

# Scoping mission to the Dhamra Port project

Business and biodiversity programme, Asia



# **REPORT OF THE IUCN SCOPING MISSION TO THE DHAMRA PORT PROJECT, ORISSA, INDIA**

## **1. Introduction**

In July 2006, Aban Marker Kabraji, IUCN Regional Director for Asia met Mr. Ratan Tata, Chairman of the TATA Sons in Mumbai to discuss various aspects of environment and corporate social responsibility for TATA's operations. This also included the conservation of turtles in view of the impending development of Dhamra Port in Orissa State, on the east coast of India. The project is to be implemented by the Dhamra Port Company Limited (DPCL) as a joint venture between L&T and Tata Steel. The ensuing communication exchanges between IUCN and TATA Steel led to an agreement between DPCL and IUCN for the latter to undertake a mission for scoping out the issues that could be followed by the setting up of an independent scientific review panel (or some other intervention) organized by IUCN, should the two organizations so agree.

Accordingly, the objectives of the Scoping Mission, undertaken during Nov 29 – Dec 02, 2006 were to:

- a. Develop an understanding of the Dhamra port project and its implications for the environment in general and for the conservation of turtles in particular;
- b. Develop an understanding of the debate and efforts undertaken thus far between the NGOs, DPCL and the Government, and establish a list of key outstanding issues that remain to be addressed;
- c. Establish the need and expectations of key stakeholders, in particular DPCL, as to the potential IUCN intervention and support;
- d. Clarify with DPCL the conditions, requirements and schedule for potential follow up work (should such a follow up be agreed between IUCN and DPCL); and,
- e. Establish the scope for the agreed follow up.

## **2. Mission Composition**

The mission comprised of Mr. Mohammad Rafiq, Head Business and Biodiversity Program, IUCN HQ, Gland, Switzerland; Dr. T.P Singh, Program Coordinator, Ecosystems and Livelihood, IUCN Regional Office for Asia, Bangkok, Thailand; and Dr. Nicolas Pilcher, Co-Chair of the IUCN Species Survival Commission Marine Turtles Specialist Group (MTSG) and Executive Director, Marine Research Foundation, Kota Kinabalu, Malaysia.

## **3. Itinerary and Consultations.**

In preparation for the visit, the Mission benefited from informal prior consultations with several of IUCN India members and members of Marine Turtle Specialist Group (MTSG) of IUCN Species Survival Commission (SSC). During the mission, most of the time was devoted to site visits, discussions with the DPCL officials and concerned government organizations in Orissa, and reviewing background information, including the environmental impact assessment report that became available in the later part of the mission. An important part of the consultation was

the exchange of information and perspectives between the IUCN Mission and the representatives of DPCL. Sections 4, 5 and 6 summarize these perspectives. A detailed itinerary listing names of the persons with whom the mission met is provided in Annex 1.

#### 4. The Dhamra Port Project

The project ([www.dhamraport.com](http://www.dhamraport.com)) is located at Dhamra, Orissa State, on the east coast of India (see the image below). The proposed port site lies 7 km from the river mouth along the landward coast of the northern of the two discharge channels, and not at the mouth of the river proper. The existing port (fishing jetty) is located a few kilometers upstream on the Dhamra River itself.

The Port is a joint venture between L&T and TATA Steel. The main construction work has not started yet but a project facility to accommodate project staff has been secured through a loan / lease agreement with a State Government agency. The development of an access road to the port site is in progress, and port construction is likely to be implemented at full scale soon after the financial closure with potential lenders, which is expected by early 2007.



The project has three main components: port construction, dredging of an access channel, and construction of a 62 km access road and railway link to Bhadrak to the north, and on the Howrah-Chennai main line. Land acquisition for the road – rail link is in progress, with most land already acquired for the access road and railway. The majority of the Port land has also been acquired.

The project entails extending or further developing the existing port facility at Dhamra established in 1930, although the two are not adjacent. In actuality the proposed development is around 7 km north of mouth of river Dhamra and around a major river bend from the current port facility (a small fishing jetty at the end of Dhamra River), and significantly dwarfs the old port in terms of size and potential environmental impacts.

According to DPCL officials, Dhamra is the preferred location for a deep sea port given the

westward inclination of the continental shelf. At the proposed location, this would involve the dredging and maintenance of a 19 km long channel from the Port to the deep sea. Anywhere else along the coastline, a much longer channel would be needed that would reportedly not be feasible to maintain at a reasonable cost.

