## BRIEFING NOTE SERIES: TOWARDS A THRIVING ECOOK MARKET IN TANZANIA



5/7: Quality Products: Electric Pressure Cookers in Tanzania



This briefing note addresses the topic of appliance quality, specifically in reference to the quality of electric pressure cookers (EPCs) in Tanzania. Appliances can be designed and manufactured to varying standards, which has implications for safety during use, functionality and efficacy to perform the task it is designed for, and the user experience. A standard can be used to determine the features or attributes which make the appliance an acceptable quality, and these can be used to dictate what is allowed to be imported into a country. Some countries adopt international standards while others write and adopt their own national standards. Along with the content of a standard, the methods and efficacy of enforcement of the standards is also a key factor which determines whether the appliances circulating in a country have the desired attributes to be able to be called 'good quality'.









### BACKGROUND TO STANDARDS

Standards are required to control the safety of a product and also the performance level. Often, appliances also have standards about how they should be dealt with at end of life – we do not go further into this side of standards in this note. Instead, we focus on safety and performance quality standards.

Safety standards for electric cooking appliances exist; there are international standards and countries may use the international standard or select their own. The challenge is that there is no international standard for performance quality for an electric cooking appliance, whether to assess minimum viable performance of the appliance, or comparative performance, where the appliance is assessed relative to others of the same type.

For EPCs, performance quality is about energy and time efficiency and ease of use. Some headway has been made; in 2020, the Global LEAP awards ran the first competition to assess well-designed EPCs (Global LEAP 2021). It involved defining tests and required features to determine the safety and performance quality of the appliances submitted for evaluation. These performance tests require further development and then processing into international or national standards, to be used by countries to control the performance quality of devices such as EPCs as the market grows. MECS is continuing this work as it is a key factor required to support the transition to eCooking, for all countries where it offers a viable and affordable cooking future.

In the rest of this briefing note we discuss the issue of quality EPCs in the Tanzanian context as well as the experiences TaTEDO and SESCOM have had thus far when importing EPCs into the country.

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## WHY IS QUALITY IMPORTANT?

Quality of any product, including the EPC, is very important because it affects the user experience, and has far-reaching impact on the success (or otherwise) of the sector. The quality contributes to establishing the reputation of the product on the market, and not only will a poor-quality product lead users to have a negative perception of that particular brand, but it can also influence how they feel towards the appliance in general. Quality EPCs have safety features, are durable and have high energy efficiency. When the EPC is of high quality, customers are satisfied and retain loyalty, so they continue to buy from the company repetitively even if the price is higher than the lower quality options on the market. Customers respond to key benefits including lower energy consumption and thus lower energy costs, saving time when cooking, and if the EPC is convenient to use.

TaTEDO understand that maintaining the quality of products contributes to long-term revenues for those in the market chain, as well as profitability, confidence of the distributors and a long-term trust among the customers. Poor quality EPCs are a burden to the customers because of the risks associated with the use and extra costs incurred when it requires replacement. These can distort the market and lead to decreasing sales volumes, higher investment required to promote the product with fewer returns, and in the end, the dissatisfied customers may look for other alternatives. Given how important a role energy efficient eCooking appliances can play in the future of clean cooking, a loss of confidence in the products would have significant negative consequences for progress in the sector.

# THE CURRENT SITUATION IN TANZANIA

It is still not clear whether there are consistent standards being used for EPCs which are coming into the Tanzanian market. It is believed that EPC brands on the market are being assessed against different standards depending on the source countries. In recent years when SESCOM started to import EPCs, an international standard reference was used by manufacturers. In the first batch of SESCOM EPCs imported in 2020, Standard Reference Number EN 12778:2002 was used by Intertek (agents of Tanzania Bureau of Standards (TBS) in China) to verify the quality of the EPCs. This is a European standard defining manufacturing, safety and functioning requirements for pressure cookers. During the second









batch imported in 2021, Standard Reference Number TZS 448-2-3-1995 was used. This is a Tanzanian standard about the safety of stationary cooking ranges, hobs, ovens and similar appliances.

Verification of the quality of the EPCs is always undertaken at the warehouse of the manufacturer before shipping to Tanzania. Since quality is a priority to SESCOM, upon testing of the appliance in Tanzania, the manufacturers have been asked to reinforce some of the parts to ensure the quality is maintained to meet what SESCOM see as an acceptable standard.

It is well known that some of the EPC brands in the market are not of good quality. Some are customized as per importers requirements, and they use different means to introduce them in the market. Laws, rules and regulation guiding the standards of different products in the market are enforced by the Government agencies such as TBS and Fair Competition Committee (FCC). These agencies have been working closely with different stakeholders in major markets like Kariakoo to identify the substandard electrical/electronic appliances, but this has to be extended to EPCs as well.

It has not been easy for customers to observe and identify low or bad quality EPCs at shop displays or even when it is in use.

#### IMPORTING TO TANZANIA

Less Container Load (LCL) or loose cargo and Full Container Load (FCL) are the two ways goods are shipped from China. The mode of shipping chosen depends on the volume of the cargo to be shipped, the financial capability of the importer and other logistics at the country of destination (for example, the availability of offloading cranes).

