

The role of a warehouse receipt system: A case study of the Malawian Agricultural Commodity Exchange

by

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DECLARATION

I hereby declare that the dissertation titled “The Role of a Warehouse Receipt System: A Case Study of the Malawian Agricultural Commodity Exchange” which I submit for the partial fulfilment of the degree MSc (Agric) Agricultural Economics at the University of Pretoria is my own work and as not been submitted for a degree at any other tertiary institution.

SIGNATURE

DATE

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ABSTRACT

THE ROLE OF A WAREHOUSE RECEIPT SYSTEM: A CASE STUDY OF THE MALAWIAN AGRICULTURAL COMMODITY EXCHANGE

By

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Department: Agricultural Economics, Extension and Rural Development
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Key Concepts: Warehouse Receipt, Commodity Exchange

In many Western countries and elsewhere, agriculture commodity exchanges have been in existence for centuries. However, Africa did not follow the same route for various reasons. The main reason is that commercial production of basic agricultural commodities considerably lagged that of its counter parts in the Western world. By the time commercial production became a significant factor, the philosophy of government controlled marketing was already entrenched in many of these countries. It was only in the mid-1990's after the demise of communism and the abolishment of the South African controlled marketing system (not related), that farmers and stakeholders suddenly asked, how should we now go about to market our products, what are the alternatives? Western models were revisited, with commodity exchanges as a possible solution revisited. An urgent need aroused regarding the requirements for the establishment and management of a successful Warehouse Receipt System (WRS).

Malawi, is one country that that has a history of government controlled marketing followed by (partial) deregulation in 2006. Despite this, the Agricultural Commodity Exchange for Africa (ACE) was established in 2005, survived and continued to grow. It has now reached a point where it is on the verge of commercially

implementing and rolling out a WRS. This has obviously brought forward a number of questions. The most prominent of these are: how do you define a WRS, what are the components of a successful WRS, what are the similarities or differences between the requirements of a successful commodity exchange and that of a WRS?

The objective of this study is to determine the importance of a WRS in the success of an agricultural commodity exchange.

ACE has advocated for a WRS as an integral part of agricultural trade and financing since its incorporation in 2006. However, Malawi does not have a regulatory framework for warehouse receipts (WRs) so the system has to be built on contractual relationships between grain depositors, storage operators, financial institutions and ACE.

Given that various commodity exchanges have been in operation throughout Africa for more than a decade with various degrees of success, sufficient literature is available on the subject matter. Much effort was made to obtain all relevant documentation, trusting that some valuable lessons are to be gleaned from these documents.

This study briefly looked at the recent history on the establishment of commodity exchanges in Eastern and Southern Africa and the importance of a WRS and the role that warehouse receipt financing has played in their development. The objective was to learn from their experience and/or mistakes and to benefit from their success.

Over recent years, the role, benefits and in some cases, the reasons for the failure of commodity exchanges in Africa, have extensively been researched. The study captures some of the invaluable observations made by many experts in this subject field. Aspects dealt with include, *inter alia*, the benefits of a successful WRS and a commodity exchange.

This study deals with the requirements of a WRS, followed by the rules. The latter have been revisited and evaluated for Malawi, given its unique circumstances and the ever changing environment. Many of the processes have been visually depicted in a set of flow charts.

This is followed by an analysis of the bank credit policies and procedures required for financing the WRs. As elaborated and included in the annexures, a draft product proposal has been compiled for bank product managers to submit to their respective credit policy committees seeking approval for the product. The process of financing a warehouse certificate and its redemption is dealt with in detail.

In the latter part, this study looked at the role of the insurance companies and best practices followed in other countries. Other aspects highlighted are the corporate structure of ACE, government intervention, the Reserve Bank of Malawi (RBM), the IT structure, marketing, price information and arbitration.

The study concludes that a well-designed and custom made WRS (for ACE) depends on various components. They are an online trading system, warehouse receipt (WR) financing, insurance, generic grading regulations and registered warehouses. ACE would struggle to grow and function properly without a successful WRS. ACE could overcome many other obstacles such as inappropriate government interference, export restrictions, etc. However, ACE needs to be operationally competent and for ACE this is tied to a successful WRS.

If ACE could succeed, it will serve as a case study for other countries and exchanges in the region to learn from.

Lastly, a series of recommendations are made. The recommendations deal with findings from the study that need to be addressed. Some issues are urgent and others may be dealt with over the longer term. Certain issues fell outside the scope of this study but still deserve attention.

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LIST OF ACRONYMS

AAMP	Africa Agricultural Markets Programme
ACTESA	The Alliance for Commodity Trade in Southern Africa
ACE	The Agricultural Commodity Exchange for Africa
ACOS	Agricultural Commodity Supplies
ADMARC	The Agricultural Development and Marketing Corporation
AGRA	Alliance for a Green Revolution (a mainly Gates Foundation funded org.)
ACTESA	Alliance for Commodity Trade in Eastern and Southern Africa
AMIS InterAg	AMIS International Agricultural Consulting Inc. – a Canadian co.
BVO	Bid Volume Only (A WFP purchasing tender system)
CRS	Catholic Relief Services
COMPETE	The Competitiveness and Trade Expansion Programme
COMESA	Common Market for Eastern and Southern Africa
EAGC	East African Grains Council (funded by USAID)
ECE	Ethiopian Commodity Exchange
EDF	(Malawi) Export Development Fund (conceptualizing by RBM)
ESOKO	Kiswahili for “E” (electronic) market.
GTPA	Grain Traders and Processor Association
IFPRI	The International Food Policy Research Institute.
JSE	Johannesburg Stock Exchange
KACE	Kenya Agricultural Commodity Exchange
MLI	(USAID) Market Linkages Initiative
MIS.	Market Information Services
NAP	National Agricultural Policy
NFRA	National Food Reserve Agency
NASFAM	National Smallholder Farmers Association of Malawi
NCPB	(Kenyan) National Cereals and Produce Board
NRC	(Malawi) Natural Resources College. (16km west of Lilongwe.)
NRI	(UK) The Natural Resource Institute
PROFIT	A USAID instrument, Production Finance and Technology

P4P	Purchase for Progress, a program run by the World Food Program
RBM	Reserve Bank of Malawi
SAFEX	South African Futures Exchanges
TAMA	The Tobacco Association of Malawi
UACE	Uganda Commodity Exchange
WFP	World Food Program
WIC	Warehouse Inventory Credit system
WR	Warehouse Receipt
WRS	Warehouse Receipt System
WRs	Warehouse Receipts
ZAMACE	Zambia Agricultural Commodities Exchange
ZIMACE	Zimbabwe Commodity Exchange

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

In the United States, Japan and Europe future commodity exchanges have been operating for centuries, some might say it dates as far back as 1695 where sporadic trading took place in Amsterdam (Baffes, J. 2011). The Dojima Rice exchange was the world's first futures exchange and was established during the 1600's (Federic, L. 2002). At the end of the 1800's there were five commodity exchanges worldwide; New York, New Orleans, Liverpool, Havre and Alexandria that all formed a global market with the connection to the transatlantic trade (Baffes, J. 2011). Not all were trading in grain commodities, for example, the Alexandria Cotton Exchange in Egypt (Raafat, S. 1997). These markets experienced a downfall after World War II but the re-birth of the exchanges occurred in 1970's and is still thriving.

However, Africa did not follow the same route for various reasons. The main reason is that commercial production of basic agricultural commodities considerably lagged that of its counter parts in the Western world. Significant commercial production in South Africa, which was the regional African leader, only took off in the early 1920's. South Africa's production first exceeded 1.5 mil tons only in 1923/24, as depicted in Figure 1 below (DAFF. 2012). Thereafter, between the 1920's and the mid-1940's agricultural production experienced huge fluctuations in production due to draught, depression and World War II along with the rest of the world.

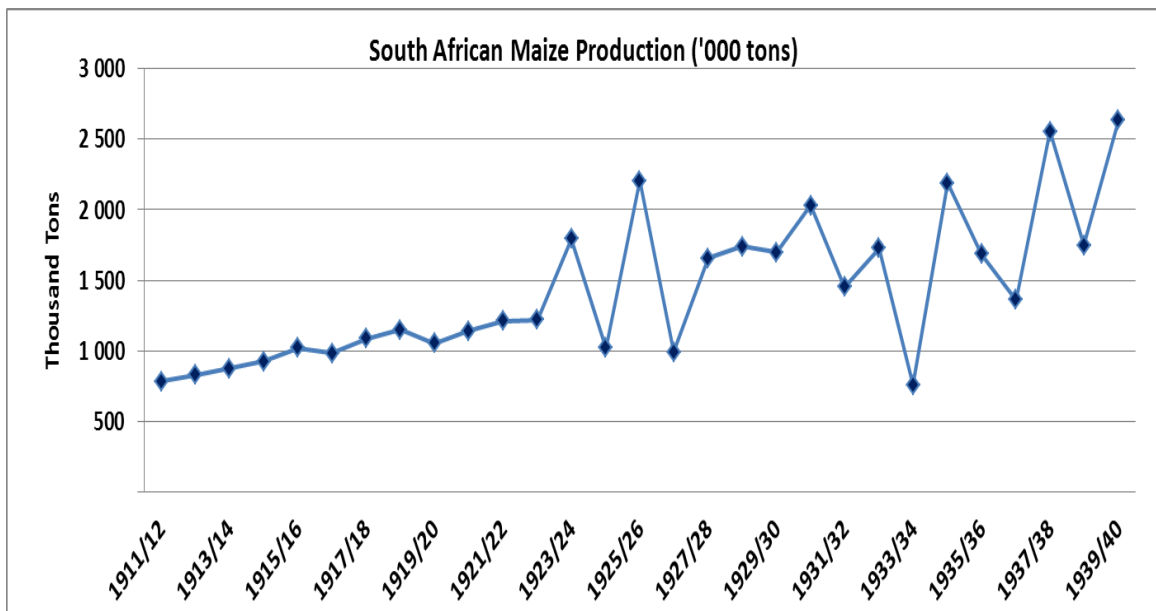


Figure 1: The South African Maize Production from 1911 to 1940 in thousand tons

Source: DAFF. 2012.

From the 1960's onwards, commercial production grew rapidly due to mechanization and use of fertilizers and herbicides. Subsequent to this, in the 70's and 80's, controlled marketing entered its heyday in support of commercial production and farmers (de Swardt, S.J.J. 1983). The main objective of the marketing schemes was to manage instability and risk characterised by the agricultural sector. Under these circumstances there was no need for commodity exchanges. Every aspect of marketing was controlled, including prices. Earlier free market initiatives, as described by De Swardt (1983), when some millers in downtown Johannesburg were issuing a form of warehouse receipt, became redundant and even illegal under the new marketing legislation. South Africa followed the international trend of greater state intervention, but as the rest of the world moved away from this system South Africa continued and soon farmers forgot that this was only one method of managing risk and instability (Kirsten, J.F; Vink, N. 2000).

Eastern and Southern Africa, which was mostly colonized by Britain and to a lesser degree Portugal, followed the same pattern as South African with the one difference; it significantly lagged in the developments of South Africa. In 1960, there were not yet any records of commercial maize production in Kenya, Malawi,

Zambia or Zimbabwe, which today make up some of the most prominent African producers. By the time commercial production became a significant factor, the philosophy of government controlled marketing was already entrenched in many of these countries. The initial success of this model in South Africa was one reason, but the rapid expansion of the communist ideology through African, where everything is centrally controlled, was another important reason.

It was only in the mid-1990's after the demise of communism and a move in South Africa to abolish the controlled marketing system (not related), that farmers and stakeholders suddenly asked, how should we now go about to market our products, what are the alternatives? Western models were revisited, with commodity exchanges being the obvious or only way forward. An urgent need came about regarding the requirements for the establishment and management of a successful commodity exchange.

Several African countries then established commodity exchanges over a period of the last 15 to 20 years. The first being South African with the South African Futures Exchange (SAFEX) in 1994, followed by Ethiopia with Ethiopian Commodity Exchange (ECX). However, the road forward was difficult and costly, with mistakes and failures plenty. For example, Zimbabwe Agricultural Commodity Exchange (ZIMACE) was established in 1994 but effectively closed in 2001. Zambia Agricultural Commodity Exchange (ZAMACE) was established in 2007 but although still formally open, it has virtually come to a standstill in the last year. This is evident that the success of a commodity exchange is much more complicated than the often popular statement of – no government interference!

Malawi, is another country with a history of government controlled marketing followed by (partial) deregulation in 2006. Government sporadically still interferes and disrupting the functioning of the market. A recent example was the ban of exports in 2011. Despite this, ACE (ACE) was established in 2005, survived and continued to grow. It has now reached a point where it is on the verge of commercially implementing and rolling out a Warehouse Receipt System (WRS).

This has obviously brought forward a number of questions again. The most prominent of these are what exactly is meant by a WRS, what are the components of a successful WRS, what are the similarities or differences between the requirements of a successful commodity exchange and that of a WRS, and even on a broader scale, what is meant by a commodity exchange?

The purpose of this study is to analyse the role of a WRS in agricultural commodity exchanges with ACE, Malawi as case study.

1.2 PROBLEM STATEMENT

Whenever a new business model is developed, one of the first questions or statements is always, what are the requirements for success. However, 'the requirements for an exchange' and 'the role (or requirements) of a WRS' should not be confused. These are two distinct concepts. Requirements is a much wider concept and includes aspects such as government policy including import and export regulations, composition of the farming sector – small farmers versus commercial farmers, the processing industry, national and regional supply and demand, levels of education, etc.

The role of a WRS looks at the core of the exchange and its functioning. It addresses the questions of what are required for the exchange to operationally function effectively within its unique country environment. An exchange might, from an operational point of view, be structured efficiently but could still fail because of the broader requirements like government policies that are not in place.

At this point it is important to distinguish between the various exchanges. The Agricultural Commodity Exchange for Africa (ACE) is a commodity exchange, where physical delivery and receipt are crucial in selling the concept of a free market for commodities. There are many exchanges around the world that trade in contracts, not only financial contracts, but also commodity contracts where cash settlement takes place at expiry. The 'Corn' contract traded on the Johannesburg Stock Exchange (JSE) Commodity Derivatives Market (CDM), is one such

example. Therefore a commodity exchange does not necessarily need a WRS. For the purpose of this study, when therefore referring to an 'exchange' it is an exchange where physical settlement is important to the agricultural environment within which the exchange operates. It would typically also be the case for 'new' exchanges. You could also have a WRS without an exchange. This would then entail issuing, registering and possibly financing of WR but with no central trading taking place.

Thus, even if the broader requirements are fulfilled, partially or entirely, a relative new exchange, similar to ACE, could not succeed without an efficient WRS. Inherent to the concept of an 'efficient WRS' is the buy-in of its key stakeholders. Thus, irrespective of any other criteria, the WRS remains key to the success of the exchange.

Across the Southern Africa region, smallholder farmers and emerging commercial farmers sell their produce shortly after the harvest each year when markets are in surplus and prices are low. If only they could hold out for a month or two, then they would be able reap the benefit of higher prices, but as they are in need of money, they have no choice but to sell early. Warehouse Receipts (WRs) could be a solution to their predicament. Under this arrangement, the owner deposits the commodity (such as maize) in a warehouse and a receipt is issued that stipulates the quantity, quality and type of product deposited. The warehouse receipt would generally be negotiable, meaning ownership is transferable, which makes it quite suitable for collateral purposes. Financial institutions may therefore be willing to extend loans against this security in the appropriate environment for a portion of the value of the underlying commodity. In these circumstances the farmer would have access to funds to sustain her/himself until such time that she/he is ready to sell the commodity.

From a financial perspective, the product is not complicated, but it requires that key fundamentals be in place. It is essential that good physical warehousing facilities are available so that all parties to the transaction can be confident that the produce is well protected and secure. There must exist high levels of trust amongst the participants, particularly the assurance that the warehouse operator

will not release the product to any party other than the owner. The inspection and grading services must also be reliable to ensure that the produce is of the precise type, quantity and quality stipulated. The legal environment must be supportive of the bank's right to realise security quickly and unilaterally in the event of default, usually by selling the warehouse receipt to a third party. The involvement of an agricultural commodity exchange can further add significant value by the registration of certified warehouses and by providing a trading platform facilitating both price discovery and transparent trade.

There are five countries in the Southern Africa region that are capable of producing sizeable quantities of grains and other crops that can qualify for the issue of WRs as negotiable instruments which can be financed and traded. These are Malawi, Mozambique, South Africa, Zambia and Zimbabwe, (Tanzania being excluded from this discussion). Of these, only South Africa has an effective commodity exchange, SAFEX. Zimbabwe used to have an effective exchange ZIMACE, but it suffered from the political turmoil in Zimbabwe to the extent that it is no longer functioning. Mozambique has yet to attempt to establish an exchange of this kind. In Zambia, several attempts have been made to establish a commodity exchange. The present exchange, known as ZAMACE, has unfortunately, like its predecessors, delivered no tangible success despite having received assistance in the amount of approximately \$1.5 million from USAID PROFIT and USAID COMPETE. In 2011 the World Food Program (WFP) was the only entity still doing trade (maize) through ZAMACE but even that has now come to a standstill. The only new commodity exchange in the region outside South Africa that has done relevant trade (albeit small) in recent times is ACE, Malawi.

ACE has advocated for a WRS as an integral part of agricultural trade and financing since its incorporation in 2006. However, Malawi does not have a regulatory framework for WRs, so the system has to be built on a contractual relationship between grain depositors, storage operators, financial institutions and ACE. This took time to achieve but in 2011 ACE was able to register the GSL silos in Kanengo, Lilongwe as the first WRS storage facility. On 2 August 2011, ACE was able to issue the first warehouse receipt. The owner eventually sold the

warehouse receipt at a profit of 72% after all costs were deducted, compared to the market price prevailing at the time he deposited the maize.

This has generated a lot of new interest in WRs issued by ACE and traded on the exchange for the 2012 season that commenced at the end of April 2012. Lack of available public storage facilities may still be a constraint, but, according to ACE, the National Food Reserve Agency (NFRA) has confirmed that they will issue WRs in the coming season from their silos in Lilongwe. Furthermore, ACE has received funding from the Common Fund for Commodities (CFC) to refurbish three rural warehouse sites that will be managed by the National Small Farmers Association of Malawi (NASFAM).

Next in line would be to bring the banks on board to provide the necessary liquidity for trade in WRs. Commercial Banks such as First Merchant Bank, National Bank, Opportunity Bank and Standard Bank have all indicated their keen interest to finance WRs.

Core to the operations of ACE or any other exchange for that matter, is its WRS as seen in Figure 2. The purpose of this study is to analyse the role of a WRS in agricultural commodity exchanges with ACE, Malawi as case study.

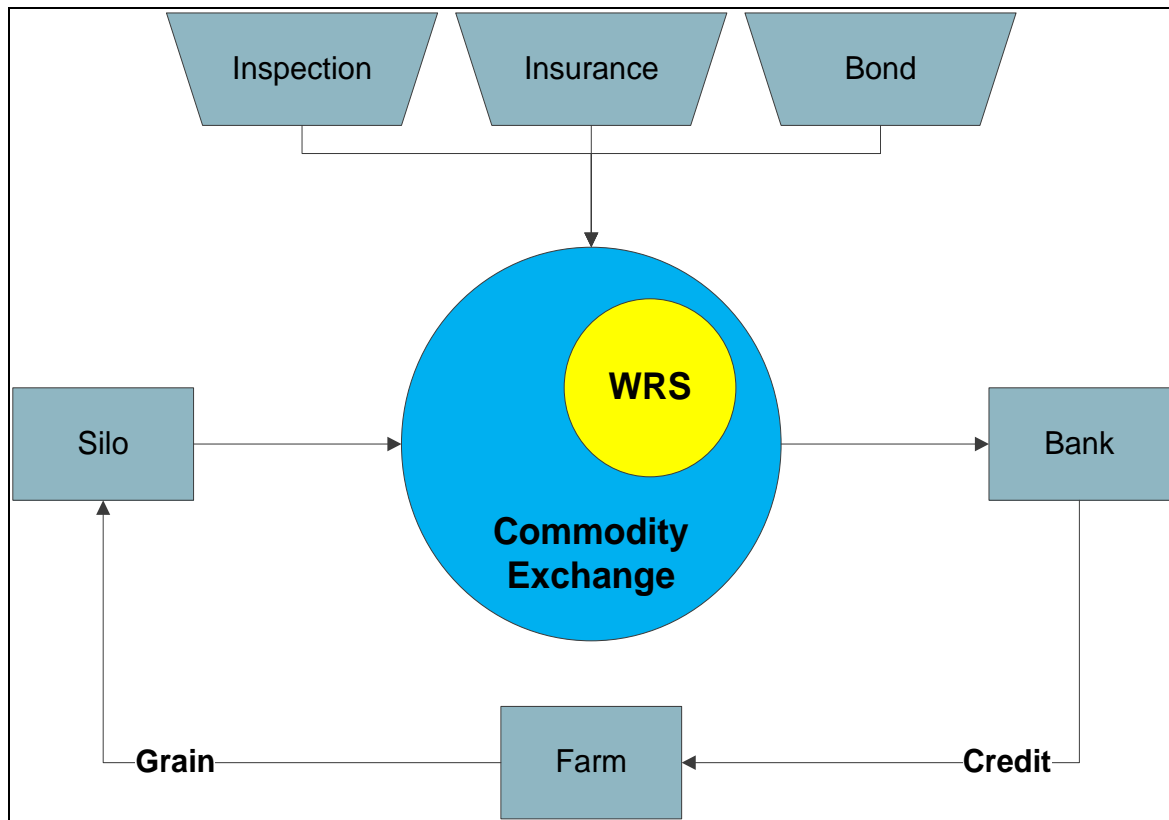


Figure 2: The Role of a WRS within an agricultural commodity exchange

Source: Lacriox,R, Varangis, P. 1996

1.3 OBJECTIVES

Commodity exchanges in Eastern and Southern Africa have a not too dissimilar record of development, as explained in the background. Therefore much can be learned from the mistakes and success of these exchanges. The literature study, analyse some of these concepts with an objective of gaining some insight in the way forward for ACE. Similar, but this time on an individual exchange basis, the history of each exchange is briefly reviewed with the focus on the WRS of each exchange.

Each exchange has some unique requirements which are country specific. The objective of this study is to identify the key requirements for ACE as it relates to the specific state of affairs for Malawi. Following from this, the objective is to review the current rules and regulations of the WRS and make some

recommendations and comments. This study also has the objectives of analysing the current position of financial institutions with specific reference to the (proposed) financing of WRs as well as that of the insurance companies, which are crucial in guaranteeing the WRs. With regard to the financial institutions, and as a secondary objective, this study will also compile an internal motivation why it will be beneficial for a financial institution to get involved. The former two stakeholders form an integral part in the successful implementation and management of a WRS.

In conclusion the main objective is:

- To determine the importance of a WRS in the success of an agricultural commodity exchange

1.4 ACADEMIC VALUE AND CONTRIBUTION

Africa has a history of natural disasters, poor food security, lack of reliable markets and government interference. Most of these events are self-inflicted and stem from poor management which are exacerbated by inappropriate decision making. A successful commodity exchange seems to be one solution to the problem. The requirements for a successful exchange are sometimes out of the control of the stakeholders, and fortunately often have some leeway. With that is meant an exchange can still function and achieve its objective even if the circumstances are not ideal – it might function more effectively if the circumstances were ideal but they seldom are. However, a WRS refers to the internal mechanisms of an exchange. This is almost always self-controlled and manageable. If ACE could implement a successful WRS, with the buy-in of its stakeholders, it will not only offer the solution to a number of policy problems in Malawi, but will also set an example for half-a-dozen other African countries which are in the process of, or have recently established commodity exchanges.

1.5 METHODOLOGY

Conducting a literature review and an analysis of the existing exchanges in Eastern and Southern Africa brings a broad understanding of the specific circumstances under which ACE will have to operate in Malawi. The rules of the exchange, in this case ACE, tell us how business will be conducted. However, before a decision could be taken on what should be in the rules, the particular circumstances of Malawi should be weighed against best practises. The study analyses a number of key criteria, for example: Should an independent body manage the WRS? Once this and the other criteria have been determined, the rules are review and commented on.

There are two stakeholders that are obligatory when it comes to a successful WRS. They are the financial institutions and the insurance companies. The WRS and the rules of the exchange must accommodate these stakeholders. The study analyse why they form an integral part of a WRS and specifically how ACE could accommodate them.

Establishing a successful exchange and ensuring its sustainability and growth are two different concepts. The study evaluates the additional requirements that are key to the long term success of the ACE. Following from this, recommendations are made.