The project envisages construction of 13 berths in phases as the demand might warrant. The first phase will involve construction of 2 berths and will be completed by December 2009 at an estimated cost of USD 500 million. When fully completed, the port expects to handle 83 million tones of cargo annually, as against the present capacity of 568.7 million tons annually in all the Indian ports. The cargo would include import of coking coal for steel making (from Australia and China), import of thermal coke and limestone, export of iron ore, and others.

The construction will involve some 60 million cubic meters of dredging. The port and the access channel are designed for vessels up to 180,000 DWT (super capsized). Vessels of 150,000 DWT would be able to enter the port 99% percent of the time, while the vessels of 150,000-180,000 DWT would be able to enter 43% of the time (during high tide only).

An environmental impact assessment of the project was undertaken, on the basis of which the proposed development received the approval of relevant government agencies. The Mission was not able to examine the approval letter but was informed that the EIA included an Environmental Management Plan (EMP) and that the DPCL would like to further improve the EMP and undertake additional mitigation measures, addressing amongst others the impact from lighting. The Beach Protection Council, a local NGO, appealed against the permit to operate to National Environmental Appellate Authority (NEAA) but the latter upheld the government approval already granted.

## **5. Environmental Impact Concerns**

Through several presentations DPCL officials conveyed a strong commitment to address the issues of environmental impacts, notably the conservation of Olive Ridely turtles *Lepidochelys olivacea* and their habitat in Gahirmatha, where they visit for mass nesting events numbering hundreds of thousands of female turtles, and utilize the offshore waters for mating and as an interesting habitat. This is a globally important nesting site for turtles, and therefore has international significance.

The issues related to turtle conservation and the Port development have been the subject of protracted and, at times, strongly contested debate. The opinions vary widely, from assertions that the development of the port will severely threaten the nesting and existence of turtles (by conservation NGOs) to no impact (NEAA), although the DPCL recognizes there will be impacts but believes these are manageable through simple mitigation measures (by DPCL officials). According to the DPCL officials, the Gahirmatha nesting beach lies some 18 km away in a straight line, and some 30 km through available waterways, with some islands intervening in between as to reduce the impact of lights and glare from the port, and this distance was considered by them to be sufficient to minimise impacts to turtles.

Following concerns raised in 2005 by conservation NGOs, Tata Steel offered (and advanced necessary funds) to WWF Orissa for an assessment of the potential impacts by the Port. The funds were later returned at the direction of WWF India. The Bombay Natural History Society was subsequently given funding to carry out a similar study, to assess the potential project impacts and solutions regarding turtles. They also returned the funds, accusing the project of

having already started the development work (land acquisition). Various people in the NGO community felt that the project should have been abandoned or moved to an alternate location, had the company been sincere in its commitment to protect the environment. However, from the initial intelligence that the Mission was able to gather, the company lacked a scientific basis for decision making and the NGOs did not provide practical advice or assist when invited by the company to undertake necessary scientific assessments, thus representing a missed opportunity to have an impact at the earlier stages of the development.

DPCL officials contend that, when the BNHS withdrew its involvement, except for some land acquisition processes, no construction had started, and that they were still committed to abandoning the project if the proposed development scientifically proved to be unmanageably inconsistent with turtle conservation

At this belated stage however, and considering the lack of a timely and credible advice to the contrary, DPCL does not see abandoning the project as a realistic option. Short of that though, as clarified during the Mission's meeting with the CEO, the company has reaffirmed its commitment to undertake any and all mitigation measures that would be necessary to protect the turtles and their nesting habitats.

As has become clear, the proposed project has had a long and often controversial history, particularly as it relates to marine turtles, and numerous issues have been raised in defense of both the turtles and the port proposal. The manner in which the EIA was obtained, for instance, has been a source of contention among opponents to the project, as the Ministry of Surface Transport (MOST) approved the development permit after reviewing the EIA on the basis of a delegated authority from the Ministry of Environment & Forests, Government of India. This delegation of authority was possible as, technically, the project was an extension of an existing port and not the development of a new port. However, in our view the port is really not an expansion of an old port, the two are not even adjacent, and hence this procedural loophole apparently preempted the possibility of a thorough review of the environmental impact assessment by the relevant State government departments such as that of Wildlife and Forests, and concerned NGOs.

Compounding this, there is a recurring difference of opinion about if and how the proposed development has affected the boundaries and viability of the Gahirmatha Turtle Sanctuary, Bhitarkanika National park, and other protected areas in the vicinity. Some people argue the port predates establishment of the protected area(s), while others say sizable chunks were excised from the protected areas in 1998 to accommodate the proposed development.

