The consultant's input in the implementation of the CFC-funded warehouse receipt systems in Eastern and Southern Africa will focus primarily on a review of the coffee marketing systems in the participating countries named above, for the purpose of identifying inefficiencies in the chain and providing practical advice on strategies and interventions needed to improve marketing of the commodity and to raise returns to producers (especially the smallholder farmers).

The specific activities to be undertaken include the following:

1. Familiarise himself with relevant background information and literature and help identify gaps and other issues on which field studies will focus;
2. Undertake field visit to Uganda, as part of a team led by Peter Greenhalgh of NRI and including local project staff, to review the marketing systems for coffee;
3. Submit practical recommendations on improvements to the coffee marketing system, including identifying opportunities to promote use of the warehouse receipt system in coffee marketing; and
4. Advise on strategies to be adopted in implementing the recommendations

ANNEX 2 ITINERARY AND LIST OF PEOPLE CONTACTED

Wednesday 9 February 2005

Arrive in Uganda

Mr David Kiwanuka
Manager Quality and Information,
Uganda Coffee Development Authority (UCDA)
Coffee House, Plot 35, Jinja Road,
PO Box 7267
Kampala, Uganda
e-mail: kiwanuka@ugandacoffee.org
Mobile: 077 507719
Tel: 256940, 233073
Fax: 232912

Julius Madira
Principle Monitoring & Evaluation Office, UCDA
e-mail: madirajulius@yahoo.com
Tel: 256940, 233073, Fax: 232912

Mr. Edmond Kananwa
Senior Quality Controller, UCDA
Tel: 256940, 233073, Fax: 232912

Mr. Apollo T. Kamugisha
Senior Development Officer, UCDA
e-mail: kiwanuka@ugandacoffee.org
Mobile: 0770506696, Tel: 256940, 233073, Fax: 232912

Mr Arinanye Clayton
Executive Director Uganda Coffee Trade Federation (UCTF)
2nd Floor, Coffee House, Plot 35, Jinja Road,
PO Box 21679
Kampala, Uganda
e-mail: arinanye@ugandacoffee.org
Tel: 343677/8, Fax: 343692

Mr Joseph Nkandu
Executive Director,
National Union of Coffee Agribusiness and Farm Enterprise (NUCAFE)
2nd Floor Coffee House, Plot 35, Jinja Road,
PO Box 7267
Kampala, Uganda
Mob: 077 595030, Tel: 236199, Fax: 233592

Mr Hermont (Harry) Mrema
Farmer Support Specialist, NUCAFE
e-mail: mrema@ugandacoffee.org
Tel: 236199, Fax: 233592

Dr Abullahi Hussain Shire,
Chairman,
Uganda Coffee Roasters Association (UCRA)

Thursday 10 February 2005

Mr Haj Ishak Lukenge
KDS/ Star Cafe
Tel: 235597, Fax: 235304
e-mail: busaanyi@kds.co.ug

Mr David Barry
Managing Director, Kyagalanyi Coffee Ltd
E-mail: dbarry@kyagalanyi.com
Tel: 259360, 344021, Fax: 230723

Francois Bercher, General Manager, UGACOF
e-mail fbe@ugacof.com

Lyle Aitken, Financial Controller, UGACOF
e-mail: lyle@ugacof.com

Ms Scovia Nandyose
Procurement Manager, UGACOF

Mohan Kulkami
Gen Manager Transport, UGACOF

Mr Andrew Falconer
Managing Director, KAWACOM
e-mail afalconer@ecomtrading.com
Tel: 222611
Fax: 505632
Direct Tel: 260200

Andrew Guy Speakman
General Manager, IBERO U LTD
Tel: 342955
Mob: 075 200462

Mr Eugene Nsereko
Commercial Manager, IBERO U LTD
e-mail: management@ibero.co.ug
Tel: 342619/29
Fax: 342646

Friday 11 February 2005

Mr Abeinenamar
General Manager, UNEX
email: ybaine@yahoo.co.uk
Tel: 258778
Fax: 254495

Mr Ayub Kalule Kalale
Managing Director, JOB Coffee Ltd
email jobcoffee@yahoo.com
Tel: 255914
Fax: 251783
Mob: 77 748494

Mr Arthur Busingye
Busingye & Co Ltd
email barthur@infocom.co.ug
Tel: 257554
Direct: 200648

Saturday 12/02/05

Mr Fred Mwesigye
Commissioner for Co-Operative

Mr Chris Baine
Business Consultant, DCDM Advisory Service Ltd
email: cfc_wrsproject@yahoo.com
Tel: 340428
Fax: 340427

Ms Deborah B Kyarasiime
Project Assistant

Ebrahim Mukasa,
Unit Supervisor, Kyagalanyi Coffee
e-mail: emukasa@kyagalanyi.com
Mob: 077 700703

Mr Sam Wamantu
General Manager, Bugisu Co-operative Union Ltd .
Tel: 045 33027, 33604
Fax: 045 33565
Jonathan Wenwa,
Accountant, Bugisu Co-operative Union Ltd
Tel: 045 33027, 33604
Fax: 045 33565
Mob: 077 465466

Sunday 13/2/05

Martin Fowler
Ministry of Agriculture

Monday 14/02/05

Andrew Guy Speakman
General Manager, IBERO U LTD
Tel: 342955
Mob: 075 200462

Mr Godfrey Kawuma Kayongo
Managing Collateral Management, COTECNA
e-mail: godfrey.kayongo@cotecna.com
Mob: 077 527547
Tel: 253658
Fax: 253690

Mr Robert Waggwa Nsibirwa
Executive Director, EAFCA(East African Fine Coffees Association)
e-mail: rwnsibirwa@eafca.org
Mob: 071 691618
Tel: 269140/1

Mr Chris J. von Zastrow
Coffee Specialist, EAFCA(East African Fine Coffees Association)
e-mail: cvonzastrow@eafca.org
Mob: 071 345 874
Tel: 269140/1

Mr Amos T. Tumwesigye
Country Manager, ACE – Audit Control & Expertise (U) Ltd
Mob: 077 744018
Tel: 233973, 348425
Fax: 235471

Mariba Livingstone,
Risk Management Analyst, ACE – Audit Control & Expertise (U) Ltd
Mob: 077 553221
Tel: 233973, 348425
Fax: 235471

Christopher Kigenyi
Executive Director, Allied Bank International (U) Ltd.,
e-mail: chris.kigenyi@alliedbank.co.ug
Mob: 077 391623
Dir Tel: 253937
Tel: 250821/3
Fax: 230902

Tuesday 15/02/05

Jason Green
IBERO U LTD
e-mail: management@ibero.co.ug
Tel: 342619/29
Fax: 342646

Ms Milly Nkaja
Head Credit/ Sales Support, Standard Chartered
email: Milly.Nkaja@ug.standardchartered.com
Mob: 071760211
Tel: 258211/7
Direct: 236240

Mr John Magnay
Chief Executive, Uganda Grain Traders Ltd
email: jmagnay@infocom.co.uk
Mob: 077 771237
Tel: 220927/220932
Fax: 220926

Mr Henry Ngabirano
Managing Director, Uganda Coffee Development Authority
email: md@ugandacoffee.org
email: ngabirano@ugandacoffee.org
Mob: 075760142
Tel: 256198/256940
Fax: 256994/232912

Wednesday 16/02/05

Depart - Uganda

ANNEX 3 STATISTICAL TABLES

TABLE A3.1 UGANDA: COFFEE EXPORTERS PERFORMANCE 2003/04 (IN 60-KILO BAGS)

No	EXPORTERS	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	TOTAL	MKT SHARE
1	Pan Afric Impex Ltd.	11,325	20,602	34,108	46,876	34,482	35,478	36,283	24,945	35,532	47,143	34,678	7704	369,156	15%
2	Kawacom (U) Ltd.	28,813	17,329	32,495	36,504	32,058	42,047	33,648	26,002	41,709	32,856	17,774	16,044	357,279	14%
3	Ugacof Ltd	5,611	2,985	19,260	43,034	22,522	24,790	18,896	14,496	30,354	33,082	33,952	14,653	263,635	10%
4	40lam (U) Ltd.	18,136	10,283	14,922	17,610	20,158	17,010	21,624	32,648	26,566	29,834	9,816	21,804	240,411	10%
5	Kyagalanyi Coffee Ltd.	4,460	3,700	14,606	9,482	25,380	36,894	26,250	12,408	20,559	36,134	29,506	18,224	237,603	9%
6	Great Lakes	12,631	21,120	22,593	28,029	17,250	15,507	12,154	13,804	28,430	23,025	7,411	10,756	212,710	8%
7	Job Coffee	10,654	12,678	28,224	22,581	20,227	19,320	6,250	8,700	17,769	1 8,485	9,470	10,869	185,227	7%
8	Ibero (U) Ltd.	6,400	5,420	12,068	22210	6,522	9,078	5,826	8,040	18 326	11746	5300	9,650	120,586	5%
9	Kampala Domestic Store														5%
10	Nakana Coffee Factory	3,670	4,638	8,866	14,375	9,870	1,654		4,414	4,894	6,698	4,679	5,924	69,682	3%
11	Wabulungu M-Purpose Estate	5,100	4,475	7,312	9,018	9,040	5,250	2,450	9,100	8,720	3,150	700		64,315	3%
12	Union Export Services	3,330	3,220	3,290	5,110	2,998	2,924	1,370	1,360	1,890	5,180	6,910	5,190	42,772	2%
13	Mbale Importers & Exp.	6,320	4,880	6,330	7,364	2,680	5,600	3,480	1,440	680	320		2,560	41,654	2%
14	Buqisu Co-op. Union	2,100	6,200	6,988	4,460	4,960	7,820	1,840	2,680	960	1,270	640	1,280	41,198	2%
15	Busingye & Co.	2,240	2,330	2,700	3,970	5,082	1,920	1,690	5,356	3,378	4,240	2,010	2,650	37,566	1%
16	Simba Café	2,038	1,050	2,030	4,092	4,120	1,750	660	1280	3900	5,038	5,112	6,360	37,430	1%
17	Savannah								1,920	7,694	5,910	1,310	3630	20,464	1%
18	H. M. Nsamba	4,316	7,670		6,400									18,386	1%

