WHAT ARE MPAS?

A Marine Protected Area (MPA) is a part of our coastline or our ocean that is specially protected, for the benefit of people and nature. They help manage part of the marine environment to promote fisheries sustainability, keep marine ecosystems working properly, and protect the range of species living there, helping people to benefit from the marine environment.

South Africa has a rich heritage of coastal and ocean ecosystems. While our land-based heritage is well protected through various national and other parks, many important marine areas have not been formally protected. However, this is changing as the Department of Environmental Affairs is in the process of declaring new Marine Protected Areas.

These MPAs will protect our ocean heritage for future generations and support fisheries sustainability, risk management, adaptation to climate change and tourism.

MPAs are so much more than simply ocean National Parks because of their role in fisheries sustainability. The returns on having well designed and properly run MPAs can be measured in their economic, environmental and social benefits.

This fact sheet explains the role of MPAs in meeting our Ocean economy and Sustainable Development Goals. MPAs help safeguard the marine environment and the services provided by healthy oceans including food, climate resilience, medicines and other benefits.
**FISH FOREVER**

MPAs support fisheries sustainability by protecting breeding and nursery areas, providing areas for resources to recover from overuse and through spillover or flow of benefits to adjacent areas. In an increasingly industrialised ocean, MPAs help maintain food and job security provided by the fisheries sector.

**BIGGER, BETTER, AND MORE ABUNDANT**

In many fish species, the older and bigger the females get, the more fertile and productive they become. This is different to humans and most mammals, whose breeding ability declines after a certain age. Where fish are allowed to mature undisturbed in a no-take area, the returns increase exponentially as their number of offspring increases. These young fish can move outside the no-take area into exploited areas. This flow of benefits is known as the "spillover effect" where fish populations build up inside the MPA and eggs and young from the large breeding adults can restock fishing grounds.

One study in the Tsitsikamma no-take MPA in the late 1980s found that red roman fish numbers were 42 times higher in the protected area when compared to nearby unprotected fishing grounds. This was after just two decades of protection allowed the species to recover. Such gains can be undone in a matter of months, if fishing starts again. Another study adjacent to the Goukamma MPA showed increases in fish catch rates without disadvantaging fishers. These are examples of some of the benefits of no-take zones of MPAs to sustaining fisheries.

**STREAMLINING DECISION MAKING TO UNLOCK THE OCEAN ECONOMY**

MPAs can help streamline environmental authorisations and represent a practical solution for managing Ecologically and Biologically Significant Areas (EBSAs). By setting aside areas of representative habitat types, other areas can be freed up for development. The protected areas also provide reference areas against which environmental impacts of activities can be measured. MPAs create certainty for development planning.

**MPA establishment is Essential to Maintain Eco-certification of the South African deep-sea trawl fishery – Vital to food and job security provided by this sector**

- Current worth of fishery: R4 Billion
- 92% of employees are previously disadvantaged with 70% of processing jobs held by women and 40% being women who are sole breadwinners in single-parent families
- Analysis shows that loss of certification will decrease the Net Present Value (NPV) of the fishery by 35–40% over a 5-year period, with a potential loss of about 12,000 jobs
- Loss of eco-certification will cause loss of access to lucrative international markets and negative impacts on the domestic market

Co-existence of ocean industries, fisheries and protection is feasible through Marine Spatial Planning and effective design of Marine Protected Areas.
ADAPTATION TO CLIMATE CHANGE

MPAs help maintain resilience in ecosystems under stress from climate change. Resilience in ecosystems contributes to resilience for people living in coastal communities. MPAs help maintain genetic diversity, critical for species to adapt to climate and other changes.

Coastal protection
Healthy shorelines protect and buffer coastal communities and infrastructure from extreme weather, tsunamis and sea-level rise. Protection of healthy shorelines now yields future benefits and safeguards the social and economic wellbeing of coastal communities.

Benchmark for measuring change
MPAs help us to understand what a healthy ecosystem should look like. We can use this information to measure change in unprotected areas. These scientific baselines, enable us to measure the impacts of climate change, invasive alien species, or pressure from fishing, mining and other activities outside the MPA. They are living laboratories.

