

FOOD & BUSINESS APPLIED RESEARCH FUND

Efficient fish feeds to enable emergence of catfish breeding in Benin (ProfishBenin)

Consortium Members

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Project description

Objective: Develop and promote affordable, nutritive, floating, and easy to use fish feeds from local feed ingredients in Benin.

Expected impact: Achieving the goal of food security by supplying fish products at low cost and favour the access of vulnerable groups to nutritious foods.

Methods: Use of survey and participatory approach combined with analytical methods and advanced fish feed technologies.

Impact activities and preliminary results

- Catfish and Tilapia are the two most produced species of fish in Benin.
- Three types of feeds are currently used: imported feeds with high cost, locally manufactured feeds with low quality and natural ingredients (leaves, phyto-zooplankton).
- The natural feeds ingredients mostly used are moringa leaves, maggots, poultry offal, cassava leaves.
- 28 promising local fish feeds ingredients are identified, characterized and mapped by agro-ecological zones of Benin. Of the 28 ingredients, 7 are from animal source and 21 from vegetal source.
- The most available ingredients are fish meal, rice bran, maize bran, wheat bran, soybean meal, cottonseed meal, cassava chips, whole soya, whole maize kernel and palm kernel cake.
- 12 fish feed formulas were designed using locally available feed ingredients. They were produced and characterized.
- 7 convenient fish feeds with high protein content and low-cost were extruded to obtain pellets which were also evaluated for their proximate composition.
- So far we are able to formulate fish pellet with protein content as high as 36 %. This level is comparable to that of Le Gouessant (37.72% of Proteins); an imported fish feed currently commercialized in Benin.
- 1 launching workshop, 2 follow up meetings and 4 steering committee meetings were organized.

Opportunities and challenges

- There is a consortium organization with diverse and adequate expertise to conduct an applied research on fish feeds development
- Fish farming in Benin largely depends on imported feeds in spite of their high price.
- High demand for improved and low cost fish feeds.
- Availability of a large diversity of fish feed ingredients to be valorised
- The bio-efficacy study on the fish feeds developed is planned for Year 2

