## Workshop on MARINE MAMMAL STRANDING

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Irangural address

Dr.G.Syda Rao, Director, CMFRI, Dr.P.L.Gautam, Chairman, NB Authority, Dr.Janet Whaley, Shri.Lakhwinder Singh, Dr.Mridula Srinivasan, & Dr.E.Vivekanandan, distinguished invitees, participants in the workshop, Ladies and Gentlemen,

My thanks to Dr.Syda Rao for the invitation to attend this inaugural function On Marine Mammal stranding. I am glad that CMFRI has taken the initiative to hold this workshop in collaboration with NOAA and IUSSTF.

I recall the mid-seventies of the last century when I initiated the system of recording Stranding of marine mammals along the Indian Coast and the Lakshadweep and Andaman Nicobar Islands. This was a time when marine fisheries was meant to deal with only finfishes, crustaceans, shell fish and sea weeds. Marine mammals was outside the scope of fisheries. I was asked many a times as to why marine mammal studies should be undertaken as there were organizations, such as the Zoological Survey of India who could do this. My contention was that marine mammal studies were inclusive and not exclusive of marine fisheries. Moreover, CMFRI had one great resource, namely, man-power, manning nearly 43 field and research centers along the Indian coast as well as research boats to operating in coastal waters. This gave an opportunity for good recording stranding and sighting of marine mammals, though identifications posed a problem, stranding were regularly recorded with whatever additional information was possible and the data with photographs published in the monthly issues of the *Marine Fisheries Information Service* and other journals.

In April, 1980, I attended the **Indian Ocean Alliance for Conservation** Meeting held at Mahe, Scychelles which had the focal theme of Conservation of marine mammals and the Regional Cooperation in the enforcement and extension of the Indian Ocean Sanctuary for Cetacean conservation and research. Agenda 7b dealt with strandings and it is ion record that "The delegate from India, Dr. Silas, kindly offered to receive and keep information on strandings from the whole region at the Central Marine Fisheries Research Institute in Cochin. The meeting accepted his offer."

As regards the International Whaling Commission, it was felt that it could only be as strong and constructive in the control of International whaling as its membership permits as Members bear a considerable responsibility for safeguarding this major component of the living natural resources of the planet. My Report, which went to the Highest levels in the Government was partly instrumental in India becoming a Member of the International Whaling Commission in 1980. Sending her Good Wishes to the 35<sup>th</sup> Annual Meeting of the IWC Mrs. Indira Gandhi in a Message wrote that:

2

"Two years ago, India Joined the International Whaling Commission because it shares the World-wide concern for preserving for future generations the largest and most mysterious of mammals. It is good that in these two years the Commission has increased the membership appreciably, strengthening the research programme of whales in the Indian Ocean and decided in favour of cessation of commercial whaling activities by 1986." Further she writes "Our interest in the Indian Ocean is obvious and we should like to see appropriate arrangements made for the conservation and development of the marine mammals of our region. We are equally concerned about the status of smaller Cetaceans".

I had the privilege of attending the 35<sup>th</sup> IWC meetings in Brighton, U.K. in July 1983 as Alternate Commissioner along with Shri Samar Singh, Commissioner.

The result of all these was the realization that fisheries should not be looked at as a disjunct component but is part and parcel of the total biota. One of the essential things was to properly record the stranding and monitor incidental catch in fishing operations and advise the latter on avoiding such incidents. In some areas tradition and taboos were so strong that they would not like a dolphin to be a victim. The impact on the local communities where stranding takes place, especially of the larger whales was significant. The following is an interesting incident which shows human reaction to stranding. I must reiterate here what one of our best writers Amitav Ghosh has said about the mass stranding of pilot whales in Salt Lake, Calcutta way back in 1852.. "Calcutta's river, the Hooghly, is subject to the pressures of the tides, and in the past it often happened that a high tide in the Bay of Bengal would cause it to flood the surrounding countryside. Thus it happened that on a hot July day in 1852, the Hooghly flowed over its embankments, swamping the low-lying wetlands that surrounded the city. When the waters receded it came to be seen that a school of gigantic creatures had been deposited in a shallow wetland pond. Word of this event spread rapidly, and in a few hours reached the ears of an Englishman by the name of Edward Blyth who was the then curator of natural history at the Asiatic Society of Calcutta...... Now hearing of the gigantic sea-creatures derposited by the tide, Blyth set off immediately for the Salt :Lakes. He arrived to find some 20 whales floundering in a shallow pond. Their heads were rounded and bodies were black, with white undersides. The adult males were over 14 feet in length. The water was too low to keep them fully submerged and their short, sharply raked dorsal fins were exposed to the sun. The animals were in great distress and their moans could be clearly heard."

"A large crows had gathered, but somewhat to Blyth's surprise they had not killed the whales. He had imagined that the animals would be set upon by the villagers, for their meat and oil. He found instead that many of the villagers had laboured through the night to rescue the creatures, towing them through a channel into the river. Many whales had been saved, Blyth learned, and those that remained were the last of a school of several dozen. Blyth chose four of the best specimens, two males and two females, and had them secured to the bank with poles and stout ropes: his intention was to return the next day with the implements necessary for a proper dissection.

Before departing, he did everything in his power to make sure that his chosen creatures would not be freed by the local populace."

"But a shock awaited him: on returning the next morning, he found that his chosen animals had been cut loose during the night. Now only a few inferior creatures remained in the pond. Not to be thwarted of these, Blyth set upon them at once and quickly reduced them to 'perfect skeletons'. On examining the bones he decided that he had discovered a yet unknown creature Globicephalus indicus. But a few years later this identification was disproved, so it turned out, in the event, that Blyth had spent two days and much effort to no avail." I would say that this need not be so. Though Globicephalus indicus is relegated as a synonym of Globicephalus macrorhynchus the taxonomy of this species world-wide needs a re-look. Globicephalus macrorhynchus, under "IUCN Status" is still listed "Insufficently kown" So are most of the species stranded along our coast. We need to look at Genetic makers such as mtDNA as tools to give us more precise information about Species identification and PCR based methods for gender identification. I am glad that today we have a book on "Identification of Marine Mammals of India" By P.Jayashankar and B.Anoop adopting such new approaches.

Still there is lot more to be done in areas such as reducing or avoiding incidental catch in fishing gears; delineating breeding and feeding areas; protocols for identification of stranded animals, the type of essential data to be recorded and photographed; use of satellite and remote sensing technologies; benign use of marine mammals for eco-tourism and so on needs to be explored.

You may be addressing these issues at this Workshop and I wish your efforts all success.

Thank You

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