

**ASSESSMENT OF THE WAREHOUSE RECEIPTS SYSTEM
IN THE PROCUREMENT OF CASHEW NUTS –
TANZANIA EXPERIENCE**

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Abstract

The study was actualized to assess the Warehouse Receipts System in the Procurement of Cashew nuts four years after its introduction following failure of liberalized Agricultural Markets in the cashews business. It was conducted at Ruangwa and Liwale districts in Lindi Region using a survey design. Data gathering and analysis were done using qualitative and quantitative techniques. The study found out that majority of key cashew stakeholders is satisfied with the system. The main reasons behind their satisfaction include; better price for the crop, stable market, safe and easy way when carrying out business transactions, assurance of paying back the loans, among others. The study also identified various challenges experienced by the stakeholders in cashew business. The main challenges include; loss of weight, lack of transparency on the auction price, lack of comprehensive quality control, high interest rate charged, multi-levies imposed on the crop, and political interference. The study recommends various strategies that can be employed to address the reported challenges. The strategies include; review of the levies imposed on the crop, use of up to date weighing scales when receiving and issuing the cargo, auction's transparency to buyers and keeping away from political interference.

Key words

Cashewnuts, warehouse, warehouse receipts system, farmers, buyers.

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1.0 Introduction

Cashew nuts are an important export for Tanzania and a major source of income for small farmers in the Southern and Coastal Regions. They are also imperative to the National Economy, providing about 18% of Tanzania's merchandise export earnings in 1999 (Mitchell, 2004). Mwase, (1998) reports that cashew production rose from 7000 tons in 1945 to its highest peak of 145,080 tons in 1973/74 (about 30% of the world production), and declining by 89% to 16,552 tons in 1986/87 (about 7%-8% of the global output).

Following the various initiatives and efforts taken by the government and the farmers in general, this decline was reversed in 1990/91 when production rose to 29,016 tons, recording further improvements to 41,657 tons in 1991/92 but declining slightly to 39,323 tons in 1992/93. Thereafter, production resumed its upward trend and reached 121,207 tons in 1999/2000 (Mitchell, 2004).

Cashews are well suited to Tanzania and to production by poor farmers because the cashew tree's tolerance of drought conditions provides a hedge against crop failure. Its ability to grow on poor soils and to be intercropped with food crops such as cassava, maize and others makes it an ideal product for small farmers.

Cashew production in Tanzania has made a remarkable recovery since the near collapse of the 1980s. Also export earnings from raw cashew nuts rose from less than \$4 million in 1990 to \$107 million in 1998 (Mitchell, 2004). This recovery has been credited to the economic reforms which begun in 1986, especially trade liberalization and exchange rate adjustments, and to the sector reforms which begun in the mid 1990s, which eliminated the monopoly of the Cashew nut Marketing Board. The recovery was also aided by the decision to export raw nuts rather than process them locally which meant that farmers were paid more quickly.

According to Jaffee, (1995), three issues are key problems that led to the near collapse of the industry:

- The increasing financial difficulties of the cooperative unions and the Tanzania Cashew Marketing Board, which resulted into large quantities of unsold nuts at the farm or village level;

- Cashew factories were operating at a loss and many factories closed between 1985 and 1990, and;
- Local authorities disallowed smooth cashew shipments between factories which would have facilitated processing.

Following trade liberalization policy which eliminated the monopoly of Cashew nuts trading by Marketing Board and Cooperative Unions, the local and foreign firms were allowed to buy cashews from the farmers. This policy was intended to increase competition in the cashew industry that resulted into increasing price to the farmers (Eskola, 2005). Unfortunately, the policy did not work well as intended because the price paid to the farmers remained to be low and the crisis of unsold nuts at the farm or village level persisted. Following this catastrophe, the Government decided to introduce the Warehouse Receipt System in the procurement of cashews directly from farmers for the 2007/2008 buying season. Through this system, only cooperative unions were licensed to buy cashews from the farmers and store the crop to the registered warehouses. The local and foreign firms could then purchase the cashews through auction. The Warehouse Receipt System in Tanzania is governed by the Warehouse Receipt Act of 2005.

Subsequent to the introduction of a warehouse receipt system in the procurement of cashews as an alternative way to address imperfections of agricultural market liberalization, and what is exactly taking place on the ground, there was found a need to assess the system in place to understand if it has been successful in overcoming the problems associated with cashew nuts trade in the country.

