Managing small-scale fisheries confronted with socio-economic changes in New Caledonia (South Pacific)

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On the rural Northwest coast of New Caledonia, the settlement of a world class mining complex has initiated rapid socio-economic changes, linked with a considerable demographic increase (+ 65% between 2007 and 2015) and plentiful job opportunities. In 2007 and 2009, studies on fisheries and commercialization of reef finfish and invertebrates were conducted to assess how these changes could impact resource-use patterns. Results showed that 1) economic, 2) social and 3) ecological changes were expected. 1) The increase in demand (+70%) may strengthen the market for marine products through the increase in local commercial fishing or external supply that would diversify and lessen local fishing pressure. 2) The lagoon uses were strongly linked to the social background of fishers. Subsistence and recreational fishing practises were part of ways of life in this rural area and may be modified by the ongoing local economic boom. 3) The overall fishing pressure (0.26 t/km²/year) was low. However, its spatial distribution showed that some areas were close to overfishing. Results suggested that the expected rise in commercial and recreational fishing could lead to unsustainable exploitation levels in these zones.

Given the scope of potential changes, public authorities have to manage changing lagoon uses to balance the indirect effects of economic development on the local natural and social landscape. They will have to choose options that would support the development of local fisheries, representing about $500,000 \in$ of sales a year, or maintain the present social organization and ecological status of reefs.