

Fiji's groupers – valuable but vulnerable

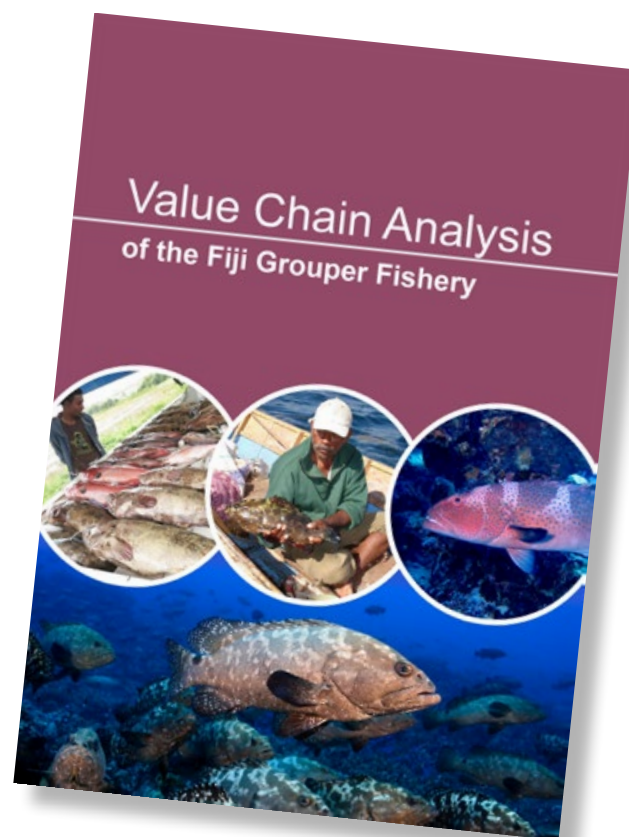
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Groupers (family Epinephelidae) are among the most highly valued (Grade 1) fish in Fiji's coral reef coastal fishery. The kawakawa (camouflage grouper, Epinephelus polyphekadion), in particular, is very much appreciated in Fiji's domestic markets, and several other groupers are especially valued for export markets to China. Recognising the increasing value of, and demand for, groupers generally, in parallel with declines in some grouper populations both in Fiji and in other countries of the region (Lee et al. 2018), we were interested to learn more about the marketing of grouper. We had noticed that fishers in some parts of Fiji were catching fewer and sometimes smaller groupers than in the past, a matter of concern for the resource itself and for fisher incomes (Sadovy de Mitcheson and Ramoica 2015).

To learn more about the grouper trade in Fiji, we conducted a value chain analysis to examine the distribution of value gained from groupers along the trade chain – from fisher to consumer – between September 2016 and April 2017. Our intention was to inform policy-makers on how higher economic benefits can be derived from groupers for value chain actors, particularly fishers, without compromising the resource base, considering that groupers are known to be particularly susceptible to overexploitation (Sadovy de Mitcheson et al. 2013). We also examined the implications for Fiji of exporting this limited and valuable resource and whether exports were of benefit to Fiji, given the declining availability of groupers in domestic markets and the lack of export tariffs.

Based on socioeconomic survey questionnaires with fishers, middlemen and middlewomen, hotels, restaurants, and exporters involved in grouper fishery and trade, and referring to the literature, we describe the trade chain as it applies to both the domestic and export trade. We gauged perceptions of resource status and evolution and gathered opinions on possible management approaches. Groupers were once exported live from Fiji to China but concerns about overfishing led to an assessment of sustainable catches and recommendations for monitoring and management (Yeeting et al. 2001): the live export trade ceased shortly after this report. Now that chilled or frozen groupers can attract high prices, similar concerns are emerging for the viability of this export trade, which should either be controlled by a quota system, or eliminated due to concerns about overfishing and competition with domestic markets.

Because most fishers catch groupers for both food and income, and given the interviewees' perception of declining



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grouper resources, prioritisation of local food security and sovereignty could help shape the management of Fiji's grouper fisheries and trade. Interviewee responses were consistent with independent studies that suggest that grouper catches have declined several-fold in recent decades (Lee et al. 2018). Due to such concerns, fishers identified appropriate management options, including spatial, temporal and gear controls, while most other players along the value chain were supportive of the seasonal (i.e. June–September) fishing ban that protects key groupers when aggregating to spawn, introduced in 2018.

To achieve higher values from groupers and reduce risks of overfishing when unit prices vary by season, species and sales outlets, it is important that market prices and needs are better understood, and that grouper resources are adequately monitored and managed. For example, fishers receive similar prices for all grouper species caught, yet the price differentials downstream can be considerable. For example, leopard coral trout *Plectropomus leopardus* (red donu) prices are often double those of other grouper species, while size (certain sizes fetch higher export values),

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condition (freshness and appearance) and availability (scarcity versus market gluts) can all substantially influence prices. Other valued species are camouflage grouper and tiger grouper (*E. fuscoguttatus*). To improve prices to fishers, the formation of producer groups to share resources for marketing could be beneficial, while a better understanding of market pricing could enhance bargaining power. Training could help to add value to catches by improved handling, processing, transportation and storage.

A full copy of the report 'Value chain analysis of the Fiji grouper fishery' is available from: WCS Fiji's website.³

References

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Fisher weighing his catch before pickup by middleman in northeast Vanua Levu, Fiji. (image: Yvonne Sadovy de Mitcheson)

³ <https://fiji.wcs.org/Resources/Reports.aspx> and <https://fiji.wcs.org/Portals/82/reports/WCS%20Grouper%20VCA%20Report%20081018%20WEB.pdf?ver=2018-10-31-023525-590>