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Sustainable Aquaculture for a Secure Future

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

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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 ± 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 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 ± 16.23 thousand Vietnam dong (VND)/ m^3 , each farm in pond system could reach the total net profit of 49.83 ± 18.74 thousand VND/ m^3 , equivalent to 328 million VND/year. These corresponding numbers of pond – hapa system were 106.98 ± 86.25 ; 196.12 ± 87.45 thousand VND/ 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.

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