# MANAGEMENT GUIDANCE PROCEDURE

## MISSION TO THE ISLAMIC REPUBLIC OF IRAN

# Report No. 37

## CONTENTS

| Summary of Recommendations  | 3                                      |
|---|--|
| 1.General Introduction  | 8                                      |
| The Ramsar Convention - general   | 8                                      |
| The Ramsar Database   | 9                                      |
| The Montreux Record and Management Guidance Procedure   | 9                                      |
| 2.Background to the present mission   | 10                                     |
| The role of the Islamic Republic of Iran in implementation and promotion of the Ramsar Convention   | 10                                     |
| Terms of Reference  | 10                                     |
| The 1992 Management Guidance Procedure (MGP) mission to the I.R. of Iran  | 11                                     |
| Iranian Ramsar sites included on the Montreux Record  | 12                                     |
| 3. Comments on specific sites   | 13                                     |
| Introduction  | 13                                     |
| <ul><li>a) Need for integrated management plans</li><li>b) Need for co-ordination of activities affecting wetlands</li></ul>  | 13<br>13                               |
| Wetlands of Mazandaran Province<br>a) Miankaleh Peninsula, Gorgan Bay and Lapoo-Zaghmarz Ab-Bandan<br>Ramsar site   | 14<br>14                               |
| Size of the Ramsar site<br>Current situation and management problems<br>Ecological character of the Ramsar site<br>Conclusions  | 15<br>16<br>17<br>19                   |
| b) Gomishan Marshes<br>Introduction<br>Observations   | 21<br>21<br>22                         |
| <ul> <li>Wetlands of Gilan Province         <ul> <li>a) Anzali Mordab (Talab) Complex Ramsar site</li> <li><i>Introduction</i></li> <li><i>Observations</i></li> <li>b) Bandar Kiashahr Lagoon and mouth of Sefid Rud Ramsar site.</li> <li><i>Introduction</i></li> <li><i>Observations</i></li> </ul> </li> </ul> | 22<br>22<br>23<br>24<br>24<br>24<br>24 |

| c) Amirkelayeh Lake Ramsar site.   | 25 |
|--|----|
| Introduction   | 25 |
| Observations   | 25 |
| d) Neyriz Lakes & Kamjan Marshes Ramsar site.  | 25 |
| Introduction   | 25 |
| e) Shadegan Marshes and mudflats of Khor-al Amaya & Khor Musa<br>Ramsar site   | 26 |
| Introduction   | 26 |
| 4. Comments on general issues  | 27 |
| Information for the Ramsar Database  | 27 |
| Number of Ramsar sites in the I.R. of Iran   | 28 |
| Possible new Ramsar sites in the I.R. of Iran  | 28 |
| Administrative issues  | 28 |
| a Establishment of a National Ramsar Committee   | 28 |
| b. Management Planning Questionnaire   | 29 |
| Use of pesticides and fertilisers  | 29 |
| Caspian sea level rise   | 30 |
| Integrated management planning at Iranian Ramsar sites   | 30 |
| Species issues   | 31 |
| Need for greater public awareness of wetland values  | 32 |
| Global Environment Facility (GEF) proposal : "Protection & Management<br>of Major Wetlands and Mangrove Forests in Iran" | 34 |
| 5. Secretary-General's visit   | 35 |

#### APPENDICES

Appendix 1 - Programme of the mission

Appendix 2 - Comments on the draft Terms of Reference for the Feasibility Study

Appendix 3 - Notification of Application of the Montreux Record and Management Guidance Procedure

Appendix 4 - Notification 2/1997 Guidelines on Management Planning for Ramsar Sites and Other Wetlands

Appendix 5 - List of people met during the mission

## SUMMARY OF RECOMMENDATIONS

## **Principal Recommendations**

- The mission advises that integrated management plans involving other land users and local communities be developed for all Ramsar sites in the I.R. of Iran, specifying core zone, buffer zone and areas where sustainable economic activities may be conducted. (Rec. 1)
- The mission advises that the Department of Environment's powers to co-ordinate the development and implementation of such management plans be strengthened by the establishment of an appropriate co-ordinating mechanism, such as a National Ramsar/Wetland Committee, on which all other departments and institutions concerned could be represented (Rec. 2).

