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Management strategies to reduce operating costs in a commercial shrimp hatchery in NW Mexico

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Strategies to reduce operating costs at an expanding shrimp hatchery in NW Mexico are presented for a period covering 3 years (2004–2006). The hatchery increased its greenhouse-type larval rearing halls from three (50 tanks, total water volume 996 m³) in 2004, to five (70 tanks, water volume 1,396 m³) in 2005, and to seven (94 tanks, total water volume 1,876 m³) in 2006. Production increased from 400 million postlarvae in 2004 to 579 million in 2005 to 760 million in 2006, but operating costs increased only 6% during this period and the unit cost for postlarvae was 44% lower. Administration expenses were the highest variable cost, but restructuring the company reduced them from 35% in 2004, to 29 in 2005 and to 21% in 2006. Feed was the second largest variable cost, reduced from 44 to 36 to 31 through improved feeding practices, changes in feed composition, and bulk purchases of commercial feeds. Costs for propane and the workforce increased, in part from higher consumption and additional staff and higher salaries to retain the trained workforce. Competition will continue to lower the market price for shrimp postlarvae, forcing hatcheries into a permanent improvement process. Increasing costs for energy will require investments in energy-saving technologies. Improved sanitation and strict biosecurity procedures will increase the survival rate, thereby reducing unit costs still further.

Palabras clave: Management, Hatchery, Operating costs, *Litopenaeus vannamei*

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