

feeding (treatment V). Shrimp were fed twice daily at feeding rates based on shrimp consumption.

Highest mean harvest weight was attained in treatment I (23.47 g) > III (19.25 g) > II (18.86 g) > IV (11.29 g) > V (9.27 g). Statistical analysis showed that differences in growth were significant at 5% probability level. However, growth in treatments I, II and III are comparable, also growth in treatments II, III and IV. Growth in treatments I, II, III and IV was significantly different from treatment V. Highest mean survival was attained in treatment III (91.82%) > I (88.93%) > II (86.95%) > IV (83.62%) > V (82.62%). Statistical analysis showed no significant differences among treatments at 5% probability level.

Projecting on a hectare basis, mean yield for each treatment was: I (628.37 kg) > II (496.35 kg) per crop in 120 days culture. Good yield was attributed to provision of formulated feeds, use of pumps in addition to tidal change for water exchange and control of predators, and pest eradication through proper pond preparation.

Staggered Harvesting as a Method of Increasing Prawn Production with Supplemental Feeding

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Prawns, like any other animals, exhibit dissimilarities in growth rates. As they grow, a wide range of body weight distribution from the same population is observed. Staggered harvesting method is commonly practised in cultured animals having this characteristic. Selective or partial harvesting is especially useful in this type of management system. In this case, the larger shrimps are caught earlier than the small ones thus giving chance for the smaller ones to grow bigger.

The study was conducted in four one-ha ponds. Recommended pond preparation was followed. Partial harvesting was employed in experimental ponds by using 2-4 units of 8 knots selective pound nets once a week commencing after three months culture until final harvest. Control ponds were harvested only once at the end of the culture period.

The results show a mean production value of 506 kg from control ponds and 639 kg from experimental ponds. Average

survival rate for experimental ponds was higher (92.90%) than for control (77.65%). Final average body weight was higher for experimental ponds (21.8 g) than for control (20.5 g).

Size-wise, production of big size group (30-35 g) is 578.0 kg compared to 434.6 kg for small size group (13.1-13.4 g) from both control ponds with over-all production of 1,012.6 kg. On the other hand, production from the two experimental ponds for big and small size groups is 872.2 and 405.8 kg, respectively. The means of the total weights of marketable size *Penaeus monodon* from control and experimental ponds are 289.0 and 436.1 kg, respectively. That is, 43.5% of the stock reached marketable size in ponds with staggered/partial harvest method compared to only 27.5% from control ponds.

The Production Economics of an Integrated Prawn Hatchery-Floating Nursery Project

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The paper aims to present an economic evaluation of an integrated prawn (*Penaeus monodon*) hatchery-floating nursery project using standard economic tools and methods of analysis. The data used in the analysis were taken from SEAFDEC AQD experience at the Batan, Aklan Research Substation hatchery-floating nursery project. The technical bases were gathered from researchers after the peculiarities of aquaculture *vis-a-vis* other business ventures in agriculture and industry were taken into consideration.

The study shows that an integrated hatchery-floating nursery project is a profitable culture system. The rate of return on investment for this integrated project ranges from 29 to 47% while payback period ranges from 1.8 to 2.6 years. A separate economic analysis of a hatchery project and a floating nursery was also undertaken to determine the profitability of independently operating each subsystem. The analysis shows better results for the floating nursery subsystem as compared to the hatchery subsystem. Return on investment and payback period for the floating nursery range from 23 to 78% and 1 to 3 years, respectively, while those for the hatchery range from 20 to 36% and 2.3 to 3.7 years, respectively.