



FACT SHEET

JULY
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A SUSTAINABLE SHRIMP FISHERY FOR MOZAMBIQUE

The EU is the world's largest seafood market. Buying decisions made by EU consumers and corporates have global consequences on social, environmental and economic levels: by supporting sustainably produced seafood, we can make a significant contribution to international development.

28

**MILLION PEOPLE
IN MOZAMBIQUE;
20% RELY ON FISHERIES
FOR PART OF INCOME**

**2,500 KM
COASTLINE ALONG THE
SOUTH-EAST OF THE
AFRICAN CONTINENT**

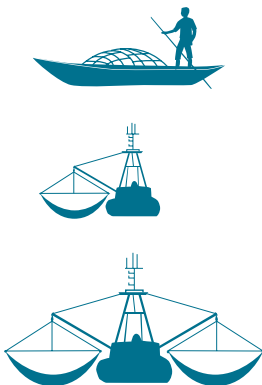
The shrimp fishery in Mozambique is a good illustration of an area where European citizens can make a positive difference to the future. Many stakeholders depend on the long-term viability of the stocks: if they come together to put their operations on a sustainable footing then thousands of lives will be improved and environmental impacts reduced. However, if they don't, the fishery risks destruction through overfishing and poor management, and the social and environmental consequences will be severe.

MOZAMBIQUE - KEY FACTS

- **Population:** 28 million
- **Coastline:** 2,500km, +60% of population live in coastal areas
- **Fisheries:** Annual marine catch 150,000 tonnes, contributes >€400m to GDP. 90% of Mozambican fishers are small-scale artisans. Approx. 20% rely on fisheries for part of income; fish makes up half of population's protein intake.

MOZAMBIQUE SHRIMP INDUSTRY

Shrimp is one of Mozambique's main fishery products – and 82% of its exports go to the EU, mainly to Spain and Portugal. Deep and shallow water species are targeted by a fleet which works in three sectors:



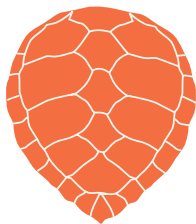
- **Artisanal sector** – Fishers use small-mesh beach seines deployed from canoes then hauled ashore by 10-14 people. Fish are the main target, but high value shrimp are an important part of the catch.
- **Semi-industrial sector** – Larger vessels of 10-20m fish for shrimp offshore using otter trawls. Most of the catch is sold domestically because of limited onboard freezing capabilities.
- **Industrial sector** – Vessels around 30m with freezer capacities of 40-60 tonnes trawl for both deep and shallow water species. Most of the vessels are European-owned joint ventures with the government, and their high-value catch goes to export markets.



**\$36-67
MILLION**

**COSTS TO MOZAMBIQUE
EACH YEAR
ILLEGAL, UNREPORTED
AND UNREGULATED (IUU)
FISHING IS A PROBLEM ALL
OVER THE WORLD,**

**IN THE DECADE
TO 2012,
SHALLOW-WATER
SHRIMP LANDINGS
FELL FROM
9,000 TONNES
TO 1,800 TONNES**



THREATS TO A SUSTAINABLE GROWING INDUSTRY

Although Mozambique's shrimp stocks have historically been plentiful, they are now threatened: the shallow-water catch fell from 9,000 to 1,800 tonnes in the decade to 2012. This puts both livelihoods and biodiversity at risk. Several factors contribute to the worsening situation:

Overfishing – All three fleets fish unsustainably. Artisanal fishers catch juvenile shrimp before they can reproduce; in deeper water, the heavy trawl gear used is posing an increasing risk to shrimp habitats, with obvious knock-on effects: this magnifies the impact of overfishing.

IUU fishing – Illegal, unreported and unregulated (IUU) fishing is a problem all over the world, and costs Mozambique \$36-67 million each year. In the shrimp sector like any other, lack of knowledge of its true impact makes stock management much more difficult.

Bycatch – Bycatch rates (including commercial and sensitive species) in tropical shrimp trawls are estimated to be as high as 85%. This can devastate ecosystems. Fishers are resistant to change as they fear less bycatch in nets could also mean fewer shrimp.

Climate change – Mozambique ranks third in African countries most vulnerable to climate change: erosion threatens coastal infrastructure making markets harder to access, while droughts mean people are shifting from farming to fishing, adding to pressure on stocks.

Ecosystem threats – Mozambique is developing fast, but at a heavy environmental cost with widespread pollution and habitat destruction – including of mangroves, vital nurseries for shrimp.

TURTLES UNDER THREAT

Tropical shrimp trawling operations cause more turtle deaths than all other human activities combined. In Mozambique, it's estimated some 1,500 marine turtles drown in nets each year. But if nets are fitted with turtle excluder devices (TEDs), deaths are reduced by around 97% for only a 2% reduction in shrimp catch – and this is easily compensated for by swifter processing and better quality shrimp, not to mention more potential markets.

National legislation makes TEDs compulsory in Mozambique – but in practice this rule is widely ignored. Their absence disqualifies exporters from selling to the US market, and leaves the EU – which currently lacks such a regulation – as the main market. Widespread promotion and use of TEDs must become a priority for the fleet, and be properly enforced.

SOLUTIONS

It's still possible to put Mozambique's shrimp fishery on a sustainable footing offering improved yields, reduced impacts on the marine environment, higher margins and long-term security – but this will require collaboration and commitment from all involved, and an effective management and control regime. There are three key priorities:

- **Raising awareness** – with government, business, fishers – of the benefits of sustainability to gain universal buy-in.
- **Rebuilding stocks** through a science-based 'maximum sustainable yield' approach, with seasonal and area closures as needed to protect vulnerable populations of shrimp and other sensitive species.
- **Improving profits** by investing in ice and freezer facilities to raise product quality and export potential, increasing industry wealth-generation.



MOZAMBIQUE IS UNDERTAKING A WWF-SUPPORTED FISHERIES IMPROVEMENT PROJECT (FIP) TO MOVE TOWARDS MARINE STEWARDSHIP COUNCIL CERTIFICATION FOR ITS INDUSTRIAL DEEP-WATER FLEET

Mozambique is undertaking a WWF-supported Fisheries Improvement Project (FIP) to move towards Marine Stewardship Council certification for its industrial deep-water fleet. It's a good start, but stocks, ecosystems and management all need significant work before this will be attained – as is the case across the whole industry.

ACTIONS

WWF therefore:

- Reaches out across diverse sectors to engage the fishery as a collective whole
- Works with government and industry (including Europe-based businesses) to communicate the economic and social benefits of sustainability
- Supports efforts to embed sustainability through the MSC programme and FIPs
- Calls on donors and agencies (including the EU) to provide financial and logistical support for improved management and control systems, facilities and infrastructure
- Supports the immediate introduction of TEDs across the industrial fleet
- Promotes EU consumer demand for sustainable seafood, helping consumers understand the impact of the choices they make





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Written and edited by WWF Mediterranean - Portugal / Evan Jeffries (www.swim2birds.co.uk), primarily based on data contained in a recent report: 'A Case Study of the semi-industrial and Industrial Shallow-Water Shrimp Fishery in Mozambique' by Robin Davies (consultant) in July 2016

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