



TRULY 'AT THE VERGE': THE FUTURE OF WAREHOUSE RECEIPT SYSTEM IN MALAWI

A Synthesized Background Paper

Prepared by:

Felix Lombe PhD¹, Chrispin Namwera MA², and Henry Mlinde BSc³,

African Institute of Corporate Citizenship (AICC)

TAURUS House

Along Convention Drive

P/Bag 382

Lilongwe 3

Tel: 265 (0) 775 787 /691

Fax: 265 (0) 775 761

Email: aicc@aiccafrica.org

Website: www.aiccafrica.org / www.os.aiccafrica.org

¹ Chief Executive Officer, African Institute of Corporate Citizenship (AICC)

² Malawi Agriculture Partnership Program Coordinator, African Institute of Corporate Citizenship (AICC)

³ Statistician, African Institute of Corporate Citizenship (AICC)

Table of Contents

List of Figures.....	2
List of Tables.....	2
1.0 INTRODUCTION: OUR ADMISSION.....	3
2.0 WHAT WE ALL KNOW... ..	4
3.0 A NOTE ON METHODOLOGY.....	5
4.0 THE PARAMETERS OF OUR 'CLAIM'.....	6
4.1 Declining Traded Volumes.....	6
4.2 Low Participation Levels.....	8
4.3 Minimal to Zero Participant Retention Rate	9
4.4 Steady Withdraw Pattern by Smallholders Farmers.....	10
4.5 The World Food Program (WFP) Factor.....	11
4.6 Patience-Testing Subsidized Operation.....	12
4.7 The Long Walk to Breakeven Points.....	13
4.8 The Liquidity Future of the two 'Babies'	14
4.9 Supremacy of Politics over Trade 'Rightfulness'	15
4.10 The Illusion of Internal Demand for Legumes.....	15
5.0. BIBLIOGRAPHY.....	19

List of Figures

Figure 1 Traded Volume under ACE and AHCX	4
Figure 2 Volume Traded under ACE	6
Figure 3 Volume traded excluding Maize	7
Figure 4 Production trends of Key legumes	8
Figure 5 Number of Participants using certified WH per year	9
Figure 6 Farmer retention in WRS participation	9
Figure 7 Volume of commodities deposited in WH	10
Figure 8 composition of traded volume	11
Figure 9 Average dollar return	12
Figure 10 Cost structure for ACE	13
Figure 11 Cost structure for AHCX	13
Figure 12 Cost and revenue structure for AHCX	14
Figure 13 Effective demand against available quantities	16
Figure 14 Average soya prices.....	16

List of Tables

Table 1 Returns on Spot Market Versus Commodity Exchange	17
--	----

1.0 INTRODUCTION: OUR ADMISSION

We would like to formally acknowledge that our quoted phrase that WRS in Malawi is at the 'verge' of collapsing has drawn a lot of attention, contestation and review of prevailing evidence for or contra to the statement. As a chief advocate of the system for 10 years now, it should be noted at the outset that a proclamation of this nature has not been just an overnight process. It is a painful admission considering how much we have equally invested (time and advocacy wise) on this intervention. Faced with evidence in our possession, we had two options: put a cosmetic picture or make this painful admission. We have opted for the later largely to save-up on time and lobby for increased efforts towards any possible and viable alternative. As we make this painful admission, we are cognisant of the following, inter-alia:

- a) Massive financial investments made by stakeholders and development partners towards this initiative and the sad reality that the outcome so far is not congruent with the investments
- b) The availability of contrary evidence supporting or refuting our 'claim'. Our plea is that our 'claim' should not be dismissed out-rightly but should be given sober reflection just we are doing with the evidence that purports that the intervention is on good course
- c) That just like any human science exercise, our evidence might have methodological errors. We would prefer an attention towards the errors.

In appreciating the above, we are tranquilized by the fact that this could be the beginning of a healthy debate where evidence is used as a basis for any opinion in this strategic sector. Since we cannot rule out the fact that our basis of conclusion is going to be subjected to numerous rounds of methodological duels, we have at this juncture, opted to isolate the few parameters on which our conclusion has been built. This will enable us accommodate counter facts and clarify on those parameters if need be. This will also ensure that the debate is well structured. Ideally we could have sent a dearth of evidence and studies done. The challenge with this would be the unlikelihood of stakeholders reading all the documents and providing feedback based on the content

provided. Finally, our 'claim' does not in any way negate the investments made so far neither does it wish to suggest a discontinuance of the same. This is beyond the ambit of our discretion. We do however recommend an independent study since we are also aware of counter evidence floating around.

2.0 WHAT WE ALL KNOW...

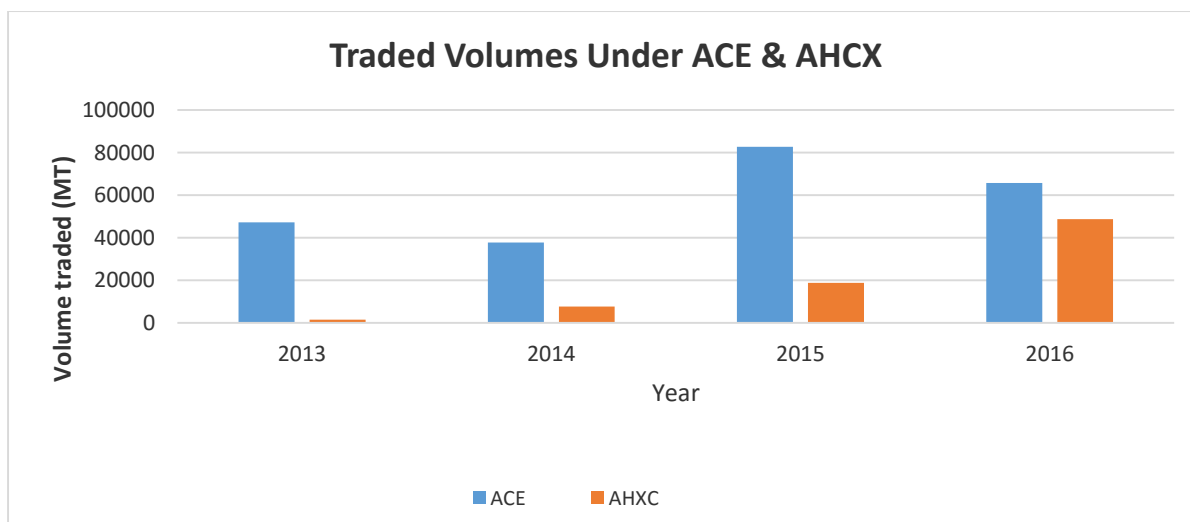
Our “verge” conclusion obviously pushes us into a pessimistic category which is not the case. We are well aware of the theoretical advantages of the system and it is paramount that we profess them briefly.

