### 2015 GSDR - Chapter 3: The Oceans, Seas, Marine Resources and Human Well-being Nexus

**Annex I: Extended version of Table 3-4: Selected regional and local case studies of addressing threats affecting the nexus (Extended version) – IN PROGRESS**

<table>
<thead>
<tr>
<th>Case study</th>
<th>Challenges faced</th>
<th>Measures undertaken</th>
<th>Impact on Oceans, Seas and Marine Resources</th>
<th>Implications for Human well-being</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regional level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine litter, regional seas in Europe</td>
<td>Mortality of marine species (e.g., through entanglement and ingestion); loss of ecosystem functioning and services; marine habitat alteration, degradation, or destruction</td>
<td>Prevention through awareness-raising/market-based instruments (e.g. plastic bag reduction by banning or taxing); Regional Action Plan for the Management of Marine Litter, including adequate waste reducing/reusing/recycling measures; extended producer responsibility; establishment of voluntary agreements with retailers and supermarkets; clean-up of litter</td>
<td>• Reduced risk of environmental impacts due to reduced marine litter such as plastic items (e.g. significant reduction of plastic bag usage)</td>
<td>• Maintenance of fish catch and tourism revenue • Revenue through levies and taxes • Reduced marine litter removal activities and damage to nautical equipment</td>
</tr>
<tr>
<td>Marine ecosystem conservation: preserving the wealth of natural capital, Mediterranean region</td>
<td>Biodiversity in region severely at risk: 19% of all species threatened with extinction and 1% already extinct at regional level</td>
<td>Network of Marine Protected Areas (170 MPAs; 2 UNESCO World Heritage Sites and 5 Biosphere Reserves); MedPan as coordination framework for conservation activities; changes of unsustainable fisheries practices (catch monitoring etc.)</td>
<td>• Increase in diversity, abundance, and average size of exploited species • Ecosystems rebuilt • Preservation of ecological processes and coastal and marine habitat</td>
<td>• Support of economically valuable activities (e.g., tourism, small scale sustainable fisheries) • Maintenance of associated cultural values</td>
</tr>
<tr>
<td>Economic, social and environmental benefits from sustainable management of tuna fisheries: The GEF/UNDP Pacific Islands Oceanic Fisheries Management Project, Western Pacific</td>
<td>Over-exploitation of the region’s oceanic fishery resources</td>
<td>Regional Strategic Action Programme (SAP) for International Waters of Pacific Islands to integrate national and regional sustainable development priorities; Sustainable management of regional/transboundary fish stocks</td>
<td>• Catches of bigeye, albacore, and yellowfin tuna at or below maximum sustainable yield (stocks at lower risk of being overfished) • Decreased discarding of non-target species – rates for longliners targeting albacore, bigeye, and yellowfin tuna have decreased from an average of 12.4, 3.5 and 3.85% respectively to nearly 0% for all species. Similar decreases were seen for purse seine fishery.</td>
<td>• Increase in fish catches by a factor of 2 • Number of people employed by local inshore tuna processing facilities doubled • Increase in fishery exports by US$ 134 million, representing a third of the region’s overall exports • Increase in foreign fishing access fees by 24%</td>
</tr>
<tr>
<td>Nutrient pollution reduction, Danube/Black Sea Basin</td>
<td>Fertilisers used in agriculture leading to nutrient pollution (nitrogen, phosphorus) from farm run-off plus</td>
<td>Danube and Black Sea Strategic Action Programmes-reform of policies, legislation and institutions related to reducing nutrient pollution in</td>
<td>• Substantial reduction in nutrient pollution • Restoration of good water quality • Decrease of biomass of</td>
<td>• Restoration and maintenance of environmental and socioeconomic benefits for nearly 160 million</td>
</tr>
<tr>
<td>Local level</td>
<td>Development of mariculture activities as an alternative livelihood option for coastal communities: Milkfish farming in Kilwa and Mtwara districts, Republic of Tanzania</td>
<td>Increased overfishing and use of destructive fishing practices (e.g. dynamite fishing) resulting in decline of fish quality and quantity</td>
<td>Conservation measures, including marine parks, reserves and protected areas; development of mariculture activities as alternative livelihood</td>
<td>Protection of oceans and marine and coastal biodiversity</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Community-based green sea turtle conservation, The Comoros</td>
<td>Turtle poaching leading to conflicts between turtle poachers and community of Itsamia (willing to address issue of poaching)</td>
<td>Education of entire community and awareness raising; Beach patrols, monitoring of nesting sites, involvement of police, confiscation of poachers' boats; Additional conservation efforts, incl. implementing and enforcing fishing regulations, cleaning of beaches and collection of household waste</td>
<td>Significant reduction of turtle poaching</td>
<td>Creation of successful eco-tourism generating income and jobs</td>
</tr>
<tr>
<td>Ban of queen conch harvesting by fisheries: A recent conservation co-management initiative in Banco Chinchoro, Quintana Roo, Mexico</td>
<td>Conch fishery decline to unsustainable levels due to unsustainable and illegal fishing</td>
<td>Conservation and management measures, including designation of biosphere reserve (in consultation with local communities), no-take zones and conch harvesting bans; establishment of alternative livelihoods</td>
<td>Increased health and quality of marine flora and fauna</td>
<td>Lobster and deep-sea snapper harvests provide a new source of income for local communities</td>
</tr>
<tr>
<td>Ecosystem Health Report Card for Managing Chilika Lake of Odisha State: a collaborative approach, India</td>
<td>Deterioration of the lake's ecosystem due to natural processes and human activities</td>
<td>Restoration strategy based on ecosystem approach; development of &quot;Ecosystem Health Report Card&quot; to diagnose problems and identify intervention priorities; messages used in communication strategy to engage stakeholders for sustainable management of ecosystem</td>
<td>Eight-fold increase in annual fish and prawn landings</td>
<td>Increase in fish catch</td>
</tr>
<tr>
<td>Linking Conservation and Livelihoods in the Oracabessa Bay Fish Sanctuary, Jamaica</td>
<td>Severe degradation of marine ecosystems and high loss of biodiversity - declining fish catch and challenges for local</td>
<td>2-phase project to preserve the marine ecosystem and increase biodiversity and species population; creation of a no-fishing zone</td>
<td>Increase in coral reefs by 153%, fish density by 272%, fish size by 16%, fish biomass by 564%</td>
<td>Generation of alternative income opportunities through the project (fishermen re-employed as coral gardeners and...</td>
</tr>
</tbody>
</table>
tourism industry protecting critical breeding areas and fish habitat; improve surveillance and monitoring of fish, turtle, and coral populations within sanctuary; strengthen community capacity to manage its marine resources; removal of debris from beaches

43%
• Several species made a comeback or recovered
• Improved sea turtle nesting conditions and hatching rates

• Income from ecotourism and collection/sale of nutrient-rich debris
• Involvement of youth in project elaboration to ensure future marine conservation