



IC WORKS BALTIMORE CITY DEPARTMENT OF PUBLIC WORKS BALTIMORE



# DPW

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# Waste Management in Tanzania

- Background and Goals of Project
- Overview of Waste Management System in Mbeya, Tanzania
  - Collection
  - Recycling
  - Organics
- Strengths
- Weaknesses
- Recommendations
- Relevance for Maryland



# Volunteer Project

## Solid Waste Policy Reform in Tanzania

- The Feed the Future Tanzania Enabling Growth through Investment and Enterprise (ENGINE) Program in Tanzania is a four-year USAID-funded Feed the Future activity



- A Solid Waste Expert Volunteer was requested to assist the Local Government Authority (LGA) in evaluating existing policies, bylaws, and regulations related to solid waste and recycling



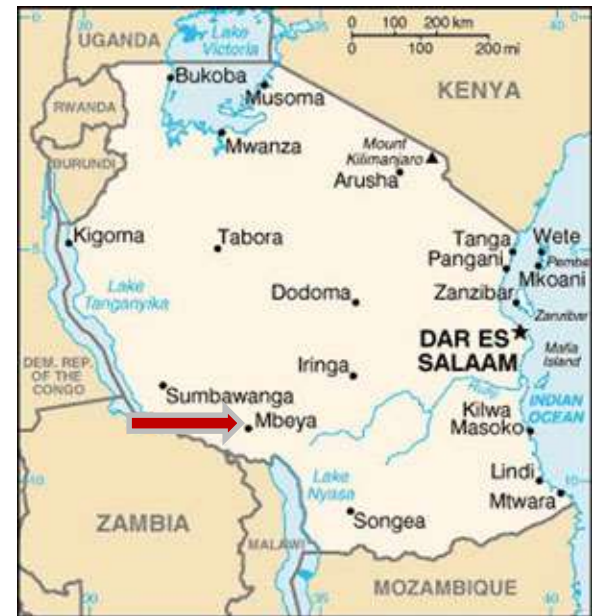
**Baltimore City Department of Public Works**



# Volunteer Project

## Solid Waste Policy Reform in Tanzania

- I spent November 1st-21st, 2017 in Mbeya analyzing the waste situation and forming recommendations
- Project Goals
  - Encourage the growth of small and medium enterprises (SMEs)
  - Increase diversion of materials from the landfill



# Methodology

- Document Review
  - Solid Waste Management and Cost Recovery Strategic Plan for Mbeya City 2013/14-2018/19"
  - "City Environmental Profile 2012"
  - Bylaws
- Interviews and Site Visits
  - Local Government
  - Community based organizations (CBOs)
  - Private Sector Institutions
- Two Public Private Dialogues (PPD)
  - Ward Level
  - City Level



# Mbeya

- Mbeya's current population is estimated to be around 462,335
- The solid waste generation is estimated to be between 314 and 326 tons per day



# Waste Collection

- Decentralized system, in which the city government delegated authority of waste collection and waste fee collection to the ward level
- Community groups provide curbside collection and transport the waste to a centrally-located dumpster for a city truck to collect and transport to landfill



# Recycling Businesses

Several businesses in the city are purchasing recyclable materials and processing them to be sold or made into new materials





# Recycling Businesses

Manual collection and sorting is the main method of operations



# Food Waste



The vast majority of waste generated is organic waste, which was calculated to be around 77% in 2013

# Rice Husk Disposal Challenge



# Making Fuel Briquettes from Rice Husks



# Assessment: Strengths

- **Mbeya's Decentralized System for Waste Collection**  
The Wards are responsible for collecting waste, cleaning the streets, and collecting the waste fee, which is to be accomplished through Community Based Organizations (CBOs)
- **Waste Processing Businesses**  
Buying and processing recyclable materials from CBOs and individual collectors
- **Strong Institutions**  
Could begin source separating recyclable and organic materials and be a resources to educate residents

# Assessment: Weaknesses

- Low Collection Rates of Waste and of Waste Fees
- CBOs Lack Equipment, Training, Contracts, Policies
- Recyclable and Organic Materials Going to Landfill
- Low Public Awareness of Waste Minimization and Management
- Stakeholders Not Involved with Bylaw Review



## Recommendations: Policy Improvements Needed

- 35 specific recommendations were given
- A few main policy recommendations included:
  - Extend Timeframe for Bylaw Review
  - Engage Stakeholders in Bylaw Review
  - Create Financial Policy and Contracts for CBOs
  - Encourage Waste Minimization
  - Create Incentives for Businesses in the Waste Sector
  - Develop Markets for Compost and Recyclable Materials

# Local Relevance: Shared Challenges and Solutions

- Stakeholder Outreach
  - Community Engagement
  - Involving Large Institutions
- Support for Small Businesses
  - Ability to secure loans
  - Policies that support businesses
  - Market for materials
- Infrastructure Needs
  - More robust infrastructure needed
- Financing
  - Waste Collection Fees
  - Funding and Maintaining Programs and Facilities



# Asante



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