	& Sons Ltd.															
19	MTL Main Traders	2,620			660	310	650	300	900	300	900	3500	1400	2,180	13,720	1%
20	Bakwanve Trading Co.		960		2,229	988	1,920	960	974	960	640	320		1920	11,871	0%
21	Joval Intercommercial Ltd						3,684	1,400	1340						6,424	0%
22	Natural Coffee				1,336	1,962	960				320	700			5,278	0%
23	Gumutindo					300	600	600	600	300					2,400	0%
24	Sitanida Agencies Ltd											700	1395	282	2,377	0%
25	Clanita Coffee (U) Ltd.	640													640	0%
26	Ziwango									310		330			640	0%
27	Zigoti Coffee Works	270													270	0%
	TOTAL	133,774	137,920		228,577	296,041	235,193	235,578	177,569	180,901	263,178	284,090	187,365	162,856	2,523,042	100%

Source: UCDA

TABLE A3.2 UGANDA: PERFORMANCE BY INDIVIDUAL COFFEE EXPORTERS IN JANUARY 2005

	EXPORTERS	Qty	% - Age Market Share	
		60 - Kilo Bag	Individual	Cumulative
	GRAND TOTAL	211,541	100.0	
1	Ugacof Ltd.*	35,376	16.72	16.7
2	Kyagalanyi Coffee Ltd.*	28,695	13.56	30.3
3	Job Coffee	24,580	11.62	41.9
4	Kawacom (U) Ltd.*	24,384	11.53	53.4
5	Great Lakes Ltd*	20,683	9.78	63.2
6	Olam (U) Ltd*	20,471	9.68	72.9
7	Ibero (U) Ltd.*	14,620	6.91	79.8
8	Kampala Domestic Store	11,376	5.38	85.2
9	Simba Cafe E.A. Ltd.	6,989	3.30	88.5
10	Busingye & Co. Ltd.	6,939	3.28	91.8
11	Mbale Importers & Exporters	5,560	2.63	94.4
12	Union Export Services	4,224	2.00	96.4
13	Nakana Coffee Factory	3,854	1.82	98.2
14	MTL Main Traders Ltd.	1,890	0.89	99.1
15	Bugisu Cooperative Union	1,280	0.61	99.7
16	Gumutindo Coffee Co-op.	620	0.29	100.0

Source: UCDA

Note* Foreign Owned

TABLE A3.3 UGANDA: COFFEE EXPORTS BY TYPE, GRADE VALUE AND UNIT PRICE

Type/Grade	2002/03			2001/02		
	Quantity 60 kg bags	Value US Dollars	Unit Price (\$/kg)	Quantity 60 kg bags	Value US Dollars	Unit Price (\$/kg)
Total	2,663,888	104,787,094	0.66	3,146,381	83,936,952	0.44
Robusta	2,221,440	81,843,943	0.61	2,715,955	64,496,820	0.44
Organic	2,500	120,723	0.80	1,440	48,936	0.57
Washed	746	36,514	0.82	880	45,833	0.87
Se. 1800	196,102	8,387,535	0.71	240,546	7,540,043	0.52
Se. 1700	93,001	3,906,042	0.70	134,334	3,708,019	0.46
Se. 1500	1,242,441	47,950,525	0.64	1,637,448	40,100,108	0.41
Se. 1400	75,945	2,814,631	0.62	119,886	2,731,132	0.38
Se. 1300	10,891	421,926	0.65	22,576	507,581	0.00
Se. 1200	432,095	15,418,363	0.59	428,879	8,612,064	0.33
BHP 1199	89,303	1,116,705	0.21	72,214	565,461	0.13
Others **	78,416	1,670,970	0.36	57,752	637 643	0.18
Arabica	442,448	22,943,160	0.86	43,426	19,440,132	0.75
Organic	4,380	339,947	1.29	4,180	254,927	1.02
Bugisu AA	67,031	4,471,639	1.11	112,119	6,265,772	0.93
Bugisu A	29,295	1,839,612	1.05	43,573	2,177,057	0.83
Bugisu B	7,831	464,920	0.99	15,572	759,701	0.81
Bugisu PB	9,263	571,396	1.03	10,520	506,520	0.80
Arabica AB	26,770	1,846,405	1.15	16,390	952,282	0.97
Arabica-UG	3,097	112,552	0.61	6,895	185,768	0.45
Wugar	47,090	2,922,831	1.03	61,020	2,786,273	0.76
Drugar	225,921	9,821,370	0.72	134,542	5,126,7 5 7	0.64
Others **	21,770	552,488	0.42	25,615	425,075	0.28

Source: UCDA

Note ** "Other" refers to coffee sold on sample

ANNEX 4 DRAFT CONTRACTS

DRAFT RECOMMENDATIONS FOR THE IMPLEMENTATION OF THE WAREHOUSE RECEIPT SYSTEM.

AIM:

1. To provide a bankable system which will aid the development of Ugandan coffee exports
2. To ensure acceptable quality standards which will emphasise Uganda's reputation for the supply of good quality Robusta and Arabica coffees.

MEANS: Operate 2 pilot schemes: one for Robusta from FAQ and one Arabica for parchment. Selection may be made from those already identified as suitable by NRI. In addition, to consider a third pilot scheme involving the exporter's position in both cases.

The Supplier and the Buyer must be legally formed bodies i.e. companies of limited liability or companies limited by guarantee.

Each party must be able to provide:

Articles and Memorandum of Association

A minimum of three years of Trading accounts

Acceptable authority for a member to negotiate with a bank the terms of finance

Certificate confirming registration with the UCDA.

It is essential that an experienced risk management team be appointed to oversee due diligence on the proposed suppliers for these pilot projects as well as for any other supplier that is proposed.

CONTRACT PROCEDURES:

ROBUSTA:

A contract will be made between the Co-operative which owns the hulling plant with the exporter to whom the FAQ is to be delivered on a Fixed Price basis either in U.S. Dollars or in Uganda Shillings.

This contract will be made up of the following elements:

Supplier

Address

Buyer:

Address:

The Supplier agrees to supply Uganda Coffee to the Buyer as per the following terms and conditions:

Quantity: +/- 3 %

Quality	Fair Average Quality which will be guaranteed to produce:	
	Screen 18	13%
	Screen 15	64%
	Screen 12	16%
	BHP 1199	4%
	Wastage	<u>3%</u>
	Total Average	<u>100%</u>

Any variation on these yields to be adjusted according to the contract prices for each grade agreed at the time of contract.

(The purpose here is for a bonus system which could be devised whereby more money can be paid for greater production of Screen 18 – and above while reducing BHP and wastage so improving on quality)

The alternative would be to specify an ungraded outturn at say, 93% plus 7% wastage and agree to a bonus for a percentage above 93%.

Inspection: The coffee will be weighed by an independent party whose authority is accepted by both parties to this contract with costs for the account of the supplier.

Packing: 60 kilo new polypropylene bags to be securely fastened

Date of despatch: No later than day of, 2005.

Date of grading: No later than day of, 2005.

Price: US Dollars.....per metric ton for FAQ

Screen 18
Screen 15
Screen 12
BHP 1199

Price to be in U.S. Dollars per metric ton delivered buyer's warehouse.

Payment: For the supplier:
Immediate to the supplier from his bank upon despatch in U.S. Dollars at% of the value against the following documents:

Warehouse Receipt signed by independent inspection agency
Which will show FAQ weights at place and date of despatch
Transporters receipt
Supplier's invoice.
Insurance note

A copy of the contract notified in law by the bank or
Assignment note of the contract to the bank
Balance to be paid upon final weights being provided by the
inspection agency.

For the Buyer:

Immediate to the supplier's bank upon arrival in U.S. Dollars at
.....% of the value against the following documents
Warehouse Receipt signed by independent inspection agency
Which will show Outturn weights and quality at time after
grading.

A copy of the contract notified in law by the bank or
Assignment note of the contract to the bank
Balance to be paid upon final weights being provided by the
inspection agency.

Insurance: All risk to be provided by the supplier through
Either the Inspection Agency or
Local Insurance Company acceptable to the bank.

Arbitration: In Uganda Friendly or according to the Laws of Uganda

This contract is subject to The Coffee Regulations 1994 under Section 20 of the
Uganda Coffee Development Authority Statute, 1991, as amended by Statute No. 5 of
1994.

Kibogo to be delivered to a central point where the coffee will be prepared as FAQ.
Each lot supplied by the farmer will be identified and remain the property of the
farmer.

The prepared FAQ will be weighed and recorded and delivered to the buyer's
warehouse within the time limits agreed at time of contract.

An independent inspection agency acceptable to both parties will be appointed to
oversee the contract at both the supplier's warehouse and the buyer's warehouse.

CONTRACT PROCEDURES:

ARABICA:

A contract will be made between the Co-operative which owns the milling plant with
the exporter to whom the parchment is to be delivered on a Fixed Price basis either in
U.S. Dollars or in Uganda Shillings.

This contract will be made up of the following elements:

Supplier
Address
Buyer:

Address:

The Supplier agrees to supply Uganda Coffee to the Buyer as per the following terms and conditions:

- Quantity: +/- 3 %
- Quality Fair Average Quality
- Inspection: The coffee will be weighed by an independent party whose authority is accepted by both parties to this contract with costs for the account of the supplier.
- Packing: 60 kilo new polypropylene bags to be securely fastened
- Date of despatch: No later than day of, 2005.
- Date of grading: No later than day of, 2005.
- Price: US Dollars.....per metric ton for Parchment
Price to be in U.S. Dollars per metric ton delivered buyer's warehouse.
- Payment: For the supplier:
Immediate to the supplier from his bank upon despatch in U.S. Dollars at% of the value against the following documents:

Warehouse Receipt signed by independent inspection agency
Which will show FAQ weights at place and date of despatch
Transporters receipt
Supplier's invoice.
Insurance note
A copy of the contract notified in law by the bank or
Assignment note of the contract to the bank
Balance to be paid upon final weights being provided by the inspection agency.
- For the Buyer:
Immediate to the supplier's bank upon arrival in U.S. Dollars at% of the value against the following documents
Warehouse Receipt signed by independent inspection agency
Which will show Outturn weights and quality at time after grading.
A copy of the contract notified in law by the bank or
Assignment note of the contract to the bank
Balance to be paid upon final weights being provided by the inspection agency.
- Insurance: All risk to be provided by the supplier through

Either the Inspection Agency or
Local Insurance Company acceptable to the bank.

Arbitration: In Uganda Friendly or according to the Laws of Uganda

This contract is subject to The Coffee Regulations 1994 under Section 20 of the Uganda Coffee Development Authority Statute, 1991, as amended by Statute No. 5 of 1994.

The costs to be allocated as follows:

1. Cost of collateral manager to be negotiated and shared by both parties
2. Cost of Insurance to be met by the supplier
3. Transport to buyer to be account Supplier
4. Each party will bear its own banking charges and interest as negotiated with their banker.