The term Warehouse Receipt System has been mainly defined in two ways by various scholars. One school of thought looks at it as a collateral tool of accessing credit to rural farmers while another looks at it as a tool for inventory management. With regard to seeing Warehouse Receipt System as a collateral tool of accessing credit for example, Coulter and Onumah, (2002) define the system as a trade where by deposit of commodities (collateral) in designated warehouse enables the access of credit to the depositor. This implies that the goods or in most cases cash crops which have been stored in a warehouse can be used as collaterals to obtain funds from the commercial banks or any other form of financial institutions. This position is supported by

Giovannucci, et al. (2001) who describe Warehouse Receipts System as one that enables poor producers to offer agricultural commodities as loan collateral to banks, with the loan typically enabling farmers to sell their crop when prices are higher, rather than at harvest (when their need for cash is greatest but price is normally very low). In fact, Gabriel and Hundie (2006), report that the Warehouse Receipt System can help farmers to put down their marketable surplus that can be traded when prices improve. Accordingly, the receipts or warrants that are given to farmers after depositing the crops are backed by legal provisions which guarantee quality, provide a secure system whereby stored agricultural commodities can serve as collateral, be sold, traded or used for delivery against financial instruments including future contracts. These documents state the ownership of a specific quantity of products with specific characteristics and stored in a specific warehouse.

Considering Warehouse Receipt System as an inventory management tool, Frezelle (2002) and Hompel & Schmidt (2007) describe the system as a fundamental element of the supply chain that essentially controls the storage and movement of materials within a warehouse and processes the transactions, including receiving, shipping, picking and put away. It also enables in directing and optimizing stock put away according to the real-time information of bin utilization status. The main objective of warehouse receipts system as inventory management tool is to provide an automated procedure to handle the records of incoming and outgoing goods. It provides a helpful link to logistics management and also for order processing in order to pick-up, packing and shipping the product out of the facility.

Thus theoretically, literature supports both functions of warehouse receipt system; as mechanism for accessing credit to rural farmers and as a technique for inventory management. Nevertheless, abundant literature looks at the system more of an instrument for addressing liquidity limitations and risks of post harvest agricultural products losses in order to minimize the impacts of agricultural markets imperfections.

Historically, the Warehouse Receipt System as a means of granting collateral has been in operation for more than 100 years in USA and Canada, one of the reasons for its establishment being price stability. In Africa, the system has been gaining popularity and success in countries

like South Africa, Zambia, Uganda, Madagascar and Tanzania (Onumah, 2010; UNCTAD, 2009; Coulter and Onumah, 2002). Drawing from literature, it can be reported that warehouse receipts system can be used to improve the rural settings in terms of access to rural finance, improve producer prices resulted from inefficient agricultural markets, improve lack of credible track records, solve the problem of shortage of collateralized assets among others (Gabriel and Hundie, 2006; Coulter and Onumah, 2002; Borsdorf et al., 1998; Lacroix and Varangis, 1996) which together culminate into low and unstable household incomes. There is evidence from research that the warehouse receipt system has well assisted in solving such problems in Ghana and that numerous small-scale farmers have been encouraged to form cooperatives and use warehouse receipts to store their crops for sale in the lean seasons (Giovannucci et al., 2001). According to Tanzania Warehouse Licensing Board, (2009), warehouse receipt system was introduced in the country in 2005 having four main objectives which are: 1) to minimize constraints that hamper effective production and marketing of agricultural produce; 2) to increase export earnings from agricultural production and marketing; 3) to strengthen institutions and improve local human resource capacities to operate effectively in a liberalised market; and 4) to improve income of small holder agricultural producers and small scale traders by increasing their market share.

The major source of controversy in the mechanism of food and input market reforms in several countries in southern and eastern Africa stems from assumptions that these countries have actually moved to a liberalised market environment (Kherallah et al. 2000), while in reality the liberalisation is not fully implemented or is even reversed (Jayne et al., 2002). Many African governments still intervene with agricultural marketing, and in countries where the government has withdrawn, the private sector has not always been able to replace the role previously occupied by the government (Eskola, 2005).

For instance, Dorward et al., (1998) found out that in the early years of liberalization, there was a fair degree of price competition between the buyers of cashew nut at the village level, despite the fact that, there were serious imperfections in the functioning of the competitive model. In 15 out of 16 villages surveyed during the 1995/96 buying season, a minimum of two and a maximum of eight traders visited a given village. A slightly lower figure (between one and eight) was

recorded for the 1996/97 season (Dorward et al., 1998). During both seasons, traders regularly raised prices within a given village to acquire the desired supply of nuts in the face of competing purchases from other buyers. During the last few seasons, there has been widely held perception that small groups of traders are colluding to fix the price paid to farmers for their cashews. Thus, while it may look like prices are determined by the market, in essence, producer prices are set by the big buyers.

