

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:

29-01-1997

FOR OFFICE USE ONLY

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Designation date

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Site Reference Number

2. Country:

Islamic Republic of Iran

3. Name of wetland: Hamoun-e-Puzak, south end

4. Geographical coordinates: 31°20'N 61°45'E

5. Altitude: (average and/or max. & min.)

490 m

6. Area: (in hectares) 10,000 ha

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

Hamoun-e-Puzak Ramsar site includes the south-western portion of the vast Hamoun-e-Puzak wetland, two-thirds of which lies in Afghanistan. It consists of a complex of shallow permanent and seasonal freshwater lakes, lagoons and marshes with rich submergent vegetation and extensive reedbeds of *Typha* and *Phragmites*. It is the first of the three Hamouns in the Sistan Basin to fill during periods of flooding, and the last to dry out during droughts. The Hamouns are marshlands with lagoons that vary strongly in water level over the seasons and years. Hamoun-e-Puzak is important for breeding, passage and wintering waterfowl.

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: P, Ts, O

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

1a . 1b . 1c . 1d | 2a . 2b . 2c . 2d | 3a . 3b . 3c | 4a . 4b

Please specify the most significant criterion applicable to the site: 1d,2b

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:

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).

1c: Spanning the border between Iran and Afghanistan, the wetland plays a substantial hydrological and ecological role in the natural functioning of a major river basin shared between two countries.

1d: The wetland is an excellent example of a large, permanent freshwater lake with extensive reedbeds in an extremely arid desert region.

2a: The wetland supports wintering populations of four globally threatened species of birds, *Pelecanus crispus*, *Aythya nyroca*, *Oxyura leucocephala* and *Aquila heliaca*. There is also probably a small resident population of *Marmaronetta angustirostris*.

2b: It supports an extremely diverse wetland flora and fauna, and thus plays an important role in maintaining the genetic and ecological diversity in the region.

3a: The lake regularly holds over 20,000 waterfowl during the migration seasons and in winter.

3c: The lake regularly supports over 1% of the regional Middle East populations of *Egretta alba*, at least six species of Anatidae, *Fulica atra*, *Grus grus*, *Himantopus himantopus* and *Limosa limosa*.

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

Hamoun-e-Puzak is located in the Province of Sistan & Baluchestan, about 40 km north-east of the city of Zabol, on the border with Afghanistan in eastern Iran. The nearest villages are Takht-e-Shah, Mahmoodi and Shaugali.

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)

Hamoun-e-Puzak is a large, perennial freshwater lake with extensive reed-beds. Most of the lake is situated in Afghanistan, but about 15,000 ha lies within Iranian territory. The entire lake is very shallow, maximum depth is probably about 2 metres. The bottom consists of alluvial silts. The Iranian part consists of a complex of open-water areas with rich submergent vegetation and extensive reed-beds, and includes the extensive marshes around Takht-e-Edalat and Mahmoodi. There are several small villages along the edge of the marsh, and the adjacent land is degraded steppe and irrigated cultivation.

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

The lake lies in an extremely arid region and receives the great bulk of its water from Parian branch of the Helmand River. The Puzak lake is the first one that fills up during periods of flooding, and therefore it hardly ever dries out completely. The rest of the area does dry out severely during dry periods. There is no overflow from the lake except in extremely wet years.

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

Hamoun-e-Puzak is the most permanent area of marsh in the Iranian section of the Sistan wetlands. Vast reed-beds of *Phragmites australis* cover much of the Hamoun-e-Puzak, and there are only relatively small areas of open water. On the Iranian side of the border, *Typha* sp. now dominates, having replaced *Phragmites* since the 1970s, apparently as a result of heavy grazing by domestic livestock. Open-water areas support a very rich growth of submerged vegetation, principally *Ceratophyllum demersum*, while the margins of the wetland are fringed with *Tamarix* thickets.

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

The lakes have rich submergent vegetation, principally *Ceratophyllum demersum*, and extensive reedbeds of *Typha* and *Phragmites*. There are also many sedges (Cyperaceae). *Tamarix* sp. thickets can be found along the margins of the wetland.

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

A wide variety of breeding and migrant waterfowl, huge concentrations of wintering ducks and coots come to the wetland in wet years. Then it is a nesting area of great importance to waterfowl and a staging post on the migration of many species, notably surface feeding ducks *Anas* spp. and waders (Limicolae). Other species, like *Anas* spp., herons (Ardeidea) and coot *Fulica atra* use it as winter-quarters. There are also pelicans, geese, terns, and birds of prey (seven different species). The bird *Passer moabiticus* is a scarce resident, breeding in the tamarisk scrub. A more detailed list of bird with some counting results is attached.

Mammals include golden jackal (*Canis aureus*), red fox (*Vulpes vulpes*), striped hyaena (*Hyaena hyaena*) and wild boar (*Sus scrofa*).

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

The reedbeds of the Hamoun-e-Puzak play a significant role in the economy of the local inhabitants who live in villages along the shoreline. These Baluchi-people use reeds for a number of purposes: as forage for domestic animals, for constructing boats (“tutans”), for fabricating wind-breaks for houses and gardens, and as a source for fuel for cooking and heating.

