Benin - Indonesia joint project to promote aquaculture

Promotion of social entrepreneurship in aquaculture for the empowerment of women and youth and household nutritional security in Benin / West Africa

Overview of Benin on entrepreneurship initiatives in the aquaculture sector

Experience in the Hydrobiology and Aquaculture Laboratory.

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The laboratory

- The Hydrobiology and Aquaculture Laboratory of the Faculty of Agronomic Sciences of the University of Abomey-Calavi (LHA / FSA / UAC)

- is headed by Professor Philippe LALEYE, Dean of the FSA,

- The LHA conducts training and research activities and is also involved in the socio-economic development of grassroots communities.

Diploma courses

The primary vocation of the Laboratory = to train its learners in better knowledge and management of living aquatic resources.

The student:

- discover aquatic ecosystems and their particularities (physico-chemical characteristics, flora and fauna),
- then learns to understand their functioning (biology and ecology),
- and finally learn about the management methods of living aquatic resources (dynamics of exploited populations or not, Fisheries, impacts, aquaculture).

The training program, as designed, is applicable from the Bachelor to the Doctorate through the Master.

The Laboratory also supports the training of Agro-Fisheries Engineers within the Faculty of Agronomic Sciences.

Training topics

The training is structured around three main themes, namely:

1. Limnology, hydrobiology and marine ecology (Study of the aquatic environment, its fauna and flora and its functioning, etc.);

2. Fisheries management and exploitation of living aquatic resources, (Biology and ecology of species, technology of fishing gear and techniques and their impacts on living resources, management techniques, socio-economics of fisheries ...)

3. Aquaculture (Biological bases, design, installation and management of aquaculture farms, etc.).

Two masters level traininger

The Hydrobiology and Aquaculture Laboratory has 2 master's level training courses:

(1) The Professional Regional Master in Monitoring Aquatic Resources and Inland Fisheries Management (MoRAP).

A regional postgraduate program set up with the financial support of the Belgian Academy of Research and Higher Education (ARES). Several countries are involved in this training:

- The Faculty of Agronomic Sciences (FSA) of the University of Abomey Calavi (UAC) in Benin
- The Faculty of Sciences of the University of Ouagadougou (UO) in Burkina Faso
- The Higher Normal School of the Abdou Moumouni University (UAM) of Niamey in Niger
- Universities in Belgium including: the University of Liège (ULg), the University of Namur)
- And the Royal Museum for Central Africa (MRAC, Africa Museum)

(2) The Specialized Master in Fisheries and Aquaculture Management (APAq)

In 2 years, it trains high-level professionals who, in addition to fisheries management, must be able to design and lead the establishment and professional management of an aquaculture farm

Continuous training

- The laboratory also offers continuing education.
- It welcomes interns from various levels and countries.
- Indeed, several students, pupils and civil servants carry out their internships within the laboratory either as part of a diploma course (License, Masters, Engineer, Doctorate, etc.), or as part of a retraining (development agents). seeking to improve their professional level in the management of living aquatic resources or in aquaculture). The duration of these internships varies between 1 to 36 months depending on the training requested.

Research within the Laboratory

- The Laboratory offers a perfect framework for research in hydrobiology and aquaculture.
- In support of the various training courses, it has a Training and Research Center in Hydrobiology and Aquaculture (CeFRHA) with an Aquaculture experimental station.









Its research program is structured around three main themes:

- Biology and ecology of fresh and brackish water fish from Benin,
- Traditional systems (acadjas, whedos ...) of fishing and fish farming in Benin and
- Possibilities of adaptation of local fish species to fish farming in Benin.

These themes are developed through supervised and supported Masters and Doctoral Thesis, but also in progress within the Laboratory.

Research and development projects

The research program within the LHA is supported by several research and development projects.

Several research programs are already carried out within the laboratory.

Others are underway, including :

1. The OpTiL Project (2016-2021): "Optimization of the tilapia production chain in Benin by genetic improvement and innovative food strategy". An inter-university cooperation program between ULg / Belgium and FSA / UAC. (Funding: ARES / Belgium),
2. The BioSEI Project (2019 - 2021): “Biodiversity and anthropogenic pressures on living aquatic resources in estuarine and lagoon systems in South Benin”. (UAC-Benin funding).
3. .....
4. .....

Scientific collaborations

The Laboratory maintains scientific collaborations with several universities, in particular research laboratories, research centers and / or institutes, in Benin, Africa, Europe and America.

Contribution to development

- The Laboratory carries out several studies and services for the benefit of socio-economic development and household food security.
- It participates in building the capacities of producers, especially local fish farmers.
- The LHA works with some 50 fish farms, more than a dozen of which are now run and managed by FSA-trained students.

The main actions aimed at these fish farmers are:

- Technical assistance for the design, monitoring-evaluation and management of the fish farm,
- Training / retraining in fish farming professions (fish reproduction, formulation and manufacture of feed, feeding techniques, strain selection, water quality control and site management).
- Provision of a favorable framework for learning and recycling producers,
- For research-action questions, producers welcome LHA students for practical training and end-of-training dissertations.

In the end, we believe that :

the future *Project aimed at promoting the empowerment of young people and women and nutritional security through social entrepreneurship in the aquaculture sector in Benin*, remains an opportunity for actors.

Thank you for your attention