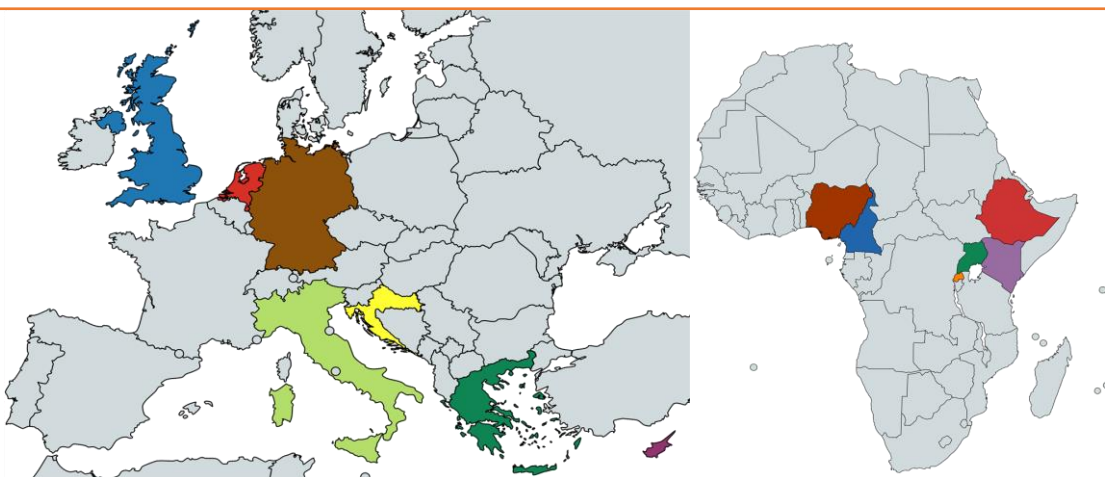


The NESTLER proposal, promoted by Z&P and its 14 partners of whom six (6) organisations are headquartered in six (6) European member states (Greece, Germany, Cyprus, The Netherlands, Croatia, and Italy). Two (2) partners (MANA and ULC) are in an associated country (UK). Six (6) partners represent the African priority towards implementing the One-Health initiative and belong to six (6) Member States (Uganda, Ethiopia, Cameroon, Kenya, Rwanda, and Nigeria) under the coordination of Synelixis, has been approved and will be funded by the European Commission under the Horizon Europe Framework Programme between 2022 and 2025

NESTLER - oNe hEalth SusTainabiLity partnership between EU-AFRICA for food sEcuRity is aimed at delivering a technological intervention to support the policy framework development between EU and Africa Member States with the adoption of the One Health programme recommendation in the area of food safety. The integration of the One Health strategy to plant and animal health is based on a systemic perspective linking the health of ecosystems, animals and humans. It requires interventions at different levels (local, territorial, value chain) and coherent public policies.

The NESTLER project will promote food security by developing an integrated cloud-edge digital platform that will closely integrate with the existing stakeholders of food value chain from both EU and Africa. The project envisages to integrate complex information sources collected from weather, climate data sources along with continuous media streams captured from multi-spectral imaging devices.

The platform will include the integration of several technologies, among which environmental sensors (for monitoring the quality of soil and the nutritional composition required to stimulate crop growth) as well as advanced imaging sensors (for undertaking environmental surveillance). In order to ingest these different data sources, AI and ML tools will be used. Data will subsequently be processed by the NESTLER backend services, that will deliver accurate mapping and data models to be plotted against geographical maps, animal monitoring services, crop growth monitoring and yield estimation models. The aggregation of information from digital tools (such as smart apps), will also result in the modelling of biological and epidemiological analysis aiming at guaranteeing food security against pest infestation outbreaks along with ensuring the presence of the right environment and atmosphere for plant-based cultivation. NESTLER also undertakes research activities to investigate the impact of insect protein on the circular economy for the well-being of animals. Moreover, methodologies are developed for edible insect farming to feed farmed animals. NESTLER results are associated to the transition from a linear economy to a circular economy delivering sustained growth.



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