20. Land tenure/ownership of:

- (a) site : National Government
 - (b) surrounding area: no information available
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21. Current land use:

- (a) site: livestock grazing, reed cutting, fishing and some illegal hunting
 - (b) surroundings/catchment: agriculture
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22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects:

- (a) at the site: Some illegal hunting has been reported in 1980, and at the moment extensive reed-cutting and overgrazing because of increased livestock may cause permanent damage to the marsh vegetation.
 - (b) around the site: Irrigation schemes among the Helmand River in Afghanistan threaten the marshlands in years of low rainfall, as they divert water away from the wetland. Drought in this area has been exacerbated by dam construction on the Helmand River in Afghanistan. The dam has been destroyed by floods in 1991, but may have been rebuilt.
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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)

The site is just outside the national Protected Area (329,000 ha) of Hamoun-e-Saberi and Hamoun-e-Hirmand. It is not legally protected, although personnel of the Department of Environment endeavour to maintain some control in the region, and have a small office at Gorgori near the wetland. The wetland has been placed on the Montreux Record.

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

In the mid-170s, the Division of Research and Development in the Department of the Environment recommended that the Hamoun Protected Area be extended to the east to include Hamoun-e-Puzak, but this has never been implemented. A Ramsar Monitoring Mission confirmed the desirability of extending the Hamoun Protected Area in January 1992. The Mission also recommended that the boundaries of the Ramsar site should be clearly demarcated on the ground, and that an integrated management plan should be developed for all wetland and water resources in the Sistan Basin.

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

Waterfowl census work has been carried out and several special studies by the Technical Division of the Department of the Environment. A major ecological study of the wetlands of the Sistan Basin was carried out during the mid-1980s. More recently, the Department of the Environment has embarked upon a study of the wetlands, as a part of its nation-wide inventory of wetlands. A Government Committee has been established to coordinate studies and centralise the collection of information. Accommodation is available for visiting researchers.

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

no information available

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

no information available

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept. of Environment etc.)

Department of the Environment
PO Box 5181
15875 Teheran
Islamic Republic of Iran

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

Department of the Environment, address as mentioned above (28)

30. Bibliographical references: (scientific/technical only)

- Carp, E. (1980). *A Directory of Western Palearctic Wetlands*. IUCN, Gland, Switzerland.
- Evans, M.I. (1994). *Important Bird Areas in the Middle East*. BirdLife International, Cambridge, United Kingdom.
- Firouz, E. (1970). *The Wildlife Parks and Protected Regions of Iran*. Biol. Conservation 3 (1): 37-45.
- Firouz, E. (1971). *The Wetlands and Waterfowl of Iran*. Teheran, Game and Fish Department.
- Mansoori, M. (1984). *National Report on Iran's Wetlands of International Importance as habitat for waterfowl*. Prepared for the Groningen Conference, Netherlands, in May 1984.
- Scott, D.A. (1976a). *A List of the Wetlands in Iran*. Internal Report. Department of the Environment, Teheran, Iran.
- Scott, D.A. (1976b). Iran National Report. Pp. 27-33 in M. Smart, ed., *Proc. International Conference on Conservation of Wetlands and Waterfowl, Heiligenhafen, Germany, 2-6 December 1974*. IWRB, Slimbridge, United Kingdom.
- Scott, D.A. (1978). *The Birds of the Sistan Basin, Iran*. Unpublished Report.
- Scott, D.A. (1995). *A Directory of Wetlands in the Middle East*. IUCN, Gland, Switzerland and IWRB, Slimbridge, United Kingdom.
- Vahedi, M. (1982). Iran National Report. In: Spagnesi (ed.), *Proc. Conference on the Conservation of Wetlands of International Importance especially as Waterfowl Habitat, Cagliari, Italy, 24-29 November 1980*. Supplemento alle Ricerche di Biologia della Selvaggina. Vol III (1): 741-747.
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**List of bird species including counting results
Hamoun-e-Puzak, south end**

Peak counts in winter

waterfowl:

<i>Pelecanus onocrotalus</i>	115
<i>Pelecanus crispus</i>	82
<i>Egretta alba</i>	1,200
<i>Ardea cinerea</i>	200
<i>Anser anser</i>	2,450
<i>Tadorna tadorna</i>	440
<i>Anas crecca</i>	58,000
<i>Anas platyrhynchos</i>	12,000
<i>Anas clypeata</i>	18,000
<i>Aythya nyroca</i>	30
<i>Oxyura leucocephala</i>	42
<i>Fulica atra</i>	37,000
<i>Grus grus</i>	450
<i>Recurvirostra avocetta</i>	130
<i>Limosa limosa</i>	5,500
<i>Cygnus cygnus</i>	2
<i>Podiceps cristatus</i>	breed
<i>Botaurus stellaris</i>	breed
<i>Ardea purpurea</i>	breed
<i>Porphyrio porphyrio</i>	breed
<i>Vanellus leucurus</i>	breed
<i>Sterna albifrons</i>	breed
<i>Chlidonias hybridus</i>	breed
<i>Acrocephalus stentoreus</i>	breed
<i>Marmaronetta angustirostris</i>	once seen

other birds

<i>Haliaeetus albicilla</i>	7
<i>Aegipius monachus</i>	5
<i>Aquila heliaca</i>	5
<i>Passer moabiticus</i>	scarce
<i>Circus aeruginosus</i>	45

source: Evans, 1994