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## RESEARCH REPORTS

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SUSTAINABLE AQUACULTURE FOR A SECURE FUTURE

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**Title:** Risk analysis of shrimp farming in Honduras

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**Abstract:** Current realities (disease issues, environmental concerns, unstable market) are encouraging shrimp farmers world-wide to review traditional management strategies and look for tools that help optimize current practices. Uncertainties and risks associated with shrimp production also need to be recognized. The present study is a risk analysis of activities carried out by shrimp farmers in Honduras. Results of the analysis are intended to provide the farm manager–decision maker with a compendium of possible outcomes that could be obtained under different scenarios, which are modeled according to the characteristics of the Honduran shrimp industry. A survey was conducted to obtain information on production parameters and costs of shrimp farms in Honduras. Data were collected from 21 farms ranging in size from 20 to 1,800 hectares. The survey was aimed at obtaining information on stocking densities, feeding rates, and other production parameters in addition to operational costs. Collected data correspond to the production of 1997. Data from the survey showed that large farms (more than 400 ha) typically produce less than 1,000 lb ha<sup>-1</sup> yr<sup>-1</sup> and have the lowest costs per unit area and break-even yields. Yields are higher for medium farms (150 to 300 ha) than for large farms. Results of the analysis suggest that under current strategies followed by farm managers in Honduras, there is more risk associated with adopting conservative practices and a low-cost-per-hectare approach than with intensifying shrimp culture by increasing stocking densities and feeding rates.

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