It appears then that a lack of understanding of the issues on all sides of the arguments to date has exacerbated the issues related to the port proposal: The developers were not clear about the real concerns of the NGOs, as these had not been clearly articulated. The NGOs didn't know the commitment of the DCPL, as this also had not been clearly articulated. The Government had no idea of the potential impacts, as these had also not been clearly articulated. Thus, most people operated on a 'half knowledge' basis, whereby they knew parts of each argument. It seems there was a lack of understanding on the implications of the port development on the turtles based on biology and natural history, and both sides worked rather from notions or partial understandings of common misconceptions about turtles. Issues such as these, and numerous others, will need to be dealt with in any future environmental planning if the project is to benefit from valuable scientific and conservation input from the relevant government agencies and NGOs.

## **6. The Roles of IUCN**

Through presentations to the DPCL authorities, the IUCN Mission outlined the vision, mission and organization of IUCN, highlighting its unique membership drawn from states and civil society, its convening mandate and role in addressing difficult often controversial conservation and development issues, its scientific knowledge base, its ability to link policy and action and its unparalleled access to high quality conservation expertise resident in its 10,000 members strong six scientific commissions, as well as in its global network of secretariat staff, members and partners.

The Mission explained the mandate that the member organizations have given to IUCN, to engage businesses in conservation agendas according to the private sector strategy approved by IUCN Council and the operational guidelines that seek objectivity, transparency and result orientation in such engagements while protecting the organization's image and integrity as its most valuable assets.

Experiences of IUCN engagement with the mining industry, oil and gas businesses, agricultural sector, forest industries, fisheries and tourism were shared with DPCL authorities exemplifying IUCN's value in terms of credible and independent science and convening of review panels and dialogues on contentious issues.

It was clarified that while IUCN expected to be paid for its costs, it was important for its potential business partners to understand and respect the need for its independence and credibility, both of which are at the very heart of its value for a business, committed to conservation.

## **7. IUCN as a Source of Independent, Credible and Sound Biological Information**

The IUCN delegation further highlighted the broad extent and global leadership in species-based science and conservation through its Species Survival Commission, and in particular in this instance of the Marine Turtle Specialist Group (MTSG). The Mission noted that several of the key players in past deliberations were current members of the MTSG, and that in future deliberations IUCN would be able to draw on a wide base of specialists involved in turtle conservation and management issues related to protected areas, lighting pollution, urban planning, turtle biology and migration, amongst others.

Some key observations following the site visits and discussions with DPCL officials are presented below to highlight initial concerns related to the biology of the turtles and the proposed activities.

- 7.1. The port site lies along a North-South axis of the inland and river boundaries, with the land consisting mostly of sparse halophytic vegetation overlaying loamy clay soils, extending some 800-1000 m inland. The site is of very low elevation, and reportedly will require some 2-6 m of infill (a tremendous volume of imported soils of which the dredging is not expected to meet 50%). Given the shoreline type, silts and fine riverine-borne sediments, there is no potential for sea turtle nesting anywhere along the shoreline. However, there is a high probability that they will be impacted at nesting sites further away through port activities, such as lighting, potential spills, etc.
- 7.2. One of the most pressing concerns arises from the impacts to turtles (particularly hatchlings) due to the extensive lighting the port will require for normal operations, and from any secondary development that arises subsequent to port construction. There is no

major direct barrier, island or other structures, in the line of site between the port site and Gahirmatha turtles nesting area that, as some earlier comments suggested, may have partially mitigated any lighting impact. As such, the glow from lights used to illuminate general port activities is expected to be seen clearly at the Gahirmatha. Turtle hatchlings are attracted to brighter lights and glows, and it is possible the hundreds of thousands, or millions even, of hatchlings emerging at Gahirmatha will be misguided by the artificial light and head inland towards the port rather than offshore.