Another critical issue in the liberalised marketing system is the aspect of price instability (Rweyemamu, 2002). This concern for example, became remarkable during the 2006/2007 cashew buying season when the local and foreign firms boycotted to purchase cashews from farmers. This was caused by the announcement of indicative price of Tshs 600 per kg issued by Cashew nut Board of Tanzania. Consequently, the crises led to a large unsold stock of cashews that remained in the hands of farmers at the village level.

While many of the researchers in this area have focused on how Structural Adjustment Programmes, World Bank and International Monetary Fund have influenced price mechanism (Dorward et al., 1998; Eskola, 2005; Kherallah et al. 2000; Rweyemamu, 2002), there is lack of information on how the introduced warehouse receipts system has managed to address the problem of price mechanism. This necessity is exacerbated by outcries from farmers and the media industry on the unfair rules of the game taking place under cashew nut business at village level. This study was an attempt to find out whether the warehouse receipt system put in place for procurement of cashews from farmers has been successful in managing the existing constraints in cashew nut trade. Thus, the study intended to assess the effectiveness of the warehouse receipt system in the procurement of cashew nuts under liberalized agricultural markets. In so doing, Lindi region was taken as a platform. In order to realize this, the study was set out to meet the following specific objectives:-

1. To understand the perceptions of various stakeholders in the cashews buying chain towards the warehouse receipts system, and;
2. To identify challenges facing warehouse receipts system.

2.0 Materials and Methods

This study was based in Lindi region because the warehouse receipts system was first pilot tested in this region. The area covered by this study was the Luchelegwa village found in Ruangwa District and the Huria village found in Liwale District. In order to find better price for cash crops and smooth supply of the agricultural inputs, the villagers organized their efforts and established Cooperative Societies. Luchelegwa village established Luchelegwa Primary Cooperative Society in 1993 while Huria village established Umoja Primary Cooperative Society in 1998. The two societies comprised of 615 and 560 members respectively during the time of the study. The study was based on cross-sectional descriptive survey. The design employed both quantitative and qualitative techniques in data collection and analysis. The sample size for both primary cooperative societies was 40 members (20 members from each society) because it was adequate for reporting purpose and analysis (Aczel, 1999). These members were availed by the respective societies and systematic stratified sampling technique was applied to select the 40 farmers.

For the case of other stake holders, the study conducted in-depth interviews with 5 cashew traders, 4 warehouse operators and top management of the 2 banks (CRDB and NMB) involved in granting the loans to the cooperative societies in Lindi region. Selection of the five cashew traders was based on the fact that they are the key actors in the cashew business in Lindi region operating for many years. The warehouse operators were purposively selected on virtue of their positions. These are the biggest and registered warehouses in the study area. Also, the two banks were taken for the study because they are the only ones which provide loans to the cooperative societies engaging in cashew and other cash crops business.

The methods used for data collection were interviews, questionnaire and documentary review. Structured questionnaire was administered to cashew growers while the use of in-depth interviews was conducted to warehouse operators, traders and bankers. Finally, secondary data and information was gathered from some reports provided by banks, warehouse keepers and the traders. Before data collection, the tools were translated into Swahili which is spoken by almost all Tanzanians. Thereafter, the questionnaire was pilot tested before full scale data collection was done. With regard to data analysis, the study employed both quantitative as well as qualitative means. Quantitative data were analyzed through the use of counts and percentages, as well as pictorial presentations. In conducting this analysis, excel software was employed. Qualitatively,

data were analyzed through the application of pattern matching, rigorous explanation building and comparison of data and information.

3.0 Results and Discussion

3.1 Results

3.1.2 Perceptions of Stakeholders towards the System

In responding to this objective, answers to the following aspects were sought: stakeholders' satisfaction with warehouse receipts system in cashew's buying chain and efficiency of the warehouse receipts system in cashew's buying chain.

