

Status and trends of artisanal fisheries in Nampula and Zambezia provinces, Mozambique

USAID commissioned this study to better understand socioeconomic and ecological issues related to fisheries in this priority geography, including the current wellbeing of fishing communities and their prospects for the future.

~101,000 households

are involved in maritime fishing activities in Nampula and Zambezia

54%

of marine artisanal catch in Mozambique is from Nampula and Zambezia

25%

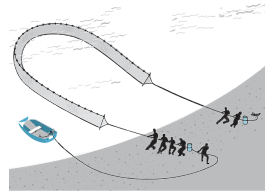
of households interviewed reported having sufficient income from fisheries.

~50%

On average coastal households reported 50% of their income came from fishing, and their fishing income was sufficient to meet family needs when it exceeded 35,200 MZN (equivalent of catching 3.2 mt of fish/year).

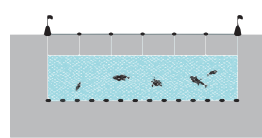
Fishing Gear Types

Beach Seine | 37% catch



5,300 beach seines in both provinces and each net is associated with 9-22 fishers. In 2024, a regulation prohibiting beach seining will come into effect. While this measure is ecologically desirable, its impact on fishers requires additional attention and planning.

Gill Net | 8% catch



7,109 gill net gears in both provinces and each gill net has 5-8 fishers associated.

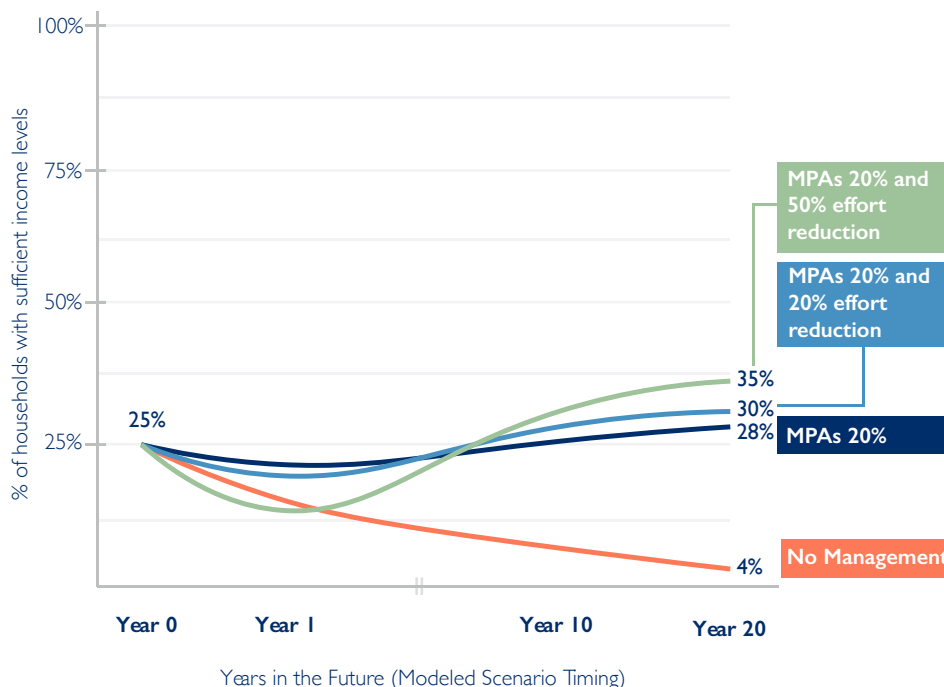
Hook and Line | 22% catch



6,481 gears in both provinces and each hook and line has 1-8 fisher(s) associated.

Figure I. Percentage of households able to meet basic family needs from fishing under different fishery management scenarios

The modeling results demonstrate the importance of both improved fisheries management and income diversification for coastal households in the study area. In the absence of improved fisheries management, the number of households earning sufficient income to meet their basic needs will continue to decline. Concurrently, coastal households need additional income sources to adjust to improved fishery management practices, support new entrants to fisheries with population growth, and increase the number of households earning income levels that provide economic security.



