USING INSECTS TO IMPROVE SMALLHOLDERS LIVESTOCK PRODUCTION AND FOOD SECURITY IN WEST AFRICA

Locations
Benin, Burkina-Faso, Ghana

Dates
01/01/2015 - 31/12/2020

Summary
Poultry farming is practised by almost all smallholder farmers in West Africa but feed and protein sources are becoming increasingly expensive here, affecting meat and egg production and reducing family income. Fish farmers suffer a similar problem. We are promoting the use of insects, which are a natural food source for poultry and fish, and endorsed by the FAO as a tool to alleviate poverty.
The problem

Fishmeal and crops such as soya are key protein sources for animal feeds, but they are not ecologically and economically sustainable.

In West Africa, poultry farming is practised by almost all smallholder farmers. Poultry producers suffer from the increasing cost of feed (representing up to 70% of the total production costs), in particular protein sources. Smallholder farmers with scavenging poultry rarely provide the necessary quantity of protein feeds, which affects meat production and eggs, and reduces family income.

Similarly, small-scale fish farmers often feed their fish on natural feed (plankton), green leaves and agricultural by-products. The nutritional value of these feeds is low, resulting in poor yields and less income for the household.

What we are doing

A solution to develop sustainable household poultry farming and aquaculture systems is to use untapped local, easily available and cheap protein sources. Insects, which are a natural food source of poultry and fish, are one such source, and FAO now strongly recommends the use of insects for human food and animal feed as a tool to alleviate poverty.

This project aims to develop appropriate methods for fly larvae and termite production based on waste material. It will ensure that these innovations are safe and socially, economically and environmentally sustainable. At a later stage, we will validate and implement these innovations with farmers, and disseminate the project’s findings to stakeholders, the general public, the scientific community and policy makers.

Results so far

The project is partly based on findings from an ongoing EU funded project, PROTEINSECT, where CABI and West African partners developed fly larvae production systems in Mali and Ghana, and carried out nutrition tests. Production systems are currently being established in the three project countries and tested for their suitability in the local context. Surveys assessing the use of termites are being carried out here.

Partners have also started evaluating animal and human health implications of using fly larvae as a protein source in poultry production.

Finally, the first participatory rural assessments and baseline economic assessments are being prepared, which will allow us to better evaluate and understand the current socio-economic issues and farmers’ expectations.

For more information visit here

Donors

Swiss agency for Development and Cooperation (SDC)

Partners

Université Polytechnique de Bobo-Dioulasso (Burkina Faso), Fish for Africa (Ghana), Council for Scientific and Industrial Research (Ghana), Institut National des Recherches Agricoles du Bénin (Bénin), Université d’Abomey-Calavi (Bénin), Université de Neuchâtel (Switzerland)

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