3.1.2.1 Perceptions of Stakeholders on Satisfaction

1. Farmers

Out of 40 farmers interviewed on whether they are satisfied with warehouse receipts system in cashew's buying chain, 97% reported to be satisfied and only 3% reported not to be satisfied with the system. According to the farmers, the main reasons for the satisfaction with the system were as follows:

- (a) Since its inception in 2007/2008, the system helped them to get better price for the crop in the market. With the old system, the farmers were paid between 300/= to 400/= per kg of cashews. The warehouse receipts system has enabled the farmers to receive 610/= per kg during the 2007/2008 buying season. In addition, they received a bonus that ranged from 100/= to 184/= per kg depending on the selling price in the auction. For the 2010/2011 buying season, the cashew farmers in Lindi region received an average of Tshs. 1,400/= per kg. This was 152.5% increase in the year 2007/2008, and 350% increase during 2010/11 in comparison to the old system.
- (b) The system has created stability towards the market and price for the crop all over the buying season. Before the introduction of the warehouse receipts system, the market for the crop was uncertain because buyers could stop to purchase the crop or reduce the price at any time they achieved their targets. With the introduction of the warehouse receipts system, farmers have no

worries to rush to sell the crop early something that caused increased supply and consequently forced the price to go down.

- (c) The warehouse receipts system requires the farmers to sell the crop through the Primary Cooperative Societies and all traders are restricted to purchase the crop directly from the farmers. This formality has successfully managed to eliminate the middlemen/agents who were used by cashew traders. This tendency exploited farmers ostensibly because they had inadequate information regarding market conditions.
- (d) The system enables farmers to get bonus payments depending on the price of crop in the market. That is, despite of the indicative price of the crop announced by the Cashew nuts Board of Tanzania, the cashew farmers have the chance of getting better price for the crop pending market situation.
- (e) The payments on installment basis, enables the cashew farmers to budget and plan their expenditures accordingly and at the same time, acts as a saving mechanism for future consumption.
- (f) The system has eliminated the use of inappropriate weighing scales popularly known as “Kangomba” which were used by the middlemen popularly known as “Chomachoma”. Chomachoma used to countdown actual weight of cashews during scaling.
- (g) The system has simplified the process of revenue collection by Cooperative Unions, Primary Cooperative Societies and District Councils. The revenue in terms of levies is collected on the sale of the crop. The levies are deducted promptly once the sale of the crop is done.

On the other hand, the main reason that has been reported to be the cause of dissatisfaction of the system mentioned above is the payments done on installment basis. Accordingly, the practice reported to make farmers unable to fulfill the basic requirements and other commitments on time. This includes failure to pay farm’s labourers on time.

2) Other Respondents (Traders, Bankers and Warehouse operators)

Out of the 11 respondents under this group of respondents, 10 (91%) responded positively while one respondent (trader) responded negatively. The main reasons for the satisfaction with the system according to cadre of respondents were as follows:-

(a) Traders

- (i) The system is very safe in money transactions because all payments and money transfers are done through the bank accounts.
- (ii) The system enables traders to get huge cargo at a point in time, which helps them to reduce operational costs of sending agents to villages to buy cashews from individual farmers.
- (iii) The system helped to improve the quality of cashews because of the presence of check points at different levels. For instance, when the farmer brought his/her crop at the cooperative society, the quality of the crop was checked before receiving and storing. The second checkpoint was when the crop was transported from the Cooperative Society to the registered warehouse.
- (iv) The system also saves time which can be utilized to perform other productive activities.

The reasons put forward by the respondent who was not satisfied with the system are:

- (i) The procurement system (when buying cashews through auction) is not followed properly because unsuccessful bidders are not informed. The tender board was also not transparent regarding the price offered by the highest bidder. In some cases, the tender board faced allegations to deny the highest bidder and pick the buyer who offered lower price.
- (ii) The price was being fixed without consulting the buyers and it was too high to enable them to make profit.
- (iii) No fair system was being followed by the government staff in the sense that, it was the government which introduced the system due to various constraints posed by liberalization of agricultural products. However, some of the staff supervising the system collude with dishonest traders who buy the crop directly from the farmers. Such traders obtain all the official documents such as Produce Dispatch Note (PDN) to enable them to export the crop abroad.

- (iv) The export levy imposed by Cashewnut Board of Tanzania was too high which increased operational costs and consequently reduced the profit earned.

(b) Bankers

The 2 bankers that were interviewed admitted that they are satisfied with the warehouse receipts system in the cashew's buying chain. The reasons behind their satisfaction include assurance of loan's repayment and optimal risk they face. This is so because stored crops in the warehouse cannot be issued without the release warrant which is prepared and issued by them. This takes place after the respective buyer deposited the money in the cooperative society's account during purchasing of the crop. In this case, the banks deduct the principal amount of loan plus interest and disburse the difference to the cooperative society.