NOTES:

CONTRACTS: It may be necessary to consider equating the proposed local Uganda contract to those issued by the European Coffee Federation (ECF) and the Green Coffee Association (GCA) of New York.

The ECF have three contracts of which one would be relevant for exporters as it covers coffee to be shipped from origin – the European Coffee Contract (ECC).

The GCA have nine contracts. Four of them deal with coffee that is sold outside the country of destination, four deal with coffee sold inside the country of destination, and one deals with coffee delivered at the border or frontier. The main distinction between the contract types is based on how cost and risk are allocated between the parties.

The bank will have the option of legalising the contract or have the contract assigned according to the bank's own assessment of each party's integrity.

FINANCIAL ISSUES INCLUDING WORKING CAPITAL:

Consideration to be given where appropriate for the CFC to provide a bank guarantee to an approved party to a transaction which would be for the provision for working capital on the basis of no more than 10% of the value for each contract and which would either be met in full by the CFC for the pilot schemes or met by each party to the transaction upon final settlement. Failing this, it may be appropriate to negotiate with DRUM whereby they may be able to satisfy the lender of finance into providing as near 110% an advance as possible and this should be explored further.

QUALITY ISSUES:

With the aim of improving the quality of Uganda coffee for export, CWRs can play a pivotal role. As described earlier, CWRs can provide a stage of traceability whereby HACCP, GAP and ISO standards can be monitored.

There is also the potential for introducing bonuses where the provision of good quality supplied above the contract terms can be rewarded.

COLLATERAL MANAGEMENT:

ACE and Cotecna are the two resident collateral management companies. ACE has been in Uganda for some time and employs about 110 staff and therefore has the means of covering most parts of Uganda and are experienced in their role. Cotecna have only been established for some 9 months but now that SGS are apparently not involved any longer, expect to obtain a good share of management projects. Not resident in Uganda but active in the Congo and who at present have management in Uganda for a specific contract in Uganda is DRUM, a UK registered company. DRUM is favoured by ABSA and when interviewed, appeared to offer more than the others in their cover of risk analysis, insurance, security, pre-shipment inspection and due diligence reporting.

Fees from ACE and Cotecna are the same at \$1500 per warehouse. DRUM's fees are negotiable as they are more dependant on what part of their services are required, particularly should they be asked to guarantee CWRs.

EXISTING and POTENTIAL RISKS re PILOT SCHEMES:

Copies of each transaction should be overseen by a legal body established for that purpose and appointed and funded by CFC. A collateral management company would be ideal.

ANNEX 5 A SMALLHOLDER PILOT PROJECT

A proposal was put forward by Harry Mrema, a Tanzanian now working for NUCAFE, whereby smallholders could access credit using their coffee as collateral. This would be done over the 2 year period of a pilot project and which would be designed to allow the smallholder to deliver coffee without demanding payment upon delivery. The aims would be for:

1. Farmers to be able to access cash which will enhance their capacity to invest in quality and increased productivity.
2. Farmers to earn more as they would own their coffee and sell only green coffee which is graded, sorted, with the right moisture content, at a negotiable price.
3. After two years, farmers would have generated adequate savings to finance their picking, processing and marketing costs without relying on marketing credit from the commercial institutions.
4. Farmers would be able to deliver their coffee for processing and marketing without demanding an advance payment and are willing to be paid after the sales proceeds are realized.
5. Farmers to access training provided under the guidelines of the Farmer Associations and NUCAFE
6. Create a situation to introduce appropriate technology such as wet processing technologies for processing both Robusta and Arabica coffees which will enhance the quality of the coffee and hopefully obtain a premium on price.

Project Participants roles and responsibilities:

Individual farmers – to produce quality coffee according to accepted farming practices adopted by the farmer groups in which the individual farmer is a member.

Quality Producer Group: To enforce group acceptable practices and ensure that each group member produced red cherry coffee (in case of Arabica coffees) of uniform quality that can be bulked together for primary processing where the group can access a central processing plant. In a situation where there is no central processing, then the coffee is primary processed at home under the supervision of the group to ensure uniformity. For Robusta coffee, to ensure the coffees are processed by a method that will ensure good quality, free from foreign matter, minimal defects counts and delivered at a designated warehouse managed by collateral managers.

Coffee Farmers Associations – Their object is to ensure that the groups' coffee, which is of uniform quality and bulked, is delivered on a consignment arrangement. Ownership remains with the farmer but Bugisu or the milling plant is allowed to use the coffee as collateral to obtain credit on behalf of the farmer associations and groups for milling at a milling factory (Bugisu – in case of Arabica coffee) to benefit from the economy of scale. Robusta coffees could be

stored in the Association's warehouse or other reliable warehouse which is acceptable by the Bank and the warehouse managing company.

Milling Plant (Bugisu Cooperative Union) or Private Owned Milling Plant: As a consignee on behalf of the Coffee Farmers Association and in collaboration with NUCAFE, they would negotiate a credit from a financial institution on behalf of the farmers. Money should be paid directly to the group accounts and use the money to pay farmers for the next delivery.

In the name of the Association to mill the coffee, sort and grade, carry out cup quality and market the coffee to buyers after consultations with farmer associations, NUCAFE and UCDA.

Warehouse Company (preferred local to minimize costs) – To manage the inventory at the Milling plant on behalf the commercial banks. Designated stores at the milling plant will be much more economical than a rural based warehouse where the volumes may not be adequate to pay for the management and financial costs.

Commercial Banks – Provide credit against receipts issued and verified by the Warehouse Company or cash deposit with the bank by the Project to be used as collateral to assist the start of the process.

National Union of Coffee Agribusiness and Farm Enterprise (NUCAFE)

The role of NUCAFE is aimed to:

1. To sensitize farmers, assist with the formation of farmer groups, and assist with the strengthening the farmer associations
2. Prepare simple business plans for the groups which will be consolidated into the Associations Business plans for the application of the bank credit finance on behalf of the farmers
3. Manage the coffee collection systems, quality assurance and ensure that all moneys and coffee stocks pertain to the project are properly accounted for and the principal of payment on performance is functional.
4. Act as an honest broker to ensure that each party in the chain is in compliance with their agreed functions on behalf of the farmers.

Targeted Farmer Associations:

1. Bulawasi Coffee Farmers Association - Sironko district
 - a. Possible farmer membership after a serious mobilization: 3,000
 - b. Farmer producer groups : 100
 - c. Expected volume of parchment coffee (1st year): 1,800 tons
 - d. Expected volume of green coffee : 1,400 tons
2. Kabonera Coffee Farmers Association – Masaka District
 - a. Possible farmers membership after serious mobilization: 3,000
 - b. Farmer producer groups: 100
 - c. Expected volume of kiboko 3,000 tons

- d. Expected volume of green coffee: 1,800 tons

Methodology

1. Farmer groups will mobilize their members to process high quality coffee and bulk it together for collection at an identified collection centres. The coffee that will be accepted will be clean coffee with the right moisture content taken during the collection period.
2. The coffee will be weighed and recorded and each member issued with receipt acknowledging receipt of the coffee.
3. The coffee will be delivered on a consignment basis where ownership still remains with the farmers but the warehouse manager could use the warehouse receipt to process a loan for the farmers.
4. The association will organize collection of the coffee for delivery at the designated warehouse. The coffee will be weighed, checked for good appearance qualities and moisture contents taken on the coffee samples
5. The warehouse keeper or manager will issue warehouse receipts and, in collaboration with NUCAFE and Farmer Associations, process a loan for a marketing credit which will be used to pay for the first consignment of the coffee) before the farmer gives to the groups another lot of coffee.
6. Alternatively the project could provide the initial start up funds which will be used as a guarantee to the Warehouse Manager or Association to access a certain amount of cash and use to pay the farmers as an initial advance to get the coffee. (Farmers could be paid only 50% of the expected market value of the coffee and the farmers will own their coffee till is sold and after the coffee is sold the farmers will receive second payment).
7. The coffee will be milled and sold and the sale proceeds could be used to repay the initial bank loans and the balance if any paid to the farmers to continue collecting coffee. Maybe the loan with the bank is cleared when all the coffees are collected, milled and sold.

Project starting period: Ideally the project should start before April this year to benefit from the main coffee seasons during the two year project.

Conditions for Success:

Trust: The implementation of the project should be in a manner that the hearts of the farmers must be won so that they can trust the system. There must be a massive education campaign lead by an independent institution which has no vested interest in the coffee.

Good Management: The whole project must be professionally managed and try as much as possible to avoid political interventions in the implementation of the project.

Pay on performance: Each party should be paid according to specific performance which is quantifiable according to quality and track record as incentives.

Scope of work for providing Collateral Management Services for Coffee warehouse receipts pilot in Uganda:

I INTRODUCTION AND BACKGROUND

The Common Fund for Commodities (CFC) is funding projects to improve the marketing of coffee and cotton through developing and testing systems of commodity trade finance based on inventory collateralisation and warehouse receipts. Though beginning with the coffee and cotton sectors, the potential for expanding coverage of the receipts system to other storable commodities for which inventory-backed financing is feasible is to be explored. The projects are being implemented in Tanzania, Uganda and Zimbabwe by the United Nations Office for Project Services (UNOPS) with technical advice by the Natural Resources Institute.

The Uganda component of the project is being implemented with the Government of Uganda through the Ministry of Tourism, Trade and Industry (MTTI), the Uganda Coffee Development Authority and the Cotton Development Organisation. The immediate objective of the project is to pilot a privately-run warehousing system that allows for the issuance and use of transferable warehouse receipts (WRs) in the coffee sector to promote access finance as well as facilitate commodity trade. A similar system will be piloted for maize.

1.1 MARKETING AND FINANCING CONSTRAINTS IN COFFEE SECTOR

The coffee marketing chain is long, involving several intermediaries and multiple handling of the commodity. Primary assembling of the crop is undertaken by micro-scaled traders ("bicycle traders"), operating in the villages. Cooperative societies and farmer associations are not very prominent in the trade. The "bicycle traders" are severely under-capitalised and often buy the crop in very small volumes of between 20kg and 60kg. They often do not pay quality premium to farmers, a situation that has contributed to quality variability in the Ugandan coffee market. Medium-scale traders, who bulk and supply to exporters, also face financing constraints, particularly since most exporters discontinued pre-financing as a result of contract non-performance or delivery of poor quality coffee beans by the traders. At the level of exporters, companies with foreign interests tend to have a comparative advantage over the indigenous companies because of easier access to relatively cheap finance from offshore as well as domestic sources.

