



TANZANIA MARKETS PAN

Policies that work 4 markets

ASSESSMENT OF ADHERENCE TO RECOMMENDED WEIGHTS AND MEASURES IN GRAIN VALUE CHAIN AND IMPLICATION ON TRANSACTION COSTS



Background

The majority of Tanzania's population lives in rural areas and the agricultural sector employs more than 80% of the population. Agriculture is the main economic activity, accounting for 24.6 per cent of GDP and 26 per cent of foreign exchange earnings. In view of its importance to the country's economy, the trend in Tanzania's agricultural sector has been of concern. During the period 2000-2012, agriculture realised a modest average growth rate of 4.4%, far below the National Strategy for Growth and Reduction of Poverty (NSGRP I) target of 10% by 2010¹. This trend in the growth of the agricultural sector is significant. Moreover it implies deepening poverty for the majority of the rural population. Hence, poverty reduction and development efforts must target the rural economy and population, with a focus on productivity growth of main staple crops.

of the level of utilization of standards, weights and measures and their implication on transaction costs in the overall market system of the cereal value chain.



The Study

This study focuses on standards, weight and measures in the marketing of staple crops, specifically on two important staples namely maize and rice.

Two districts were covered in the study, one to represent a main maize growing area and the other a rice growing area, Kongwa district in Dodoma Region and Mbarali district in Mbeya Region respectively.

The agricultural value chain is complex and market dynamics play a major role in providing incentives or disincentives to smallholder farmers in the production process. Yet little is known about farmers' and traders' practices in relation to standards, weight and measures and the implication of their practices on value chain transaction costs². The question still remains about the extent of adherence to recommended standards, weights and measures.

Therefore, Rural Livelihood Development Company (RLDC) commissioned a study to look at existing practices related to standards, weights and measures with a view of engendering the understanding of what is happening and thereafter propose interventions to correct and improve cereal markets' efficiencies in Tanzania. The study focuses on undertaking an assessment



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1. The NSGRP is also known by its Kiswahili name MKUKUTA (Mkakati wa Kukuza Uchumi na Kupunguza Umaskini) while the Zanzibar Growth and Reduction of Poverty (ZGRP) is known as MKUZA (Mkakati wa Kukuza Uchumi na Kupunguza Umaskini) Zanzibar.
2. Value chain is the full range of activities involved in getting a product or service from production, through the different phases to the hand of final consumer. Transaction costs relate to the non-price costs of making a commercial exchange.

Used data collection methodologies:

- *In-depth interviews with a number of officials representing key government institutions such as TBS, WMA, Tanzanian National Road Agency (TANROADS), MIT as well as district and market officials in the visited districts,*
- *Structured interview using a questionnaire with 3 previously determined categories of value chain actors (grain farmers, grain traders and grain transporters): in total 100 small traders, 100 grain farmers and 61 transporters were interviewed.*
- *Rapid testing of weights, measures and standards on a sample of grain traders in the visited markets, in order to obtain evidence on empirical measurements and be able to compare with official standards: a total of 47 weight measurements and 43 moisture measurements were taken for experimental tests of weights and quality standards.*

Moreover, secondary data was used to complement the primary data collected in the survey, in-depth interviews and field tests. Important sources of secondary data were the Ministry of Agriculture Food Security and Cooperatives (MAFC), Weight and Measure Agency (WMA) and Ministry of Industry and Trade (MIT).

Existing Policy and Legislative Regulations

- The *National Trade Policy of 2003* and the *Agricultural Policy of 2008* whose thrust is to facilitate strategic marketing of agricultural products to ensure fair returns to all stakeholders based on competitive, efficient and equitable marketing system.
- The *Standard Act No 2 of 2009* provides for promotion of standardization through publication of Standards under the authority of the Executive Council of TBS. The standards are prepared in English and not always addressing the current requirements in regional and international markets, because of not being updated.
- *Cereals and Other Produce Act 2009* establishes various standards to regulate marketing of agricultural produces in the country, as well as setting up the Cereals and Other Produce Board.

- The manner in which agricultural goods are sold in Tanzania is laid out in the *Weights and Measures Act No 20 of 1982* and subsequent amendments including Cap No 340 of 2002. According to existing legislation, specific goods must be sold by net weight or measure.

