



Circular bioeconomy in Abidjan: from food waste to the fork

To support food system transformation in Abidjan, Côte d'Ivoire, the Food and Agriculture Organization of the United Nations, in collaboration with the Autonomous District of Abidjan, is developing an innovative project to produce animal feed and organic fertilizer from food waste by rearing flies.

What is the problem?

- Abidjan has 6 million inhabitants and the population is growing with + 187 000 inhabitants/year
- Creating new jobs is a challenge
- Waste management is a priority as the city produces + 4 000 tonnes of food waste per day
- Dependence on imported agricultural inputs needs to be reduced



What is our proposed solution?

- Collect food waste from the food markets of Abidjan
- Produce mature black soldier fly larvae
- Dry the larvae for poultry and aquaculture feed
- Use the frass as organic fertilizer
- Bring larvae farming to the city by training women in a farm school



What makes our solution innovative?

We use a new, circular bioeconomy approach to:

- Harness naturally occurring biological processes
- Turn organic waste into valuable products for sustainable local food production
- Involve local communities throughout the product life cycle
- Contribute to a cleaner and greener city, reducing waste and pollution
- Relieve the pressure on natural resources for agriculture and feed production
- Empower women and boost business opportunities



