

# Artificial reproduction and pond rearing of the African catfish *Clarias gariepinus* in sub-Saharan Africa

A handbook



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## PREPARATION OF THIS DOCUMENT

The African catfish *Clarias gariepinus* has been reared for almost 20 years in Africa with mixed success; the total farm production of this species being only 3,978 metric tonnes or 7.4% of the total farmed finfish production of 69,434 mt in Africa in 1994. To a large extent the poor performance of this freshwater fish species in Africa has been due to the absence of reliable production techniques for the reproduction and rearing of the species under practical farming conditions.

The document is based on the practical field experiences of Gertjan de Graaf and Hans Janssen on the artificial reproduction and rearing of the African catfish within FAO field projects in the Central African Republic, the Republic of the Congo, Kenya and Nigeria. The manual has been written by the authors as a practical guide for the reproduction and pond rearing of the African catfish, based on methods which have proven to be successful and reliable in the field.

The manual was edited by Dr. A.G.J. Tacon and Ms. M. Page of the FAO Inland Water Resources and Aquaculture Service and produced as part of the ongoing activities of the Service to help to meet the needs of aquaculture workers of Member Countries for the development of suitable farming techniques for the sustainable expansion of aquaculture production.

### *Distribution:*

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#### ABSTRACT

The manual is based on the practical experiences of the authors on the artificial reproduction and pond rearing of the African catfish *Clarias gariepinus* within FAO field projects in the Central African Republic, the Republic of the Congo, Kenya and Nigeria. The manual is divided into five major sections dealing with: 1) general biology, including natural feeding habits and reproduction; 2) artificial reproduction, including induced propagation without and through hormone injection; 3) fry nursing in earthen ponds, including pond preparation, fertilization, feeding and management; 4) monoculture, including feeding methods; and 5) polyculture with *Tilapia*. In addition, information is provided concerning the economics of different fingerling and grow-out farming practices in Africa, and concerning diseases and hybridization.

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