

A photograph of a dolphin leaping from the ocean. The dolphin is captured mid-air, its body arched as it moves from the water towards the sky. The water below is a deep blue, with white foam from the dolphin's exit visible. The sky is a clear, light blue with some soft, wispy clouds. The overall scene is bright and captures the natural grace of the animal.

RECOMMENDATIONS AGAINST DOLPHINARIA IN INDIA

BASED ON WORLDWIDE SCIENTIFIC RESEARCH ON THE WELFARE OF DOLPHINS IN CAPTIVITY

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EXECUTIVE SUMMARY

In the last two years a spate of proposals have been put forth by government departments and private promoters to set up Dolphinariums in India that showcase performances by live dolphins and other cetacean species as a way to promote tourism (annexed). “Dolphinarium” (such facilities have been known by different names including but not limited to dolphinarium, oceanarium, dolphin park, theme park etc, hereinafter collectively referred to as dolphinarium) are captive facilities that display and also use dolphins and other cetacean species in performances, for commercial entertainment.

The only known case of dolphins kept in captivity for use in live performances in India was at the ‘Dolphin City’ facility in Chennai, Tamil Nadu in the late 1990s. Bottlenose dolphin performances used to occur thrice a day at this facility. Within six months of their arrival from Bulgaria, all four dolphins died. Consequently the Central Zoo Authority of India (CZA) refused them the mandatory recognition needed to continue operations. Since then no dolphin shows have existed in India for over a decade.

These new proposals therefore are an alarming trend, especially as there is an increasing body of worldwide scientific research that highlights the negative impact of such captive facilities on the welfare of dolphins (family Delphinidae under order Cetaceans) and indeed all cetacean species. Today, there is a significant global movement against such facilities, due to the growing exposure of the cruelty meted out to dolphins and other cetacean species in the commercially exploitative captive industry.

This document is to serve as a guide for government agencies and other relevant authorities by providing a brief overview of significant global research studies on the welfare of captive cetacean populations with special emphasis on bottlenose dolphins (*Tursiops sp.*), that are held in Dolphinarium worldwide. The information presented here, provides a strong case against the keeping of these marine mammals in captivity and can provide government authorities with relevant data to refuse permission to those organisations, government bodies and individuals who propose to set up such captive facilities in India.

The objectives of this document are to present in brief, the current known proposals for Dolphinarium in India; followed by an overview of the existing national policies and legalities related to the capture, import and display of cetacean species.

It also uses the results of neuroscience and behavioral biology studies conducted over the past two decades, to highlight the impact of captivity on cetacean species in terms of their intelligence, natural behavior in the wild and habitat requirements further illustrated by detailed descriptions of bottlenose dolphins and beluga whales, that are commonly held in captivity.

Additionally it provides an overview of the global multi- billion-dollar captive cetacean industry primarily fuelled by trade in wild caught specimens. The report also contains analysis of research studies conducted by experts in the field; which have assessed the impact of captivity on cetacean behavior, mortality, health and reproduction among other aspects, potential dangers faced by humans.

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We also thank Chris Draper, from the Born Free Foundation for contributing valuable inputs and expertise in developing this document and also for connecting us with Dr. Lori Marino. Lori, of The Kimmela Center for Animal Advocacy gave us valuable time to discuss this issue and provided unique insight on the plight of cetaceans in captivity.

We thank Nukkehalli Jayasimha, India Director of Humane Society International (HSI) for sharing his views and key insights and also make a special mention of Naomi A. Rose, PhD, from HSUS for her vast research which has provided much of the key arguments against keeping Dolphins in captivity used in this report.

Additionally, we would like to thank the Whale and Dolphin Conservation Society (WDCCS), a leading global charity dedicated to the conservation and protection of whales and Dolphins, for generously making available on their website a range of scientific publications that helped to make this report, a comprehensive and accurate representation of issues faced by cetacean species in captivity. Wildlife Protection Society of India (WPSI) and Fins and Fluke have been key campaign partners, with whom we continue to work closely. We gratefully acknowledge all the organisations and activists working tirelessly to save all cetacean species from captivity. Last but not the least, we thank all our fellow animal protectionists from the FIAPO family, for their inputs and support and encouragement of this campaign.

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Chapter One

Proposed Dolphinarium In India

1.1) State-Specific Profile Of Dolphinarium Proposals

A spate of news reports announcing proposals for Dolphinarium in India have emerged during 2011/2012. Brief profiles based on recent media reports (annexed) on these proposals, put forth currently by Kerala, Maharashtra and New Delhi are presented as follows:

a) Kerala

No. Of Projects - 2

a.1) Proposed Project Name – Kochi Oceanarium

The proposed Oceanarium is envisaged to be a state of the art Oceanarium set in 36.5 acres of possible reclaimed land and is earmarked for this project at Puthu Vypeen, Kochi. The consultant, M/s Mahindra Consulting Engineers Ltd. has completed the feasibility study and submitted the Detailed Feasibility Report. A Special Purpose Company has been registered for development of the project viz. Kerala Oceanic & Marine Park Ltd. The project is proposed to be implemented on Public Private Partnership (PPP) mode. The Oceanarium for its sustained operation would require a strong R&D and technical support in the area of marine biology. It proposes to enable this with the assistance from Ministry of Earth Sciences, GOI. This facility would be established as a separate entity and the cost for this is estimated at Rs.130 Crores. The services of R&D centre will be made available to the Oceanarium on cost plus basis. The proposed development components for the Oceanarium complex would include the following, aquarium, touch tanks, thematic pavilions, shark tank, lagoon, and a polar pavilion. The Main tank containing Aqua Terrarium, Under water vision, barrier Reef, Deep Sea Tunnel will have a capacity of 8000 cubic meters. The shark tank will have a capacity of 1230 cubic meters.

This project is reportedly being executed through the State Fisheries Resource Management Society (FIRMA). Mangroves, which reportedly densely cover the region, are vulnerable to such intensive infrastructural development projects according to environmental experts. Despite the fact that the Union Ministry of Environment and Forests has made it categorically clear that land reclamation, building bunds, disturbing the natural course of sea water, destruction of mangroves and construction-developmental activities are prohibited in areas coming under the Zone One of the Coastal Regulation Zone, recent reports suggest the possibility that the state government may have given in-principle approval to the establishment of this project. Any such approval must be reversed to ensure protection of both animals and natural resources.

a.2) Proposed Project Name – Dolphin Park

This proposal is slated to be Asia's largest dolphinarium. It is proposed to be a feature of the entertainment zone that is a part of the overall Marine Drive Phase II development initiative allegedly under the Greater Cochin Development Authority (GCDA). The GCDA chaired by Mr. N. Venugopal is currently considering a proposal submitted by a company called Initor Projects, reportedly based in British Virgin Islands and the Middle East, which claims to have expertise in setting up dolphinarium globally.

The proposal mentions that Initor Projects is able to source wild-caught dolphins, rental dolphins or even captive bred dolphins or dolphins being held in captivity elsewhere. Experts believe that is difficult to establish the authenticity of a captive bred dolphin given the commercial nature of the industry, and deem that most dolphins kept in captivity are considered to be more often than not, sourced through wild capture. The project is estimated to be executed through a public-private partnership model at a cost of more than 20 crores with each dolphin costing an additional 1,55,000 – 2,95,000 USD each. The developers propose to hold dolphin shows or performances thrice a day, with international staff and possibility of additional seal performance shows. News reports released in October 2012 (annexed) also report that a team from Dubai comprising of alleged experts from the UK and Russia who were involved in setting up Dolphin parks in the Middle East will also be assessing the site. The proposal further states that interaction programmes will be conducted between the captive dolphins that are marine mammals as well as carnivorous predators and the general public.

b) Maharashtra

No. Of Projects - 3

b.1) Proposed Project Name – Sea World, Sindhudurg

The Maharashtra government is reportedly planning to set up a new ocean theme park and Dolphinarium to be built on the Malvan coastline in Sindhudurg. It includes plans for a Dolphin stadium, theme restaurants, water sport areas, golf course, Antarctica attraction and an underwater studio. The 500-600 acre-sized theme park, is expected to cost about Rs 510 crore and was presented to the cabinet by tourism minister Chhagan Bhujbal last year. The facility allegedly intends to display corals, dolphins, seals, penguins and a host of other marine creatures. The Maharashtra state government hopes the project will generate tourism revenue and increase employment opportunities for the region. It is believed that a detailed project report (DPR) is being prepared by Dr. Sarang Kulkarni (Science and Technology Centre, Pune).

b.2) Proposed Project Name – Water World At Mahalaxmi Race Course, Mumbai (Dolphin Park With Underground Aquarium)

This project proposal allegedly intends to promote Dolphin-assisted “therapy” for humans as well as display Dolphins for performances and interaction programmes to promote tourism. Such “therapy” is entirely lacking justification by health care authorities; nor can the well-being of dolphins be assured; The Animal Welfare Board of India has not approved any such “use” of animals under any circumstances for dubious human “benefit.” The Mayor of Mumbai reportedly first put this suggestion forth in 2009 and the project is currently under the Commissioner of Fisheries, Mumbai and the status is unknown.

b.3) Proposed Project Name – Expansion Of Taraporewala Aquarium, Mumbai On Location Or Worli Dairy

This proposal is allegedly focused on the renovation of the famous Taraporewala Aquarium in Mumbai, by building a tunnel leading to the sea with whales and Dolphins, on the lines of Singapore and Malaysia. Other media reports suggest that the Taraporewala Aquarium will be added to by way of a 5- star hotel and fish massage facility. Additionally, Worli Dairy is also being considered as a possible site for the Oceanarium.

c) New Delhi

No. Of Projects – 1

Proposed Project Name – Blue Planet Aquarium Or Water World, Grand Venice Hotel, Greater Noida

An aquarium and Dolphinarium is being proposed as a part of a Venice-themed tourist resort named 'Grand Venice.' This venture would join Bhasin Infotech & Infrastructure Pvt. Ltd (Conceived, Developed and Promoted) and Sheraton Hotels & Resorts and a Singapore-based company, Andover Leisure Pvt. Ltd. The aquarium would cover an area of 1-lakh square feet and the major exhibits would include seawater tanks for large marine life like sharks and lionfish with acrylic tunnels for the tourists to walk through. The shark enclosure would have transparent bottomed boats for looking down into the water from the surface. Sharks, Penguins, Walrus, Octopus and Dolphins would reportedly be on display and may also be used in performance.

1.2) Current Policy & Legal Framework To Regulate Import Of Wild Animals With Emphasis On Cetaceans For Commercial Performance And Captive Display in India

a) Wildlife (Protection) Act, 1972

The entire order Cetacea (all species of Dolphins, whales, and porpoises) is listed in Schedule I of the Indian Wildlife (Protection) Act, 1972 (the Act), under item number 4-A in Part I (as Cetacean Spp.). Cetaceans are also listed in item number 3-C of Part I of Schedule II. Specific cetacean species are also listed in Schedule I and Part II of Schedule II. No hunting (including capture) of these species is allowed as per Section 9 of the Act. Under Section 40(2-A) of the Act, no person is allowed to acquire, keep in his control, custody, or possession, any cetacean species unless he has a certificate of ownership for such animal issued by the Chief Wildlife Warden under Section 42 of the Act

b) Foreign trade (Development and Regulation) Act 1992

As per section 8 (1) no export or import shall be made except in accordance with the provisions of this Act, the rules and orders made there under. Chapter III of this Act deals with the Classification of Export & Import Items (1st April 2009 – 31st March 2010), and Live animals; Animal Products are mentioned under Schedule I & Section I of the Import Policy. This section states that the import (Exim code – 01061200), of Whales, Dolphins and porpoises (mammals of the order cetacea); manatees and dugongs (mammals of the order Sirenia) is restricted and subject to the import licensing note No. 6 as per the Policy Conditions of the chapter which states that the **Import of Wild Animals (including their parts and products) as defined in the Wild Life (Protection) Act, 1972 is prohibited** (*It is pertinent to note here that many cetacean species currently held in dolphinarium globally are possibly sourced from wild captures*).

c) Foreign Trade Policy (2009-2014)

The Foreign Trade Policy is brought out under the provisions of the Foreign Trade (Development & Regulation) Act 1992 and it regulates the import and export of all goods including wildlife. The policy contains the conditions (*which include compliance with CITES - Any wild animal species intended for import, must be evaluated against the guidelines set by CITES (Convention of International Trade of Endangered species of Wild fauna and flora). Import of animals and their parts and products for zoological parks and circuses or for research purpose may be only permitted subject to the provisions of CITES and on recommendations of the Chief Wildlife Warden of the States and Union Territories under license from the Director General of Foreign Trade (DGFT). Import of wild animals as pets in the personal baggage of a passenger is also subject to the provisions of CITES in accordance with the Ministry of Commerce's Public Notice No. 27ITC (PN). All imports and exports of wild animals and plants are permitted only through the Customs points at Mumbai, Kolkata, Delhi, Chennai, Cochin, Amritsar and Tuticorin*), governing import and export of permissible species of wildlife and wildlife products.

The policy is decided in consultation with the Management Authority for CITES in India as far as matter relating to wild fauna and flora are concerned and is enforced through the Customs Act, 1962. In India, the CITES authority is represented by the Director of Wildlife Preservation. If permission is granted under the CITES guidelines, the application has to be submitted to the Customs Department after compliance with all the rules pertaining to the species intended for import, as mentioned in the **Wildlife (Protection) Act, 1972, Foreign trade (Development and Regulation) Act 1992, Foreign Trade Policy (2009-2014)** is established.

d) Customs Act, 1962

Section 3(3) of the Foreign Trade (Development and Regulation) Act 1992 provides that all items (including wild Fauna & Flora) covered in the Import & Export policy will be deemed to be covered under Section 11 of the Customs Act, 1962. As a consequence, all cases of violation of the Import-Export Policy in general and CITES in particular, constitute an offence under the Customs Act and are dealt with by the Customs officials. Two essential conditions governing the import and export of Wildlife and the derivatives are - Compliance with the provisions of CITES and Inspection of the consignments by the Regional Deputy Directors of Wildlife Preservation at the Customs points. In case of items covered under CITES, an endorsement is made based on the relevant CITES export permit. Export or import of wild animals and their parts and products is allowed for the purpose of scientific research and exchange of animals between Zoos and is subject to licensing by the Director General of Foreign Trade (DGFT), Government of India.

e) Performance Certificate, Animal Welfare Board of India (AWBI)

In exercise of the power conferred by Section 38 of the Prevention of Cruelty to Animals Act, 1960 Central government has framed the Performing Animals (Registration) Rules, 2001 with amendments from time to time. All animals that are used at or for the purpose of entertainment have to be registered with the Animal Welfare Board of India (AWBI).

The AWBI certificate has to be pre facto and cannot be post facto; hence the permission must be sought before the training and performance. All animals that are registered must be trained subject to conditions of registration laid down under the rules.

If the said animal species is intended for zoo facility, the Central Zoo Authority must provide the authorization. If it is intended for use as a commercial performing animal, then the State Government receives the application for the said species in compliance with the rules as laid out under the **Performing Animals Act** (*Cetaceans currently not in the two schedules specified in the Act*) with a copy of the application sent to the Animal Welfare Board of India (AWBI).

