



**PREVENT**  
Waste Alliance

## Pilot to assess inspection methods at entry points and test practicability

<b>Project period:</b>	01.2021 - 10.2022
<b>Project partners:</b>	<a href="#">UNITAR SCYCLE</a> <a href="#">World Resources Forum</a> <a href="#">Vice Presidents Office Tanzania</a> <a href="#">National Environment Management Council (NEMC) - Tanzania</a> <a href="#">East African Communications Organisation (EACO)</a>
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<b>More details:</b>	<a href="https://prevent-waste.net/en/tanzania/">https://prevent-waste.net/en/tanzania/</a>

### Organization and set up

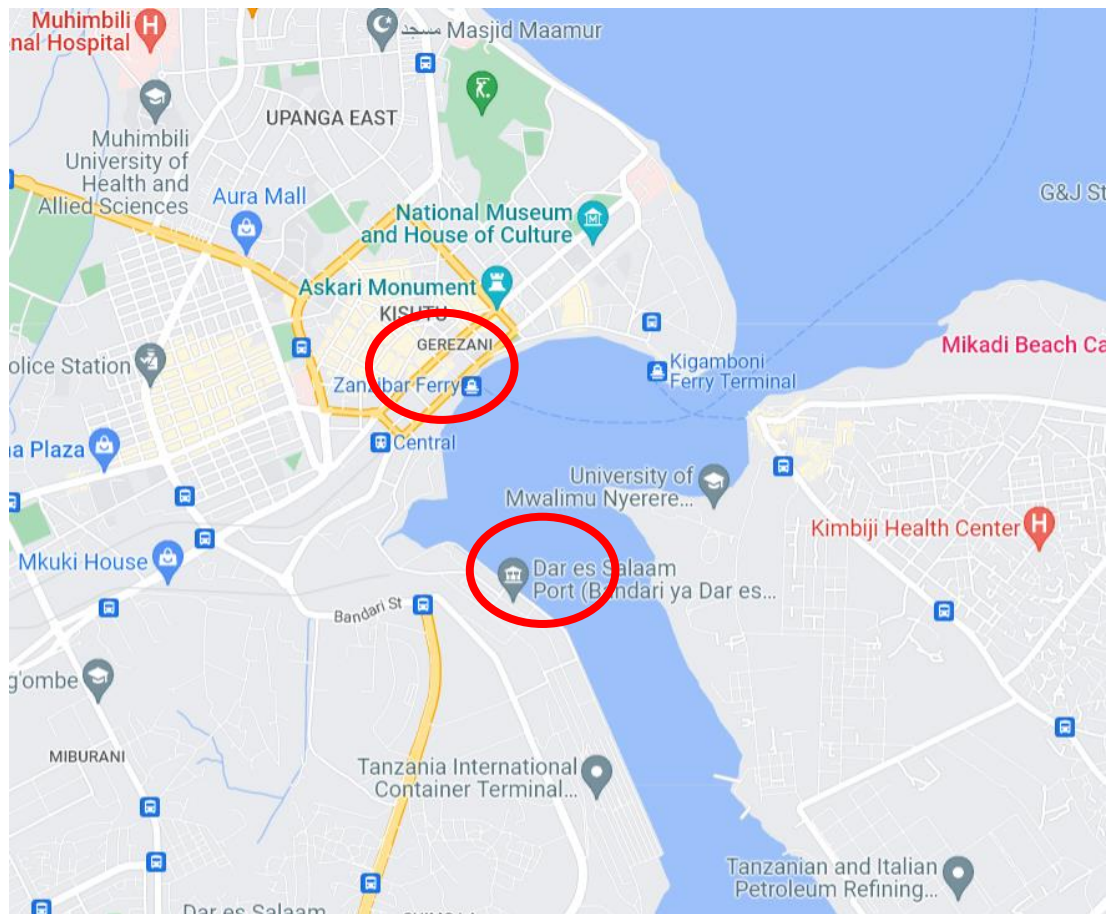
The pilot was organized by the National Environment Management Council (NEMC) in partnership with the competent authorities for inspections and port administration, i.e. the Tanzanian Revenue Authority (TRA), the Ports Authority (TPA), the Bureau of Standards (TBS), and the Vice President's Office (VPO).

