

*Research article***Floating cage aquaculture production in Indonesia: Assessment of opportunities and challenges in Lake Maninjau****Junaidi<sup>1,\*</sup>, Hafrijal Syandri<sup>2</sup>, Azrita<sup>3</sup>, Abdullah Munzir<sup>1</sup>**

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**Abstract:** Aquaculture in floating cages in Lake Maninjau has recorded significant growth, even as the largest contributor to total annual aquacultural production in West Sumatra Province. In this study, we assessed the output of floating net cages in Lake Maninjau, Indonesia. We analyzed the characteristics of fish farming, fish fry, feed supply, and production, and the challenges and opportunities for increasing aquacultural production in the future. We used purposive sampling in this study with an interview questionnaire to obtain information from 80 fish-cultivating households in Lake Maninjau. We then used descriptive statistical methods of data analysis. The results showed that in 2018, there were 17596 floating net cages. The majority ( $n = 33$ , 41.25%) of fish farmers have 20 to 40 floating net cages per household, and 67.5% ( $n = 54$ ) are used for tilapia cultivation. We recorded that 77.5% ( $n = 62$ ) of fingerlings were sourced from private hatcheries. Six companies supply commercial feed pellets in an amount of 2000 tons per month for aquaculture activities. Japfa Comfeed Indonesia Ltd. provides 35% of the feed. The fish species cultivated were Nile tilapia, common carp, giant gourami, Clarias catfish, and pangasius catfish, with gross yields ( $\text{kg}/\text{m}^3/\text{cycle}$ ) of 12, 11.5, 10.4, 7.88, and 8.89, respectively. Fish farmers face challenging conditions: poor water quality, mass mortality of tilapia, high fish feed prices and low fish sale prices, and noncash payments. We recommend ensuring the development of floating net cages in Lake Maninjau for a more sustainable future. Therefore, it is necessary to operate as many as 6000 nets to meet guidelines