It is vital to note that ***the AWBI refuses to issue any performance certificates to cetaceans and has taken a decision not to issue performance certificates to cetaceans in future.***

Any attempt to import these animals for the purpose of performance would be in violation of the Prevention of Cruelty to Animals Act 1960 and the rules framed under it.

f) Prevention of Cruelty to Animals Act, 1960 (reference to Capture & Transport Rules)

In exercise of the powers conferred by clause (i) of subsection (2) of Section 38 of the Prevention of Cruelty of Animals Act, 1960 (59 of 1960), the Central Government has made the Prevention of Cruelty (Capture of Animals) Rules, 1979.

In exercise of the powers conferred by clause (h) of sub-section (2) of Section 38 of the Prevention of Cruelty to Animals Act, 1960 (59 of 1960); the Central Government has made the Transport of Animals, Rules, 1978.

Capture and transport are incontestably stressful and dangerous for cetaceans and is not recommended. ¹Physiological indications of stress associated with capture and captivity include elevated adrenocortical hormones and ²impaired cell functions. Additionally, it was found that ³mortality rates of captured Bottlenose dolphins increase by *six-fold* immediately after capture and do not drop down to “normal” levels for up to 35-45 days.



Figure 4 a - dolphins subjected to stressful transport procedures while being removed from their natural marine habitat

1.3) Dolphinarium & Eco Tourism – The Contradiction

Many Dolphinarium promote captive dolphin facilities by calling them “eco tourism” attractions. Eco-tourism by definition attempts to celebrate the natural world by providing ways in which people can enter fragile ecological environments causing zero disturbance to nature, and to teach the wonders of nature and the responsibility to protect it.

Dolphinarium thereby completely contradict this principle of eco-tourism.

Removing a wild animal from its natural habitat, forcing it to live in a small concrete tank filled with chlorinated water and then using food deprivation as a means to make it learn unnatural tricks to entertain a human audience teaches nothing about environmental or animal appreciation or protection. Instead, it teaches that it is “right” to capture, contain, control, and forcibly modify natural behavior of wild animals.

Resources like water and electricity are used in large quantities to facilitate Dolphinarium, which in turn has a detrimental environmental impact.

1.4) Recommendations against captivity

All Non-governmental organisations representing animal protection and welfare strongly oppose proposals to build Dolphinarium, and request you to take appropriate actions to ensure that such facilities are not established in India.

No peer-reviewed studies support the claim made by captive facilities that exposure to, or interaction with, captive

cetaceans increases the public's knowledge level or concern about dolphins, other marine mammals or the environment. The ⁴most in-depth survey conducted by the public display industry and published as a white paper was critiqued unfavorably by a peer-reviewed evaluation of its methods and results.

All captive cetacean attractions mislead the public about marine wildlife and their natural habitat. Not only is the public misguided about the natural behaviour and habitat of cetaceans, they are also led to believe that the tricks they see are how cetaceans truly behave in the wild. Captivity also encourages the public to view wild marine mammals as pets and thus conditions them to believe that these animals only have value in the context of their relationship to humans. The public does not know how to recognize the evidence of fear, deprivation and emotional stress on the dolphins and mistakenly believes that they are 'happy' in captivity, a concept promoted by captive facilities to ensure commercial profit.

The remarkable sensitivity and intelligence of dolphins, which makes it possible for them to learn human language and follow human instructions; are the very qualities which make them vulnerable to the physiological and psychological impact of being separated from their wild social family groups, forced to live in concrete and unnatural enclosures or tanks as well as being forced to learn tricks through food deprivation and eventually performing repetitively on a daily monotonous cycle.

Thus, dolphins in captivity gradually become 'caricatures' or human modified versions of their wild counterparts, eventually experiencing a complete atrophy of their natural instincts and behaviours. For example,⁵Marine mammals such as whales and dolphins are known to use sound through a process known as echolocation as a primary means for underwater communication and sensing in their wild natural habitat. They emit sounds in order to communicate about the presence of danger, food, a conspecific or other animal, and also about their own position, identity, and reproductive or territorial status. Subsequently, ⁶It has been found, that anthropogenic noise in captive conditions may affect developmental, reproductive, or immune functions and cause more generalized stress in these animals. Thus, continuous exposure to loud music and other human created sounds in captivity can have a significantly detrimental impact on cetacean health and well-being.

Such facilities may also promote trade and illegal capture of dolphins from the wild and lead to India becoming another market for this abhorrent practice. This is contrary to conservation principles, and the next chapter provides insights into Cetacean intelligence and natural behavior making it amply clear that captive facilities like Dolphinarium are unable to provide an adequate species specific habitat for dolphins and other cetacean species and invariably expose the captive animals to poor welfare conditions.

India must take an absolute and progressive stand against the keeping of any cetaceans in captivity with special focus on dolphins and lead by example in perpetuating principles of conservation, wildlife protection and welfare and eco conscious tourism rather than latching onto the now globally declining trend in using animals as commercial attractions for profit.

Chapter Two

Understanding Cetacea In The Wild

2.1) Species Description

The order Cetacea contains about 90 species, all ocean dwelling except for 4 species of freshwater dolphins. The order contains two suborders, Mysticeti (baleen whales) and Odontoceti (toothed whales, which includes dolphins and porpoises). The species range in size from Commerson's dolphin, smaller than a human, to the Blue Whale, the largest animal ever known to have lived. Cetaceans are mammals, that is, members of the class Mammalia. Their closest living relatives are the even-toed ungulates, such as the hippopotamus and deer. The order Cetacea is fully adapted to aquatic life. The body of a cetacean is fusiform (spindle-shaped). The forelimbs have been modified into flippers. The tiny hind limbs are vestigial; they do not attach to the backbone and are hidden within the body. The tail has horizontal flukes. Cetaceans are nearly hairless, and are insulated from the cooler water they inhabit by a thick layer of blubber. Cetaceans breathe air. They surface periodically to exhale carbon dioxide and inhale a fresh supply of oxygen.

Cetacean eyes are set on the sides rather than the front of the head. This means only cetaceans with pointed 'beaks' (such as dolphins) have good binocular vision forward and downward. Tear glands secrete greasy tears, which protect the eyes from the salt in the water. The lens is almost spherical, which is most efficient at focusing the minimal light that reaches deep water. Cetaceans have highly developed hearing. They can detect sounds from dozens of miles away and discern from which direction the sound comes. Odontoceti (toothed whales, which includes Dolphins and porpoises) are generally capable of echolocation. From this, Odontoceti can discern the size, shape, surface characteristics, distance and movement of an object. With this ability, cetaceans can search for, chase and catch fast-swimming prey in total darkness, discern the nature of other non-prey objects, and, it is currently hypothesized, communicate with members of their social group.

⁸The cetaceans most likely to be seen at marine parks are various species of whales, such as Beluga whales and dolphins such as bottlenose dolphins.

2.2) Species Behaviour, Intelligence & Habitat

a) Introduction

Many cetacean species such as dolphins, whales such as beluga whales, orcas and others display a diverse range of behaviours and cognitive intelligence in their complex natural wild habitat. These behaviours are severely modified when these animals are kept in captivity. Removing them from their natural habitat and forcing them to live in unnatural, inadequate spaces such as concrete tanks, subjects them to an artificial life where they experience gradual atrophy of their natural behaviours and often display aggression to other animals and to human visitors. To understand better the impact of captivity on dolphins and other cetaceans, it is important to first recognize the salient aspects of their wild behaviour, natural intelligence and aptitude and their habitat. For the purpose of this document, we have provided detailed information on the impact of captivity on dolphins, in particular bottlenose dolphins, as this is the species most commonly held in captive facilities worldwide, it by no means reduces the similar importance of understanding the impact of captivity on other equally vulnerable cetacean species, such as the beluga whale. The insights provided in this document, are indicative of the suffering experienced by all cetaceans and other marine mammals that are housed in artificial captive conditions.

b) Physical Behaviour

Cetaceans exhibit a range of behaviours that don't have an equivalent amongst land mammals. Various behaviours such as breaching, porpoising, lobtailing, and others are heavily documented in scientific literature on cetaceans. A breach or a lunge is a leap out of the water also known as cresting. Whales are more likely to breach when they are in groups, suggesting social reasons, such as an assertion of dominance, courting or warning of danger. Lobtailing is the act of a whale or dolphin lifting its flukes out of the water and then bringing them down onto the surface of the water hard and fast in order to make a loud slap. Cetaceans engage in a variety of locomotor play, including aerial behaviors, erratic swimming, stranding, and surfing. Aerial behaviors consist of leaps, breaches, flips, pinwheels, and slapping the surface of the water with various body parts such as the chin, pectoral fin, or tail flukes.

c) Intelligence

^{9a}One of the primary foundations for the moral and ethical arguments against keeping cetaceans in captivity is that they are intelligent. Ironically it is their intelligence that has made these animals desirable for public display—their ability to understand human commands and learn complex behaviors or tricks has been exploited to provide humans with entertainment. Likewise their intelligence increases people's rapport with and interest in these animals. But exactly how intelligent are cetaceans? Most studies demonstrating cetacean intelligence have been conducted on captive animals, albeit primarily in dedicated research facilities or nonprofit public display facilities. Yet as these captive animals increasingly provide information to their captors about their sentience and intelligence, the ethical and moral arguments opposing cetacean captivity become increasingly convincing.”

d) Habitat

²⁰Critical habitat refers to those parts of a cetacean's range, either a whole species or a particular population of that species, that are essential for day-to-day survival, as well as for maintaining a healthy population growth rate. Areas that are regularly used for feeding (including hunting), breeding (all aspects of courtship) and raising calves, as well as, sometimes, migrating, are part of critical habitat, especially if these areas are regularly used. Unlike land-based critical habitat, however, marine critical habitat boundaries may be less fixed, especially in terms of hunting and feeding areas, which are dependent on upwelling and other ever changing oceanographic conditions. Baleen whales, for example, are known to feed in and around upwellings, which vary depending on local and large-scale oceanographic conditions to some extent during a season and from year to year. Dolphins in particular have large home ranges, often more than 100 kilometers, thus captivity severely compromises their space requirements, reducing them to living in an artificial tank which cannot adequately replace their natural habitat requirements.



2.3.a) Special Focus – Bottlenose dolphins (*Tursiops Sp.*)

CLASS: Mammalia

ORDER: Cetacea

SUBORDER: Odontoceti

FAMILY: Delphinidae

GENUS: *Tursiops*

SPECIES: *truncatus*

²¹Bottlenose dolphins, the genus *Tursiops*, are the most common and well-known members of the family Delphinidae, the family of oceanic dolphin. ²²Bottlenose dolphins live in groups typically of 10–30 members, called pods, but group size varies from single individuals up to more than 1,000. ²³The common bottlenose dolphin (*Tursiops sp.*) is found in most tropical to temperate oceans; its color is grey, with the shade of grey varying among populations; it can be bluish-grey, brownish-grey, or even nearly black, and is often darker on the back from the rostrum to behind the dorsal fin. ²⁴The dolphin's search for food is aided by the use of sonar known as echolocation: they locate objects by producing sounds and listening for the echos. ²⁵Researchers have documented echolocation details, such as signal strength, spectral qualities, and discrimination, extensively. Bottlenose dolphins (*Tursiops sp.*) are capable of immediately recognizing a variety of complexly shaped objects both within the senses of vision or echolocation and, also, across these two senses. The immediacy of recognition indicated that shape information registers directly in the dolphin's perception of objects through either vision or echolocation, and that these percepts are readily shared or integrated across the senses. Bottlenose dolphins are also able to extract shape information, suggesting they are able to form an "echoic image" or sound picture of their targets.²⁶

^{27a}Bottlenose dolphins range in lengths from 6.0 to 12.5 ft (1.8 to 3.8 m) with males slightly larger than females. Adults can weigh from 300-1400 lbs (136-635 kg). This is a long-lived dolphin species with a lifespan of 40-45 years for males and more than 50 years for females in the wild, captive dolphins generally do not live as long according to some research studies.^{27b}Bottlenose dolphins are found in temperate and tropical waters around the world. There are coastal populations that migrate into bays, estuaries and river mouths as well as offshore populations that inhabit pelagic waters along the continental shelf. ²⁸Based on a number of studies of near shore populations, Bottlenose dolphins seem to live in relatively open societies. Mother and calf bonds and some other associations may be strong, but individuals may be seen from day-to-day with a variety of different associates. Group size is often less than 20 near shore; offshore groups of several hundred have been seen.

^{9b}**Dolphin brains possess three characteristics, which underlie sophisticated intelligence in all mammals, including humans.** These are 1) large size – both in absolute terms and relative to body size, 2) an expanded and complex neocortex, and 3) a well-developed limbic and paralimbic system for processing emotions, social relationships and perceptions, and other high-level capacities related to awareness of self and other.

Dolphin Brain Size -

¹⁰Dolphin brains are among the largest and most complex in the animal kingdom. Some Dolphin species, including the bottlenose Dolphin, possess brains four and five times larger than expected for their body size, placing them second to modern humans and considerably above the other mammals, including the great apes. This same trait is found in modern humans, relative brain size is also found in humans, who possess brains about seven times the expected size.

Dolphin Neocortical Expansion and Complexity -

The neocortex is the evolutionarily newest part of the brain in mammals and is correlated with higher-order cognitive (thinking, problem-solving) functions. In general terms, the larger and more complex the neocortex the greater the intelligence. Several peer-reviewed studies of the dolphin brain reveal they possess a highly expanded ¹¹neocortex with a high-degree of organizational complexity. These findings show that dolphin and whale brains have evolved to process and integrate complex thought processes, just as humans have.

Dolphin Paralimbic and Limbic Structures

¹²Limbic and paralimbic cortical structures are related to processing of emotions and social awareness in mammals. The cingulate and insular cortices (both part of these systems) are extremely well developed and the expansion of these areas in cetaceans is consistent with high-level cognitive functions such as attention, judgment and social awareness. Moreover, recent studies show that the ¹³anterior cingulate and insular cortices in larger cetaceans contains a type of projection neuron, known as a spindle cell or Von Economo neuron. ¹⁴Von Economo neurons are highly specialised projection neurons considered to be involved in neural networks subserving aspects of social cognition and have thus far been found in humans and ¹⁵great apes and ¹⁶elephants. Spindle cells are thought to play a role in adaptive intelligent behaviour and the presence of these neurons in cetaceans is consistent with the complex cognitive abilities found in this group.

Self-Awareness

Perhaps the most compelling evidence for a high level of intelligence in cetaceans is the recent demonstration that cetaceans are self-aware. ¹⁷These studies involve cetaceans recognizing their image in a mirror. Researchers marked Bottlenose dolphins with zinc oxide cream or marker pens in locations the dolphins could see only with a reflection, and the dolphins immediately swam to inspect themselves in a mirror placed in their pool. This showed that the dolphins were able to recognize that the images they saw in the mirror were actually of themselves and not simply another dolphin. The dolphins used the mirrors as tools to view themselves, positioning themselves so that they could use the mirror to view the parts of their body that had been marked. These are all indicators of self-awareness. ¹⁸In humans the ability to recognize one's own image in a mirror does not appear until the age of two. Therefore, Bottlenose dolphins have a level of understanding comparable to that of a two-year-old child, although the linguistic skills of cetaceans hint at intelligence far more developed. Locking two or three young children in a small room 24 hours a day—even one with a window and a dog for a companion during the day—would be unacceptable. Yet confining dolphins in an equivalent space for their lifetime— with a human caretaker to interact with during business hours—is standard practice for Dolphinarium and aquaria.”

