Shrimp culture: A secondary crop in traditional fish farming practices in many Asian countries

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DESCRIPTION

Marine shrimp farming may be a century-old practice in many Asian countries. Until a decade ago, this commodity was generally considered a secondary crop in traditional fish farming practices. Shrimp fry trapped in salt beds, coastal paddy fields or brackish water fishponds are allowed to grow to marketable size and harvested as secondary crop. However, in recent years when higher income are derived from the harvest of shrimp than the principal crop, many farmers have converted their rice fields, salt beds and fishponds into shrimp farms. One in all the foremost important operational functions in shrimp culture is that the provision of adequate food supply to make sure that the classy animals attained the required harvesting size within the targeted timeframe. Feeds are among the biggest operational cost of shrimp farming and each effort should be made to confirm efficient utilization of feeds for growth. It’s therefore necessary to own adequate knowledge on the feeding habits and behavior of the classy organisms, their nutritional requirements and efficiency in dietary protein conversion for growth. Traditional shrimp farms in most Asian countries employ extensive culture operation within which the expansion of shrimps fully depends on natural food organisms. In semi-intensive culture operation, supplementary feeds are given while natural food organisms remain the key food source. In intensive culture operation, shrimp growth is totally hooked in to artificial diets. Within the natural habitat, shrimps go after other small crustaceans, finfish, molluscs, polychaetes, ophiuroids and other slow-moving benthic organisms. They catch food with their pereiopods, fancy their bucal cavity and nibble slowly. They’re omnivorous but cannibalize if food is insufficient or of poor quality. They’re also scavengers, feeding on any reasonably decaying matter available within the habitat. Though India includes a long history of shrimp farming, commercial shrimp aquaculture gained momentum only during the late 1980s. Within the early 1990s, many corporate bodies invested within the Indian shrimp-farming sector and fueled explosive growth. Many hatcheries and feed mills were established to produce seed and feed to the farmers. Some improvements of the normal farming methods are made within the past years. Stocking density of shrimp ponds may be increased through concentration of fry by pumping more tidal water into the pond. Pond depth is increased to reduce fluctuations of environmental parameters. As a result, pond yield has correspondingly increased. However, expansion of the shrimp farming industry continues to be restricted because of the inconsistency in fry supply. The success within the production of hatchery-bred shrimp fry within the 1970’s has accelerated shrimp farming development within the region. With improved pond culture techniques, yield from traditional shrimp ponds has been raised to 500–800 kg/ha/year without supplementary feeding. Pond yield are often further increased to 5–10 tons through supplementary feeding and intensive pond management. We understand that every farm has specific needs and challenges. However, breaking it right down to the fundamentals, the following tips are applicable to varied farmers across different circumstances. We hope that these 10 simple tips can help shrimp farmers implement better management regimes for his or her farms. There are lots of other tips that are specific for every a part of the culture period that we are going to cover, so stay tuned for our next installment during this series. By early 2000, the shrimp-farming area had increased from 60,000 ha in 1991 to 145,000 ha, and shrimp production had increased from 40,000 metric tons (MT) to 100,000 MT. This growth came in spite of the setback caused by White Spot Syndrome Virus (WSSV) in late 1994. The disease impacted the industry significantly in 1995 and resulted within the exit of virtually all corporate investors by 1997. This was followed by a recovery and moderate growth within the previous few years.