

WHITE SHRIMPS NOW AT 12.5% OF PHILIPPINE SHRIMP PRODUCTION

Finally, Philippine shrimp farming is back on its feet! Thanks to the white shrimp, *Penaeus vannamei*, farmers, hatchery operators, and feedmillers have renewed confidence and enthusiasm in the shrimp industry. Not very long ago, the culture of this species was hugely unpopular due to concerns on diseases, potential ecological impact, and farmgate prices. As was the experience in much of Asia, the farming of white shrimp offers so many advantages that it is just too good a species to pass. Fortunes have indeed changed and the white shrimp is now the darling of the industry.

What is driving the white shrimp farming industry in the Philippines now is the high domestic prices. Ever since the collapse of the shrimp industry in 1994, the domestic supply of shrimps has been stagnant and this has steadily pushed prices up. The supply problem has been aggravated by the spread of white spot disease some 6-7 years ago, which is believed to have reduced the harvest volumes of wild shrimps. At present, farm-gate prices of white shrimp is around US\$4.9-5.4/kg for 12-15 g animals. Bigger animals (15-18 g) fetch US\$5.7-6.2/kg. With a production cost of US\$2.7-3.4/kg, white shrimp farming in the Philippines is turning out to be very profitable. It is not uncommon to see farmers making US\$10,000-15,000/ha/crop especially those located near Metro Manila where buyers cue up at the farm to buy freshly harvested shrimps.

White shrimp farming is now practiced both in intensive and extensive culture. In intensive culture, production is typically between 7-12 tons/ha/crop, for a culture period of 90-120 days. Survival is around 65-80% and FCR ranges from 1.3-1.5. Many of these farms practice partial harvesting and start with a stocking density of 100-200/m². Contrary to earlier claims that white shrimp farming will not work in large and shallow brackishwater ponds with zero biosecurity, a growing number of extensive farmers are now embracing the species with a production of around 1 ton/ha and an FCR of 0.7-1.1. Production cost using this system is only around US\$1.7-1.8/kg for 20-25 g shrimps..

WSSV is a big problem experienced by *P. vannamei* farmers especially during the cool months of the year, hence culture tends to be limited during the warm months. It is interesting to note that extensive farmers report that they have a much better chance of harvesting something in extensive white shrimp culture and breaking even compared to extensive black tiger shrimp culture. Farmers also say that the white shrimp compared to the black tiger is marketable already at 6 grams with a price of around US\$3.7/kg. The same size of black tiger will sell for no more than US\$2.5/kg.

There are no official estimates on the white shrimp production in the Philippines in 2007, but this probably exceeded 5,000 mt, from an estimated 3,000 mt in 2006. This

presently puts *P. vannamei* production at around 12.5% of total shrimp production. Much of the industry is aware that the high domestic prices will not last for long, probably not beyond 2010. There are studies however that suggest that should farmers be able to bring down farmgate prices to US\$3.5/kg or less for 12-15 g shrimps, the domestic market can potentially expand to as much as 75,000 mt based on the early 90s per capita shrimp consumption figures. While it is difficult to make a respectable profit with this price in intensive culture, extensive farmers can still easily make a dollar profit margin.

At for the black tiger, Philippine production remains stagnant at around 38,000 mt. Of this figure, only around 5,000xxxmt actually comes from intensive culture while the rest comes from extensive farms producing jumbo 40-60 g shrimps. At its peak, the Philippines produced 94,000 mt of black tigers, of which around a quarter of the volume came from intensive culture. With the entry of white shrimps, it is very likely that the farms having difficulty producing black tiger will shift to white shrimpsi, as has been the case throughout much of Asia.

Penaeus monodon is expected to remain king in some intensive farming centers in the Philippines, such as in the islands of Negros, Cebu, and Bohol, where high growth rates and survival rates have been sustained in the last 5 years. Typically, farmers from these areas harvest 4-6 tons/ha/crop of 30-35 g black tigers in 120-130 days with a survival of 80% and FCRs of 1.8-2. Unlike the intensive black tiger shrimp farmers of yesteryears, the present pool of farmers are highly skilled and experienced. They also have a healthy respect for the environment, moderating their stocking densities, employing proper pond preparation, rigorously screening fry for diseases, and totally abandoning the use of antibiotics.