¹⁹Louis Herman, who taught Bottlenose dolphins a simple sign language and a computer-generated sound language, conducted one of the most successful and illuminating cetacean linguistic studies. This study determined that, using these artificial symbolic languages, dolphins could understand simple sentences and novel combinations of words, but most importantly that cetaceans comprehended sentence structure (syntax)—an advanced linguistic concept. Interestingly, while we may have been able to teach dolphins relatively sophisticated artificial languages, we have been unable to decode their many vocalizations, which may very well be a language. This begs the question of which species is “smarter”— dolphins, who can learn and understand what people want of them, or humans, who have yet to learn or understand what dolphins might be telling us. Scientists have also shown that cetaceans are able to grasp abstract concepts.“

²⁹Bottlenose dolphins have been used since 1949 in shows in Dolphinarium that feature dolphins doing tricks to entertain the audience. Using a method known as ³⁰'operant conditioning', which involves using food deprivation as a reinforcer, they are trained to perform acrobatics, locate hidden objects and play with balls. This method is an undeniable evidence of the poor welfare conditions that dolphins are exposed to in captivity and negative impact therein on their physical and mental health.



Figure 4 b Bottlenose dolphins

2.3.b) Profile – Beluga Whale (*Delphinapterus leucas*)

The Beluga or white whale (*Delphinapterus leucas*) is an Arctic and sub-Arctic cetacean. It is one of two members of the family Monodontidae, along with the narwhal, and the only member of the genus *Delphinapterus*. This marine mammal is also known as the sea canary due to its high-pitched twitter and range of sounds it emits. The majority of belugas live in the arctic and the seas and coasts around North America, Russia and Greenland; their worldwide population is thought to number around 150,000 individuals. They are migratory and the majority of the groups spend the winter around the arctic ice cap. In terms of species conservation, the beluga was placed on the International Union for Conservation of Nature's Red List in 2008 as being "near threatened"; and the subpopulation from the Cook Inlet in Alaska is considered to be Critically Endangered and is under the protection of the United States' Endangered Species Act. Of seven Canadian beluga populations, the two inhabiting eastern Hudson Bay and Ungava Bay are listed as endangered.

Yet, Belugas are unfortunately one of the cetaceans most commonly kept in captivity in aquaria and wildlife parks in North America, Europe and Asia as they are popular with the public due to their colour and expressivity. They are social animals, with large home ranges and display expressive and cooperative behaviour with members of their family groups, and even while hunting or travelling. They are known to display curiosity towards humans and other animals, and form strong emotional bonds with their young. The beluga is considered an excellent sentinel species (indicator of environment health and changes – dolphins play a similar role) because it is long-lived, at the top of the food web, bears large amounts of fat and blubber and is relatively well-studied for a cetacean. Thus, their importance in the ecology and functioning of the marine ecosystem is well established and their subsequent capture and use in performance and display in the poor welfare conditions in captivity is unacceptable and potentially harmful for their marine environment and wild population in the long term, as they are also vulnerable to other threats such as hunting and pollution.

As of 2006, as many as 58 belugas were being held in captive facilities in Canada and United States, and approximately 42 deaths in captivity had been reported up to that time. Most belugas found in aquaria are caught in the wild, as captive-breeding programs have had little success. For example, despite best efforts, as of 2010, only two male whales had been successfully used as stud animals in the Association of Zoos and Aquariums (AZA) beluga population. Despite being held in captivity, very little is known about the biology and natural behaviour of Belugas, thereby, clearly dispelling the notion that holding wild cetaceans in captivity provides an educational benefit. Similarly, the difficulties in captive breeding and high mortality rates in captive facilities, contradict the popular claims made by captive facilities that captivity enhances species conservation.



Figure 4 d Beluga whales

2.4) Conclusion

This chapter only provides a brief insight into the complex physiology, intelligence, social groups, habitat, behavior, and emotional development of cetacean species. Although there is a vast and increasing body of research literature that provides in-depth information on each of these aspects, we are still learning the extraordinary capabilities and evolutionary marvels that characterize this unique and charismatic species.

However, we now know enough about Cetaceans and their needs to accept that living a life in a 'swimming pool' performing the same tricks day after day, living often in isolation or mismatched groups, is a poor substitute for the complex, diverse natural life of these extraordinary animals.

³¹Dolphinaria and aquaria cannot even begin to simulate the natural habitats of these species. The water in their tanks is often chemically treated and filtered to prevent the animals from swimming in their own waste. Smooth concrete walls usually surround these sound-sensitive creatures and inhibit the natural use of their acoustic abilities. We cannot provide what nature can, and in addition to altering the natural behavior of these animals and exposing them to poor welfare conditions and stressful encounters with humans on a daily basis, Dolphinaria provide misinformation about the dolphins' welfare, protection or conservation requirements.

It is extremely important that Indian authorities use the available body of scientific research to formulate a stringent ban on the keeping of dolphins and indeed all Cetacean species in captivity for either display or commercial performance purpose. We must be focused on protecting natural habitats and conserving these species, rather than compromising their welfare.

Chapter Three

Impact Of Captivity & Commercial Performance On Cetacean Species Globally

The arguments presented here are collated from a range of global research studies that conclusively state that all cetacean species are unsuited to captivity with special emphasis on dolphins, as they are the species most commonly held in captive facilities worldwide. The dolphins alleged 'smile' has enabled the commercial captive industry to mislead the public into thinking that keeping them and other cetaceans in captivity is educational or fun, and that the animals enjoy living in captive environments, interacting with humans and performing unnatural tricks. In reality, they are deprived of a chance to display their natural behavior and are forced to alter their instincts, and learn tricks by way of food deprivation and fear, in every Dolphinarium in the world. From the methods of capture, to the failure of captive facilities to meet any standard of acceptable welfare conditions for the captive animals, we can safely assume that any facility proposed in India would be subject to similar concerns, no matter how they present themselves to the authorities.

3.1) What is a Dolphinarium?

A Dolphinarium is a captive facility for dolphins and often other cetacean species such as orcas or beluga whales, where they are used in display or as performing animals. The animals are usually kept in a concrete pool or tank, though occasionally they may be kept in pens in the open sea, either for research, display or for public performances. Some Dolphinarium consist of one pool where dolphins and other cetaceans perform for the public, others are part of larger parks, such as marine mammal theme parks, that may keep other animals and have other attractions as well. While cetaceans have been held in captivity since the 1860s, the first commercial Dolphinarium was opened only in 1938. Many varied designs exist, but an often found basic Dolphinarium design for public performances consists of stands for the public around a semi-circular pool, sometimes with glass walls which allow underwater viewing, and a platform in the middle from which the trainers direct and present the show.

Their popularity increased rapidly until the 1960s. Since the 1970s, increasing concern for animal welfare led to stricter regulation, which in several countries ultimately resulted in the closure of all Dolphinarium in the past decades. Dolphinarium are gradually being phased out in most western countries, due to a strong and active global anti-captivity movement. However there has begun an unfortunate boom in captive facilities being set up in Middle East, Asian and South Asian countries.



Figure 1 - Dolphins kept in a small dirty pool in a Dolphinarium in Turkey

3.2) Species Interaction Programmes (Swim with the dolphins Interaction Programmes and Petting Pools)

Many Dolphinariums across the world offer interactive programmes that allow visitors to pet, feed and swim with dolphins. Interacting with a large intelligent predator, who is already stressed in its captive environment, increases risk of injury and transference of disease to humans while significantly adding more strain to an already stressed animal. Experts state that observation studies have shown that ³²in contradiction to the expectation of the tourists, their findings showed that dolphins continually try and avoid humans during interactive programmes. Adding this fact to the findings that the dolphins dive deeper in presence of swimmers, they concluded that the dolphins avoid the swimmers. ³³Avoidance, for example, is considered to be the most important stress related behavior during interactions with dolphins and humans. These results contradict the claims of the captivity industry, that commonly state that the dolphins 'enjoy' performing or are 'happy' to be in proximity to humans.

³⁴Instances of cruelty and negative impact on dolphin behaviors have been observed during studies on interactive programmes such as swim –with-the-dolphins (SWTD) programmes and 'petting pools'. Such programmes have no educational value and are instead highly exploitative. Such activities can even prove to be dangerous for dolphins; for example, experts state that ³⁵In certain uncontrolled circumstances of such programmes, dolphins have been observed to be routinely behaving in a submissive manner to humans. ³⁶This is considered as a very disturbing dynamic, by experts, who believe it can seriously affect the dominance hierarchy within the dolphins' social group and increase risk of injury to the submissive dolphin. It also indicates a general and persistent level of stress to which the submissive dolphin is being subjected, which could in turn affect his or her long-term health

³⁷Captive interactive programs have been considered by experts to considerably distort the public's understanding of the marine environment. Observations have shown that ³⁸educational messages may take second place to entertainment in whale and dolphin performances, where the 'jumping', 'splashing' and up-close encounters with the animals may diminish educational benefit. Furthermore, promotion of physical interaction with captive marine mammals may also **encourage visitors to carry out such activities with their wild counterparts, thus impacting negatively on wild populations.**

³⁹Observational studies have revealed that dolphins have delicate skin and are at risk of harm from humans' nails and jewellery. For example, ⁴⁰experts have observed that not all facilities require participants to remove all makeup and suntan lotion before entering dolphins' enclosures for interactive programmes. ⁴¹This can lead to contamination of the water and also irritate the dolphins' skin and eyes". ⁴²Furthermore, dolphins have been known to attack humans during swim-with interactions, especially captive males who may often be sexually frustrated due to inadequate or incompatible social groupings.

⁴³Injuries to humans incurred from dolphins during swim-with programmes, have been witnessed. These injuries include broken bones, internal injuries and wounds requiring hospitalization. ⁴⁴In a survey of people who work with marine mammals, 50% of the staff has reported injuries caused by marine mammals. Additionally, experts state that ⁴⁵Bottlenose dolphins are one of very few mammalian species known to direct lethal aggression that is unrelated to predation towards mammals of other species. This is a significant example of the negative impact of captivity on both dolphins and the humans that interact with them through such enforced interactive programmes. There have hardly been any instances of similar nature reported between humans and dolphins in the wild.

Another programme offered are 'Petting Pools', where visitors are allowed to pet, feed and physically interact with the animals from the periphery of the pool. ⁴⁶Expert studies assessing such programmes have shown that dolphins in petting pools can be exposed to humans 12 hours a day, every day, with the public often splashing water or slapping the sides of

the tank to get the dolphins' attention. This exacerbates the noise and disturbance to which the dolphins are routinely subjected to, in such activities, and is considered to be detrimental to their health and welfare. ⁴⁷Experts have also made observations of dolphins in petting pools being fed popcorn, bread, french fries, sandwiches, and the contents of drink containers. ⁴⁸This has led to the ill health of dolphins, with many being observed as being obese, which is indicative that these activities were not properly supervised and caused competition between the captive dolphins, leading to some being over fed. ⁴⁹An even more disturbing observation, is that of human visitors placing objects such as glasses, paper, stones, coins, bottle tops, metal souvenirs, and even a baby's pacifier into the mouths of dolphins or offering them wristwatches and even cigarettes. Experts' state, that if such objects are swallowed, they can cause intestinal injuries, poisoning, and even death. These are significant concerns that impact the welfare of dolphins and indeed all cetacean species kept in captive environments, where they are vulnerable and subject to human management.



Figure 2 - Overcrowded petting pool with the animal having no option to getaway. Photo courtesy WSPA

3.3) Typical Performance Routines Of Captive Cetaceans In Dolphinarium

⁵⁰In marine park shows, animals are conditioned to perform tricks, or behaviours, which marine parks insist are extensions of natural behaviour. While many species are indeed naturally athletic, the term "extension" is stretched to the fullest breadth of the imagination. Orcas do not "naturally" catapult humans into the air, or tolerate being ridden, climbed upon, or walked on. Dolphins do not "naturally" allow trainers to "water ski" on their backs, straddling two dolphins, in what is referred to as a Roman ride. Tail - walking is not a behaviour observed in wild populations of Tursiops, nor is "breaching" seen among beluga whales. Performances using props present potential risks of ingesting foreign objects, as do demonstrations of echolocation that use eye cups. These and other activities are unnatural and taught to the captive animals using starvation as a motivational tool.

3.4) Examples of the negative impact of Captivity On Marine Mammals

^{51a}The following examples provide evidence of the negative impact of captivity on marine mammals. The first example illustrates the impact of capture on wild populations, by documenting the case of the capture of eight dolphins in the Dominican Republic waters by a captive facility and the ensuing untimely death of four of the captured dolphins. Such incidents highlight the link between wild captures and the captivity industry. The second example, illustrates a case in Mexico, where dolphins held in a shallow sea pen were exposed to a hurricane and some of them died as they were unable to escape their enclosure, it also highlights the stress and trauma experienced by captive dolphins during transport. Such

incidents are unfortunately all too common in the captivity industry and clearly indicate that dolphins and all other cetaceans are unsuited to a life in captivity.

^{51b}Bayahibe, Dominican Republic

No surveys or other research had been conducted on the status of Bottlenose dolphins inhabiting Dominican Republic waters prior to the capture of eight individuals near Bayahibe (off the southeast coast of the country) in August 2002. The captors told locals, however, that they were merely going out to conduct research on the dolphins—by attaching tags. The captures caused a furor locally, as community groups objected to “their” dolphins being taken, and to the lack of consideration of the impact the takes would have on the economically important local dolphin-watching industry. The capture also was severely criticized by the Dominican Republic Academy of Sciences. The dolphins were taken to Manatí Park, a captive dolphin facility that operates dolphin shows and a Swim with dolphins program. This facility had already courted controversy and coverage on European television over the state of the facilities and an attack on a child by one of the Dolphins in the park. Although there are no known records of dolphin mortalities at Manatí Park, local workers at the facility informed a WSPA representative that one day in 2000, four dolphins suddenly died, to be replaced the very next day by five new, but undocumented, animals

⁵²La Paz, Mexico

The history of the La Paz dolphins is a dismal one. After their December 2000 capture, they were transported to the dolphin Learning Center (DLC), a badly constructed sea pen enclosure owned by an entrepreneurial local doctor, in front of a beach resort hotel. Dolphin advocates warned Mexican authorities and the DLC facility owner that the sea pen’s location (near a sewage outfall and relatively heavy vessel traffic) and shallowness were substandard and could create serious problems for the dolphins. A video released of the transport of the animals, much of which was in wooden crates, showed footage of one of the animals being repeatedly dropped while being carried in a stretcher across a beach. One of the dolphins died within a few weeks of being brought into the facility. In response to the capture, and the fact that the capturing facility did not possess the appropriate permits for a live capture of cetaceans, the Mexican Environmental Enforcement Agency ordered the DLC Dolphinarium shut down. However, the Mexican courts ruled against this closure in June 2001, and so the dolphins remained in captivity. In September 2003, La Paz was hit by a hurricane, and although the human population prepared against the onslaught of the storm, nothing was done to similarly protect, or evacuate, the La Paz dolphins. Due to contamination of the dolphins’ pen—from the sewage outfall, just as dolphin advocates had predicted—the large amount of storm-tossed debris, and the stress associated with the event, three of the seven remaining dolphins died within days of the hurricane’s passing. Another dolphin died in November.

