

Who uses the fishery resources in South Africa's largest impoundment? Characterising subsistence and recreational fishing sectors on Lake Gariep

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Abstract

The African Union's prioritisation of inland fisheries as an investment area for poverty alleviation and regional economic development will require the development of management plans. These should be based on sound knowledge of the social dynamics of the resource users. In South Africa the social dynamics of resource users of inland fisheries have never been assessed. The purpose of this study was to assess the human dimensions of the anglers utilising the fishery in Lake Gariep, South Africa's largest impoundment. The study was based on 357 first-time interviews conducted on the lakeshore between October 2006 and December 2007. Anglers were categorised as recreational (39%) or subsistence (61%) based on their residency, occupation, primary motivation for angling, mode of transport and gear use. Subsistence anglers were local (99%), residing within 10 km of the place where they were interviewed, while recreational anglers included both local resident and non-resident members. The racial composition of anglers was dependent on user group and differed significantly ($p \leq 0.05$) from the demographic composition of the regional population. Recreational anglers were predominantly White ($\geq 60\%$ of interviews) and Coloured ($\geq 25\%$), while 84% of subsistence anglers were Coloured and 16% Black African. Most recreational anglers had permanent employment or were pensioners while $<30\%$ of subsistence anglers were permanently employed. Most recreational users (82%) accessed the lake with their own vehicle while subsistence anglers mainly walked (63%) or used a bicycle (28%). Recreational interviewees either consumed (59%), sold (11%), gave away (10%) or released (20%) some of their catch. Subsistence anglers either ate their catch (53%) and/or sold (41%) their catch. Within the subsistence sector no anglers released fish after capture or gave some of the catch away. We conclude that this inland fishery contributes to the livelihood of the rural poor who use the lake on a subsistence basis and that recreational-angler based tourism may contribute to increased income and employment opportunities through related service industries.

Keywords: angling, livelihood, recreational, subsistence, policy