1.6 DELIMITATIONS

The study did not question the existence of ACE as the best policy instrument to address the marketing of grains and oilseeds in Malawi. ACE has already been functioning with mixed successes since 2005 and the study has merely attempt to determine what will make it more successful and specifically the role of the WRS. The study has also not evaluated the role of the government, nor the way in which it has interfered in the economy or the agriculture industry or the implications or effectiveness thereof. It has also not evaluated key government programs such as the 'Fertilizer for Food', a subsidized fertilizer program that has been instrumental in production increases over the last few years, but at what cost? Although it has

made certain recommendations, this study has also not considered what the implications in the medium or long will be if they are not implemented. More immediate, it has also not attempted to envisage what the short term implications will be if any of the key components of the WRS were to be mismanaged and/or failed temporarily.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter will focus on previous studies and information that are available to give a better understanding of the role of a WRS in a commodity exchange. Given that various commodity exchanges have been in operation throughout Africa for more than a decade with various degrees of success, sufficient literature is available on the subject matter. Much effort was made to obtain all relevant documentation, trusting that some valuable lessons are to be gleaned from these documents.

This chapter will give a clear understanding of what exactly is meant by a commodity exchange and the functions of an agricultural commodity exchange. It also gives a clear definition of a WRS and how it fits into a commodity exchange, specifically aimed at the Malawian context.

The different models to develop a successful commodity exchange within the African basis are studied. The first model is based on the top down approach and establishes why this approach is not effective in the Malawian framework. The second model is a pure theoretical model that was conceptualized during the international conference for African Agricultural Ministers. The last model is the proposed realistic model that is currently being established in Malawi and is based on a WRS.

The failures of a free market system, and WRS is also looked at in order to understand what needs to be addressed in order to be effective in the establishment of WRS and a commodity exchange. This goes hand in hand with the requirements for a successful exchange. One of the main aspects to consider in an effective commodity exchange is the actual contract size; this should be

realistic so that the normal small scale farm are able participate on the exchange which is one of the main goals of ACE.

The last point that will be covered in the chapter is the basis of costs to establish what the cost of the implementation was in both Ethiopia and Uganda as foundation and who carried these costs? This is also important in order to be realistic and establish whether or not such a WRS and commodity exchange could be implemented in the Malawian context.

2.2 DEFINITION OF A COMMODITY EXCHANGE

A commodity exchange is a well-established market place that brings order to the commodity markets. It is a platform that brings together numerous buyers and sellers to trade commodity contracts that is standardized by the rules and regulations of the exchange. This platform gives way to options and futures trade to secure prices and physical delivery of the commodity contract on the predetermined date. It should be noted that physical delivery is not a pre-requisite for contracts traded on the major commodity exchanges.

It seems that the definition of a “*commodity exchange*” is quite an issue in some literature. Robbins (2010) makes the point that KACE (Kenya) and MACE (Malawi) were designed by the same people and can no longer be called commodity exchanges. Their main activity is that of a rudimentary market information service collecting estimates of prices and traded volumes in several wholesale centres and disseminating those using SMS, email, newspapers and some radio.

An agricultural commodity exchange has a number of functions as listed by (UNCTAD 2009) in Figure 3:

Price discovery: The first and one of the most important functions is price discovery. This enables the small scale farmers to enter into a standardised price structure and have transparency of how prices are formed for their specific commodity. The commodity price reflects the true demand and supply relationship

with all known information to help the farmer make a knowledgeable decision on which crop to cultivate and when to deliver that crop onto the market at the highest price. It also closes the gap between future and spot prices making all price formation across time more efficient.

Price risk management: With farmers not knowing whether the prices they will receive at the end of production will be able to cover all input costs is the main reason why commodity exchanges are needed within the African context. Forwards, futures, options and swaps are the most widespread instruments used by the commodity exchange for price-risk management. This will enable the farmer to hedge a selected price and know what the outcome will be before planting the selected crop to ensure that returns will outmatch input costs and a profit will be made. A problem arises in the barriers that farmers face with direct entry into the futures market; contract sizes in the exchange may exceed the annual quantity produced, lack of education, resources, infrastructure and quality standards that must be met. To use the price risk management function of the exchange these barriers should be overcome by the small scale farmers to ensure their participation within the market development.

Facilitation in physical delivery: In order for a commodity exchange to function properly the futures market must closely correlate with the cash or “spot” market. Hedging offsets the price movements on the cash market by locking in a futures price. The commodity exchange can also encourage investment within infrastructure of that country along with increasing the standard and quality of the physical product of the market.

Facilitation in financing: Since the agricultural environment is known as a high-risk, low-return enterprise financial institutions are not keen on investing and taking the risk of lending capital to an agricultural producer especially in the developing countries. With a commodity exchange the WRS should be in place to ensure that the exchange is actually trading a guaranteed quantity and quality of goods. WRS provide a financier with secure collateral that can easily be liquidated in the case of default. This is an incentive for financial institutions to provide capital for small scale farmers that have a warehouse receipt as their collateral.

Market development: A commodity exchange facilitates the buyers and sellers to come together on one platform and eliminate the effort to search for each other. This includes farmers, processors, traders, banks and consumers. To effectively use the commodity-linked instrument all players should understand this exchange by educating all the participants in the supply chain. Only then the market can and will be used to the most effective degree.

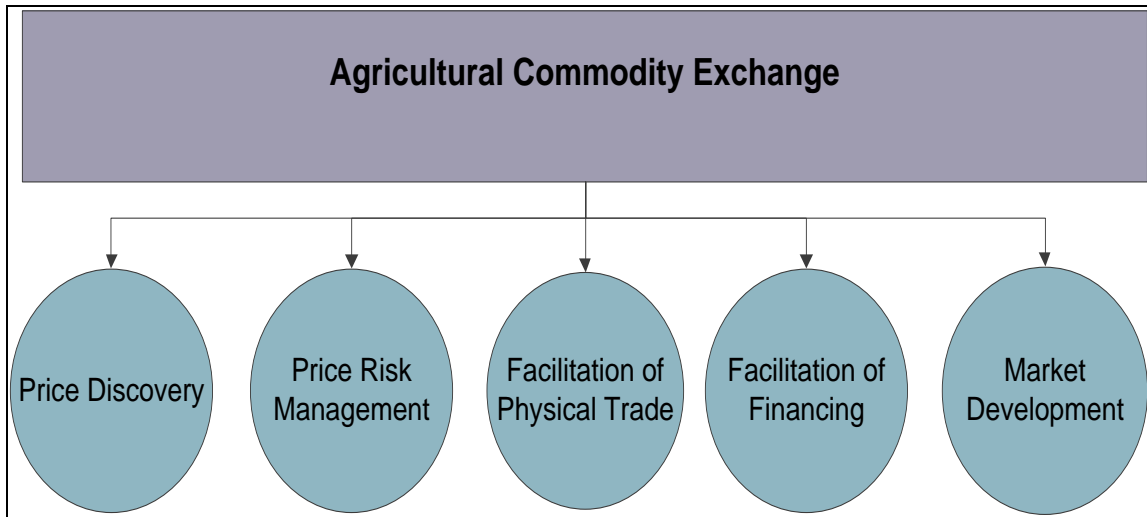


Figure 3: Functions of an agricultural commodity exchange

Source: UNCTAD. 2009

It should be acknowledged that an agricultural commodity exchange reduces market inefficiencies but it does not override the market itself. This commodity exchange is still based on the basic economic principals of demand and supply and can't be used as a tool for any group or government to establish or impose any price level. It only enables the users to better respond to the fundamental market of demand and supply issues. If maize is in oversupply then prices will be low, the exchange will only facilitate higher regional or international trade but it is not there for governmental misuse to artificially increase maize prices. This is also the case with a shortage in maize supply when prices are high, again no government intervention should be allowed to use the exchange to set prices. Promoting an African commodity exchange cannot be the commodity policy of African countries, it is just one of the elements of such a policy and one should attach only realistic expectations to its functioning.

Kristian, S.M is on record (2011) to say that ACE is not trying to establish an African Chicago Board of Trade but a structured system for the small scale sector. Hence the prerequisites for establishing a “western type exchange” need not be present.

2.3 WAREHOUSE RECEIPT SYSTEM (WRS)

The development of warehouse WRSs emerged as an important means of improving the performance of agricultural marketing systems in Africa following liberalisation in the 1980s. Progress in promoting WRS and related market institutions in Africa has generally been slow or limited but interest remains high in Eastern and Southern Africa as well as elsewhere in Africa. Liberalisation initially created significant space for local subsidiaries of international inspection companies to offer warehousing and commodity collateralisation services without any regulatory oversight. These companies set up tripartite collateral management agreements (CMAs) involving a bank, the borrower and the collateral manager (i.e. the inspection company acting as warehouse operator) for the primary purpose of allowing the depositors to secure bank credit (Onumah, 2010).

Initially the companies that benefitted most from these arrangements were those international subsidiaries that had access to substantial insurance and professional indemnity cover from international insurance companies. Examples are Société Generale de Surveillance (SGS), Socotec/ITS. However, one of its major drawbacks was the exclusion of small-scale producers and traders as the main users are large-scale operators. The system was predominantly used for financing import and export transactions but rarely for non-tradables, except where the depositor is a large processor or major trading company. In most African countries, there have been very limited benefits to the domestic agricultural trade.

Partly in response to the exclusion of smallholder farmers from accessing the CMAs, attempts were made by NGOs to establish inventory credit systems targeting farmers' groups. The primary objective was to enable producers to

utilise inventory credit to delay sale of produce and therefore benefit from the seasonal rise in commodity prices, especially in the staple grains markets.

The successful implementation of a WRS forms the core of the operations of most but not all commodity exchanges in Africa, some commodity exchanges like the South African CDM is trading at large volumes without a WRS since physical delivery is not a pre-requisite for the contracts traded on the exchange. However, the mere creation of a WRS is not enough. According to Robbins (2010), this needs to be extended to the base of the pyramid, where most of the stakeholders of the industry might benefit. This will latch onto the idea of establishing thousands of properly run depots for smallholders, something that should have been taken up decades ago and does not require a commodity exchange. Robbins is of the opinion that it will require an independent certifying body to access and monitor the operators of the warehouses and WRS. This view is also echoed by others including the WR Consultancy Team (see below) and Kennedy (2011).

The challenges of establishing a successful WRS, is also highlighted by Moller (undated), who says that even though ACE originates from the initiatives of NASFAM, they, like any other farmer organisation, do not have storage space, which is an absolute necessity to participate in structured trade.

Kennedy, in his report on a business process and strategy for ACE, contemplates the idea that the management of the WRS should fall under the authority of “another” body, more specifically the Grain Traders and Processors Association (GRPA).

The Warehouse Receipt Consultancy Team (WRCT) is a World Bank funded initiative between GTPA and Senwes that was launched in 2007, with the objective of implementing a WRS using, in part, the silos/warehouse of ADMARC, by way of a lease agreement. In their final submission they outline what they considered to be the main conditions for a successful warehousing industry, as follows:

- Emulates the existing grain market structure as closely as possible so that the market participant is willing to accept the WRS.
- Be financially attractive to both the providers and the clients.
- Be credible, efficient and trustworthy, and accepted as such by the stakeholders.
- Enable the collateral financing of grain at both the commercial level (to foster trade) and at village level (to alleviate cash needs).
- Create a system to those who want to own grain but do not want to be involved in the storage.
- Provide a safe and affordable alternative for the grain that farmers currently store on their farms.
- Enable grain to be retained in rural areas, thereby increasing efficiencies and minimising cost, and in particular transportation cost.

The WR Consultancy Team also recommended that a WRS should be housed in a specially instituted Agency for this purpose and it should have the following main functions:

- Registering the service providers and maintaining such a registration, as well as promoting future registrations.
- Monitoring compliance with the rules and regulations.
- Taking responsibility for the printing of the relevant documentation.
- Promoting the use of WRs.
- Several other functions related to training, arbitration and market information.
- Maintain a register.

The WRS is not universally supported though. Robbins (2010) reports that the banks in Uganda were not interested in lending against WRs. The establishment of a WRS also have its challenges. In the case of UCE it took ten years. It now incorporates full traceability (UCE. 2012).

2.4 MODELS TO ESTABLISH A COMMODITY EXCHANGE IN THE AFRICAN CONTEXT

2.4.1 The Top-Down approach

In 2010, Peter Robbins published a paper called “*Review of the role of commodity exchanges in supporting smallholder farmer linkages and income benefits*”. His description of the African approach in establishing commodity exchanges, though critical, was to the point. He said that “*none of these exchange projects were initiated by governments or any other stakeholder group (with the possible exception of ACE which was supported by a large parastatal co-op)*”. This is possibly the most important difference between these commodity exchange-based systems and all those similar systems that have grown organically and successfully in more developed countries which were established, funded, owned and run by the people who use them. He continues to state in general with reference to the five southern African exchanges, that the fact that the major stakeholders in the agricultural industries of these countries have not identified the need for the commodity exchange-reform system represents a major flaw in the entire programme.

Robbins carries on by stating that research should be undertaken to determine whether a more simple method of introducing large and well organised buyers to sellers exists. He says that donors might act as catalysts in the endeavour, but no system will be effective if the stakeholders do not feel the need for it. Robbins is, of course quite right - after all these years one of the core problems of exchange is introducing stakeholders to each other and getting them to work together.

It is easy at the start to state that an exchange represents all stakeholders equally, but is this true? Who are the stakeholders?

In Malawi, the National Small Farmers Association of Malawi (NASFAM) took the initiative, as mentioned above. Moller (undated) says that “*ACE has a very close relationship and together they are promoting the concept*”. The Malawi Government should certainly be counted as another stakeholder. It has included

ACE in its National Agricultural Policy, combining efforts to make a greater impact (ACE, undated). ACE also integrates with the Government's vision for agriculture with the ASWAP, the green belt initiative, fertilizer subsidy, increase public storage and improved infrastructure.

The Ethiopian (coffee) model, which is considered a success, apparently has a greater proportion of producers of coffee that are organised into farmers' associations than producers of any other goods. Specialist coffee warehouses are operating throughout Ethiopia.

2.4.2 Theoretical model

The model of how to develop a successful commodity exchange, specifically for African nations, was one of the highly debated topics during the international conference for African Agricultural Ministers that was held in Dakar on June 2009. In theory, according to the conference notes, the model that should be adhered to is as outlined below. This is the basic building blocks for a commodity exchange and no level should be skipped otherwise the exchange will not stand the test of time. Figure 4 depicts the model visually.

Level 1: The first level that should be in place is the government and policy framework. The main commodities that will be traded on an exchange is food crops, this is inevitably a politically sensitive topic in developing countries and are susceptible to unpredictable policies and government interventions (Rashid *et al.*, 2010). Most governments in African countries have and will intervene in the cereal markets to stabilize prices, especially with price spikes that threaten consumer welfare. A commodity exchange should not be used as a policy instrument for government intervention. Government policies should not interfere in the commodity exchange since the fundamental markets of demand and supply is used to determine prices, but with unpredictability of government interventions adds additional risk which can limit the success of an exchange and the contracts. With some countries the losing party in a contract just walks out without delivering on that contract, this causes the trust in the commodity exchange to be limited. Any country that wants to establish a successful commodity exchange needs to

have an environment of a stable rule of law and effective contract enforcement to guarantee delivery of that contract and encourage investment within the exchange market.

Level 2: Infrastructure is a vital component to build an effective commodity exchange. You need to have the correct storage facilities in place to enable farmers to deliver their grains to that storage facility so that they can sell the grain at a later date at which supply is not higher than the demand and prices are at higher levels. Along with infrastructure, comes transport with roads and railways to enable the transportation of the produced crop from farm level to the processors. Without these systems in place then the exchange will not be able to function at optimum level because the crops can't be transferred from the farm to the well-paying processors and it cannot be stored to sell at a later date thus there is no use in developing an exchange since no physical delivery can take place and no guarantee can be obtained by the actual storage facility by giving WRs for the crops in storage.

Level 3: The commodity exchange needs to set certain standards for the crops being traded on the exchange to ensure that homogeneity exists within the trading system and all the crops are on the same standard within the trade. An independent party needs to do the certification of allocating a standard to the crops delivered on the market.

Level 4: The WRS is the most basic form of trade. It is where the small scale farmers come and deliver their commodity to a selected storage facility that is accredited by the commodity exchange, then an independent party will classify the product with a certain grade that meets the standards set by the exchange as discussed on level 3. This receipt is proof that the individual owns that crop within the storage facility and can be used as collateral on the futures market.

Level 4: Financial services should be able to finance the WRs in level 3 as collateral to provide capital to the farmers and give them the power to hold onto that crop a bit longer until market prices are more favourable and not just to settle for the first and best prices because they fall into a cash flow problem. WRs should

be easily used as collateral and can be liquidated in a short period of time if the owner does not deliver on the repayment of the loans. This will enable the warehouse receipt owner to have economic growth year to year and not just to live on a day to day survival basis.

Level 5: The spot market is the current cash market. There should be an ample amount of buyers and sellers to ensure the success of establishing a futures market. The size of the spot market will be a good indication on how well a futures market will succeed. The larger and stronger a spot or cash market the better the chances are for a futures market to be successful.

Level 6: This is the most advanced level of the trade the actual futures and electronic trade, for this to actually occur and be successful all the previous steps should already be in place and be achieved otherwise the basis for the futures market is not a solid basis and will collapse over time.

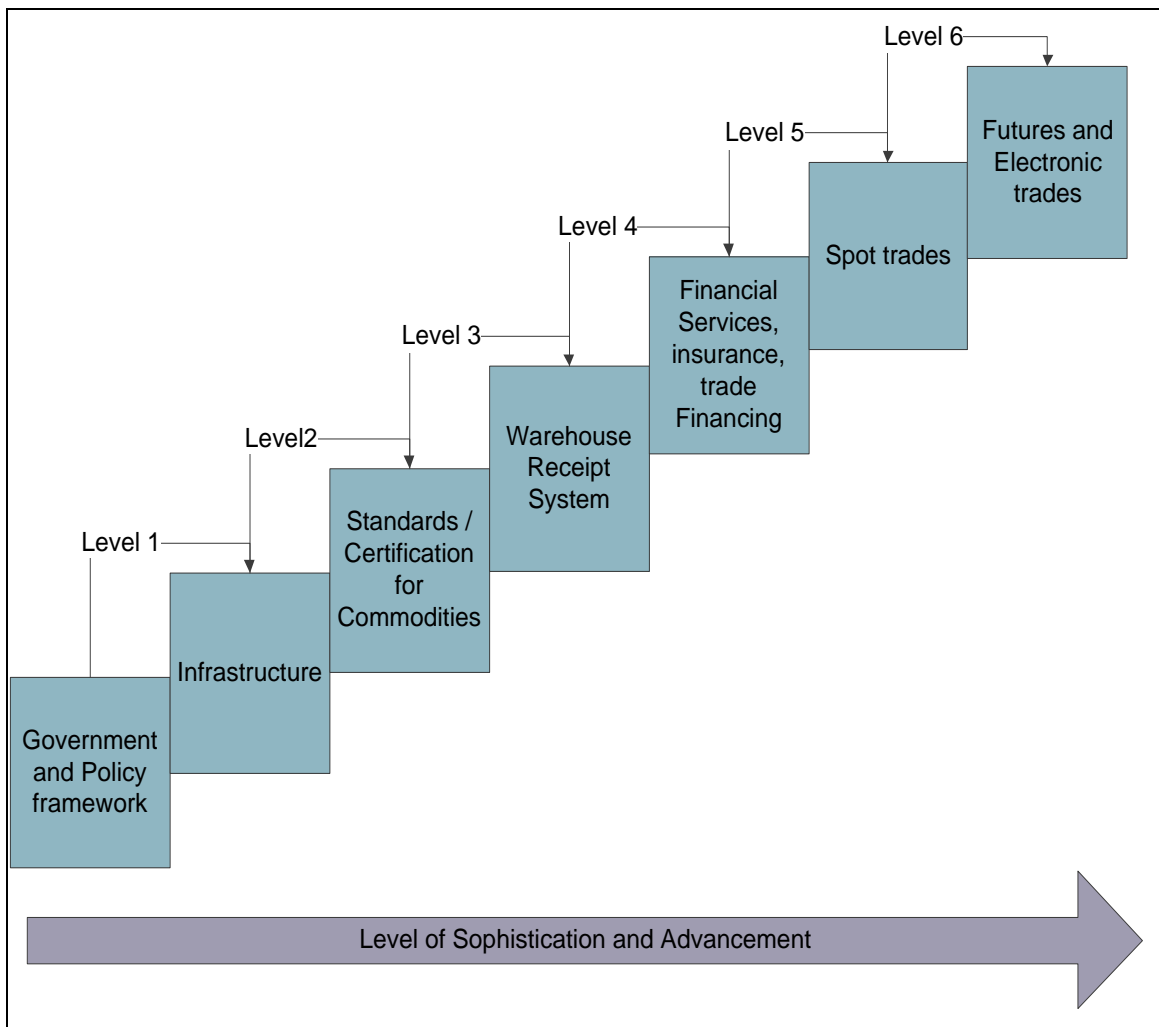


Figure 4: Levels of an agricultural commodity exchange development

Source: CMA/AOC. 2009.

2.4.3 The new commodity exchange-based reform process model

In Sub-Saharan Africa, according to Robbins (2010), it seems certain trading market mechanisms have been recommended as a way of introducing a further round of agricultural marketing reforms. Robbins describes the model as follows: The components of the proposed system consist of a pyramid of institutions with, at its apex, a commodity exchange. In this model, the exchange is supposed to be linked to a WRS. Prices which are recorded by the exchange as deals struck, would form the basis of a market information service. The commodity exchange, initially of a very basic design, is established in the capital city. Some large warehouses are either build, requisitioned from state ownership, or leased from the private sector. These warehouses then go through a certification process

overseen by the staff of the exchange. To qualify for certification from the exchange, each warehouse must comply with certain fixed standards of security, must be provided with proper quality-testing and weighing equipment, and must be managed with a high degree of probity. These, what we might call district warehouses, are supposed to act as hubs for very large numbers of small produce collection depots. It is to these depots that small-scale farmers are supposed to bring their products and come into negotiating contact with buyers.

2.5 FAILURES OF FREE MARKET SYSTEMS AND WAREHOUSE RECEIPT SYSTEMS

Several literature studies refer to the shortcomings of the free market and/or a WRS and the importance for an exchange to address these issues in order to be successful. Mostly it lacks the following (Onumah, 2010 and Robbins, 2010):

- Transparency.
- Suitable storage infrastructure.
- Competition.
- Market information.
- Legal and regulatory support.
- Bargaining power of small scale producers.
- Lack of requisite skills.
- Missing or weak market institutions.
- Available credit.

Other issues include:

- Poor quality standards.
- Failure to use standard weights and measures.
- Inadequate volumes of production.

2.6 BROAD BASED REQUIREMENTS FOR A SUCCESSFUL WRS

Most of what has been discussed above forms part of the requirements in some or other way. A few additional aspects, however, are often highlighted in the available literature. They are:

- **Financing.** Stocks passing through the exchange must be financed by a reliable banking service.
- **Insurance.** Insurance companies involved should be familiar with all aspects of the agricultural industry.
- **Legal framework.** There are several references to the legal environment. However, there are different views. The two most important ones are the government legislation under which an exchange functions, and access to a robust legal framework with reference to private litigation as and when required.

Importantly though, Onumah (2010) states that although it is helpful, particularly in assuring lenders of their security interest in underlying commodities, specific warehouse legislation is not required before launching a WRS. He stresses that South Africa is a perfect example where a very successful “silo receipt system” is not backed by specific warehouse legislation. Neither was the once successful WRS in Zambia backed by any law. Even where legislation was enacted, as is the case in Tanzania and Uganda, the law came after the systems had evolved. South Africa demonstrated that a strong market institution, such as a commodity exchange, can self-regulate its supporting receipt system on the basis of existing contract law. This is feasible where the existing exchange promotes the WRS.

When it comes to private litigation, research documented indicates that the Malawi legal system is not up to standard. Kennedy (2011), when discussing defaulting on contracts, comments that it is often unenforceable in Malawian courts. Moller observed (2012) that from his understanding this is not due to a lack of legislation, but rather because of the backlog in courts.

ZAMACE on its website (Zamace.org, 2012), comments as follows on its legal framework “ZAMACE is a Zambian registered corporate entity, owned managed and self-regulated by the agricultural industry, operating under a regulatory structure to be governed by the Securities and Exchange Commission (SEC). ZAMACE has come too early for the Zambian regulatory regime which currently has no provision for licensing of a commodity exchange. SEC is currently in the process of finalising the submission of the Commodity Exchange Bill 2012 for enactment.”

- **Government intervention.** Much has been said about government intervention. It is common knowledge that with or without the existence of ACE, all market participants are continuously being affected by government intervention. Since ‘government intervention’ fall outside of the scope of this research, the writer has taken the view that the relationship between ACE and the government is of more importance, at this stage and has made some recommendations to that effect.
- **Education.** Little is said about education in the literature. One source (unknown) did report that 65,000 Ethiopians gained a diploma in Agriculture in the last ten years. The degree or lack whereby Malawian farmers, formally and informally, has been educated will be important when compiling a marketing strategy on the WRS.

