

Evaluation of Tropical Fisheries Management
within Australian waters

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Abstract

The world's fisheries are in a state of crisis. With many of Australia's tropical fisheries being poorly understood – and limited data on marine composition and ecological inter-relationships being available. An economic barrier of distance has long hindered the development of Australia's tropical fisheries. Recent decades have seen growth in these northern/external fisheries, increasing the call for effective fisheries management within these remote areas. Effective management is considered as the ability of the management to satisfy the biological, environmental, administrative, economic, political and social components of the fishery. Review of the Northern Prawn Fishery, Cocos (Keeling) Islands Fishery and Western Australian Northern Shark Fishery determined whether this broad consideration of effective management can be evaluated. The NPF (a large targeted commercial trawl fishery) management demonstrated a clear consideration for each component. The CKIF (a small traditional subsistence atoll fishery) management demonstrated no particular consideration for any component. The WANSF (a small sized targeted commercial fishery) management demonstrated a consistent consideration for each management component. The cross-fishery analysis identified a vast difference in levels of considerations between the fisheries. The method of assessment was seen to be of little value in assessing the CKIF, as the set management components had little focus on aspects of traditional community fishery management. The assessment was unable to identify either commercial fishery as effectively managed, as the means of assessment had reduced potential to evaluate the relevance of management considerations from fisheries of differing commercial size. A future evaluation model was identified as primarily determining whether a management maintained sustainability within the fishery, before evaluating the other management components.