

APPENDIX G: Strategies and activities needed in support of the sector policies

Policy Objectives	Targets	Strategies/Actions
I. To improve the nutritional status and food security of the people by increasing the national fish production	1.1 Coastal fish production increased to 236 132 tons	1.1.1 Conduct of a comprehensive marine fish resource survey on selected fisheries 1.1.2 Replace One Day (inboard engine powered) boats affected by the tsunami on an urgent basis. 1.1.3 Ensure speedy and quality production of vessels and the availability of engines (for 1.1.2 above) 1.1.4 Ensure availability of nets/lines 1.1.5 Promote harvesting of demersal finfish 1.1.6 Introduce methods and provide facilities to harvest currently underutilized/untargeted species. 1.1.7 Introduce credit schemes to enable introduction of new One Day boats and for replacement of other boats and to provide working capital 1.1.8 Implement a co-management program under the principles of "responsible fishing" 1.1.9 Development of anchorages and minor landing sites 1.1.10 Management of fish landing centres preferably by fisheries co-ops/CBOs to provide the requisite services
	1.2 Offshore fish production increased to 156 450 tons	1.2.1 Replace balance multi-day boats destroyed by tsunami on urgent basis 1.2.2 Introduce 750 additional multi-day boats 1.2.3 Introduce credit schemes to enable additions and replacements of multi-day boats. 1.2.4 Increase capacity of and quality of local boatyards 1.2.5 Ensure availability of nets/lines 1.2.6 Promote the use of net & line haulers 1.2.7 Promote expansion technology 1.2.8 Set up a Coast Guard Unit as an operational unit under the Navy. 1.2.9 Introduce and operate collector vessels in combination with long line fishing. 1.2.10 Set up a cold chain to cover the preservation and marketing of fish to enable reduction of post harvest losses
	1.3 High seas production increased to 26 750 tons.	1.3.1 Formulate Fleet Development Plan for high seas fishing 1.3.2 Facilitate obtaining IOTC tuna quotas where need arises 1.3.3 Introduce 100 large boats above 24 meters 1.3.4 Conclude umbrella agreements for fishing in outside waters 1.3.5 Promote Public-Private partnerships/ private investment to introduce new High seas boats 1.3.6 Train crews capable of operating the HS

		vessels and enable acquisition of certificates 1.3.7 Support high seas fishing through the provision of infrastructure.
	1.4 Inland Fisheries and Aquaculture production increased to 74 450 tons.	1.4.1 Increase fish production in minor perennial reservoirs and seasonal tanks through culture based fisheries. 1.4.2 Increase Indian Carp production through stock enhancement programs in major and medium perennial reservoirs. 1.4.3 Increase supply of fish seed for stock enhancement by rehabilitating Government Centers and construction of mini nurseries to be operated by Community based Organizations (CBOs). 1.4.4 Strictly implement community based fisheries management in perennial reservoirs 1.4.5 Promote the efficient collection of catch statistics from perennial reservoirs 1.4.6 Promote commercial aquaculture through public/private sector participatory demonstration projects in collaboration with SME banks. 1.4.7 Promote carp culture in estate tanks. 1.4.8 Rehabilitate the prawn farming industry in the north western province by continuation of dredging of the “Dutch Canal” and the imposition of Best Management Practices. 1.4.9 Promote establishment of shrimp farming activities in the North Eastern coastal belt. 1.4.10 Increase culture diversity in coastal aquaculture 1.4.11 Undertake aquaculture research & development in collaboration with research agencies
2.To minimize post harvest losses and improve quality and safety of fish products to acceptable standards	2.1 Eliminate post-harvest value losses in offshore fishing, inland fishing & aquaculture	2.1.1 Introduce refrigeration/fish holds on coastal inboard engines and multi-day vessels 2.1.2 Encourage 6-8 m FRP boats to carry ice and insulated boxes on fishing trips 2.1.3 Improve practices of onboard fish handling 2.1.4 Disseminate better fish handling/stacking techniques 2.1.5 Encourage the use of value-adding post harvest technology 2.1.6 Promote cold storage facilities in major inland fish landing sites 2.1.7 Set up a cold chain to cover the preservation and transport of fish.
	2.2 All fish landing points provided with basic facilities	2.2.1 Provide clean water at landing centers 2.2.2 Provide paved areas for sorting/washing of fish and facilities for effluent disposal 2.2.3 Provide ice and fish storage facilities and landing centers.
	2.3 Fish marketing and distribution systems modernized	2.3.1. Establish a state-of-the art central fish market 2.3.2 Expand the net work modern/hygienic fish retail outlets 2.3.3 Promote the use of stackable and washable fish boxes in fish transport 2.3.3 Introduce Micro-chip traceability system to track quality of fish transported