### Implementation

The pilot took place from the 21<sup>st</sup> of September 2022 until the 12<sup>th</sup> of October 2022. Many preparatory activities preceded the pilot (WP1-3). The pilot was carried out mainly within the Dar es Salaam port specifically at the loose cargo port, at the Inland Container Depots (ICDs) and the passenger port of Dar es Salaam. Specific inspection points included the following areas:

- 1) The baggage room at Zanzibar ferry port
- 2) Azam Sealink Inland Container Depot
- 3) Malindi Shed
- 4) Other ICDs upon notification (Kurasini ICD & Tanzania International Container Terminal Services)

Figure 1: Importation areas where the pilot was conducted



Source: NEMC

NEMC defined the roles and responsibilities of each involved authority during the pilot beyond their regular responsibilities and organized a task force that worked on the pilot. No external personnel was hired, the inspection team was comprised of officers from TRA, TBS, TPA, NEMC and VPO. During the implementation of the pilot a total of 20 people were involved in the inspection, detection and control of e-waste and UEEE imports.

Inspectors used the check list developed during the project (see the Deliverable “Checklist on Differentiation of UEEE and E-waste”) while conducting the inspections. The check list provides a guideline for inspections following the principles of the Basel Convention Technical Guidelines and incorporating the suggestions and interpretations of the Vice President Office in Tanzania.

During the inspections, however, inspectors did not find the check list handy enough to use it during each inspection and functionality checks, therefore inspectors mainly applied the learning from the workshops and trainings and applied the checklist criteria by memory while being in the field.

The pilot task force conducted inspections and checks on cargos, containers or loose goods, in parts randomly, or upon information from TPA that shipments contained UEEE. As an additional task, inspectors would keep track of the date of inspection, exporting country and amount, weight and type of the goods as part of the statistical data collection.

Inspectors checked if the imported goods were properly packed, as adequate packaging and storage is an important condition to meet when importing or exporting electric and electronic items (see Figure 2 for an example of the packaging of imported used fridges). In addition, the weight of each item was checked and noted (see Figure 3-left), keeping records of the weight of each item together with the number of units enables to assess the average weight of the imported goods and to characterize the imports. Further on, the inspectors collected information about the types of tests conducted and their result. Figure 3 shows an example of the inspections conducted at Azam Sealink ICD.

Figure 2 Example of the packaging of imported fridges



Figure 3 Weighting if inspected goods (left) and Inspected cargo at Azam Sealink ICD (right)



Figure 4 Screen regarded as e-waste after visual inspection (left), identification of refrigerant (right)



The inspection started with visual inspection which in some cases were sufficient to discriminate between e-waste and UEEE according to the check list and BCG, for example if an item was visibly damaged so that it must be regarded as e-waste (see Figure 4-left). The visual inspection was useful also to identify missing components that are essential for the proper functioning of the items (such as missing power cables, fridge doors etc.). Furthermore, the visual inspection enabled to identify types of refrigerant in used fridges to assess whether they are allowed to enter the country

according to the Environmental Management (Control of Ozone Depleting Substances and Hydrofluorocarbons) Regulations, 2022 (see Figure 4 right).

Ultimately, if items had passed the visual inspection, some of them were subject to functionality checks to assess whether the appliance is to be considered e-waste or UEEE. The functionality tests consisted mainly of a simple switch on and off of the item and depending on the type of item, other functionalities were tested (see Figure 5).

Figure 5 Functionality test of a microwave



## Results

During the pilot exercise, a total of 6091 units, were found to be imported in Tanzania, of which 392 were inspected and tested by the inspectors involved in the pilot.