2.6.1 Standardized size of contract and/or minimum lots

This topic is also referred to several times in literature. Robbins is of the opinion that the minimum ‘lot’ which can be traded on the exchange is often as much as 50 tons – a quantity that only the largest farmers could produce at one time. Below this level of very large transactions, therefore, another completely different scale of market mechanism is needed to benefit the millions of typical small-scale producers who represent the vast bulk of participants in the agricultural sectors of these countries. For instance, a benchmark recorded price for a large quantity of a product, held in a secure and accessible warehouse, graded and packed to a high standard, is likely to bear no relationship to the farm-gate price for a few

hundred kilos of the same product in an isolated part of the country whose quality has not been objectively tested. This would be especially true if the farmer, along with all other fellow farmers, was desperate to sell at harvest time and had no access to several traders who were all in open competition to buy his or her output.

On the South African Futures Exchange (SAFEX), minimum lots vary depending on the product. The largest lot is for maize – 100 tons, and the smallest for soybeans, 25 tons (JSE, 2011). In the case of Malawi, ACE confirmed (2012) that from the exchange side, there will be no minimum requirement. However, each warehouse owner could set its own requirement. GSL has indicated it will be 5 tons, while warehouse facilities operated by NASFAM have set a 3 tons minimum. ACE is also in discussion with Rab Processors with regard to their Kulima Gold depot, a sourcing point, where the minimum could be as low as 1 ton. Malawi banks have also expressed an interest that there should be a minimum but no decision has been taken.

2.7 BENEFITS OF A SUCCESSFUL WRS

The benefits of a WRS in a successful agricultural exchange have been confirmed in various reports, not least Onumah in 2010 which highlights the following:

- Traditionally there is a lack of sufficient storage space and therefore postharvest losses are huge in some cases – estimated up to 30%. The WRS forces industry to improve on the storage opportunities and thereby reduces postharvest losses.
- It offers small time farmers the opportunity to bulk their crops, grade and store them which in turn means they could be offered to a wider geographical area and trade “unseen” based on the WR.
- A WRS guarantees delivery thereby reducing counterparty risk.
- A WRS goes hand in hand with the supply of market information. The latter is usually heavily upgraded and expanded.
- It greatly improves the integrity of the system since all products are now inspected and graded.

- It enhance liquidity in rural areas, either through financing as collateral or as a liquid saving – call it a grain bank whereby the owner can sell product when in need of cash.
- It increases welfare levels in the industry since producers are not forced to sell at harvest time when prices are typically at its lowest.

Based on the navy beans project in Ethiopia, Robbins (2010) is of the opinion that if it works as designed, millions of small scale farmers will enjoy substantial benefits. They would not need to travel far with their goods to find a competitive market, the prices they receive would almost certainly be a greater slice of the true market price, they would not be forced to sell to cover their immediate expenses, they would be encourage to market their goods collectively with their fellow farmers and they would have an incentive to produce a standard quality product and use standard measure and packing material to improve its market attraction.

2.8 COSTS

The issue of costs has been raised in several publications. Robbins (2010) writes that various estimates for the cost of establishing the Ethiopian Exchange range from between \$20 million to \$58 million.

The Uganda Commodity Exchange was founded in 1998. The system was originally funded with a grant from the European Commission of 1.3 million Euros. A further 1.13 million Euros were given for technical assistance. It was originally expected for the exchange to become self-financing within four years. Exchange staff visited other commodity exchanges in South Africa, Kenya and Colombia to see how they worked. Many of the original objectives of the scheme have not materialised or have been considerably delayed. Funding for commodity exchange has now ended and it is not certain whether they will receive further funding. Supporters say, however, that government cannot let it fails as it is 'too important'. Apparently, the government is trying to borrow funds from the World Bank to finance it.

2.9 SUMMARY

To recap, the first part of the chapter focused on the understanding of what exactly is meant by the term commodity exchange, that it is a platform that brings together numerous buyers and sellers to trade commodity contracts that is standardized by the rules and regulations of the exchange. It explained why a WRS is imported to a commodity exchange, that the successful implementation of a WRS forms the core of the operations of most commodity exchanges in Africa. However, the mere creation of a WRS is not enough it is merely the base of the pyramid

The second part of the chapter was a focus on how to establish a successful warehouse receipt system by examining the three models and recognizing the different components that needs to be in place in order to limit the failure rate. This established that there are three main requirements for a successful exchange which are: financing, insurance and a legal framework. It was documented that there will be no minimum size of the contacts by ACE, However the warehouse owner can set its own requirements ranging from as low as 3 – 5 tons. This will enable the small scale farmer to participate on the WRS and commodity exchange in Malawi.

The main benefits of a WRS and a commodity exchange is that millions of small scale farmers will enjoy substantial benefits. They would not need to travel far with their goods to find a competitive market, the prices they receive would almost certainly be a greater slice of the true market price forced to sell to cover their immediate expenses, they would be encourage to market their goods collectively with their fellow farmers and they would have an incentive to produce a standard quality product and use standard measure and packing material to improve its market attraction.

Following the literature review the next chapter will focus on some of the different agricultural commodity exchanges within Africa. The objective is to differentiate between the successful African agricultural commodity exchanges and those that were unsuccessful. This should be of value for ACE in their decision making process.

CHAPTER 3

RECENT HISTORY ON THE ESTABLISHMENT OF COMMODITY EXCHANGES IN EASTERN AND SOUTHERN AFRICA

3.1 INTRODUCTION

This chapter analyses the agricultural commodity exchange success rates into the African background as the history of the selected commodity exchanges is studied. Much can be learned from the mistakes and successes of these exchanges, as stated earlier in the objectives of the study.

The following countries were selected for the background study with focus on the WRS of each exchange: South Africa, Ethiopia, Malawi, Uganda, Zambia, Zimbabwe and Kenya.

This chapter also includes an in depth study of Malawi looking at the country background and the maize production potential of the country along the with its maize supply chain. This will determine if Malawi has the sufficient production potential to justify the development of a WRS within the country. Gaining extra insight in the way forward for ACE.

3.2 THE SOUTH AFRICAN COMMODITY DERIVATIVES MARKET

The first commodity exchange to be established in Africa was in South Africa. The Agricultural Markets Division (AMD) was established in January 1995 as a division of the South African Futures Exchange (SAFEX). AMD quickly established itself as the agricultural market leader with respect to price transparency, particularly in the maize market in Southern Africa. Since deregulation, the maize market has been exposed to numerous market conditions affecting demand and supply,

including changing weather patterns, currency fluctuations and regional food shortages. During the first half of 2001, members of SAFEX accepted a buyout by the JSE Securities Exchange to become a separate division within the JSE. As from August 2001, the Agricultural Markets Division of SAFEX became the Agricultural Products Division of the JSE Securities Exchange South Africa and moved from its original premises in Houghton to the JSE building in Sandton. Currently, white maize is the most liquid contract, followed by wheat, yellow maize, sunflower seeds and soya beans. The growth in the market has resulted from an increased number of participants, greater understanding of the market and the development of a broader base of marketing strategies based on the derivative products. In 2010, the division reinvented itself by introducing other commodity products and so rebranded to become the Commodity Derivatives Market of the JSE Ltd.

3.3 THE ETHIOPIAN COMMODITY EXCHANGE (ECX)

In the late 2005 the Government of Ethiopia was approached to establish a commodity exchange (targeting initially only the large, well known and important coffee industry). The proposed exchange would be designed to serve smallholder farmers and small traders, it would not exclude those with less education or less capital, and it would balance the interest of all actors and the public and private sectors. A commodity exchange would not aim to eliminate traditional markets around the country, but rather to build up these informal markets by adding technology and systems to bring more transparent, more efficient and more reliable trading to all concerned (Gabre-Madhin, 2012). Two laws were passed, one to establish the exchange and, a second one for its regulator. The exchange was found on the following core criteria:

- The design and implementation of a quality-control and warehouse operation system.
- An electronic warehouse receipt system.
- A central depository.
- A financial clearing house.
- An electronic market data system.

- Quality standards.
- Standard trading contracts.
- Recruit and train members and regulators.
- Develop the rules of the exchange.
- Market surveillance system.
- Launch a nationwide awareness-raising campaign.
- An in-house suite of IT applications, and to integrate the software with all warehouses.

Unique and crucial to the successful establishment of the exchange was the high level support it received. President Giorgis in his annual opening of Parliament in 2007 came out in support of the exchange as the solutions to some of the farmers problems. In Ethiopia's case the Government with its financing partners has put up the money to sponsor the exchange for social welfare reasons, while the members get the private benefits of its existence. In 2010, they added food grains to the exchange, after reaching an agreement with the World Food Programme (WFP) to buy maize through the exchange.

ECX has taken a much more active role when it comes to warehouses compared to other exchanges. It owns and/or operates most of the warehouses. Operations have grown from one warehouse in Addis Ababa to 55 warehouses in 17 regional locations, or from 5000 tons to 250,000 tons. ECX say that Ethiopian coffee farmers today receive 70% of the final price, rather than 38% that researchers had measured in the years prior to the exchange.

3.4 MALAWI

3.4.1 Country Background

Agriculture plays a vital role in Malawi making up around 30% of total GDP of the country according to the USDA (2009) and employs over 80% of the labour force. It is the main sector of the country that is critical for the economy in terms of job creation, export opportunities, rural development and overall economic growth. .

The agricultural sector of Malawi is still dominated by a few food and cash crops despite numerous attempts to broaden the variety of produce. Maize remains the main food crop produced by most small holder farmers to secure their own food supply. Maize production flourished in the past 10 years growing from 1,560,000 tons in 2002/2003 to more than double that of 3,900,000 tons of the 2011/2012 season indicated in Figure 5. Such rapid growth has brought about the opportunity for exporting as seen in Figure 6.

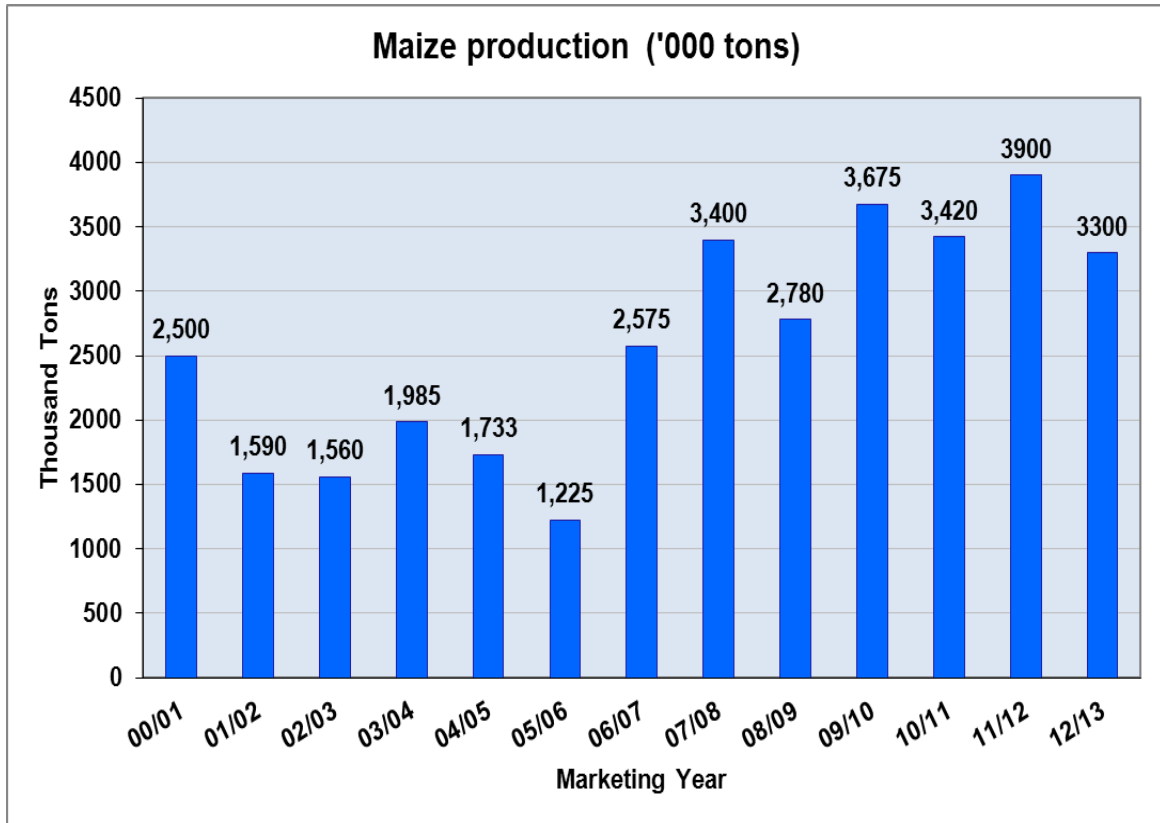


Figure 5: Maize production of Malawi from 2000 to 2012

Source: USDA 2012

Export bans were lifted in 2007 due to intense lobbying of the GTPA with the Malawi government but exports are still limited to only 300 thousand tons per annum and most exports is destined for Zimbabwe. The three main border posts in Malawi through which maize trade takes place are; Songwe, bordering with Tanzania in the Northern Region, Mchinji, bordering with Zambia in the Central Region and Mwanza bordering with Mozambique in the Southern Region. Ending stocks since 2006/2007 grew to a maximum of 1.3 million tons in 2009/2010 but has been drawn down again to the current 428,000 tons.

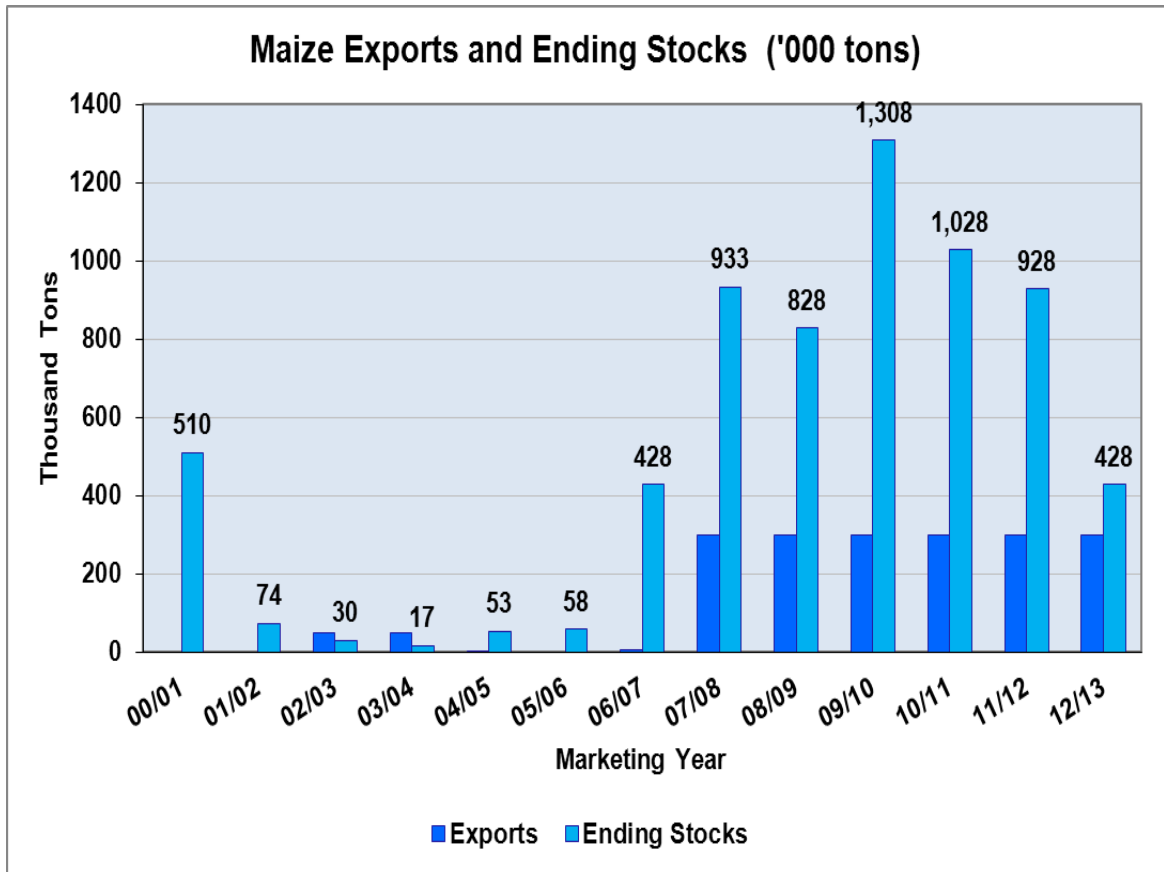


Figure 6: Maize exports and ending stocks of Malawi from 2000 to 2012

Source: USDA 2012

As seen in Figure 7 **Error! Reference source not found.** Malawi only recorded a shortage four times over the past thirteen years. Although production remains somewhat volatile, by enlarge over the large 6-7 years Malawi has recorded surpluses of around 400-500,000 tons on average.

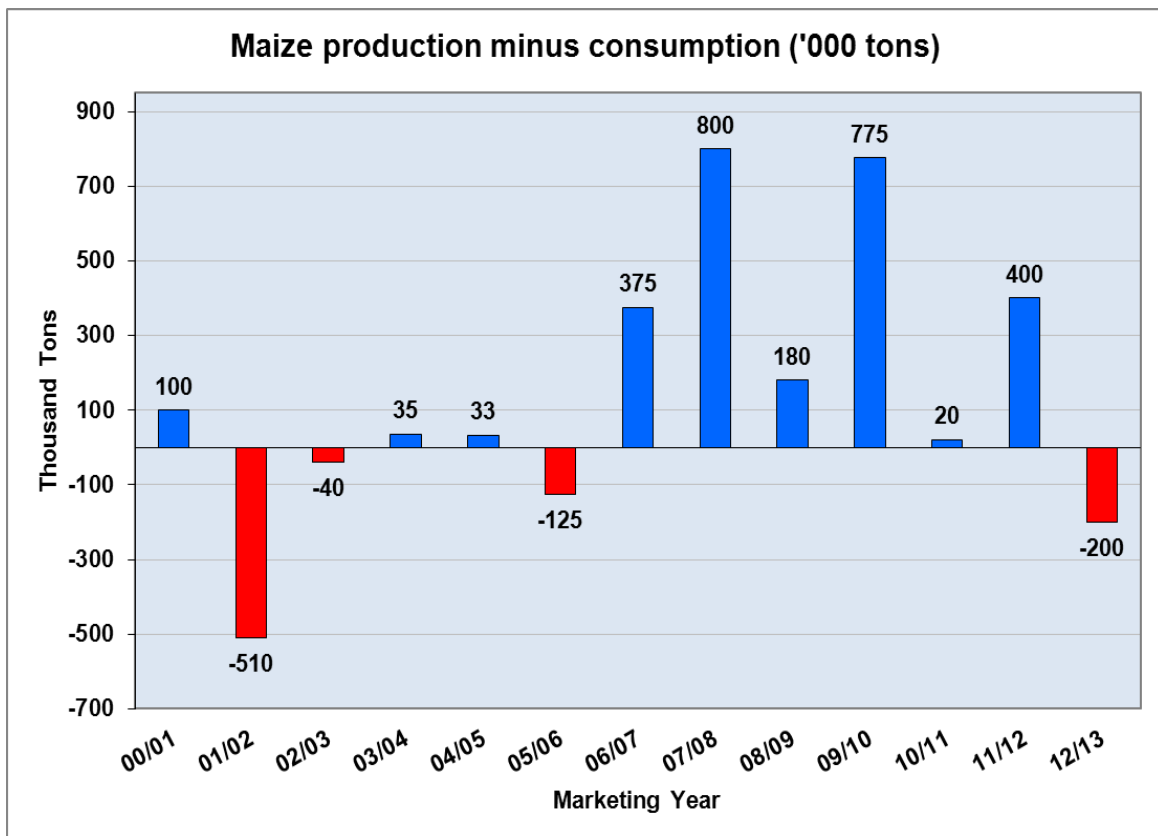


Figure 7: Maize production minus consumption of Malawi from 2000 to 2012

Source: USDA 2012

Figure 8 is a clear illustration on how the supply chain of maize in Malawi operates. Most of the smallholder production does not enter the formal market but is used for self-consumption; it only goes as far as the village mills but seldom enters large scale millers. There are a number of small and large-scale traders that brings maize into the traded market. These traders obtain the maize mostly from agents that represent a number of small scale farmers. The maize may be trade through several organizations before being sold to the processors. It is usually processed by large-scale millers into either maize meal, for brewing or animal feed. Some quantities are processed by village mills and then link into their own market chains to the final consumer.

Private traders either as companies or individuals are also involved in the business at large but most of these traders have access to storage facilities. This enables them to make maize purchases immediately after harvesting or even still during harvest time when prices are at the lowest point with over supply, and release that

stock as price increases during the non-harvesting period from December to March of the following year. This not only leads to most of the profits entering the hands of the traders, but also ensures a smoothing of supply so that higher prices in the market will call forward stored domestic supplies. Larger traders often buy from small-scale traders to enable them to get larger volumes than making many small direct purchases from individual farmers.

Most agricultural traders lack both formal skills and trade finance. They operate small-scale businesses with few assets and trade only with people they know in cash terms and over short distances. Contracts are verbal and there is no strong legal system of enforcement.

Commercial milling companies process most maize, large milling companies usually purchase through traders or most of the time has their own traders. Traders try to find the cheapest maize, locally or from other countries mostly Mozambique.

All players in the supply chain aim to use their capacity for storage and financing to take advantage of the seasonal price fluctuations in the staple food crops, especially maize. As could be expected the small-scale maize farmers are the first to sell, mainly because they are in dire need for cash to pay off the input costs debts and this is the only annual income they receive but also because they don't have storage facilities. This resulted in making them price takers in the market and enter into the market at the lowest price point of the seasonal fluctuations. Commercial farmers on the other hand tend to avoid selling close to the harvesting period to gain from the price rises as the season continues. They have better financing and storage facilities available along with insurance.

Apart from lowering farm gate prices for producers, processors also suffer from this drastic seasonal price changes since they have to find capital to purchase in bulk at the start of the season rather than make purchases at intervals throughout the season. This is where the linkage of implementing a WRS will benefit all parties within the current supply chain.

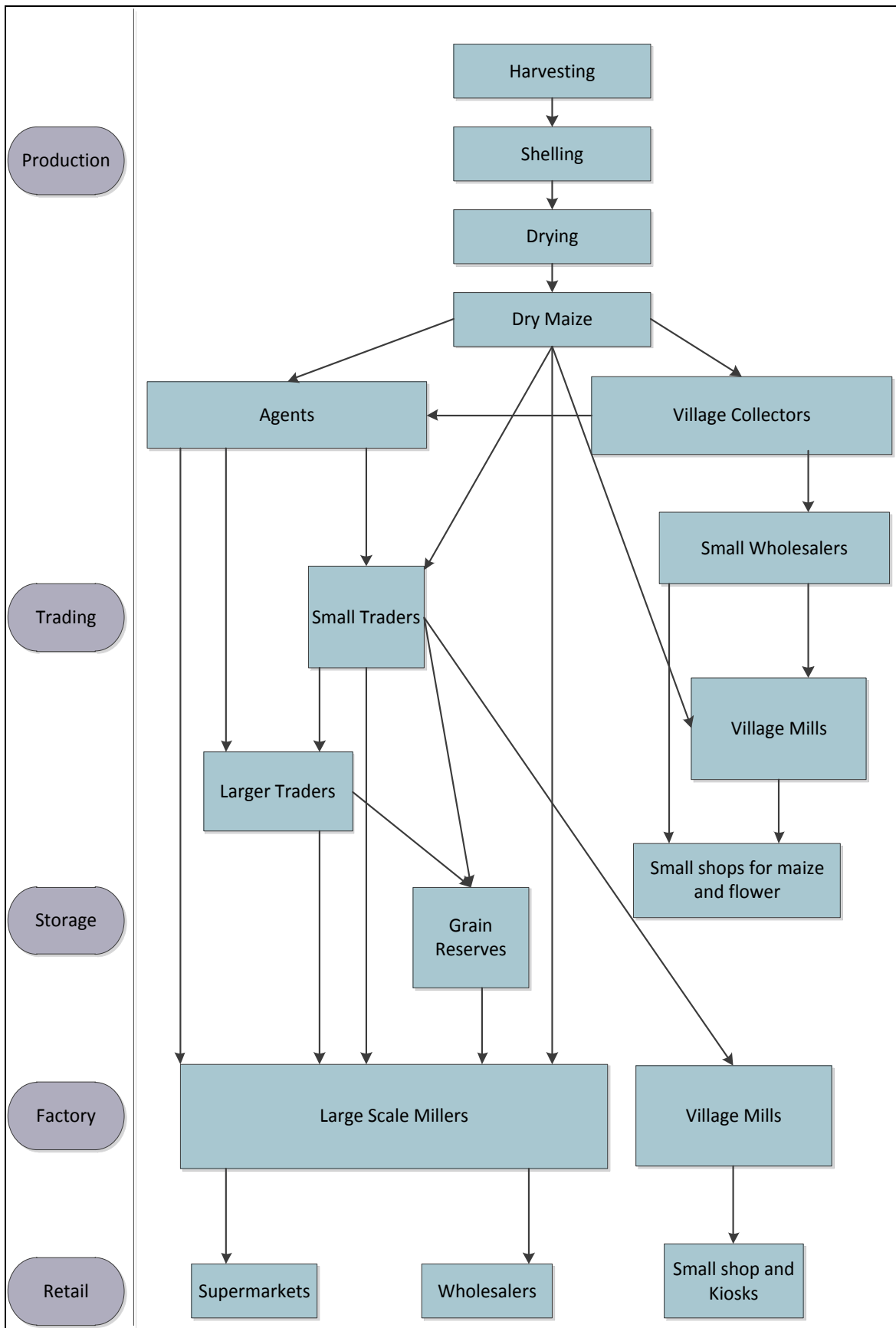


Figure 8: Maize Supply chain in Malawi

Source: USDA. 2009

3.4.2 Commodity Exchange of Malawi

To the outsider it may be a bit confusing, but Malawi initially had two commodity exchanges - one for local trade and the other for regional trade. There is also a possibility that a third one is on the way.