3.5) ⁵³Common Stressors In Dolphinarium & Their Impact On:

a) Cetacean Behaviour

Captive facilities are unable to replace the vast, complex and varied oceanic habitat that is essential for the well being of a social, intelligent and far ranging predator, such as a dolphin. The small-constricted space provided in captive tanks, provide inadequate living space, which leads to the development of stereotypical behaviours, aggression and gradual atrophy of natural instincts and behaviours such as foraging and travelling. The smooth walls of the tank inhibit the display of echolocation, which is an essential aspect of the dolphin’s ability to orient themselves in their natural habitat. All these behaviours are severely compromised in captivity and they are exposed to unnatural sounds, forced proximity to humans and also forced to modify their many of their natural behaviours and learn instead, tricks and performance routines for the entertainment of the public.

This artificial existence has a very detrimental impact on the dolphin’s well - being, both in terms of physical and mental

health.

For example, dolphins are not allowed to exercise that part of their behavioral repertoire that is related to hunting and foraging. This leads to the development of stereotyped behaviors, severe aggression toward conspecifics and humans, and other behavioral problems, that frequently arise in predators denied their natural foraging behavior. Furthermore, performing animals are trained to demonstrate a series of conditioned behaviors. Some of these behaviors may be part of their natural behaviors, but many are merely based on natural behaviors that have been performed out of context and exaggerated and altered almost beyond recognition. The most common training method, called operant conditioning, uses food as positive reinforcement. For many animals this means that satisfaction of hunger is dependent on performing tricks; for others, hunger is deliberately induced so the reinforcer will be effective. This is not food deprivation per se, for a complete food portion is ultimately provided each day, but the use of food as a reinforcer reduces some animals to little more than beggars. Their lives obsessively revolve around the food presented during shows and training sessions. Patrons of any captive marine mammal show can easily observe the animals' attention fixed on the buckets of food. For these animals, natural feeding and foraging rhythms and cycles, as well as independence of any kind, are lost.

Natural behaviors and interactions, such as those associated with mating, maternal care, weaning, and dominance, are altered significantly in captivity. In most cases, these behaviors are strictly controlled by the needs of the facility and the availability of space. The needs of the animals are secondary. For instance, weaning is timed to suit the needs of the facility, as opposed to the needs of the pup, cub, or calf, because the offspring may be disruptive to the social group or because space is limited. Dominance interactions can be aberrant and abnormally violent, as the animals must adjust their behaviors in response to the small living space and the artificial age and sex composition of the captive social group. Wild-caught captive marine mammals gradually experience the atrophy of many of their natural behaviors. Many are caught too young to have learned how to socialize properly and form relationships. For cetaceans socialization and learned behavior and skills are undoubtedly crucial to normal and natural development.

b) Birth Rates and Mortality rates (Comparison to Wild Populations)

Bottlenose dolphins

Some studies indicate that captive Bottlenose dolphins live as long as and have the same mortality rates as their counterparts in the wild. Other studies, however, continue to indicate a higher year-to-year mortality rate for animals in captivity than for those in the wild (Table 1). The failure of captive dolphins to exhibit a significantly higher survival rate in spite of 70 years of maintaining this species in captivity disputes the public display industry's oft-stated contention that captivity enhances survival by keeping animals safe from predators, parasites, and pollution and by providing animals with regular feeding and ever-improving veterinary care. The reproductive history of Bottlenose dolphins shows a similar pattern. Although calves are now born routinely in captivity, captive-born calf mortality rates fail to show a clear improvement over the wild. As predation—a significant source of calf mortality in the wild—is not a risk factor in captivity and veterinary supervision is intensive when a calf is born, this failure to demonstrate higher calf survivorship is disturbing. Causes of death for captive-born calves include lack of maternal skill, lack of proper fetal development, and abnormal aggression from other animals in artificial social environments and confined spaces.

Species	Mortality Rate in Captivity				Mortality Rate in the Wild
	Study 1	Study 2	Study 3	Study 4	
Bottlenose Dolphin	7.0%	7.4%	5.6%	5.7%	3.9%
Killer Whales	7.0%		6.2%	6.2%	2.3%

Figure 3 - Table

c) Physical & Emotional Welfare

Confinement exacerbates stressful situations for marine mammals in many ways. Captive animals are forced to live in artificial social groupings determined by humans, in confined areas, and the ensuing social pressures and stress they experience can escalate when they have no avenue for escape. In Dolphins, for example, adding new members to a captive group—such as young animals reaching maturity—or placing incompatible animals into groups can upset the group’s social dynamics and dominance hierarchies, as can isolating individual animals or separating them from their associates. These circumstances can lead to increased aggression, illness, poor success in calf rearing, and even death. The effects of socially inflicted stress in captivity were illustrated in a 2002 study, which described how seemingly innocuous changes in dolphin groupings and associations could actually cause extreme stress, leading to chronic illness and death.

3.6) Conclusion

These research studies and cases only prove that captivity has repeatedly failed to deliver any sort of acceptable welfare and protection for Cetacean species. Promoting similar facilities in India will only create situations where such instances of poor welfare, stress and captive animal deaths may well become the norm. No matter how large or expensive the project and captive facility claims to be, it cannot reproduce successfully the natural environs essential for the well-being and propagation of marine mammals. Such facilities only undermine conservation and welfare protection efforts and add more threats to the eventual survival of these species in the wild.



Chapter Four

Sourcing From The Wild

4.1) Live Captures

⁵⁴Most cetacean capture methods are extremely traumatizing such as drive captures. This hunt involves a fleet of small boats that herd dolphin pods into shallow water by producing loud noises when the crews bang on hulls, or clang metal pipes together underwater. Some of the animals are set aside for sale to captive display facilities, while the remainder are killed with long knives or spear-like tools. Aside from humane considerations, removal of animals from wild populations can have a substantial negative impact on the animals left behind.

Research on Bottlenose dolphins shows that certain individuals play a crucial role in holding dolphin communities together. If these individuals are removed, the dolphin group might lose cohesion and disperse. This could have serious survival implications for the remaining animals, as having a well-organized group is crucial when dolphins forage for food or have to defend themselves against competitors and predators.

Many members of the general public believe captures of wild cetaceans are a thing of the past, encouraged in this mistaken belief by the display industry. This is however not the case.

Figure 4 e- Images of live drive captures of dolphins for meat and trade for captive industry





4.2) Conservation Fallacy

⁵⁵Public display facilities have begun to increasingly promote themselves as conservation or educational centers. Sometimes in some cases, even changing their names to reinforce this image. Through skillful and targeted marketing and public relations, they miss no opportunity to emphasize their role as modern 'arks', barriers against the extinction of endangered species in the wild. In reality, most public captive display facilities do no more than produce multiple generations of a limited group of species and do not maintain true conservation programs at all. In fact, only 1 of the 50 members of the Alliance of Marine Mammal Parks and Aquariums (AMMPA)—the main industry association that represents all captive facilities, that house, display or use in performance, dolphins, other cetaceans, marine mammals such as seals, walrus and others, fish species—routinely provides funding or grants to promote the conservation of critically endangered river dolphin species. Public display facilities with the motivation, staff capability, and commitment to engage in or support conservation programs for any animal species have always been few in number. Dolphinaria in fact, promote no understanding of wild dolphins or any other cetacean species, their marine environment or social behaviour. Dolphinaria instead support the trade in wild caught cetaceans (dolphins/whales), in a time, when marine species are already under threat due to pollution, overfishing and other anthropogenic influences.

Captive facilities focus on one aim alone and that is to make a commercial profit. Animal husbandry in captive facilities is rarely motivated by a conservation goal. It is generally done to ensure availability of specific species that suit the commercial purpose of the facility rather than to maintain an ecological balance. Every effort is expended to ensure that species popular with the public are bred, without any attempt to consider or contribute to global conservation efforts directed towards protecting marine biodiversity. The requirements of providing the public with a satisfying recreational experience always supersedes the goals of conservation or education as far as marine mammal captive facilities are concerned. Thus such

false claims are highly misleading at best. Hardly, any Dolphinarium globally are involved in substantial conservation programs either in or ex situ, and even if they do contribute, the amount spent on these programs is a mere fraction of the income generated by the facilities. Dolphinarium and aquaria still acquire several species of marine mammals directly from the wild. It is tragic, that while we have vast scientific research available globally attesting to the urgency of protecting the fragile and increasingly damaged marine ecosystems; we are instead continuing to remove fish species for the aquaria trade, damaging corals, polluting our seas and oceans, capturing marine mammals, such as dolphins, whales, seals for commercial entertainment and moving rapidly towards the complete destruction of this fragile marine environment which covers more than 70% of our planet's surface and is crucial to our survival.

It is imperative that India takes the correct and proactive stand against these proposals to set up marine mammal captive facilities and instead mandates a complete prohibition on the keeping of any marine mammal in captivity in India.

Chapter Five

Risks To Human Health

5.1) Diseases

⁵⁷Respiratory diseases have been reported in nearly a fifth of marine mammal workers, including diseases such as tuberculosis. Clearly, continuous exposure to marine mammals can involve a health risk to people working with the animals, but it can also threaten the health of the public. Diseases contracted from marine mammals are difficult to treat and diagnose, as physicians who are not aware of the risks—or range—of potential infectious diseases may overlook them. Facilities that allow direct human contact with marine mammals, such as Dolphinariums with petting pools or SWTD programs, are exposing their customers to possible infection and injury. The reverse is also true—such facilities are exposing their animals to possible human diseases or injury as the result of inappropriate behavior by the public.

5.2) Injury And Death

⁵⁸The risks faced by during interactive programmes between humans and dolphins for example are considerable. Research has shown, that people have suffered from broken bones, lacerations and shock caused by aggressive behaviour from the dolphins that are forced to interact with humans during swim-with-the-dolphins programs or in petting pools. Several dolphin biologists have noted that few, if any, dolphin-inflicted human injuries could be truly accidental, yet all the injuries in SWTD accident reports were so labeled. This is disturbing, as the perpetuation of the dolphin being a friendly gentle animal by Dolphinariums in the interest of commercial profit, actually misleads the public from understanding its natural instincts as a large carnivorous predator.

It is probable that a person will eventually be killed in these programs, more likely in one of the many new facilities in the developing world being built and operated by entrepreneurs who know little about dolphins and other cetacean species but anticipate a large profit from this lucrative tourist activity. This has significant implications for the animals as well. Should an animal be involved in a seriously injurious or fatal interaction, he or she would certainly be removed from the attraction and would face an uncertain fate.

The fact is that at any time during a swim session, especially one that is not controlled, dolphins may inflict minor to serious injuries on swimmers for various reasons, some of which are neither obvious nor predictable. Even in controlled swim sessions, the risk is always present and is potentially lethal. There is also a risk that petting pool dolphins will inflict injuries on members of the public. Frequent teasing by visitors and other inappropriate behavior, such as touching sensitive areas of the dolphin's body, like the eyes or blowhole, increase the likelihood of aggression by the dolphins. Members of the public have even been observed holding children and babies over the heads of dolphins at petting pools, oblivious to the fact that Dolphins are also predators and carnivores.

⁵⁹Bottlenose dolphins have been regularly reported to be attacking and killing members of other cetacean species, and even attacking and killing conspecifics' calves. Till date there has only been one record, in Brazil, of a bottlenose dolphin killing a person. The animal who caused the incident was a solitary male, named Tiao by locals, with a history of approaching human swimmers as well as of inflicting injuries: 29 swimmers had reported injuries, mostly as a result of the humans "harassing" the dolphin by grabbing his fins or trying to jump on his back. Arguably these people were only trying to do the very things that dolphin trainers are regularly observed doing to and with dolphins at Dolphinariums. Eventually, on 8 December 1994, the

dolphin rammed a man (who was reported to have been attempting to put objects into the Dolphin's blowhole), rupturing his stomach and causing his death.

Conclusion

The arguments against keeping all marine mammals with special emphasis on Cetacean species in captivity presented in this document are sourced from a range of research studies conducted globally across various Dolphinariums as well as studies done on wild populations and collated in this report. The outcome of every study conclusively brings us repeatedly to the same result, that dolphins or any cetacean species for that matter are unsuited to captivity. They are deprived of a chance to display their natural behavior and are forced to alter their instincts, and learn tricks by way of food deprivation and fear, in every Dolphinarium in the world. From the methods of capture, to the failure of captive facilities to meet any standard of acceptable welfare conditions for the captive animals, we can safely assume that any facility proposed in India would be subject to similar concerns, no matter how they present themselves to the authorities.

However the vast and increasing body of research now available has gradually begun to dispel these myths, revealing the captive industry to be commercially exploitative, focusing on profit at the cost of education and animal welfare or protection. There is a growing global movement against Dolphinariums and many countries have taken the first step in phasing out these unnatural and outdated concepts, by enforcing strict legislation against them. For example, in early 2005, Chile became the first country to ban outright the public display of most marine mammal species (as well as some sea birds), and also their import, export, and capture from the wild. Costa Rica joined it soon after, prohibiting the capture and public display of all cetaceans. In September 2005, the Netherlands Antilles determined that it would allow no more dolphin exhibits in its territories (it already has one and has issued a permit for another).

Cyprus denied a request to set up a dolphin assisted therapy facility in 2006. Some countries have banned the live import or export of cetaceans; these include Cyprus (imports are prohibited), Hungary (imports), Argentina (imports from the Russian Federation), Vietnam (exports) and Malaysia (exports are prohibited, as are imports of marine mammal species already found in Malaysia). Mexico has prohibited the import and export of marine mammals.

Other nations have banned or enacted moratoriums on the live capture of cetaceans in their waters. These include Mexico, New Zealand, Brazil, Peru, Argentina (orca captures are prohibited), the Dominican Republic, Nicaragua, Australia, China (including Hong Kong), Indonesia (live captures of Irrawaddy Dolphins in the Mahakam River are prohibited), Laos (live captures of Mekong Irrawaddy dolphins are prohibited), Malaysia, the Philippines, Singapore, and Thailand.

The government of Antigua and Barbuda, after issuing a permit to a foreign company to capture as many as 12 dolphins annually from local waters, rescinded this permission after activists filed a lawsuit arguing the quota was unsustainable and that it violated regional conservation agreements. In a number of cases, municipal, provincial, and national governments have decided not to allow a Dolphinarium or a cetacean exhibit to be built.

Furthermore, some countries have implemented strict legislation for the keeping of cetaceans in captivity. Among these are the United Kingdom and Brazil, neither of which holds cetaceans in captivity, and Italy, which bans SWTD attractions and other human-dolphin interactions. All of these developments suggest that a paradigm shift may be underway. The media attention on controversial captures, unnecessary deaths, and inhumane transports is having an impact on the general public's perception of marine mammals in captivity. The impression of happy animals performing for treats is giving way to recognition of behind-the-scenes suffering.

The preceding pages have presented the case against capturing cetaceans and keeping them in captivity. Therefore, while

humans can segment the various parts of the captive experience and even draw comparisons between the impact of various aspects on the welfare of cetacean species such as dolphins, it is now **irrefutably clear that the entire captive experience for marine mammals is so contrary to even the most basic elements of compassion and respect that it should be rejected outright and for all time.**

It is unacceptable for marine mammals to be held in captivity for the purpose of public display.