Out of the total 6091 units, around 5000 were found to be shipped from Germany. In fact, the inspection team was notified by TRA on a shipment of 4 containers within one day from the port of Hamburg. Items were declared as used household items and for some, documentation proving their functionality was provided. Only 4 % (16 units) of the total 5000 units found in the container were tested by inspectors to determine whether the equipment was e-waste or UEEE products. After the tests, it was concluded that all 16 items were to be considered UEEE.

15 % of all items found in inspected shipments originated from Zanzibar (936), more than one third of these items have been inspected and tested by the inspectors during the pilot exercise (352). Thus, the inspected items originating from Zanzibar accounted for 90% of all items inspected and tested during the pilot exercise (392 units).

The vast majority of the goods have been declared as used household items, personal effects and spare parts. In fact, many used items are being shipped from Zanzibar to Tanzania mainland by individuals that declare them as personal effects.

Table 1 presents a summary of the amount of the items found during the pilot exercise and information on how the container/cargo was declared (declaration are in fact not referring to the single items but rather to the shipment).

Table 1 Items found and tested during the inspections

Origin country	Units found	Percentage of total units found	Units tested	Percentage of total units test
Hamburg, Germany (Used household items)	5000	82%	16	4%
Sohar, Oman (Personal effects)	10	0.2%	5	1%
UK (Personal effects)	145	2%	18	5%
Zanzibar	936	15%	353	90%
Business for spare parts	19	0.3%	19	5%
Personal Effects	883	14%	311	79%
Used goods	28	0.5%	17	4%
Non specified	6	0.1%	6	2%
<b>Total</b>	<b>6091</b>		<b>392</b>	

During the inspections a large variety of products were found. Figure 6 provides an overview of all type of items reported by the inspectors.

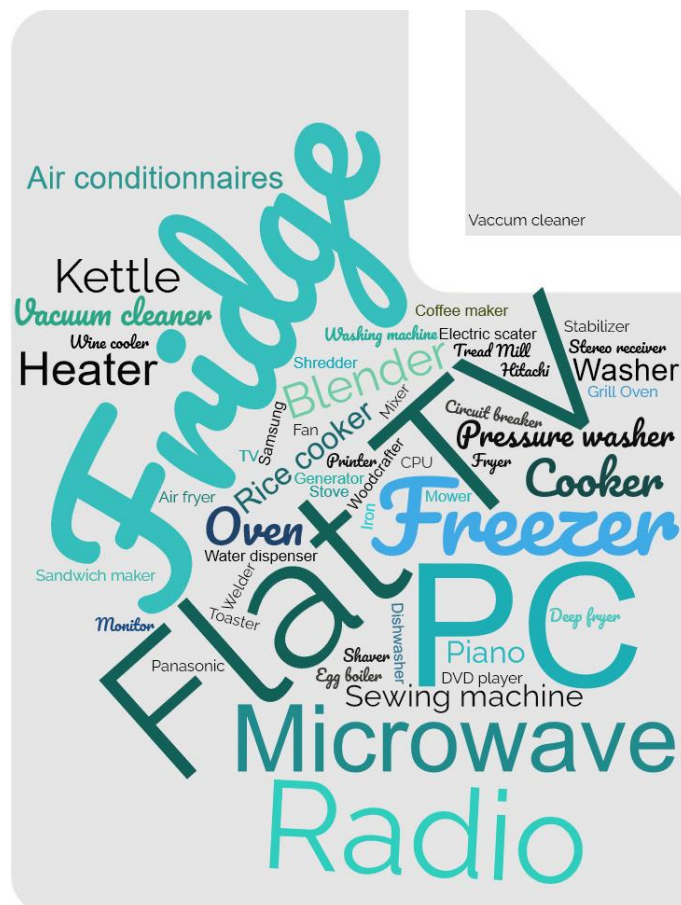
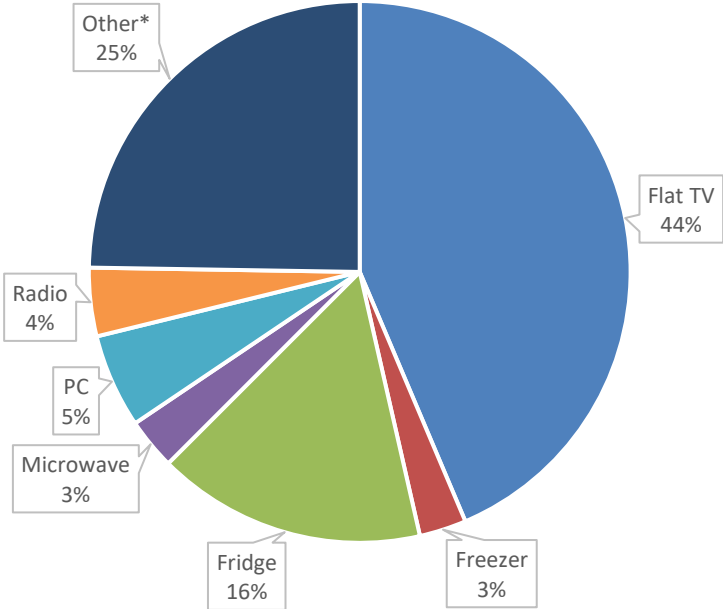