Theoretically, WRS aims to reduce unethical marketing, provide better price to farmers, increased profit for rural farmers due to extended sales period, increase bargaining power of farmers and reduce post-harvest losses of agricultural crops. WRS also enables depositors to leverage financing against stored commodities and it ensures trade security for all links in the agricultural industry, among others.

Conceptually, WRS works well in an environment characterized by vibrant financial system, good infrastructure (in terms of good roads and warehouses), the availability and integrity of public warehouses in rural areas, low interest rates charged, the turn-over period and volumes of commodities deposited and traded. Historically, WRS has worked well in Ethiopia and South Africa while in countries like Zimbabwe, Zambia and Uganda it has collapsed.

In the Malawi context, the two commodity exchanges that exist in trade in agriculture commodities are Agriculture Commodity Exchange for Africa (ACE) and Auction Holdings Limited Commodities Exchange (AHCX). We are equally conversant that so far the traded volumes under ACE and AHCX are as shown in Figure 1:

Figure 1 Traded Volume under ACE and AHCX



Sources: IFRI 2017, ACE and AHCX reports

In light of the different challenges that the system has faced so far, AICC has been part and parcel to voices tilted towards efforts on a number of policies options which include: export mandates, removal of export restrictions and merging of ACE and AHCX and better infrastructure.

At present we are aware of the heightened expectation imbued in the recently passed Warehouse Receipts Bill (2017) which seeks to define and clarify the legal status of warehouse receipts as documents of title and to clarify the rights and obligations of warehouse operators and holders of warehouse receipts in accordance with international best practices in order to facilitate trade and financing of goods in storage in Malawi.

Finally, as we discuss the performance of WRS, it is important to attest that going by the religious and strict definition of WRS, Malawi does not have one. However, we will use the WRS to denote the present arrangement, although it falls below the true meaning of WRS.

3.0 A NOTE ON METHODOLOGY

In synthesizing this document, we made use of a few internal documents besides the usual literature review. The internal documents include:

- Demand and supply analysis for legumes in Malawi

- Periodical commodity outlooks
- Operational efficiency analysis of commodity exchange in Malawi
- Effect of maize prices on legumes

These studies were done using different analytical methods including parametric test and non-parametric test. Time series data, survey report and impact assessment reports were used.

4.0 THE PARAMETERS OF OUR 'CLAIM'

Briefly, in making our claim, the following parameters were handy:

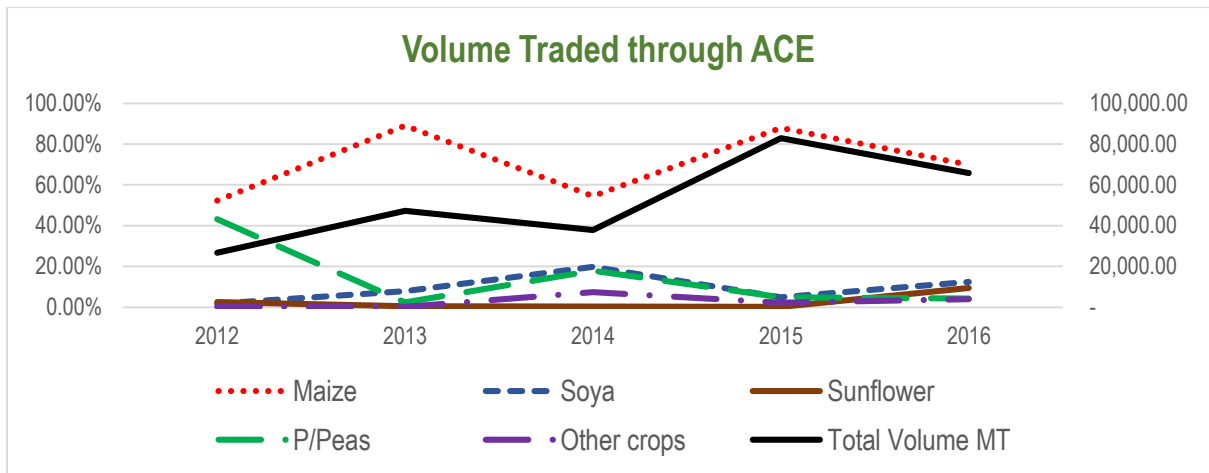
- a) Declining Traded Volumes
- b) Low Participation Levels
- c) Minimal to Zero Participant Retention Rate
- d) Steady Withdraw Pattern by Smallholders Farmers
- e) The WFP Factor
- f) The "Awareness-Attitude" Paradox
- g) Patience-Testing Subsidized Operations
- h) Long Walk to Breakeven Point
- i) The Liquidity future of the "two" Babies
- j) Supremacy of Politics over Trade "Rightfulness"
- k) The Myth of Financial Access

We have deliberately skipped mention of any recommendation since the task was to substantiate our 'claim'.

4.1 Declining Traded Volumes

At the onset one would argue that the traded volume have increased over time as shown in Figure 2 especially for ACE.