<p>3. To increase employment opportunities in fisheries and related industries and improve the socio-economic status of the fisher community.</p>	<p>3.1 Promote fisheries based economic activities</p>	<p>3.1.1 Set up three fish canneries 3.1.2 Introduce improved techniques for /curing/during of fish 3.1.3 Promote economic uses offish waste 3.1.4 Resurrect traditional Fish/curing & preservation primarily for <i>elite</i> urban markets 3.1.5 Promote recreational fishing collaboration with the tourism sector 3.1.6 Promote commercial aquaculture ventures in collaboration with SME banks</p>
	<p>3.2 Promote fishery related activities such as the production of fishery inputs</p>	<p>3.2.1 Set up new fish net making plants or/and expand existing ones 3.2.2 Set up new ice plants and cold rooms 3.2.3 Encourage manufacture/assembly of marine engines 3.2.4 Expand boat production capacities</p>
	<p>3.3. Establish income generating activities among coastal fishing communities</p>	<p>3.3.1 Strengthen CBOs to organize and support Income generating activities. 3.3.2 Strengthen women groups in fishing communities and encourage them to promote savings</p>
	<p>3.4 Improve the living conditions and quality of life of fishing families</p>	<p>3.4.1 Provide requisite amenities and facilities conducive to livelihood development and better quality of life of the fishers 3.4.2 Set up 10 model fishing villages replete with amenities and facilities</p>
<p>4. To increase foreign exchange earnings from fish products</p>	<p>4.1 Fish exports increased to 28 000 Mt. by volume and Rs. 18 000 million by value</p>	<p>4.1.1 Promote practices and techniques of fish quality maintenance onboard fishing vessels 4.1.2 Establish quality infrastructure facilities at fishery harbours 4.1.3 Provide incentives to exporters tied to performance 4.1.4 Promote culture of marine ornamental fish 4.1.5 Promote culture, harvesting, collection and value addition of new varieties of fish crustaceans and molluscs and aquatic plants for exports</p>
<p>5. To conserve the coastal and aquatic environment.</p>	<p>5.1 Develop & Stabilize coastal stretches.</p>	<p>5.1.1 Implement artificial beach nourishment measures 5.1.2 Construct coastal protection structures 5.1.3 Expand the green belt on the coastline with the participation of communities/coastal inhabitants 5.1.4 Formulate and implement shoreline management plans 5.1.5 Prevent sand and coral mining/damaging reefs 5.1.6 Establish and maintain coastal information system</p>
	<p>5.2 Improve the quality of coastal environment and lagoons</p>	<p>5.2.1 Enhance the recreational & aesthetic value of coastal areas 5.2.2 Strengthen the enforcement procedure 5.2.3 Promote & implement appropriate sewerage and waste management system in the underserved coastal areas</p>

		<p>5.2.4 Formulate and implement coastal inlet management program</p> <p>5.2.5 Improve the lagoon environments for economic benefits</p>
	5.3 Conserve critical coastal habitats	<p>5.3.1 Implement “Special Area Management Plans“ at high priority sites identified in the 2004 CZMP</p> <p>5.3.2 Survey and demarcate lagoon and estuary boundaries and establish reservations</p> <p>5.3.3 Control spreading of invasive plants in high priority land & aquatic areas</p> <p>5.3.4 Enhance productivity of lagoon and estuaries by research and re-stocking programs</p> <p>5.3.5 Conduct research for assessment of the habitats for restoration</p> <p>5.3.6 Conduct outreach programs to enhance public awareness and education on coastal habitats.</p>
	5.4 Minimize risk & vulnerability due to coastal hazards	<p>5.4.1 Conduct vulnerability and risk assessment in the coastal areas & introduce development criteria</p> <p>5.4.2 Establish coastal hazard early warning systems & formulate response strategy</p> <p>5.4.3 Develop bio-shield in vulnerable areas</p> <p>5.4.4 Intro coastal insurance policy</p> <p>5.4.5 Implement coastal access program</p>
	5.5 Introduce alternative livelihoods	<p>5.5.1 Facilitate eco-tourism programs</p> <p>5.5.2 Implement culture of marine and brackish water fish including ornamental fish based</p> <p>5.5.3 Establish institutional mechanism to implement alternative livelihood program</p>
	5.6 Rehabilitate the abandoned shrimp farms and peripheral areas of existing farms to gain economic & environmental benefits	<p>5.6.1 Convert abandoned shrimp farms in the NW and eastern province for economical benefits and environmentally sustainable uses.</p> <p>5.6.2 Enhance the environment of the peripheral areas of the existing shrimp farms</p> <p>5.6.3 Introduce community re-forestation program</p>

Source: MFAR, Ten Year Development Policy Framework of the Fisheries and Aquatic Resources Sector, 2007 – 2016, March 2007