

EFFECT OF INTRODUCED NON-NATIVE FISH SPECIES ON ECOSYSTEM SERVICES ON LAKE KARIBA FISHERY

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Abstract

The purpose of the study was to assess the effect of introducing non-native fish species (*Limnothrissa miodon*, *Oreochromis niloticus* and *Cherax quadricarinatus*) have on ecosystem services of the Lake Kariba fishery. Three hundred and seventy-seven (377) respondents were picked randomly from the 3 strata (I, II and IV) of the lake and were interviewed using a questionnaire. Focus Group Discussion (FGD) and interviews with headmen/women, experts, government leaders and processors/exporters were also done to strengthen and validate the results. Analysis of data was done by cross-tabulation using chi-square analysis using SPSS version 16. Microsoft Excel was used to produce outputs, which was done based on defined themes. Responses from FGD and key informants were analyzed using classical content analysis. The study revealed that although there has been an ecological impact on the Lake Kariba fishery, introduced non-native species have had a positive effect on ecosystem services through improved peoples' livelihoods brought about by improved household food security, improved nutrition, employment creation and overall contribution to the Gross Domestic Product (GDP) of the country. Around 59.42% of the respondents showed an affirmative response that introduced non-native fish species have a positive response on their lives. It's therefore concluded that despite the ecological effects, introduced species have a positive effect on livelihoods through improved food security, employment creation, income generation and overall contribution to Zambia's GDP. Keywords: Non-native species, Ecosystem services, *Oreochromis niloticus*, *Limnothrissa miodon*, *Cherax quadricarinatus*, Ecosystem, Lake Kariba.

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