Information Sheet on Ramsar Wetlands

Categories approved by Recommendation 4.7 of the Conference of the Contracting Parties.

NOTE: It is important that you read the accompanying *Explanatory Note and Guidelines* document before completing this form.

1. Date this sheet was completed/updated:
April 24, 2001

FOR OFFICE USE ONLY.

DD	MM	YY						
Designation date			Site Reference Number					

2. Country:
PAKISTAN

3. Name of wetland: Ormara Turtle Beaches

4. Geographical coordinates: 25° 09'- 25° 18'N, 64° 15'- 64° 40'E

5. Altitude: (average and/or max. & min.) Sea Level **6. Area:** (in hectares) c. 2,400

7. Overview: (general summary, in two or three sentences, of the wetland's principal characteristics)

A sandy beach extending from Kalmat to Ormara, on the shores of the Arabian Sea. Ormara is situated on a sandy strip of land about 10 km in length. The site supports an appreciable number of marine turtles, particularly *the Olive Ridley* and *Green* Turtles. Besides, there have been unsubstantiated reports of endangered *Hawksbill* turtle frequenting the site.

8. Wetland Type (please circle the applicable codes for wetland types as listed in Annex I of the *Explanatory Note and Guidelines* document.)

marine-coastal: A · B · C · **D** · **E** · F · G · H · I · J · K

inland: L · M · N · O · P · Q · R · Sp · Ss · Tp · Ts
· U · Va · Vt · W · Xf · Xp · Y · Zg · Zk

man-made: 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9

Please now rank these wetland types by listing them from the most to the least dominant:
E, D

9. Ramsar Criteria: (please circle the applicable criteria; see point 12, next page.)

1 2 3 4 5 6 7 8

Please specify the most significant criterion applicable to the site: 2

10. Map of site included? Please tick *yes* √ -or- *no*
(Please refer to the *Explanatory Note and Guidelines* document for information regarding desirable map traits).

11. Name and address of the compiler of this form:

Tahir Qureshi, Head of Coastal Ecosystems Unit
& Jamshed Kazi, Programme Development Officer
IUCN-Pakistan, 1 Bath Island Road, Karachi- 75530
PAKISTAN, Tele: (92-21) 5861540, Fax (92-21) 5835760, 5861448, Email tahir.qureshi@iucnp.org

Please provide additional information on each of the following categories by attaching extra pages (please limit extra pages to no more than 10):

12. Justification of the criteria selected under point 9, on previous page. (Please refer to Annex II in the *Explanatory Note and Guidelines* document).

Criterion 2: The site supports an appreciable number of marine turtles, particularly the *Olive Ridley* and *Green* Turtles. There have been unsubstantiated reports of the endangered *Hawksbill* turtle frequenting the site. Sandy, undisturbed stretches of Ormara beach provide ideal nesting grounds for the turtles as they come ashore in vast numbers to dig pits 5-6 feet deep to lay up to 200 eggs.

---

13. General location: (include the nearest large town and its administrative region)

On the coast of the Arabian Sea, 100kms Northwest of Karachi in the province of Balochistan.

---

14. Physical features: (e.g. geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate)

Ormara is situated on a sandy strip of land about 10km in length, connecting a large mountain block (*Ras Ormara)*, some 20km long and up to 8km in width on the mainland. This structure defines an extensive bay on each side—the west bay and the east bay. The west bay is distinguished by the cliffs of a low mountain range (*Kamgar*) at its western end, and by a low, 25 km long coastal ridge on the eastern end known as *Ras Sakani*. Both bays are flanked by a continuous sandy beach, extending for about 24 km between Ormara and Kamgar on the western bay.

---

15. Hydrological values: (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc.)

The coastal belt of Makran (including Ormara) receives an average of 150mm rain per year, resulting in a highly saline soil composition and desert-like conditions inland. As a result, the Makran basin is not able to retain freshwater inputs from rainfall and seasonal rivers, which flow as run-off to the sea. Owing to the fact that the Makran coast falls in a major sub-duction zone, where the Indian Ocean plate moves northward under the continental crest, clusters of mud volcanoes have developed along the shore of Ormara, where gas-charged water escapes to the surface.