MACE, or the Malawi Agricultural Commodity Exchange, was established in 2004 and had the vision of making markets work better for the smallholder farmers through reliable market information and improving transparency in trade. It provided market information through SMS's. According to Robbins, MACE is a private company controlled by Elizabeth Manda but which has been funded by the Rockefeller and Gates Foundations. (Talk is that it has "closed down" but no confirmation on this could be acquired.)

ACE, was established in 2005 and started operating an online trading platform in October 2006. The National Small Farmers' Association of Malawi (NASFAM) took the initiative to establish ACE as an attempt to ease the marketing effort for small farmers. The aim was to link national marketing institutions to create free information flows and facilitate regional trade growth. Shortly after launching, it had attracted the interest of 11 companies in Malawi, 6 companies in Zimbabwe and a growing number of members from South Africa, who are also members of the SAFEX (AMPRIP, 2007).

Auction Holdings Limited (AHL) is setting up a "third" exchange that will be used as a platform to facilitate buying and selling of agricultural produce. (AHL controls the tobacco auctions.) AHL says that the facility, which will be ready in four months' time, will offer central stocking, better commodity prices and increased exports with foreign buyers' participation. Minister of Agriculture, Irrigation and Water Development, Peter Mwanza, said it could "*propel development of commercial agriculture and diversification while helping export growth.*" "*There are also opportunities for banks and other lending institutions, farmers, transporters, brokers, insurers etc. as this set up will provide collateral or security for so many business transactions.*" The ambitious project, costing AHL a capital amount of US\$17.5 million (about K4.8 billion), intends to create a platform where farmers,

local and foreign buyers will be transacting under the facilitation of the exchange with daily market updates (The Daily Times, 2012).

From a practical point of view, of the three exchanges mentioned above, only ACE is presently functional and growing in volumes, support and initiative. ACE commenced operations as a virtual commodity exchange in 2006 with the National Small Farmers Association of Malawi as a founding member and shareholder. ACE has a system whereby bids and offers are advertised on a screen. When a deal is struck between two parties it is supposed to be a valid forward contract. However, when the market price moves away from the transaction price, a culture has unfortunately established itself where the party losing out because she/he can now obtain a higher/lower price, walks away from the transaction. Apparently this is no different from any other transaction struck outside the exchange, but nonetheless it greatly tarnishes the image of the exchange. ACE does not guarantee the transaction but only advertises it. Although market participants are aware of this, outsiders compare ACE to that of a futures exchange where all transactions are guaranteed. For this reason, a system whereby WRs are traded and guaranteed by ACE will greatly enhance the image of the exchange.

Kennedy (2011) confirms this view in his analysis stating two criteria that hampered growth: A reputation was difficult to achieve due to contractual defaults (usually on the side of the seller) and the provision of realistic market information based upon trades agreed through use of the exchange was hampered by a lack of exchange trade volume.

Table 1: Trade volumes and value of exchange 2006 - date

Period	Traded Volumes (Metric Tons)	Value (US \$)	Notes
2006 – 2009	38,000	9.5 million	
2010	20,000	7.0 million	WFP bought about half
2011 – date	33,300	9.8 million	WFP bought US\$7.4 million

Source: Kennedy (2011)

ACE currently has an arrangement with the ESOKO project to use their SMS system as a platform with which to access farmers directly and to pass information concerning ACE exchange bids and offers. The coverage has reached 1000 “subscribers” to date and is growing rapidly.

The World Food Programme (WFP) needs special recognition. When the success and style of commodities exchanges are discussed in Africa, with South Africa being the only exception, the WFP is mentioned. For the rest though, convincing the WFP to purchase through the exchange, even if only part of their requirements, seems to be the ultimate achievement. The reason is apparently that the WFP is by far the single largest buyer. Suffice to say, ACE has also brought the WFP on board. It is purchasing by way of the Bid Volume Only (BVO) system.

The BVO is a system uniquely designed for the WFP. It is based on their product specifications, which in the case of Malawi, differ slightly from the industry specifications. The WFP comes on screen as a single bid, specifying in reality only the quantity, while potential sellers have to outdo each other with offers. Only one bid is allowed, in this case the bid of WFP. Offers must also be valid for days during which WFP can decide whether they will accept or decline.

As said above, ACE adopted a virtual trading system. However, Kennedy (2011) in his SWOT analysis identifies the IT structure as a weakness.

ACE currently charges 0.02% of contract value (tons x value per ton). Kennedy (2011) is of the opinion that this is a very small percentage for an exchange that is able to provide a constant stream of market information and the ability to bid, offer and contract through the transparent ACE platform. He is of the opinion a commission of 0.05% - 0.25% is more in line with accepted charges for ACE.

More recently, since 2011, registered warehouse operators have been able to take grain deposits from third parties and issue a WR as proof of grain stored in the name of the owner. The WR could then be offered on the ACE trading platform.

Registered buyers issue a hard copy with the initial owner/depositor's photo on the receipt. The paper document has no value as a document of title – the electronic record, which is contained within the ACE registry, holds the real value.

3.5 THE UGANDA COMMODITY EXCHANGE (UCE)

UCE is a private sector organisation that was mandated by the Government of Uganda to regulate the WRs System Act, 2006 (UCE, 2012). In 2006, the European Union and the Government of Uganda funded a project known as Commodity Trading and Warehouse Receipting in Uganda, the main objective of which was to improve rural livelihoods. This would be done by supporting private sector run warehouses that would operate as public warehouses under the law. These public warehouses would open their doors to the farming communities so as to provide storage of standardised agricultural commodities. Warehouse Receipt Systems in Uganda are implemented on an ICX supported electronic platform called eWRS and has been instrumental in facilitating trade and financing in agricultural commodities.

Key achievements to date:

- WRS was launched on 28 April 2008.
- Licensing conditions have been developed for maize, beans, rice, cotton and coffee and the UCE is in the process of designing licensing conditions for sorghum and millet.
- 7 licensed warehouses in Jinja, Masindi, Kasese (2), Tororo, Gulu and Mbarara. All towns mentioned are situated nearer to the Ugandan farmer where the UCE has surplus production.
- eWRS has over 450 depositors, 70% farmer groups and 30% traders.
- UCE has a memorandum of understanding (MOU) with the UN World Food Programme to procure 150,000 tons through the system. To date, WFP has procured over 6,000 tons through the system.
- Over 9,000 tons have been deposited through the system.
- Over 4000 farmers have been trained by UCE around the hinterland of the warehouses.

- The commodity trading floor is now operational.
- UCE SMS platform is currently being designed.
- 4 financial institutions have signed MOU's with UCE to start financing WRs. Housing finance banks have lent over 400 million shillings, using the receipts as collateral.
- MOU's between UCE and the Uganda Coffee Development Authority and one coffee public warehouse have been licensed.

UCE was founded in 1998, originally with a grant from the European Commission. It was originally anticipated that the exchange would become self-financing within four years. Exchange staff visited other commodity exchanges in South Africa, Kenya and Colombia to see how they worked. Many of the original objectives of the scheme have not materialised or have been considerably delayed. Funding for commodity exchange has now come to an end and it is not certain whether they will receive further funding. Supporters say however, that government cannot let it fail as it is '*too important*'. Apparently, the government is trying to borrow funds from the World Bank to finance it. Commodity exchange staff said that:

- East Africa needs the exchange and it should work closely with SAFEX.
- World Food Program should only make purchases through the WRS.
- There would 'be no price discovery without the exchange.'

According to Robbins (2010), traders like the market the way it is and see no benefit in a commodity exchange. He continues by stating that most experts approve of the WRS but are unconvinced about what the purpose of the commodity exchange is. One idea was that the exchange would be an '*eBAY for maize*', with no need for a trading floor. Such a system would need local community drying equipment and a bagging depot with stitching machines etc. This could be done without an exchange. There was an atmosphere of '*massive conflict*' in the process of setting up the exchange as advisors had very different concepts for the project. Some wanted a fully-fledged, Western type of exchange trading in minimum 50 ton lots with futures, hedging and derivative trading, to be used only by the tiny percentage of the largest farmers. Others placed emphasis on the warehouse receipt. The country's banks were not interested in the project,

especially the idea of lending against WRs. An important issue is that a warehouse receipt is just a promise to pay certain tonnage of the same quality product - not a guarantee of sale. They only work if merchants can be persuaded to buy and sell it. In practice, this can take a week in a buoyant market, but in a country with two growing seasons, a buyer must be found quickly before the next harvest. The system can go wrong once, but if it goes wrong twice, no one will trust it. The exchange is still trading less than the 1100 tons per month it needs to trade to break even. The exchange has seven licensed warehouses and disseminates prices using SMS. There are no brokers on the exchange, only dealers, but some of them represent farmers groups. The exchange could be working with about 315 organised farmer's groups (30 farmers per group), but in practice it only works with 50 such groups. The agreement to establish the WRS was signed in 2006. The legislation for the WRS took ten years. It now incorporates full traceability.

Two interim reports – one from the Common Fund for Commodities and another by the Uganda Commodity Exchange, have found that the WRS is not feasible at the farm gate level because volumes are too small and instead of the farmers, the immediate beneficiaries of the system are traders. Indeed, if traders do not benefit, they won't use the system.

3.6 ZAMBIA COMMODITY EXCHANGE (ZAMACE)

ZAMACE was initially modelled as a mutual exchange, owned by commodity brokers and with a board of directors which comprised up to 8 members and three institutional seats; Zambia National Farmers Union (ZNFU), Millers Association of Zambia (MAZ) and Bankers Association of Zambia (BAZ). The Articles of Association of the Exchange provide for up to 15 member commodity brokers (ZAMACE, 2012).

The exchange was established in 2007. Its main traded item has been wheat, followed by maize and soya beans. It is funded by USAID Profit (start-up) and Compete (running costs). Minimum tons traded 30 tons. The exchange emails prices to 500 farmers and uses SMS technology (Robbins, 2010). From a

practical point of view, the exchange ceased to operate in 2011, although there have since been renewed efforts to revive it.

3.7 ZIMBABWE COMMODITY EXCHANGE (ZIMACE)

The idea of ZIMACE arose in the early 1990s, when the government committed itself to liberalise agricultural marketing which had been under parastatal control for years. It became apparent that an organisation was needed through which free marketing of agricultural commodities could occur. At a workshop on The Agricultural Sector Policy and Pricing held in Nyanga in November 1992, it was recommended that a commodity exchange marketing system be implemented on an experimental basis as an alternative market for decontrolled commodities. Thus, ZIMACE evolved on 1 March 1994 (Masanganise, undated).

ZIMACE was started by interested parties in the private sector, viz, the Commercial Farmer's Union and Edwards and Company, a local firm of stockbrokers. Initially, ZIMACE employed brokers who traded for the exchange. This was followed by a period when ZIMACE did not employ any brokers and was not actively involved in any trading. It only provided a forum for deals to take place with an administrator facilitating the deals. Effectively, ZIMACE was closed in 2001 when the Government gave the monopoly on maize and wheat trading to the Grain Marketing Board.

Last year another attempt was made to revive the exchange. It is now called the Commodities Exchange of Zimbabwe (COMEZ) and it is open, but no date is yet set for the commencement of trading. At the launch on 14 January 2011, Industry and Commerce Minister, Welshman Ncube, said that the exchange would be managed by the State, banks and farmers' unions (Bloomberg *Business Week*, 2011).

COMEZ will end the GMB monopoly, although the State will continue to play a strong role.

Bloomberg quotes Ncube saying that: “We should create a transparent, open and accessible commodities market where both buyers and sellers can participate knowing the prevailing prices.”

To start with, the new commodities exchange will trade only in grains, cereals and oil seeds. The chairman of COMEZ, Wilson Nyabonda (the previous president of the Zimbabwe Commercial Farmers Union), has said that private investors would be able to acquire shares in COMEZ.

3.8 KENYA AGRICULTURAL COMMODITY EXCHANGE LIMITED (KACE)

The Kenya Agricultural Commodity Exchange Limited (KACE) is a private sector firm launched in Kenya in 1997 to facilitate competitive and efficient trade in agricultural commodities, provide reliable and timely marketing information and intelligence, provide a transparent and competitive market price discovery mechanism and harness and apply information and communication technologies (ICTs) for facilitating trade and information access and use, initially in only Kenya but to subsequently extend to the East African Community. KACE is a limited liability company with a Board of Directors that manages its operations in accordance with its established Rules and Regulations. The products chiefly traded are agricultural, like cereals, dairy products and cotton. The Nairobi Coffee Exchange was set up in 1998 and equipped with an electronic trading system. The Exchange is intended to become the hub for coffee trading in eastern Africa. A futures trading system will be introduced in the near future.

The objectives of KACE are:

- To facilitate domestic, EAC regional and international trade in agricultural commodities and services.
- To provide farmers and other commodity value chain participants (e.g. input suppliers, traders, brokers, processors and consumers) with reliable and timely marketing information and intelligence, and other services that enhance their bargaining power and competitiveness in the market place.

- To provide a transparent and competitive price discovery mechanism through the operations of the exchange physical and virtual trading floors.
- To harness and apply modern information and communication technologies (ICTs) to facilitate trade and information access and use.

3.9 OTHERS

Tanzania intends to strengthen its warehouse regulatory regime in order to ensure that receipting can be mainstream for staple grains as has been achieved for coffee, cotton and cashew. The Government of Rwanda is similarly collaborating with the EAGC to promote WRS as a means of ensuring a more efficient trade in staple grains

3.10 SUMMARY

In this chapter it is clear that the commodity exchanges in Eastern and Southern Africa have a not too dissimilar record of development. Out of these seven selected countries only five are still going strong.

South Africa CDM could probably be rated as the most efficient commodity exchange on the African continent. In part because it has an efficient WRS or silo receipt system, as it is called, that forms the basis of the exchange; it should be kept in mind that only a small percentage of contracts traded on the CDM enter physical deliveries. The same goes for Ethiopia with ECX, which has taken a much more active role when it comes to warehouses compared to other exchanges. Uganda's commodity exchange is developing at a reasonable pace but funding is running out and government is trying to borrow funds from the World Bank. UCE has found that the WRS is not feasible at the farm gate level because volumes are too small and instead of the farmers, the immediate beneficiaries of the system are traders. The Zambia commodity exchange ceased operations in 2011 and had no WRS in place. Zimbabwe commodity exchange was closed when the government awarded a monopoly on maize and wheat trading to the Grain Marketing Board. A new commodity exchange COMEZ was launched in 2011 but no trading is taking

place yet. Kenya's agriculture commodity exchange main objective is to become the hub for coffee trading in western Africa.

This chapter emphasises the fact that Malawi has tremendous agricultural production potential with maize production growing from 1.5 million tons to 3.9 million tons in the past 10 years. This at the same time has brought forward the need for a national transparent trading mechanism designed to accommodate the small scale farmer. A WRS, that will form the basis to the exchange, offers such a solution.

It became clear that each exchange has some unique requirements which are country specific but the main difference between those exchanges that was able to succeed and those that did not make the cut, in part lies with having a successful WRS in place.

In the next chapter the unique rules and requirements for a WRS specifically based on the Malawian context will be discussed. As seen in this chapter it is important to have country specific requirements to successfully implement a WRS.

CHAPTER 4

RULES AND REQUIREMENTS FOR A MALAWI WAREHOUSE RECEIPT SYSTEM

4.1 INTRODUCTION

This chapter focuses on two objectives; the first objective is to identify the key requirements for ACE as it relates to a specific state of affairs for Malawi. Based on these requirements and the current rules and regulations the second objective is achieved by making recommendations and comments specifically on a WRS for ACE.

The first part of the chapter focuses on the current rules and regulations of ACE indicating whether ACE should be the central independent body managing the WRS. It also touches on the following criteria for grading regulations and quality issues and the warehouse registration requirements and inspections. This chapter will also indicate how the proof of ownership of a WR will be determined and whether or not a WR will be transferable and if there is going to be an expiration date for the WR.

The second part of the chapter emphasises the objective of making some recommendations and comments on a WRS, specifically for ACE. It looks at the process of issuing and financing the WRS. The chapter is concluded with some vital comments that ACE could take into consideration to avoid any confusion between certain terms that is used within a WRS.

4.2 GENERAL

The implications of forward contract defaults for the image of ACE have been highlighted in 3.4.2 the Commodity Exchange of Malawi. As stated, although ACE only “advertises” these contracts on its screen, and they are in reality no different to any other contracts concluded in the industry, to the uninformed - ACE is

perceived to be the culprit. Market participants expect guaranteed performance from an exchange. With this in mind, Kennedy (2011) writes that WRs hold the key to greater volumes of commodity trade through the exchange, absolute certainty concerning the quality of commodity delivered against a contract, absolute certainty that the commodity contracted exists, is securely stored and will be applied to a contract and absolute certainty from a lending bank's perspective that when used as loan collateral, a warehouse receipt is as secure if not more secure than property.

ACE has advocated for a WRS as an integral part of agricultural trade and financing since its incorporation in 2006. There is a substantial need in the market for a system that will reduce the risk of contract/performance defaults in agricultural trade and also facilitate competitive financing with agricultural commodities as collateral. Malawi does not have a regulatory framework for WRs, so the system has to be built on a contractual relationship between depositors, storage operators, financial institutions and ACE. The initial success of the WRS is very much dependent on the active involvement of all participants and this is why it took 6 years before the first WR was issued, financed and traded in Malawi (ACE, 2012).

4.3 ACE

The following criteria could be considered as key to a successful ACE WRS:

4.3.1 Should a central independent body manage the warehouse receipt system?

The literature review, 2.3 Warehouse Receipt System (WRS) on page 29, has indicated that several experts are of the opinion that a WRS should be managed by an independent body. In the section below, a case will be made why it is recommended that ACE perform this function.

Why ACE? Probably the two most important reasons are:

- ACE took the initiative and is the only body that has to date been able to achieve practical successes. Others have researched it, talked about it and/or tried it, but have never got out of the starting blocks. ACE successes, albeit small, have brought industry buy-in, gave the process momentum and obtained positive media exposure.
- Cognizance must be taken of the fact that should the WRS come off the ground, there will be two systems, so to speak, possibly mirrored on the South African system. Each South African warehouse operator issues its own certificates with its own set of rules. The only similarity is that product quality specifications are standardised on a nationwide basis. Parallel to this is the SAFEX silo (warehouse) certificate system. Although both certificates are tradable, the SAFEX certificate has the additional benefit that it is standardised and can be delivered on the exchange (JSE/SAFEX). One could say, it has better “credit rating”. It is closely monitored and managed in-house. The SAFEX silo certificate system is without doubt one of the central pillars of the Exchange. It is therefore in the future interest of SAFEX that they continue to manage their own SAFEX silo certificate system.

If a Malawi WRS is successfully developed, it is more than likely to go the South African route. Therefore each warehouse operator will also be in the position of wishing to issue its own receipts. However, it is likely that these receipts will be of lesser value and will, of course, not be traded on the Exchange. ACE, on the other hand, will from the outset develop and manage its own receipt system – the “ACE Warehouse Receipt”. This is likely to have a much wider exposure and a higher standing and therefore be a far more sought after certificate. This of course, is subject to the buy-in from financiers, insurers, etc., and is likely to remain so in future.

Other than the fact that it will be known as an ACE warehouse certificate, it will be linked to a warehouse operator (a company or legal entity), and to a specific depot. The fact that ACE will guarantee the performance of the certificate is by far the most important aspect. This is what will ultimately build the reputation and the “*brand name*” of the certificate. And, this is what prospective buyers will pay for.

Only a selective small number of informed participants will be aware that there is a system of insurance behind the certificate.

4.3.2 Grading regulations and quality issues

An integral part of the WRS is the grading regulation and quality issues. In a well-developed system, like South Africa, this has over time taken a back seat, as all participants have absolute faith in terms of the quality that they are entitled to on a WR. However, in a newly established WRS, this will not be the case and there will be uncertainty as what to expect when the WR owner arrives to withdraw her/his product. It is emphasised that this will not always be the case but it will happen at some warehouse structures.

An incident or default on quality will have to be managed efficiently and hopefully at no cost to the owner. Timing will be of the essence. More than likely vehicle(s) for transport will already be waiting and possibly the processor could be low on grain and could not afford her/his factory to run out of stock.

If the parties involved cannot resolve the dispute internally, it needs to be speedily referred to an independent arbiter or arbitration procedure. This is normally preceded by the appointment of an independent grading inspector that will visit the premises to take samples and independently grade the product.

In most countries, like South Africa, national statutory grading regulations exist, compiled and adjusted from time to time by a government body with industry input. The regulations are published in the Government Gazette and the use thereof is mandatory. Since the regulations were compiled in consultation with industry, they normally do not have a problem to subscribe to the regulations. In some cases there are deviations from the regulations between parties as per contractual arrangement, but the regulations still form the basis and the exceptions are specified.

In Malawi there seems either to be no national statutory grading regulations or they are not enforced. It is recommended that this issue be re-visited by the industry as a matter of urgency.

The closest national grading regulations are the regulations used by the NFRA, which is a government parastatal. The main criteria where parties differ, is in respect of the moisture content. NFRA is on 12.5% - that is the maximum moisture content at intake (unless the operators have drying capabilities.) This is what is referred to as an “ACE 1” grade. WFP recently increased their moisture level to 14.0%. This now called an “ACE 2” grade.

From a depositor’s point of view, maize can be delivered on either one of the specifications. The buyer on the other hand, must specify what grade he is purchasing. An ‘ACE 1’ grade can be delivered on an ‘ACE 2’ contract.

The different grading regulations listed in Table 1 applicable are a matter of concern.

Table 2: Grading standards for white maize in selected countries and regions relevant to Malawi

	Malawi	South Africa			WFP	COMESA-EAC	
	Gr 1	WM 1	WM 2	WM3	Gr 1	Gr 1	Gr 2
Maximum percentage (%)							
Defective kernels:							
Insect (pest) damaged	2				1	1	3
Diseased, mouldy, rotten	1				1	0.5	0.5
Immature/shrivelled	1				1	1	2
Discoloured/stained	2.5					1	2
Germinated & frost damaged	0				0	1	1
Total defective	11.5	7	13	30		4	6
Broken kernels	5				3	4	6
Foreign matter organic	0.5					1	1.5
Foreign matter inorganic	0.5					0.25	0.5
Foreign matter total		0.3	1	1	1		
Filth						0.1	0.1
Other colour maize		3	6	10		2	2
Other grains	1				2		
Total deviations		8	16	30			
Moisture	14	14	14	14	12.5	13.5	13.5

Source: WR Consultancy Team, 2007

4.3.3 Warehouse registration requirements and inspections

ACE has taken the initiative, after consultation with specialists and industry, and compiled a list in the format of a questionnaire on the requirements to be registered as an ACE warehouse operator (see annexure 3). The following issues will have to be taken into account according to Moller, KS (2012):

- Although the requirement for registration and the inspection questionnaire could initially be combined, as is currently the case, this should be split into two distinct documents: “ACE Warehouse Registration Physical On-Site Requirements” and “ACE Warehouse Registration Physical On-site Questionnaire”.

- The “*Physical On-site Requirements*” is a sub-section of the broader “*Warehouse Receipt System (WRS)*” and is incorporated in annexure 3, B Storage Facility.
- Given the diversity in infrastructure across the country and more specifically between urban areas and rural areas, industry consultation will be an on-going process.
- Another potential problem is that some facilities were initially well capitalised, but budget constraints and lack of maintenance means that they may not qualify in their present condition.
- Care will also have to be taken that smaller rural warehouses are not excluded from qualifying. A fine balance will be required between maintaining a minimum standard, whilst accommodating smaller lower capitalised warehouse structures. Initially, it is only logical that better capitalised warehouse operators are likely to be targeted and registered first. It is, however, likely that at some stage it will become necessary to split warehouse registration into two categories to accommodate the diversity in structures.

4.3.4 Inspection team

As said above, all warehouse operators that submitted an application need to be inspected and approved. It is important that inspection and recommendation for approval or otherwise is conducted by independent professional experts.

ACE has taken the initiative and appointed Mr Rui Francisco, a building consultant, and Mr Cephass Taruvinga, a storage and post-harvest specialist. Their credentials (curriculum vitae) will be available at ACE headquarters on request (Moller, KS. 2012).

