



Located in East Nusa Tenggara Province, Rote Ndao is at risk from multiple sources of threats in the ATS region, from climate change, marine pollution from oil and gas rigs around the Timor Sea, to marine debris and activity from fishing and shipping vessels. These activities affect water and sediment quality, habitats and marine biodiversity in the Arafura Sea, especially in Rote Ndao. Seeking to understand local communities' perception of the impacts of marine- and land-based pollution, the GEF/UNDP/PEMSEA ATSEA-2 Programme has conducted a field survey; results identified marine pollution hotspots and highlighted areas most vulnerable to climate change. Moving forward, ATSEA-2 is seeking an audience with the Rote Ndao local government and will endorse the development of a community-based task force in the area to tackle marine pollution from the oil and gas sector. These actions will be complemented by training and regional exchange.

In addition, ATSEA-2 will focus on ecosystem-based Integrated Coastal Management (ICM) adaptation and implementation, including alternative livelihood interventions and capacity building, complemented by climate change vulnerability assessments. Coastal fisheries are integral to socio-economic development in the majority of coastal communities throughout the ATS region; ICM provides local planners, developers and other beneficiaries with a framework to improve sustainable development and conservation of local coastal and marine resources, which will result in better use and management of ecosystem goods and services.

A key aspect of these initiatives is the involvement of women in ICM planning and decision-making. Activities place an emphasis on training for home-based small business run by women, along with capacity building for gender empowerment and community welfare in the district through seaweed. This includes improved market access for seaweed farmers, particularly for seaweed growing and/or processing enterprises run by women.

#### Rote Ndao Biodiversity Objectives:

- 102km under ICM
- 86,400 inhabitants supported with alternative livelihoods
- Climate change adaptation
- Marine pollution reduction





Located close to Merauke in Papua Province, Kolepom island and the surrounding seascape are home to mangrove swamps and muddy ground ideal habitats for shrimp fisheries spawning aggregation (SPAG). Official designation of Marine Protected Area (MPA) status for Kolepom would contribute to the achievement of conservation goals in accordance with national targets, while also providing benefits to people who live in and around the conservation area.

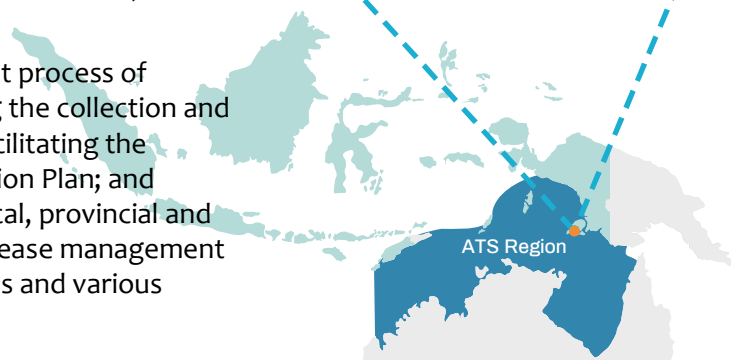
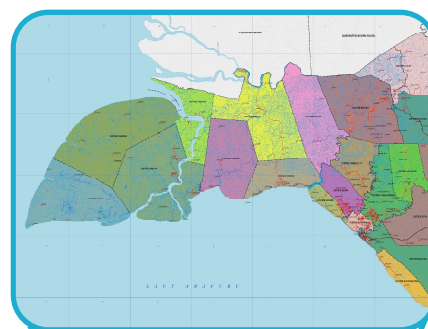
Since 2015, an area of 353,287 ha around Kolepom Island in Merauke Regency has been identified as suitable for potential MPA expansion. Potential spawning grounds and nursery waters for various types of marine species – including snapper and shrimp – have been identified, while Kolepom has also been identified as a habitat for sawfish, which are currently listed as endangered by the International Union for Conservation of Nature (IUCN).

The GEF/UNDP/PEMSEA ATSEA-2 Programme will provide assistance in improving the livelihoods of coastal communities in Merauke through an Ecosystem-based Approach to Fisheries Management (EAFM) and Fishery Improvement Projects (FIP) for barramundi fisheries; coordinating with fisheries stakeholders in strengthening fisheries data collection, monitoring, controlling and surveillance to reduce illegal, unreported and unregulated (IUU) fishing; and raising awareness to reduce the bycatch of endangered, threatened, and protected marine species.

In addition, ATSEA-2 will support the establishment process of Kolepom MPA in Merauke, Papua, by coordinating the collection and analysis of ecological and socio-economic data; facilitating the development of the MPA Management and Zonation Plan; and regularly coordinating with stakeholders at the local, provincial and national levels. This will also include efforts to increase management effectiveness in conservation areas, coastal regions and various other small islands nearby.

#### Merauke Biodiversity Objectives:

- 555,000 ha new MPA (outer islands)
- Alternative livelihoods
- Fishery Improvement Project (FIP) for Barramundi







Located in Indonesia's Maluku Province, the Aru archipelago is home to more than 500 small islands. One of the GEF/UNDP/PEMSEA ATSEA-2 Programme focus is on the southeast area of Aru (Aru Tenggara) where the region has been appointed as Suaka Alam Perairan or Marine Protected Area (MPA) through the Minister of Marine Affairs and Fisheries' Decree No.63/MEN/ 2009, dated 3 September 2009. Aru Tenggara MPA is under the management of Kupang National Marine Conservation Area Agency, with its work unit based in Aru.

Aru Tenggara holds MPA status due to its rich marine and terrestrial biodiversity, where diverse natural habitats are home to endangered and endemic species, including the scribbled angelfish (*Chaetodontoplus duboulayi*), golden butterflyfish (*Chaetodon aureofasciatus*), margined coralfish (*Chelmon marginalis*), threadfin pearl perch (*Glaucosoma magnificum*) and speckled carpetshark (*Hemiscyllium trispeculare*).

The GEF/UNDP/PEMSEA ATSEA-2 Programme will support the improvement of Aru Tenggara MPA management effectiveness, from green to blue level, using EKKP3K (Efektivitas Kawasan Konservasi Perairan, Pesisir dan Pulau - Pulau Kecil – Effectiveness of Conservation Area for Marine, Coast and Small Islands) evaluation standards and METT (Management Effectiveness Tracking Tool) to achieve a target score of 92. Furthermore, ATSEA-2 will provide assistance in empowering women and improving the livelihoods of coastal communities in the Aru islands through an Ecosystem-based Approach to Fisheries Management (EAFM) and Fishery Improvement Projects (FIP) in red snapper and shrimp fisheries, thereby strengthening monitoring, controlling and surveillance to combat illegal, unreported and unregulated (IUU) fishing and reduce

#### Aru Islands Biodiversity Objectives:

- EAFM, FIP – red snapper
- EAFM, FIP – shrimp
- Alternative livelihoods
- Improve management effectiveness in 114,000ha of the Aru Tenggara MPA
- Reduce IUU fishing