## **GEF** Proposal

- The mission advises that the Ramsar Bureau work with the Department of Environment, UNDP and the World Bank, to develop a comprehensive proposal on wetland conservation and wise use in the I.R. of Iran, for submission to the GEF (Rec. 41)
- The mission advises that the proposal to GEF lay great emphasis on increasing public awareness of wetland values, and on capacity-building of staff responsible for the management of wetlands (Rec. 40)

## Ramsar Database

- The Department of Environment is encouraged to review the draft Ramsar Information Sheets, make any necessary corrections and amendments, and formally submit them, together with definitive maps showing the boundaries of the sites, to the Ramsar Bureau (Rec. 25).
- The Department of Environment is encouraged to provide the Ramsar Bureau with information on the status of the seven sites included on the Montreux Record, and to consider whether their ecological condition warrants continued inclusion in the Record. The Department of Environment is encouraged to use the Montreux Record questionnaires in this process (Rec. 26).
- The authorities of the I.R. of Iran are encouraged to present formal confirmation to the Ramsar Bureau on whether the current 18 sites are to be retained in the Ramsar List as at present or whether they are to be subdivided into a larger number of sites (Rec. 27).
- The authorities of the I.R. of Iran are encouraged to decide on whether additional Ramsar sites are to be listed and inform the Ramsar Bureau accordingly (Rec. 28).

## **Public Awareness**

• The mission advises that public awareness activities be developed and implemented, particularly in the vicinity of designated Ramsar sites and involving local people, to

increase awareness and understanding of the values of wetlands; a first step could be the organisation of a national seminar on wetlands (Rec. 37).

- Representatives of the I.R. of Iran are encouraged to increase their level of participation in regional wetland workshops (Rec. 38).
- The mission advises that exchanges be developed between the I.R. of Iran and neighbouring countries, on issues of common interest and concern (e.g. Caspian sea level rise, shared water resources and endangered species conservation), to promote exchange of information and contribute towards capacity-building of staff responsible for the management of wetlands in the country (Rec. 39).

## **Specific Sites**

a. Miankaleh Peninsula, Gorgan Bay and Lapoo-Zaghmarz Ab-Bandan Ramsar site

- The mission advises that an integrated management plan be developed for the Miankaleh Ramsar site incorporating a zonation system with core protected area, buffer zone and areas of sustainable use, such as agriculture or aquaculture. Such a management plan should define ecological targets to be achieved in restoration work. It could serve as a pilot project for other Ramsar sites in the I.R. of Iran, as well as for other wetlands in states of the Caspian littoral (Rec. 8).
- The mission advises that the boundaries of the Miankaleh Ramsar site be precisely defined (Rec. 5).
- The Department of Environment is advised to give consideration to the proposed LandBank feasibility (environmental assessment) study, to be carried out in close cooperation with the Department of Environment and its experts (Rec. 11).
- The mission advises that particular attention be attached to conservation of the ecologically important area of Lapoo-Zaghmarz Ab-Bandan which acts as a channel for freshwater to reach the sensitive freshwater marshes at the western end of Gorgan Bay (Rec. 9).
- The mission advises that increased efforts be made to improve communication and exchange of information between the local Department of Environment office and the local village communities which manage the Ab-Bandan (Rec. 10).
- The authorities of the I.R. of Iran are encouraged to provide the Ramsar Bureau with a map (if possible at a scale of 1:100,000) showing the size and boundaries of the Miankaleh Ramsar site, and an updated Ramsar Information Sheet (Rec. 4).
- In view of the ecological changes which have taken place at the site, the I.R. of Iran is encouraged to consider the inclusion of the Miankaleh Ramsar site on the Montreux Record and consider, at the time of provision of updated maps and Ramsar Information Sheets under Recommendation 4, whether part(s) of the wetland should be deleted from the Ramsar site, with designation of other wetlands in compensation (Rec. 12).