- 7.3. The potential impacts of shipping and vessels which will be plying the waters following port construction was also taken into account during the site visits. However, this is rated as a lower concern than lighting and disorientation given that these vessels will likely be traveling at slow speeds and avoided by turtles (there are ample examples of places around the world where navigation channels are in close proximity to turtle sites, with little evidence of negative impacts). It must be noted though, while DPCL suggests the number of vessels will decrease because each will carry heavier loads, it is only a matter of time before the vessels' numbers grow in response to the development potential and increased handling volume of the port. Given the oceanographic conditions, in part characterized by shallow depths and normal approach routes to the port (further to the North), the shipping is unlikely to impact the offshore areas of the nearby Gahirmatha marine sanctuary area. While a concern has been that vessels may not follow specified route and enter the marine sanctuary, they will have a strong incentive to keep the lane if they are not to risk going aground. To address potential vessel interactions with turtles, there will need to be a requirement for offshore navigation, taking vessels far from shore and approaching the entrance to the 19 km dredged channel from the NE. In addition, both navigational and speed restrictions would be required to minimize possible interactions. These vessels are unlikely to approach the port at speeds exceeding 10 knots, and thus could be avoided by swimming turtles.
- 7.4. Dredging was another operational threat to turtles, particularly if dredging operations take place during the peak season for olive Ridleys in the region. The DPCL officials remarked that mitigation measures exist for protecting turtles during dredging operations, but the environmental impact assessment of the project remains silent on this aspect, or is at best inadequate on the specific measures. Concerns in this regard need to address the precise nature and control of dredging operations. Questions to be raised, *inter alia*, include: When will dredging be carried out? Will a dredger stop if a turtle is sucked up? Will there be patrol craft searching for turtles, and dredging operations shut down if they exceed a certain density? Will there be considerations of timing and seasonality of dredging operations, limited to the periods when turtles do not congregate in the area? When do turtles congregate in the area? These really need spelling out in a comprehensive environmental management plan prior to commencement of Port construction activities.

## **8. Issues Related to Implementation and Follow-up Activities**

Barring the past concerns expressed by conservation NGOs, today there appears a broad support both in the general public and government departments for the port project, premised on the hope for economic prosperity, possibly ignorant of the potential impacts that the project and associated secondary developments might have on the environment as a source of sustainable living and on the social fabric of the predominantly rural landscape

During this mission, the CEO, DPCL asked if IUCN would be prepared to assist in the process, possibly through preparation of a sound Environmental Management Plan, further demonstrating a will to see things done in a manner which reflects the Company's environmental concerns. The CEO indicated a strong desire to continue to work with IUCN, not necessarily 'green-stamping' the project, but assisting with development of an environmental management plan, and onward further for a long-term relationship, possibly in an advisory role on environmental matters. Given this, the Mission believes, a valuable opportunity exists for IUCN to engage in the process and assist where appropriate. That said, below we list some issues which will need to be addressed for any IUCN engagement to be productive.

- 8.1. IUCN believes in longstanding positive impacts, and this project, through an IUCN and DPCL partnership, has the potential to significantly contribute to environmental standards for mega development projects. Thought will need to be placed into what long-term legacy can be left by the partnership between DPCL and the environment with IUCN mediation? Could an alliance of the project, fishing industry, other businesses, conservation organizations, and local communities be created to address the broader conservation issues in the area? Turtles face other threats such as from fishing fleets even if the port was not to be developed.
- 8.2. The possibility of a long term management plan for Gahirmatha sanctuary, funded through a Trust of some kind, is also a consideration.
- 8.3. The location of the port in proximity of defense facilities imposes a constraint in terms of access to the site, especially by foreign experts, and will need to be taken account of in mitigation planning and implementation, should IUCN be invited to participate in these activities.
- 8.4. There will be a need at a later stage to evaluate the impact of the port through strandings or other such counts, but these will need distinguishing from the current dead turtles which strand on the river banks, as a result of drowning in trawlers. Turtle Excluder Devices could assist in mitigating this impact.
- 8.5. The secondary industrial and urban expansions associated with the port- development are of grave concern. What expansion will be allowed in the future after heavy infrastructure development? It would be short-sighted to think that the investment of billions of dollars would not be taken advantage of by secondary industries, particularly if the port becomes a net importer rather than exporter of raw materials – industries will want to be as close to the port as possible. Moreover, while the port itself might be committed to environmental action, the secondary industries may not be so. This will have broader and area wide environmental impacts.
- 8.6. Related to the above issue, there will be a need for long-term Government commitment to eliminate additional coastal development, and regulate secondary development in a way that complies with the same EIA directives as the Port. For turtles, at least, there needs to be a firm commitment at the State and National government levels for the protection of areas surrounding the port to avoid port-related or secondary development whatsoever south of the river, and to effectively regulate lighting and other related operations affecting nesting and hatching in space and time.
- 8.7. In relation to operations and shipping, DPCL officials have presented plans to mitigate various impacts, but these will need careful review. For instance, a mitigation measure



for lighting was proposed whereby port activities would cease during the peak emergence days. Will this really be feasible? Does all nesting occur only during an arribada, or do turtles nest there before and after? Does it make biological sense? How many turtles nest outside of this period? Biologists would be needed for patrolling the beaches regularly to ensure dark days are both clearly announced (to the DPCL) and complied with. In addition, given the significant grounding potential for the vessels > 150,000 DWT, which can only access the channel at high tide periods (and which needs considering in light of potential spills, and collisions), the potential exists for bypassing lighting control measures if large vessels need to be out of port regardless of time and turtles because of tidal predictions. This may also have implications for prescribing standards for vessels (such as double hulls).

