

Research Article

Economics of fish production at Chitwan district, Nepal

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ABSTRACT

A study was conducted in 2016 to analyze the economics of fish production at Chitwan District of Nepal. Three study sites: East, West and South part of Chitwan were selected purposively. A total of 90 households, 30 from each study site were selected randomly and were interviewed by using pre-tested semi structured questionnaire. Secondary data needed for the study were obtained from DADO, MOAD, NARC and other related organizations working on fisheries and aquaculture sector. Descriptive statistics and extended Cobb Douglas production function was used to accomplish the study objectives for which MS-Excel and SPSS 16 were used. The B/C ratio is obtained dividing the gross return by total variable cost incurred. The total cost of production per ha of the pond area was Rs. 743798 per year with 79 and 21 percent variable and fixed cost components, respectively. Feed cost (28 %) was largest cost item followed by cost for labour (25 %), fingerlings (10 %), maintenance (6 %), manure cum fertilizers (5 %), fuel cum energy (3 %) and limestone and others (2%). The average gross return and net profit realized per ha were Rs. 1223934 and Rs. 480135 respectively. The cost, return and profit were calculated to be highest for east Chitwan with highest B/C ratio followed by west Chitwan and south Chitwan. The B/C ratio for the district was found to be 1.63. The return to scale was found to be decreasing with value of 0.654 indicating that 1 percent increment in all the inputs included in the function will increase income by 0.654 percent. Production function analysis, including five variables, showed significant effect of human labour, fingerlings and fuel cum energy cost but feed and manure cum fertilizers cost were insignificant.

Keywords: Fish, Cost, Return, Benefit Cost ratio, Production function

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