- The mission advises that more information be obtained about the feeding ecology of the wintering waterfowl in Gorgan Bay, either through a search of existing literature or by new studies (Rec. 3).
- The mission recommends that information on the impact of fishery along the Caspian shore of Miankaleh Peninsula be made available and incorporated into the integrated management plan (Rec. 6).
- The mission advises that the proposed construction of an asphalt road along the peninsula within the Wildlife Refuge not proceed, as proposed by the 1992 MGP mission (Rec. 7).

b. Gomishan Marshes

- The mission advises that Gomishan Marsh be designated as a Ramsar site as soon as possible, taking into account its outstanding ornithological qualities and function for fisheries (Rec. 14).
- The Department of Environment is encouraged to return the signed contract for the Gomishan Project to the Ramsar Bureau as soon as possible (Rec. 13).
  - c. Anzali Mordab (Talab) Complex Ramsar site
- As at Miankaleh, the mission advises that an integrated management plan for the whole of the Mordab be drawn up, taking account of the requirements of all the users of the wetland, and developing detailed zonation measures (Rec. 18).
- The Department of Environment is encouraged to arrange for the Montreux Record questionnaire to be completed on the basis of the information from the research project, so that a decision can be taken on whether it would be appropriate to remove Anzali Mordab from the Montreux Record (Rec. 15).
- The mission advises that further studies be undertaken on the extent and impact of *Azolla* infestation and methods for its elimination (Rec. 16).
- The present mission reiterates the 1992 recommendation for the establishment of additional non-hunting areas within the Ramsar site (Rec. 17).

d. Bandar Kiashahr Lagoon and mouth of Sefid Rud Ramsar site

- The mission advises that an integrated management plan be drawn up, identifying the impacts of fishing, tourist and other activities on the ecological character of the site, developing appropriate zonation for the different activities, and giving the Department of Environment a co-ordinating role in these activities (Rec. 20).
- The mission advises that additional studies be made of the wintering waterfowl populations at the site (Rec. 19).

e. Amirkelayeh Lake Ramsar site

- The mission advises that an integrated management plan be developed for Amirkelayeh Lake, including zonation, involvement of local people, public awareness activities and regulated use of pesticides and fertilisers (Rec. 21).
  - f. Neyriz Lakes & Kamjan Marshes Ramsar site
- The mission advises that an integrated management plan be drawn up for the whole Ramsar site, including the possible restoration of Kamjan Marshes (Rec. 23).
- The Department of Environment is encouraged to inform the Ramsar Bureau of any changes which may have taken place at the Neyriz Lakes & Kamjan Marshes Ramsar site since the 1992 mission (Rec. 22).
  - g. Shadegan Marshes & mudflats of Khor-al Amaya and Khor-al Musa Ramsar site
- The Department of Environment is encouraged to provide the Ramsar Bureau with further information on the proposed drainage of a large area of the Shadegan Ramsar site for agricultural development, and to develop an integrated management plan for the whole site (Rec. 24).

## Administrative issues

• The Department of the Environment should provide the Ramsar Bureau with a completed version of the Questionnaire on "Management Planning for Ramsar sites and other wetlands" (Rec. 29).

## Use of pesticides

- The mission advises that general guidance be provided to farmers on the use of pesticides, such guidance to cover the dangers of over-use, both to human health and the environment, and the economies that can be made by efficient use of pesticides (Rec. 30).
- The mission should investigate, with WWF-International, the possibility of developing a pilot project on Pollutant Release and Transfer Registers in the I.R. of Iran (Rec. 31).

## Caspian sea level rise

• The I.R. of Iran and the office of UNDP in the I.R. of Iran are encouraged to provide the Ramsar Bureau with information (via any appropriate focal points) on any studies and actions which may affect the coastal wetlands in the Caspian region. The Bureau will provide technical input, as appropriate, and give publicity to the information provided (Rec. 32).

## Species conservation

• The mission should seek support from the Bonn Convention Secretariat for a survey and research project on the Slender-billed Curlew in the I.R. of Iran (Rec. 33).

- The mission advises that the Department of Environment and the Ramsar Bureau seek to develop co-operation between specialists in the western Mediterranean and Lake Orumiyeh areas, with a view to the possible use of plastic rings for the flamingos at Lake Orumiyeh, through visits by Iranian experts to the research stations in the western Mediterranean (notably in France, Spain and Italy) and of return visits to Lake Orumiyeh by experts from these stations (Rec. 34).
- The mission encourages greater technical exchanges (including visits by Iranian specialist personnel) between the Department of Environment and Wetlands International, on waterfowl data collection, management and analysis (Rec. 35).
- The relevant Iranian authorities are encouraged to review, with extreme caution, the introduction of exotic fish into natural wetland ecosystems in the I.R. of Iran (Rec. 36).