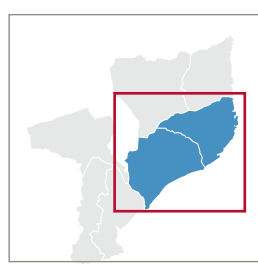
Scenario Assumptions:

- Households earn approximately 50% of their income from fisheries
- Current population of fishers remains the same (although annual population growth is 2.9%, 2020)
- Current price of fish remains the same
- Current distribution of catch between fishers remains the same

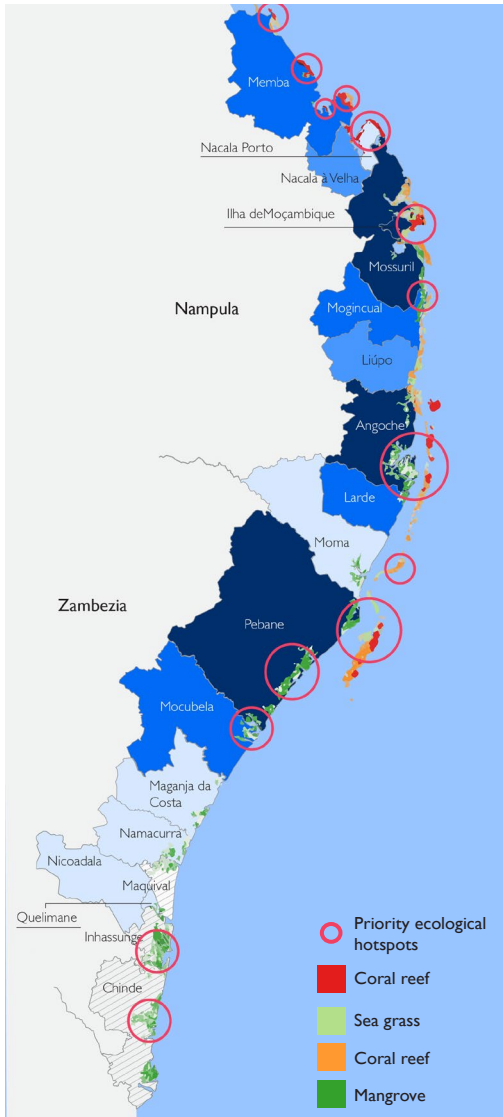
Other levers of change that implementers to consider for achieving sufficient income level of households:

- Increasing the price of catch value (without raising catch)
- A more equitable distribution of catch among fishers

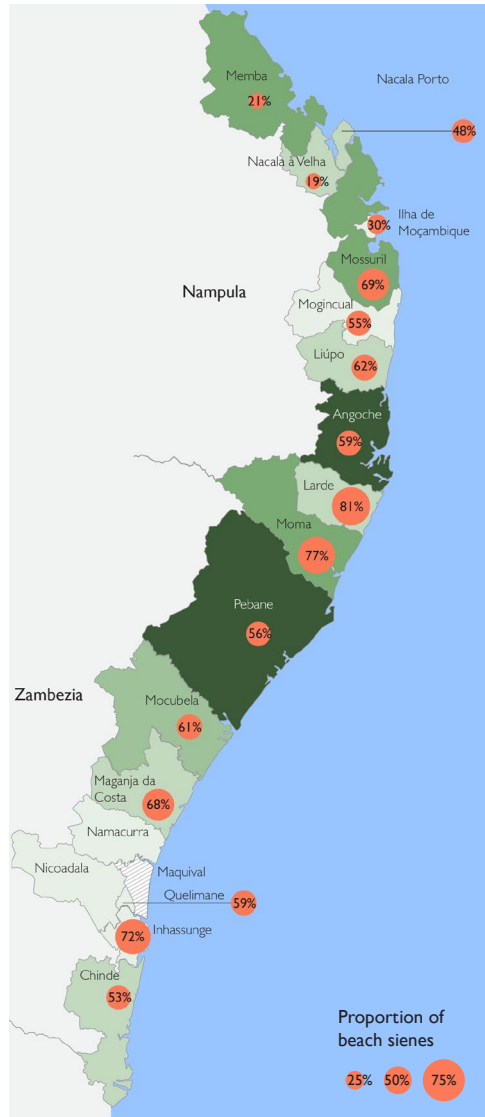
Data captured and shown below for select coastal districts in Nampula and Zambezia



