Literature Cited

Pandav, B. 2000. Conservation & management of olive ridley sea turtles on the Orissa coast. PhD thesis. Utkal University, Bhubaneswar, India.

Pandav, B. & B.C. Choudhury. 2000. *Conservation & management of olive ridley sea turtle* (Lepidochelys olivacea) *in Orissa*. Final Report. Wildlife Institute of India, Dehradun.

Prusty, B.G., R.K. Sahoo & S.D. Mehta. 2000. Natural causes lead to mass exodus of olive ridley turtles from Ekakulanasi, Orissa, India: a need for identification of alternate sites. In: Sea Turtles of the Indo-Pacific: Research, Conservation and Management (eds. N. Pilcher & G. Ismail) pp. 189-197. ASEAN Academic Press, London, UK.

Ram, K. 2000. Behavioural ecology of the olive ridley sea turtle Lepidochelys olivacea (Eschscholtz, 1827) during the breeding period. M. Sc. Dissertation, Salim Ali School of Ecology,

Pondicherry University, Pondicherry, India.

Shanker, K., B. Pandav & B.C. Choudhury. 2004a. An assessment of the olive ridley turtles (*Lepidochelys olivacea*) nesting population in Orissa, India. *Biological Conservation* 115: 149 – 160.

Shanker, K., J. Rama Devi, B.C. Choudhury, L. Singh & R.K. Aggarwal. 2004b. Phylogeography of olive ridley turtles (*Lepidochelys olivacea*) on the east coast of India: implications for conservation theory. *Molecular Ecology* 13: 1899-1909.

Tripathy, B. 2004. A study of the offshore distribution of olive ridley turtles (Lepidochelys olivacea) in the coastal waters of Rushikulya rookery along the Orissa coast, India. Wildlife Conservation Society – India Program Small Grant, Centre For Wildlife Studies, Bangalore, India

Views of Fishworker Support Organisations on Turtle Conservation Measures in Orissa

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The International Collective in Support of Fishworkers has been involved in researching the interaction between fisheries and turtle conservation in Orissa. While several of the views in our note overlap with those of other groups such as the traditional fishworker groups and those of turtle biologists, certain others are exclusive opinions. Our views on turtle conservation measures and the highlights of our note are presented below:

- There should be strict implementation of the 5-km near-shore 'non-trawl zone'.
- Protection of reproductive patches is an efficient and cost effective conservation method.
- Regulating the use of certain gear: There should be no blanket proscription of all forms of gillnets, which is the mainstay of the fishers of Orissa.
- Compensation should be given for livelihood opportunities foregone. A compensation package for fishing opportunities foregone should be worked out, including provisions for earning an

- alternative livelihood. Incentives to switch to more selective gear should also be considered.
- Recognising and protecting the rights of safe passage: In the implementation of turtle conservation measures, right of safe passage through the marine sanctuary and 'no-fishing zones' should be better recognized and protected. This is an important issue for several communities living in the vicinity of the marine sanctuary, who have to cross the core area of the Gahirmatha sanctuary to fish beyond, and face harassment on a regular basis.

Turtle Conservation Measures Useful in the Medium and Long Term

 Review of legislation: There is need for considerable improvement of the scope of legislation for turtle protection, especially with regard to turtle-fisheries interactions. Instead of total protection regimes for turtles, it may be

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judicious to move into conservation regimes for all the coastal living resources, including turtles. In Orissa, as well as in other parts of India, there is a need to develop a conservation plan not only for marine fisheries within territorial waters but also for the whole of the exclusive economic zone.

- There should also be a proper operational definition of fishing in fisheries legislation. There should be effective and transparent ways to determine what constitutes fishing within the marine sanctuary or 'no-fishing zones'.
- There should be an improved understanding about turtle-fisheries interactions.
- Measures must be undertaken to reduce the total fishing effort.
- Awareness and training programmes should be undertaken among fishing communities.
- There needs to be better socio-economic data. Reliable socio-economic data about communities dependent on fisheries resources in turtle habitats should be collected to better assess the impact of turtle conservation measures on local livelihoods.
- There should be training and better coordination among enforcement officials.
- Use of VMS and GPS for better implementation and enforcement: Satellite-based vessel monitoring systems (VMS) should be introduced to track fishing vessel movement in fishing grounds. All mechanized fishing vessels should be brought under the ambit of such a programme with financial assistance from the government.

- Hand-held global positioning system (GPS) instruments should be distributed to fishers in both mechanized and non-mechanized categories so that if prior information is given to the fishers about the location of reproductive patches, they can, with the aid of GPS, determine the location of such patches and avoid fishing there. All fishers should be prohibited to fish in such patches
- Traditional fishworkers must be made equal and effective partners in conservation efforts at all levels.
- There should be greater dissemination of information about conservation measures and regulations in place, particularly among fishworkers. This, in combination with professional training of enforcement officers responsible for apprehending fishing vessels, should ensure that unnecessary harassment of fishers and increasing opportunities for bureaucratic corruption, are avoided.
- Conservation programmes should address the range of factors that contribute to turtle mortality, including non-fishery factors such as industrial and urban pollution of the sea, development projects such as ports, military establishments and operations, oil and gas exploration, mineral mining from the coastal areas, intensive prawn culture, collection of prawn seeds (larva) with fine-meshed nets, and uncontrolled and irresponsible tourism, and bring them within the ambit of conservation programmes.
- Conservation programmes should take a holistic, ecosystem approach towards conservation, management and sustainable use of all the coastal and marine living resources, including turtles.

Initiatives towards Consensus - the Orissa Marine Resources Conservation Consortium

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Stakeholders in the turtle-fisheries scenario have been perceived as being either "pro-turtle" (anti-people) or "pro-people" (anti-turtle). Throughout the last decade there has been no conducive platform or

space whereby the turtle-fisheries stakeholders could come together to discuss and address important problems arising out of turtle-fisheries interactions. It was expressed by some stakeholders such as the

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