## Secretary-General's visit

• The mission advises that the main recommendations of this mission be discussed during the visit of the Secretary General of the Ramsar Convention Bureau to the I.R. of Iran (Rec. 42).

## MANAGEMENT GUIDANCE PROCEDURE

## MISSION TO THE ISLAMIC REPUBLIC OF IRAN

## Report No. 37

22 April - 6 May 1997

## 1. General Introduction

The Ramsar Convention - general

The Ramsar Convention is generally regarded as the first of the modern inter-1. governmental agreements on the environment. It deals with wetlands and remains the only inter-governmental agreement devoted to a broadly defined group of ecosystems. When adopted at an international conference in the Iranian city of Ramsar in 1971, it incorporated two concepts which have since been widely accepted in other conventions and legal instruments: international listing of important sites (in Ramsar's case the "List of Wetlands of International Importance"); and the "wise use" principle which has been interpreted by member governments as being synonymous with "sustainable use". In the early years of the implementation of the Convention, the main emphasis was placed on designation of sites for the Ramsar List; at present the 103 Contracting Parties have designated 889 sites, covering a total area of almost 63,000,000 hectares, or 630,000 square kilometres, representing some 10% of the world's wetlands. In recent years, ever greater attention has been paid to the wise use concept and to the development and implementation of National Wetland Policies, or at least, to the inclusion of wetland concerns in national biodiversity strategies or national environment action plans. Thus, the principal focus has shifted to the incorporation of wetland concerns into a national land and water use plan, and to multisectoral co-ordination of the approach to conservation and wise use of wetlands with government ministries, agencies and other interested institutions.

2. This emphasis on wise use is reflected in the Ramsar Strategic Plan 1997-2002. Among the General Objectives of the Plan are: broad application of the wise use concept, improved management of designated Ramsar sites, involvement of local communities in management of wetlands, and assistance to developing countries in financing their activities under the Convention.

3. The main policy-making body of the Convention is the Conference of the Contracting Parties which meets every three years (most recently in Brisbane, Australia, in March 1996, when the Strategic Plan was adopted). The Conference elects Regional Representatives and Alternate Representatives to the Standing Committee, which meets once a year between meetings of the Conference to review the Convention's business. The Standing Committee oversees the work of the Ramsar Bureau (or secretariat), headed by the Secretary General, which deals with the day-to-day running of the Convention and is co-located with the headquarters of IUCN - The World Conservation Union in Gland, Switzerland. The

Scientific and Technical Review Panel (STRP) provides advice on scientific and technical matters to the Standing Committee and the Bureau.

## The Ramsar Database

4. The Ramsar database, maintained on behalf of the Convention by Wetlands International, contains a map and description of each wetland designated for the Ramsar List. The map shows the boundaries of each site, and the description, using the Ramsar Information Sheet (RIS) approved by the Conference of the Parties, provides information on the site, its conservation values and the use made of it. The database is an essential tool for monitoring the status of Ramsar sites, and for providing information to Contracting Parties on the situation at individual Ramsar sites and on management techniques used. Resolution VI.13 of the Brisbane Conference urges Contracting Parties to provide data on all listed sites by 31 December 1997, and an updated RIS for each site every six years.

## The Montreux Record and Management Guidance Procedure

5. When Contracting Parties designate wetlands for the Ramsar List, they accept an undertaking to maintain the ecological character of sites so listed, and to inform the Bureau if the ecological character of any listed site has changed, is changing or is likely to change. If the ecological character of the site, or of part of it, is irreparably damaged, the Contracting Party may decide to delete all or part of the site from the Ramsar List; if this decision is taken (and no sites have ever been deleted completely because of change in ecological character, while the number of partial excisions is extremely low) then the Contracting Party, (according to Article 4.2 of the Convention) shall compensate for any loss of wetland resources by creating additional reserves for the protection, either in the same area or elsewhere, of an adequate portion of the original habitat. Meetings of the Contracting Parties have always devoted considerable attention to actual or potential change in ecological character, and have devised a number of mechanisms to help Contracting Parties to fulfil their obligations in this field. The most important of these are the Montreux Record and Management Guidance Procedure.