Figure 6 Type of products found during the pilot exercise

The majority of the 392 items inspected and tested were flat TVs (44%) mainly originating from Zanzibar, followed by fridges (16%), personal computers (6%), radios (4%) and microwaves (3%). Another 25 % of the products tested (“Other” in the below graph) comprises a large variety of devices such as dispensers, sewing machines, egg boilers, mixers etc. **Error! Reference source not found.** illustrates the situation.



\* Other variety of products include blenders, heaters, oven, cookers, toasters, pianos, mixers, freezers, vacuum cleaners, washing machines, kettles, stoves etc.

Figure 7 Share of products inspected and tested by type

Visual inspections revealed that 303 items (77%) of the inspected and tested items (392) were not properly packaged, and 292 (74%) did not have a functionality certificate. 52 items (13%) were missing essential parts, 34 (9%) were visibly damaged and 17 (4%) were considered to have outdated technologies that may not meet the local market. Thus, according to the Basel Convention Technical Guidelines and the checklist developed during the project, those items were considered e-waste.

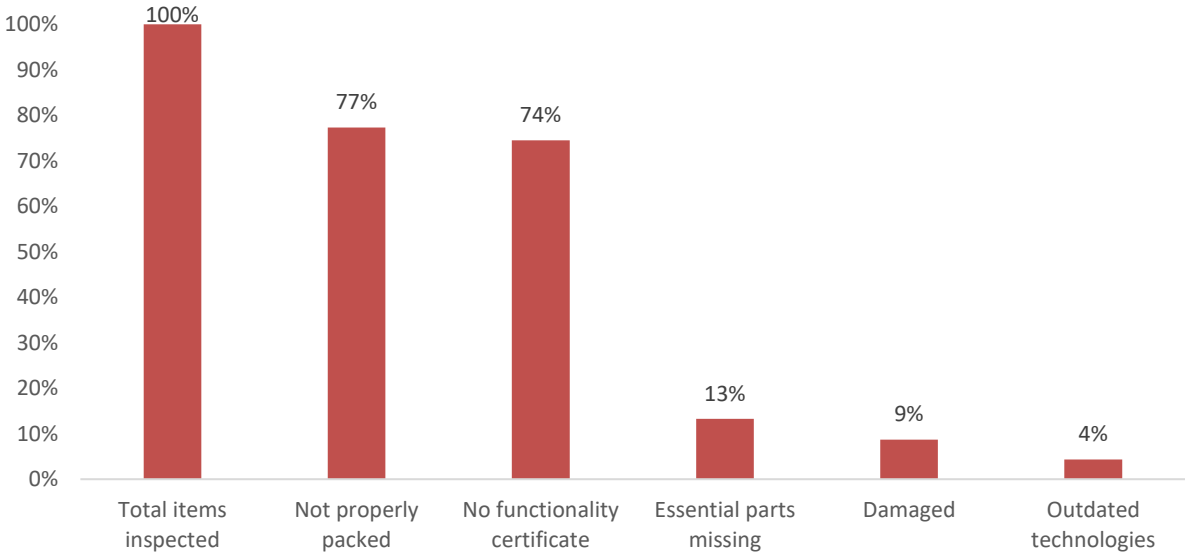


Figure 8 Results of the visual inspection (in percentage of the total items inspected: 392)

