For more details contact:

Dr. Theodore B. Zahariadis
Project Coordinator
Synelixis Solutions SA ,Greece
(zahariad@synelixis.com)

NESTLER Team
info@nestler.eu

Join Us

@NESTLER

/showcase/NESTLER

https://nestler-project.eu//

oNe hEalth SusTainabiLity partnership between EU-AFRICA for food sEcuRity

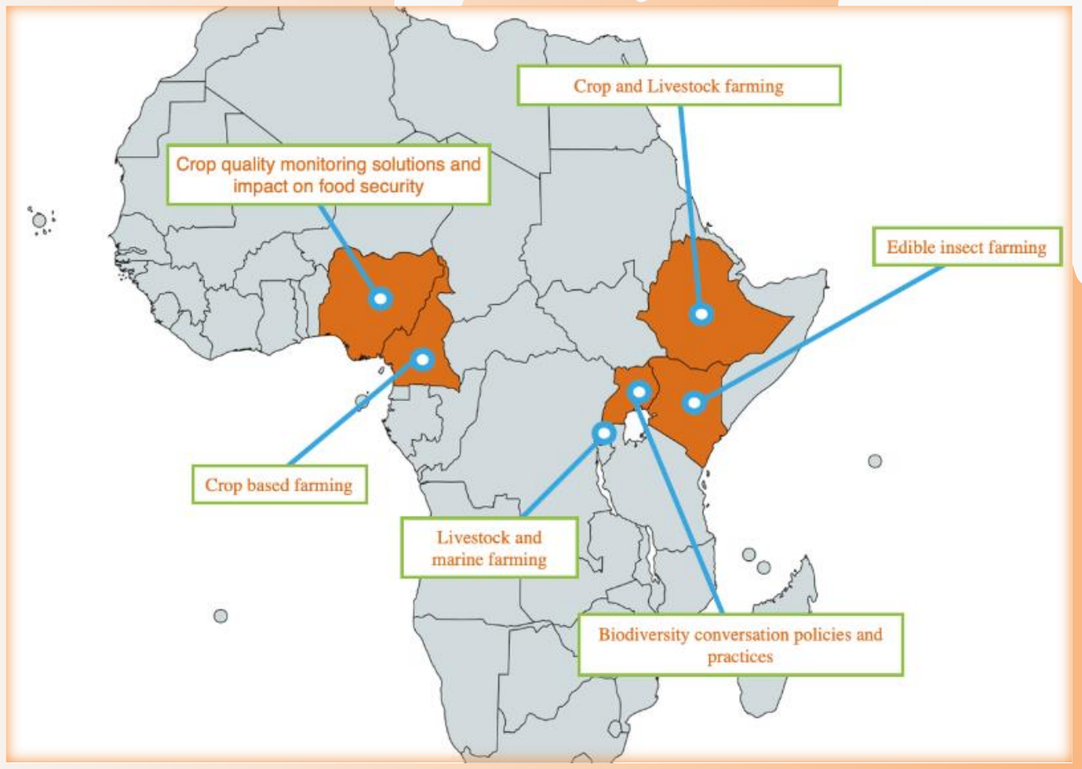
The NESTLER project is funded by the European Union under Grant Agreement No. 101060762. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

About NESTLER

The **NESTLER** project is a collaboration between the EU and African member states aimed at promoting sustainability through the One-Health initiative. The project combines technological innovations to monitor the well-being of animals, plants, and humans using a holistic approach. By integrating advanced remote sensing technologies, the project develops a software platform that collects data from satellite sources, unmanned aerial vehicles, and IoT devices. These data are processed using machine learning algorithms to extract predictive models that support sustainability. Additionally, the project investigates insect production as a protein resource and the utilization of animal waste in crop-based farming to enhance circular economy practices.

Key Strengths of the NESTLER Project

- **One health initiative between EU-Africa**
- **15 partners across EUROPE and AFRICA**
- **Advanced AI Algorithms**
- **Remote Sensing Technology**
- **Integrated Platform for Real-Time Data Analysis**
- **Circular Economy Focus**



NESTLER 6 Use Cases:

Crop based farming – Cameroon
The main objective is to evaluate the quality of crop-based agriculture using chicken droppings and cow dung fertilisers, IoT devices to analyse soil nutrients, smart agricultural irrigation and pest control measures.

Biodiversity conservation policies and practices – Uganda: The trials will take place at the Bwindi Impenetrable National Park, where coffee is being grown by communities as an alternative livelihood to help mitigate the Human wildlife conflict arising from crop raids by the Gorillas and other wildlife.

Crop and Livestock farming – Ethiopia: The pilot will be conducted in two others. The first will evaluate the feed value of Black Soldier Fly (BSF) products, such as full-fat larvae, defatted BSF larvae (protein meal) and oil/fat of BSF larvae. The second, will be conducted at Sebeta National Fisheries and Aquatic Life Research Center (NFALRC) in plastic fish tanks.

Livestock and marine farming – Rwanda: The pilots will be conducted in two locations. The first will involve chicks to evaluate the efficiency of protein from Black Soldier Fly larvae meal. The second, conducted in Nkungu Aquaculture and Fisheries Research site, will evaluate the efficiency of protein from Black Soldier Fly larvae meal.

Edible insect farming – Kenya: One of the objectives of the trials is to evaluate the effectiveness of insects in recycling organic waste into nutrient-rich biomass and high-quality organic fertilizer, as well as to determine optimal rearing conditions of insects to biodegrade waste under varying organic waste mixtures ratios.

Crop quality monitoring solutions and impact on food security – Nigeria: The objective of the pilot is to collect comprehensive data to develop a robust yield prediction model specifically for cassava. The potential benefits of the pilot include improved yield prediction, enhanced farm management, tailored support and recommendations, resource efficiency, knowledge sharing, and food security and economic benefits.