6. The Montreux Record, so called because it was adopted at the 4<sup>th</sup> meeting of the Conference of the Contracting Parties in Montreux (Switzerland) in 1990, identifies Ramsar sites that are in need of priority conservation attention at national or international level, and is maintained as part of the Ramsar database. Of the 889 Ramsar sites, 62 are currently included in the Montreux Record, with the approval of each Contracting Party concerned. Resolution VI.1 of the Brisbane Conference approved new guidelines for the operation of the Montreux Record, and questionnaires to be used for assessing possible inclusion or removal of a listed site from the Montreux Record.

7. The Management Guidance Procedure (formerly known as the Monitoring Procedure) is operated by the Bureau at the invitation of the Contracting Party concerned, and takes the form of a visit to one or more Ramsar sites (particularly sites on the Montreux Record) by an expert group under the leadership of a Bureau staff member. Its aim is to suggest steps which will remove the threat of change to ecological character or will help to restore the original character where it has changed, thus enabling the site to be removed from the Record.

## 2. Background to the present mission

# The role of the Islamic Republic of Iran in implementation and promotion of the Ramsar Convention

8. As the host country of the initial conference in Ramsar in 1971, the I.R. of Iran has always had a special symbolic role in the promotion and implementation of the Convention. The I.R. of Iran was one of the first seven Contracting Parties which brought the Convention into force in 1975. At the time of accession it designated 18 wetlands for the Ramsar List, covering an area of 1,357,000 hectares. It remains one of the few states which has designated more than a million hectares of wetlands for the List. After the Islamic Revolution, the I.R. of Iran has maintained its close involvement in the operation of the Convention, taking part in most meetings of the Conference of the Parties, and including 7 Ramsar sites on the Montreux Record. The I.R. of Iran accepted the Paris Protocol to amend the Convention on 29.04.86, and the Regina amendments (as recommended by the 1992 mission) on 20.07.94. A previous application of the I.R. of Iran, in 1992 (Monitoring Procedure Report No. 27, see paragraph 15). The delegation of the I.R. of Iran was a member of the working group which prepared the final draft of the Strategic Plan 1997 - 2002, before its submission for adoption in plenary session at the Brisbane Conference in 1996.

9. Formal communications between the Ramsar Bureau and the government of the I.R. of Iran are effected through the Ministry of Foreign Affairs. The Department of Environment (which is attached to the Presidency of the I.R. of Iran) has been designated as the Ramsar Administrative Authority responsible for the implementation of the Convention in the country. The I.R. of Iran served as Alternate Representative for Asia on the Standing Committee from 1990-1993, and was elected again for the period 1996-1999.

10. At a meeting in the Ministry of Foreign Affairs on Tuesday 29 April 1997, it was confirmed that the I.R. of Iran, which has signed most of the modern international conventions on environmental issues, gives particular attention to the Ramsar Convention, and wishes to maintain its high profile role in its international and national promotion and implementation.

## Terms of Reference

- 11. The Terms of Reference were submitted to the Ministry of Foreign Affairs and the Department of Environment. The general purpose of the mission was to advise the authorities of the I.R. of Iran on overall implementation of the Convention, and in particular to advise on the following topics :
  - General issues of conservation and wise use of wetlands in the I.R. of Iran.
  - Conservation and wise use of specific sites in the I.R. of Iran, especially Miankaleh.
  - Advice on public awareness relating to wetlands, *inter alia*, through specialised workshops.
  - Preparation for the visit of the Secretary General of the Ramsar Convention Bureau to the I.R. of Iran.

12. The following specific Terms of Reference were agreed as regards Miankaleh:

"To determine alternatives in the Miankaleh project area for land use for economically feasible and sustainable agriculture and aquaculture, compatible with protection of the biodiversity and the function of this wetland as an area for migrating birds. Different degrees of intensity of land use as well as alternatives in aquaculture will be compared. The report will also advise on the compatibility of sustaining biodiversity with non-agriculture use, especially the infrastructure (roads, railways, ports, holiday villages, industries) which are or could be planned in the area. The report will advise the LandBank, the Department of Environment and other (local) authorities which are or might be involved in developing activities in the Miankaleh area".