The West has set a tragic precedent with its multi-billion dollar captive marine mammal facilities, which developing countries, hungry to prove their standing in the global hierarchy, are rushing to follow. These mega-corporations hide the deaths, the impossibility of providing adequate welfare, the deliberate exploitation and the unavoidable illness, which besets dolphins and other cetaceans in captivity.

India has a rich and diverse natural heritage with unlimited opportunity to develop tourism, by focusing attention on conserving, protecting and naturally enriching its magnificent coastlines. Natural marine sanctuaries, controlled and responsibly managed wild dolphin-watching activities can be developed with rural coastal communities, providing the wonderful educational, social and financial benefits.

Setting up captive cetacean facilities, in the face of the strong global movement against the captivity, is detrimental to India's global image and undermines the robust animal welfare and protection efforts that are prevalent in the country today.

India must be progressive in its policies and make every effort to be an example of efficient and appropriate legislation in support of cetacean conservation, and the welfare and protection of all marine mammals in its own waters and not act as a new market for wild caught dolphins or any other marine mammal.

Import or Export or Capture of dolphins and any other cetacean species for use in performance or display and establishing of Dolphinarium in India must be completely prohibited.

CAMPAIGN PARTNERS

Wildlife Rescue and Rehabilitation Centre in collaboration with the State Wildlife Department of Karnataka has constructed the Bannerghatta Rehabilitation Centre (BRC) for the rescue of small wild mammals, birds and reptiles and aims to campaign against the keeping of wild animals in enclosures or under any form of confinement by any person whomsoever under any circumstances

The Born Free Foundation is a dynamic international wildlife charity, devoted to compassionate conservation and animal welfare. Born Free takes action worldwide to protect threatened species and stop individual animal suffering

Earth Island Institute is an umbrella organization, which has more than 60 projects working for the conservation, preservation, and restoration of the Earth

End Notes

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- 68) ²⁸ American Cetacean Society , a retrieved from <http://acsonline.org/fact-sheets/bottlenose-Dolphin/>

APPENDIX

Media Resources: (News Reports on Dolphinarium proposals in India)

KOCHIN

1) <http://www.thehindu.com/news/cities/Kochi/article3579971.ece>

Authority gives green signal for Kochi oceanarium project

The Kerala State Coastal Zone Management Authority (KSCZMA) has given in-principle approval to the estimated Rs. 480 crore Kochi Oceanarium project at Puthuvypeen. The area identified for the project, initiated by the State Fisheries Resource Management Society (FIRMA), falls under the Zone one of the Coastal Regulation Zone. Experts had earlier pointed out that the project will have a major impact on the thick mangrove cover in the region. Sources in the authority told The Hindu that the in-principle approval has been granted subject to certain conditions. The project proponents should submit a detailed project report on the proposed compensatory afforestation programme to make up for the loss of mangroves in the region. A committee consisting of experts will be formed to monitor the implementation of the project on a regular basis. It will have the powers to enforce the regulations prescribed under the coastal regulation zone norms. FIRMA had offered a proposal to relocate the flora and fauna of the Puthuvypeen area at one of the two sites identified for the purpose. It had also envisaged a detailed project for planting mangroves at a 20 acre holding near the Pokkali fields or at 40 acres at puramboke land at Valanthakad. The society had also assured that it will plant all varieties of mangroves present in the project land at the selected site. It had also agreed to take up the responsibility for its propagation, protection and management. It is learnt that the authority's decision to give in-principle approval to the Oceanarium project comes at a time when the Union Ministry of Environment and Forests had made it categorically clear that land reclamation, building bunds, disturbing the natural course of sea water, destruction of mangroves and construction-developmental activities are prohibited in areas coming under the Zone One of the Coastal Regulation Zone. In its earlier report on the Kerala Cricket Association's international cricket stadium project at the mangrove-rich Pampaimoola in Edakochi, the Ministry had pointed out that the project cannot be permitted in CRZ-1 area according to the provisions of CRZ Notification 1991.

2) <http://www.ksidc.org/oceanarium-kochi-project.php>

Development of Oceanarium project, Kochi

19th July 2011

REQUEST FOR QUALIFICATION (RFQ) TO PRE-QUALIFY AND SHORTLIST SUITABLE APPLICANTS FOR AWARDING THE OCEANARIUM PROJECT THROUGH COMPETITIVE BIDDING PROCESS

The Govt of Kerala (GoK) represented by State Fisheries Resource Management Society (FIRMA), has decided to set up Oceanarium project at Putu Vypeen, Kochi, Kerala, India to provide facilities for propagating awareness about marine environment and bio-diversity. The project is to be developed in Public Private Partnership (PPP) route on Design, Built, Finance, Operate and Transfer (DBFOT) basis through Competitive Bidding process for selection of a private entity and / or public sector companies as bidder to whom the project may be awarded. GoK has engaged Kerala State Industrial Development Corporation Ltd (KSIDC) as bid manager for selection of developer for the project. GoK intends to pre-qualify and shortlist suitable applicants who will be eligible for participation in the bid stage for awarding the project in accordance with procedure set out in RFQ.

3) http://articles.timesofindia.indiatimes.com/2012-10-04/kochi/34259391_1_gcda-land-swap-greater-cochin-development-authority

Expert team from Dubai to study dolphinarium plan

TNN Oct 4, 2012, 02.35AM IST

KOCHI: A team from Dubai is expected to visit the city soon and assess the facilities here for setting up a dolphinarium, as planned by the Greater Cochin Development Authority (GCDA). GCDA chairman N Venugopal said the team, comprising experts from the UK and Russia who were involved in setting up dolphin parks in the Middle East, would arrive in a week's time. "They will inspect the site along the Marine Drive, where the park is proposed. They will study the nature of the sea water, its salinity and assess whether dolphins will be able to survive in these waters. They will also look into the possibility of introducing seals into the park." The team will submit its findings to GCDA and the authority will initiate further steps depending on its observations. On land acquisition, Venugopal said the authority would, on November 1, exchange land in lieu of property being taken over for the construction of Chilavanur Bund Road. The authority would get 46 cents to complete the road project as part of the land swap deal with landowners. The GCDA will also acquire 35 cents from Cochin Shipyard to facilitate construction of a link road between Panampilly Nagar and Vayanasala Road. The 10-m-wide link road will ensure better connectivity from Panampilly Nagar to Kadavanthara and Thevara. Venugopal said a committee had been constituted to prepare a panel of architects for construction of an underground exhibition centre at Jawaharlal Nehru International Stadium. The five-member committee would scrutinize the designs

submitted by architects. On other projects, he said the walkway under construction at Marine Drive would be opened in December. The GCDA executive committee has authorised the chairman to look into possibilities of installing a statue of late chief minister K Karunakaran on the stadium premises.

4) <http://www.deccanchronicle.com/channels/cities/kochi/dolphin-park-viable-kochi-experts-921>

Dolphin Park viable for Kochi: Experts

October 20, 2012 DC Kochi

Experts from the Singapore Dolphin Park who visited the sites identified for the Greater Cochin Development Authority's dolphin park have remarked that the project was feasible considering Kochi's nearness to the sea. "Three experts from the Singapore Dolphin Park visited the sites on Marine Drive and the 1.5 acre land behind the high court. The experts inspected the sites in detail, examined the nature of the sea water and its salinity. A sample of sea water was submitted for detailed laboratory examination. A final decision will be taken once we confirm that the dolphins will be able to survive in these waters," said N. Venugopal, chairman, GCDA. The project has been conceived by the GCDA as part of Marine Drives' second phase of development. The project will be implemented on a revenue sharing basis and investment, to the tune of `20 crore, will be made by the Singapore Dolphin Park. "We will provide the land and other ancillary facilities. Once the modalities are finalised, an MoU will be signed" added Venugopal. Flights with special facilities have to be used to transport four dolphins. The cost of the dolphins is ` 3.5 crore. As many as 30 employees are needed to run the park of which eight special trainers will be from Japan. There will be three shows a day.

MAHARASHTRA

1) SINDHUDURG

1) <http://digitaljournal.com/article/320519>

India resists calls to cease plans for dolphinarium in Sindhudurg

Mar 2, 2012

Mumbai - Despite pressure from NGOs and even its own Ministry of Environment and Forests (MoEF), the Maharashtra state government is defending its plan for a new water theme park and dolphinarium to be built on the Arabian Sea coastline in Sindhudurg. Details of the project, called Sea World, after its American counterpart in Orlando, Florida, were officially announced in October, 2011. If the proposed project pushes ahead in the popular tourist destination south of Mumbai, on the west coast of India in Maharashtra, it would become India's first aquarium-based theme park. The 500-600 acre-sized theme park, is expected to cost about Rs 510 crore and was presented to the cabinet by tourism minister Chhagan Bhujbal last year. The new venture, said to mirror SeaWorld's US model, includes plans for a dolphin stadium, theme restaurants, water sport areas and an underwater studio. Maharashtra state government hopes the project will generate tourism revenue and increase employment opportunities for the region, but its inception drew fire from several NGOs, including cetacean advocate Ric O'Barry of the Earth Island Institute's, Dolphin Project and Save Japan Dolphins. Along with the Federation of Indian Animal Protection Organizations (FIAPO) and other groups, O'Barry had urged Minister Prithviraj Chavan, to "take immediate action to stop the Sindhudurg proposal before it proceeds." And at first, the pressure appeared to be working. Directives from the Ministry of Environment and Forests (MoEF) concerned over complaints received from animal welfare groups, asked the state government not to entertain the proposal. But a response, issued yesterday in The Hindu newspaper, revealed state entities were on the offensive. In defense of its plans, the Maharashtra government announced its intention to query "experts in Pune's Science and Technology Park, a Central Government institute, [...] to prepare a Detailed Project Report (DPR)." One that would justify their plan. Marine biologist Dr Sarang Kulkarni, heading the DPR charge at Pune, called efforts by cetacean groups hoping to get the project stopped, as being "based on half knowledge." Maharashtra Tourism minister Chagan Bhujbal himself, responded to MoEF claims about potential violations of the 1972 Wildlife Protection Act, as more NGO opposition to "anything and everything." Bhujbal's stance should not come as a surprise. In an interview given to Frontline last November, Bhujbal admitted he would pursue an aggressive marketing strategy for Maharashtra. "Our target is to create demand," he said, "the other things will follow." But it is the mentality behind the proposal that is of most concern to animal welfare groups. According to The Hindu news, if the project goes ahead, senior officials are already eyeing local dolphins. One official contended, "there are dolphins in the region, so [...] will not bring them out of their natural habitat." It is a statement suggesting that dolphins procured for the marine park, may be garnered from the wild. The concern is that India has unsuccessfully attempted to break into the captive marine mammal industry several times before. Back in 2010, it prompted a response from the Whale and Dolphin Conservation Society (WDCS), who along with Animal Asia, aired their fears in a letter addressed to MoEF's Minister of State, Mr Jairam Ramesh: "We are very concerned that the establishment of a live dolphin display in India would lead to dolphins being captured from the wild, with unknown consequences for the population from which they are removed. Any individuals captured would then be forced to suffer the effects of confinement in captivity." Furthermore the missive said in regard to India's history with cetaceans, "the only captive cetaceans to have been displayed in India, have died within only a few months of their arrival in the country." The assumption by state officials that native dolphins placed in an artificial environment are not being removed from their natural habitat, is puzzling. And for some, it only serves to highlight the thought processes enveloping the entire project. It also raises flags over the expected level of care captive cetaceans might receive. Dolphin Project director, Ric O'Barry, has been fighting the new dolphinarium since the project was first announced. Since the outset, O'Barry has urged project officials to adapt their thinking and consider other options for tourism that doesn't involve captivity. "Watching dolphins in the wild is a much more authentic and exhilarating experience than watching them swim around in tiny circles in a tank," said O'Barry, adding, "India is a dolphin captivity-free nation, and it should remain that way forever." FIAPO agrees and has joined with O'Barry in expressing their concerns to the Maharashtra state government. They hope through an online petition and a direct letter campaign, to prompt a change of heart. For now though, Maharashtra's Tourism Minister appears determined to rebuff their efforts. Ceasing this project is "not good for the state's development as a tourist hub," Chagan Bhujbal said.

2) <http://www.thehindu.com/news/states/other-states/article2574421.ece>

PETA opposes marine park in Sindhudurg

STAFF REPORTER

The People for the Ethical Treatment of Animals (PETA), an American organisation, wrote to Maharashtra Chief Minister Prithviraj Chavan on Thursday, urging him "to put a stop to the ill-conceived and reckless plan" of building a marine park in the coastal district of Sindhudurg. The State government has proposed an aquarium-based theme park in Sindhudurg on the lines of SeaWorld, a chain of marine mammal parks and 'oceanariums' in the United States. Spread over 200 acres, the Indian counterpart is reportedly estimated to cost around Rs.500 crore. In an email to Mr. Chavan, PETA stated: "The proposal for a marine park in Sindhudurg flies in the face of growing worldwide condemnation of confining wild animals or otherwise using them for human diversion. As people around the world learn more about the miserable lives of animals in oceanariums and other captive environments, they are staying away...We respectfully ask that you give serious consideration to immediately reversing the decisions that have led to this development being launched." According to PETA: "Confining animals that are genetically designed to swim the vast oceans to chemically treated concrete tanks is cruel. Whether taken from their ocean homes or bred in captivity, fish, rays, sharks, dolphins and other animals quickly grow depressed, bored and listless in the monotony of aquarium tanks. There's no doubt that they are aware they aren't where they are supposed to be. Many die far short of their expected lifespan."

Flak for SeaWorld

The animal rights organisation pointed out that SeaWorld has itself come under severe criticism for holding captive whales and dolphins. "According to a news report, SeaWorld was the inspiration for the proposed marine park in Sindhudurg, but considering the condemnation SeaWorld has faced for its cruelty to animals, this is egregiously irresponsible. Despite a well-financed public relations department, SeaWorld has one of the worst histories of animal care. "At least 25 orcas have died at U.S. SeaWorld facilities in the last 26 years, none of them of old age. The causes of their deaths range from severe trauma, intestinal gangrene, acute hemorrhagic pneumonia, pulmonary abscesses, chronic kidney disease, chronic cardiovascular failure, septicemia, influenza and cerebral necrosis. In many cases, the cause of death could not even be determined. Dozens of bottlenose dolphins have also perished in mysterious or troubling circumstances," the letter said. PETA has filed a lawsuit against SeaWorld for enslavement of orcas in violation 13th Amendment to the U.S. Constitution.

Research

PETA cited examples of accidents and physiological anomalies among captive dolphins that allegedly led to their death. It said scientific evidence in connection with this was "irrefutable." Certain research studies showed that dolphins exhibited behaviours and reflexes that were close to those of humans. There was opposition to "marine mammal exhibits" in England and a worldwide shifting of focus away from such displays, the organisation said. "In Brazil and Costa Rica, it is illegal to use marine mammals for entertainment. Israel has prohibited the importation of dolphins for use in marine parks, and Canada no longer allows beluga whales to be captured and exported. The state of South Carolina in the U.S. has banned exhibits of whales and dolphins," the letter said.

