

**Review Article** 

# Advance in Environmental Waste Management & Recycling

# Identification, Extraction, Storage and Commercial Development of Potash From Wasting Cocoa Pods in Ghana for the Organic Cosmetics and Fertilizer Industries in Line With Un Sustainable Development Goals

### Prince Akwaaba\* and Buabin Daniel

Presented by the Community Agric Development, Ghana team

## Corresponding author

Prince Akwaaba, Community Agric Development, Ghana team, Tel: +233 243828822; E-mail: cadghanaprojects@gmail.com

ISSN: 2641-1784

Submitted: 20 Aug 2019; Accepted: 27 Aug 2019; Published: 31 Aug 2019

#### **Abstract**

The present study investigated Cocoa as a seasonal crop which constitutes the main income of most cocoa farmers in Ghana. Farmers in Ghana and indeed other parts of the world cultivate cocoa solely for its beans. After harvesting and breaking cocoa pods, the pod husk, placenta and the mucilage surrounding the beans are discarded as waste. It is estimated that for each ton of dried cocoa beans, about 10 tons of husks/pods (fresh weight) are generated.

**Keywords:** Cocoa, Potash, Black Soap, Cocoa Pods, Organic Fertilizer

The accumulation of cocoa pod husk waste on the farm causes the area to be polluted with mineral salts and also encourages the proliferation of fungi since they use cocoa pod husk as substrate, particularly *Phytophthora* species causing the black pod disease, posing serious problems especially in black pod endemic areas.

Our team discovered that any means of exploiting cocoa pod husk commercially will serve as a cleaning up technology which will prevent environmental pollution and the proliferation of black pod disease and malaria. It will also serve as an added vocation and also provide an additional source of income to cocoa farmers and their families.

One such use is the extraction of potassium salts from cocoa pod husk which can be used to make a local soft soap, popularly known as 'BLACK SOAP'. Another significant use is also processing the Potassium concentrated wasting cocoa pods into organic fertilizer. It is estimated that less than 10% of cocoa pod husk has been exploited in this way in Ghana for almost a century.

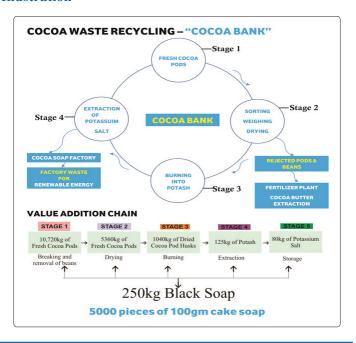
Currently, Ghana is the second largest Cocoa producer in the world with about 800,000 tons of cocoa beans exported annually, translating into approximately 8 million tons of wasting cocoa pods under the tress nationwide. This is a great opportunity to exploit at least 50% of the cocoa waste for commercial soap production by year 2020.

The Black Soap developed from the wasted cocoa pods lathers a lot due to the high alkaline content in the Cocoa potash, the soap helps prevent and remove rashes, pimples, ringworm, black spots

and other blemishes, improves the texture of the skin, and promotes healthy & shiny hair growth [1].



#### Illustration



Reference 1. Winifred O Kumi, Jemmy Takrama, I Gyedu-Akoto, C. K. Agyente-Badu, o potash processing, crig.	Mercy Asamoah, Esther et al. (2012) Manual for		

**Copyright:** ©2019 Prince Akwaaba. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.