13. The participants in the mission were:

Ramsar Convention Bureau (22 April - 6 May) Mr. Michael Smart, Senior Policy Advisor (Mission leader) Ms. Rebecca D'Cruz, Regional Co-ordinator, Asia

# Netherlands Ministry of Agriculture Nature Management and Fisheries (22 April - 29 April)

Mr. Hendrik Moen, Regional Director Rural Development, Government Service for Land and Water Management, Netherlands

Mr. Vincent van den Berk, National Reference Centre for Nature Management, Netherlands.

The members of the mission wish to express their thanks to the Ministry of Foreign Affairs for arranging the visit, to the Department of Environment and the LandBank for providing transport and generous hospitality, and to the Royal Netherlands Embassy for covering the costs of air transport to the Islamic Republic of Iran.

14. The detailed programme of the mission is given in Appendix 1.

## The 1992 Management Guidance Procedure (MGP) mission to the I.R. of Iran

15. The previous MGP mission to the I.R. of Iran in 1992 visited Ramsar sites in Seistan, Gilan, Mazandaran and Fars Provinces; among the sites mentioned in the mission report are several visited by the present mission: Miankaleh, Anzali Mordab, Amirkelayeh Lake and Bandar Kiashahr Lagoon. It made a number of recommendations on the management of Iranian wetlands (notably Kamjan Marshes and Gomishan) and on the question of sea level rise in the Caspian. The principal recommendations of the 1992 report (paragraph 126 of that report) were as follows:

- An integrated management plan for the wetlands and water resources in the Iranian portion of the Seistan Basin should be prepared and implemented as an urgent priority, and at the earliest possible opportunity, the Government of Afghanistan be invited to collaborate.
- A technical meeting between experts from each of the five countries bordering the Caspian Sea be convened in Iran under the auspices of the Ramsar Convention to review the ecological changes which have occurred.

- Management plans should be developed for each of the Department of the Environment's wetland reserves and Ramsar sites.
- The boundaries of all existing Ramsar sites should be retained as originally designated and new Ramsar sites be designated at one or more of the five wetlands identified as particularly suitable for listing.

It is suggested that the report of the 1992 mission be made available to all concerned domestic organisations as many of its recommendations still have relevance in 1997 and deserve to be taken into consideration. Reference will be made to them at appropriate points in the present report.

## Iranian Ramsar sites included on the Montreux Record

16. The following seven Iranian Ramsar sites are currently included on the Montreux Record, with the approval of the Iranian authorities, in order to indicate that they are priority sites for urgent action:

- Alagol, Ulmagol and Ajigol Lakes (included on 31.12.93 because of impact of agricultural developments);
- Anzali Mordab (Talab) complex (included on 31.12.93 because of falling water levels and increased eutrophication, leading to the rapid spread of the reed *Phragmites australis*);
- **Hamun-e-Puzak, south end** (included on 4.07.90 because of the possibility that water inflow could be reduced by construction of a dam in Afghanistan);
- Hamun-e-Saberi & Hamun-e-Helmand (included on 4.07.90 because of the possibility that water inflow could be reduced by construction of a dam in Afghanistan);
- Neyriz Lakes & Kamjan Marshes (included on 4.07.90 because of drought and agricultural activities);
- Shadegan Marshes & mudflats of Khor-al Amaya & Khor Musa (included on 16.06.93 because of the effects of chemical pollution which resulted from the Iran-Iraq war);
- Shurgol, Yadegarlu & Dorgeh Sangi Lakes (included on 4.07.90 because of the effect of war and drought at Yadegarlu).

Comments are made in section 3 of the present report on certain of the above wetlands.

## 3. Comments on specific sites

## Introduction

## (a) <u>Need for integrated management plans</u>

17. It is now more than 20 years since the first Iranian sites were designated for the Ramsar List. In many of them, economic and ecological conditions have changed. In the sites visited by the mission, the members were able to witness such changes at first hand (this was more especially the case at Miankaleh, where the mission spent the most time, and which appears to be a good example of the general problems encountered in maintaining the ecological character of Iranian Ramsar sites); the mission was informed of similar changes at other wetlands which there was not time to visit.