Existence of laws and regulations if not enforced will never develop Tanzanian Agricultural Markets

Regulating government institutions involved

- *Tanzania Bureau of Standards (TBS):* The main function of TBS is formulation, promotion and implementation of National Standards in the field of agriculture, food products and chemicals, textiles, leather, environment, engineering and service industry. Therefore, TBS is a key stakeholder and it is directly involved in ensuring that standardization and quality of food grains throughout the market value chains are enforced to ensure a fair and efficient marketing system.
- *Weight and Measure Agency (WMA):* WMA is an executive agency responsible for fair trade transactions through certification of weights and measures. It endeavours to ensure optimum use of resources and fair trade transactions between investors, producers, traders and consumers with consumer protection emphasis.

Challenges faced by regulatory environment – a case study:

WMA has only 199 staff who are supposed to cover the head office, 24 regions and 134 district councils in the country in addition to large number of markets and other functional areas within their jurisdiction. Based on an assessment done in 2005, the actual staff requirement adds up to 750. Apart from staff, WMA is also faced with inadequate transport facilities, training, equipment and even office space.

Key findings from the study

An incentive mechanism such as a price *premium for different quality and standards* does not exist and hence farmers are not incentivised to adhere to laid-down quality and standard requirement. Farmers are not adequately compensated within the local markets to keep standards and quality of produce high.

Statutory organizations such as Weights and Measure agency (WMA), Tanzania Food and Drugs Authority (TFDA) and the Tanzania Bureau of Standards (TBS) which have regulatory oversight for weights, quality and measures are allocated inadequate resources (staff and funds) and generally lack capacity to deliver required services as prescribed in their respective Acts.

Since crop cess, market fees and transport charges are levied on a 'per-bag' basis rather than on weight basis, this creates incentives for traders and intermediaries to overload the packing beyond standard weights.

A self-regulatory mechanism for the use of standards, weights and measures does not exist. The farmers associations and groups are not well provided with capacity to regulate the market in their favour. For example, lack of guidelines, regulations and standards in Kiswahili at farmers' level is a hindrance to gain fair competition in the markets.

Infrastructure and distance limit the ability of smallholder farmers to participate directly in markets in urban areas and at national level. Farmers are not able to carry the high transportation costs, hence have to depend on traders or transporters.

Due to limited market information and lack of knowledge on standards for weights and measures, farmers find themselves in a weak negotiating position. Traders take advantage of this situation and pay low prices for densely packed volumes of produce. Not using accurate measuring instruments alone creates significant margin of loss to farmers estimated to be over 40% of annual sales.

Value chain actor's awareness of laws and regulations pertaining to standards, weights and measures Among the small traders interviewed, about 19% were aware about them. On the side of farmers, about 11% of the respondents had awareness about them.



Rapid assessment



The empirical study to compare measurements of products available in the markets with existing regulations demonstrated variations between actual weights, measures and quality and official standards for weights and measures.

First, **actual weights were compared with weights indicated on the package.** The difference between actual weight obtained in the rapid test results and the weight indicated on the labels were on average 8%, meaning that the sacks were 8% heavier than was indicated.

Second, **weights obtained using market scale were compared to standards** as established by weights and measures Act of 1982. Results show that average weight obtained from this exercise was 48% different from the standard recommended weight (maximum weight of 75 Kg and 100 Kg for paddy and rice respectively). This clearly shows that both farmers and traders are not following the standard recommended packaging weight in cereal marketing.

In general, the rapid testing shows that more farmers use volume measurement in selling their paddy compared to weight (Mbarali). More maize farmers reported using weight measurement when selling their grain produce to traders (Kongwa). However, all reported that there are no weighing scales in their communities, thus raising the issue of how they were able to weigh their produce. It means all weighing is done using weighing scales brought in by traders, depending on their goodwill and honesty.

Quality of grades

The question whether the market compensates for grade differences for produce sold in the market was also reviewed. For maize, price difference between grade I and grade II maize were negligible, almost non-existent: at the time of the study (August 2011) grade I is sold at Tsh 40,681/= per bag (90 kg), while grade II is sold at Tsh 40,638/=. However, for rice there was a 7.7% price differences between grade I and grade II. The existence of price premium for higher grade motivates farmers to improve quality (and quantity?) of cereal produce.



