

TECHNICAL SHEET

Development of off-grid fish farming Clarias

above-ground fish farming

Soilless fish farming is a type of intensive farming that takes place in a workshop, pigsty or stable, where the animals are not taken out. Fish farming is often done in ponds. Fish can also be raised outside their natural habitat, in a pond or in tanks.

Clarias fish

Nicknamed catfish (it has barbels around its mouth reminiscent of a cat's moustache), the *Clarias* is a member of the family Clariidae and of the order Siluriformes. There are a number of species, particularly in freshwater. It has a more or less elongated body, a flattened head and a single dorsal fin, extending to the caudal fin. In Third World countries, fish represent a source of animal protein accessible to the vast majority of the population. According to Gourène et al (1999) and Teugels (1996) cited by N'Guessan et al (2010), catfish are among the most economically important freshwater and brackish fish products in the world. Among these fishes is the species *Clarias anguillaris*. The world production of siluriformes, more than 420,000 tones/year (FAO, 2003), is currently the fourth most important freshwater cultured species after carp, salmonids and tilapia.

Characteristics of the technology

This is the rearing of *Clarias* fish in above-ground tanks. The tanks used are made of tarpaulins mounted on wood. They have a capacity of 2000 litres (Length: 2m, Width: 1m and Height: 1m) and can hold up to 400 clarias fish. Trained producers master the management of the farm, the main elements of which are: acquisition of fry (10 g on average), stocking, local feed production, feeding schedules, water renewal, control fishing/rationing, sorting, sale, etc. The duration of a clara fish farming cycle is on average 6 months. Above-ground fish farming is coupled with the production of organic vegetables in order to make use of the nutrient-rich drainage water.

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