3) <http://www.petaindia.com/mediacentre/news-releases/PETA-Delegation-Meets-Maharashtra-CM--Presents-Central-Government-Objection-To-Proposed-Sindhudurg-Dolphin-Park.aspx>

PETA Delegation Meets Maharashtra CM, Presents Central Government Objection To Proposed Sindhudurg Dolphin Park

24 May 2012

Mumbai – A delegation from People for the Ethical Treatment of Animals (PETA) India met with Maharashtra Chief Minister Prithviraj Chavan yesterday evening to present a letter from the Ministry of Environment and Forests (MoEF) objecting to plans to build a dolphin park in Sindhudurg. The delegation also presented a dossier containing opposition to the park (a Rs 510 crore project) from the Federation of Indian Animal Protection Organisations, the Humane Society International and world-renowned dolphin expert Ric O'Barry, who was featured in the Oscar-winning documentary The Cove. The film, which exposed the cruelty of capturing dolphins and confining them to marine parks, shocked the world. During the meeting, Minister Chavan took serious notice of the MoEF objection. "With the objections of the central government, non-governmental organisations, animal welfare experts, and the local and international public, it's high time for the Maharashtra government to shelve plans for the ill-conceived Sindhudurg dolphin park", says Dr Manilal Valliyate, director of veterinary affairs for PETA India. "If even a fraction of the Rs 510 crore cost of the dolphin park project was instead channelled towards helping endangered dolphins in nature, it would go a long way in ensuring the protection of these intelligent animals." In its letter, the MoEF points out that The Indian Wildlife (Protection) Act, 1972, prohibits the hunting and capturing of wild animals. The letter goes on to say that the Member Secretary of the Central Zoo Authority (CZA) has stated that the "objective of the said water park does not conform to the objective of its operation, i.e., conservation of wildlife, as laid down under Rule 10 (1) of the Recognition of Zoo Rules, 2009" and that "the operation of the Water Park for extracting performance out of the animals shall also be [a] violation of Rules 10 (11) (2) of Recognition of Zoo Rules, 2009." It adds that based on similar previous proposals, the CZA has found that keeping dolphins and other marine animals in captivity leads to their "inadequate care" and death because such facilities are not prepared to care for them. In their rightful ocean homes, dolphins inhabit a vast and complex world. They establish close, cooperative and long-standing relationships. They live in large, intricate social groups, swim together in family pods and can travel up to 100 miles a day. Dolphins used in marine parks are violently torn away from their families and confined to small tanks in which they can swim in only mind-numbing circles. Most captive dolphins live to be only half the age of wild dolphins. Emory University scientists recently determined that the cognitive capacity of dolphins is second only to that of humans. At the annual meeting of the American Association for the Advancement of Science – the world's largest science conference – experts in the fields of philosophy, conservation and animal behaviour argued that dolphins should be treated as nonhuman "persons" with their rights to life and liberty respected. In Brazil and Costa Rica, it is illegal to use marine mammals for entertainment. Israel has prohibited the importation of dolphins for use in marine parks, and Canada no longer allows beluga whales to be captured and exported. In the US, the state of South Carolina has banned exhibits of whales and dolphins.

4) http://articles.timesofindia.indiatimes.com/2012-03-19/mumbai/31210119_1_land-acquisition-acquisition-process-sindhudurg

Dolphin park land buyout in 6 months

TNN Mar 19, 2012, 02.46AM IST

Mumbai: Mired in a controversy over the construction of a Shivaji statue in the Arabian Sea, the state government is taking no chances with its other future projects. The government is gearing up to start the land acquisition within the next six months for a dolphin and water theme park along the Arabian Sea coastline in Sindhudurg. "A large portion of this land is in our (state government) possession, so there will be no problem in completing the acquisition process smoothly. The land is mostly surrounded by areas of Oros," state tourism minister Chhagan Bhujbal told the legislative council on Friday, while adding that the detailed project report (DPR) of Sea World is in the process of completion and a proposal for viability gap funding (VGF) has already been sent to the central government for approval. The minister was answering queries on an apparent delay in commencement of the project's land acquisition process. On his reply, some members claimed that the minister has been giving the same answer year after year, leading to a delay.

"The honourable minister had repeated the same answer last year. However, this time we would like to know how he plans to go about this realistically and where will the NOCs and funds come from," asked Congress MLC Bhai Jagtap. In reply to another question, Bhujbal clarified that Sindhudurg district has already been declared a 'tourism district' and is being provided with various concessions by the state. Chief minister Prithviraj Chavan has already given an in-principle approval to the Rs 510-crore project that will be part of a plan to promote the 720-km-long coastline. The state hopes that by developing such a park, the Konkan coastline, so far lying in neglect, could be turned into a major tourist attraction.

5) http://articles.timesofindia.indiatimes.com/2011-10-19/mumbai/30297036_1_theme-park-dolphin-govt-nod

Dolphin park gets govt nod

TNN Oct 19, 2011, 03.46AM IST

MUMBAI: The government on Tuesday approved a plan to build a dolphin and water theme park along the Arabian Sea coastline in Sindhudurg. Chief minister Prithviraj Chavan has given an in-principle approval to the Rs 510- crore project that will be part of a plan to promote the 720-km-long coastline. "The land for Sea World, to be built on a PPP model, will soon be identified and constructions will start on the lines of a dolphin theme park in Florida. We will start the tendering process as early as possible," state tourism minister Chhagan Bhujbal told TOI. He has been visiting Orlando and other parts of the

world to study theme parks there. But a source said industries minister Naryan Rane, who is also the guardian minister of Sindhudurg, did not hide his reservations about the project and its feasibility. The state hopes that by developing such a park, the Konkan coastline, so far lying in neglect, could be turned into a major tourist attraction. The MTDC has already conducted a feasibility and viability study with the help of Pune University after which a final blueprint was presented to Chavan who agreed that such a facility was required. Going by the blueprint, Sea World will have a giant aquarium, a dolphin park and a stadium, a facility to train and keep dolphins, guest houses, a theatre and theme restaurants. The government had initially planned to set it up in the sea but now, it has been shifted to the land. "The water could then be drawn from the sea through outlets," said a tourism department official. After considering Raigadh and Ratnagiri, the MTDC finally zeroed in on Sindhudurg because of its proximity to the national highways and airports of international quality.

6) http://www.afternooncd.in/city-news/sea-world-by-hook-or-crook/article_49020

SEA WORLD, BY HOOK OR CROOK

Thursday, March 01, 2012

Maharashtra's highly ambitious 'Sea World Project' in Sindhudurg is now facing international opposition, with world famous environmentalist Richard O Barry, Director, Dolphin Project, urging CM Prithviraj Chavan to immediately suspend the Rs.5.10 billion marine-mammal park in the state. Barry has, in a letter, drawn the attention of the state to the intense suffering marine mammals undergo and the impact a state of captivity has on their life. After winning the international Bambi Award in 2011 in Germany for his dedication and efforts to preserve dolphins and whales, Barry had mentioned about the level of distress suffered by these intelligent mammals. "Marine mammals in captivity (aquariums) quickly become depressed, stressed and volatile. Captivity is not where they are supposed to be," Barry had said.

In 2011, when the CM had approved the project he had said that Maharashtra is blessed with a 720-km-long coastline with magnificent beaches, offering huge potential to attract domestic as well as foreign tourists. In the past few years, the number of tourists visiting the state and its coastal areas has shown a significant increase. Sea World would have a world class aquarium for viewing some of the most exotic marine life, underwater studios, a dolphin stadium, water sports facilities, a water park, theme restaurants, conference centre, theatre, information centre and accommodation for tourists. When contacted by the ADC, the CM confirmed that he had been receiving several letters from NGOs, activists and environmental organisations opposing the project since the time it was first announced.

Sea World - Rane's brainchild

Senior officials from the MTDC and the Mantralaya said that the ambitious marine-mammal project was the initiative of the then CM (now state industries minister) Narayan Rane. Requesting anonymity, officials stated that, in a determined bid to bring development and progress to his home-town of Ratnagiri, Rane had made the proposal and had also got the preliminary sanctions from the state cabinet. When the news of 'Sea World' was first circulated in the state, Rane in his statement to the media claimed, "Sea World will impart awareness on environment, create love for nature and promote eco-tourism which would help generate immense employment opportunities for the coastal Konkan region of the state, the most beautiful but backward."

Fed-Up - Bhujbal

"I am fed up with these oppositions to every project in the state. Even before a project is made official and its budgetary appeals cleared, people and organisations start voicing their concerns against it," said Chhagan Bhujbal, Tourism Minister. Taking a pot shot at the international activist Barry and referring to concerns expressed by several NGOs, the tourism minister said that opposition to projects has become a fashion. "People even before gauging the merits and demerits of the project are shouting that it must be scrapped," said Bhujbal.

The minister stated that the proposed park is a dream project for the state, and has been envisioned along the lines of the Sea World Orlando, a marine life-based zoological park near Orlando in Florida.

Sea World - Maharashtra

In October 2011, the state government had proposed an aquarium-based theme park in Sindhudurg on the lines of Sea World, a chain of marine mammal parks and 'oceanariums' in the United States. Spread over 200 acres, the Indian counterpart is reportedly estimated to cost around Rs.500 crore, according to senior officials in the Tourism Ministry, Maharashtra. The decision, taken last October, followed a feasibility report prepared by the Science & Technology Park, University of Pune. Construction of Sea World, which will house state-of-the-art facilities, will start by September this year and the marine park is expected to be thrown open by 2015. Among other things, Sea World would include a dolphin stadium, water park, a 3D dome theatre, aquarium, amphitheatre, underwater studio, rescue centre, theme restaurants and amusement facilities.

7) <http://www.indianexpress.com/news/state-asks-pune-institute-to-address-concerns-over-proposed-dolphin-park-in-sindhudurg/918386/0>

State asks Pune institute to address concerns over proposed dolphin park in Sindhudurg

Mumbai, Thu Mar 01 2012, 01:16 hrs

Following a directive from the Union Environment Ministry not to entertain the proposed Sea World project at Sindhudurg due to violation of Wildlife (Protection) Act 1972, the state government has asked a Central government institute in Pune to address the concerns. The state government had also recently received a letter from dolphin expert Rick O'Barry, against the proposed project. The Ministry of Environment & Forests (MoEF) had written a letter to the state government in December 2011 pointing that wild animals or those bred in captivity cannot be killed or captured as per the Wildlife Protection Act 1972. The proposal, which received in-principle approval from chief minister Prithviraj Chavan in October 2011, would have been a dolphin and water theme park along the coastline of Sindhudurg, similar to 'Sea World' in Orlando, USA. It was also supposed to have a giant aquarium, to train dolphins, and visitor facilities like theme restaurants. However, the MoEF letter had stated that Central Zoo Authority had observed that "similar proposals received in the past and those who acquired dolphins/other live marine animals lead to the death of the animals because of ill-preparedness on part of management and inadequate care of the animals that are so difficult to maintain in captivity." It, therefore, asked the state government "not to entertain the construction of Dolphinarium/Water Park at Sindhudurg." Meanwhile, state tourism minister Chhagan Bhujbal said, Science and Technology Park, Pune — an institute jointly set up by the Ministry of Science and Technology, Government of India and University of Pune — is being consulted to address the concerns. The project had received in-principle approval based on the interim technical feasibility report prepared by the same institute. "They will now come up with a detailed project report and chart out the plan as to how to go about it," Bhujbal said. Sources said concerns raised by renowned dolphin expert Rick O' Barry, director of Earth Island Institute's Dolphin Project and who featured in the Oscar winning movie 'The Cove', — which exposed dolphin slaughter in Japan — are also being considered. Barry recently wrote to chief minister Prithviraj Chavan, urging him to "take immediate action to stop the Sindhudurg proposal before it proceeds." Barry, who has over 40 years' experience with marine mammals and has worked extensively with captive dolphins, said these creatures cannot cope in artificial environments and a tank or aquarium, however large it is, can never compare to the vast ocean habitat. "Dolphins in aquariums—even those born in captivity— quickly become depressed, stressed and volatile. These exceedingly intelligent animals know they are not where they are supposed to be...It is clear that keeping them in captivity is morally and ethically indefensible."

8) <http://webcache.googleusercontent.com/search?q=cache:http://www.thehindu.com/news/states/other-states/article2950830.eco>

Dolphin water park project: State on the defensive against NGOs

Despite directives from the Ministry of Environment and Forests (MoEF) to “not entertain” the proposal for the construction of a dolphin park in Sindhudurg district, the State government is still strongly defending the Rs 510 crore project. Experts in Pune’s Science and Technology Park, a Central Government institute, have been asked to prepare a Detailed Project Report (DPR) to justify the State government’s plan. Opposition to the project meant to promote the State’s coastline, and to be constructed on the lines of Seaworld in Orlando, USA, has been coming from animal activists and environmentalists alike. Last week, Ric O’Barry, director of Earth Island Institute’s Dolphin Project urged Maharashtra Chief Minister Prithviraj Chavan to “take immediate action to stop the Sindhudurg proposal before it proceeds”. Writing on behalf of the People for Ethical Treatment of Animals (PETA), he stated that “dolphins do not cope well in cramped, artificial environments” and that “keeping them in captivity is morally and ethically indefensible.” However, Dr Sarang Kulkarni, a marine biologist with the Science and Technology Park, who is in-charge of preparing the DPR rubbished the fears. “The opposition is based on half knowledge. There are lots of misunderstandings,” he told The Hindu on Thursday. The project had received an in- principal approval in October last year, based on the interim technical feasibility report prepared by the same institute. The hostility from Mr O’Barry and similar organisations has put the government on the defensive. Recently, Maharashtra Tourism minister Chagan Bhujbal reportedly said, “Anything and everything is facing opposition from NGOs. This is not good for the state’s development as a tourist hub,” reacting to Mr O’Barry’s letter to the Chief Minister. But it is not just the activists who have opposed the project. The MoEF had received several petitions from activists, which prompted it to write to the Maharashtra government in December last year, its letter said. The ministry had stated that the project violates several sections of the Wild Life (protection) Act, 1972. Adding to that, the ministry also quoted the Central Zoo Authority which stated, “The objective of the said water park does not conform to the objective of its operation, i.e., conservation of wildlife, as laid down under Rule 10 (1) of the Recognition of Zoo Rules, 2009.” It further said, “the operation of the Water Park for extracting performance out of the animals shall also be violation of Rules 10 (11) (2) of Recognition of Zoo Rules, 2009.” The Central Zoo Authority also observed that “from the similar proposal received in the past and those who acquired Dolphins/ other live marine animals lead to the death of the animals because of ill-preparedness on the part of management of the organization and inadequate care of the animals that are so difficult to maintain in captivity.” It was based on these observations that the MoEF then told the Maharashtra government, “You are requested not to entertain the proposal for construction of Dolphinarium/Water Parks’ at Sindhudurg.” Added to that, the State government had proposed to undertake the project in Public-private partnership (PPP) model, which is meant for commercial purpose, and not permitted under Wild Life (protection) Act, 1972, the MoEF noted. Dr Kulkarni maintained that the project will take care of conservation and will be within the Indian legal framework. “We are committed to conservation and we are following a pro active approach to sustainable development,” he stated. Sources in the Tourism Ministry stated that the DPR will help the State government to “deal with the MoEF.” Assuring that the project will be in the limits of the Wild Life (protection) Act, 1972, a senior official in the ministry stated that the sole objective will be to promote tourism and “explore the biodiversity of the region.” An appropriate place in the Malvan town of Sindhudurg district has been chosen for the project, he revealed. “There are dolphins in the region, so will not bring them out of their natural habitat. We have not yet decided if they will be kept in tanks or aquariums. But we will take care of the animals. This will be a huge boost to the tourism of Maharashtra.” Highlighting the plight of the dolphins, Mr O’Barry’s letter to Mr Chavan said, “Even the largest aquarium in the world cannot begin to compare to the vast, complex ocean habitat where dolphins are meant to be. In tanks, their social and familial relationships are left in tatters and their ability to communicate is severely compromised. Dolphins in aquariums – even those born in captivity – quickly become depressed, stressed and volatile.”

