THE EXCITING WORLD OF FAECAL SLUDGE RE-USE
Exploring turning poop into gold

8TH JULY 2020 - 8.30 TO 13.00

9.30-10.10 Animal Feed
10.15-10.55 Biomass Fuels
11.00-11.40 Compost
11.45-12.30 Electricity/Biogas

Join us on ZOOM
Meeting ID 852 0231 3363
Block 2: Biomass Fuels
HUMAN POO TRANSFORMED INTO FUEL FOR KENYA URBAN POOR
PRESENTER: JOHN IRUNGU- GENERAL MANAGER
NAWASSCOAL produces fuel briquettes (MakaaDotcom) from a combination of faecal sludge and sawdust with molasses as a binder.
Briquette Production Process
From Household to Household

Household latrine/Septic

Transport of sludge

Drying of sludge

Carbonisation

Milling & Mixing

Cookstove using briquettes

Market distribution

Final product

Sun drying

Briquette manufacturing
Avoided CO2 emissions 1123 t per annum
Reduced cases of respiratory diseases
Reduces chicken mortality by 70%
Saves 50% of monthly fuel expenditure
Reduces cooking time by 30%
1 tonne of MakaaDotcom saves 88 trees
165 tonnes produced to date
14,520 Trees saved to date
Improved collection, transportation and treatment of faecal sludge

Our Value Proposition
Why Makaa Dotcom?

**SDG 6: Clean water and Sanitation**
- Improved sanitation
- Management of fecal sludge

**SDG 7: Affordable Clean Energy**
- MakaaDotcom is an alternative to charcoal
- Production target - 10 tonnes per day

**SDG 8: Decent Work and Economic Activity**
- Job Opportunities
- Creating circular economy
- Profits to the company

**SDG 9: Industry, Innovation and Infrastructure**
- Growth of manufacturing industry
- Contribute in achieving vision 2030

**SDG 11: Sustainable cities and Communities**
- Make Nakuru Town clean/Green
- Improved livelihoods

**SDG 13: Climate Action**
- 1 tonne of MakaaDotcom saves 88 trees
- Conservation of Forest/Water catchment Areas

**SDG 17: Partnership for the Goals**
- Partnership development partners
- Partnerships with County Government
Challenges / Advantages

- High capital investment
- Inadequate local technologies
- Lack of standards & Policies for faecal based products in the country
- Product perception

- Unlimited source of raw material
- Large market potential
- Energy challenge solution
- Saves trees
- Creation of employment
Where we want to be

- To grow from 15 tons per month to 150 tons per month by 2025
- To enhance alternative energy solutions
- To create more employment for youth and empower women
- To expand and diversify into other faecal based products

Come talk to us!

Find our publications (Popular publication, Scientific Journals, and videos) on our website:

https://nawasscoal.co.ke/

Also follow us on Twitter - @MakaaDotcom and Facebook - MakaaDotcom

Email: johnirungu50@gmail.com
Q & A
BIOMASS FUELS

Photo credit: NAWASSCOAL
Potential use of FS char briquettes as a cooking energy in Dar es Salaam, Tanzania

Presented by: Petro Mwamlima
Lecturer

Ardhi University
(School of Environmental Science and Technology)
Production
Production Cont…
ARDHI UNIVERSITY
P.O. BOX 35176
DAR ES SALAAM, TANZANIA
Email: petro.mwamlima@aru.co.tz
Website: http://www.aru.ac.tz/

PATENT OWNED (Link below)

PUBLICATIONS ON FS CHAR BRIQUETTES (Links below)
EXPERIENCE ON THE PROCESS OF STANDARDS DEVELOPMENT ON BRIQUETTES IN TANZANIA

Joseph Emmanuel Ismail
Tanzania Bureau of Standards (TBS)
SANITATION FOR SECONDARY CITIES

Dickson Ochieng
Director Govt Relation, Sanivation
dickson@sanivation.com

July 8th 2020
Re-Use Webinar
OUR VALUE PROPOSITION
Cost-effectively enabling secondary cities in Africa to scale sanitation services

https://youtu.be/5lm_65Rr1eY
QUESTIONS

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dickson@sanivation.com  www.sanivation.com
Q & A

BIOMASS FUELS

Photo credit: SANIVATION
THANK YOU FOR JOINING US!