There are also other options available, such as Socotec and SGS Malawi, both international subsidiaries operating in Malawi and specialising in grain quality and storage (Moller, KS. 2012). However, it is of little importance who is appointed, as long as ACE has industry buy-in. In future, export certification may bring another dimension.

4.3.5 Proof of ownership of warehouse receipt

Until recently, WRs were issued by way of an original hard copy document - normally on specially printed paper, embossed with the logo of the exchange and sequentially and uniquely numbered. In a well-established WRS, the original WR document is normally transferable and sometimes negotiable. That meant that the holder of the original WR could arrive at the warehouse and claim title to the product. Unless the WR was reported lost or stolen, or ownership reported as being in dispute, the holder is fully entitled to withdraw the product. The warehouse operator keeps a record of the person or entity that withdraws the product, and of course to whom the WR was originally issued, but in between, record of transfer of ownership is not required.

With new technology at hand, ownership is registered on a central databank server. In most instances when ownership is transferred, it is now required to report/register such transfer on the central databank since there is no longer a hard copy of the WR. If a WR hard copy exists, it has no legal standing. The electronic registration and record keeping (transfer) of WRs, also in respect to financing, is a great improvement and has minimised operational problems of lost or stolen WR and fraud.

ACE has opted for the electronic issue of WR (Moller, KS. 2012). All exchanges are using, or will in due course switch to using this method. When introducing a WRS, it makes sense to utilise the latest technology available. It does, however, place an additional burden on the software requirements and management. Should ACE at any stage opt not to provide this service in-house, there are companies specialising in providing this service. An example is ESC (Electronic Silo Certificates) which provides this service to the JSE/SAFEX in South Africa (ESC, 2012).

4.3.6 Transferability

The issue of transferability is very much at stake in the decision making process. Although the WR gives the owner the right to the product stored in a commercial warehouse, this is not unconditional. The WR can be issued in two pre-determined formats, transferable and non-transferable. The WR Consultancy Team also recognized this distinction during their investigation in 2007.

- When “transferable”, it will mean that the initial owner of the WR could transfer (sell) it to a third party. The new owner will then be liable for the outstanding costs and financing obligations, should it wish to redeem the WR.
- If non-transferable, that means that the original owner will first have to make good on the outstanding costs and financing obligations. The WR will only then be transferred by the exchange to the new owner of the product. Whether the administration procedures of the exchange require the WR to be cancelled and a new WR issued, or whether the WR is transferred from one owner to the next is immaterial. Note - the new owner is not obligated to withdraw the product, neither does it have to pay the upfront fixed handling cost again. It will only be liable for the daily storage cost as from the date of issue the new WR.

A WR that is “transferable” should not be confused with ACE that electronically “transfers” a WR from one owner to the next. Whether in electronic format, or a hard copy format, when a WR is non-transferable it means it cannot legally change ownership unless all obligations under the WR have first been complied with. The latter refers specifically to storage costs due to the warehouse owner, and, if financed, interest and fees due to the financier.

4.3.7 Expiration of warehouse receipt

Another aspect that needs to be raised is whether a WR expires. In other words, must the owner withdraw the product by a certain date, for example, by the end of season?

It is recommended that a WR expires for the following reasons:

- It will be beneficial for a financier who needs to discount the value of the WR in order to determine the percentage it is willing to finance.
- For the financier, it is of most importance that his collateral is reconfirmed from time to time.
- The date of expiration should be at the end of the season, for example, end April.
- It will greatly assist warehouse operators who prefer to do maintenance before the new harvest comes in. It will not mean that all warehouse structures will be empty, but simply that they would be in a position to manage the process together with the WR owner.
- A substantial part of the income of the warehouse owner comes from the initial fixed fee charged at intake. The warehouse operator would therefore prefer to be in a position to either have capacity to take in new grain or re-charge this fee should the WR owner not wish to withdraw her/his product (yet).
- On the last point, if the WR owner does not wish to or prefers, for whatever reason, not to withdraw the product at the end of the season, she/he could negotiate with the warehouse owner. However, it is more than likely that she/he will be liable for paying the upfront charges again.
- For ACE, re-issuing WRs at the beginning of the new season is also a form of control to reconfirm the existence of the product.

4.3.8 Who is entitled to withdraw the grain in storage?

Issues at stake are:

- Definitions:
 - WR owner – the legal entity who can rightfully claim title to the product and who should be registered on the ACE data bank.
 - WR holder – no such a concept exists when a WRS is based on electronic WRs.
 - Holder of a WR hard copy. Although a WR hard copy was issued at the time of deposit, this document has no legal standing.
- Authorised representative of the WR owner. This will be natural person who has written proof that he is authorized to withdraw the grain on behalf of the WR owner.
- Proof of identity and credentials:
 - A natural person should be in possession of an official identification document and authorisation on the letterhead of the WR owner.
- ACE software capabilities. When a WR is cleared for withdrawal and instructions are issued to the warehouse owner, such instruction should specifically indicate who (the name of the individual) and her/his capacity (for example, employee or contract transporter) will arrive to withdraw the product.

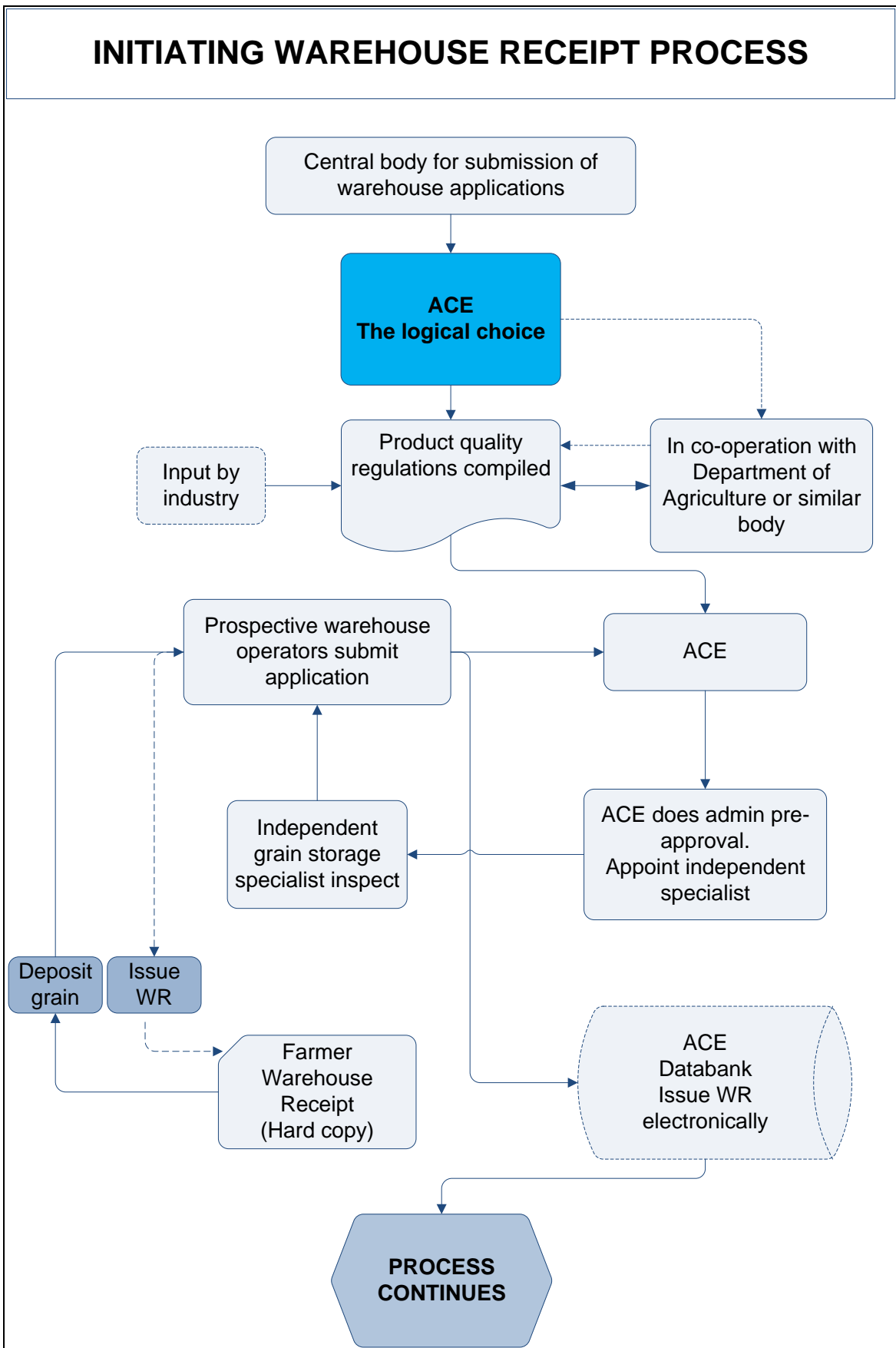


Figure 9: Initiating the warehouse receipt process

4.4 PROGRESS REPORT

In 2011, ACE registered the GSL silos in Kanengo, Lilongwe as the first WRS storage facility (ACE, 2012). The GSL facility has a capacity of 12,000 MT and it was open to deposits from any interested third party. In 2011, three small rural warehouses of 500 tons each were registered. A fourth warehouse with a capacity of 2000 tons was under consideration in an arrangement with the UNDP Millennium Villages Project. It would have operated under the banner of NASFAM, assisted and supervised by ACE, for the balance of the 2011 season (ACE, 2011 and Kennedy, 2011).

Storage fees were set by GSL and advertised by ACE. The fees cover all costs and the depositor will have no additional costs. This includes bagging in new bags and printing these bags where WFP is the buyer (ACE, 2012).

The National Food Reserve Agency (NFRA) plays a very important part when it comes to maize storage and marketing in Malawi. The NFRA came about in 1998 when the government, under pressure of the IMF and World Bank programs, agreed to eliminate price support operations for maize by ADMARC and prepare it to operate on a strictly commercial basis. It agreed to establish an agency to handle disaster relief involving the management of the strategic grain reserve in the place of ADMARC, with a clear delineation of responsibilities between the two agencies.

The NFRA had for some years taken deposits from selected large traders, and occasionally the banks called the NFRA to obtain confirmation of physical stock before approving finance (ACE, 2012). This was, in effect, an unstructured warehouse receipt. The NFRA was quick to confirm that they would participate in the WRS and issue WRs from their Kanengo (Lilongwe) silos. NFRA has storage sites in other locations and also confirmed that they will apply the procedures that have been implemented and tested in Kanenga (Lilongwe) to these sites (AMIS InterAg). ACE confirms that NFRA has 240,000 tons of silo capacity under management and they are in consultation for the registration thereof (2012).

Other than the NFRA warehouses, ACE has targeted a total 16 facilities with a combined storage capacity of 53,200 tons (ACE, 2012).

During May 2012, ACE sent its inspectors to the warehouse owners (below), responding to their application based on the new proposed requirements (annexure 3) (ACE, 2012).

- Rab Processors Lilongwe
- Rab Processors Blantyre
- Farmers World Lilongwe
- Agora Blantyre
- KU Distributors Blantyre
- Transglobe Blantyre
- Rice Milling Blantyre

Individual feedback is still confidential, but it could be reported that four sites were unconditionally approved, one conditionally and two declined (Moller, KS. 2012). It is considered a good mix, proving the point that inspections are thorough and that in some instances grain has been stored in facilities that are not up to standard. ACE certification will most definitely improve the industry standard. Informed market participants will not be confident if they know that they store product at a facility that is substandard according to the ACE requirements.

4.5 PROPOSED RULES AND REGULATIONS – ACE WAREHOUSE RECEIPT SYSTEM

In this section the objective is to comment and make some recommendations on the current ACE rules and regulations in respect of their WRS.

4.5.1 Summarized extract of the process for issuing and redeeming a WR

The following summary is extracted from the document “Warehouse Receipt System in Malawi a strategy – a solution”. The process of depositing the product, issuing the warehouse certificate, financing and redeeming the certificate, can be summarised as follows (ACE, 2012):

- A commodity is deposited in an ACE registered warehouse facility, certified to store that commodity.
- The warehouse owner issues a WR, through ACE, and thereby guarantees the quantity and quality.
- The WR owner could request financing from a preferred bank and immediately receive the funds.
- The WR owner follows the market prices and may offer the WR for sale through ACE’s trading platform.
- A buyer accepts the offer and ACE generates a contract.
- The buyer deposits funds into the ACE settlement account.
- ACE settles the finance and storage costs and transfers ownership of the WR
- ACE transfers the balance to the seller
- The new owner can either collect the commodity or request new financing from a preferred bank.
- The WR is cancelled in the Registry if the commodity is collected. If not, the sequence starts again.

4.5.2 Proposed rules and regulations

Based on the suggestions made and documentation provided by ACE, the writer proposes that the following rules and requirements for a WRS, be adopted:

- Subject to the provisions of these proposed Rules (below), any person complying with the following conditions may apply to ACE for the registration of a commodity warehouse:

- (Definition: “*Commodity*” includes, but is not restricted to, maize, wheat, sorghum, barley and soybeans.)

4.5.2.1 Financial worth

- The grain warehouse owner shall be a legal entity registered to conduct business in Malawi. The registration will indicate the legal entity’s status, in other words, whether it is a company, trust, individual, etc.
- The grain silo/warehouse owner shall be in good financial standing and credit, and shall have a net financial worth (on a going concern basis) of at least 150% of the value of the grain storage capacity it applied to register. Small farmer warehouses, under management of NASFAM or a similar organization, may apply for exemption on condition that such exemption, if approved, is publicly communicated.
- A certificate by a public accountant and auditor, confirming compliance with this requirement, shall accompany the warehouse or grain silo’s application.
- ACE retains the right to request the applicant’s financial statements for evaluation by independent auditors of its choice.
- These requirements shall be verified / confirmed by the warehouse owners on request of ACE, the financier or the insurer. If no requests have been submitted, the records must in any event be verified / confirmed every three years.
- Applicants with an insufficient net financial worth, may provide sureties or guarantees in a form acceptable to ACE *in lieu* of such net financial worth.

4.5.2.2 Warehouse site, layout, physical structure and equipment

- ACE, at its own discretion, will compile a list of “Physical On-Site Requirements” which an applicant must fulfil before acceptance for registration.
- ACE retains the right to update the requirements from time to time.
- Such list will be available at ACE’s registered office and on its website.

4.5.2.3 Personnel employed

- The grain warehouse operator must employ at least one qualified grader to conduct and/or oversee its operations.
- “Qualified” means to be in possession of a valid certificate from an acceptable institution examining the technical knowledge regarding grading, handling, safe storage, management and fumigation of grain.
- ACE will from time to time publish a list containing the names of acceptable institutions.

4.5.2.4 Insurance

- Warehouse owners shall have current insurance policies in place, covering warehouse buildings, equipment and commodities stored therein against the following minimum risks: theft, fire, earthquake, earth tremor, malicious damage, storm, flood, spontaneous combustion and explosion.
- In the event of loss, damage or non-performance, the warehouse owner shall substitute grain of the same quantity and of equal or better quality at the location described in the warehouse receipt. If grain is substituted from another site, the owner of the warehouse receipt will be duly compensated, if prejudiced.

4.5.2.5 Notice of registration

- Every registered grain warehouse shall permanently display on the outside of the main entrance to the warehouse, a notice to the effect that it is a registered grain warehouse in terms of these rules.

4.5.2.6 Register of warehouses

- ACE shall keep record of all applications, inspection records, comments and the outcome of the application.

- In addition, ACE shall keep a summarised list of all accredited grain warehouses, showing the location of each warehouse and the kind of grain for which it has registered.
- Such list shall be available at the office of ACE and be published on their website.

4.5.2.7 Register of Warehouse Receipt

- It shall be the responsibility of ACE to keep registers in respect of:
 - Current WRs
 - Ceded WRs (as collateral)
 - Lost silo WRs
 - Cancelled WRs
 - Transferred WRs (when sold)
 - Discharged WR
- In the event that a warehouse receipt is sold, and the new owner requires a “hard copy”, such receipt will be issued by ACE only.
- In the event that a warehouse receipt is lost, and the owner requires a replacement “hard copy”, such receipt will be issued by ACE only.

4.5.2.8 Grain offered for storage

- When a person offers grain to any warehouse for storage, the grain warehouse shall, if there is sufficient space available in such warehouse, take delivery of the grain and provide suitable and safe storage therefore, provided that the grain offered to the silo/warehouse complies with the grain quality terms outlined in the Terms and Conditions of the ACE Contracts.
- A warehouse owner has a lien on any commodity stored in the warehouse for the payment of any outstanding warehouse service costs incurred. This lien is not considered as debt.

4.5.2.9 Administration of warehouse receipts

- ACE warehouse receipts shall be issued by a warehouse owner on the ACE trading system.
- Upon issue of an ACE warehouse receipt by a warehouse owner, a hard copy of the warehouse receipt shall be given to the owner of the grain.
- A warehouse receipt can be split into several receipts of smaller denominations on request of the warehouse receipt owner. This may only be affected by ACE. The replacement receipts will be of similar tenure and warehouse service tariff. ACE shall provide notification thereof to the warehouse owner.
- Any number of warehouse receipts can be merged into one receipt by ACE on request of the warehouse receipt owner. Consideration should, however, be given to tenure and warehouse service tariffs, so as not to prejudice the warehouse owner.
- Loss of warehouse receipt
 - In the event of loss or damage to the warehouse receipt hard copy, originally provided to the owner, the owner may approach ACE for a replacement copy. Only ACE may provide such replacement copy.
 - Note, however, title to the product, is vested in the electronic copy on record in the ACE data bank. The loss of a warehouse receipt hard copy shall not affect any of the out loading procedures, given that ACE in any event issues final clearance (out loading) instructions electronically to the warehouse owner.
 - In any legal proceedings regarding a lost or destroyed warehouse receipt, the non-production of the warehouse receipt shall not constitute a defence. The legal right to possession of the commodity is vested in the electronic copy on record in ACE's data bank.

4.5.2.10 All warehouse receipts issued will be site and structure specific.

- A warehouse receipt is always linked to a specific site and structure.
- The requirement in respect of structures only applies if the warehouse owner has more than one structure on a site and has not registered all structures to issue ACE warehouse receipts.
- Notwithstanding that the commodity deposit will be stored in bulk and will not be specifically identified, the onus is on the warehouse owner to prove that the total quantities stored correspond with its records and commitments, inclusive of the warehouse certificates issued.

4.5.2.11 Transferring of commodities on deposit and issued against a ACE warehouse receipt

In the event that the warehouse owner owns a series of warehouses registered to issue ACE warehouse receipts, and wishes to transfer a commodity or part of a commodity that was deposited against an ACE warehouse receipt between such warehouses, this may only be done on the following conditions:

- The warehouse owner must receive written approval from ACE. It must prove to ACE that that such transfer is without prejudice to the warehouse receipt owner and/or that the owner is duly compensated.
- The warehouse owner must have sufficient stock of the commodity on the destined site to cover the commodity in transit.
- In the case where the warehouse owner could not comply with the above, the warehouse owner should provide ACE with a cash bond to secure the maize in transit, to the maximum of one truckload at a time.
- The warehouse owner must inform ACE when the process has been completed and request ACE to adjust the warehouse receipt to reflect the new site and structure.

4.5.2.12 Every warehouse owner shall in a safe place, keep a complete and correct record of:

- All warehouse receipts that it has issued, the persons to whom the warehouse receipts were issued and the addresses of such persons.
- The warehouse owner should attach to the warehouse receipt issued, any weighbridge certificates or grading documentation pertaining to the volume and grade of the commodity indicated on the warehouse receipt. This must include moisture calculations, waste calculation, etc.
- All warehouse receipts returned to and cancelled by it.
- All persons to whom delivery of grains were made (on the instruction of ACE).
- All notices provided by ACE of the transfer of ownership of warehouse receipts, as well as the names and addresses of the transferees.

4.5.2.13 Inspection of warehouses

- Any person designated by ACE for the purpose of inspection in terms of these rules, may at any reasonable time inspect any registered grain warehouse or any of the commodities stored, or offered for storage, therein, and any record kept in connection therewith. Any grain silo/warehouse owner/employee obstructing any person so designated in the performance of his duties shall be deemed to have breached these Rules.
- Whenever ACE is satisfied as a result of any such inspection that a warehouse owner is not performing her/his duties satisfactorily, they may serve a warning in writing on her/him that unless she/he performs her/his duties in a proper manner her/his registration will be cancelled.
- If it is evident from a further inspection, performed not less than seven days and not more than three months after such warning, that the warehouse owner is not performing her/his duties in a proper manner, ACE may cancel her/his registration immediately.
- Should ACE note that the net worth of any silo has diminished below the required level, written notice shall be given to the warehouse owner requiring that she/he augment the net worth of the silo to bring it up to the

level required, within 30 days. If, the warehouse owner fails to meet this requirement, the ACE Silo / Warehouse Committee may cancel her/his registration.

- In the event of a cancellation of registration, ACE must publish notice of the cancellation of the registration of the grain warehouse and that the aforesaid grain warehouse may not receive any more grain for storage in terms of these rules. ACE shall then monitor the safe withdrawal of all remaining stored grain covered by ACE warehouse receipts.
- Should a warehouse owner's accreditation lapse or should it wish to terminate the registration granted in terms of Section 2, it must advise ACE of such intention, where after ACE shall publish notice of the intended cancellation of the registration of the warehouse and that the warehouse may not receive any more grain from storage in terms of the ACE Warehouse receipts Rules and Requirements. ACE shall cancel the registration once it is satisfied that all grain in storage in terms of these rules has actually been dispatched or dealt with in a manner acceptable to the holders of such warehouse receipts.
- Notice referred to above shall be effected on the ACE website and in a local newspaper.

4.5.2.14 Validation of a WR

- A warehouse receipt shall always be unencumbered, shall not be a negotiable instrument and may not be negotiated by transfer endorsement and delivery.

4.5.2.15 Transfer of ownership

- Should a warehouse receipt be sold, then in that event ACE will transfer ownership of the receipt to the new owner once all the financial obligations have been fulfilled towards the financier, if applicable, and the warehouse owner.

- If ACE has access to the “hard copy” originally issued to the owner, ACE will cancel it. Should the new owner require a “hard copy”, ACE will issue a new ‘hard copy’.
- ACE will inform the warehouse owner of the transfer of ownership.
- Should the new owner wish to immediately out load the grain purchased, the procedure will remain the same, and ACE will issue out loading instructions to the warehouse owner in favour of the new owner, who by then has title to the grain through a newly issued electronic receipt.

4.5.2.16 *Financing against warehouse receipts*

- In the event that the WR owner obtained financing from a financier and has presented the warehouse receipt as collateral against such financing, the final responsibility to service such financial obligations remains with the owner.
- Should the financier request ACE to facilitate such transaction, ACEs responsibility will be limited to record such lien against the WR on its database and ensure that, should the WR be sold or a request received from the owner to outload, the outstanding lien will be made good on in favour of the financier before such WR is transferred or released for outloading.
- In the event that despite the best efforts of ACE to continuously inform the financier of the changing value of the collateral, the value of the collateral is less than the outstanding lien, ACE will not be responsible for the shortfall. It will remain a matter between the WR owner (the borrower) and the financier and ACE will await further instruction from the financier.
-

4.5.2.17 *Outloading the underlying commodity of the WR*

The grain warehouse owner shall only outload the commodity to the owner of the warehouse receipt once it has received an electronic instruction from ACE to do so, provided that:

- Such warehouse receipt owner has given ACE at least 7 working days' notice of his intention to take delivery;
- ACE in turn has notified the warehouse owner; and
- The warehouse receipt owner has acknowledged receipt of the grain to be received.

4.5.2.18 General

- The silo/warehouse owner shall refer all disputes relating to these rules in general and to warehouse receipts in particular, for Arbitration or mediation in terms of the ACE Regulations, as read with the ACE Rules of Arbitration.
- Amendments to these Rules and Requirements may only be made by the ACE Board of Directors.
- ACE is entitled to charge fees in respect of services rendered in the process of managing the WRS.

4.6 COMMENTS ON PROPOSED RULES AND REGULATIONS

The following comments should be noted:

- It is recommended that ownership of a warehouse receipt not be transferable and that a warehouse receipt not constitute a negotiable instrument. This could be changed at a later stage.
- Only ACE can issue duplicate receipts or “*new*” receipts based on transfer of ownership. If volumes pick up this could be changed at a later stage.
- Only the word “*warehouse*” be used, and not “*silo*” to avoid confusion.
- Only the words “*warehouse receipt*” be used, and not “*warehouse certificate*” to avoid confusion.
- The potential formation of an “*ACE warehouse committee*” was done away with to streamline operations and to avoid legal complications. It could be brought back at a later stage if required.
- ACE Board of Directors could delegate authority to investigate and make recommendations but the right of approval should be vested in the Board.

