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POND DYNAMICS/AQUACULTURE COLLABORATIVE RESEARCH SUPPORT PROGRAM



## RESEARCH REPORTS

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SUSTAINABLE AQUACULTURE FOR A SECURE FUTURE

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**Title:** Nonparametric estimation of returns to investment in Honduras shrimp research

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**Abstract:** Economic returns to the investment in shrimp research in Honduras by Auburn University researchers, as a part of the Pond Dynamics/Aquaculture Collaborative Research Support Program (1993 to 1998), were estimated using a nonparametric approach. A survey of shrimp growers in Honduras provided data on yield, input application, and prices for their first year of production and for the year 1997. Research investment data included funding from both public and private sectors. Results showed that total factor productivity indices increased from 1995 to 1997 indicating technical progress due to research. When both private and public investment were considered, the internal rate of return to the investment in research was 46%. However, the internal rate of return to public-sector investment alone was above 6,681%. This indicated that the public funds invested in shrimp research in Honduras have been leveraged effectively with private-sector capital to generate technological progress.

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