

# MOLE CONFERENCE 2017

(Tue. Oct 3 2017)

## ESPA PRESENTATION





**ENHANCING PRIVATE SECTOR  
PARTICIPATION IN WASTE  
MANAGEMENT IN GHANA**

# PRESENTATION OUTLINE

- ❖ **Prevailing Circumstances**
- ❖ **Waste Chain**
- ❖ **Challenges**
- ❖ **Enhancing the Sector : Short, Medium-Term to Long-Term**
- ❖ **Achievement of the Private Sector**
- ❖ **Conclusion**

- ▶ **VISION** : To Provide Sustainable Environmental Sanitation for Ghana
- ▶ **MISSION** : “Complement and Support Government’s effort in resolving environmental challenges in communities in Ghana.”
- ▶ **AIM** : “To bring **Together** all environmental service providers under one umbrella and promote effective service delivery through contemporary best practices and coordinate the activities of members.”

# PREVAILING CIRCUMSTANCES

- ❖ **Fee and Performance -Based Contract**
- ❖ **Polluter Pays Principles**
- ❖ **Assemblies (the burden of sanitation taken off them)**
- ❖ **High Import Duties**
- ❖ **Private Sector to pay for VAT on Sanitation Services etc.**
- ❖ **Policy Direction is weak (Who is Driving the Sector**

# WASTE CHAIN

- ❖ **Point of Generation, Collection, Haulage, Treatment, Final Disposal site.**
- ❖ **Dustbins, Compaction Trucks (mostly 2<sup>nd</sup> hand)**
- ❖ **Gap** - Enrollment of service provision is low
- ❖ **Treatment and Recycling on a lower scale**
- ❖ **Landfills (90 kilometers turn around, 72km)**
- ❖ **Transfers station (very expensive, most contractors cannot afford)**

# CHALLENGES

- ▶ **Bad Public Attitude**
- ▶ **Weak Enforcement of bye-laws by the MMDA's**
- ▶ **Weak Institutional structures and limited technical capacity for waste management in the MMDAs**
- ▶ **Lack of adequate disposal facilities**
- ▶ **Inadequate equipment holding capacity for waste management service**
- ▶ **Lack of adequate national financing strategy**
- ▶ **Weak research support**
- ▶ **Poor forward planning in the midst of rapid urbanization**

# SOME ACHIEVEMENTS OF THE PRIVATE SECTOR:

## ▶ **INFRASTRUCTURE**



# ACCRA COMPOST & RECYCLING PLANT (ACARP)



# LAVENDER HILL- (BEFORE & AFTER)



# SOME ACHIEVEMENTS OF THE PRIVATE SECTOR:

## ▶ **INNOVATION**

# JEKORA VENTURES (FORTIFER PLANT)

**JVL FORTIFER COMPOST PLANT**  
BORTEYMAN

MANAGED BY  
**JEKORA VENTURES**  
WASTE MANAGEMENT PROFESSIONALS

IN PARTNERSHIP WITH  
**IWMI**  
International  
Water Management  
Institute

**MoFA ACCREDITED FERTILIZER PRODUCER**

FUNDED BY: **BILL & MELINDA GATES FOUNDATION**, **UKaid**, **Grand Challenges Canada/ Grand Challenges Canada**, **WORLD BANK GROUP**

SUPPORTED BY: **TREND**

**How Our FACILITY WORKS**

- Desludging**  
Organic material (muck) is digested from local fertilizer plants into a screening chamber where it passes through large grids for removal of coarse materials.
- Mixing**  
Screened sludge is pumped into a mixing chamber. This can mix up to 3 trucks of average size volume of waste at once.
- De-watering**  
Fresh sludge is obtained from the mixing tank into a drying bed. Sand drying beds are the oldest and most common type of drying bed used. They provide free evaporation as media on which batches of sludge are de-watered. Two physical mechanisms are involved in the drying process: filtration (especially over the first one to three days) and evaporation (the remaining days) for removing the remaining moisture. The drying process takes 7-21 days (average 18 days), depending on weather conditions.
- Leachate treatment**  
The leachate originating from the drying bed is sent to a sand filter for polishing before being released into the environment.
- Sorting**  
Organic acid (food) waste associated at source is collected into a sorting bin. It is usually 50% sorted, with further manual sorting required and the water is removed on the platform and dried for 2-3 days to remove moisture fraction.
- Composting**  
Food waste is mixed with the de-watered fresh sludge in a reactor of 2:1. The mixture is heated for composting afterwards. The process takes 2-3 months.
- Curing**  
Techniques and media are moved to the reactor for reduction to be completed. During this time, fermentation of the reactor material reduces and releases carbon dioxide.
- Sieving**  
The well-mixed media is used to remove larger particles and make it suitable for farm application.
- Enrichment, Pelletization & Bagging**  
This process involves mechanical compost or an enriched plus greater nutrient, sometimes the correct volume and bagged for appropriate transport and sale.
- Product Storage**  
The finished product is kept in sacks of 10kg, 20 kg and 50 kg for purchase and delivery.



# SOME ACHIEVEMENTS OF THE PRIVATE SECTOR:

## ▶ **CAPACITY**

# LANDFILLS MANAGEMENT



# SOME ACHIEVEMENTS OF THE PRIVATE SECTOR:

## ▶ **EXPERTISE**

# TRANSFER STATION & MEDICAL WASTE (ZOOMPAK)





# ENHANCING THE SANITATION SECTOR

- ▶ **Institutional Restructuring**
- ▶ **Promoting Integrated Waste Management**
- ▶ **Sustainable Financing Mechanism**
- ▶ **Affordable Service Delivery Fees**
- ▶ **Solid Waste Treatment & Disposal**
- ▶ **Continuous Public Education**
- ▶ **Provision of Infrastructure**

# CONCLUSION

- ❖ **Impacts of good sanitation (NHI budget will reduce significantly, Tourism promotion, higher productivity, creation of jobs , general wellbeing of citizenry, etc)**
- ❖ **Harmonization**
- ❖ **Policy Direction (Enabling Environment)**
- ❖ **Partnerships : Public Private Partnerships**
  - i. Development Partners

**THANK YOU**