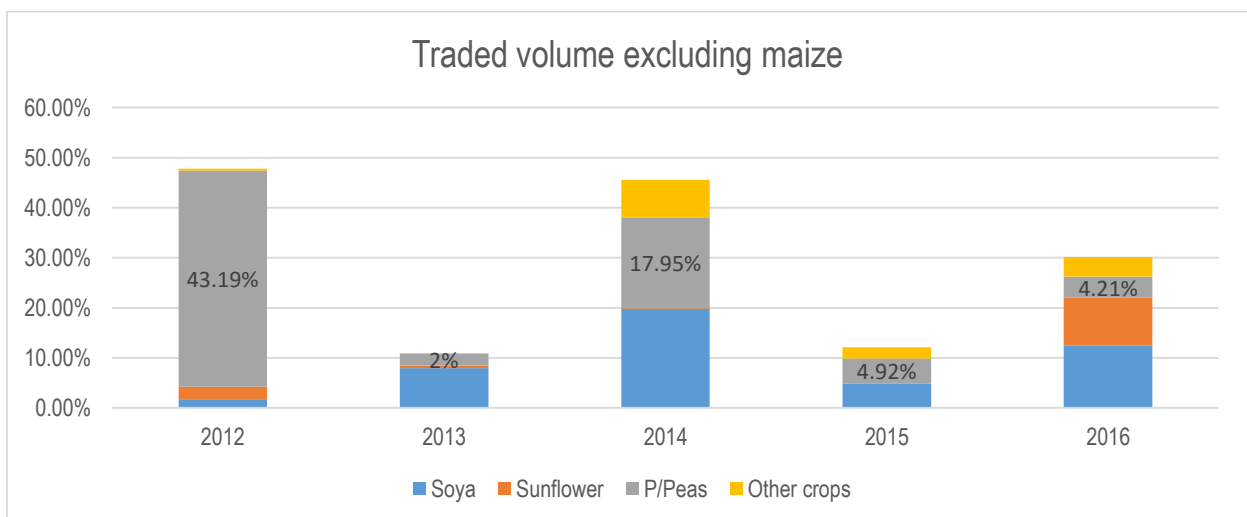
Figure 2 Volume Traded under ACE



Source: ACE and AHCX reports

However, this is a superficial situation as much contribution is from maize as seen above. Maize has contributed over 70% of the traded volume over years. We have elsewhere argued in this presentation that the maize dominance and the under trading of legumes is a recipe for a collapse of the system for obvious reasons. Even so, we have argued elsewhere that the maize dominance is largely due to the WFP factor. Taking off the maize hype, the Figure 3 below is a true reflection of volumes.

Figure 3 Volume traded excluding Maize

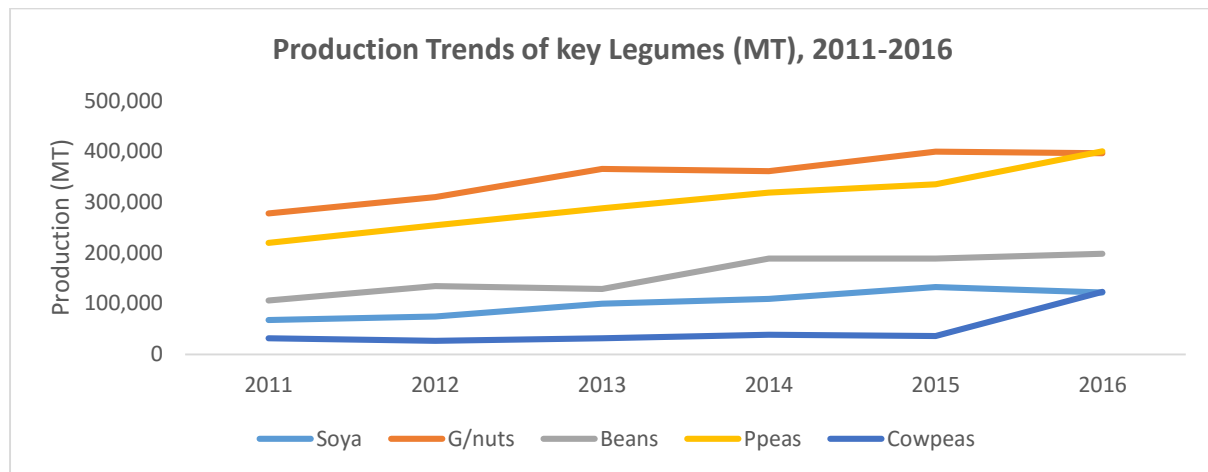


Source: AICC 2017

As shown in Figure 3 above, volumes of the legumes have been too low over the years. In fact pigeon peas registered decreasing trend while soya has been

fluctuating. As for other crops the decline is evident enough. This should be worrisome especially when the legumes growers and traders have loudly complained about the market access challenges. Evidence shows that there has been a conspicuous increase in legumes production as shown in Figure 4 below.

Figure 4 Production trends of Key legumes



Source: AICC and MoAIWD

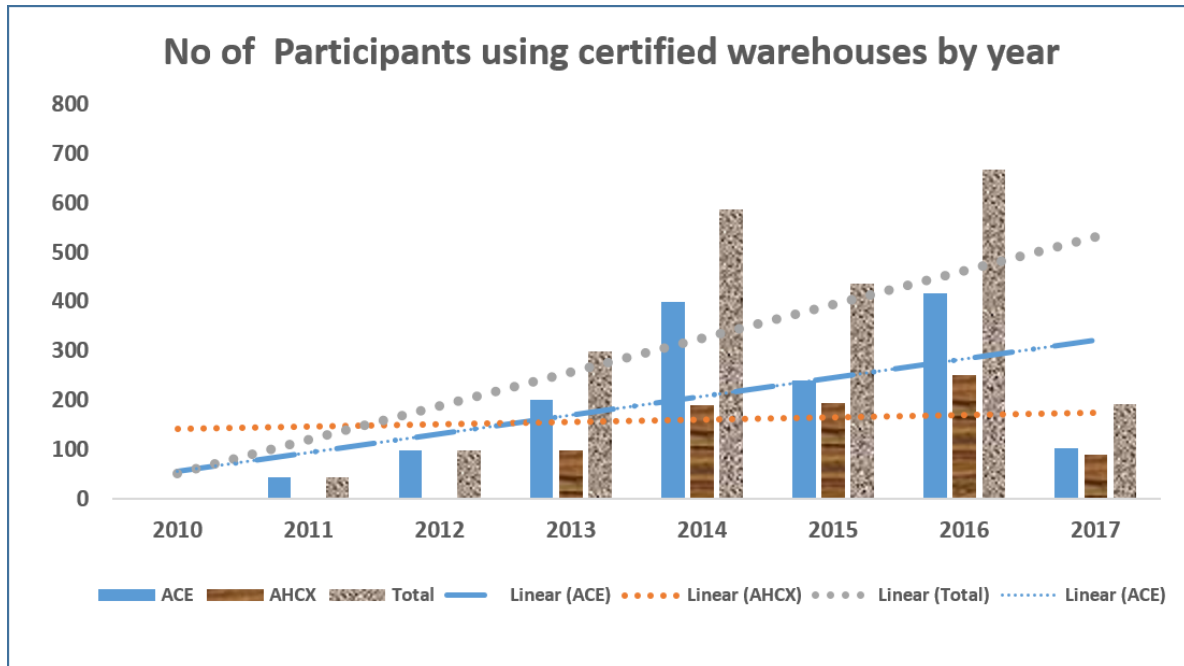
The question is: if legumes have registered increased production trend, why should the two exchanges register low volumes at a time when producers are complaining of market access?