The involvement of several intermediaries tends to increase distribution margins, leading to lower farmgate prices and squeezing the margins for exporters. Low farmgate prices tend to discourage increased production and productivity by farmers. Unlike the situation in Tanzania, farmer organisations are unable to play a significant role in marketing coffee largely because of lack of capital, making it difficult to compete with other buyers in the strictly cash-based trade at the farmgate.

Based on the foregoing, the proposed warehouse receipt system (WRS), which will be piloted beginning with the harvest in June 2005, is intended to help improve access to finance at various levels of the marketing chain and also contribute to facilitating bulking and supply of quality produce to exporters.

Uganda produces significant surpluses of maize, which is traded mainly into the relief market dominated by the World Food Programme (WFP) and the Kenyan grain market, primarily through informal channels. This trade is also constrained by lack of finance and quality variability. A receipt system similar to the one proposed for coffee is therefore to be piloted in the maize sector.

2. DESCRIPTION OF PILOT WRS FOR COFFEE SECTOR

2.1 Objectives and intended benefits of the proposed WRS

To achieve the objectives of improving access to finance, shortening and enhancing the efficiency of the marketing chain and promoting delivery of quality coffee beans to exporters, the WRS proposed for the coffee sector is intended to produce the following benefits:

- Make financing against coffee inventories possible by developing a system in which depositors and banks have confidence. This implies identifying and mitigating process and business risks associated with the proposed system.
- Reduce inventory financing costs by allowing relatively larger volumes to be deposited than can be stored by individual depositors, thereby reducing especially the cost of collateral management. For this purpose, multi-depositor use of designated warehouses will be promoted except in cases where the scale of operation of individual depositors is large enough to justify the cost of collateralisation and financing.
- Encourage bulking of quality produce close to the farmgate by enforcing quality standards consistent with those that apply within the export trade and easing access to finance by farmer groups and medium-scale traders engaged in assembling stocks marketed by the farmers.

Consistent with these expectations, a multi-depositor WRS is to be promoted under which transferable warehouse receipts can be issued by designated operators. The transaction cycle is as follows:

- Farmer organisations, including primary cooperative societies and area marketing enterprises (promoted by the Uganda Cooperative Alliance) as well as medium-scale traders who bulk and deliver FAQ or parchment coffee in volumes of between 5 and 10 tonnes to designated warehouses.
- Collateral managers (CMs) appointed at the designated warehouse will issue warehouse receipts (WR) covering stocks of coffee delivered and which comply with quality standards adopted under the programme. The CMs will issue the receipt after weighing and grading the stocks delivered.
- The WRs issued may be presented by depositors, if they require financing, to participating banks which will provide finance secured primarily against the delivered coffee. The financing bank will be required to take physical possession of the WR against which financing has been provided.
- The delivered coffee may be further processed at the designated warehouse by the warehouse operator, with the CM reporting on the out-turn.
- The depositor will arrange sale of the stored coffee or its processed equivalent to an exporter (except in the case where the depositor is an exporter).
- The buyer will pay the proceeds from the sale into an account held at the financing bank, enabling the bank to recover the credit advanced and related interest charges. The bank will also deduct any storage and collateral management fees incurred by the borrower/depositor before the balance is credited to the account of the borrower

2.2 Process and business risks associated with proposed WRS

The main business and process risks associated with the system include:

Storage losses – through theft/burglary, fire and allied perils as well as loss of value due to quality deterioration. To minimise this risk, the designated warehouses have to comply with minimum physical acceptable standards and there should all risk insurance cover for the warehouse and the stocks held during the entire marketing season. Only credible CMs, who enjoy the confidence of the banks will be appointed to issue the receipts, and they (CMs) will be required to provide regular reporting on the state of the collateralised stocks to the financing banks and other parties with interest in the underlying stocks.

Further to these measures, it is intended to strictly enforce quality standards at the designated warehouses and to train various depositors, especially the farmer organisations, to ensure that they are able to deliver quality beans, with minimum risk of rejection at the warehouse. This will lead to storage of minimise risk of deteriorating in quality during the storage period.

Fraudulent issue of WR - to avoid unauthorised parties issuing of WRs that do not represent commodities stored and/or situations where depositors are cheated on weight or quality in receipting their crop, the following are proposed:

- The WRs issued under the programme will be standardised, containing standard terms and conditions, and design features that can reduce the risk of fraud;
- Ensuring that scales and grading equipment are assized or calibrated regularly;
- Instituting systems for issuing receipts that allow a clear audit trail to be established and to minimise access by unauthorised parties; and
- Instituting a system of verification of WRs, especially by financing banks.

Price and valuation risks: to minimise this risk, in the absence of price risk management instruments in Uganda, a market information system will be maintained under the project to help keep key lenders and depositors informed about price movements and other significant market developments. Bankers will be encouraged to adopt margining or “hair cutting”, advancing between 70% and 80% of the market value of the crop; and to institute systems to monitor the link between the market value and book value of the advance provided. Banks will also be encouraged to include in financing contracts, exit clauses allowing for the bank to arrange sale of the underlying commodity if they are overly exposed.

Marketing risk – will be mitigated through requiring depositors to have offtake contracts with credible exporters or, in the case of exporters, with credible international buyers. It is expected that the promotion of transparent exchange trading of the commodity within the domestic market under a project supported by the European Union and the Government of Uganda will eventually make this requirement redundant.

Fraudulent release of collateralised stock – to avoid unauthorised release of collateralised stocks, it will be required that all financed WRs are lodged with the lenders and released on the basis of the payment versus delivery principle (where without full settlement of the loan advanced the WR is not released by the lender). The CM will deliver the stored crop only upon presentation of the original WR and release instructions from the lender, where the crop has been used to secure a loan.

2.3 Principal beneficiaries and stakeholders

The main target depositors under the pilot WRS are:

- Primary cooperative societies
- Area marketing enterprises promoted by UCA
- Farmer groups promoted by NUCAFE and other NGOs working with the coffee producers
- Private traders supplying coffee to exporters
- Exporters intending to use the designated warehouses to build up inventories for export. These include Job Coffee Ltd., Bugisu Cooperative Union, UNEX Coffee and Businje Coffee.

During June-September 2005 pilot season, the designated warehouses will be the:

1. Mbarara warehouse owned and operated by Job Coffee Ltd. Robusta coffee will be stored at this location.
2. Bugisu warehouses operated by the Bugisu Cooperative Union, which will be used for storing Arabica coffee.

The pilot for maize will be stored mainly in private warehouses in Tororo.

2.4 Targets for the pilot season

The projected throughput during the pilot season (June-September 2005) is estimated at 2,000 tonnes of Robusta (FAQ) and 2,000 tonnes of Arabica (parchment). During the October-February 2005/06 season, the estimated throughput of Arabica stored in the Bugisu warehouse is expected to rise to 4,000 tonnes.

Three banks are expected to participate in financing WRs issued during the pilot season.

3. Services required

The services of the collateral manager are needed to mitigate the following risks: storage losses as well as fraudulent issue of warehouse receipts and/or fraudulent release of collateralised stocks. The CMs are also expected to provide information, especially to banks, to enable them manage market-to-value risks for the collateralised stocks. The specific services required include the following:

- a) Receipting stocks complying with standard quality standards;
- b) Issuing standard warehouse receipts as adopted under the pilot project;
- c) Storing the stocks delivered in a manner that ensures maintenance of quality and quantity of the delivered stocks or the processed equivalent;
- d) Releasing stocks upon presentation of the WR and written confirmation of release by the lenders; and

e) Reporting on stocks held and their quality throughout the duration of the storage contracts.

In providing these services, the CM will be required to execute and storage/collateral management contracts setting out the following:

- The holding period for the specific depositor
- Indemnities for wrongful acts by depositors
- Liens for unpaid fees
- Duration and termination procedures
- Arbitration for disputes
- Applicable laws
- Fees and charges
- Discretion in exercise of CM's duties
- Issuance of warehouse receipts; warranties for accuracy of the warehouse receipt description and the stated value of goods
- Condition of goods on delivery to CM and cases of refusal of goods by CM
- Warranty of storage suitability
- Transfer to other storage sites when the condition of the storage facility is compromised

The storage/collateral management contracts should also outline the limitations of responsibility of the CM, including:

- Wilful default, gross negligence, negligence.
- To risks covered under insurance cover.
- Direct damages/indirect damages

3.1 Qualifications of the Collateral Manager

Eligible collateral management firms should be locally-registered companies with experienced professional staff. They should have a credible track record in the provision of collateral management services for storable commodities, including coffee, cotton and grains and should be solvent. They should also have field staff with experience and training in warehouse and collateral management, preferably of coffee, cotton and grains. The company should have professional indemnity insurance issued by a credible corporate surety.

3.2 Submission of technical and financial proposals

The technical proposals should include comments relating to their understanding of the services required, as described in this Scope of Work, suggesting improvements where possible to further reduce the exposure of lenders and depositors under the WRS. The proposal should also describe how the company intends to perform the functions required, including outlining procedures for:

- Taking delivery of commodities deposited, including the documentation required;
- Issuance and security of the warehouse receipts;
- Release of the collateralised commodities;
- Securing the warehouse and the stocks;
- Stock management and reporting systems (either manual and web-based), particularly in producing and disseminating reports on the collateralised stocks; and
- Staff management and reporting systems, especially of the field staff.

Where the company has operational manuals on these procedures, a brief outline of the contents should be provided to support the above.

To demonstrate the competence of staff to be involved in the provision of these services, the company should provide pen sketches of both its management and field staff. The CVs of the key staff should be provided as annexes to the technical proposal.

The company is also required to provide evidence that it has Professional Indemnity Insurance, providing such information as the type and provider of insurance, scope of insurance, confirming whether the financing bank is the loss payee as well as the claims and time limits on the insurance policy.

The financial proposals should set out the fees proposed as well as the terms and conditions under which the services are to be provided.

The proposals should be hand-delivered in sealed envelopes and marked **“EXPRESSION OF INTEREST FOR PROVISION OF WAREHOUSING AND COLLATERAL MANAGEMENT SERVICES”** and addressed to:

The National Project Coordinator
Warehouse Receipts System Project
6th Floor, Room 606, Farmers House
Parliament Avenue
PO Box 7103
KAMPALA

The proposals should be delivered not later than **4.00 pm on Monday 25th April 2005**.