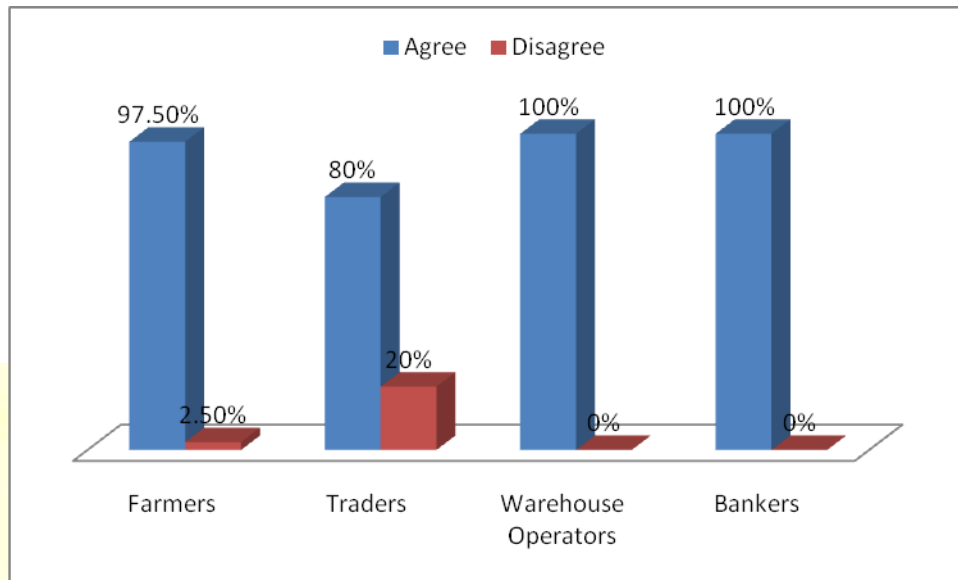
(c) Warehouse Operators

Just like the bankers, all 4 warehouse operators involved admitted that they are quite satisfied with the warehouse receipts system in the cashew's buying chain because the system guarantees them to get their payment for the services offered. According to the operators, all the deductions are made by the bank including the warehouse fee that is then directly deposited into their respective accounts.

3.1.2.2 Perceptions of Stakeholders on System's Efficiency

The figure below summarizes the distribution of the respondents views with regards to the system's efficiency:

Figure 1: Stakeholders' views on System's Efficiency



Agree: Stakeholders who accepted that efficiency of the system has increased.

Disagree: Stakeholders who objected that efficiency of the system has increased.

The reasons given by farmers as to why the system has increased efficiency in the cashew's buying chain compared with the old system are that of better price and stability of the market throughout the season.

On the banker's side, the assurance of loan's repayment and optimization of risk has been the main concern. One banker had this to say with that regard:

“The warehouse receipts system enables us to recover our money quickly even before the time that we have agreed with the cooperative societies and thus make both parties happy although it makes us to receive less interest than expected”.

The warehouse operators on the other side, admitted that the system has increased efficiency because the payment for the service they offered to the cooperative societies is always paid on time. Also, there is a smooth flow of information to the public and other stakeholders due to proper records keeping.

Finally, the traders argued that, the availability of huge cargo in the warehouses which allows them to purchase by depositing money in the bank accounts of respective cooperative societies,

has reduced their operational costs and increase their profit. This has been due to elimination of agents who used to buy the crop from individual farmers in the villages.

3.1.3 Challenges facing the warehouse receipts system

The second and last objective of this study was to identify challenges facing warehouse receipts system. This section presents crucial challenges as experienced by various key actors of the warehouse receipts system.

3.1.3.1 Farmers' Views

The interviewed farmers mentioned six main challenges that face the system which they feel act as constraints to achieve their desired goals as well as making the system more effective and efficient. These are loss of weight, lack of transparency on the auction price, and existence of middlemen. Others are lack of comprehensive quality control, high interest rate imposed on loans, and high crop levies imposed by Districts councils.

a) Loss of Weight

This was the common problem to most farmers who were interviewed. The incidence occurs when the primary cooperative society sends the cashews to the main warehouse where the crop is inspected by the warehouse operators to verify its quality and quantity. The weight of the cargo received by the operators from primary cooperative societies in most cases is greater than the actual weight determined by the warehouse operators. This creates a big controversy between the primary cooperative societies and individual farmers at the time of making payments. This is because the buyers always make payments by reflecting the weight of the cargo kept at the main warehouse and not otherwise. According to farmers, this problem is caused by the warehouse operators. On the other hand, the warehouse operators attribute the problem to the inaccuracy of the weighing scales used at primary cooperative societies' level.