4.2 Low Participation Levels

Participation can be either from buying or selling perspective. Since seller participation is paramount for sustainability of the scheme, we defined participants mainly as those depositing/selling their produce. Seen from that angle, the number of participants (farmers and traders) utilising the WRS has registered an increasing creasing trend in general over the past five years as shown in Figure 5. However, this might not be the true reflection as smallholder farmers' participation in subsequent years has been low as seen in the next sub section. In addition, the abortion levels have been at 15% (that is the number of participants withdrawing before the final deal). The regular participant have been large firms such as CP Feeds, Sun seed Oils, Price Commodities and Graintex Feeds and Hatchery. For AHXL, the average number of participants

has been around 150 while for ACE it has been around 300 with notable decrease in 2017 to just 75. Our qualitative findings reveal that all previous participants find the trading platform “not very profitable”. This obviously confirms the decreasing number of participants.

Figure 5 Number of Participants using certified WH per year

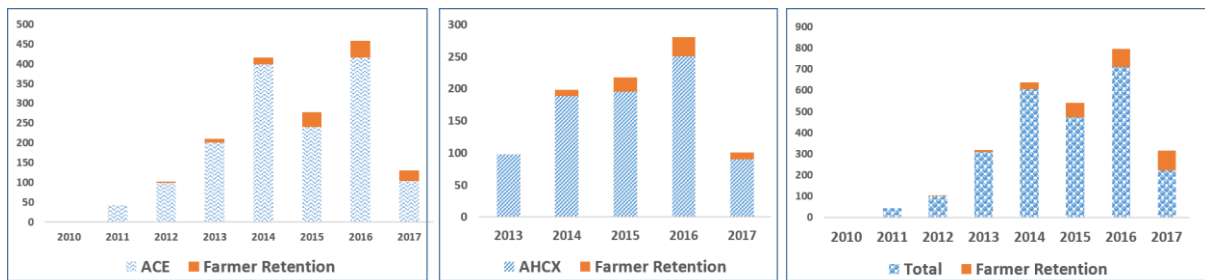


Source: ACE and AHCX

4.3 Minimal to Zero Participant Retention Rate

Farmers and other participants are rational beings. Where profits have accrued to them, all factors constant, the likelihood of re-venturing into the platform are high. Interesting throughout the period under question, only 3 participants (big players) have traded throughout, while for each successive year, retention rate was almost zero for smallholder farmers. Had the platform proved profitable to them, the retention level would have been notable. Our analysis show that even if we allow a break-period of one year or two years, none of the farmer participation had ever traded before that prevailing year as revealed by Figure 6 below.

Figure 6 Farmer retention in WRS participation



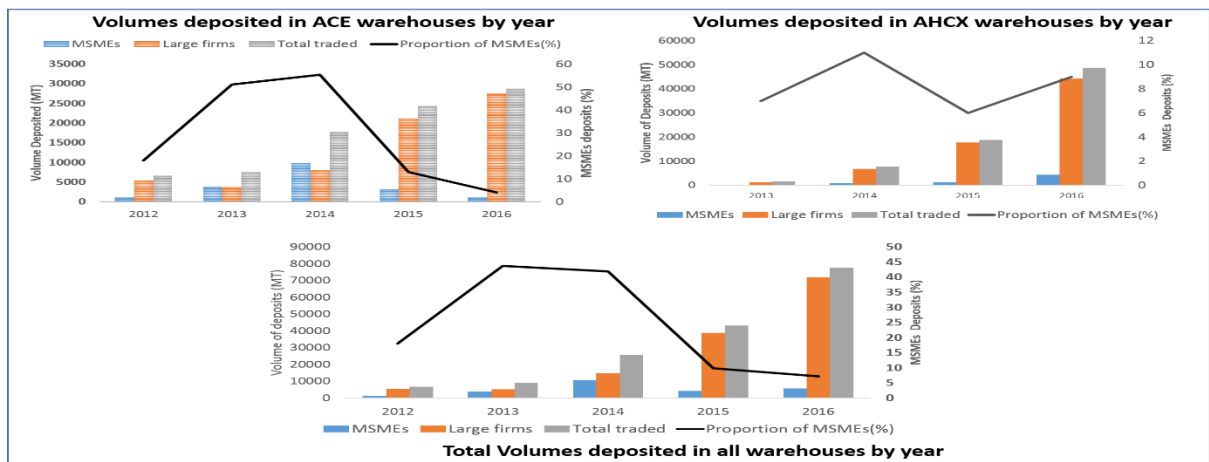
Source: AICC

Worthy noting is the behaviour in utilising the system over time. On average, smallholder farmers utilised the WRS once over the period while large scale farmers and processors utilised the WRS two times over the same period. Since these large scale farmers and processors also buy produce from smallholder farmers, they expressly limit smallholder farmers' participation in WRS in the absence of well organised farmer groups.

4.4 Steady Withdraw Pattern by Smallholders Farmers

The success of any commodity exchange to a larger extends depends on the volumes being traded which indirectly depends on the number of participating traders. Of critical importance is the number of smallholder farmers participating and their traded/deposited volumes. This is neither good news. Quantity-wise, MSMEs have steadily withdrawn from the two platforms as shown in three graphs below (Figure 7). This should be a cause of concern especially when we consider the fact the intervention was touted as a panacea for MSMEs grain market challenges.