ANNEX 7



IMPROVING MARKETING AND ACCESS TO CREDIT BY THE COFFEE SECTOR IN UGANDA THROUGH A WAREHOUSE RECEIPT SYSTEM

BRIEFING DOCUMENT ON PILOT WAREHOUSE RECEIPT
SYSTEM FOR COFFEE
FOR BANKERS IN UGANDA

Prepared by:

Natural Resources Institute, U.K.

APRIL, 2005



I INTRODUCTION AND BACKGROUND

The Common Fund for Commodities (CFC) is funding projects to improve the marketing of coffee and cotton through developing and testing systems of commodity trade finance based on inventory collateralisation and warehouse receipts. Though beginning with the coffee and cotton sectors, the potential for expanding coverage of the receipts system to other storable commodities for which inventory-backed financing is feasible is to be explored. The United Nations Office for Project Services (UNOPS) is implementing the project in Uganda through the Ministry of Tourism, Trade and Industry with technical advice by the Natural Resources Institute.

The immediate objective of the project is to pilot a privately-run warehousing system that allows for the issuance and use of transferable warehouse receipts (WRs) in the coffee sector to promote access to finance as well as facilitate commodity trade.

This document outlines the constraints faced by sector players in the coffee marketing system and how the proposed Warehouse Receipt System (WRS) can help them particularly to improve their marketing and access to finance. It also describes the various players, processes and structures necessary to implement the WRS for the coffee sector in Uganda.

The structure of the document is as follows:

- This section provides a brief overview of the marketing and financing constraints in the Uganda coffee sector;
- Section 2 describes the proposed Warehouse Receipt System, its objectives and intended benefits. Also outlined is the transaction cycle, the process and business risks associated with the proposed system. This section also details the targeted beneficiaries under a pilot scheme and the timing of the operations;
- Section 3 focuses on the role and qualifications of the collateral manager as an integral risk Mitigant against some of the risks outlined in the preceding section; and
- Section 4 describes other interventions intended to support the development of the warehouse Receipt System.

1.1 MARKETING AND FINANCING CONSTRAINTS IN COFFEE SECTOR

The coffee marketing chain in Uganda is long, involving several intermediaries and multiple handling of the commodity. Primary assembling of the crop is undertaken by micro-scaled traders ("bicycle traders"), operating in the villages. Cooperative societies and farmer associations are not very prominent in the trade. The "bicycle traders" are severely under-capitalised and often buy the crop in very small volumes of between 20kg and 60kg. They often do not pay quality premium to farmers, a situation that has contributed to quality variability in the Ugandan coffee market. Medium-scale traders, who bulk and supply to exporters, also face

financing constraints, particularly since most exporters discontinued pre-financing as a result of contract non-performance or delivery of poor quality coffee beans by the traders. At the level of exporters, companies with foreign interests tend to have a comparative advantage over the indigenous companies because of easier access to relatively cheap finance from offshore as well as domestic sources.

The involvement of several intermediaries tends to increase distribution margins, leading to lower farmgate prices and squeezing the margins for exporters. Low farmgate prices tend to discourage increased production and productivity by farmers. Unlike the situation in Tanzania, farmer organisations are unable to play a significant role in marketing coffee largely because of lack of capital, making it difficult to compete with other buyers in the strictly cash-based trade at the farmgate.

Based on the foregoing, the proposed warehouse receipt system (WRS), which will be piloted beginning with the harvest in June 2005, is intended to help improve access to finance at various levels of the marketing chain and also contribute to facilitating bulking and supply of quality produce to exporters.

2. DESCRIPTION OF PILOT WRS FOR COFFEE SECTOR

2.1 Objectives and intended benefits of the proposed WRS

To achieve the objectives of improving access to finance, shortening and enhancing the efficiency of the marketing chain and promoting delivery of quality coffee beans by farmers, the WRS proposed for the coffee sector is intended to produce the following benefits:

- Make financing against coffee inventories possible by developing a system in which depositors and banks have confidence. This implies identifying and mitigating process and business risks associated with the proposed system.
- Reduce inventory financing costs by allowing relatively larger volumes to be deposited than can be stored by individual depositors, thereby reducing especially the cost of collateral management. For this purpose, multi-depositor use of designated warehouses will be promoted except in cases where the scale of operation of individual depositors is large enough to justify the cost of collateralisation and financing.
- Encourage bulking of quality produce close to the farmgate by enforcing quality standards consistent with those that apply within the export trade and easing access to finance by farmer groups and medium-scale traders engaged in assembling stocks marketed by the farmers.

2.2 Transaction Cycle

The proposed transaction cycle is as follows:

- Farmer organisations, including primary cooperative societies and area marketing enterprises (promoted by the Uganda Cooperative Alliance) as well as medium-scale traders who bulk and deliver FAQ or parchment coffee in lot sizes of about 50 tonnes to designated warehouses. The deliveries will be in pursuance of an off take contract with an exporter.
- Collateral managers (CMs) appointed at the designated warehouse will issue warehouse receipts (WR) covering stocks of coffee delivered and which comply with quality standards adopted under the programme. The CMs will issue the receipt after weighing, quality tests and grading the stocks delivered.
- The WRs issued may be presented by depositors, if they require financing, to participating banks which will provide finance secured primarily against the delivered coffee. The financing bank will be required to take physical possession of the WR against which financing has been provided.
- The delivered coffee may be further processed at the designated warehouse by the warehouse operator, with the CM reporting on the out-turn.
- The depositor will arrange sale of the stored coffee or its processed equivalent to an exporter (except in the case where the depositor is an exporter).
- The buyer will pay the proceeds from the sale into an account held at the financing bank, enabling the bank to recover the credit advanced and related interest charges. The bank will also deduct any storage and collateral management fees incurred by the borrower/depositor before the balance is credited to the account of the borrower

2.3 Process and business risks associated with proposed WRS

The main business and process risks associated with the system include:

Storage losses – through theft/burglary, fire and allied perils as well as loss of value due to quality deterioration. To minimise this risk, the designated warehouses have to comply with minimum physical acceptable standards (Annex I) and there should all risk insurance cover for the warehouse and the stocks held during the entire marketing season. Only credible CMs, who enjoy the confidence of the banks, will be appointed to issue the receipts, and they (CMs) will be required to provide regular reporting on the state of the collateralised stocks to the financing banks and other parties with interest in the underlying stocks.

Further to these measures, it is intended to strictly enforce quality standards at the designated warehouses and to train various depositors, especially the farmer organisations, to ensure that they are able to deliver quality beans, with minimum risk of rejection at the warehouse. This will minimise the risk of deterioration in quality during the storage period.

Fraudulent issue of WR - to avoid unauthorised parties issuing WRs that do not represent commodities stored and/or situations where depositors are cheated on weight or quality in receipting their crop, the following are proposed:

- The WRs issued under the programme will be standardised¹, containing standard terms and conditions, and design features that will reduce the risk of fraud;
- Ensuring that weigh scales and grading equipment are calibrated regularly;
- Instituting systems for issuing receipts that allow a clear audit trail to be established and to minimise access by unauthorised parties; and
- Instituting a system of verification of WRs, especially by financing banks.

Price and valuation risks: to minimise this risk, in the absence of price risk management instruments in Uganda, a market information system will be maintained under the project to help keep key lenders and depositors informed about price movements and other significant market developments. Bankers will be encouraged to adopt margining or “hair cutting”, advancing between 70% and 80% of the market value of the crop; and to institute systems to monitor the link between the market value and book value of the advance provided. Banks will also be encouraged to include in financing contracts, exit clauses allowing for the bank to arrange sale of the underlying commodity if they are overly exposed.

Marketing risk – will be mitigated through requiring depositors to have off take contracts with credible exporters or, in the case of exporters, with credible international buyers. It is expected that the promotion of transparent exchange trading of the commodity within the domestic market under a project supported by the European Union and the Government of Uganda will eventually make this requirement redundant.

Fraudulent release of collateralised stock – to avoid unauthorised release of collateralised stocks, it will be required that all financed WRs be lodged with the lenders and released on the basis of the payment versus delivery principle (where without full settlement of the loan advanced the WR is not released by the lender). The CM will deliver the stored crop only upon presentation of the original WR and release instructions from the lender, where the crop has been used to secure a loan.

2.4 Principal beneficiaries and stakeholders

The main target depositors under the pilot WRS are:

- Primary cooperative societies
- Area marketing enterprises promoted by UCA
- Farmer groups promoted by NUCAFE and other NGOs working with the coffee producers
- Private traders supplying coffee to exporters

¹ The design of the standardized Warehouse Receipt is currently under discussion.

- Exporters intending to use the designated warehouses to build up inventories for export. These include Job Coffee Ltd., Bugisu Cooperative Union, UNEX Coffee, Masaka Cooperative Union and Businge Coffee.

During June-September 2005 pilot season, the designated warehouses will be the:

1. Kakoba warehouse in Mbarara operated by Job Coffee Ltd. Robusta coffee will be stored at this location.
2. Bugisu warehouses owned and operated by the Bugisu Cooperative Union, which will be used for storing Arabica coffee.

2.5 Targets for the pilot season

The projected throughput during the pilot season (June-September 2005) is estimated at 2,000 tonnes of Robusta (FAQ) and 2,000 tonnes of Arabica (parchment). During the October-February 2005/06 season, the estimated throughput of Arabica stored in the Bugisu warehouse is expected to rise to 4,000 tonnes.

3 Role of the Collateral Manager

The role of the collateral manager will be to mitigate the following risks: storage losses as well as fraudulent issue of warehouse receipts and/or fraudulent release of collateralised stocks. The CMs will also be expected to provide information, especially to banks, to enable them manage market-to-value risks for the collateralised stocks. The specific services required include the following:

- a) Receipting stocks complying with standard quality standards;
- b) Issuing standard warehouse receipts as adopted under the pilot project;
- c) Storing the stocks delivered in a manner that ensures maintenance of quality and quantity of the delivered stocks or the processed equivalent;
- d) Releasing stocks upon presentation of the WR and written confirmation of release by the lenders; and
- e) Reporting on stocks held and their quality throughout the duration of the storage contracts.

3.1 Qualifications of the Collateral Manager

The eligible collateral management firms, which will be involved in providing the services outlined above, should be locally registered companies with experienced professional staff. They are required have a credible track record in the provision of collateral management services for storable commodities, including coffee. They are also required to have field staff with experience and training in warehouse and collateral management, preferably of coffee. The company should also be solvent and have professional indemnity insurance issued by a credible corporate surety.