---

16. Ecological features: (main habitats and vegetation types)

The coast of Ormara features sandy beaches to a large extent, but is also surrounded by rocky terrain and cliffs. Apart from a few clumps of datepalm, the vegetation is characteristic of the coastal plains of Makran. Immediately behind the beach area, salt tolerant shrubs and vines can be found. The shrubs consist of *Salsola barysoma, Calligonum polygonoides, Haloxylon salicornicum*, and the vines are mostly *Ipomaea pescaprae*. Among the other vegetation types found on the coastal dunes are *Suada fruticosa, Aerua persica, Heliotropium curassavicum, Sericostum pauniflorum, Atriplea griffithi* and several species of *Tamarix* and *Acacia*. Small bushes of *Calatropis procera* along with *Aerua gavanica* are also found in the undergrowth.

---

17. Noteworthy flora: (indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc.)

The vegetation is composed of salt-tolerant and arid area plants which grow in very harsh, freshwater-scarce conditions. There are no reported species or plant communities on this site which can be classified as rare, endangered or biogeographically important.

---

18. Noteworthy fauna: (indicating, e.g., which species are unique, rare, endangered, abundant or biogeographically important; include count data, etc.)

The area is very important particularly as a marine turtle nesting site for the endangered *Olive Ridley, Green*, and possibly *Hawksbill* turtles. The site also seasonally harbours a variety of migratory waterbirds, although not in significant numbers. In 1996, the Zoological Survey Department carried out a mid-winter count at the site (See Appendix A). The details of another survey in June 1999 are also provided (See Appendix B).

---

19. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

Fishing for commercial and subsistence purposes is the primary economic, social, and cultural activity of the local communities inhabiting the site area. It is estimated that about 50% of the coastal families along the Makran coast (which includes both Ormara and Jiwani turtle beaches) are *khalasis*, who do not own fishing boats, but work as hired labourers on the boats of others. Drying of fish is a major activity and source of employment along the Makran coast and the fisheries department has constructed drying yards which are rented to the fishing companies.

---

20. Land tenure/ownership of:

The site is under state ownership property of the Revenue Department. Some surrounding area are privately or communally owned.

---

21. Current land use:

The coastal waters off Ormara serve as a productive fishing zone. The beach along the western bay is relatively undisturbed and uninhabited, while there is a rapidly expanding fishing village situated on the eastern bay. Significant progress in fisheries exploitation has taken place over the past decade as mechanised boats are replacing the sailboats. The headland is under the control of the Pakistan Navy who have established the Jinnah Naval Base there.

---

22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects:

Over the past two decades, a significant portion of turtles nesting at Ormara have been captured almost every season due to harvesting operations by local exporters. This has been substantiated through informal interviews and discussions with senior officers from the Balochistan Fisheries department, whose efforts to curtail such practice has met with limited success. More recently, there has been some predation of turtle eggs by stray dogs, domesticated by the local fishing communities.

Pollution on the eastern bay is also a growing problem. Polystyrene floats from fishing nets and dumping of wastes from fishing boats adds to the debris which washes up on the shore, particularly during the southwest monsoon period.

---

23. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made: management practices; whether an officially approved management plan exists and whether it has been implemented)

No officially sanctioned measures have been taken in this regard. The local fishermen however, acknowledge the incidental catch of marine turtles which are ensnared in the drift nets. While most of the locals have never heard of Turtle Excluder Devices (TEDs), there is nevertheless a greater awareness and a conscious effort is made to protect these turtles from getting trapped and suffocated to death by the fishing nets.

---

24. Conservation measures proposed but not yet implemented: (e.g. management plan in preparation; officially proposed as a protected area etc.)

Groombridge et al undertook a survey of the Makran Coast in January 1987. He has offered the following recommendations for the conservation of marine turtles on the Makran Coast which have yet to be implemented: (1) More detailed information on turtle nesting numbers and seasonal density is required for the known nesting sites in Balochistan, including Ormara, as well as Jiwani and Astola Island; (2) An overall assessment of the extent of marine turtle nesting is urgently required; (3) All exploitation of adult turtles should be stopped, in line with the existing legislation, until a more complete picture of marine turtle resources in Balochistan is available; (4) Consideration should be given to providing formal protected area status (possibly as wildlife sanctuaries) to 2 sites, namely the turtle 'cliff ' beach (also known as Dran) in Jiwani and the current site of Ormara, particularly the west bay.

