







The Value of **Increasing Marine Protection in South Africa**

Marine Protected Areas (MPAs) defend the oceans capacity to produce oxygen, sequester carbon and provide food and livelihoods for billions of people. The combined economic benefits of marine and coastal ecosystems are estimated to be around 35% of South Africa's annual GDP.





JOB & FOOD SECURITY

- In Africa, the fishing and marine food sector employ more than 12 million people, the largest of the Blue Economy recognized sectors across the continent.
- At present, a number of South Africa's marine resources are overexploited, which results in a loss of potential food protein, livelihoods and income.
- In 2014, it was estimated that 312 000 tonnes of seafood was eaten in South Africa annually.



FISHERY ENHANCEMENT TOOLS

- Fisheries play an important role in meeting food security needs and providing livelihoods for more than 100,000 people in South Africa.
- An analysis of scientific studies showed that **fish biomass** is, on average, 670% greater within ocean sanctuaries (i.e. fully protected areas) than in unprotected areas, and 343% greater than in partially-protected areas.
- In 2006, the economic value of linefish exports from MPAs in the Garden route (Goukamma, Robberg, and Tstisikamma MPAs) was valued at R33 million per year.

E.G.

GOUKAMMA MPA

This linefish refuge allows populations to recover and benefits neighbouring waters with "spillover" fish. This results in more and bigger fish being caught in the open areas near to the MPA. For example, a study found that the catch of endemic seabream in the Goukamma MPA and adjacent areas effectively doubled its pre-MPA values in just 10 years.



















ECO-TOURISM VALUE

- South Africa is known as an adventure destination, and the coast provides countless ecotourism activities - snorkelling, scuba diving (including spear fishing), shark diving, whale watching, coastal hiking, bird-watching, game fishing and surfing. Contributing significantly to the country's overall tourism value.
- The direct value of the marine ecotourism sector to the South African economy was estimated at R400 million and its indirect value at more than R2 billion. While the direct contribution of coastal tourism to national income was US\$1734 million (R26 billion in 2009).
- Penguin Tourism at Boulders in Cape Town was estimated to contribute ~R14.5 million in 2010. The current total value of the colony is estimated to be R28 million.
- A small patch of Mangroves at the Mngazana mangrove forest were valued in 2005 to provide ecosystem services worth over R1.6 million annually.
- Diving at iSimangaliso was valued at over R75 million and estimated to contribute more than **R12 million** at **Aliwal Shoal** in 2014. **These two** sites alone (both MPAs) bring in over 100 000 divers annually and are integral to pro-poor community development.
- Sardine Run Ecotourism coupled with boats and tours are estimated to be worth more than R5.4 million.



E.G.

PROTEA BANKS MPA

Protea Banks MPA protects around 7 different shark species (popular sharkdiving spot); Protects unique deep reefs and three submarine canyons and secures the value of the area for ecotourism (including the sardine run).



COMBAT CLIMATE CHANGE

- Coastal ecosystems are widely known to fight climate change through carbon sequestration. Coastal vegetation like mangroves, seagrass beds, salt marshes store this carbon effectively. The protection and restoration of coastal vegetation could provide coastal and island communities with important economic opportunities on the carbon offset market.
- MPAs protect habitats (like mangroves, coral reefs, salt marshes and seagrass) that provide a buffer against the impacts of climate change and a level of insurance against natural disasters, additionally strategically-placed MPAs defend coastal property and infrastructure from the impacts of natural disasters.

E.G.

UTHUKELA MPA

(North Coast, Kwa-Zulu Natal)

uThukela MPA protects endangered mud habitats and species that depend on the inflow of water from uThukela, South Africa's second largest river.





















BIODIVERSITY RESILIENCE

- Biodiversity forms the backbone of ecological resilience and resilience refers to the capacity of a system to respond and recover from a disturbance, and to return to a state of equilibrium. Resilience provides structure and environmental stability around which socioeconomic development occurs.
- Marine reserves may not be immune to the effects of climate change, but to date, reserves with complex ecosystems are more resilient than unprotected areas.
- Scientific evidence consistently shows that the **greatest** ecological benefits from protection are derived from strongly or fully protected areas. By excluding extractive activities and removing or minimising other human pressures, species can maintain or recover abundance, biomass and diversity.
- Within MPAs, species populations may grow, their age structure change and their reproductive output increase. These factors increase resilience, larger populations and higher reproductive outputs which buffer against decline, meaning that species are less likely to become extinct at local, regional or global scales.

E.G.

ISIMANGALISO MPA (North Coast, Kwa-Zulu Natal) iSimangaliso MPA safeguards feeding areas of the critically endangered leatherback turtles; Protects submarine canyons; Provides refuge for coelacanths and protects slinger and rockcod aggregations to deliver fisheries benefits.

If we do not protect our oceans sufficiently, we will lose money and have much more risk economically - climate change, less funds from tourism, collapse of commercial fisheries etc. Over-fishing, damaging industrial activities, habitat destruction, climate change and pollution are not letting up and by not protecting our oceans ability to keep giving what we take, we risk a biodiversity crisis, ocean collapse and a subsequent economic catastrophe.

More reason to push hard and accelerate 10% ocean protection in South Africa. We must make a shift from what needs to be done to how it can be done.

LET US LEAVE THE YOUTH AND GENERATIONS TO COME A HEALTHY, RESILIENT, AND THRIVING OCEAN.

The sources of the above stats and facts can be found here: https://oceanimpact.co.za/references/