The project management unit has been involved in soliciting suitable collateral management companies that meet the above criteria through a competitive bidding process. Four companies providing collateral management services in the Uganda market were formally invited to submit expressions of interest to provide these services. The terms and conditions under which these services will be provided will be evaluated and discussed with the CM by a team including the project management unit and participating banks. See Annex II.

4 Other Supporting Measures

4.1 Issuing of Standard WRs

To minimise fraud in the issue of the receipts, standardised warehouse receipts with adequate security features are to be printed and issuing procedures, providing a reliable audit trail, instituted. The design of the WRs will be discussed with key stakeholders before printing.

4.2 Market Information Systems (MIS)

The project team in conjunction with the Uganda Coffee Development Authority is developing an MIS system that will enable dissemination of market-sensitive information about developments in the coffee sector and provide regular reporting to the Banks on the state of the collateralised stocks.

4.1 Quality Assurance System

The project team has, on the basis of on-site inspection, confirmed the capacity of the selected warehouses to store the quantities envisaged and to assure the quality standards of the commodities whilst in storage. The depositors were selected on the basis of their capacity to deliver quality coffee. However, many of them tend to deliver coffee of variable quality. To address this problem, the project will provide training in commodity quality standards and assurance for the targeted groups of depositors. The training will be on both pre- and post-harvest practices that assure delivery of quality coffee.

4.4 Warehouse Legislation

The draft warehouse legislation was submitted to Cabinet, which approved its fundamental principles. The final draft has now been forwarded to the Ministry of Justice for gazetting by and eventual submission to Parliament. However, due to the tight schedule at Parliament surrounding next year's general elections in March 2006, it is likely that debate and promulgation of the WRS bill may be delayed. The delay in passing the law is, however, unlikely to affect the outcome of the pilot, especially since banks, which are likely to participate are familiar with purely contract-based inventory financing arrangements.



IMPROVING MARKETING AND FINANCE OF COFFEE AND OTHER AGRICULTURAL COMMODITIES THROUGH A WAREHOUSE RECEIPT SYSTEM IN ZIMBABWE

BRIEFING DOCUMENT ON PILOT WAREHOUSE RECEIPT SYSTEM FOR COFFEE AND SOYBEAN FOR BANKERS IN ZIMBABWE

Prepared by:

Natural Resources Institute, U.K. in fulfillment of subcontract with
United Nations Office for Project Services (UNOPS) –
the Project Executing Agency

APRIL, 2005



1. INTRODUCTION AND BACKGROUND

The Common Fund for Commodities (CFC) is funding projects to improve the marketing of coffee and cotton through developing and testing systems of commodity trade finance based on inventory collateralisation and warehouse receipts. Though beginning with the coffee and cotton sectors, the potential for expanding coverage of the receipts system to other storable commodities for which inventory-backed financing is feasible is to be explored. The projects are being implemented in Tanzania, Uganda and Zimbabwe by the United Nations Office for Project Services (UNOPS) with technical advice by the Natural Resources Institute.

The Zimbabwe component of the project is being implemented with the Government of the Republic of Zimbabwe (GRZ) through the Ministry of Agriculture (MOA), the Ministry of Industry and International Trade (MIIT), the Grain Marketing Board (GMB) and the Zimbabwe Coffee Mill (ZCM). The immediate objective of the project is to promote a privately-run warehousing system that allows for the issuance and use of transferable warehouse receipts (WRs) in the coffee and soybean sectors so as to ease access to finance as well as facilitate commodity trade.

This briefing document discusses how warehouse receipts systems (WRS) can help improve the financing and marketing of coffee and soybeans in Zimbabwe and describes the pilot WRS being promoted under the project. The structure of the document is as follows:

- Section 2 provides a brief overview of production, financing and marketing of the two crops;
- Section 3 describes the existing pre-harvest and inventory-based financing systems in the coffee sector, outlining the benefits and risks associated with the system and improvements proposed under the pilot WRS for coffee;
- Section 4 focuses on the proposed WRS for the soybean sector; and
- Section 5 describes other interventions intended to support the development of the WRS.

2. COFFEE AND SOYBEAN PRODUCTION, FINANCING AND MARKETING

Coffee production in Zimbabwe is low and has been declining (from about 10,000 tonnes in 1999 to just over 4,000 tonnes in 2004). However, the Government of the Republic of Zimbabwe (GRZ) has signalled interest in promoting coffee production as a means of improving the country's foreign exchange earnings. It is therefore expected that steps will be taken to stabilise and increase coffee output. Soybean production has similarly declined but national output is estimated at about 80,000 tonnes.

The production of both crops is dominated by the commercial farming sector (A2 farmers), who tend to market their coffee through ZCM, which is farmer-owned and processes about 65% of the exported coffee. The government-owned GMB, which handles less than 10% of the exported crop, is used mainly by A1 farmers as the marketing channel for their crop. ZCM offers curing and marketing services for a fee but GMB often buys the crop and is required to make a second payment to the farmers from its profits (something it has been unable to do because of the fixed exchange rates). Most smallholder producers

market their crop through co-operatives, but only few of the co-operatives are reported to be well-organised.

ZCM is promoting niche marketing of the smallholder crop, and the manager indicates that it is possible to obtain premiums of between 20-35% if the required volumes are available. Producers who market their crop through ZCM often have to wait for periods of between 6 weeks and 3 months (in extreme cases up to 6 months) from the time of delivery, through processing to receiving export proceeds. This implies an acute need for bridging finance, which tends to be unavailable to the smallholder producers.

The domestic soybean market is dominated by the oilseed and feedstock processing companies, including Cairns Holdings, Olivine Industries, Lever Brothers, National Foods and Nestle. GMB is also a major buyer on the domestic market, supplying mainly to the processors (during the 2003/04 season the Board traded nearly 13,000 tonnes of soybeans). South Africa tends to be the main destination for soybean exports from Zimbabwe.

2.1 FINANCING FOR THE COFFEE AND SOYBEAN SECTORS

Pre-harvest and inventory-backed financing is available for producers marketing their crop through ZCM. The main beneficiaries of pre-harvest finance tend to be commercial (A2) farmers and few groups of A1 farmers, notably the Vumba Agricultural Collective Cooperative Society Ltd (VACCS). Financing is based on field assessment of expected output for the season and the lender, mainly Kingdom Bank, advances up to 20% of the value of the crop. The borrower commits to marketing his/her coffee through ZCM, which guarantees that proceeds from the sale of the financed crop will be channelled through the bank, enabling it recover the credit provided.

Inventory finance is also available to coffee producers using ZCM. The advance provided ranges between 40% and 80% of the value of the parchment coffee deposited by the borrower at ZCM, depending on the track record of the borrower. The advance rate tends to be higher for the A2 farmers. Honde Valley Coffee Growers Association (HVCGA), a cooperative representing over 450 small-scale producers, has benefited from this form of financing. The system is primarily trust-based and does not involve formal third-party oversight of the warehouse operator (ZCM) or the collateralised stocks.

Inventory finance for the soybean sector is mainly provided under traditional collateral management agreements involving ITS Socotec, which is the main collateral manager in Zimbabwe. The main beneficiaries are the A2 farmers as well as the oilseed and feedstock processing companies like Cairns Holdings, Olivine Industries, Lever Brothers and National Foods.

3. THE COFFEE SECTOR FINANCING SYSTEMS

3.1 Pre-harvest finance for coffee: benefits, problems and associated risks

Disbursement of pre-harvest finance for coffee usually occurs in April and makes it possible for producers to procure inputs such as fertiliser and insecticides for year-round maintenance of the crop. As is the case with other forms of working capital credit, the requirements often include a good track record with the bank and security in the form of immovable assets. However, as a result of the land reforms, land title is no longer available to many producers (both A1 and A2 farmers). Borrower track record and a guarantee by ZCM have therefore become the main means by which banks mitigate default risk.

Access by A1 farmers to pre-harvest finance has been made possible through a mentoring system involving A2 farmers who market their crop through ZCM. The A2 farmers carry out farm surveys to estimate expected output and provide advisory services relating crop husbandry as well as pest and disease control. They also undertake field monitoring of the financed crop.

The **VACCS** is one group of A1 farmers, which has benefited from pre-harvest finance provided by Kingdom Bank. The credit obtained is usually used for input procurement and has reportedly contributed to the group's ability to consistently deliver high quality coffee (Class 2+) and obtain significant quality premiums, estimated at about 90% (in local currency terms) of the prices obtained by similar groups who usually deliver Class 3 coffee.

However, the advance provided (at the rate of 20% of the value of the crop) is viewed by the borrowers as insufficient to meet their input financing as well as household consumption needs over the eight to 10-month intervening period between provision of the advance (in April) and receipt of sale proceeds (which occurs between November and February). The bank is also quite exposed with regards to default risk arising either from crop failure or side-selling. So far, the mentoring/monitoring system developed by ZCM around the A2 farmers, has proved effective in minimising this risk.

It is proposed under the pilot that financing for the sector is structured, tying the pre-harvest finance to inventory finance (details are discussed in Section 3.3). This is intended to alleviate the cashflow difficulties currently faced by A1 farmers accessing pre-harvest finance while reducing the financing risks assumed by lenders.

3.2 Existing inventory finance for coffee: transaction cycle, benefits and risks

The transaction cycle under the existing trust-based receipt system for coffee at ZCM is as follows:

- ZCM issues warehouse receipts (WR) covering stocks of parchment coffee delivered by A2 farmers and farmer cooperatives.
- The WRs issued is presented to Kingdom Bank which provide finance secured against the delivered coffee.
- ZCM processes the coffee and facilitates export on behalf of the depositor.
- The export proceeds are channelled through Kingdom Bank, which recovers the advanced provided and credits the balance to the account of the borrower.

The system does not involve collateral managers (CM) and the bank relies primarily on stock reports from ZCM as a basis for financing. The system is relatively low cost and accessible to smallholder groups, including the **HVCGA**. The main business and process risks associated with the system include:

Storage losses – ZCM has insurance cover against theft/burglary, fire and allied perils. Its warehouses comply with minimum physical standards and it maintains a credible warehouse management regime. As a result of these factors, the risk of loss of value through physical losses or quality deterioration is effectively mitigated.

Price and valuation risks: are mitigated by the adoption by banks of a system of margining or “hair cutting”, advancing between 40% and 80% of the market value of the crop. This system will be maintained while banks are also encouraged to institute internal systems to monitor the link between the market value and book value of the advance provided.

Marketing risk – this risk appears to be related to external reaction to recent developments in the country’s agricultural sector. It is mainly collateralised coffee from the new A2 farmers which is at risk.

