

PLASTIC WASTE MANAGEMENT AND BUSINESS DEVELOPMENT MISSION





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Sustainable Inclusive Business-The Knowledge Centre was formed in 2015 through a fruitful partnership between the Kenya Private Sector Alliance and MVO Nederland. The center has worked towards raising awareness for businesses to have a positive impact on People, Planet and Profit through providing tools and knowledge for businesses in Kenya.



Figure 1: African Quote

Sustainable Inclusive Business means that companies take responsibility for the (full) impact of their business activities (on people, the environment and profit). Businesses can flourish (do well) and do business in a good way at the same time. If you are aiming for improving on Sustainable Inclusive Business aspect you are working towards a Future Proof Business.

SIB Kenya is here to facilitate the growth of your ambition.



Figure 2: Sustainable Inclusive Business Documentary

The Plastic Waste Management and Business Development Mission

Part of the mandate of the SIB Knowledge Centre is to provide a platform for businesses to share insights on how some of the challenges businesses face can be converted into viable business opportunities. This is why SIB Kenya organized the Plastic Waste Mission, a multi-stakeholder forum comprising a round table and tours to relevant entities and opportunity areas, to get a clear picture of the plastic waste situation in Nairobi, and delve into dialogue, to identify the challenges/opportunities in this specific type of waste.







Thank you!

Thank you for making this mission possible, by attending the roundtable and other subsequent meetings. We would also like to thank the Embassy of the Kingdom of the Netherlands for hosting, The Kenya Private Sector Alliance for support, MVO Nederland, Dutch PET Recycling, Mr. Green, Taka Taka Solutions and the Retailers Association of Kenya for knowledge and technical support.

The following is a report of the mission.

The Private Sector is connected to the issue of waste in different ways.

- A. **Responsibility** for their waste from within the company (office waste, to waste while producing, etc), throughout the value chain up till the end consumer.
- B. **Capability** of the private sector to change issues around waste (power of supply chain and choices, power of the payroll, power of volume, power of producing in a different way).
- C. **Opportunities** for private sector to decrease negative impact, waste and also come up with business solutions.







Recently the plastic bag ban became active and this came with a few laws and regulations that still need to be sharpened to make sure the implementation of the ban works well. Overnight plastic bags and wrapping are not allowed but the alternatives are not always much better and collection, recycling and disposal of old bags has not been taken into account. The regulations point at the producers as the responsible entity for their plastic waste. The private sector therefore has a responsibility to address waste management issues as a business case.

KEPSA/SIB Kenya in collaboration with MVO Nederland and the Embassy of the Kingdom of the Netherlands organized a plastic waste management Business Development Mission Roundtable whose objectives was to:

- Form coalition of the willing from the Plastic 'users' and Plastic 'recyclers' end.
- Share and exchange knowledge, issues, views and the need for solutions in the Kenyan context and identify relevant international laws and trends.
- Define possible solutions and assign key players to be part of implementation.
- Collectively address issues on policy level that KEPSA/SIB Kenya can take up with the Government (Kenyan government and possibly foreign Governments for capacity support).
- Discussion on Extended User/Producer Responsibility.
- Business linkage and match making.

The Roundtable

The roundtable was the genesis of the *Plastic Waste Management & Business development Mission* with a follow up of one-on-one meetings, backstage company visits and work sessions to discuss Policy, Collection, Distribution, Recycling and Re-using of waste. This round table was hosted by the Dutch Embassy and Moderated by SIB Kenya.



Figure 3: Mr. Suresh Patel (Standing), of the KEPSA Environment Sector Board sharing his insights.

A pool of expectations

The roundtable had a representation of the entire value chain. Waste collection entities, recyclers, government, representative associations, legal, users and manufacturers of plastic packaging, producers of other kinds of waste, international experts, development partners and many interested individuals.

This traction is an indication of the need for cross-cutting solutions. The expectations, displayed enthusiasm and the need for impact oriented plastic waste management solution, and the need for collaboration across the value chain to implement policy and solutions.

Sample questions/expectations:

- What can my (retail) business do to be part of the solution?
- What knowledge exists, that is useful and relevant for the change process?
- What is the role of women, agricutlture sector and fisheries industry in implementing the ban?
- How can I (hotel) be totally compliant? What can SIB Kenya do to support the change process?
- How can I involve my whole value chain in the process?
- How can the change process be inclusive of the BoP as end users and part of the value chain?

- Can a take back system work? And how?
- To change mindsets, can a curriculum be introduced in school?

Quotes

This is an opportunity for high partnership to meet the high-volume plastic situation. It is an opportunity to support SMEs and growth of local market - Suresh Patel, KEPSA

Plastic can be kept going responsibly by re-using and recycling. The multi-use ability of plastic should not be ignored - Akshay Shah, Sil Africa

For a solutions to work, certain requirements were laid on the table. These are business needs.

- Consolidation of efforts by the government
- Clean inputs for clean outputs(manufacturers) that are recyclable
- Technical committee of multistakeholders to oversee implementation
- Technical expertise and capacity (phd in waste management)
- Technology boost

Overview of the focal points

Policy

Existing policies are good, some however, need to be updated but most only require implementation. Enforcement being a challenge, businesses can self-regulate their waste management practices based on their business values.

