

NEWAL Project Grants 2022

Project Factsheet



NEWAL
Network for Water & Life

Project title Enriching MOSW with *Mucuna prurines*

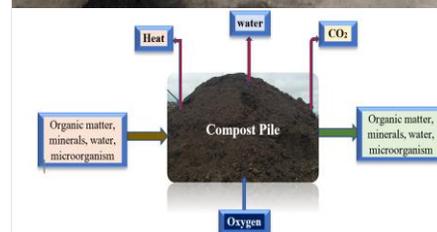
Country Ghana

Target SDGs SDG 2, 6, 8, 11 and 13

Partner Institution AAMUSTED/KNUST/AfES/KCARP

Background

Kumasi Compost and Recycling Plant (KCARP) is a mega-scale municipal solid waste treatment plant, where organic waste is managed through composting. The potential for high quality organic compost is a competitive benefit against inorganic fertilizers. Therefore, enriching the organic waste with *Mucuna* is a new research area to investigate.



Project goal

The project goal is to assess the utilization of crushed fruits of *Mucuna prurines* to enrich organic waste derived from processed municipal organic solid waste produced at KCARP to improve the organic compost nutrient quality for plant amelioration.

Target population and how they are impacted

The target population include Kumasi Compost and Recycling Plant Ltd (KCARP), and ZoomLion Company Ltd (ZLCL) of Jospong Group of Companies (JGC), Kumasi Metropolitan Assembly (KMA) and farmers group. Improper disposal of solid waste keeps endangering the environment hence the need for waste management practices to ensure sustainable and friendly environment as well as reduce diseases such as cholera, typhoid, dysentery and malaria which can results in loss of human resources needed in the development of the country.

How the project sustainability is ensured

Sustainability of the project is ensured since the project is in collaboration with KCARP at Esreso-Adagya, a private sector led organic compost production by Jospong Group of Companies (strongly supported by the Government). Also, securing additional research funds on an emerging knowledge gap that may require further action research will also be ensured since the use of *Mucuna* as an amendment is a new area that can be exploited.

Business opportunity that can result from the project

Mass diversion of organic waste from disposal sites to composting plants for value added nutrient recovery, and consequently reduce waste management burden in the country. Creation of velvet beans commercial farming ventures especially for jobs to benefits the native farmers because of high market demand for co-composting with organic waste. Also there will be knowledge transfer for economic production of high-quality organic compost to serve the agriculture sector nationwide whiles creating jobs and planting for food security.

Main applicants



Priscilla
Badaweh
Coffie
Researcher
Ghana



James Kumah
Co-
investigator
Ghana

Advisor



Dr. Evans
Dawoe
KNUST
Lecturer
Ghana