Fraudulent issue of WR and release of collateralised stocks – under the purely trust-based system, lenders rely only on the integrity of the warehouse operator to minimise this risk. Concern about this appears to have discouraged other banks from engaging in this form of financing. It is to mitigate this risk that the following are proposed:

- WRs issued be standardised, containing standard terms and conditions, and design features that can reduce the risk of fraud;
- Scales and grading equipment used by warehouse operators will be required to be assized or calibrated regularly;
- Systems will be instituted to ensure that allow for a clear audit trail to be established in issuing WRs and to minimise access to the receipts by unauthorised parties; and
- Third party inspection of warehouses and monitoring by a collateral manager will be instituted.

3.3 Proposed pilot coffee trade finance system

The proposed system builds on the existing financing systems. It involves a structure that links provision of pre-harvest finance (to the A2 farmers and well-organised groups of A1 farmers, like the VACCS) to inventory-backed financed that is made more secure with the inclusion of third-party monitoring and inspection by a collateral manager. Inventory credit may also be offered to producers which do not access the pre-harvest finance (e.g. HVCGA).

3.3.1 Transaction cycle

Provision of pre-harvest finance will involve the following process:

- Farm survey to estimate expected output and farm income by ZCM team;

- Survey report and estimated farm income submitted to bank, which determines financing to be provided (currently at the rate of 20% of the estimated value);
- Loan conditions, as determined by the bank, include requiring borrower to deposit coffee produced at ZCM;
- Borrower (A2 farmer or farmer group representing A1 farmers) harvests and undertakes primary processing of coffee; and
- Borrower deposits parchment coffee conforming to approved standards (Class 3 or better) at the ZCM warehouse at Mutare.

As is currently the practice, the pre-harvest finance is expected to be provided in April and the parchment coffee delivered to ZCM in August/September. The interest rates charged will be consistent with market rates and reflect the level of risk assumed by the bank.

Upon delivery of parchment coffee to ZCM, inventory finance of up to 80% of the value of the deposited coffee will be provided to the depositors. Part of the inventory credit will be used to offset the pre-harvest finance and the remainder will be available to finance input procurement and household consumption needs. Repayment of the inventory credit will be from the proceeds from the sale of the crop. The cycle for the provision of inventory credit will involve the following:

- Depositor delivers parchment coffee to the ZCM warehouse at Mutare;
- ZCM will issue warehouse receipts (WR) covering stocks of parchment coffee delivered – confirming (as per the WR issued) the volume and quality of the crop delivered and identify of the depositor;
- The collateral manager (CM) confirms delivery of the deposited coffee to financing banks;
- Depositor submits the WR issued to the financing bank;
- Bank provides finance secured against the delivered coffee; taking physical possession of the WR buyer arranges payment, covering at least the advance provided, through the borrower's accounts at the bank;
- ZCM processes the coffee and facilitates export on behalf of the depositor;
- Export proceeds are channelled through the financing bank, which recovers the advance provided and credits the balance to the account of the borrower;
- Bank releases WR to buyer who takes delivery of the coffee.

3.3.2 Target throughput and beneficiaries under the pilot

The target throughput of parchment coffee to be delivered is estimated at 2,000 tonnes and two banks are expected to provide financing against the receipted stocks. With the value of the deposited coffee estimated at about US\$2 million, it is expected that pre-harvest finance amounting to about US\$400,000 will be provided. Inventory finance to be provided is estimated at about US\$1.6 million.

The target borrowers under the pilot for coffee at ZCM are:

- A2 farmers and farmer organisations such as Honde Valley Coffee Growers Association, Vumba Agricultural Collective Cooperative Society Ltd. and Guri Cooperative Society.

3.3.3 Process/business risks and mitigation measures

The main performance risks associated with the pre-harvest finance include the following:

- a. Fraud in estimating expected crop output.
- b. Crop failure due to unanticipated unfavourable weather and/or pests and diseases.
- c. Side-selling to avoid repayment of pre-harvest credit.

The ZCM team has been undertaking the surveys and established a credible track record in doing so. It is expected that the team will maintain the same level of integrity, particularly since the credit is critical to the operations of the farmers and any cases of fraud will fatally undermine the whole system. Their role in monitoring farming operations of the borrowers and mentoring, especially the A1 farmers, will help reduce loss of output and side-selling. Most of the farmers who obtain pre-harvest finance have irrigation facilities and therefore are not unduly exposed to the vagaries of the weather.

The process and business risks associated with inventory finance as well as the proposed mitigation measures are as discussed in Section 3.2. The main innovation is the inclusion of third-party inspection and monitoring services by a collateral manager (functions are discussed in Section 3.4).

3.4 Inspection and monitoring by the collateral manager

Inspection and monitoring by the CM is critical to securing the interests of depositors and lenders with interest in the collateralised stocks. The functions of the CM include to:

1. Supervise in-take at the designated warehouses;
2. Carry out regular unannounced inspection of the designated warehouses;
3. Verify availability of physical stocks, ensuring consistency with receipts issued;
4. Verify the quality of stocks held;
5. Review curing losses at the designated warehouse, reporting on any significant discrepancies; and
6. Submit regular reports on the above as well as other activities below to the financing banks.

In addition, the CM will be required to:

- a) Inspect weighing and grading equipment at the designated warehouses and advice on remedies, where necessary;
- b) Review and advice on improvements to stock in-take systems as well as storage management procedures and documentation at the participating warehouses;
- c) Install stock management and reporting systems (web-based or manual) that will enhance the timeliness and quality of reporting on stock levels;
- d) Review procedures and documentation related to the issuing of the warehouse receipts to minimise fraud; and
- e) Review stock delivery procedures and documentation and advice on improvements needed.

4. Pilot WRS for soybean

The pilot is intended to expand access to commodity-backed finance beyond processors to include producers, medium-size traders and farmer organisations representing A1 farmers. The transaction cycle under the proposed system will be as follows:

- Delivery of soybean that complies with agreed standards to GMB storage sites at the Lion's Den and Concession Depots.
- GMB, as the warehouse operator, will be responsible for storage of the crop and issue "goods-received notes" evidencing in-take of the stocks.
- The appointed collateral manager will check stock quality and weight and issue transferable warehouse receipts to depositors.
- Depositors will negotiate off-take contracts, assuring a minimum future price with potential buyers.
- Depositors will present WR and off-take contract to the financing bank.
- Bank lends up to 80% of the value of the crop, after confirming availability of stocks with the collateral manager and taking possession of the WR issued.
- Collateral manager monitors stocks, ensuring that GMB complies with storage management practices and procedures required to maintain the quality and quantity of stocks delivered.
- Depositor agrees sale with buyer, instructing buyer to pay through account with the financing bank.
- Bank receives payment and releases WR to buyer as well as instructs the collateral manager to release the stocks.
- Bank credits depositor with balance after deductions to cover loan advanced as well as interest and other charges.

The proposed system will help mitigate such risks as storage losses, fraud in issuing WRs and in the release collateralised stocks as well as marketing risks. It is expected that lenders will use margining to manage price and valuation risks. A target 10,000 tonnes of soybean is expected to be deposited during the harvest season beginning June 2005.

4.1 Role of collateral managers under the soybean WRS

Unlike the financing structure for coffee which require inspection and monitoring services, the CM will provide full-service collateral management services for the soybean WRS, including:

- Issuing warehouse receipts against stocks delivered to the designated warehouses (at Lion's Den and Concession in the Mashonaland Province);
- Ensuring effective storage of the collateralised stocks by the warehouse operator (GMB);
- Providing stock management and reporting systems (either manual and web-based) that enable the CM produce and disseminate reports on the collateralised stocks, especially to the financing banks; and
- Releasing the stocks in compliance with release orders by the financing banks and upon presentation of the warehouse receipts.

4.2 Qualifications of the Collateral Manager

The eligible collateral management firms, which will be involved in providing the services outlined above, should be locally-registered companies with experienced professional staff. They would be required have a credible track record in the provision of collateral management services for storable commodities, including coffee and soybean. They are also required to have field staff with experience and training in warehouse and collateral management, preferably of coffee and soybean. They company should also be solvent and have professional indemnity insurance issued by a credible corporate surety.

The market leader in the provision of collateral management services (ITS-SOCTEC) has been formally invited to offer the services required. The terms and conditions under which these services will be provided will be discussed with the CM by a team including the project management unit and participating banks.

5. Other supporting measures

i. Issuing of standard WRs

To minimised fraud in the issue of the receipts, standardised warehouse receipts with adequate security features are to be printed and issuing procedures, providing a reliable audit trail, instituted. The design of the WRs will be discussed with key stakeholders before printing.

ii. Market information systems (MIS)

As part of its contribution to the development of the WRS, the Ministry of Agriculture (MOA) will include dissemination of market-sensitive information through its existing systems, which are being upgraded with donor support, under a project scheduled to be completed by June 2005.

iii. Quality assurance system

The project team has, on the basis of on-site inspection, confirmed the capacity of ZCM to enforce commodity standards that will ensure that all receipted coffee can be exported. The A2 farmers generally have the capacity to deliver quality coffee. However, many A1 farmers tend to deliver coffee of variable quality. To address this problem, the project will provide training in commodity quality assurance for groups of A1 farmers. The training will be on both pre- and post- harvest practices that assure delivery of quality coffee.

iv. Warehouse legislation

The draft warehouse legislation has been submitted to the Cabinet's Committee on Legislation, which has considered and approved its fundamental principles. The revised draft is to be approved by the full cabinet before submission to Parliament. However, due to the recent parliamentary elections in March 2005, it is unlikely that the bill will be placed before parliament before August 2005. It is expected that banks and other key stakeholders will continue to lobby for the promulgation of the legislation. The delay in passing

the law is, however, unlikely to affect the outcome of the pilot, especially since banks which are likely to participate are familiar with purely contractbased inventory financing arrangements.

ANNEX 9

Scope of work for providing Collateral Management and Warehouse Inspection services for the Coffee/Soybean warehouse receipts pilots in Zimbabwe

I INTRODUCTION AND BACKGROUND

The Common Fund for Commodities (CFC) is funding projects to improve the marketing of coffee and cotton through developing and testing systems of commodity trade finance based on inventory collateralisation and warehouse receipts. Though beginning with the coffee and cotton sectors, the potential for expanding coverage of the receipts system to other storable commodities for which inventory-backed financing is feasible is to be explored. The projects are being implemented in Tanzania, Uganda and Zimbabwe by the United Nations Office for Project Services (UNOPS) with technical advice by the Natural Resources Institute.