9)<http://www.thehindu.com/news/national/article2951052.ece>

Maharashtra defends dolphinarium plan

Project — on lines of Orlando’s Seaworld in the U.S. — is aimed at promoting State’s biodiversity Despite directives from the Ministry of Environment and Forests (MoEF) “not to entertain” the proposal for a dolphin park in Sindhudurg district, the Maharashtra government is still strongly defending the Rs.510-crore project. Experts in Pune’s Science and Technology Park, a Central government institute, have been asked to prepare a detailed project report (DPR) to justify the State government’s plan. Opposition to the project — meant to promote the State’s coastline and to be constructed on the lines of Orlando’s Seaworld in the United States — has been coming from animal activists and environmentalists alike. Last week, Ric O’Barry, director of Earth Island Institute’s Dolphin Project, urged Chief Minister Prithviraj Chavan to “take immediate action to stop the Sindhudurg proposal before it proceeds.” Writing on behalf of the People for Ethical Treatment of Animals (PETA), he said “dolphins do not cope well in cramped, artificial environments” and “keeping them in captivity is morally and ethically indefensible.” Highlighting the plight of the dolphins, Mr. O’Barry’s letter said: “Even the largest aquarium in the world cannot begin to compare to the vast, complex ocean habitat where dolphins are meant to be. In tanks, their social and familial relationships are left in tatters and their ability to communicate is severely compromised. Dolphins in aquariums — even those born in captivity — quickly become depressed, stressed and volatile.”

‘FEARS BASELESS’

However, Dr. Sarang Kulkarni, a marine biologist with the Science and Technology Park who is in-charge of preparing the DPR, rubbished the fears. “The opposition is based on half knowledge. There are lots of misunderstandings,” he told The Hindu on Thursday. The project had received an in-principal approval in October last year, based on the interim technical feasibility report prepared by the same institute. Recently, Tourism Minister Chagan Bhujbal had reportedly said: “Anything and everything is facing opposition from NGOs. This is not good for the State’s development as a tourist hub,” reacting to Mr. O’Barry’s letter to the Chief Minister. The MoEF had also received several petitions from activists opposing the project, which prompted it to write to the Maharashtra government in December last that the project violated several sections of the Wild Life (Protection) Act, 1972. The Ministry also quoted the Central Zoo Authority as saying, “The objective of the said water park does not conform to the objective of its operation, i.e., conservation of wildlife, as laid down under Rule 10 (1) of the Recognition of Zoo Rules, 2009.” It further said: “The operation of the Water Park for extracting performance out of the animals shall also be a violation of Rules 10 (11) (2) of Recognition of Zoo Rules, 2009.”

VULNERABLE IN CAPTIVITY

The Authority also observed that “from the similar proposal received in the past and [going by the experience] of those who acquired dolphins/ other live marine animals, [such a conservation] led to the death of the animals because of ill-preparedness on the part of management of the organisation and inadequate care of the animals that are so difficult to maintain in captivity.” It was based on these observations that the MoEF had requested the government “not to entertain the proposal for construction of dolphinarium/water parks at Sindhudurg.” In addition, the State government had proposed to undertake the project in the public-private partnership (PPP) model, which is meant for commercial purpose, and not permitted under Wild Life (Protection) Act, 1972, the MoEF noted.

PROACTIVE APPROACH

Dr. Kulkarni maintained that the project would take care of conservation and this would be under the Indian legal framework. “We are committed to conservation and we are following a proactive approach to sustainable development,” he said. Tourism Ministry sources said that the DPR would help the State government “deal with the MoEF.” Assuring that the project would be within the limits of the Wild Life (Protection) Act, 1972, a senior official in the Ministry stated that the sole objective would be to promote tourism and “explore the biodiversity of the region.” An appropriate place in the Malvan town of Sindhudurg district had been chosen for the project, he revealed. “There are dolphins in the region, so [we] will not bring them out of their natural habitat. We have not yet decided if they will be kept in tanks or aquariums. But we will take care of the animals. This will be a huge boost to the tourism of Maharashtra.”

10)http://www.khaleejtimes.com/DisplayArticle09.asp?xfile=data/international/2011/November/international_November296.xml§ion=international

Activists slam Maharashtra move for dolphin theme park

8 November 2011

MUMBAI - International activists have slammed the Maharashtra government's plans to set up an ambitious, Rs5.1 billion dolphinarium and thematic water park in Sindhudurg, describing it as a 'regressive' step, when many countries were shutting down such facilities. "The public display of whales and dolphins are declining in popularity in the developed world," Naomi R. Rose, senior scientist, Humane Society International (wildlife), wrote to Chhagan Bhujbal, Maharashtra's tourism minister, who is pushing ahead with the project. "It would be regressive for India to build a dolphinarium now, when the popularity of this type of exhibit has almost certainly peaked and begun a global decline." Rather than irreversibly damaging and altering its natural resources and offering an out-dated entertainment by building artificial 'copy-cat' wildlife attractions, India should instead promote its unique natural beauty and cultural riches along the Arabian Sea coastline, she told the minister.

People for the Ethical Treatment of Animals (PETA), an animal rights organisation, told Chief Minister Prithviraj Chavan that "the proposal for a marine park in Sindhudurg flies in the face of growing worldwide condemnation of confining wild animals or otherwise using them for human diversion." "As people around the world learn more about the miserable lives of animals in oceanariums and other captive environments, they are staying away," said the PETA letter. "We respectfully ask that you give serious consideration to immediately reversing the decisions that have led to this development being launched." "Worried about the lack of development along the Konkan coast in the state, the Maharashtra government has been trying to build new infrastructure in the backward region. Sindhudurg district is just a few kilometres north of Goa, boasts of equally nice beaches, but lack of infrastructure has seen tourists ignoring it. Bhujbal, who travelled to different parts of the world — including Orlando in the US — to 'study' such theme parks, is now keen that such a facility be developed in Sindhudurg. The aim is to lure the millions of tourists, including foreign visitors, who travel to Goa every year. Last month, Chavan gave in principle approval for the project to be taken up on a public-private partnership basis. Rose of the HSI told Bhujbal that construction of dolphinariums is a backward step for any region to take. According to her, India has an opportunity to be a leader in Asia regarding the increasingly controversial practice of exhibiting dolphins and other marine mammals to the public. "The practice is in decline in the developed world, but is still increasing in the developing world," she notes. "This is a disturbing trend, particularly in countries such as China." According to Rose, captive dolphin attractions actually mis-educate the public about wildlife and the marine environment. "Not only does the public not learn much, if anything, about the real life of dolphins, but they are led to believe that the tricks they see are how dolphins truly behave in the wild and that the dolphins are pets and have value only in the context of their relationship to humans." PETA also referred to the opposition to 'marine mammal exhibits' in England and a worldwide shifting of focus away from such displays.

1) **WORLI DAIRY**

1)<http://www.hindustantimes.com/India-news/Mumbai/Taraporevala-Aquarium-modernisation-delayed/Article1-838767.aspx>

Taraporevala Aquarium modernisation delayed **Hindustan Times, Mumbai, April 11, 2012**

The wait for city's first oceanarium just got longer. The modernisation of Taraporevala Aquarium —which had inched forward in 2010-11 after being in the pipeline for more than five years — has come to a halt. Reason: the state government has decided to float a new plan for the project. "The tenders that were invited earlier [for the project] have been cancelled. There will be re-tendering," said fisheries minister Madhukarrao Chavan in a written reply to a query raised by legislator Vijay Sawant in the legislative council, on Tuesday. The Taraporevala Aquarium, spread across 4,369 sqm, was built in the 1950s. In 2010, the state government came up with a plan to build an oceanarium, leading to the sea with whales and dolphins, on the lines of Singapore and Malaysia. "The project was cancelled in a meeting on August 9, 2011. A committee to finalise the process of modernisation, headed by chief secretary Ratnakar Gaikwad, met on March 14. They are deciding on the next course of action for re-tendering," Chavan said. The previous bidder could not meet the tender conditions laid and so the project could not go ahead, said an official from the department on condition of anonymity. The state might also look at re-considering the current aquarium site for setting up the oceanarium, said the official. Sites such as the Worli Dairy, too, are being considered owing to their proximity to the sea.

2)<http://www.mumbaiirror.com/article/2/20120314201203140156511768673a82a/Iconic-Worli-dairy-to-make-way-for-oceanarium.html>

Iconic Worli dairy to make way for oceanarium **Wednesday, March 14, 2012**

The State is planning to set up a Rs 150-crore oceanarium on the land where the Worli Dairy currently stands. Fisheries Commissioner Paraag Jain-Nainuttia said on Tuesday that key aspects of the project, including funding, would be discussed at a meeting with Chief Secretary Ratnakar Gaikwad on Wednesday. The dairy, which is running losses, has been declared a sick unit. The land, along the Worli seaface, belongs to the animal husbandry, dairy development and fisheries (ADF) department, so its acquisition for the project is likely to be smooth. "I surveyed five to six places for the oceanarium after taking over (the fisheries department) six months ago, and felt that the Worli spot was the best one. The location falls in the city's tourist circuit, and one can easily access it," Jain-Nainuttia told Mirror. "Singapore, Japan and Dubai all have oceanariums, and we need to build one in Mumbai at the earliest." An oceanarium is a large seawater aquarium in which marine animals are kept for study and public entertainment. The fisheries commissioner said that the site of Taraporewala Aquarium was too small for creating such a sea park. "The Worli plot is nearly seven acres. We will meet the chief secretary on Wednesday to discuss the project, including its financial model - whether it should be funded by the government or made part of a public-private partnership," he said. Officials in the fisheries department said that the oceanarium would cost around Rs 150 crore. Foreign companies with expertise in oceanariums will be consulted for technical know-how, they said. Jain-Nainuttia said that the Taraporevala Aquarium would be revamped soon. "We have 74 species of fish and other marine life at the aquarium, and would like to add more. We will also have a five-star hotel atop the aquarium, and plan to start a fish massage facility," he said. Chief Secretary Gaikwad said that among other things, a proposal for a botanical garden along the boundary of Aarey Colony and Sanjay Gandhi National Park would be considered. When the Sena-BJP was in power, it had planned an oceanarium at Gorai, but the plans failed to take off.

3)<http://www.hindustantimes.com/India-news/Mumbai/City-to-soon-get-a-sea-water-aquarium/Article1-712631.aspx> (2011)

City to soon get a sea water aquarium **Hindustan Times, Mumbai, June 23, 2011**

After several failed attempts towards expansion of the Taraporewala Aquarium, the Brihanmumbai Municipal Corporation (BMC) is planning an underground walk-through sea water aquarium at the Birla Krida Kendra at Charni Road. As part of the makeover of the landmark theatre, the civic body has finalised the designs of the project and will be floating tenders by July. The makeover plan will cost an estimated Rs70-80 crore including the restoration of the theatre, auditoriums inside the premise and the aquarium. The civic body plans to go underground up to two levels to build the **walk-through cyclic aquarium that**

will have marine species and oceanic ecosystem on display. "The designs for the project have been finalised. We plan to execute it on a public-private-partnership model," said additional municipal commissioner, Aseem Gupta. Gupta added that apart from the aquarium, the theatre and the other auditoriums would also be renovated. However, the ongoing art-related activities will not be affected. The sea-facing 70,498.98 sqft Birla Krida Kendra houses a drama theatre, multi-purpose halls and a restaurant. The civic-owned facility was shut down in the year 2000 after it was declared dilapidated. The contract would be given to firms that have an experience of maintaining at least three aquariums and can understand the cycle of the marine species. As the area falls under the Coastal Regulatory Zone, appropriate permissions will be needed.

4) <http://www.projectstoday.com/News/Worli-dairy-may-be-replaced-by-an-oceanarium>

Worli dairy may be replaced by an oceanarium
Wednesday, 14 Mar 2012

The Maharashtra Government is planning to set up an oceanarium on the land where the Worli Dairy is currently located in Mumbai. The project is estimated to cost Rs 150 crore. Foreign companies with expertise in oceanariums will be consulted for technical know-how. However, the funding details of the project are yet to be worked out. The Worli dairy has been declared as a sick unit. Meanwhile, the Taraporewala Aquarium will be revamped soon with a five-star hotel atop the aquarium, and a fish massage facility.

2) MAHALAXMI RACE COURSE

1) <http://www.hindustantimes.com/News-Feed/HT-Story/Central-Park-at-Turf-Club/Article1-362813.aspx>

Central Park at Turf Club?
Hindustan Times, Mumbai, January 03, 2009

Mayor Shubha Raul has grand plans for the 22-acre open space at Mahalaxmi Race Course. Earlier, she wanted to build a parking lot there. Now, she wants the open space for a spectacular tourist spot, though the Royal Western India Turf Club which maintains the 226-acre race course has already turned down her proposal. "I have suggested that we could build an underground aquarium and a dolphin park. But this not a final plan and only a start for the utilisation of the open space," said Raul. Ironically, the proposed site is a few kilometres away from Taraporewala Aquarium, which is being extended into an oceanarium - a state government proposal that is in the last stages of bidding. Raul was unaware of the aquarium revamp plan. "If that's the case, we can develop the area like the Central Park at New York, which works as a lung for the entire city," she said. Raul has a hard copy of the proposal from a little-known entertainment company, Ape Super Ape Entertainment Pvt Ltd, based in Chinchpokli. When Hindustan Times contacted Pradip Gohil, managing director of Ape Super Ape Entertainment Pvt Ltd, the company admitted it had no experience in the project and was only acting as a catalyst for a dolphin therapy assistant in Australia, who is hoping to tie-up with the firm for such a project. "Any project that we initiate will not disturb the functioning of the race course till its lease expires. But if we start planning now, we shall have a concrete plan," she added. But the RWITC is not happy with the proposal. It has written to the mayor declining the suggestion, saying that their agreement — which is on till 2013 — specifies that the 22-acre area has to be maintained as an open ground and free for public use. "We are not in favour of any such proposal, which we have conveyed to the Mayor through a letter from our committee. The open space is maintained by us and is used by amateur riders and for jogging," said Vivek Jain, spokesperson of the RWITC.