Figure 7 Volume of commodities deposited in WH

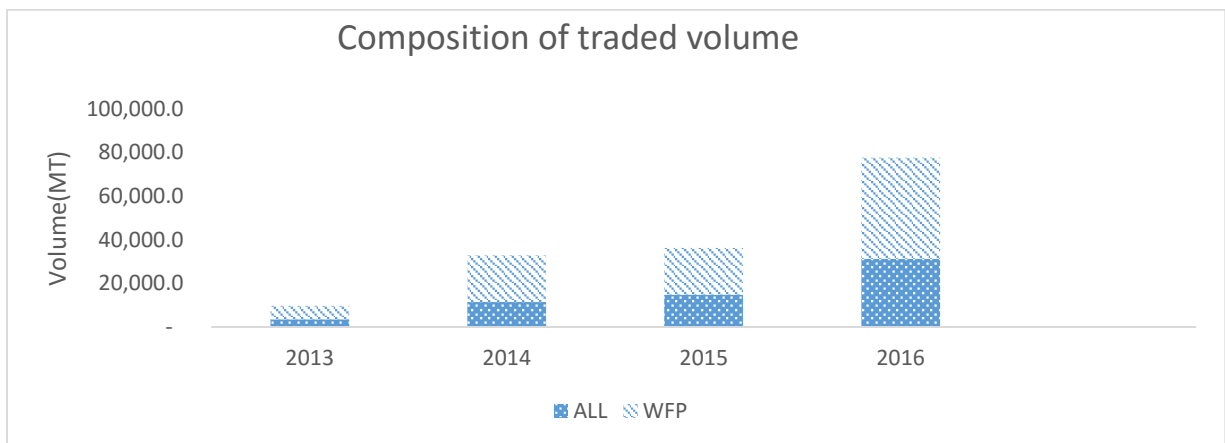


Source: ACE and AHCX

4.5 The World Food Program (WFP) Factor

WFP has been funding different projects across Africa such as in Tanzania, Zambia and Uganda. In Malawi, WFP remains the largest buyer as it requires tens of thousands of metric tons of food each year to support its food assistance programmes. The WFP has therefore been an important buyer of grain in Malawi and a major client for ACE. In 2011, for instance, WFP bought 26, 373 metric tons and 8728 metric tons in 2012 representing 63 % and 84 % of total traded volumes, respectively.

Figure 8 composition of traded volume



Source ACE AND IFRI

As depicted in Figure 8 above, in a likely event that WFP is not purchasing commodities through the exchange, the volume traded may be evidently low.

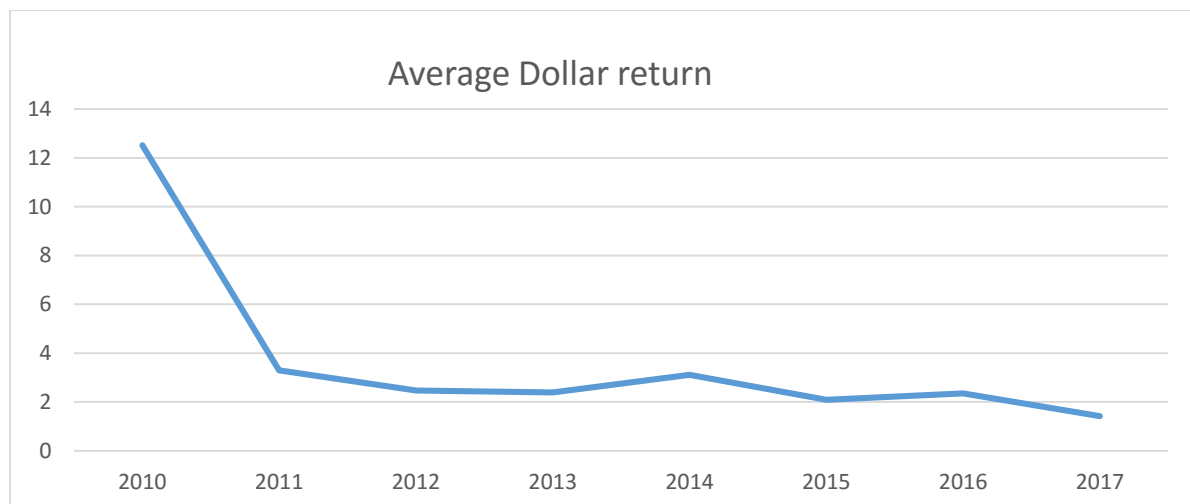
Assuming that WFP buys half of the usual procured quantities the Break Even Price (BEP) will even be missed by 64% more than it is being missed now.

Ironically, when WFP floats tender for grain quantities demanded it is sellers who bid for prices unlike the ideal situation in which buyers could bidding for the grain. In the face of uncertainty as regards maize marketing for instance, sale of maize may be problematic as maize is regarded as a political crop and subject to export bans. Much as WFP support is critical in early stages of exchange's development, high reliance on single buyer is far from ideal.

4.6 Patience-Testing Subsidized Operation

The journey to balance both subsidized operation cost by both commodity exchange leaves a lot to be desired in Malawi. There are resources which are significantly being pumped by external partners to stimulate operations of commodity exchange. Several stakeholders have, commendably, pumped in resources to ACE in particular. However, there is a declining pattern in terms of the number of dollars being fetched for each dollar invested in a year as shown in Figure 9 below:

Figure 9 Average dollar return



Source: AICC 2017

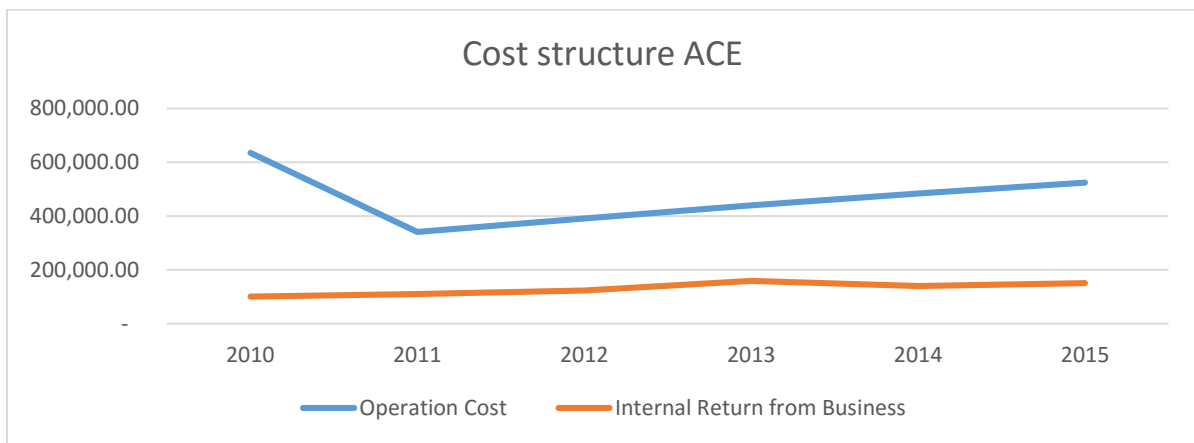
A simpler interpretation of the above should be that for each dollar invested, the marginal return is decreasing. This should imply that any dollar invested now is less effective than before – courtesy of other parameters discussed in this

document. While patience would dictate that we give the trend some time, the increasing marginal returns would have been preferable.