- Only the words “*warehouse owner*” be used, and not “*warehouse operator or manager*”. Strictly speaking, an “*operator*” could lease a warehouse from an owner or landlord, which adds further complications. If that is already a practice in Malawi, the rules will have to be adjusted, and hopefully that can be done at a later stage.
- The definitions of net financial worth has been simplified and reduced to accommodate smaller warehouses. A provision for exemption has been included for consideration.
- The regular verification of financial worth is an issue. Best practice in many countries, including the JSE in South Africa, requires monthly submission of Financial Statements and a complete audit report annually (JSE, 2011). This requirement has been relaxed for present purposes, but should be reviewed again.
- The definition of grain has been done away with and replaced by the word “commodity”
- The issue of the WR being “transferable” has been addressed under point 4.3.6.

4.7 SUMMARY

This chapter focused on the objective to review the current rules and regulations of the WRS and make some comments and recommendations specifically based on the Malawian ACE structure.

The first part of the objective was achieved by determining the current rules and regulations for a WRS in ACE. It re-emphasise that currently, in the practice of forward contract trading, ACE does not guarantee the performance of the exchange, any of the parties can walk out of the contract and don't have to deliver. A WR hold the key to solve this dilemma and will enable ACE to guarantee performance of the contract. (ACE controls ownership of the WR and can ensure that the WR owner delivers on his contract.)Malawi does not have a regulatory framework for WRs, so the system has to be built on a contractual relationship between depositors, storage operators, financial institutions and ACE.

The first requirement that was identified by the study is that ACE should be the central and independent body that will manage the WRS. This is based on the fact that ACE has already established itself as successful and this has built trust within the industry.

Another aspect to take into consideration is the grading regulations and quality issues. This is a vital part for a successful WRS to guarantee the quality and grade of the maize that is deposited. The registration requirements for warehouses along with inspections are another critical aspect to consider. ACE compiled a list of requirements that should be met to be a registered ACE warehouse operator and all warehouses needs to be inspected and approved. Proof of ownership of a WR is important to prevent fraudulent collection of maize. ACE has indicated that it will make use of an electronic WR and utilize the latest technology available.

The second part of the objective was achieved by proposing rules and regulations for a WRS specifically aimed on ACE. It summarised the process of issuing and redeeming a WR. This was followed by a detailed proposal on the new rules and regulations.

This chapter concludes with a few additional comments pertaining specifically to the interpretation of the proposed rules.

Now that the specific rules and regulations for a WRS is in place, the next chapter will go a step further to analyse the financial and insurance instruments that is required for a successful WRS.

CHAPTER 5

BANK CREDIT POLICIES, PROCEDURES AND INSURANCE MECHANISMS FOR WAREHOUSE RECEIPT FINANCING

5.1 INTRODUCTION

There are two stakeholders that are obligatory when it comes to a successful exchange. They are the financial institutions and the insurance companies. The WRS and the rules of the exchange must accommodate these stakeholders. This chapter will analyse why they form an integral part of the WRS and specifically how ACE could accommodate them.

This chapter will focus on two main objectives of analysing the current position of financial institutions with specific reference to the (proposed) financing of WRs as well as that of the insurance companies, which are crucial in guaranteeing the WRs. With regard to the financial institutions, and as a secondary objective, this chapter will also introduce a motivation why it will be beneficial for a financial institution to get involved. This motivation is attached in Annexure 4.

The first section in this chapter will focus on the financial institutions by first examining the general advantages of a WRS when it comes to the commodity financing through banks. It will also indicate how the financial institution will be assured that the commodity that they are taking in as collateral will be guaranteed in quality. Another curtail factor that is discussed is what will happen if the price of the underlining commodity that was used as collateral for a loan drops? It also gives a few observations that were made and were incorporated throughout the study that is specifically based on ACE. This section underlines the process of financing a WR and redeeming a financed certificate by the WR owner.

The second section of this chapter will focus on the insurance underwriters. It emphasizes the reasons why adequate insurance cover and performance bonds for licensed warehouse operators are important.

5.2 FINANCIAL INSTITUTIONS

5.2.1 General

Kenny (2011) in his review of the ACE strategy highlights the distinct advantages of a warehouse receipt when it comes to commodity financing through banks:

- The commodity is placed in a third party secure warehouse by the depositor.
- At the time of intake, it is not only weighed, and if in bags also counted, but the quality is tested and graded.
- A professional fumigation service is a service that is offered by the warehouse keeper. This is also important for export certification.

The financing bank can therefore be assured that the commodity that they are requested to finance, is as risk free as possible and represents excellent loan guarantee collateral.

Placing a lien on the warehouse receipt in the ACE registry is a simple matter and will ensure that before any payment is made to the seller of a deposited commodity; all bank dues have been paid (for price risk management, see below).

The exchange should also undertake to assist with the process of valuing the banks' commodity lien holdings by providing real time market information to the bank, based on actual exchange bids, offers and trades.

The exchange's involvement in loan transactions involves selecting participating lending banks from the outset, connecting them to the ACE system and providing them with both market information (for price risk management purposes) and potential clients.

While discussing loan financing using receipts as collateral, it is important to emphasise that the receipt would never come into the bank's possession – the bank would retain the right to sell the receipt under certain circumstances. Advances against collateralised receipts often amount to up to 70% of the perceived receipt value at the time of granting the loan – the value of the receipt commodity would be assessed by ACE using market information available at the time.

Should the market price fall below the 70% loan granted, the bank would have the right to call on the depositor for either additional commodity receipts with which to re-establish the loan: receipt equity balance or to call for cash to be applied to the loan account to create re-establishment of the initial ratio.

It is normally accepted that the borrower is provided a grace period within which to respond to the call, failing which, the bank is entitled to sell the initially pledged receipt, in order to recover or limit its potential losses.

Each receipt's registry record should contain information concerning any outstanding expenses related to it – transport charges unpaid and warehouse intake / out-turn and rental charges unpaid.

These are normally paid at the time of sale by the receipt holding party, and deducted from the holder's account with ACE before payment is sent via the clearing system to the holder who has just sold the receipt. Funds are received at the same time from the buyer of the receipt, which allows for the charges to be paid, commissions to be taken and the account balance to be passed on to the seller.

If the bank makes a decision to sell, there has to be sufficient equity remaining in the receipt to allow for recovery of these incurred charges – this should be considered when establishing both the registry and deciding on allowable loan : equity ratios.

5.2.2 ACE

Apart from canvassing banks individually, ACE also had a working session on May 2, 2012 where representatives of all interested banks were present. Minutes of the meeting are available from ACE on request.

A few important observations were made that have been incorporated throughout this document. The following can be highlighted as it relates directly to the financing of the WR. Comments are in brackets, if applicable (Moller, K.S. 2012):

- Banks think it is important that the approved warehouse operators also have a proper balance sheet. (This has been addressed in the 4.5 Proposed rules and regulations – ACE Warehouse Receipt System).
- Banks will need to take the product to credit committee for approval; a proper motivation is required, like any other new product. (The consultant has written a pro forma motivation that could be used to speed up the process).
- Who-ever issues the ACE WR should preferably be the legal entity that owns and operates the warehouse.
- Warehouse operators issuing WRs for their own stock should be treated different that issuing WR for 3rd parties. (Although there is an additional risk, if it is an ACE WR, the onus remains on ACE to inspect the site).
- There is no government regulator in Malawi, therefore ACE is at present performs in a self-regulatory capacity. (It has advantages its advantages in the seen in 3.4.2 Commodity Exchange of Malawi).
- Banks suggests that there should be a minimum volume e.g. 5 metric tons specified in 2.6.1 Standardized size of contract and/or minimum lots (This is likely to be the case for urban sites but the banks could impose a minimum volume themselves).
- Banks indicate there will be pricing differences between, for example 5 tons and 5000 tons. (Understandable as long as the small farmers are not unduly punished to enable these farmers to compete with the larger players).

- Banks do currently finance commodities but it is based on offering the commodity as collateral and a balance sheet. Banks understand that what ACE requests is that finance will only be collateral based.
- Banks indicate that duration for financing will be important. They will discount the interest rate forward. A cut-off date or expiry date is important. (It has been included in the rules in 4.3.7 Expiration of warehouse receipt).
- Banks requests a Memorandum of Understanding (MoU), which they would like to include in their proposal to the credit committee. (A pro forma submission has been prepared by the consultant).
- Companies with more than one depot might wish to issue a WR at a sourcing depot and subsequently like to move the stock to an urban (larger) warehouse facility. The issue of removal and transporting of the product is at stake. (It has been addressed in in 4.5 Proposed rules and regulations – ACE Warehouse Receipt System).
- Even if the product is legally transferred under the rules, it might change in value subject to the location of the new site. (It has been addressed in 4.5 Proposed rules and regulations – ACE Warehouse Receipt System.)
- Insurance is an important issue. (On-going discussion with the insurance companies still takes place).
- The original proposed rules prevent ACE from offering a WR unless the value will exceed the obligations (outstanding finance and storage cost). (This has been addressed in 4.5 Proposed rules and regulations – ACE Warehouse Receipt System).
- Possible commission structure for the banks will be a flat fixed fee upfront and a % daily calculated and compounded.
- Banks will individually decide what % of value of collateral could be financed, maybe with different options at difference rates.
- ACE in its capacity as overseer will have to find ways of informing the financier should market values change substantially and the collateral as security is at risk.

Does ACE need all banks to act in unison? Dr. Gideon Onumah in his presentation at the COMESA conference said (Onumah, G. 2009): he is of the opinion that not all banks have to be incorporated in the beginning. The pilot project in Tanzania

showed that it pays to focus in the beginning on a few willing banks, usually local banks which enjoy greater scope in innovating. Other banks tend to respond by free riding on the positive experiences of the early uptakes.

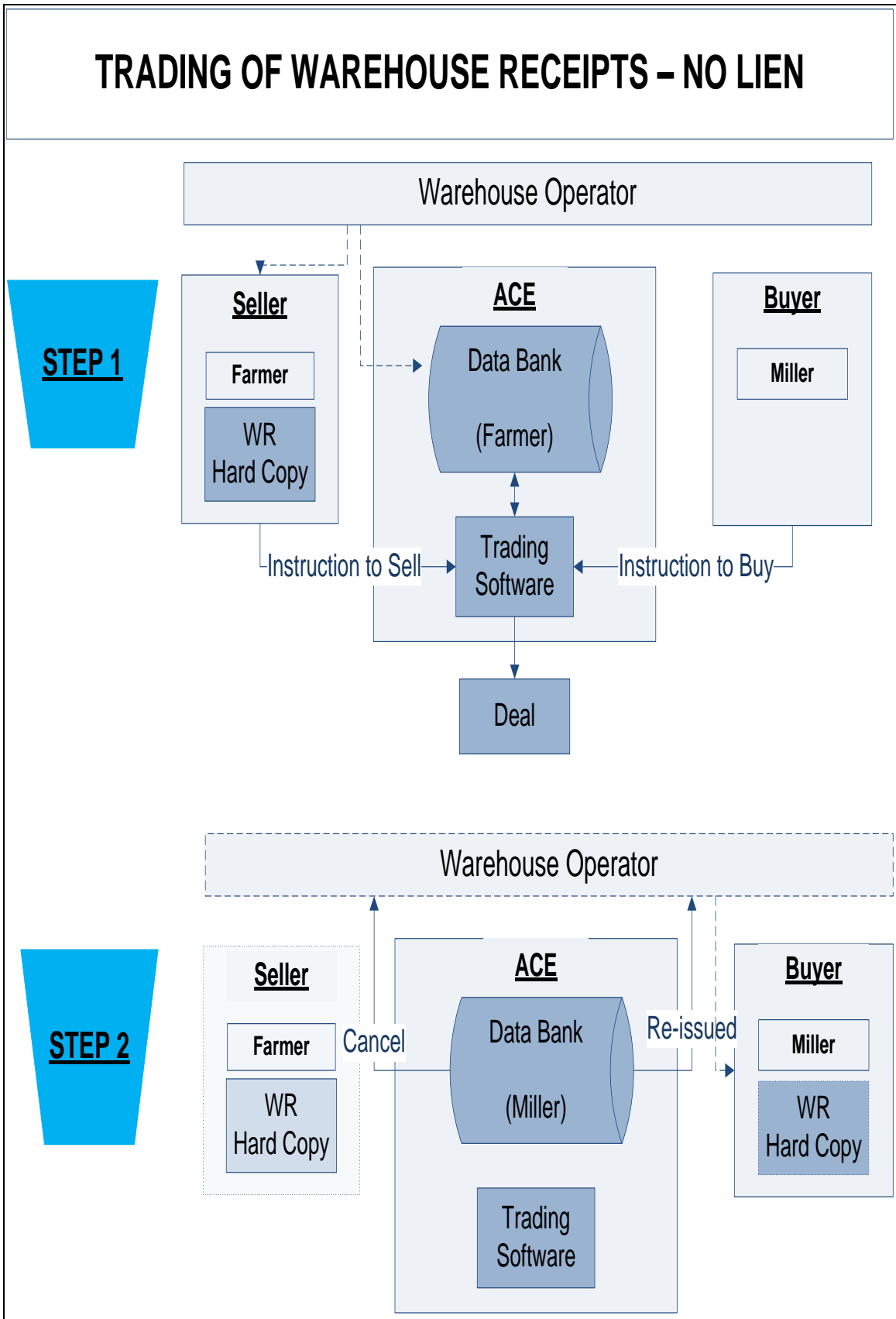


Figure 10: The trading of warehouse receipts with no lien

5.2.2.1 *The process of financing a WR*

The process will be as follows illustrated in Figure 11:

- The depositor will deliver her/his product at an ACE registered warehouse facility and obtain a WR.
- The warehouse owner will issue a WR electronically through the ACE online data bank. Although the depositor will be provided a hard copy, proof of ownership is vested in the electronic receipt kept on the ACE data bank. The hard copy will be superficial and have no legal standing.
- Should the WR owner wish to finance her/his WR, he/she may compare the offers from the various banks, but more importantly, should open an account with the financier prior to financing. The reason for this, is that should her/his application be successful, the financier is required to pay the money into an internal account from where the owner could, should she/he prefer to do so, transfer the money to another account.
- ACE, through its software system, will electronically submit the WR owner's application to the bank. The bank will log-in on the ACE online system and receive the application.
- The ACE system will show that an application in respect of a specific WR has been submitted and that approval thereof is pending.
- The bank will approve the application online. Two basic methods of review could be followed by the bank:
 - Transaction screening - each application is considered on merit subject to criteria such as the identity of the warehouse owner, the commodity, the quantity, etc. (see risks identified, below).
 - The bank could provide ACE with a predetermined formula whereby an application is automatically approved based on the criteria supplied. For example, Bank XYZ could indicate that it will finance all maize applications of WR issued at warehouse owners in Lilongwe at 60% of current market price at prime plus 3% and those outside of Lilongwe at 50% of current market price at prima plus 4%.

- Once approved, the bank will transfer the money to the ACE settlement account, which in turn will pay the WR owner.
- Simultaneously, but in fact just after ACE has received the money from the bank and before it is paid out to the WR owner, ACE will register a lien on the electronic certificate with the terms and conditions.

5.2.2.2 *The process of redeeming a financed certificate by the WR owner*

- The financed WR could be redeemed for two reasons: The WR owner wishes to repay the lien because he/she wishes to withdraw the product themselves for utilisation thereof. More likely however, is that the WR owner has sold the WR through ACE and the new owner now has to make good on payment.
- The new owner will make payment to the ACE settlement account electronically whilst requesting ACE to calculate the outstanding lien on the WR. ACE will repay the bank the capital plus interest thereon, and will make payment to the warehouse owner of the outstanding storage fees. The balance will be paid over to the original WR owner.
- After all obligations have been met, ACE will clear the WR, transfer ownership to the new owner, and if requested, send instructions to the warehouse owner for out loading by the new owner.

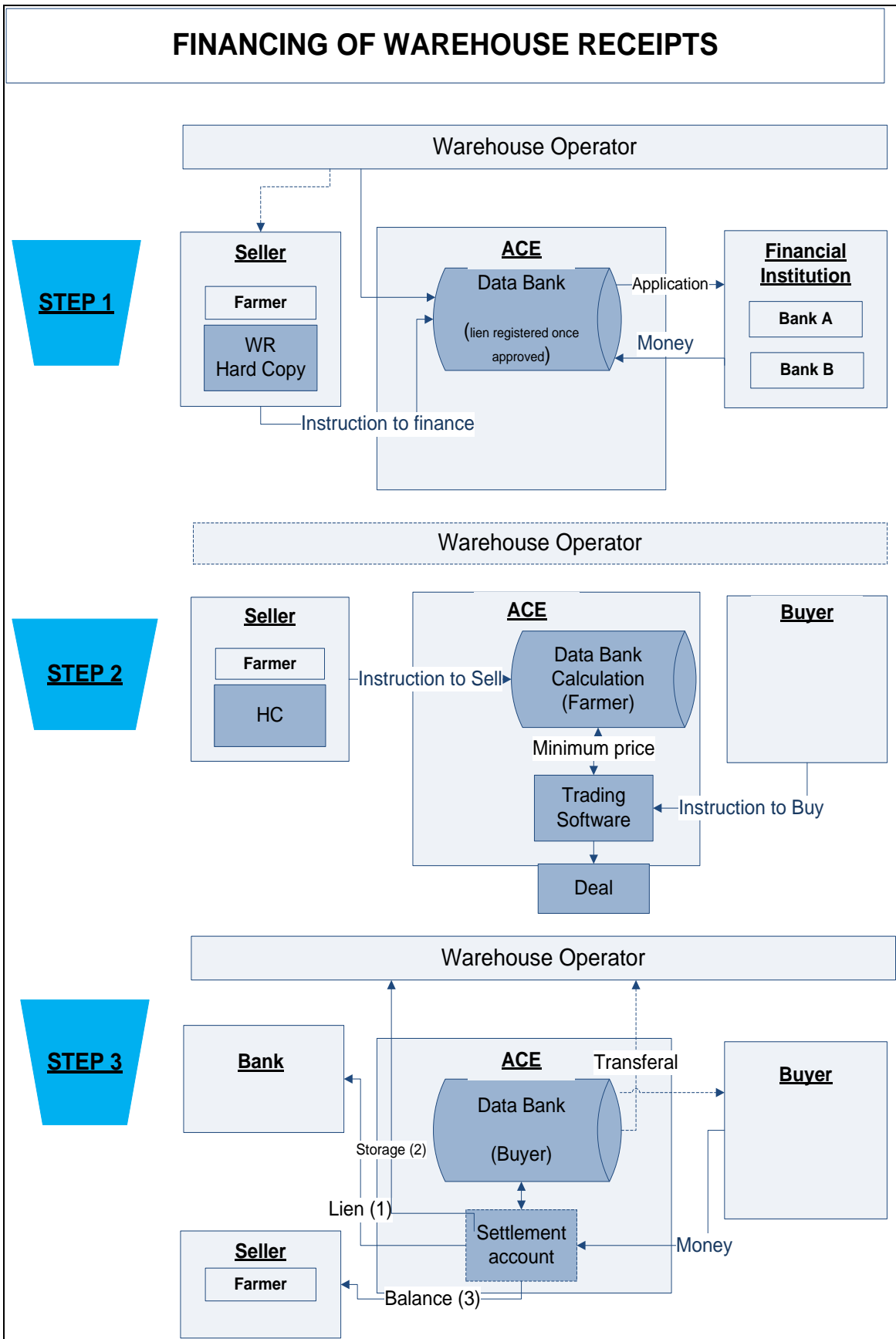


Figure 11: Financing of warehouse receipts by financial institutions

5.3 INSURANCE MECHANISMS

5.3.1 General

As stated under 2.6 Broad based requirements for a successful wrsin respect of literature review, with the establishment of CMAs in the 1980's, international subsidiaries operating in Africa had access to substantial insurance and professional indemnity cover from international insurance companies. Examples were Soci t  Generale de Surveillance (SGS), Socotec/ITS, Bureau Veritas and Audit Control and Expertise (ACE) (Onumah, 2010).

The importance of the availability of adequate insurance cover and performance bonds for licensed/certified warehouse operators is emphasised by Onumah. It is especially depositors and lenders that are concerned that their interests will be sufficiently protected in the event of loss. While the insurance industry is often able to insure warehouses and stocks against relevant losses, there are difficulties when it comes to obtaining the right performance bonds. Insurance companies tend to issue conditional bonds, which may not be appropriate as it creates uncertainty regarding compensation in the event of non-performance by the warehouse operator. Banks are sometimes able to provide unconditional bonds which are preferred, but the costs tend to be quite high. This is a challenge that needs to be addressed in order not to exclude potential warehouse operators.

Electronic warehouse receipts are growing in popularity in all African countries. They are preferred by banks because of the greater security they offer against forgery.

5.3.2 ACE

ACE is currently in consultation with the stakeholder in the insurance industry. On May 2, 2012 consultation took place between the ACE, Mr Master Mbale Chartered Insurer from NICO General Insurance Co. Ltd. And Mphatso Chadzaia, Regional Manager, AlexanderForbes, Malawi, USAID SA TradeHub and consultants (Moller, K.S. 2012). The initial discussions confirmed informally that

most warehouse owners have adequate comprehensive insurance. This means in the event of so called “normal” perils, such as fire, water damage, etc. the warehouse owner are likely to be covered and could claim.

With regard to WR owner, if the warehouse owner is not able to guarantee immediate performance back by her/his adequate balance sheet, the WR owner will have to wait for the outcome of the insurance claim.

5.4 SUMMARY

For a WRS to be a success the financial institutions and insurance underwriters should be included from the start. This is one of the main objectives of the study to analyse the current position of financial institutions with specific reference to the (proposed) financing of WRs as well as that of the insurance companies, which are crucial in guaranteeing the WRs.

The first section focused on analysing a financial institution in relation to the rules and requirements for the WRS.

The second section focused on analysing the insurance underwriters. The importance of the availability of adequate insurance cover and performance bonds for licensed/certified warehouse operators is emphasised.

This chapter made recommendations and commented on additional requirements specifically as it relates to the financial and insurance institutions and role within a WRS. The next chapter will focus only on additional requirements for a WRS specifically for ACE and not just general rules and requirements.

CHAPTER 6

ACE – ADDITIONAL REQUIREMENTS FOR A SUCCESSFUL EXCHANGE

6.1 INTRODUCTION

The study has completed the rules and requirements for a WRS seen in Chapter 4 it has indicated what the importance is for financial and insurance institutions within a WRS and what the implications are. In this chapter the main focus is to determine additional requirements specifically for ACE within the Malawian context as stipulated in Chapter 2 each country needs to have its own specified rules and regulations. This chapter will focus on these specified rules for ACE.

It starts out by describing the dual nature of ACE and explaining why ACE needs to have this dual structure of ACE Trust and ACE Ltd. It also looks at the government interventions and how government intervention in emergencies responses should be kept in balance with predictability and transparency for the private sector to still invest in the commodity exchange. This chapter will also consider the fact that the Reserve bank of Malawi is in the process of deploying an export development fund that will use the WRS to promote exports.

ACE is also in dire need of IT infrastructure and it is in the developing stages to interlink the numerous components of the ACE trading system. The IT system will form the core of the WRS and the trading of WRs. The industry interaction of ACE is becoming more and more vital as seen in this chapter with stakeholders covering a wide spectrum. The information system of ACE is another important section to ensure a successful commodity exchange and WRS to determine who will distribute the specific information on prices and how this distribution will occur. This chapter is concluded by looking at the arbitration procedures of ACE.

6.2 OWNERSHIP AND STRUCTURE

The ACE Trust was formally incorporated on 12 November 2007 under the Trustees Incorporation Act. It has a chairman and four additional trustees and is considered to own 50% of the Exchange. Income is limited to donor aid grants. Grants are mostly linked to specific projects. Current and past projects are as follows (ACE, 2012):

Current:

- EU and Common Fund for Commodities (CFC), Pilot Warehouse Receipt System – US\$635,000. Duration 30 months. Commencing July 10.
- AGRA – Market Linkages and Capacity Building for better Dialogue \$540,000. Duration 24 months. Commencing Feb 10.

Past projects :

- USAID Market Linkages Initiative - 2011: \$47,200, Trade facilitation and linkages & ESOKO MIS.
- USAID COMPETE - 2010: \$60,000, Capacity support and IT development ..
- DFID: 2008: \$35,000, Bridging Finance.
- Michigan University – 2007: \$40,000, Technical Assistance.
- Hewlett Foundation – 2007: \$80,000, Core operation support.
- Common Fund for Commodities – 2006: \$120,000, Operational support and regional sensitisation.
- USAID / NASFAM – 2005: \$400,000.
- ACE Inception and Start up Alliance for a Green Revolution in Africa (AGRA) US\$ 350,000.
- USAID Compete US\$95,000.
- EU / Common Fund for Commodities US\$ 600,000.
- USAID Market Linkages Initiative (MLI) US\$40,000.

ACE Ltd. was incorporated on 15 July 2006 under the Companies Act. It has a chairman and two directors and is considered to own 50% of the Exchange.

The dual structure above was developed to ensure that the ACE trading platform is protected from any possible predatory move by trade entities to take over the exchanges function for their own purposes and disenfranchise small farmers and farmers associations that have supported its function since inception.