MPAS INCREASE TOURISM REVENUE

MPAs attract local and international tourists. The estimated value of South African marine ecotourism is R428 million in direct value, and at least R2,130 billion in overall value to the economy. The African penguin colony at Simonstown and the coral reefs of Sodwana Bay attract thousands of visitors every day. South Africa’s oceans have species that occur nowhere else on earth and offer incredible encounters with seabirds, turtles, sharks, rays and other animals that local and international tourists want to experience. South Africa’s seascapes include beautiful coasts, reefs, underwater forests, important cultural and historic sites and even sub-marine canyons home to ‘Pre-historic’ coelacanths.

BIO-DISCOVERY AND BENEFITS FOR THE BIO-ECONOMY

Marine species may produce powerful medicines and other compounds and services that have yet to be discovered. These provide untapped possibilities for the bio-economy.

One of our South African seaslug species, the silver seaslug Leminda millecrca, produces a compound that fights against oesophageal cancer.

The most powerful compound ever tested against cancer comes from a deep water creature found only in the Agulhas ecoregion of South Africa.

JOB CREATION & SUPPLEMENTARY LIVELIHOODS

MPAs can provide important alternative sources of income and livelihoods for many people. Jobs associated with the marine wildlife economy, such as tour guiding, scuba diving, shark cage diving, turtle, bird and whale watching are all possible close to protected areas. Local communities can take advantage of the opportunities from tourists who come to otherwise unknown areas, because they are protected. This allows for entrepreneurial enterprises such as family-run restaurants, curio and craft sales, local produce sales and ‘home-stay’ type accommodation. MPAs also create jobs linked directly to the MPA, including tour guides, field rangers, park managers, gate staff, hospitality staff, maintenance staff and in-house educators.

In addition to contributing to food and job security, climate resilience and tourism development, MPAs have additional benefits to people. These include educational, cultural, historical and spiritual benefits.

Outdoor Classrooms
MPAs are wonderful resources for education and provide learning opportunities for people of all ages. They give children and adults a chance to explore and enjoy our ocean heritage, learning about South Africa’s unique environment while having fun in nature.

Left: Rangers doing monitoring work in the Aliwal Shoal MPA
Right: Officer in the Trafalgar MPA

Left: Rangers doing monitoring work in the Aliwal Shoal MPA
Right: Officer in the Trafalgar MPA
Preservation of Culture and History
Our coastlines have cultural and historic meaning for many South Africans – MPAs can help look after these special places, such as archaeological sites, traditional fishing areas and can help support age-old cultural practices.

Where MPAs allow some fishing or harvesting of species such as mussels, people gain a valuable source of protein, more importantly this allows communities to continue with the historical subsistence practices that maintain their cultural heritage.

Sites of historic significance
Wrecks and other sites of archaeological and historical interest help diversify tourism opportunities and development. The wreck of the Produce within the Aliwal Shoal MPA is a popular dive site.

Spiritual spaces
The sea is a place of cleansing and spiritual renewal for many South Africans. A powerful spiritual connection to our ocean enhances our lives and sustains us emotionally.

INCREASING OCEAN PROTECTION
South Africa is in the process of declaring several new MPAs to advance protection from 0.4% to 5% of our marine environment. This network represents the diversity of South Africa’s marine ecoregions and ecosystem types.

These new MPAs will:
- Protect offshore ecosystems for the first time, some of these contain Critically Endangered habitats and species.
- Help overexploited species to recover and improve fishery yields.
- Manage Ecologically and Biologically Significant Areas (EBSAs), Sensitive habitats such as coral and sponge grounds and Essential Fish Habitats.
- Improve protection of well-known animals such as whales and dolphins, sharks, turtles and seabirds to ensure their survival and enhance tourism opportunities.
- Streamline environmental decision making, support the ocean economy and contribute to Sustainable Development Goals.

FUTURE FRIENDLY OCEAN MANAGEMENT
MPAs provide opportunities for future generations by supporting sustainable development and ensuring the ocean continues to provide benefits.

Our children need us to protect our oceans – by protecting our oceans today we are providing current and future generations with food, climate resilience, job opportunities, medical breakthroughs and spiritual connections. By protecting ocean ecosystems we are protecting ourselves, and giving the people of South Africa options for the future.

HOW MPAS CONTRIBUTE TO SUSTAINABLE DEVELOPMENT GOALS
The new MPA network helps South Africa progress towards the Sustainable Development Goals (SDG) and the Convention on Biological Diversity (CBD) target of 10% protection by 2020.