4.7 The Long Walk to Breakeven Points

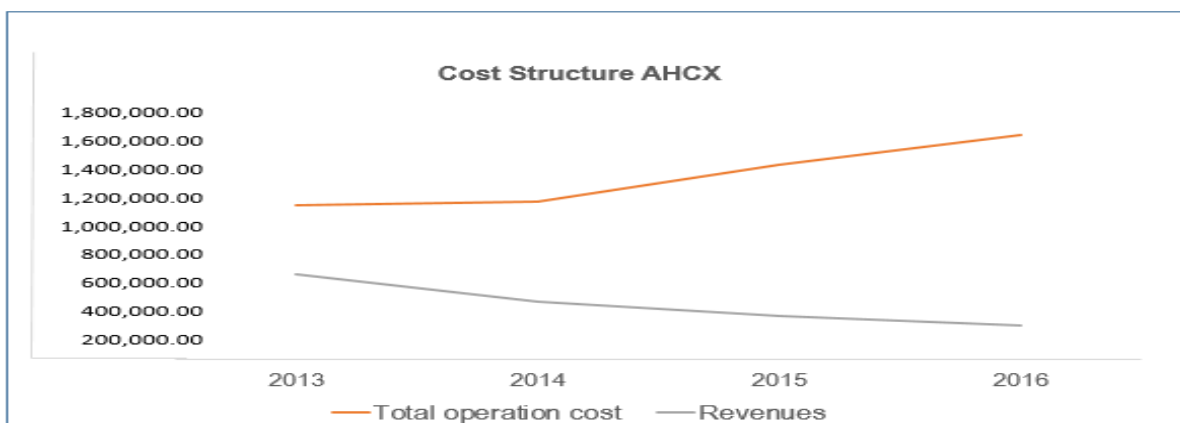
Sustainability of the whole system is actually the question about the sustainability of the two commodity exchanges which in turn is dependent on their ability to generate revenues from trade in the medium term. The cost structure and own revenues (generated from trading) have registered a divergent pattern as shown in Figures 10 and 11 below which suggests a long walk to break-even point for both commodity exchanges.

Figure 10 Cost structure for ACE



Source: AICC 2017

Figure 11 Cost structure for AHCX



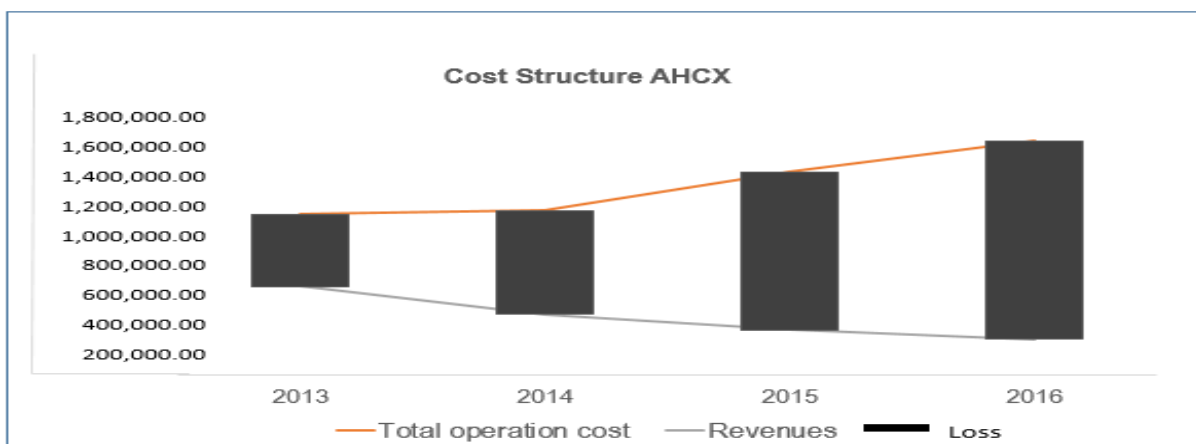
Source: AICC 2017

Since the breakeven points are still far from the sight, one can only assume that the subsidies (for ACE) and bailouts (for AHXL) will continue prevailing. If these are taken off, the system should collapse immediately.

4.8 The Liquidity Future of the two 'Babies'

It is naivety of high order to cite the prospect of WRS while ignoring the present financial positions of ACE and AHXL. The overdependence of ACE on donors and its long walk to the breakeven point has been discussed elsewhere in this document. A closer look at AHXL would suffice for now. AHXL is a subsidiary of AHL Group. Since AHXL is not as 'privileged' as ACE in terms of grants, its initial operations so far have been financed by subvention from the mother company. AHXL has been making losses since its inception. However, this is not the cause of concern for now. What is of great concern is the increasing loss level thereby exerting pressure on the mother company as shown in Figure 12 below.

Figure 12 Cost and revenue structure for AHCX



Source AICC 2017

In March, 2016 Auction Holdings Commodities Exchange (AHCXL) head offices in Lilongwe had its offices sealed and properties confiscated following the company's failure to honour a court order to pay MWK 2 billion to oil and protein in a breach of contract. Oil and Protein Company limited went into contract with AHCXL for the supply of commodities that the company uses in processing into cooking oil. However, following the low volumes of the

commodities that were available in the season, AHCX was unable to supply the agreed tonnage. The low volumes of produce produced during the 2015/16 season affected the exchanges ability to supply the agreed tonnage to the processor. Oil and Protein therefore claimed for damages on the inability for the exchange to honour the contract and sued for MK 1,861,358,126.25 (monetary loss) and UDS 171,000.00 (for breach of contract). This is an on-going court case and should AHXL be held liable by the court, it will be forced to pay this amount. This will surely be a task of the mother company, AHL Group. However, the mother company itself has its own nightmares as it is grappling with the K40 Billion Loss – courtesy of the formerly PTA Bank loan. AHL Group's liabilities are presently higher than assets, rendering it almost insolvent. It is likely that ADMARC will come in or they will negotiate for restructuring of the debt. If the later holds, AHL Group will be forced to shed-off loss-making subsidiaries – top of which is none other than AHXL.