b) Lack of transparency on the Auction Price

The actual price at which the cashews are sold at the auction remains a secret among the task force members who form the tender board. The so called highest bidder is then informed to pay for the specified quantity and quality of the crop. Since the price remains unknown to farmers, it

raises questions and curiosity about its correctness and validity. Farmers have feelings that they are paid less than what they should actually receive.

c) Existence of Middlemen (Chomachoma)

Although the system to a large extent has successfully managed to eliminate the middlemen, these people still exist and they continue to buy the crop directly from farmers. The problem arises when the primary cooperative societies run shortage of fund to make advance payments to farmers. In such situations, some farmers lose patience and get into a trap of selling their cashews to middlemen who normally pay low price.

d) Lack of Comprehensive Quality Control

Comprehensive quality control of the crop is only done at the main warehouse where the technical staff from Cashewnut Board of Tanzania are available. The quality control exercise which is done at the village level is not performed by any technical personnel. It often happens that grades assessed by cooperatives and those done at the main warehouse differ. This causes serious misunderstanding between cooperative societies and the farmers.

e) High Interest rate Imposed on Loans

The interest rate imposed on loans taken by primary cooperative societies is too high. Such loans advanced to cooperative societies are needed in order to make initial payments to cashew farmers and for buying other supplies like gunny bags, receipts books, etc. The exorbitant interest rate reduces the income/profits to be earned by the farmers after selling the crop.

f) Crop Levies imposed by Districts Councils

The crop levy which is imposed by districts councils on each kilogram of the cashew collected at the main warehouse is also claimed to be high. Normally, 5% of the indicative price announced by the government must be collected on each kilogram of cashews collected at the main warehouse. Farmers consider the imposed levy as their killer as it consumes nearly half of their profits.

3.1.3.2 Other Stakeholders' Views

These stakeholders also suggested four main challenges which they think blocked the system to produce desired results to the farmers and business community as a whole. The critical challenges they suggested are that; the opening of tender/bids is done in a secret manner, poor quality of gunny bags, existence of political interference and events of pilferage.

a) **The opening of Tender/bids is done in a Secret Manner**

When the interested buyers collect the sales catalogues from the cooperative union, make their bids/offer and return such bids, the regional task force/tender board opens such bids/offer secretly. The unsuccessful bidders/buyers are not informed about the outcome. There are claims from some of the buyers that the regional task force/ tender board favours certain companies in the process of selling cashews even when such companies offer low prices in the auction compared to other buyers. In short, the auction system at the region is considered to be unfair and unclear to the participants.

b) **Poor quality of gunny bags**

The quality of gunny bags that were used in the cashew business for the season 2010/2011 was low. These gunny bags were not intended for use in the cashew business; however, the societies used them due to shortage. Normally, in cashew business, the jute gunny bags having a capacity of 80 kg each are the ones used. Nonetheless, during the 2010/2011 buying season, the societies used the gunny bags designed to be used in coffee business. These bags have a capacity of 60 kg each. Due to that, buyers were forced to re-bag the cargo using standard gunny bags at their own expenses. This increased buyers' operational costs.

c) **Political interference**

Political interference is another critical issue facing the warehouse receipts system. Sometimes the technical matters in the cashew business are interfered by politicians instead of being handled by professionals as per regulations. There are claims that decision of taking loans from banks and selection of the buyers are sometimes dictated by some political figures.

d) **Pilferage occurrences**

There are reported incidences of significant loss of cashews which have been reported missing from where they were stored. This tendency is causing drawback to the operation of warehouse receipt system in Tanzania. For the reported cases, the most affected party has been the farmers.

3.2 Discussion

3.2.1 Perceptions of Stakeholders towards the Warehouse Receipt System

Generally, large proportion of the stakeholders (96%) admitted that they are satisfied with warehouse receipts system to be used in the cashew's buying chain. This is due to the fact that the system is more efficient and profitable to them compared to the old system used before.

This is supported by one of the farmers from Liwale District by saying:

“The warehouse receipts system is a reliable solution to the poor farmers because it defends the interests of the cashew farmers in terms of stable market and price from the beginning until the end of the season and thus, the government should retain and keep improving the system”.