The government also needs to consolidate effort for greater impact and for ease of dialogue and cooperation with the private sector. Compliance for instance is tasking, time consuming and expensive because of different categories of compliance laws with different specifications.

Collection

Waste (plastic) collection is not organized. Every business/household makes individual effort to get rid of their waste. Retailers in malls cannot dictate their own methods as they do not own the premises; taking care of their own waste means an extra cost for more space for waste management processes like sorting and storage.



Image Source a: The East Africa

There is need to have certainty of volumes for collectors, in order to meet cost margins upon sales. Decentralized solutions make volumes low. There lies an opportunity to create business models out of it for instance, an ease of collection system.

Distribution

Distribution of waste is expensive. Environmental friendly transport facilities are very costly, and decentralized collection worsens the situation. It was highlighted that PET bottles consume much space yet go for a very low price.

There is currently no segregation at source. Distributors incur the segregation costs themselves as no recycler will take 'dirty' waste. If collectors can be empowered and users are informed, this problem will be solved. There is need for a mindset shift.

Recyclers are not obliged to a solution as the industry is welcome too many solutions. China having banned the import of plastic, it is a great opportunity as most of the volume will now remain in Kenya.



To get high volumes, recyclers need to reach out to the grassroots level collectors, form associations and long term collaborations among different/scattered collectors.

For the sake of the health and safety of end users, the recycling products need to be technically analyzed. How safe is the recycling process and how safe is the end product?

It is important to also question the circularity of the product: Once it has reached the end-of-life, where does it go? Can it be re-used, recycled or up-cycled?

Extended User Responsibility

The EPR proposal (attached) is a good starting point for businesses but require collaborative efforts.

Other Highlights:

If a practical application is found, then plastic "waste" can be value and create impact. Think about it: 7 million households need proper sanitation, if plastic can be converted into latrines, it would take 20,000 tons of plastic. This is just one suggestion, there must be many more!

Call for solution: There is an oversupply of film waste, and a solution is needed!

Opportunities

- Awareness creation, to change people's mind-set and create intrinsic value for segregation.
- Create a business model that creates value for across the value chain
- A multi-stakeholder approach to the EPR
- Incentives, innovation to make collection an industry initiative

Recommendations

It was recommended that a technical committee, with a representative from every part of the value chain be tasked with presenting solutions and suggestions to parliament, to make amendment of the relevant laws easier and practical.

What is currently happening is a coalition between many other stakeholders minus the government. Regulations mostly come later as the legislation process is long, in this regard, businesses with disruptive solutions can start, and let the impact convince the government.

Every part of the value chain has something to say and a discussion to happen. It is therefore important to identify key heads on every level and having dialogue, before combining the whole value chain. This will give a clear picture and a clear need per value chain level.

There is need for integrated private sector approach to the EPR for it to work. A transparent approach by private sector initiatives on the same is required to avoid duplication of efforts or competition on impact.

Government to Government capacity building and consolidation of effort. Different government bodies make different regulations and procedures. There is need to consolidate effort for greater impact and to ease the compliance efforts, increase initiatives.

Did you know?

"Microwaving plastic makes it harder to recycle because it increases its melting point?"

The way forward: SIB Kenya would like to divide the chain into different groups to start working on specific issues in parts of chain, categorized as follows;

1. Knowledge & Regulations

Opportunity:

- Mapping, research, dialogue and policy, supporting progress with incentives and levies
- Linkage-SIB/MVO/NLGovernment Support: Dutch Trust Expert to Kenya for drafting value chain structure, providing technical expertise, learning from the Dutch private sector journey and government

Next steps:

- Identifying leading partners for each impact.
- Defining per impact real needs.

Current active players:

- KEPSA, Suresh Patel, Danish Embassy, County Government

2. Consumers Awareness

Create awareness and value in segregation

Opportunity:

- Consumers campaign
- Developing alternative collections system (segregation by consumers, incentives)

Next steps:

- Start by tagging consumer awareness along on projects that will now start (like no plastic bottles in hotels during meetings)

Current active players:

- Taka Taka Solutions, Mr Ibrahim Waste Collection, Carrefour

Partners in this space:

- KEPSA, County Government, Danish Embassy

3. Collection & Distribution

Opportunity

- Increasing volumes to warrant increase of recycling factories
- Combining effort of existing collectors, Automation of collection, converting strategic points/businesses into collection points

Next steps:

Define biggest challenges and needs in facts

- What does it take/ is needed for waste collecting entities to increase their volume/business times
- What can we do to support this?
- Define the value for plastic e.g. what do we need / lack to make sure that all of those are being collected and recycled?
- Non-valuable plastic what is the reason for no alternatives (yet)?
- What is the technical need to recycle them and increase value and be part of?
- Which businesses could start with take back scheme? And how?

Current active players:

- Taka Taka Solutions, Mr. Green, Retailers Association of Kenya, Carrefour, BoP innovation Centre.