Other similar models could be explored which may better suit Malawian law, but the protective intention of retaining the trust (or a similar secure vehicle) within any structure should remain.

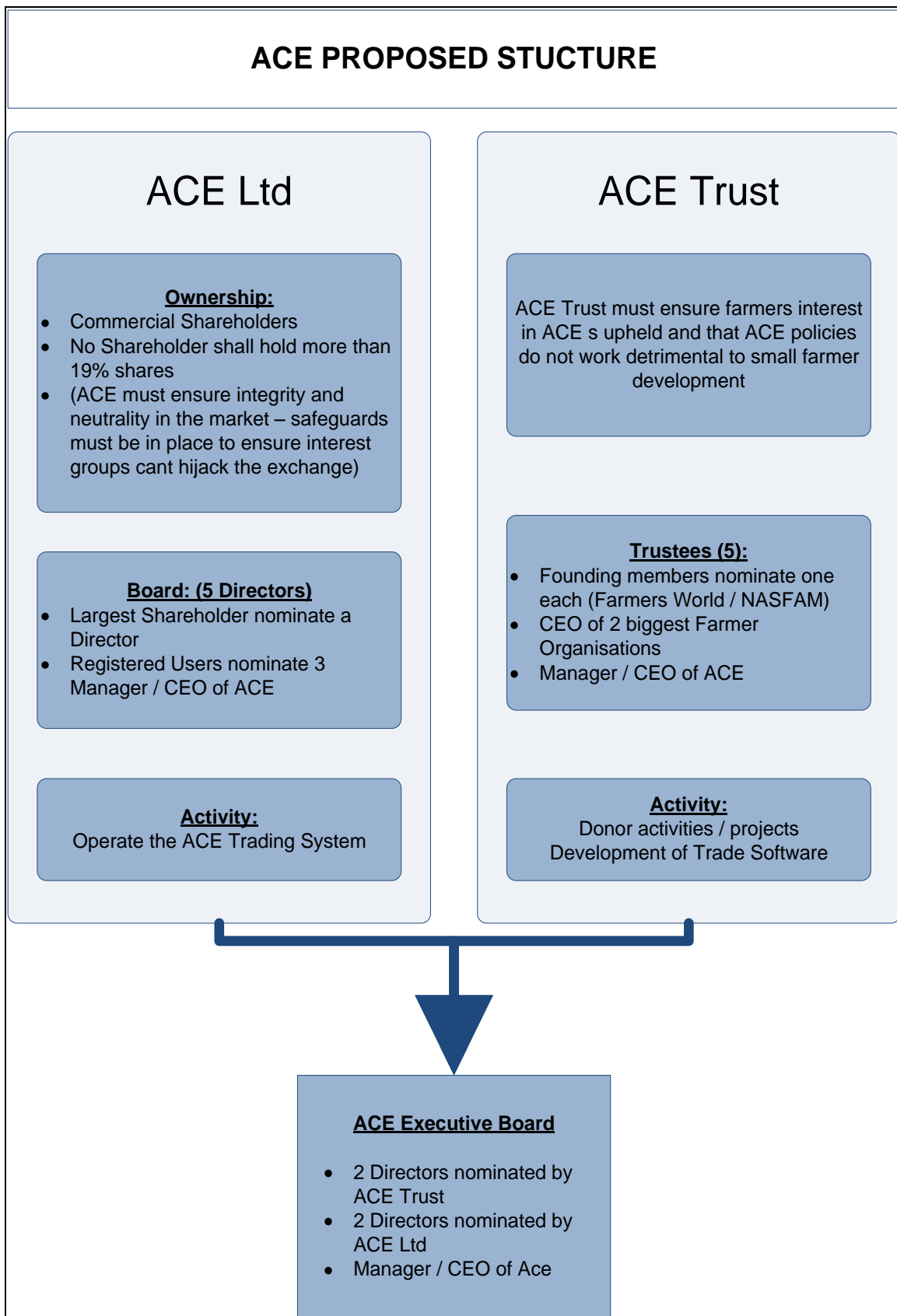


Figure 12: The proposed structure of the ACE comparing ACE Ltd and ACE Trust

6.3 GOVERNMENT INTERVENTION

Minot (2010) Staple food prices and policy options for Malawi, concluded that: “One the main challenges facing policymakers in Malawi is to design a framework for public sector intervention in food markets which is flexible enough to allow it to respond to emergencies, yet limited, transparent, and predictable enough to provide the private sector with a business environment that will favour trade, storage, and marketing investment.”

6.4 RESERVE BANK OF MALAWI (RBM)

Although not a requirement for a successful exchange, the impact of the policies of RBM could be hugely positive but also disastrous. The WRS has caught the RBMs attention due to good synergies with a policy that they are in the process of conceptualising. The RBM will deploy an Export Development Fund (EDF), capitalised with 80 billion Malawi Kwacha, aimed at increasing Malawi's export and foreign currency earnings (ACE, 2011). The RBM has shown interest in the WRS because the structure can be used to provide an incentive to and promote export, on the large scale needed to significantly increase foreign currency earnings.

Three significant incentives will be provided to exporters:

- Competitive financing available to commodities on WR for export.
- Any commodity financed under the EDF must be exported. If the Government of Malawi implements an export ban or other restrictive policies on a commodity, it will not affect the export of a WR financed under the EDF.
- The foreign currency generated by export of a WR financed under the DDF, will 100% benefit the exporter. The 40/60 rule will not apply.

On the face of it, it sounds like a great opportunity. However, the fact that policy makers believe that a food crisis calls for an export ban, suggests that the Government of Malawi will allow WRs to be exported, and this makes the policy

flawed. This means that one could potentially have large numbers of WRs that were targeted for export, but now have to be offered on the local market. Also, policies change constantly. The kwacha has been devalued since (Reuters, 2012), the official rate of 165 Mkw to the US\$ has been scrapped and banks are selling at Mkw250, just short of the black market rate of 275. Governor Chuka said that “*it is now a free floating foreign exchange regime*” (ACE, 2011).

6.5 IT INFRASTRUCTURE

ACE is developing the trading software locally with the assistance of an international IT expert. The local developer is doing much of the coding with technical support from the expert. Advantage functions and version management is done by the expert. The local developer works full time and the expert part time.

The ACE trade system has three components:

- the normal bid/offer matching functionality,
- the Bid Volume Only (BVO) auction system, and
- the warehouse receipt system.

The system is integrated and works on the same database. The warehouse receipt registry is also integrated into the system and keeps control of WR ownership and outstanding storage costs and financing.

Basic functions such as issuing a WR, financing a WR and trading a WR have been completed and are functioning. More advanced functions, such as splitting a WR or merging two receipts, have to be done manually. The automatic calculation of finance and storage cost and the listing of the WR audit trail, are also still conducted manually.

From a technical point of view, the system is written in “*unfuddle*”, where each functionality/issue gets a ticket and that is where the system is described.

It does appear as though the biggest concern presently experienced in the conduct of the ACE operations, relates to the software. It should be emphasised, not because there may be inherent problems, but simply because there is so little known about the software. Presumably, the IT programmers are managing their responsibility with the necessary professional conduct, but it is not transparent from an industry point of view or even internally from an ACE operations point of view.

The virtual issue of WRs, links to banks that would receive and approve applications for financing on-line, all interdependent on the software, call for a transparent management solution. To illustrate this, roughly 80% of all people employed by the JSE are directly or indirectly linked to the IT side of the business (JSE, 2012). It is extremely important that the IT component is not left behind as the ACE business model grows.

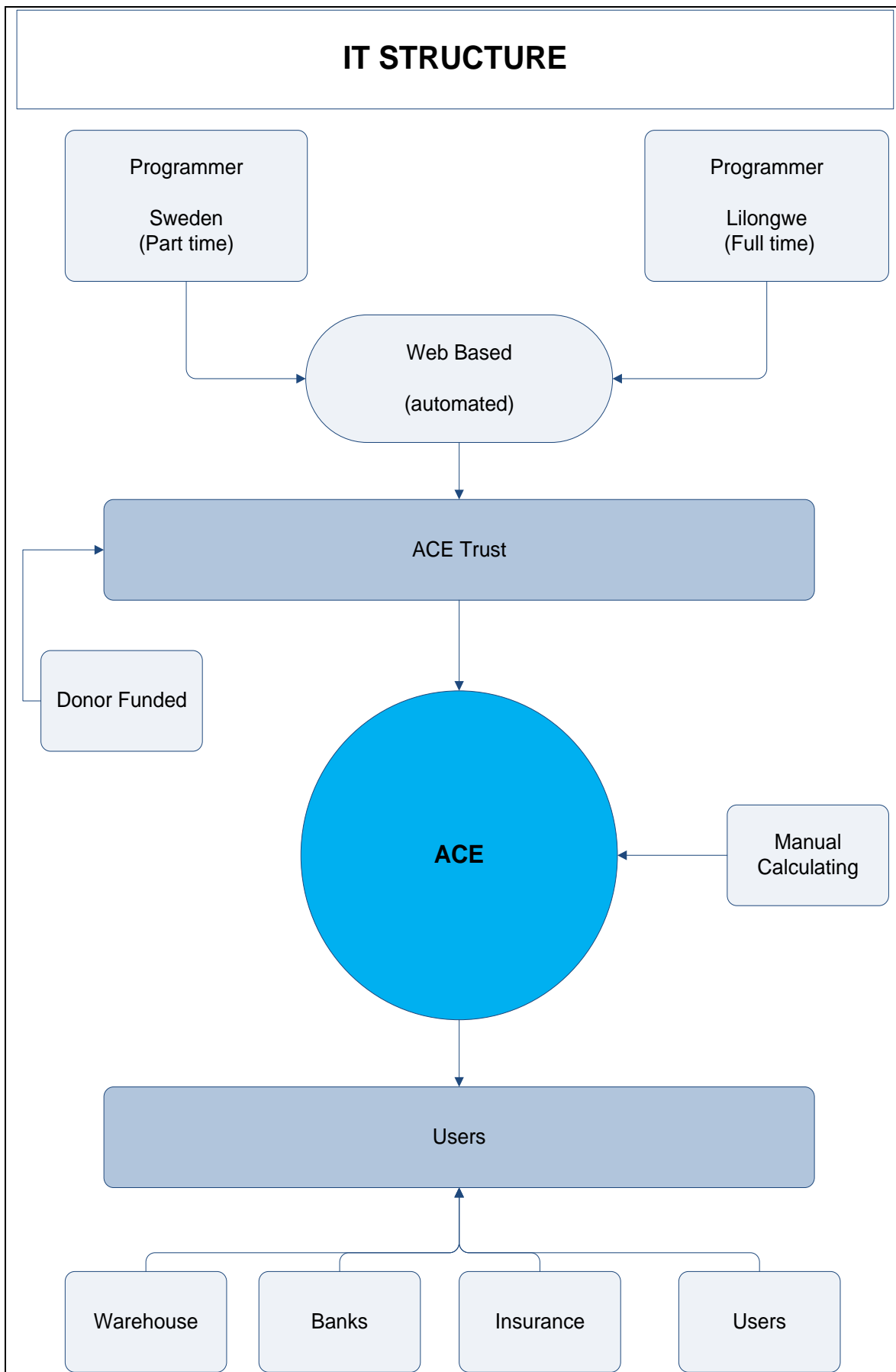


Figure 13: The IT stricture of the ACE system

6.6 MARKETING

As highlighted under point 6, the interaction with the various stakeholders covering a wide spectrum from small farmers to financiers to government officials and multi-national exporter companies, is very important. Feedback indicates that ACE has done excellent work in this regard. Unfortunately, it is an on-going process as the exchange grows and new services are offered.

The number below gives an indication of ACE's exposure (Moller, K.S. 2012):

- ACE Ltd has 20 member seats of which 7 are sold.
- It has 37 registered users of which 17 are from outside of Malawi.
- 1256 individual members of farmer groups are registered for the sms service.
- 105 farmer groups and/or associations have been visited.
- Regular interaction with prominent traders and processors takes place on an individual basis.
- Stakeholders can be divided into three broad categories (below) with interaction taking place on a regular basis.
 - Government & parastatals
 - Associations
 - NGO's inclusive of donors

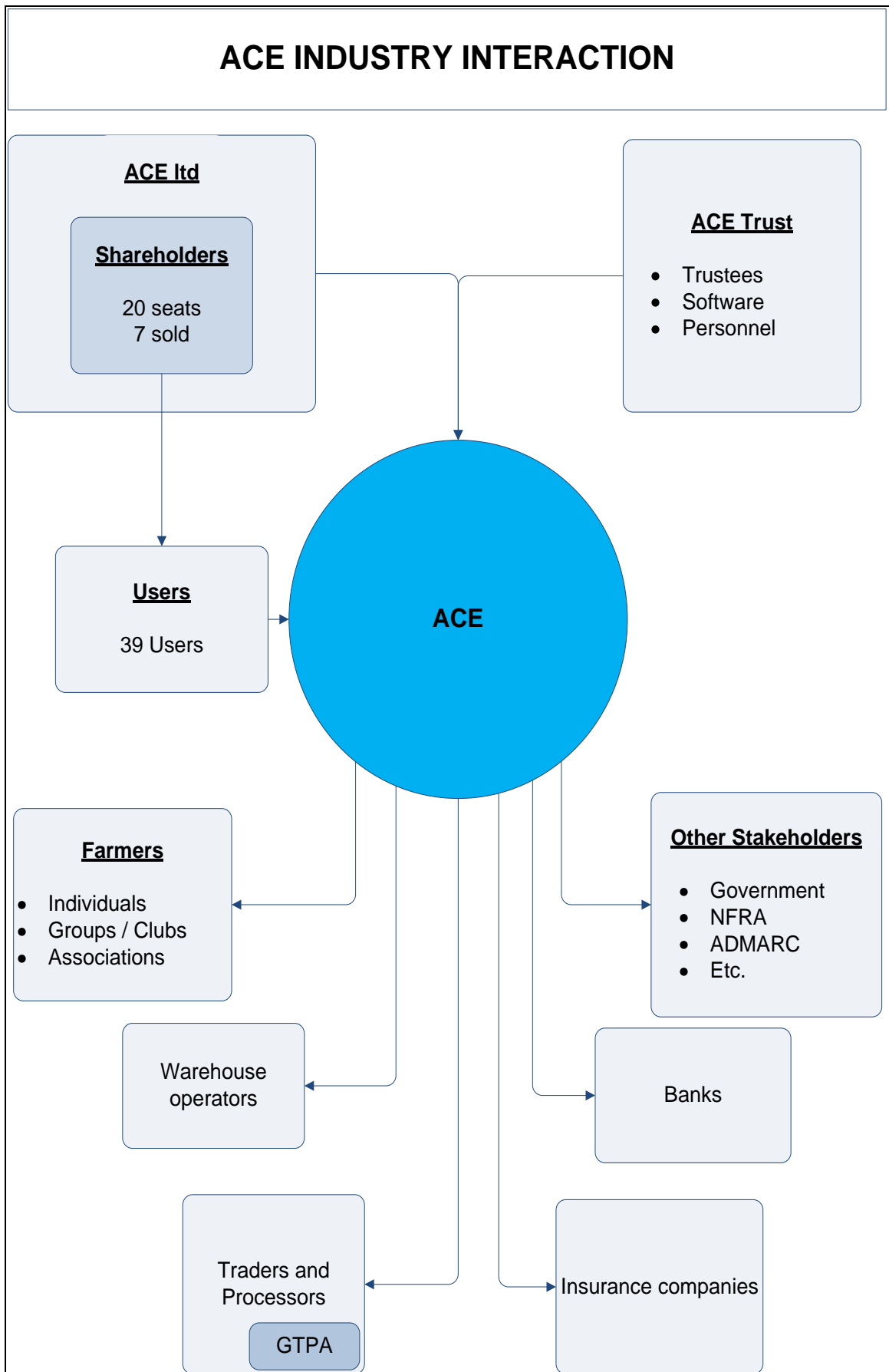


Figure 14: The industry interaction of ACE

6.7 MARKET INFORMATION

Esoko is a marketing information system developed in Ghana and used by ACE to provide market opportunities and information to mobile partners. By May 2011 (AMIS InterAg), 1256 sms's of various offers and bids on the exchange had been sent via Esoko market information system generating 60 smallholder farmer contracts in the first months.

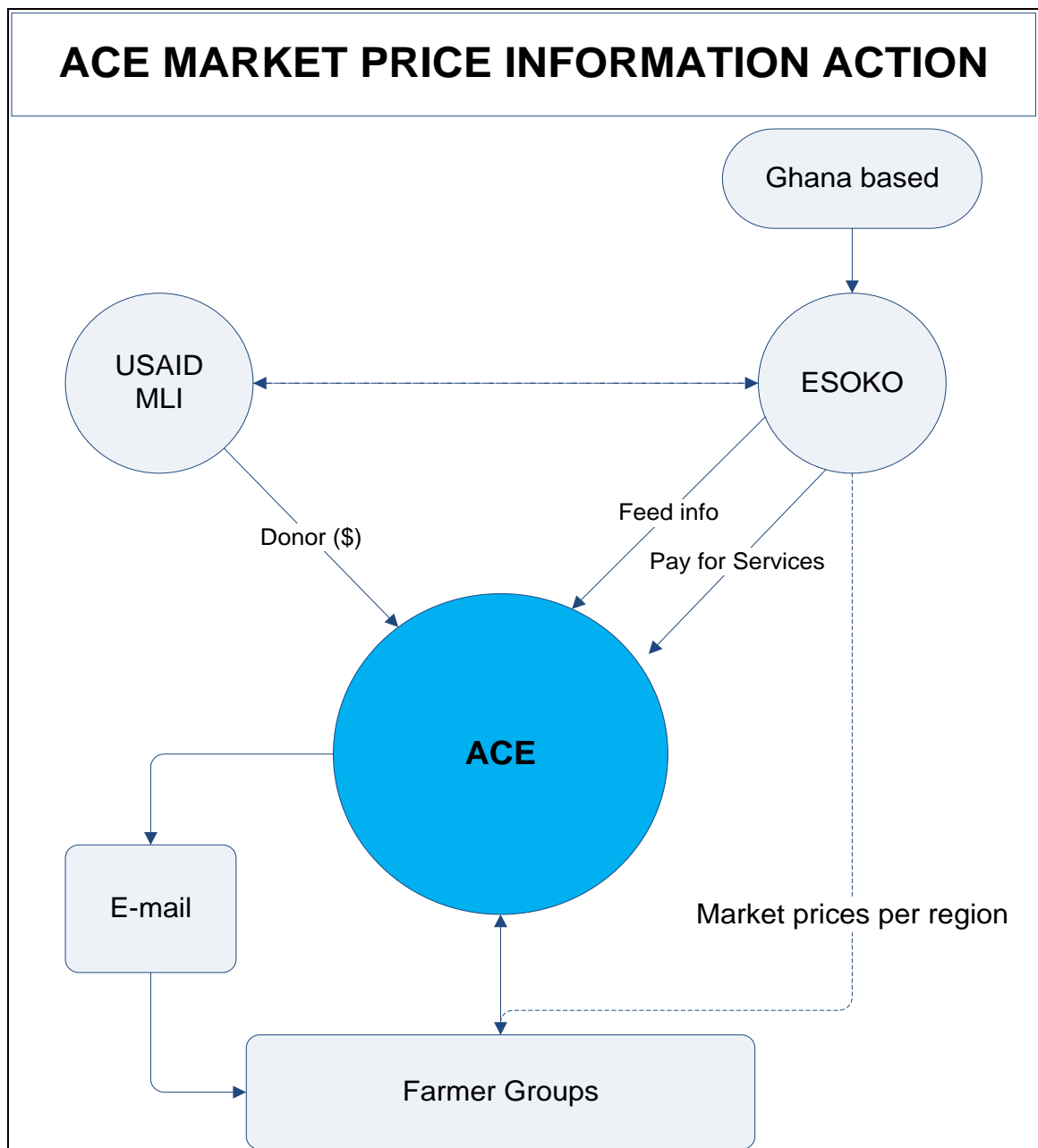


Figure 15: The market price information action of ACE

6.8 ACE ARBITRATION PROCEDURES

ACE has adopted a set of arbitration rules at inception together with the WRS rules and regulation. Since the latter has been rewritten, the arbitration rules are likely to be out of sync and needs to be revisited as a matter of urgency.

6.9 SUMMARY

The importance and intricacies of a WRS has been extensively dealt with in Chapters 5 and 6.. However, as commented on in Chapter 2, and specifically as it relates to ACE, a WRS is a subsection of the broader commodity exchange. Therefore when it comes to the requirements of a successful exchange, there are various important issues of importance. This chapter only dealt with a selective few as it relates to the WRS. For example, the IT infrastructure is important for the exchange but also vitally important for the success of the WRS. Therefore the success of the WRS is interlinked to some of the key criteria that will also determine the success of ACE.

CHAPTER 7

CONCLUSION AND RECOMMENDATIONS

7.1 CONCLUSION

Research has indicated that ACE has ownership of a well-functioning (online) trading system. There are however, some limitations: The trading system was developed and is maintained abroad. Little is known of the developers and/or the company. From what could be ascertained, it is a small business venture with one or a limited number of developers. A local developer is also employed. The ideal would be that a legal contract exists, regulating the relationship between ACE and (the) developer(s) and/or the developing company. The system should be fully documented, including the code. Clarity should exist regarding software back-up's, future software development and maintenance in the event that the current developer(s) could not fulfil their obligations. Given the strategic importance of a trading system, many exchanges prefer to develop and/or maintain their system on an in-house basis, subject, of course to expertise and costs. Although these aspects are important, it should be stressed that ACE at present owns and has access to a modern online trading software system that subscribes to the operation objectives of the exchange.

The financial institutions have demonstrated their willingness to finance WRs. Prerequisites tabled by them have largely been addressed. They indicated that with the intimate knowledge gained in respect of the functionality of ACE they will submit a proposal to their respective credit committees requesting the approval for financing of WRs as a formal bank product. ACE, through this study, has demonstrated to them the operational procedures and that the risks associated have been addressed when and where pertinent.

Performance guarantees are one aspect on which the reputation of ACE is built. There is always the chance that a warehouse operator is struck by a natural disaster such as fire. Insurance companies have confirmed that the prominent

warehouse owners are all insured to this effect. Likewise, this enabled ACE to include insurance cover as a pre-requisite in the rules of the exchange. Ultimately, it will be ideal if an insurance product could be linked to the WR and not the warehouse owner. Further discussions between ACE and insurers are exploiting this possibility.

The Malawi grain and oilseed industry is still lacking one generic grading and certification system acceptable by government institutions, agribusinesses, the WFP, ACE and others. Despite this, stakeholders have in the interim period agreed that the standards required by ACE for the issuing WRs are acceptable and will be universally enforced even though it might be parallel to other sets of grading regulations.

It is difficult to rank one of the pillars of a WRS as more important than the other, however, a series of registered warehouses will probably be high on the list. ACE is in the fortunate position of having already and successfully negotiated the participation of a number of privately owned warehouses through its owners. This should not necessarily be taken for granted. ACE has to set the rules for the exchange in the best interest of all stakeholders which is not necessarily, or at all times, in the interest of the warehouse owners. Nonetheless, the agreement now enables ACE to issue certificates and for the WR-owner to redeem the certificate.

The combined result of the above criteria and others as outlined throughout this study, are a well-designed and custom made Warehouse Receipt System for ACE. ACE will struggle to function and grow without it. ACE could overcome many other obstacles such as inappropriate government interferences, export restrictions, inadequate marketing, insufficient price dissemination, etc. However, ACE needs to be operationally competent and for them this is tied to a successful WRS.

If ACE could succeed, it will serve as a case study for other countries and exchanges in the region to learn from.

7.2 RECOMMENDATIONS

7.2.1 National standardised grading regulations

The different grading regulations used by various parties are problematic. This is also a greater problem in a developing country such as Malawi, than in a developed country where the level of education of market participants is typically higher and institutional players often have high standards that are self-imposed. As referred to in this report, the norm in most countries is that the Department of Agriculture takes a leading role, often publishing an official notice in the government gazette setting up an industry meeting where industry input is requested and consultation takes place. Draft regulations are compiled and a second meeting is arranged in order to finalise the regulations. Once finalised, regulations should be used by stakeholders and enforced by government or their representative body. This does not mean there are not exceptions, but the procedure to be followed, should be set out in the regulations.

It is recommended that a task group be formed that at the outset to compile a report on the status quo. This report should include the following:

- The different grading regulations used by the different stakeholders.
- How grading regulations differ in different areas or in the same area between different parties.
- Whether grading regulations are consistently applied.
- What level of skill exist among the graders who apply these regulations.
- An assessment of the equipment at their disposal.
- How Malawi standards differ from international best practices, as well as standards of neighbouring countries.

Subsequently, the task group should embark on a mission to implement national standardised regulations. Key to the success is the buy-in of the industry. This should not be seen as a short term desk-top kind of study, but rather a project that requires specialist input on the one hand, but also, on the other hand, operational experience and input. The project should also refer to the challenges of

implementation and enforcement as well as advertising and marketing the benefits to all stakeholders, and in particular the small farmers.