For the Less Container Load (LCL), cargo from different manufacturers is organised and consolidated in the warehouse of a freight forwarder. This mode is used when the importer does not have enough cargo to fill the container, hence they have to share the containers with other shipments and pay for the space used. Before consolidation, inspection of the cargo is

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done at the manufacturer warehouses to ensure the quality of what is to be shipped.

Full Container Load (FCL) shipment happens when the shipper has enough goods to fill the container exclusively and bears the cost of the entire container. SESCOM has been using this mode of shipping for its EPC shipments. In this mode, the inspection of the goods is also done at the manufacturer warehouse before shipping takes place.

### WHAT IS QUALITY?

The Tanzanian market has different brands of EPCs coming from different manufacturers. It has not been easy for customers to observe and identify low or bad quality EPCs at shop displays or even when it is in use. This is because of low awareness on the key features that determine the quality of the EPCs. TaTEDO has observed and discovered that commonly, customers rarely focus on the functional guality of the EPCs when making a purchase, rather they base their decision on the price, size, colour/outer look and brand name. TaTEDO advises customers to look at the common features which may be indications of bad quality of what they procure. Some of these include;

#### At shop displays:

- Un-insulated lid: the most important and obvious feature that indicates the quality of the EPC as it contributes into efficiency and safety of the pressure cooker. An insulated lid is a key feature in energy saving as it reduces the energy consumption, something very important for longboiling dishes.
- Labelling: in most cases EPCs which have no labels indicating specifications, manufacturing country, no user manuals or warranty tend to be of low quality (with less insulation and thermal and electrical safety).

#### When in use:

- If it gets very hot in the outer body, it means it is not well insulated.
- If it leaks from the lid when the pressure cooker is closed (especially when it is new), it means the seal is not adequate or placed correctly.
- If the EPC is not getting to high enough pressure when cooking and the pressure relief valve is not floating (even when you have followed all the instructions i.e., putting enough liquid, don't overfill the pressure cooker) it indicates poor functionality.







- If it lacks the safety features, such as:
  - Expanding rubber gaskets that prevent unlocking or removing the lid when contents are under pressure
  - Lid lock to prevent the lid from being opened while contents are under pressure
  - Pressure regulators to ensure the pressure doesn't get too high
  - Temperature probes and fuses to protect against excessive temperature
- Durability;
  - It is difficult to know the durability of the EPC by looking at the outer housing, but it should be stable when using dishes which need frequent stirring or during cleaning.
  - If the outer body gets discoloured when the EPC is exposed to heat and moisture after some few months of use, the outer body looks ugly and unpleasant.
  - If the EPC starts short-circuiting or overheating at the bottom and the power supply cord is hot there is a fault in the electrical circuits. When using an EPC the user should always check the temperature of the power cord and the device.

#### IN PURSUIT OF A STANDARD

This section describes the steps that are required to pursue a quality standard in Tanzania. Preparing standards is a multi-stage process, and it is difficult to know how long that process might take after it is initiated by a particular Ministry. Based on the experience of developing and establishing other standards, the following is expected to be the case.

- 1. The Ministry of Trade should be in consultation with TBS to address the requirements.
- Terms of reference should be prepared by the Ministry of Trade in collaboration with TBS with the aim of identifying standards including the ISO and others to develop appropriate standards for Tanzania. The report on the findings should be prepared.
- The Ministry of Trade and TBS forms a 'mirror committee' which comprises experts from different sectors. It is called a 'mirror committee' because it is responsible for developing the national position on a particular standard and for presenting that national position back to the relevant international Technical Committee.
- Government Ministries such as the Ministry of Energy, Trade, and private stakeholders such as TaTEDO and other actors who will uses those standards will be allowed to critically read the

report and give their opinions based on their expert experiences and ISO standards. At this stage experts may well be invited to present the details of the technical operation and use of EPCs.

- 5. The first draft on the standards is developed by TBS and the mirror committee,
- 6. Stakeholder workshops are organised for validation of the standards.
- 7. After the validation of the standards, normal procedures to channel the validated standards is followed under the guidance of the Ministry to make the standards public and official.

## It has not been easy for customers to observe and identify low or bad quality EPCs at shop displays or even when it is in use.

## RECOMMENDATIONS FOR THE STANDARD

The same features and tests that the Global LEAP awards used to assess EPCs should be considered when developing and enforcing the standards in Tanzania:

- Designs of the EPCs, to protect the exposed electronics and control panel from liquids from inner pots/ when in use.
- External and internal workmanship; the quality and maintainability of external and interior materials and surfaces, including the ability to be cleaned and maintained.
- Circuitry; all the electrical connections in the EPCs should be well insulated, and power supply cords should have required operating current capacity.
- External temperatures; should be bearable during operations.
- Safety mechanisms; such as thermal fuses for temperature and automatic pressure control mechanisms when required level reached

#### REFERENCES

Global LEAP. 2021. "Global LEAP Awards: 2020 Buyer's Guide for Electric Pressure Cookers." https://globalleapawards.org.

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