4.9 Supremacy of Politics over Trade 'Rightfulness'

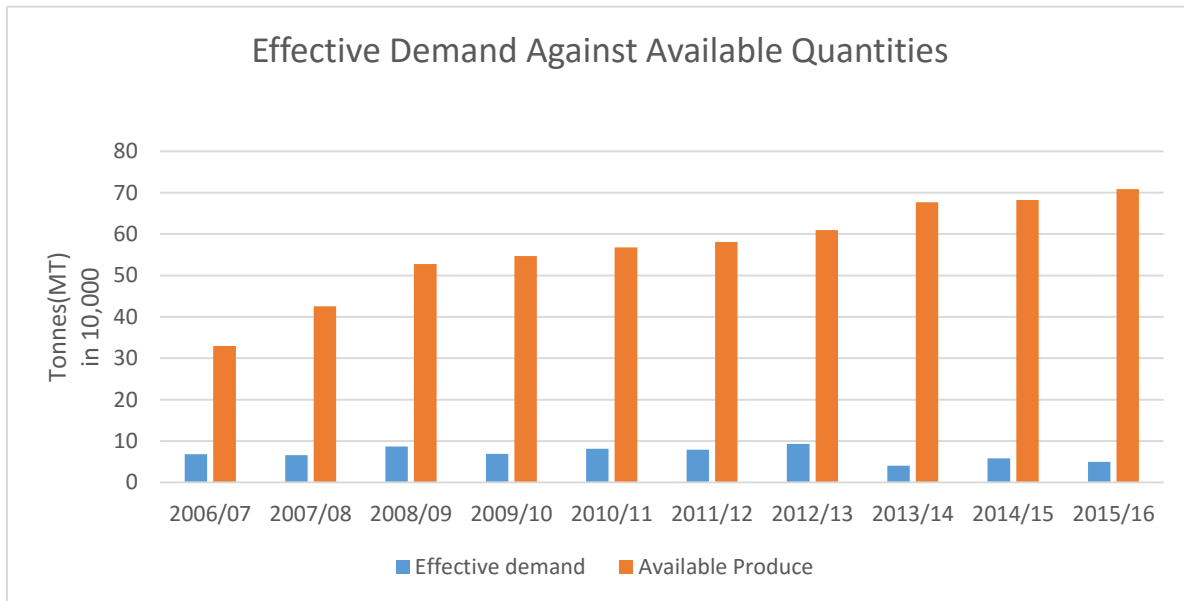
The so called prospects of WRS are so much at the mercy of politics and political “correctness” in Malawi which are always supreme to efficient requirements of trade. The export bans on maize are not near any immediate evaporation. As such, the only plausible source of demand is domestic consumption. With WFP being the major buyer, the whole system is at the mercy of hunger and WFP food security intervention. The current WRS law and Control of Goods Act (in progress) provide a cosmetic picture of WRS prospects. However, in WRS Law, Section 44 in particular, the minister is given powers to “make regulations for the implementation of the Act” while the Control of Goods Act (under review) gives the minister the power to impose export (and import) bans as long as “he gives reasons for the decision taken (Section 7(3)). The increased presence of a big brother (government) in both maize and legumes as seen in the two laws, make WRS at vulnerable position.

4.10 The Illusion of Internal Demand for Legumes

Although an inferior commodity presently at the commodity exchanges, much of the push for WRS has been premised on finding sustainable market model

for legumes. Ideally WRS should be a platform for domestic and international demand. Nominal demand (available demand) for legumes (soya, groundnuts and common beans) against effective demand have registered a wide parity as shown in Figure 13 below.

Figure 13 Effective demand against available quantities

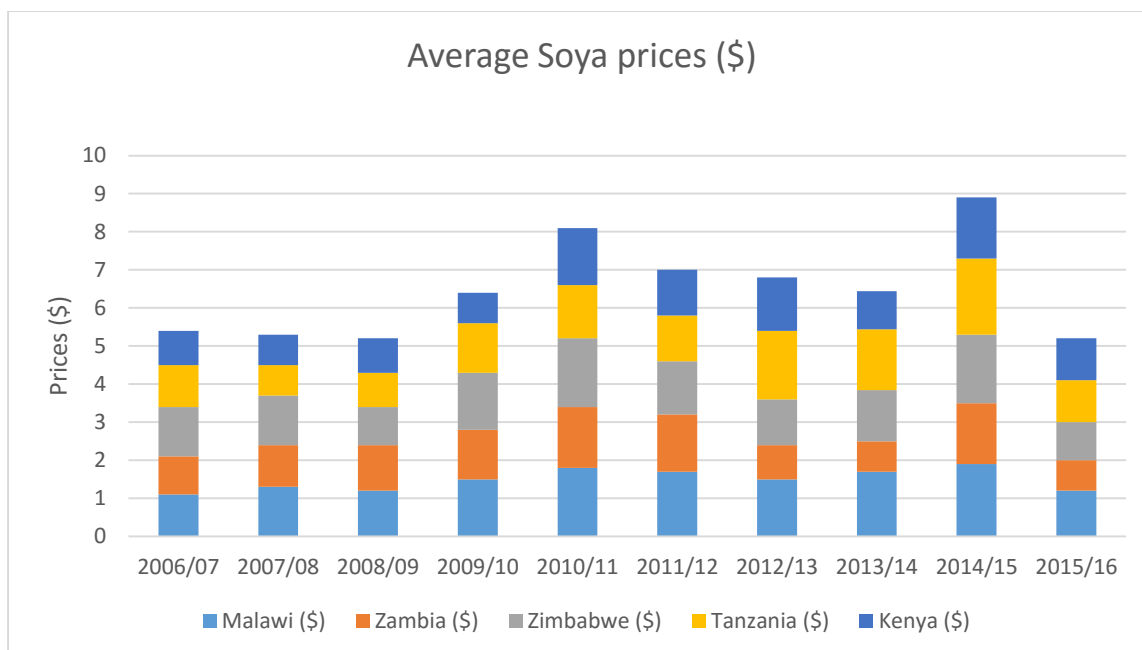


Source: AICC 2017

A key explanation for reduced effective demand is the importation of crude oil (palm crude in particular). Crude oil is exempted from duty and almost all processors prefer using 80% of imported content. In light of this, the exportation of raw commodities is the only opportunity that may save the current situation.

However, competitiveness in prices at the international market of our grain legumes has been a factor that stagnated the legumes export. Malawi has been outcompeted by regional neighbours as seen in price trend as shown in Figure 14 below:

Figure 14 Average soya prices



Source: MoAIWD, Ministry of Industry and Trade, Trade Map Statistics, AICC

The low competitiveness of our soya for instance and low domestic demand means that WRS does not offer a viable option either.

