

# NOTICE OF PUBLICATION

---



AQUACULTURE & FISHERIES INNOVATION LAB

## RESEARCH REPORTS

Sustainable Aquaculture for a Secure Future

---

**Title:** Technical-Economic Efficiencies of Snakehead Seed Production Under Impacts Of Climate Change In The Mekong Delta, Vietnam

**Author(s):** Nguyen Thi Kim Quyen, Truong Hoang Minh, Tran Ngoc Hai, Tran Thi Thanh Hien, Tran Dac Dinh

College of Aquaculture and Fisheries, Cantho University, Vietnam

**Date:** 3 October 2017 Publication Number: AquaFish Research Report 16-A02

AquaFish will not be distributing this publication. Copies may be obtained by writing to the authors.

**Abstract:** This study was carried out from February to December 2014 by interviewing 75 farmers who operate snakehead seed production in An Giang, Dong Thap and Hau Giang provinces, Vietnam. The results showed that the total area for production was  $629.01 \pm 756.77 \text{ m}^2$ , whereas the volume for nursing was  $582.10 \pm 119.81 \text{ m}^3$  for pond system and  $1,019.56 \pm 736.66 \text{ m}^3$  for combining pond – hapa system). Each hatchery used  $44.26 \pm 22.63$  pairs of broodstock/breeding cycle and produced whole year. The quantity of seed per cycle of pond system was a half of that figure of other system while seed productivity per  $\text{m}^3$  was much lower. Snakehead seed was mainly sold to seed traders in the Delta (82.3%). With average production cost of  $47.81 \pm 16.23$  thousand Vietnam dong (VND)/ $\text{m}^3$ , each farm in pond system could reach the total net profit of  $49.83 \pm 18.74$  thousand VND/ $\text{m}^3$ , equivalent to 328 million VND/year. These corresponding numbers of pond – hapa system were  $106.98 \pm 86.25$ ;  $196.12 \pm 87.45$  thousand VND/ $\text{m}^3$ , equal to 1.75 billion VND/year. Factors of climate change affecting snakehead seed production involved rainfall change, droughts, water and air temperature increase, salinity intrusion which caused diseases easier (36%), affected seed production in general (31%), bad water quality (10%), .... To reduce the impacts of climate change to production, the farmer in snakehead seed production often changed selling market, suspended production of seeds, used better brookstocks by choosing them more carefully and a number of other measures.

This abstract was excerpted from the original paper, which was in the *Animal Review* (2016), 3(4): 73-82.

---

**AQUAFISH RESEARCH REPORTS** are published as occasional papers by the Management Entity, AquaFish Innovation Lab, Oregon State University, Corvallis, Oregon 97331-1643 USA. The AquaFish Innovation Lab is supported by the US Agency for International Development under Grant No. EPP-A-00-06-00012-00. See the website at <aquafishersp.oregonstate.edu>.