The functionality checks were conducted on all inspected products that passed the visual inspection (202 out of the 392 inspected products). Most of the items were switched on for few minutes to see whether the device started, and to test some basic functionalities.

It is important to highlight that these results are limited to the small sample size achieved in the pilot test, and the result therefore cannot be considered representative of all the imports into Tanzania occurring at all importation points.

## Challenges

During the execution of the pilot, several challenges have been encountered such as:

- 1) No access to electricity at some importation points. To overcome this challenge, the selected items had to be transported to locations where electricity was available.
- 2) The weight scale was missing in some areas where the items were tested, therefore it was not possible to collect information about the weight of inspected/tested devices.
- 3) Lack of adequate documentation and declarations proving the functionality of the UEEE that would have facilitated the work of inspectors.
- 4) Importers demonstrated concerns about the fate of their goods once they had been selected to perform functionality tests.

Foreseen challenges after the completion of the project:

- 1) Lack of adequate resources and human capacity may represent an obstacle in continuing carrying out inspections, this will be addressed upon the adoption of the National Guidelines.
- 2) The lack of recycling facilities in the country may represent challenges in disposing off the products regarded as e-waste during the inspections. However, collaborations with local e-waste collectors or international e-waste treatment facilities can be established to ensure an environmental-sound disposal of e-waste.

## Evaluation and recommendations

During the trainings, it could be observed that inspectors and competent authorities were hesitant to approach the inspection and functionality testing because it was perceived something complicated to do. The first success of the pilot phase therefore is that it actually happened and lowered the bar for future work. Despite the short duration of the pilot exercise, it enabled the project partners and the local authorities to gather relevant information on the main importation routes, quantities, types and functionality of UEEE imports into Tanzania that provide the basis for drafting the National Guidelines on Importation of UEEE.

In addition, the pilot phase contributed to build capacity and strengthen the cooperation among relevant institutions, competent authorities, and inspectors. In fact, inspectors confirmed that during the pilot they were able to build up necessary experience on transboundary movements and competences on the inspection and detection of UEEE and e-waste.

It is recommended that the Tanzanian Government propose the National Guidelines to the relevant authorities in order to get it approved. Consequently, the national authorities will be positioned to implement the inspection and control procedures on transboundary movements that have been shared during the ReduCE-waste project.

Further, it is recommended that the responsible institutions discuss how these inspections and controls on transboundary movements can become part of the daily routines of inspectors at the port and can be integrated in the yearly inspection plans. This would imply budgetary commitments to finance the inspectors' additional working time beyond their current routine inspections.

Also, inspectors and experts who have attended the workshops, training and conducted the pilot during the ReduCE-waste project are strongly encouraged to share their knowledge and experience with other colleagues in order to continue building national capacity on the subject. It would be helpful in this context to transform the checklist into a digital version to make it easier to handle so that it is actually used during the inspections. It could then guide inspectors through the process and enable a more systematic and broader inspection approach taking account of all waste criteria and not only two or three which inspectors still have in mind from the trainings.

Finally, it would be crucial to include Zanzibar into the inspections since most UEEE enters Tanzania via this part of the country. In the pilot, this UEEE was only inspected on mainland Tanzania when UEEE is transported there from Zanzibar entering via different channels along the coast where it is more difficult to control than at the importation point in the port of Zanzibar. The UEEE remaining in Zanzibar remains uncontrolled.



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## Imprint

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