The above quotation of this farmer is referring to the problems that faced the cashew farmers in the previous years when the crop market was not stable and the price was always varying from time to time with no clear justification from private buyers.

On the other hand, a small proportion of stakeholders (4%) including a farmer and a cashew trader disclosed that they were not satisfied with the warehouse receipts system to be used in the cashew's buying chain. Their observation is that the system is neither efficient nor profitable and it is a burden to them. For instance, one of the traders had this to put with respect to his dissatisfaction:

“.....the introduction of warehouse receipts system has eliminated employment opportunities to the majority of cashew agents and middlemen in cashews business. It has also introduced a small group of people among the government officers who make money at the expense of farmers and traders instead of helping them. Further, the system has introduced some unnecessary costs within the chain which increase a burden to farmers and traders”.

Actually, the above argument is based on the fact that the warehouse receipts system has successfully managed to eliminate the agents and middlemen on the cashews business who used to receive money from the cashews traders and moved to the villages to buy the cashews direct from the farmers.

Following from the above discussion, it is important for the public authorities especially Cashewnut Board of Tanzania to maintain and strengthen the system. This can be done through involving the key actors in critical decision making such as deciding on indicative price, the rate on export levies and others. On the other hand, the other shortcomings must be addressed seriously so as to improve the system.

3.2.2 Discussion on the Challenges facing Warehouse Receipts System

The farmers and traders are the main victims of the critical challenges presented in the foregoing section. These challenges affect their activities and thus cause a big loss of income and profits. The challenges involve weight shortage and quality control, lack of transparency on the tender system and auction price, and existence of middlemen (chomachoma). Most farmers and traders bitterly insist that if deliberate and serious measures are not taken to address the challenges, there is no doubt that the system will collapse and pave the way to the old system to take the lead.

A farmer at Luchelegwa village stated that:

“...though the system has successfully managed to address the problem of cashew market; we are greatly discouraged by the problem of weight shortage and secret on auction price”.

The farmers keep on insisting that, although they are the owners of the crop, they do not have influence on the selling price. In addition, they do not have access to know the selling price for their own crop in the auction. Thus, the foregoing aspects draw attention to the authorities to take the corrective measures to enhance the system before it is too late.

4.0 Conclusion and Recommendations

4.1 Conclusion

The warehouse receipts system to a large extent has successfully managed to address the problem of cashew market within the country since its inception in 2007/2008 buying season. Currently, the cashew farmers have the courage and motivation to revive and expand their farms and use services provided by extension officers within their respective areas for the purpose of increasing production and quality of the crop. The system, to a large extent has managed to increase competition in cashew market which in turn helps to improve the price of the crop in the market.

However, regardless of the reported success, the system is faced with five main challenges including, loss of weight, lack of transparency on the auction price, high transportation and supervision costs, lack of direct control towards the crop on farmer's side and robbery. These challenges need serious efforts to be addressed in order to improve the performance of the warehouse receipts system. Failure to do so will make the system to fail to achieve its intended goals.

4.2 Recommendations

This study provides various recommendations that may be employed in order to improve the system. The recommendations are put into two categories namely: Policy recommendations and Managerial recommendations.

1. Policy recommendations

- a) Taking into account stakeholders view that crop levies imposed by Districts Councils, Cashewnut Board of Tanzania and Cooperative Union are high (5% of the indicative price), there is a need for the government to review the current prevailing rates. If this is done, it will provide relief to the farmers and thus increase their incomes. On the other hand, the current export levy which is imposed by Cashewnut Board of Tanzania for each kg of cashew to be exported (Tshs. 240/= per kg) is too high. This affects the price of cashews in the market because when buyers offer price at the auction, they make considerations for all costs involved in buying and exporting

the cargo abroad. If export levy is reviewed downward, it will also bring positive impact on the price of cashews at firm level. This will ultimately benefit the cashew farmers.

- b) It has been identified that most farmers and traders complain on the issue of weight shortages in the main warehouses which is due to intentional conduct or use of outdated weighing scales. There is a need for the government to be strict on this issue by directing the warehouse owners to equip their stores with digital, reliable and modern weighing scales. This will eliminate shoplifting by operators and eradicate complaints from both farmers and buyers. This can be achieved by the Government through the mother Ministry not registering the warehouses which fail to comply with the directives.