4. Recyclers & Re-users

Opportunity:

- Recycling Factories development

Current active players:

- Dutch PET recycling, AES, Brush Ltd

Next steps:

- Mapping the recyclers
- Identify what's lacking in the recycling business, whats biggest need to grow them and map what we need to recycle plastic into.
- Investigation non-valuable and expensive to recycle [lastic
- Matching Dutch expertisse to kenyan needs and businesses
- create business linkages and support start-up factory

Impact area: PET Recycling, targeting Beverage/Bottling industry **Opportunity:** copying PETCO model (SA) for the industry in Kenya.

Next Steps: Status update of chance and conditions under which PETCO would be willing to take the lead to set-up same system in Kenya. Defining other opportunities to recycle PET in Kenya (set-up collection and factory)

Current Active Players: PETCO, KAM

5. Users of Plastic (retailers/hotels/manufacturers)

Impact Area: Reduce or not to use plastic bottles in hotels/hospitality industry

Opportunity: reducing costs by replacing water serving in glass or refillable, positive marketing **Next steps:** concept/campaign to communicate to Hotels, identify the frontrunners, document

Current active players: Serena Hotel

baseline use, document impact.

Impact Area 2: Start a collection scheme in the hospitality/retail industry Nairobi Reduce use and stimulate alternatives and set-up manageable take back scheme

 $\textbf{Opportunity:} \ \textbf{Collaboration, commitment and support for users, retailers} \ \textbf{\&} \ \textbf{recyclers}$

Next steps: start with linkage retailers to e.g. TakaTaka, develop plan

6. Glass Recycling

Impact area: Balance the colours of glass for input of recycling with the need of coloured glass for local bottling. Clean and brown glass is being recycled by Central Glass.

However most of the green glass is imported and only Tusker Malt is using a bit of the green glass for their bottles. As Heineken beers and various wines are not locally bottles.

Opportunity: Discuss local bottling and or reduce use of green glass or increase the use of green glass locally by changing bottles. Use a change of colour glass as Marketing 'Good side' of the product.



THE JOURNEY BEGINS. WELCOME ABOARD. LET'S CHANGE, WORK TOGETHER!

Potential partners identified 2. Recyclers & Re-users 1. Knowledge & Regulations Embassy of the Netherlands Impact area: PET Recycling, targeting **Danish Embassy** Beverage/Bottling industry **Embassy of Sweden Dutch PET Recycling MVO** Nederland Highlands Mineral Water Co Ltd KEPSA - KAM, NEMA PETCO South Africa PUM Coca-Cola Sabco **Dorion Associates** WEEE recycling centre KenInvest PUM NLBusinessHUb SIL Africa **Alternative Energy Solutions** 4. Collection & Distribution 3. Consumers Awareness KEPSA - Mr Green NEMA - Taka Taka Solutions - BOP Innovation Centre Ministry of Environment - WEEE recycling centre

- BIO Milk

Users of Plastic (retailers/hotels/manufacturers)

Impact Area: Reduce or not to use plastic bottles in hotels/hospitality industry

- Java House Africa
- Kenya Hoteliers Association
- Serena Hotel
- Southern Sun
- Highlands Mineral Water Co Ltd
- Coca-Cola Sabco
- Fairmont the Norfolk
- The Tribe
- Kempinski
- Royal Orchid
- Sankara
- The Concord

- **6.** Impact Area 2: Start a collection scheme in the hospitality/retail industry Nairobi
 - BoP Inc
 - Java House Africa
 - Taka Taka Solutions
 - Coca-Cola Sabco
 - Retailers Association of Kenya
 - Brookside Dairy Limited
 - Jumia
 - Green Globe Consultancy

1. TakaTaka Solutions





Figure 4: Sorting of waste at TakaTaka Solutions Nairobi

TakaTaka Solutions is a Nairobi-based waste collection and resource recycling business. Its mission is to provide affordable and environmentally friendly waste management services to all income areas.

Taka Taka solutions has an operation base in Kiambu county, which is the separation and distribution centre. Because most waste producers cannot separate their waste, Taka Taka Solutions have taken up this role for themselves. One separation station has about 12 bags, for different types of waste.

Taka Taka Solutions separates over 30 tons of waste every day. They also, recently started a compost centre as more than 50% of the waste is organic. Taka Taka Solutions distributes separated waste to recyclers and users. PET plastic moves out the fastest. They have a challenge selling TetraPack due to its complex recycling process. Acquiring land is one of their challenges, as/when they seek to expand.



For a recycling plant to set up in Kenya, they need to give 10, 000 tons of plastic every year. combine effort and make bigger impact.

need to give 10, 000 tons of plastic every year. This is possible if other small scale collectors agree to

2. Mr green

Mr. Green Africa trades recyclable waste while achieving a tangible social and environmental impact by integrating informal waste workers into their supply chain and therefore are their only fair and reliable trading partner. With their mobile application and back-end solution, Mr. Green have digitalized the entire supply chain to make processes more efficient and to enable measurement of the social impact they create through the recyclables bought and sold to clients.

3. Ngong Dumpsite

The dumpsite is geographically located in Kajiado County, Ngong Ward at Ngong Town. It is a public dumpsite managed by the County Government of Kajiado.

















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