

Life Cycle Assessment (LCA) Study of Shrimp Fishery in the South East Coast of Arabian Sea

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Abstract : The shrimp trawl fishery is considered one of the more valuable fisheries from the South east Coast of Arabian Sea. Inventory data for the shrimp were collected over 1 year period and used to carry out a life cycle assessment (LCA). LCA was performed to assess and compare the environmental impacts associated with the fishing operations related to shrimp fishery. This analysis included the operation of the vessels, together with major inputs related to the production of diesel, trawl nets, or anti-fouling paints. Data regarding vessel operation was obtained from the detailed questionnaires filled out by 180 trawlers. The analysis on environmental impacts linked to shrimp extraction on a temporal scale, showed that varying landings enhanced the environmental burdens mainly associated with activities related to diesel production, transport and consumption of the fishing vessels. Discard rates for trawlers were also identified as a major environmental impact in this fishery.

Keywords : shrimp trawling, life cycle assesment (LCA), Arabian sea, environmental impacts

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