2) <http://www.marathikatta.com/General/waterworld-at-the-racecourse/>

Waterworld at the racecourse

A meeting next week between Mayor Dr Shubha Raul, Collector I A Kundan and civic officials will decide whether the sprawling environs of the Mahalaxmi Racecourse will turn into a waterworld, with a dolphin park and an underground aquarium. According to sources, RWITC secretary Behram Engineer received a letter from the Mayor's office on Thursday, inviting the club's committee members to her office "to discuss the beautification programme of the racecourse". In November, Raul had written to the Royal Western India Turf Club Ltd (RWITC), asking it to hand over the racecourse plot to the BMC. After that, the civic body sent the racecourse a showcause notice asking why its lease agreement for the plot should not be terminated because of certain violations.

3) <http://www.exchange4projects.com/TOURISM/from-horses-to-fishes-mumbai-racecourse-fates-hangs-in-the-air>

From horses to fishes? Mumbai racecourse fates hangs in the air
Monday, January 05, 2009

A meeting next week between Mayor Dr Shubha Raul, Collector I A Kundan and civic officials will decide whether the sprawling environs of One of Mumbai famous landmarks ,where fortunes are made and lost , may soon get a whole new avatar. The Mahalaxmi Racecourse will turn into a waterworld, with a dolphin park and an underground aquarium. According to sources, Royal Western India Turf Club Ltd (RWITC), secretary Behram Engineer received a letter from the Mayor's office on Thursday, inviting the club's committee members to her office "to discuss the beautification programme of the racecourse". In November, Raul had written to the RWITC, asking it to hand over the racecourse plot to the BMC. After that, the civic body sent the racecourse a showcause notice asking why its lease agreement for the plot should not be terminated because of certain violations. Now, the BMC wants to ensure that the lease agreement with RWITC for the racecourse is not renewed. The lease on the plot, jointly owned by the state government, expires in 2013. The BMC has issued several notices to RWITC over breach of their lease agreement, like sub-leasing space for a restaurant, in the recent past. Raul is inspired by the oceanarium in Singapore, and wants the 226-acre racecourse to be turned into a tourist attraction, complete with a dolphin park and an aquarium. "I've seen many such tourist attractions in foreign countries. We call Mumbai an international city, but we only have the Gateway of India, that too made by the British. We want to convert the entire racecourse into one of the major tourist and citizen centres in Mumbai. We have called for a group leaders' meeting next week, where presentations will be made about the project. Later, there will be another meeting with the Collector and civic officials. The BMC will use the remaining area of the plot for parking and other civic works," said Raul.

NEW DELHI

1) http://www.thaindian.com/newsportal/uncategorized/indias-first-oceanarium-to-come-up-in-greater-noida_100616062.html

India's first oceanarium to come up in Greater Noida
Sat May 05 2012 16:25:35 GMT+0530 (IST) by IANS

New Delhi, May 5 (IANS) In another first for the National Capital Region (NCR), the country's first oceanarium is all set to open in Greater Noida by the year-end. Developed as a part of a Venetian-themed tourist resort named 'Grand Venice', the \$9 million Blue Planet aquarium is being developed as a joint venture between Indian real estate developers, the Bhasin group and Singaporean leisure and tourism company, Andover Leisure. The project started with a desire to create something truly world class. I believe the Blue Planet will be a recreational, entertaining and educational destination," Bhasin group

Managing Director, S.S. Bhasin said, "The project started 4 years back and is nearing completion. We believe that the aquarium will be inaugurated in one go with the rest of the resort, by the year end," he added. "People will get to see aquatic wonders such as sharks, penguins, walrus, octopus and dolphins," Bhasin said, about the major attractions of the public aquarium. The aquarium will cover an area of 1 lakh square feet and the major exhibits will include huge sea-water tanks for large marine life like sharks and lion fish with acrylic tunnels for the tourists to walk through the aquarium itself. The shark enclosure will have transparent bottomed boats for looking down into the water from the surface. Besides the real fishes, the installation will also include choreographed underwater performances by entertainers dressed up like mermaids and mermen. Andover group president, Sindu Hui Han Zhang, said that the oceanarium will be working with the Indian Oceanographic Society. Andover currently runs three public aquaria in China and is also charged with the upkeep and running of the Blue Planet.

Most of the modern oceanaria are usually set up near the sea, where sea water can be drawn naturally. On the other hand, offshore aquaria like Blue Planet maintain the salinity artificially. The developers hope that the public aquarium will be a unique amusement spot which will draw tourists to itself and the 3 million square feet tourist complex which will also include a 5-star hotel.

2) <http://www.expresstravelworld.com/latest-updates/358-blue-planet-aquarium-to-debut-in-greater-noida>

Blue Planet aquarium to debut in Greater Noida

Friday, 11 May 2012 18:07

Delhi-based Bhasin Group, in collaboration with Singapore based leisure and tourism attraction company, Andover Leisure will be inaugurating the integrated tourism and hospitality project, 'Grand Venice', in Greater Noida by this year end. The mega project, with a built-up space of four million square feet, will host India's first underwater world and aquarium, Blue Planet. The complex will also house entertainment facilities, a hotel, food courts, shopping malls and corporate offices. According to SS Bhasin, managing director, Bhasin Group, all components except the hotel will be ready within eight months from now. The aquarium, spread across 1,00,000 square feet, will showcase live aquatic flora and fauna. The major exhibits at the aquarium will include sharks, lion fish, jellyfish, etc. The shark exhibit will also have recreational glass boats to make it educational and interactive.

3) <http://www.expresstravelworld.com/sections/market-section/408-blue-planet-aquarium-to-debut-in-greater-noida>

Blue Planet aquarium to debut in Greater Noida

THURSDAY, 14 JUNE 2012 14:42

Delhi-based Bhasin Group, in collaboration with Singapore based leisure and tourism attraction company, Andover Leisure will be inaugurating the integrated tourism and hospitality project, Grand Venice, in Greater Noida by this year end. The mega project, with a built-up space of four million square feet, will host India's first underwater world and aquarium, Blue Planet. The complex will also house entertainment facilities, a hotel, food courts, shopping malls and corporate offices. The entire project involves an investment of approximately Rs 750 crore. According to SS Bhasin, managing director, Bhasin Group, all components except the hotel will be ready within eight months from now. "The hotel, a 270-key Sheraton, will take another eight to ten months to be operational," he said. Grand Venice will also have 1.2 million square feet of retail space along with a cineplex and a gaming zone. The aquarium, spread across 1,00,000 square feet, will showcase live aquatic flora and fauna. The major exhibits at the aquarium will include sharks, lion fish, jellyfish, etc. The shark exhibit will also have recreational glass boats to make it educational and interactive. Trained personnel, dressed as mermaids or mermen will enthrall visitors with choreographed underwater pyrotechnics in combination with music and light. Talking about the replication of international public aquariums, Sindu Zhang Huihan, president, Andover Group stated, "Many of the exhibits will follow a combination of terrestrial and oceanic themes. Along with this, exhibits carry a particular geographical theme that is both educational and recreative in its function to visitors without compromising on aesthetics."

4) <http://www.indiaprwire.com/pressrelease/entertainment/20120505119098.htm>

Land of Delhi-NCR welcomes the inhabitants of water - A public aquarium to satiate your wanderlust

New Delhi, Delhi, May 5, 2012

Delhi-based Bhasin Group, in collaboration with a Singapore based leisure and tourism attraction company, Andover Leisure Pte Limited will soon be inaugurating a public aquarium the Blue Planet at Greater Noida. It is one of its kind and first ever colossal public aquarium of international standards which is coming up in India. Delhi-based Bhasin Group, in collaboration with a Singapore based leisure and tourism attraction company, Andover Leisure Pte Limited will soon be inaugurating a public aquarium the Blue Planet at Greater Noida. It is one of its kind and first ever colossal public aquarium of international standards

which is coming up in India. Set over a carpet area of approximately 100000 square feet, the Blue Planet aquarium will showcase live flora and fauna flourishing in the mysterious world underwater. The Blue Planet is one of the major attractions which is a part of 3 million square feet mega tourist destination complex that would house a mall, multiplex, a 5 star hotel and retail shops. The entire project involves enormous amount of investment pegged at approximately INR 750 crore, and is projected to be a much sought-after tourist destination bringing in a grand display of real-life aquatic marvels.

Sounding quite excited about this new path-breaking project, SS Bhasin, Managing Director, Bhasin Group said, "Whether the marine species in Rift Valley lakes of Africa or the life underwater in the cascading River Ganges in the deltaic Sundarbans, at the Blue Planet, people will get to see a geographically distinct eco-system including flora and fauna of a particular water body anywhere in the world which includes aquatic wonders such as sharks, penguins, walrus, octopus and dolphins." The major exhibits include huge sea water tanks for large marine life like sharks, lion fish and others. The shark exhibit has recreational boating at the top. These boats will have transparent bottoms to look through downwards into the water. Talking about the awe-inspiring replication of international public aquariums such as the Atlanta's Georgia Aquarium, Dubai Mall Aquarium, Japan's Okinawa Churaumi Aquarium and others, Sindu Zhang Huihan, President, Andover Group stated, "Many of the exhibits will follow a combination of terrestrial and oceanic themes. Along with this, exhibits carry a particular geographical theme that is both educational and recreative in its function to visitors without compromising on aesthetics." This new man-made wonder debuting in India will also bring to life the tales of little mermaid which have been appealing the children since a long time. There will also be a 6 meter deep tank with a transparent window for mermaid shows at specified times. Trained personnel, dressed as mermaids or mermen will enthrall the visitors with choreographed underwater pyrotechnics in combination with music and light, much akin to a great musical dramatic saga. There will also be a spell-binding representation of most aspects of the rainforest ecosystem with plants, water bodies, selected reptiles and amphibians and otherwise artificially created ambience. On the whole, Blue Planet aquarium is a never seen before amusement spot in India which can draw in footfalls to itself and the mall, that has a unique and exquisite architecture with gondola rides in a Venice themed interior. The aquarium will be facilitated to be accessible within the next three to four months.

Notes to Editor

About Bhasin Group

Bhasin Group is a rapidly growing multi-diversified conglomerate that has a strong presence in sectors such as Automobile, Real Estate (Retail, Shopping Malls, Commercial Spaces) and Hospitality and is committed towards setting new standards & credited with several innovations over the last few decades.

Blue Planet Aquarium

The group is all set to introduce "Blue Planet", the first ever 1,00,000 Sq. Ft. Commercial Aquarium in India. The basic format of the Blue Planet is typically based on the biotope concept and will attempt to showcase unique biotopes in both freshwater and salt water which replicates the Rift Valley lakes of Africa such as Lakes Victoria, Malawi and Tanganyika, as well as the mouth of our own River Ganges in the deltaic Sundarbans. Apart from such biotopes a number of species based tanks (depending on licensing and procurement possibilities) where a particular species of biological interest will be showcased depending upon the curiosity index of the visitors. The major exhibits include huge sea water tanks for large marine life like sharks, lion fish and others where visitors would walk through one of Asia's longest transparent acrylic tunnels as they look around and above for a perspective on these creatures which any sort of print or electronic media is unable to create. Smaller exhibits are in variety of curved shapes including cylinders and the patented "Zero edge" all side viewing aquarium. The facility includes a proper café and a souvenir shop before exiting.

About Andover Group

Andover Leisure Singapore Pte Limited is a specialized leisure and tourism attraction company wholly owned by Andover Capital Group Limited. It is a professional aquarium operator committed with long term views and has been efficiently dealing in this unique niche business model which requires specialist technologies and expertise in management. Presently, China Beijing Tai Ping Aquarium, China Nanjing Aquarium and China Hefei Aquarium are the three main prestigious projects managed by the Andover Leisure Pte Limited. Andover has a technical and management capability and will get the Blue Planet aquarium in the right footing with good curatorial contents that will have a vibrant client experience.

5)http://articles.timesofindia.indiatimes.com/2012-05-06/noida/31596940_1_aquarium-marine-species-greater-noida

Greater Noida aquarium to display exotic marine species

TNN May 6, 2012, 12.33AM IST

NEW DELHI: Delhiites will soon get a chance to witness some of the most exotic marine species like sharks, lion fish, penguins and dolphins in their own neighbourhood. The country's largest public aquarium-1-lakh sq ft Blue Planet-is set to open at Greater Noida by the year-end."Whether it's the marine species in Rift Valley lakes of Africa or the life forms in the Ganga, people will get to see a distinct ecosystem at the aquarium. There will be massive water tanks for exhibits, recreational boating, and mermaid shows with underwater pyrotechnics, music and light," says S S Bhasin, managing director, Bhasin Group, which will open the aquarium in collaboration with Singapore-based Andover Group. Spread over two floors, the aquarium-a \$9-million project-will also include a tropical rainforest, underwater tunnel, 4D theatre, reptile park, penguin paradise, and activities like coral walking and shark feeding. To afford visitors a diverse experience, both saltwater and freshwater species will be on display. Visitors can soak in the ambience at the aquarium cafe, and take home with them little keepsakes from the souvenir store."The exhibits will serve both aesthetic and educational purposes. We will also have guided tours and back-of-house visits to show people how we maintain the place," says Sindhu Zhang Huihan, president, Andover Group. The aquarium is part of a 3-million sq ft complex, Great Venice, which will house a mall, multiplex, five-star hotel, shopping centre, amusement arcade, and more than 30 restaurants, cafes and bars. Cobble walkways, water canals and gondolas will complete the Venetian experience at the complex, as envisioned by the Bhasin Group. The mall, expected to be one of its kind, will have shops spread across three areas-canal shops, San Marco Square and mansions-and will cover about 10 acres. The project will also celebrate Indian culture-handicrafts village, state emporia, foods of India, folk performances-and even at the aquarium, 65% of the species will be of Indian origin.Bhasin says the idea behind the project came from his children after numerous trips abroad. However, with Rs 750 crore at stake, the ambitious project is actually a numbers game. "NCR gets 15 million domestic tourists and five million international visitors each year, and about 20 million people live in the region, so the market has immense potential," he says.

6)<http://timesofindia.indiatimes.com/business/india-business/Bhasin-Group-to-set-up-Indias-biggest-aquarium-this-year/articleshow/13017710.cms>

Bhasin Group to set up India's biggest aquarium this year

May 6, 2012, 08.28AM IST

NEW DELHI: Delhi-based real estate company Bhasin Group has tied up with Singapore-based Andover Leisure Pte to build a 100,000 sq ft aquarium - which would be bigger than Singapore's Sentosa and Atlanta's Georgia Aquariums. It will come up in a mall run by the company in Greater Noida. The aquarium, to be titled Blue Planet, is expected to cost \$9 million (Rs 45 crore). The joint venture company executing the aquarium project will import over 5,000 species of fish from as far as South Africa, South America and Australia, apart from collecting the best Indian varieties. Andover, which has proven expertise, will also be bringing in South African penguins sharks, jellyfish walrus, octopus and also dolphins.The aquarium is part of a very large, 3.2 million sq ft project that will comprise, among others, a retail mall and a 270-room Sheraton hotel. "We are developing the entire complex as a tourist destination where people can come and stay with their families," said SS Bhasin, managing director of Bhasin Group. The Rs 700 crore so-called mixed-use project will be financed through a mix of internal accruals and bank funding.The aquarium will include an experience tunnel running through the aquarium, mermaid shows, fish feeding and synchronised swimming with the fishes. The mall would include gondola rides. Bhasin said he expects an average footfall of 5,000 people daily in the aquarium and as many as 25,000 in the mall. "There is a strong need for entertainment options in the country," he says.

