Vietnamese Pangasius
Aquaculture Improvement Project (AIP)

Background:

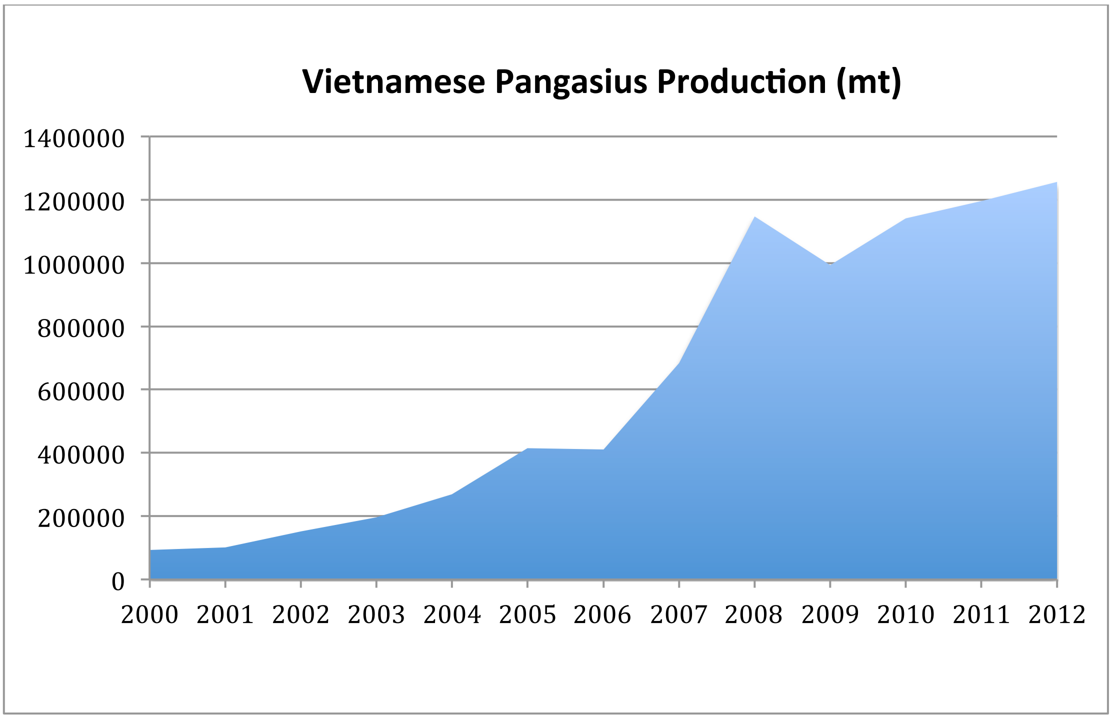
Pangasius production has been concentrated mostly in the 10 provinces of the Mekong River Delta of Vietnam: An Giang, Dong Thap, Tien Giang, Can Tho, Vinh Long, Ben Tre, Hau Giang, Soc Trang, Tra Vinh, and Kien Giang. In addition, two other provinces, Tay Ninh and Quang Nam, also produce pangasius.

Development of better farming systems (including the shift from cage- to pond-based operations), improving hatcheries (with high-quality broodstock), shifting from basa to tra as the main species for production, and use of commercial feeds has resulted in tremendous growth in Vietnamese pangasius production over the past decade.

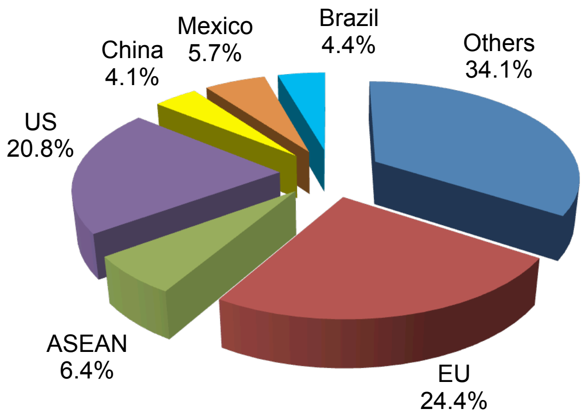
In 2011, the total farming area was approximately 5,509 hectares, and it is estimated that it will reach up to 13,000 hectares in 2020 (Directorate of Fisheries, 2013), with over 75 percent of total production taking place in the Mekong Delta provinces of Can Tho, Dong Thap, and An Giang. The industry has grown significantly in recent years, exceeding 1.25 million metric tons of production in 2012, making pangasius production one of the most intensive aquaculture industries in the world. Currently, average production of Vietnamese pangasius per hectare is among the highest in the world at more than 300 metric tons per crop, or as much as 500 to 600 metric tons per hectare per year. Progress over the last decade has come through changes in production system and species, as well as seed and feed improvements.

In 2013, exports of pangasius were valued at USD 1,761 million and EU markets represented USD 385 million. The production volume of 1.17 million metric tons shows a decrease of 6 percent compared with 2012 (Source: General Statistics Office).

The popularity of Vietnamese pangasius has led it to be consumed in more than 140 countries and territories over 5 continents (http://www.pangasius-vietnam.com/378/Daily-News-p/About-Pangasius.htm). In 2013, the EU and US remained the two biggest export markets for pangasius based on value.



Source: Directorate of Fisheries, 2013



Percentage Distribution of Importers for Vietnamese Pangasius, 2012 (Source: VASEP, 2012)

Sustainability Issues:

Major sustainability issues for Vietnamese pangasius are:

- **Farm effluents**. Effluent from pangasius farms directly affects the quality of the water in the natural environment, and the Mekong River in particular. Although treatment ponds are required by the national government, many pangasius producers do not have them. In some cases, producers who have treatment ponds are not using the facilities as intended, but rather as an additional production pond. Due to lack of a system of feeding adjustments and allocations, the amount of feeds and other nutrients being discharged into the water system may be significantly higher than expected.

- **Diseases and antibiotic use**. Antibiotics are still commonly used in pangasius farms, though this practice is not documented. While results of the monitoring conducted by SFP from 2007 through 2009 showed an insignificant amount of residue, this issue still needs to be examined and monitored, as producers are using drugs and antibiotics. Furthermore, no disease-monitoring system is established in the region, hence, protocols and measures for avoiding or addressing disease-related issues are lacking.
- **Feed sourcing and feed efficiency**. Fishfeed is one of the biggest investments in the pangasius industry (more than 60% of the operating cost), and it is also one of the main contributors to the deterioration of water quality inside and outside the farm. Most producers are practicing discretionary feeding, which has great potential for overfeeding the stocks. The current feed conversion ratio of 1.6 represents a significant opportunity for improvement and eventually reducing the nutrient load into the system.
- **Economics.** The market has dictated the success of the pangasius industry for the past decade. The price of the product has been erratic due to over-supply of pangasius as well as the economic situation of the importing countries, and these factors have directly affected the growth of the industry. Due to the unstable price of pangasius in the market, some medium- to small-scale operations, which are the most vulnerable in this kind of trend, have stopped production and abandoned their farms. Producers also have experienced delayed payment and non-payment from processing plants that have experienced losses from the international market.

For further details about issues relating to Vietnamese pangasius, see White Paper on Vietnamese Pangasius Farming.