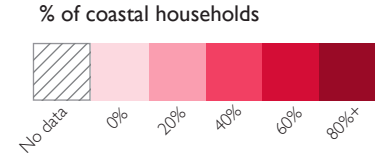
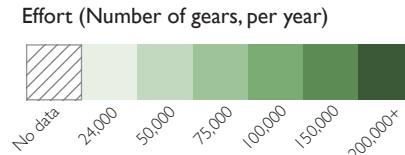
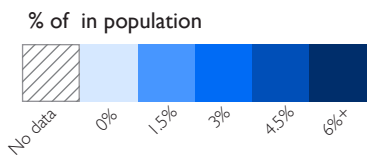
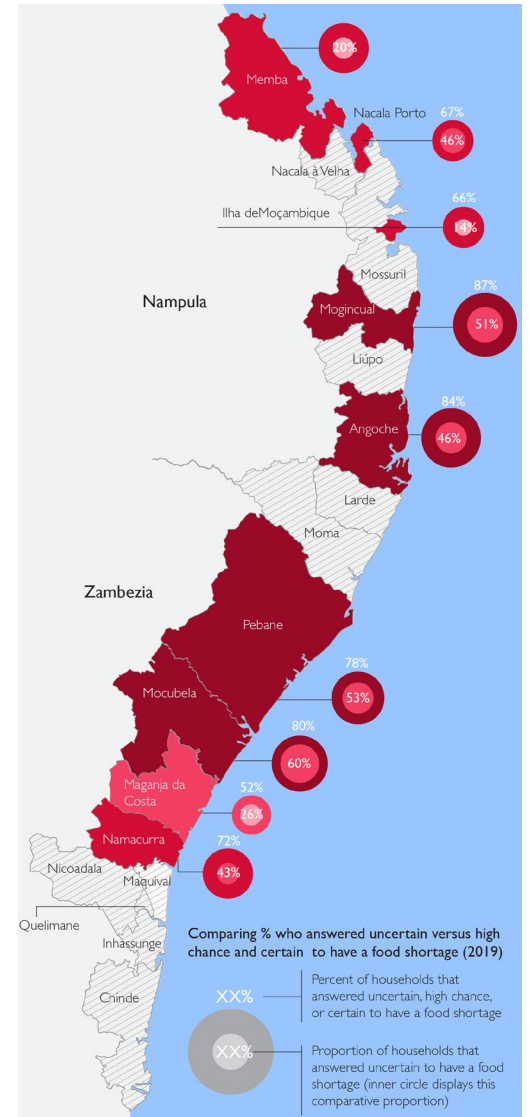
Map 1
Ecological hotspots & fisher populations



Map 2
Fishing Effort



Map 3
Household Food Insecurity



Fisher population represented by color gradient and ecological hotspots highlighted by red circles. Ecological hotspots provide critical spawning, foraging and nursery habitat and are major larval source and sink areas.

* The ecological hotspots (red circles) shown are areas of particular importance for supporting fisheries based on the habitats present and their role in fish foraging, spawning, and larval connectivity. These hotspots were identified through spatial prioritization models for coral reef dependent fish species in six districts across the study area.

Total number of gears reported in 2019 represented by color gradient with the proportion of catch reported from beach seines overlaid.

Percent of households that answered (on a Likert scale) unsure, a high chance, or certain to have a food shortage in the next 12 months represented by color gradient, and the comparative proportions displayed in the concentric circles.