Implications for non-compliance with standard weights and measures

<p>Implications to LGA (through cess collection)</p>	<ul style="list-style-type: none"> The actual market fees collected for marketed cereals are based on numbers of sacks, being less than the potential revenue to local authorities, had weight been used instead. (1 actual bag corresponds with 1.8 to 2.5 official bags)
<p>Implications to traders</p>	<ul style="list-style-type: none"> Traders see the transport costs reduced by negotiating transportation charges with transporters on the basis of numbers of sacks instead of weights. Traders see the amount of crop cess payable to village administrations or local authorities reduced as payment is done on the basis of sacks instead of weights.
<p>Implications to farmers</p>	<ul style="list-style-type: none"> Farmers lose at the expense of traders because of the practice of not using standard weight and measures.
	<p>Use of volume instead of weight measure reduce smallholder farmers margin by 43% for maize and 48% for paddy.</p>



Conclusions

- There is low adherence to official standards, weight and measures in cereal marketing in Tanzania. The main drivers for this are:
 - (1) lack of awareness of the existing standards and
 - (2) lack of incentives such as price premium for higher quality/grades.
- The existing statutory institutions, particularly WMA, TBS and TFDA, lack resources (both budgetary and human) to adequately execute their regulatory mandate of enforcing adherence to official standards, weights and measure. This means that even though statutes exist to regulate the agricultural value chain, enforcement is inadequate because of the existing constraints and limitations.
- Cess, market fees and transport charges, being levied on a 'per-bag' basis rather than a 'per-weight' basis, create incentives for traders and intermediaries to overload the packaging beyond standards. This is a policy issue that the Prime Minister's Office, Regional Administration and Local Government (PMO-RALG) has to address. The district councils and villages should be capacitated to charge crops cess on standard measurement, thus per kilogram or ton.
- Self-regulatory mechanisms for the use of standards, weights and measure do not exist. Lack of guidelines, regulations and standards in Kiswahili means that farmers are not able to exert their rights due to lack of aware of the available legislative environment.
- Knowledge deficit on smallholder's side is a major constraint to reduce transaction cost and bargain for premium prices for cereal grains. Not using accurate measurements results in financial losses on farmer's side of approximately 40% of the annual sales revenue.
- Lack of market infrastructure within close proximity of small scale farmers exacerbates marketing transaction costs facing the farmers. This forces farmers to sell their produce under circumstances which are characterized by inadequate market information on prices and market demand and hence results in inefficient transactions that disadvantage farmers.

Although Tanzania has a good number of national policies to guide implementation of standards, weights and measures, what emerges is a lack of keen follow-ups to ensure that what is stated in the Acts and Regulations is implemented.

Policies alone are not adequate to enforce and guarantee adherence. Next to the existence of laws and regulations, public education, knowledge, awareness and legal enforcement are equally important to effectively implement a fair and efficient trade and marketing system in the country.



Recommendations

- Increase funding and human resources to the statutory institutions that are charged with the regulatory responsibilities for standards, weight and measures in the cereal value chain – TBS, WMA and TFDA –, including expansion of their geographical presence and visibility as well as increase of staff and transport facilities.
- Facilitate the use of standardised and certified weighing equipment at market level, among others by providing farmers with weighing scales (through farmers groups or associations). Weighing scales can be used for different purposes: verification of correct use of volumes and packaging for sale (trade) as well as determination of the cess to be charged (tax collection). The use of weighing scales in villages should be charged a minimal fee for future replacement and maintenance. This can be managed through the Village Authority.
- Completion and enactment of the Legal Metrology Act should be a government priority.
- Set-up public education campaigns and awareness programmes to cover rural areas. Simple strategies, using posters and small banners at rural markets and agricultural collection centres will make a tremendous impact on public understanding of standards, weights and measures. Similarly, producing standards and regulations in Kiswahili language for wider reach to farmers, traders and other value chain actors at rural level cannot be neglected.
- Review the policy on crop cess charged by district councils so that the basis of charging levy is weights and not the numbers of bags. Simultaneously, PMO-RALG will have to create the facilitating environment for District Authorities to implement the new legislation.

A coherent collaboration between government and private sector actors is needed together with adequate resources to enforce compliance, especially in an economy where the level of education is still low. Public education, knowledge and awareness of all value chain actors and legal enforcement by regulatory institutions are very important factors to facilitate fair-trade and increase efficiency of the marketing system, benefiting all actors.

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