The Zimbabwe component of the project is being implemented with the Government of Zimbabwe through the Ministry of Agriculture (MOA), the Ministry of Industry and International Trade (MIIT), the Grain Marketing Board (GMB) and the Zimbabwe Coffee Mill (ZCM). The immediate objective of the project is to promote a privately-run warehousing system that allows for the issuance and use of transferable warehouse receipts (WRs) in the coffee and soybean sectors so as to ease to access finance as well as facilitate commodity trade.

1.1 COFFEE AND SOYBEAN PRODUCTION, MARKETING AND FINANCING

Coffee production in Zimbabwe is low and has been declining (from about 10,000 tonnes in 1999 to just over 4,000 tonnes in 2004). Soybean production has similarly declined but national output is estimated at about 80,000 tonnes. The production of both crops is dominated by the commercial farming sector (A2 farmers). The A2 farmers tend to market their coffee through ZCM, which is farmer-owned and handles about 65% of the coffee exports. ZCM offers curing and marketing services for a fee, while GMB buys the crop and is required to make a second payment from its profits (something it has been unable to do because of the fixed exchange rates). The government-owned GMB, which handles less than 10% of the exported crop, is used mainly by A1 farmers as the marketing channel for their crop.

Most smallholder producers market their crop through co-operatives, but only few of the co-operatives are reported to be well-organised. ZCM is promoting niche marketing of the smallholder crop, and the manager indicates that it is possible to obtain premiums of between 20-35% if the required volumes are available. Producers who market their crop through ZCM often have to wait for periods of between 6 weeks and 3 months (in extreme cases up to 6 months) from the time of delivery, through processing to receiving export proceeds. This implies an acute need for bridging finance, which tends to be unavailable to the smallholder producers.

The domestic soybean market is dominated by the oilseed and feedstock processing companies, including Cairns Holdings, Olivine Industries, Lever Brothers, National Foods and Nestle. GMB is also a

major buyer on the domestic market, supplying mainly to the processors (during the 2003/04 season the Board traded nearly 13,000 tonnes of soybeans). South Africa tends to be the main destination for soybean exports from Zimbabwe.

Inventory-backed financing is available for soybean under the traditional collateral management agreements with ITS Socotec, which is the main collateral manager in Zimbabwe. However, Kingdom Bank offers credit secured against coffee deposited with ZCM, primarily on the basis of trust, with no formal oversight system in place. This system is discussed in Section 2. Kingdom Bank continues to show interest in inventory-backed financing. Other banks which have indicated interest in the system are Agribank and Premier Finance.

2. DESCRIPTION OF PILOT WRS FOR COFFEE SECTOR

2.1 Objectives of the WRS project, the system and identified risks

The transaction cycle under the trust-based WRS for coffee at ZCM is as follows:

- ZCM issues warehouse receipts (WR) covering stocks of parchment coffee delivered by A2 farmers and farmer cooperatives representing the A1 farmers.
- The WRs issued is presented to banks which provide finance secured against the delivered coffee.
- ZCM processes the coffee and facilitates export on behalf of the depositor.
- The export proceeds are channelled through the financing bank, making it possible for the loan to be recovered and the balance credited to the account of the borrower.

Kingdom Bank is the main provider of finance secured with collateralised coffee stocks at ZCM. The system does not involve collateral managers (CM) and depositors who process their crop at ZCM are not charged storage fees. The bank relies primarily on stock reports from ZCM as a basis for financing, a situation which is not considered ideal by banks, though so far no major losses have occurred.

The immediate objective of the project is to make the existing inventory finance system for coffee more secure, and therefore attract financing from other banks. It is also to pilot inventory finance for soybean during the harvest season beginning June 2005.

2.2 Process and business risks associated with proposed WRS

The main business and process risks associated with the system include:

Storage losses – ZCM has insurance cover against theft/burglary, fire and allied perils. Its warehouses comply with minimum physical standards and it maintains a credible warehouse management regime. ZCM also receipts only coffee that conforms to acceptable quality standards. The combination of these factors reduce the risk of loss of value through physical losses or quality deterioration. The interest of depositors and lenders is also protected in the event of a loss because of the insurance cover taken by ZCM.

Price and valuation risks: are mitigated by the adoption by banks of a system of margining or “hair cutting”, advancing between 70% and 80% of the market value of the crop. This system will be maintained

while banks are also encouraged to institute internal systems to monitor the link between the market value and book value of the advance provided. Banks will also continue to include in financing contracts, exit clauses allowing for the bank to arrange sale of the underlying commodity if they are overly exposed as a result of adverse market developments.

Marketing risk – this risk appears to be related to external reaction to developments in the country's agricultural sector. It is uncertain how banks can mitigate the risk by requiring borrowers to secure offtake contracts with credible international buyers.

Fraudulent issue of WR and release of collateralised stocks – under the purely trust-based system, lenders rely only on the integrity of the warehouse operator to minimise this risk. Concern about this appears to have discouraged other banks from engaging in this form of financing. It is to mitigate this risk that the following are proposed:

- WRs issued be standardised, containing standard terms and conditions, and design features that can reduce the risk of fraud;
- Scales and grading equipment used by warehouse operators will be required to be assized or calibrated regularly;
- Systems will be instituted to ensure that allow for a clear audit trail to be established in issuing WRs and to minimise access to the receipts by unauthorised parties; and
- Third party inspection of warehouses and monitoring by a collateral manager will be instituted.

These improvements are to be adopted under a pilot programme planned for the harvest beginning in June 2005.

2.3 Principal beneficiaries and stakeholders

The target depositors under the pilot WRS for coffee at ZCM and GMB warehouses at Mutare are:

- A2 farmers and farmer organisations such as Honde Valley Coffee Growers Association, Vumba Coffee Cooperative and Guri Cooperative Society.
- Other private coffee traders.

The target throughput of parchment coffee to be delivered is estimated at 2,000 tonnes and two banks are expected to provide financing against the receipted stocks.

2.4 Pilot WRS for soybean

The pilot is intended to expand access to commodity-backed finance beyond processors to include producers, medium-size traders and farmer organisations representing A1 farmers. The transaction cycle under the proposed system will be as follows:

- Delivery of soybean that complies with agreed standards to GMB storage sites at the Lion's Den and Concession Depots.
- GMB, as the warehouse operator, will be responsible for storage of the crop and issue "goods-received notes" evidencing in-take of the stocks.

- The appointed collateral manager will check stock quality and weight and issue transferable warehouse receipts to depositors.
- Depositors will negotiate off-take contracts, assuring a minimum future price with potential buyers.
- Depositors will present WR and off-take contract to the financing bank.
- Bank lends up to 80% of the value of the crop, after confirming availability of stocks with the collateral manager and taking possession of the WR issued.
- Collateral manager monitors stocks, ensuring that GMB complies with storage management practices and procedures required to maintain the quality and quantity of stocks delivered.
- Depositor agrees sale with buyer, instructing buyer to pay through account with the financing bank.
- Bank receives payment and releases WR to buyer as well as instructs the collateral manager to release the stocks.
- Bank credits depositor with balance after deductions to cover loan advanced as well as interest and other charges.

The proposed system will help mitigate such risks as storage losses, fraud in issuing WRs and in the release collateralised stocks as well as marketing risks. It is expected that lenders will use margining to manage price and valuation risks. Target deposits is set at about 10,000 tonnes.

3. Services required

The services of a collateral management (CM) company are needed in implementing the WRS for both coffee and soybean. The system for coffee will require the CM to carry out warehouse inspection and stock monitoring at ZCM and to provide regular reports to the financing banks and other parties with interest in the underlying commodities. Under the WRS for soybean, the CM will be required to provide full service collateral management as detailed below.

3.1 Inspection and monitoring services for coffee WRS

The core inspection and monitoring services to be provided by the CM include to:

1. Supervise in-take at the designated warehouses;
2. Carry out regular unannounced inspection of the designated warehouses;
3. Verify availability of physical stocks, ensuring consistency with receipts issued;
4. Verify the quality of stocks held;
5. Review curing losses at the designated warehouses, reporting on any significant discrepancies; and
6. Submit regular reports on the above as well as other activities below to the financing banks.

In addition, the CM will be required to:

- a) Inspect weighing and grading equipment at the designated warehouses and advice on remedies, where necessary;

- b) Review and advice on improvements to stock in-take systems as well as storage management procedures and documentation at the participating warehouses;
- c) Install stock management and reporting systems (web-based or manual) that will enhance the timeliness and quality of reporting on stock levels;
- d) Review procedures and documentation related to the issuing of the warehouse receipts to minimise fraud; and
- e) Review stock delivery procedures and documentation and advice on improvements needed.

3.2 Collateral management services for soybean WRS

For purposes of providing collateral management services for the soybean WRS, the CM is required to provide services including:

- Issuing warehouse receipts against stocks delivered to the designated warehouses;
- Ensuring effective storage of the collateralised stocks by the warehouse operator (GMB);
- Providing stock management and reporting systems (either manual and web-based) that enable the CM produce and disseminate reports on the collateralised stocks, especially to the financing banks; and
- Releasing the stocks in compliance with release orders by the financing banks and upon presentation of the warehouse receipts.

3.3 Qualifications of the Collateral Manager

Eligible collateral management firms should be locally-registered companies with experienced professional staff. They should have a credible track record in the provision of collateral management services for storable commodities, including coffee and soybean. They should also have field staff with experience and training in warehouse and collateral management, preferably of coffee and soybean. They company should be solvent and have professional indemnity insurance issued by a credible corporate surety.

3.4 Submission of technical and financial proposals

The CM is required to submit technical proposals which should include comments relating to the understanding of the company of the services required, as described in this Scope of Work, suggesting improvements where possible to further reduce the exposure of lenders and depositors under the WRS. The proposal should also describe how the company intends to perform the functions required. Where the company has operational manuals on these procedures, a brief outline of the contents should be provided to support the above.

To demonstrate the competence of staff to be involved in the provision of these services, the company should provide pen sketches of both its management and field staff. The CVs of the key staff should be provided as annexes to the technical proposal.

The company is also required to provide evidence that it has Professional Indemnity Insurance, providing such information as the type and provider of insurance and scope of the insurance.

The financial proposals should set out the fees proposed as well as the terms and conditions under which the services are to be provided.

The proposals should be hand-delivered in sealed envelopes and marked **“TECHNICAL AND FINANCIAL PROPOSALS FOR PROVISION OF WAREHOUSE INSPECTION AND COLLATERAL MANAGEMENT SERVICES”** and addressed to:

The National Project Coordinator,