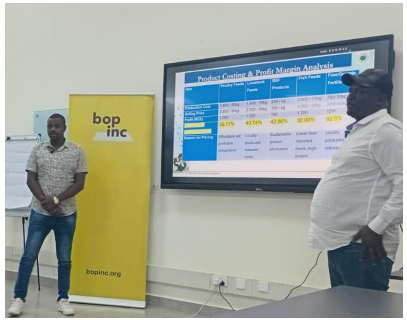
Scaling Global South Climate Solutions | Bunyala Agri-Climate Impact Solutions - Busia county, Bundalangi, Kenya

BACIS builds climate-resilient livelihoods for lakeside communities by combining sustainable aquaculture, locally produced fish feeds, Black Soldier Fly (BSF) farming, organic fertilizer production, waste valorization, and youth skills development.





Challenge

Communities around Lake Victoria are increasingly affected by climate variability, flooding, environmental degradation, declining and unpredictable livelihoods, rising fish-feed costs, and limited employment opportunities for young people.

At the same time, organic and agricultural waste remains underutilized while farmers depend heavily on costly external production inputs. These challenges threaten food security, household incomes and the resilience of vulnerable lakeside communities. There is an urgent need for locally driven solutions that turn climate and environmental challenges into sustainable livelihood opportunities.

Solution

BACIS is developing a blue-green circular economy model that links fish cage farming, locally produced fish feeds, BSF farming, organic fertilizer, waste management and climate-smart agriculture. Organic waste is converted into BSF protein for feed and frass for organic fertilizer, reducing waste while creating valuable agricultural inputs. The model also provides practical training for youth, women and vulnerable groups in aquaculture, BSF production, feed formulation,environmental conservation and green entrepreneurship.The approach is locally sourced, resource-efficient, skills-based and replicable across other lakeside and aquaculture-producing communities in Kenya.







Scaling Global South Climate Solutions | Bunyala Agri-Climate Impact Solutions - Busia county, Bundalangi, Kenya





Contact
Shikukuwabwire30@gmail.com | Website

Impact

- **250 youth** mapped and onboarded into agribusiness value chains through the Wezesha 3 programme.
- **25 youth** trained in aquaculture.
- **20 youth** trained in Black Soldier Fly farming and sustainable waste management.
- **8,600 tree seedlings** planted with youth across 10 schools and Port Victoria Hospital, strengthening environmental restoration and climate awareness.
- **10,000 seedlings** received from Kenya Forest Service for forest regeneration.
- BACIS has developed capacity for **fish-feed and animal-feed production using locally available materials, including BSF protein**.
- The circular production model targets f**ish cage farmers, poultry and livestock farmers,** while creating opportunities for youth and women in green enterprises.

Partners

- KICTANet: Digital skills training and certification of youth.
- EKYAN: Technical partnership supporting aquaculture training.
- NGCDF Budalang'i: Community partnership supporting youth engagement and tree planting.
- Kenya Forest Service (KFS): Provided 10,000 tree seedlings for forest regeneration.
- Hydro Victoria Africa: Partnered with BACIS on sustainable waste management and BSF training.
- Dhamira Moja: Supported youth soft-skills development and youth mobilization.
- Ustadi Foundation / Wezesha 3: Supported mapping and onboarding of youth into agribusiness value chains.