8.8. There is a serious issue of (lack of) capacity if not knowledge in agencies that have responsibility to oversee compliance with environmental assessment and mitigation plans. It would be in the longer term interest of the people, project and nature to ensure the necessary capacity exists and is sustained.

8.9. A quick review of the project EIA indicated that it was prepared in October 1997, and was unqualified in certain areas. The EIA evaluated two basic proposals: (1) a port development along the mainland shoreline, and (2) port development on an emerging island in the sea to be connected with the mainland through a dyke. However it is assessed, in our opinion the EIA does not completely address certain development aspects. The quality and analysis of the information in the EIA also leaves much to be desired. For example, the noise levels in the ambient environment have been assessed to already exceed the permissible limits but nothing has been prescribed as to how the additional noise generated by project activities will be addressed. The issue has been treated as one of rather marginal importance. Similarly, the impact of this development on marine turtles received scant attention and even then focused on lesser issues than those that will need dealing with, such as light pollution.

## **9. Addressing the issues**

In the concluding session of the Mission with the DPCL authorities, the CEO suggested that the following areas presented an opportunity for potential follow up by IUCN:

- (a) Carry out the study which BNHS / WWF abandoned.
- (b) Look at the current studies and synthesize them and if necessary carry out further studies.
- (c) Look at other contemporary research (such as the WII study) and help harness synergy in various efforts.
- (d) Prepare environmental management plan that focuses on turtles conservation but is inclusive of other key environmental issues.
- (e) Advise what else DPCL could do to mitigate ports impact on turtles.

The IUCN Mission agreed, based on past experiences, that there were a suite of options, in addition to the above suggestions, to move the process forward. As one example, IUCN outlined a multi-tiered and staged approach starting with the prompt mobilization of a few scientists by IUCN to address turtles conservation issues during dredging activities, likely to be amongst the first of numerous operations to significantly impact turtles. While the dredging was earlier scheduled to commence in January 2007, it is now likely to commence towards the middle of

2007. This activity would not only address an imminent need without losing further time and opportunity but would also serve as trust and relationship building exercise between IUCN and DPCL.

Meanwhile, and in parallel, IUCN and DPCL could develop the details of an independent scientific review panel that IUCN would convene to advise DPCL on the various issues listed in section (8) above and other matters arising, in particular a much-needed review of the original EIA that would greatly benefit from an update of the data and reinforcement of its analysis and recommendation.. This panel would not take decisions on behalf of DPCL nor make prescriptive recommendations which would put the DPCL management in an awkward situation of having to decide one way or another. Rather, it would provide DPCL with credible science and options for action and informed decisions. It would serve in many ways as a mechanism for quality assurance on environment-related outputs of the DPCL. The first few tasks of the Panel would be to:

- (i). Oversee the work of the taskforce on dredging (as suggested above).
- (ii). Support the process of developing and implementing a comprehensive response to turtle conservation and that of a greater environmental scope;
- (iii). Develop options for and support the preparation of the requisite environmental management plan that would address the broader issues of environment around DPCL, beyond turtle conservation.

Understanding that informed decision-making is constrained by lack of adequate and credible data, IUCN and DPCL could also collaborate on undertaking additional research to fill the critical gaps in information.

In aspects of environmental mitigation, DPCL may also wish to consider taking on board the respective environmental agencies (Forest Department, Wildlife Department, Department of Surface Transportation), and to utilize their capacity to act in their regulatory and support role effectively. IUCN could be of potential assistance in building these relationships, given the faith and trust indicated by several of the organizations in the preparation for, and during, the Mission.

In the medium and longer term, IUCN and DPCL may also explore the prospects of using the DPCL commitment and performance for enhancing global standards and leadership in environment with respect to mega projects.

As a parting remark, and following a request from the DPCL delegation, it is important to note the fiscal environment in which IUCN operates. IUCN does not normally work on a consulting basis involving payment of a fee for a physical deliverable. Instead, it works on cost recovery basis whereby the costs of IUCN inputs are recovered against an estimated budget. Any funds remaining unspent are returned to the company. The cost recovery mainly comprise of the staff time costs, travel and communication, and organizational overheads (25% of the overall costs).