A more recent recommendation was put forth by Tomascik (1997) who proposed the establishment of a green turtle hatchery and nursery in Sonmiani (Miani Hor) which is ideally located at the crossroads of the Sindh and Balochistan coast. The idea is to raise the hatchlings in captivity and release them once they are large enough to fend off potential predators.

---

25. Current scientific research and facilities: (e.g. details of current projects; existence of field station etc.)

The federally administered Zoological Survey Department (ZSD) has been undertaking a project to study the biodiversity of the area.

---

26. Current conservation education: (e.g. visitors centre, hides, information booklet, facilities for school visits etc.)

While there is no site-specific conservation education programme, IUCN's Coastal Ecosystem Unit routinely carries out awareness and environmental sensitisation activities, largely through accompanying students, local, and foreign visitors to various coastal mangrove sites in the vicinity of Karachi. Public awareness of environment, and particularly of national wetlands has been steadily increasing in the national media through contacts with a number of interested and competent environmental journalists. WWF for example, had inaugurated a Wetland Visitor Centre in the same week as World Wetland Day (February 2, 1999), which is due to be operational by the end of June 1999. Provincial government agencies such as the Sindh Wildlife Department and the Sindh Environment Protection Agency also carry out selected awareness campaigns, related to turtle conservation or coastal pollution. Although, environmental awareness and conservation education activities occur throughout the year, it should be noted that such activities tend to be inevitably clustered around specific occasions, such as World Wetlands Day, World Water Day, or World Environment Day.

---

27. Current recreation and tourism: (state if wetland is used for recreation/tourism; indicate type and frequency/intensity)

None at present.

---

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept. of Environment etc.)
Territorial jurisdiction is with the Balochistan Forest and Wildlife Department and functional jurisdiction is with the Balochistan Fisheries Department

---

29. Management authority: (name and address of local body directly responsible for managing the wetland)

The Balochistan Forest and Wildlife Department.
Civil Secretariat, Lytton Road, Quetta, Balochistan. Tel: (92-81) 838358

30. Bibliographical references: (scientific/technical only)

Ahmed, M.F., Ghalib, S.A., & Hasnain, S.A. 1992. The Waterfowl of Makran Coast. Proceedings of a 3-day national conference on problems and resources of the Makran Coast and a Plan of Action for its development. Pp. 113-123. Pakistan Council of Science and Technology, Islamabad.

Groombridge, B. 1987. Makran Coast: A newly explored habitat for marine turtles. WWF-Pakistan Newsletter, Vol 6(2): 1-5.

Groombridge, B. 1989. Marine turtles in Balochistan: Report on an aerial survey, 9-11 September 1988 with notes on wetland sites and a proposed marine turtle conservation project (unpublished report). WCMC: Cambridge, UK.

Scott, D.A., Rao, A.L. & Beg, A.R. 1990. The Wetlands of Pakistan and the Ramsar Convention. (Unpublished report).

Tomascik, T. 1997. Coastal Marine Protected Areas Management Project (CMPAMP). Project proposal developed for IUCN Pakistan.

UN/ESCAP 1996. Coastal Environmental Management Plan for Pakistan. New York and Bangkok.

Please return to: **Ramsar Convention Bureau, Rue Mauverney 28, CH-1196 GLAND, Switzerland**
Telephone: **+41 22 999 0170** • Fax: **+41 22 999 0169** • e-mail: ramsar@ramsar.org

Ormara Turtle Beach- Avian Fauna Count during the year 1999

APPENDIX A:

Oystercatchers	-	890
Avocet	-	680
Kentish plover	-	126
Little ringed plover	-	85
Ringed plover	-	190
Common tern	-	730
Whiskered tern	-	426
Blackbellied tern	-	245
Caspian tern	-	640
Herring gull	-	1570
Lesser blackbacked gull	-	2130
Slenderbilled gull	-	870
Redshank	-	840
Greenshank	-	220
Himbrel	-	135
Godwit	-	355
Lesser sandplover	-	580

APPENDIX - B

Curlew	-	28
Oystercatcher	-	19
Kentish plover	-	76
Redshank	-	45
Lesser sandplover	-	113
Little tern	-	65
Caspian tern	-	9
Sandwich tern	-	2
Blackbellied tern	-	4
Herring gull	-	135
Lesser blackbacked gull	-	248
Egyptian Vulture	-	13
Griffon Vulture	-	9