3.11 The Myth of Financial Access

Trading through the WRS seem appetizingly to farmers. Critical analysis shows possibility of losses by users who instead opt to sell through spot markets after utilizing the facility at once. In 2013 average trader were depositing 23 MT for both commodity exchanges. Considering the waiting average time of 90 days after deposing the commodities, the average increase in price below 20% makes the spot market likely profitable.

Table 1 Returns on Spot Market Versus Commodity Exchange

	MAIZE	SOYA BEANS	PIGEON PEAS
Average Traded quantity (kgs)	23000	34000	45000
Average Spot Price	55	160	100
Projected Prices (After 3 Months)	60.5	176	110
Revenue For Spot Market	1,265,000.00	5,440,000.00	4,500,000.00

Revenue after 3 Months (without charges)	1,391,500.00	5,984,000.00	4,950,000.00
Charges on 3 months period			
WR Storage Charges	124,200.00	124,200.00	124,200.00
Operation Charges	13,915.00	59,840.00	49,500.00
Bank Charges	73,053.75	314,160.00	259,875.00
Loan Value (70%)	885,500.00	3,808,000.00	3,150,000.00
Total Charges	211,168.75	498,200.00	433,575.00
Revenue at 3 Months (after charges)	1,180,331.25	5,485,800.00	4,516,425.00
Diff. Between Spot Revenue and WRS Market Revenue	(84,668.75)	45,800.00	16,425.00

Source: AICC 2017

As can be seen above, participants can only make enough profit if price increase by over 30% over a 90-day period. The past 5 years made it imprudent on the part of farmers to deposit and borrow from Banks as compared to spot trading at a lower price. The kingmaker is the interest charged by Banks (besides other charges). The assumption that Banks IN MALAWI will reduce the rate charged on borrowed amount simply because of the presence of collateral is unpremiered. In addition, the average waiting period has been 4 to 5 months which attract increased charges.

5.0. Bibliography

ACE (undated) Bridging funding for the Agricultural Commodity Exchange for Africa Trust Quarterly Progress report.

ACE (2012) ACE Overview: A Holistic Approach to Agricultural Marketing.

ACE (2012) Warehouse Receipt System in Malawi: A strategy - A solution

African Development Bank (2017) Agricultural Market Access Sub-Strategy for Africa: Commodity Exchanges, Warehouse Receipt Systems, and New Standards

Agricultural Commodity Exchange for Africa (2016) ACE Rural Strategy 2020.
AFD, CTA and IFAD (2015) Study on Appropriate Warehousing and Collateral Management Systems in Sub-Saharan Africa. Key Findings.

AICC (2017) Consumer Preference of Oilseeds Products in Malawi (2017)

AICC (2018) Farmers' Attitudes Towards Warehouse Receipt System in Malawi.

AICC (2017) Oilseeds Microprocessors' Profitability Analysis for Malawi

AICC (2017) Geographical Distribution of Rice Profits in Malawi

AICC (2017) *The Future of Grain Markets in Malawi: A Position Paper on The Future of Grain Markets in Malawi Developed During a side event at the 14th National Agricultural Fair.*

Amani, S., M. (2016) Building and Assessing the Capacity of Farmers' Organizations: The Case of the United Nations World Food Programme's Purchase for Progress. A Dissertation Presented in Partial Fulfilment of the Requirements for the Degree Doctor of Philosophy. Arizona State University.

Auction Holdings Commodity Exchange Reports. Various Issues

Dentoni, D. and Dries, L. (2015) Private sector investments to create market-supporting institutions: The case of Malawian Agricultural Commodity Exchange. Working Paper No. 2015/08. Maastricht School of Management.

Edelman, B., Lee, L. H. and Mabiso, A. (2015) Strengthening Storage, Credit, and Food Security Linkages: The Role and Potential Impact of Warehouse Receipt Systems in Malawi. IFPRI Malawi Strategy Support Program. WORKING PAPER 12.

FAO (2015) Designing Warehouse Receipt Legislation: Regulatory Options and Recent Trends.

- Gondwe, A. and Baulch, B. (2017) The Case for Structured Markets in Malawi. IFPRI Malawi Strategy Support Program. Policy Note 29.
- Hernandez (2012) The Agricultural Commodity Exchange for Africa (ACE). Mapping the Progress of Structured Trade Systems in Malawi.
- Ivanovic, D. and Saint-Geours, J. (2017) Warehouse Receipt System Reform Initiatives in Africa. Lessons and Experiences from the World Bank Group.
- Kumar, P. et al. (2013) Assessment of Marketed and Marketable Surplus of Food grain Crops in Karnataka.
- Mtanda, A. M. (2015) Farmers' Attitude Towards Warehouse Receipt System in Newala District. A Dissertation Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Arts in Rural Development of Sokoine University of Agriculture, Morogoro, Tanzania.
- Nordier, A. (2013) The Role of a warehouse receipt system: A case study of the Malawian Agricultural Commodity Exchange. A thesis submitted in partial fulfillment of the requirements for the MSc Degree in Agricultural Economics, University of Pretoria, South Africa.
- Onumah. G. and Coulter, J (2002) The Role of Warehouse Receipt Systems in Enhanced Commodity marketing and rural livelihoods in Africa. *Food Policy* 27 319–337. Available at <http://www.elsevier.com/locate/foodpol>.
- 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).
- Rashid, S. (2015) Commodity Exchanges and Market Development: What Have we Learned?: 29th International Conference of Agricultural Economists (ACAE). 8th-14th August, 2015, Milan, Italy.
- Towo, N.N. and Kimaro, P.J. (2014) WAREHOUSE RECEIPT SYSTEM: A SOLUTION TOWARDS SMALLHOLDER FARMERS' FINANCIAL CONSTRAINTS? *International Journal of Economics, Commerce and Management*, Vol. 2 (7), 1-20.
- WFP (2016) Purchase for Progress (P4P) Malawi. Quick Facts.
- Van der Vyver, A. and Nordier, A. (2013) The Role of a Warehouse Receipt System in an Agricultural Commodity Exchange. A Case Study of the Malawian Agricultural Commodity Exchange. A paper presented at the 4th International Conference of the African Association of Agricultural Economists (ICAAAE), September 22-25, 2013, Hammamet, Tunisia.