

## Circular Bio-nutrient Economy

### Workshop

January 10<sup>th</sup> to January 11<sup>th</sup>, 2023

Kisumu Hotel, Kisumu, Kenya

Poverty and Health Integrated Solutions (PHIS) and Cornell University

### Summary

The workshop aimed to bring together representatives from sectors involved in an existing or potential circular bionutrient economy: government, industry, non-profit and private, and academia. We gathered at Kisumu Hotel for one and a half days to meet each other, share hurdles from each of our perspectives, and workshop solutions in diverse teams. Group activities and social periods were complemented by a “galleria” table that show-cased participants prototypes, educational materials, and products throughout the workshop. Priorities for further action included the formation of a network, producing safety standards and best practice guidelines, build a website and issue policy and market briefs. Participants closed the workshop with an acclamation to form a community of practice.

### Highlights of group and plenary activities

1. Community and individual objectives
  - a. Develop a network for Research & Development; Extension & Advocacy; Enterprise & Commercialization
  - b. Map the entire Circular Bio-nutrient Economy (players, prices, costs of operation, etc.)
  - c. Quality standards of fertilizers made from excreta (material)
  - d. Best practice guidelines for materials handling to ensure safety (practice)
  - e. Systems model to identify social benefits of nutrient recycling
  - f. Sensitization plan for farmers, toilet-users, etc.
2. Hurdles to implementation:
  - a. R&D knowledge gaps in biochar and waste processing
  - b. Community acceptance of circular bionutrient economy
  - c. Government relations & Policy
  - d. Commercialization of excreta products (soil amendments and fertilizers)

The group found that the lack of guidelines and standardization fit into all categories

### Outcomes

The activities of the workshop brought forward key tasks, potential collaborations, design idea, and shared knowledge. However, more important to the group was the formation of a cohort with mutual appreciation and respect, similar background

knowledge and overlapping goals. We decided to form a community of practice and spent the last evening discussing how we wanted to organize ourselves, what we wanted to achieve, and what was required to continue communication, open-sharing, and collaboration. As an result, we now have a vibrant active WhatsApp group and a website (XXXX). We to use the WhatsApp group to share and discuss findings, ideas, and literature. The website is a digital guidepost to show who is involved, hold discussions, promote each other's work, and share any events to come.