This report was presented to DPCL for comments. Such comments have been considered and incorporated where appropriate. The report will now be officially submitted to the Chairman Tata Sons and the Managing Director, Tata Steel to identify the next stages of collaboration with IUCN, if so desired.

### **Acknowledgments**

The IUCN Mission would like to acknowledge the support, hospitality and openness of the DPCL staff during this visit, in particular the CEO, Mr. Santosh Mohapatra, Deputy General Manager

Mr. Anjani Kant, Assistant Manager (Business Development) Mr. Mihir Ranjan Mishra and Executive Assistant, Mr. Mayukh Sinha. In addition, we would like to express our gratitude to the office and guest house(s) staff, who made us feel welcome and provided us with a superb working atmosphere during our visit.

The Mission also wishes to thank profoundly the officers and staff of the departments of forests and wildlife, IUCN member institutions, and members of the public who took the time to speak to the Mission and generously shared their thoughts.

## Annex 1: Itinerary of IUCN Scoping Mission

Nov 27, 2006	Arrival in Delhi; initial discussion of the mission objectives and program between Mr. Rafiq and Dr. Pilcher
Nov 28, 2006	Full Mission assembles in Delhi, continues preparatory discussions, and departs for Bhubaneswar.
Nov 28, 2006	Meeting at DPCL Office, Bhubaneswar. Participants: Mr. Anjani Kant Deputy General Manager, Mr. M. R. Mishra, Asst. Manager and Mr. Mayukh Sinha, Executive Assistant.
Nov 29, 2006	<ul style="list-style-type: none"> <li>➤ Travel from Bhubaneswar to Dhamra via Bhadrak</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Meeting with Divisional Forest Officer Wildlife, responsible for Gahirmatha Sanctuary. Mr. P K Mishra at Bhadrak</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Visit of the existing fishing jetty in Dhamra, and conversation with fisherman and local people.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Visit of proposed Dhamra port site and surrounding fishing community.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Dr. T. P. Singh's telephone conversation with Mr. A K Jena, Divisional Forest Officer Wildlife, Rajnagar, precluding the possibility of the visit to Gahirmatha Sanctuary, due to restrictions imposed by defense authorities on foreigners approaching from Dhamra by boat.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Discussion among Mission Members</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Discussion with accompanying DPCL Staff (Mr. Kant and Mr. Mishra)</li> </ul>
Nov 30, 2006	<ul style="list-style-type: none"> <li>➤ Visit coastal waters in the vicinity of proposed Dhamra port site</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Visit Damra Village and Mathai River – potential fresh water source for the port</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Travel from Dhamra to Bhubaneswar,</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Mission meeting to recap the days' work and to prepare for meetings tomorrow.</li> </ul>
Dec 01, 2006	<ul style="list-style-type: none"> <li>➤ Meeting with CEO DPCL Mr. Santosh K. Mohapatra. Also present were Mr. Kant, Mr. Mishra, and Mr. Sunil Patel (Dredging Expert) of DPCL.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ A presentation to DPCL Staff by Dr. Pilcher</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Meeting with Mr. S C Mohanty, Chief Wildlife Warden, Orissa:</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Meeting with Mr. P. R Mohanty, Principle Chief Conservator of Forests, Orissa</li> </ul>
Dec 02, 2006	<ul style="list-style-type: none"> <li>➤ A general drive around Bhubaneswar</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Depart Bhubaneswar for Delhi</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Dr. Pilcher Departs Delhi</li> </ul>
Dec 03, 2006	<ul style="list-style-type: none"> <li>➤ Dr. Singh Departs Delhi</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Mr. Rafiq at Delhi awaiting flight; reviews EIA of the project</li> </ul>
Dec 04, 2006	Mr. Rafiq Departs Delhi

Asia is the largest regional programme of the World Conservation Union (IUCN) and hosts some 12 percent of the global membership. IUCN operates ten Country or Liaison Offices in Asia, two regional Ecosystems and Livelihoods groups based in Colombo and Bangkok, and the Asia Regional Office in Bangkok, Thailand. In the region, IUCN is implementing more than 100 projects with some 400 staff. The Union has 129 members, government and non- government agencies, in 19 of the 23 countries from South to East Asia and National Committees in Pakistan, India, Nepal, Sri Lanka, Bangladesh, Japan and South Korea.

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