2. Management recommendations

- a) The management of the cooperative unions and societies as a whole must make sure that all technical matters concerning operations of the business are left to themselves instead of being interfered by politicians who have no acquaintance on technical matters.
- b) The auction system of selling the crop through secret tenders seems to affect the farmers and the buyers. Farmers are not aware of the price in which their crop fetched while buyers do not understand the true winner of the auction. This is caused by the system that is not transparent which signals corruption practices. In order to clear these allegations and bring true and fair play, it is suggested that all the auctions be conducted openly by inviting all interested buyers and allow them to compete as stipulated by procurement regulations.

References

- Aczel, Amir, D. (1999), Complete Business Statistics, (Forth Edition), Irwin/McGraw-Hill International Editions, Singapore.
- Borsdorf, Roe, S. Figiel, and Charles Uphaus. 1998, 'Grain Warehouse And Warehouse Receipt Evaluation Report', Unpublished document, USAID. Washington, D.C.
- Coulter, J. and Onumah, G. (2002): The role of warehouse receipt systems in enhanced commodity marketing and rural livelihoods in Africa, Food policy, Vol. 27, pp 319-337.

- Dorward, A. J. Kydd and C. Poulton (eds) (1999), *Smallholder cash Crop Production Under Market Liberatization: A New Institutional Economics Perspective*. Wallingford, UK: CAB International.
- Eskola, Elina (2005): *Agricultural Marketing and Supply Chain Management in Tanzania: A Case Study*. ESRF Working Paper Series, No. 16, Dar es Salaam.
- Frezelle, H. Edward., 2002; *World class warehousing and material handling*, McGraw Hill, USA.
- Gabriel, A. H. & B. Hundie (2006), *Farmers' Post-Harvest Grain Management Choices under Liquidity Constraints and Impending Risks: Implications for Achieving Food Security Objectives in Ethiopia*, A paper prepared for presentation at the International Association of Agricultural Economists Conference, Gold Coast, Australia, August, 2006.
- Giovannucci, Daniele & Varangis, P. & Larson , D., 2001. "Warehouse Receipts: facilitating credit and commodity markets," MPRA Paper 13548, University Library of Munich, Germany.
- Hompel, Michael Ten., Schmidt, Thorsten., 2007; *Warehouse management: Automation and Organisation of warehouse and order picking systems*, Springer-Verlag Berlin Heidelberg.
- Jaffee, S. (1995), "Private trader Response to Market Liberalization in Tanzania's Cashewnuts Industry", World Bank, Policy Research Working Paper No. 1277, March.
- Jayne, T.S., Govereh, J., Mwanauo, A., Chapoto, A. and Nyoro, J.K., (2002), 'False promise of false premise? The experience of food and input market reform in Eastern and Southern Africa', *World Development*, Vol 30 No 11: 1967-85.
- Kherallah, M., Delgado, C., Gabre-Madhin, E., Minot, N. and Johnson, M., 2000, 'The road half-travelled: agricultural market reform in sub-Saharan Africa', *Food Policy Report 10*, Washington, D.C.: International Food Policy Research Institute.
- Lacroix, R. and P. Varangis. 1996. 'Using Warehouse Receipts in Developing and Transition Economies' *Finance & Development*, Vol. 33, No. 3, September.
- Mitchell, Donald (2004): *Tanzania's Cashew Sector: Constraints and Challenges in a Global Environment*. Africa Region Working Paper Series, No. 70, June 2004.
- Mwase, N. R. (1998), *Economic liberalization and privatization of agricultural marketing and input supply in Tanzania: A case study of Cashewnuts*, African Economic Research Consortium (AERC) Research paper; 86.
- Onumah, G. (2010), *Implementing Warehouse Receipt Systems in Africa Potential and Challenges*, Paper prepared for the Fourth African Agricultural Markets Program Policy Symposium,

organized by the Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA) of the Common Market for Eastern and Southern Africa (COMESA), September, 2010, Lilongwe, Malawi.

Rweyemamu, D. C., (2006), The Contextual Analysis of Cashewnut Industry in Southern Tanzania After Market Liberalization, The African Journal of Finance and Management, Vol. 10. No. 2, 14 – 21.

Tanzania Warehouse Licensing Board, (2009), The Warehouse Receipt System in Tanzania.

Tanzania Warehouse Receipt Act No. 10 of 2005.

UNCTAD (2009), Review of Warehouse Receipt System and Inventory Credit Initiatives in Eastern & Southern Africa, Report commissioned by UNCTAD under the All ACP Agricultural Commodities Programme (AAACP).