7.2.2 Training – qualified grading personnel

Running a successful WRS is very much dependent on an efficient, reliable and trustworthy intake system. This, in turn, is dependent on sufficient numbers of qualified graders. Best practices in many countries, provide that the government, through an authorised body, sets minimum standards, establishes training schools – both theoretical and practical, and implements standardised and recognised examinations. Typically, this would be underpinned by a system of state and private laboratories. Malawi and ACE seem to be in desperate need for these actions to come off the ground - some to be established and others to be reinstated. The first grading dispute could have the potential to seriously disrupt the workings of ACE, if it were to be found that WRs were issued without the presence or supervision of one or more qualified and/or recognised grader(s).

The following is recommended:

- A fairly short and crisp study to determine the current pool of so-called graders and of the industry needs.
- That a program be set up whereby qualified lecturers are contracted, possibly from abroad, to train groups of graders in various locations in Malawi. The program should have the ability to run indefinitely, although the number of locations targeted, students enrolled and courses per year will decline over time.
- That action be considered to establish two state laboratories, possibly in Lilongwe and Blantyre, run on contract by private companies specialising in grain and oilseed grading and quality issues. These laboratories should also have the support and trust of the private sector with the objective that disputes could be referred to them. They should preferably also have sufficient personnel to be sent to warehouses on short notice where a dispute has been declared.
- A limited number of top students could also be taken on a study tour to, for example South Africa, which has well developed grading system

coupled with the necessary laboratories (state and private) to support the industry.

Initial and elementary training courses for graders are fairly inexpensive and suitable for group training, thereby targeting reasonably large numbers of students in a short period of time. Such skills are also applicable all over primary agriculture and agribusiness (the processing industry), from farmers to extension officers to storage operators to millers.

7.2.3 ACE and its relationship with the GoM, the NFRA and the RBM

During discussion, interviews and research undertaken in the compilation of this report, the writer was hoping to obtain confirmation of a strong, positive relationship between ACE and these three key stakeholders, which he did not. It should be emphasised that, fortunately, there was no evidence of a negative relationship. On at least one occasion, as referred to in this report, the Minister of Agriculture publicly supported ACE. What the writer would like to see however, is constant interaction between ACE and these stakeholders. When it comes to government initiatives, such as food security and export initiatives, ACE could, through a transparent and reputable trading system, be of great support to the government in making its initiatives a reality.

The writer recommends that ACE places a higher priority on these relationships. ACE should, in a pro-active manner, submit written documentation (maybe in the form of a strategy proposal) to government in general, to the NFRA in respect of how the WRS could support its food security initiatives, and to the RBM in respect of how ACE could contribute towards its EDF initiative.

7.2.4 Software

ACE is wholly dependent on its software system. Having elected to conduct an online trading system (which choice this report supports), inclusive of the online issuing of WRs, it should ensure at least the following:

- That this system is reliable.
- That it has been fully documented.
- That development and maintenance, which is an on-going process, is conducted by a reliable individual/company with backup.
- That back-up exists for the code and any other relevant programming for which ACE has paid and in respect of which it requires access.
- That all legal rights to the software belong to ACE, and have been documented as such.

It is recommended that an assessment be undertaken, where after a plan of action be agreed upon.

7.2.5 Database and communications

It appears as though ACE's SMS price distribution through the ESOKO system, is one of its strengths. This is underpinned by ACE's database of names and contact details. It is well known that in many western countries, distribution lists are considered an asset and companies buy and/or sell these lists, which enable them to communicate directly and more effectively with clients.

It is recommended that ACE re-evaluates the strategic contribution of its database with the objective of rapidly expanding the database as a medium for effective price communication.

7.2.6 Arbitration rules

The proposed rules and regulations for ACE, referred to in paragraph 7.4 above, require that a dispute be referred to arbitration. ACE has a set of Arbitration rules, probably adopted together with their WR rules (which have now been rewritten), and probably originating from ZIMACE, as did the WR rules. Since this aspect fell outside the scope of this project, it did not receive the attention it deserves. This aspect, however, also needs to be revised. ACE is at risk, should a dispute occur and the WR rules and the arbitration rules conflict with one another, that it be impossible or at least very difficult, to resolve the dispute. Bear in mind that disputes are more likely to occur in the development phases of an exchange, than later on when the exchange is well established.

It is recommended that a person be tasked to re-write the Arbitration rules. Such person should be a qualified arbitrator or experienced in participating in arbitrations, and have a measure of expertise in relevant legislation pertaining to, in particular, arbitration in South Africa and/or Ethiopia, which are widely considered to be the role models commodity exchanges in Africa.

7.2.7 Legal opinion

It is recommended that a legal opinion be obtained in respect of the WR rules and the Arbitration rules (once the latter have been re-written, or in order that it may be done). The purpose of such an opinion would be, *inter alia*, to assess the feasibility of the rules together with the Arbitration rules and importantly, existing legislation; to determine to whom the rules pertain and to what extent they are enforceable; to gauge the value of a WR. Such person should, other than obvious legal qualifications, also have knowledge of and/or access to Malawian legislation. In the interest of cost and time, the same person tasked with compiling the Arbitration rules, could be instructed to deal with this aspect as well.

7.2.8 Operational manuals

The issue of a WR sounds like an easy and simple task. However, this should not be taken for granted. The concept of marketing maize through ACE has been conveyed to Malawian small farmers through training and educational seminars. The same could be said of the senior management at agribusiness companies.

However, behind the scenes at operational level, there will be a large component of staff that will work with grading, intake and issuing WRs, followed by the subsequent withdrawal of product, even if under supervision. Operational staff would preferably need a step-by-step manual on the procedures of issuing a WR. This, of course, should be integrated with training courses. Large agribusiness organisations, for example NFRA which directly or indirectly manages a large number of warehouses, will be in need of such an operational manual. It is debatable where the ultimate responsibility lies for compiling such a manual, whether with ACE or the private sector. Whichever the decision, ACE should remain involved as such a manual is a prerequisite for successfully implementing WRs at ground level.

It is recommended that a person be tasked to write an operational manual for the issue of WRs.

7.2.9 Educating and selling ACE abroad

This report has referred to the large number of users registered on ACE, but who are inactive. With markets in Eastern and Southern Africa opening up, and Malawian maize and other products flowing back and forth across its borders, there is a need for ACE and its stakeholders to also 'sell' ACE to its regional partners.

The concept of a WRS is also new to many of the stakeholders of ACE. It will be most beneficial to ACE, in order to gain some local support and understanding, if it were to take a small delegation to visit the JSE, South Africa, or ECX, Ethiopia, a local warehouse operator and financial institutions.

Such a visit (and presentation at the JSE) will have a dual benefit, promoting ACE to a number of traders as well as to agribusiness organisations that may have an interest in becoming involved. For example, Senwes Ltd, South Africa is already involved and could set an example for others. Also, to Malawian stakeholders, it could re-confirm the long term benefits of a price discovery through a transparent and reputable exchange.

It is recommended that a study and promotional tour be undertaken by ACE and some of its key stakeholders, including one or more government representatives.

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ANNEXURE 1:

List of Potential Storage space

ACE Members Storage Space for WRS

Facility	Capacity	Commodities	Open to third party storage
[name/location of storage facility]	[MT]	[Commodities that can be stored in the facility]	[capacity that could be promoted to third party against storage fees]
Agora, Blantyre	6000	Maize, Soya, Pigeon Peas, Ground Nuts	N/A
Rice Milling, Blantyre	2000	Maize, Soya, Ground Nuts, Pigeon Peas, Beans, Rice Paddy, Milled Rice	N/A
NASFAM, Lilongwe	2000	Maize, Ground Nuts	1000
NASFAM, Mchinji	2000	Maize, Ground Nuts	1000
NASFAM, Balaka	500	Maize, Soya, Groundnuts	500
NASFAM, Natjenje	500	Maize, Soya, Groundnuts	500
Kafulu Cooperative	500	Maize, Soya, Groundnuts	500
PISU, Blantyre	6000	Maize, Soya, Pigeon Peas, Ground Nuts, Sun Flower	N/A
PISU, Lilongwe	6000	Maize, Soya, Pigeon Peas, Ground Nuts, Sun Flower	N/A
Senwes, Kanengo	7000	Maize. Soya	N/A
Chitsosa Trading	4000	Maize Soya, Ground Nuts	N/A

Dalitsa Gen Suppliers	1500	Maize Soya, Ground Nuts	N/A
KASFA	1200	Groundnuts	N/A
Mulli Brothers	8000	Maize, Soya, Pigeon Peas, Ground Nuts, Sun Flower	N/A
UZ Investment	4000	Maize Soya, Ground Nuts	N/A
Mwandama	2000	Maize Soya, Ground Nuts	2000
TOTAL	53200 MT		

Source: ACE, 2012

NFRA has 240.000 MT. ACE and NFRA are currently investigating registration of these facilities.

ANNEXURE 2:

9.0 ACE Warehouse Receipt Document



Date of Print: 11.08.2011
Warehouse Receipt Number: WRS/2011/03

<p>1) Depositor Details Entity: [REDACTED] Contact: [REDACTED] Physical Address: Lilongwe Postal Address: [REDACTED] Tel: [REDACTED] Fax: Email: [REDACTED]</p>	<p>2) Warehouse details Warehouse Name: Farmers World Kanengo Svos Contact: Amin Edhi – 0999880172 Warehouse Owner: Farmers World Warehouse Number: LLW/FWQ/3 Location: Lilongwe Kanengo Fax: Email: farmersworld@farmersworld.net</p>																																	
<p>Passport sized photo here: [REDACTED]</p> <p>Receipt owners signature here</p>	<p>3) Commodity Details a) Commodity Name: Maize b) Variety: White Maize c) Grade: ACE 1 d) Quantity: 23.559mt</p>																																	
<p>5) This Warehouse Receipt is subject to the terms and conditions stipulated in:</p> <ul style="list-style-type: none"> a) The ACE Warehouse Receipt Rules b) The parties acknowledge themselves to be familiar with and to be bound by the default terms and conditions if applicable as stipulated generally by the Regulations of ACE. c) ACE Arbitration Rules – Any dispute arising under this or in relation to this Warehouse Receipt shall be submitted to Arbitration in terms of regulation 38 of the regulations of ACE. 	<p>4) Outstanding Charges</p> <table border="1"> <thead> <tr> <th>Charge</th> <th>Outstanding (MWK)</th> <th>Effect Date</th> </tr> </thead> <tbody> <tr> <td>Storage</td> <td>52,823.52</td> <td>25th August 2011</td> </tr> <tr> <td>Finance</td> <td>396,791.20</td> <td>1st August 2011</td> </tr> </tbody> </table> <p>6) Audit Trail</p> <table border="1"> <thead> <tr> <th>Date</th> <th>Action</th> <th>Owner</th> <th>Volume (MT)</th> </tr> </thead> <tbody> <tr> <td>11.08.2011</td> <td>WRS/2011/03 issued</td> <td>[REDACTED]</td> <td>23.559</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Charge	Outstanding (MWK)	Effect Date	Storage	52,823.52	25 th August 2011	Finance	396,791.20	1 st August 2011	Date	Action	Owner	Volume (MT)	11.08.2011	WRS/2011/03 issued	[REDACTED]	23.559																
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Source:

ACE, 2012

ANNEXURE 3:

Warehouse inspection check list and points

For registering warehouses for the A.C.E. Warehouse Receipt system

Name of Org.....Address..... Tele.....Email.....Warehouse name..... Bag/BulkPhysical Address..... G.P.S.....Name of representative..... Mobile..... Date of inspection.....Time.....Warehouse temperature.....Pictures taken.....
--

A. Warehouse site and buildings

#	Item	Details	Points 0 - 10
1	Storage site	Must be easily accessible by road, sited above flood plains and should not be liable to flooding and the area must have good water drainage and must have sufficient space to maneuver medium sized trucks	
2	Storage capacity	Measure usable volume L.....W.....H.....= V..... Assess storage capacity.....	
3	Handling capacity	Intake per hour.....Dispatches per hour.....	
4	Sorting	Area for cleaning, sorting and drying.	

	area/platform	
5	Quality analysis space and tools	Is this provided for in the form of a room or space/table? Tools -sampling spear, grading scale, grading sieves, grain dividers etc.	

B. Storage facility

#	Item	Details	Points 0 - 10
1	Floors	Floors must be of concrete cement, must be above ground level with sufficient elevation to allow drainage and must have vapor proof barrier up to the walls.....	
2	Walls	If metal they must reflect heat and sunlight to keep the inside cool, If concrete the inside must be plastered with cement for easier cleaning.	
3	Doors	All doors must be rodent proof, secure and lockable and must be large.	
4	Roof	Must shed water quickly without leaking Roof overhang at eaves level should be sufficient to shed rain-water clear of walls.....	
5	Ventilation	Must be well ventilated for the reduction of humidity and moisture	
6	Lighting	Inside the warehouse there must be sufficient light.....	
7	Water drainage	Sufficient drainage around the building to clear water away from the warehouse.....	

		
8	Security	Security around the warehouse should be good to protect the commodity from unauthorized access and entry	
	Safety	Safety considerations with regards to personnel, chemicals, commodities, buildings, vehicles	
9	Pest proofing	Complete exclusion of pests from the warehouse is difficult but all possible points must be screened and also treated for termites	

C. Grain handling tools and equipment

#	Items	Details	Points 0 - 10
1	Weighing equipment	Indicate the type of weighing equipment and capacity available and when it was assized	
2	Stacking dunnage	Pallets or poles will suffice but should cover 100% indicate what is available.....	
3	Moisture meter	Moisture testing meters are more accurate than humidity testing meters. Indicate type and name and when last calibrated	
4	Pest control equipment	List what they have and assess.....	
5	Other warehouse tools	Cleaning tools, wheel burrows etc.....	

6	Fire prevention	List equipment and indicate if there is a fire prevention perimeter.....	
---	-----------------	--	--

D. Personnel and Management Systems

#	Item	Details	Points 0 - 10
1	Stacking arrangements	Indicate if there is a stacking plan and if commodities are stacked according to grades	
2	I.C.T	Indicate if there is a computer, internet access and subscription to MIS like Esoko	
3	Hygiene and inspection	Is there a standard regular grain and warehouse inspection and hygiene program which is recorded.....	
4	Storage non food items	Is the warehouse used to store nonfood items like chemical, tobacco etc.....	
5	Management structure	Indicate the management structure and if there is sufficient personnel.....	
6	Trained staff	Is staff trained in storage, grading, stack building, administration etc.....	

Total Score:

.....
.....

Comments:

.....
.....
.....
.....
.....
.....

Inspected by.....

Sign.....

Warehouse representative

signature.....Date.....

.....

Note:

This checklist is designed to be a decision making tool, not a formulaic means to arrive at an exact answer. The qualitative analysis in the certification diagnostics is of equal importance. The point of cut off for declining registration should be guided by the level of warehousing and commodity management sophistication existing in the whole sector and when quality preservation will be compromised.

ANNEXURE 4:

PRO FORMA SUBMISSION TO BANK CREDIT COMMITTEE FOR APPROVAL OF WAREHOUSE RECEIPT FINANCING

Background

Most financial institutions have a similar process where a new product requires approval from their respective Credit Committees, before the product may be offered to potential customers. This document will attempt to assist the agricultural product manager who must submit a presentation to the Credit Committee. There is a degree of duplication pertaining to the main document “ACE Malawi – Implementation of a Warehouse Receipt Trading Mechanism : Operational Management with specific reference to Warehouse Receipt Rules & Procedures, Financing and Insurance.”

1. Overview

The development of warehouse receipt systems (WRS) emerged as an important means of improving the performance of agricultural marketing systems in Africa, following market liberalization in the 1980s. Progress in promoting WRS and related market institutions in Africa, has generally been slow or limited, but interest remains high in Eastern and Southern Africa as well as elsewhere in Africa. Liberalization initially created significant space for local subsidiaries of international inspection companies to offer warehousing and commodity collateralization services without any regulatory oversight. These companies set up tripartite collateral management agreements (CMAs), involving the bank, the borrower and the collateral manager (i.e. the inspection company acting as warehouse operator), for the primary purpose of allowing the depositors to secure credit from the bank.

Initially the companies that benefitted most from these arrangements were those international subsidiaries that had access to substantial insurance and

professional indemnity cover. However, one of the major drawbacks was the exclusion of small-scale producers, local traders and processors, as the main users are large-scale operators. The system was predominantly used for financing import and export transactions but rarely for non-tradables. In most African countries, there have been very limited benefits to the domestic agricultural trade.

Partly in response to the exclusion of smallholder farmers from accessing the CMAs, attempts were made by NGOs to establish inventory credit systems targeting farmers' groups. The primary objective was to enable producers to utilise inventory credit to delay sale of produce and therefore benefit from seasonal rise in commodity prices, especially in the staple grains markets.

2. The Agricultural Commodity Exchange for Africa (ACE) – Malawi

ACE has advocated for a Warehouse Receipt System (WRS) as an integral part of agricultural trade and financing, since its incorporation in 2006. There is a substantial need in the market for a system that will reduce the risk of contract/performance defaults in agricultural trade and also facilitate competitive financing with agricultural commodities as collateral. Malawi does not have a regulatory framework for warehouse receipts, so the system has to be built on a contractual relationship between depositors, storage operators, financial institutions and ACE.

There are distinct advantages of a warehouse receipt (WR) when it comes to commodity financing through banks:

- (a) the commodity is placed in a third party secure warehouse by the depositor
- (b) at the time of intake, it is not only weighed and if in bags also counted, but the quality is tested and graded.
- (c) A professional fumigation service is offered by the warehouse keeper - this is also important for export certification.

The financing bank can therefore be assured that the commodity that they are requested to finance, is as risk free as possible and represents excellent loan guarantee collateral.

3. The process of financing a WR

The process will be as follows:

- The depositor will deliver his product at an ACE registered warehouse facility and obtain a WR.
- The warehouse owner will issue a WR electronically through the ACE online data bank. Although the depositor will be provided a hard copy, proof of ownership is vested in the electronic receipt kept on the ACE data bank. The hard copy will be superficial and have no legal standing.
- Should the WR owner wish to finance his WR, he/she may compare the offers from the various banks, but more importantly, should open an account with the financier prior to financing. The reason for this, is that should his application be successful, the financier is required to pay the money into a internal account from where the owner could, should he prefer to do so, transfer the money to another account.
- ACE, through its software system, will electronically submit the WR owner's application to the bank. The bank will log-in on the ACE online system and receive the application.
- The ACE system will show that an application in respect of a specific WR has been submitted and that approval thereof is pending.
- The bank will approve the application online. Two basic methods of review could be followed by the bank:
 - Transaction screening - each application is considered on merit subject to criteria such as the identity of the warehouse owner, the commodity, the quantity, etc. (see risks identified, below).
 - The bank could provide ACE with a predetermined formula whereby an application is automatically approved based on the criteria supplied. For example, Bank XYZ could indicate that he will finance

all maize applications of WR issued at warehouse owners in Lilongwe at 60% of current market price at prime plus 3% and those outside of Lilongwe at 50% of current market price at prima plus 4%

- Once approved, the bank will transfer the money to the ACE settlement account, which in turn will pay the WR owner.
- Simultaneously, but in fact just after ACE has received the money from the bank and before it is paid out to the WR owner, ACE will register a lien on the electronic certificate with the terms and conditions.

4. The process of redeeming a financed certificate by the WR owner

- The financed WR could be redeemed for two reasons: The WR owner wishes to repay the lien because he/she wishes to withdraw the product themselves for utilisation thereof. More likely however, is that the WR owner has sold the WR through ACE and the new owner now has to make good on payment.
- The new owner will make payment to the ACE settlement account electronically whilst requesting ACE to calculate the outstanding lien on the WR. ACE will repay the bank the capital plus interest thereon, and will make payment to the warehouse owner of the outstanding storage fees. The balance will be paid over to the original WR owner.
- After all obligations have been met, ACE will clear the WR, transfer ownership to the new owner, and if requested, send instructions to the warehouse owner for out loading by the new owner.

5. Identifying the risks and implementing mitigation procedures.

The following risks areas have been identified and addressed:

5.1 Operations of the warehouse owner

5.1.1 Risk : The warehouse owner will accept the product from the depositor and issue the WR through the ACE data bank. The

product serves as collateral. It is imperative that the warehouse operator:

- Correctly accounts for the product at intake, including grading, quantity and any type of adjustments for moisture, waste, etc.
- The warehouse operator's storage facilities are on par with best practices and it has the necessary procedures in place to safely store the product, thereby maintaining the quality and quantity.
- Either the warehouse operator or the personnel employed or both, are adequately trained and have the required experience to safely store products.
- The integrity of the warehouse owner and his personnel is above suspicion.

5.1.2 Mitigating procedures : The warehouse operator subscribes to the ACE warehouse receipt rules. In order to qualify for an ACE warehouse registration, his premises must have been independently inspected by professional experts. ACE warehouse registration enhances his business profile and profitability. ACE warehouse registration is an incentive for the warehouse operator which he will strive to retain. Inclusive in the rules are the following requirements:

- Intake document requirements
- Regular inspections by ACE appointed inspector to verify quantity and quality of the product.

5.2 Perils (insured and uninsured) and financial worth of the warehouse operator

5.2.1 Risk : Should the warehouse operator's facilities be damaged by, for example a fire, and the product is partly or completely destroyed, the warehouse operator must replace the product at his own cost. Similarly, should the WR owner arrive to collect the product and for whatever reason, the product is not of the required quality or the quantity is not available, the warehouse operator

must replace or make available the product, and/or financially compensate the WR owner, at his own cost.

5.2.2 Mitigating procedures : The following procedures are in place:

- The ACE warehouse receipt rules and regulations require that proof of adequate comprehensive cover be provided to ACE, thereby ensuring that the warehouse operator may at least claim from the insurance company.
- In circumstances where the event is an uninsured peril, or the insurance company rejects the claim, ACE also requires the warehouse operator to have a minimum financial worth. The requirement is at least 150% of the value of the product stored. This should enable the warehouse operator to make good on the WR obligations at his own cost.

5.3 Diminishing value of the collateral

5.3.1 Risk: Other than safeguarding the collateral, the issue of protecting the value of the collateral or should the value thereof diminish, ensuring that the value of the collateral at all times exceeds the lien by a comfortable margin. Given that the product is an agricultural commodity and traded on the free market, the price varies with a high degree of volatility and if not monitored could decline below the lien value.

5.3.2 Mitigating procedures : The following steps have been taken:

- The financier has the option to choose to what degree it is prepared to finance the product, for example 60% of current market value. It could also differentiate, if a higher percentage is financed, and a higher interest rate could be charged compensating for the perceived higher risk.

- ACE will regularly update the financier on market prices and the value of the product. ACE shall, however, provide an additional service to the financier whereby the financier could give ACE instructions of the minimum margin it wishes to maintain between the value of the product and the lien, as a percentage or as an absolute amount. ACE will load this on the software system and should the price decline to this level request, the WR owner either to transfer additional margin, or request him to sell the WR to protect the lien. “Paying additional margin” will in effect mean that the WR owner will repay part of the loan.
- The financier has online access to the ACE software and could monitor the process. It will also ensure that that qualified personnel will be monitoring the situation.

5.4 The administration capabilities of ACE

5.4.1 Risk: The financier is heavily depended on ACE’s administrative capabilities and the software systems maintained by the exchange.

5.4.2 Mitigating risk: Employees of the bank have been involved with the ACE planning and procedures from the beginning, contributing towards making the system efficient and secure. This dialogue will most definitely continue.

6. Loan contracts

Initially the “loan contract” will form part of the ACE WRS Rules and Regulations. All parties subscribe to the rules and arbitration procedures. It is, however, advisable that after the initial teething problems have been resolved, the need (or not) for a separate loan agreement contract between the financier and the WR owner is investigated.

If we look at best practices elsewhere and take South Africa as example, financiers typically have separate contracts in place. However, financing of WR (or silo certificates) has over a period of fourteen year evolved into a specialized financing product. The approach followed by many South African banks, is also different based on contractual law in this country. Many financiers have what is called a “sell and buy back agreement” with the WR owner. In short, ownership is transferred to the bank and the client has first option to repurchase the WR on predetermined conditions.

7. Opportunity and reward

Malawi lately and under normal growing conditions, produces an annual maize crop well in excess of three million tons. Even if only a third of the crop potentially qualifies to be financed under some type of WRS, this constitutes a financing opportunity of around US\$300 million (based on a conservative maize price of US\$300 per ton). Although the opportunities will be relatively small in the first years, the advantage to the financier is that his exposure will be small while he is familiarizing himself with the product.

What makes the product attractive is the low risk. An ACE approved warehouse has the capability of safely storing the product at low risk coupled with comprehensive insurance, if required. Managing the value of the collateral could also be efficiently done.

Like most financial products new to the market, in the initial stages competition is limited and those financiers offering the product are likely to achieve high margins and administration fees.

Elsewhere in Africa, product financing often forms the core in the relationship with clients in rural areas. Additional financing opportunities (spin-offs) will present itself through warehouse receipt financing (FAO, 2009).