18. Wetlands in virtually all parts of the world are the subject of conflicts over land use. There is pressure to use these highly productive, yet environmentally sensitive, areas for all kinds of development. This is also true of many Ramsar sites. In some cases, this pressure is so extreme or the changes so great, that it may be necessary to consider deletion of all or part of the originally-designated site from the Ramsar List, followed by listing of other areas in compensation (see paragraph 5). An alternative, which the mission feels to be greatly preferable in the I.R. of Iran, would be to develop - for each Ramsar site, especially the larger ones - a broad-based, well integrated management plan involving other land users and local communities, and specifying core zone, buffer zone and areas where sustainable economic activities may be conducted. The Ramsar Management Planning Guidelines, formally approved by the Conference of the Contracting Parties, could offer a model here of particular relevance to the I.R. of Iran, where Ramsar sites are often of considerable size and incorporate areas used for economic purposes. Miankaleh, the wetland to which the mission devoted most of its attention, could serve as a useful prototype for such an operation, the more so as it is affected by the rise in the level of the Caspian Sea, a phenomenon having an impact on other Ramsar sites (in the I.R. of Iran, as well as other states of the Caspian littoral) and other wetlands.

## **Recommendation 1**

The mission advises that integrated management plans involving other land users and local communities be developed for all Ramsar sites in the I.R. of Iran, specifying core zone, buffer zone and areas where sustainable economic activities may be conducted.

## (b) Need for co-ordination of activities affecting wetlands

19. The dilemma of how to prevent encroachment and adverse impacts by other bodies on listed Ramsar sites, whether for agricultural development, aquaculture or for industrial development is of course not by any means restricted to the I.R. of Iran. This explains why the Convention has (as noted in paragraph 1 above) moved towards an integrated wetland management approach (including strict protection of appropriate core or highly sensitive zones), rather than an approach based on protected sites alone.

20. The mission noted with appreciation the measures taken at Ramsar sites by the Department of Environment to implement the Ramsar Convention, such as the control of

illegal cabins used by hunters at Anzali Mordab and the re-opening of the Department's centre at Amirkelayeh. Nevertheless, the mission felt in general that the Department had not, despite its best efforts, fully succeeded in co-ordinating land and water use at Ramsar sites. At some sites, in particular Miankaleh, there have been serious limitations on the ecological values of the site; at others such as Bandar Kiashahr which have no protected status, the Department has little possibility of intervention.

21. The mission strongly recommends therefore, that the Department of Environment's powers to co-ordinate activities affecting land and water use around Ramsar sites and other wetlands be strengthened. The Department's central role in co-ordination of activities such as agriculture, water resources, industrialisation or road building needs to be strengthened, and recognised by other ministries and agencies. Establishment of a national Ramsar/Wetland Committee (see paragraphs 74 and 75), on which all these bodies could be represented, would be one way of promoting improved co-ordination.

## Recommendation 2

The mission advises that the Department of Environment's powers to co-ordinate the development and implementation of integrated management plans be strengthened by the establishment of an appropriate co-ordinating mechanism, such as a National Ramsar/Wetland Committee, on which all other departments and institutions concerned could be represented.

22. Recommendations 1 and 2 above are the most fundamental proposals made by the mission. The development of integrated management plans for Ramsar sites and other wetlands will of course be a major task, calling for much technical input and for extensive co-operation with other ministries and agencies in the I.R. of Iran. It can only be carried out successfully if the Department is given additional powers of co-ordination with these ministries and agencies, and will in any case call for development of a greater capacity for such co-ordination and for training of staff. Funds will be required for these activities and for this reason, Recommendation 41 is extremely important in providing the means, through support from UNDP, the World Bank and the Global Environment Facility, to carry out these fundamental recommendations.

23. The mission hopes that, to ensure understanding and wide dissemination of the its conclusions, the present report (which, as determined by Recommendation 4.7 of the 4<sup>th</sup> Conference of the Parties, shall be a public document once the Contracting Party concerned has had an opportunity to study it) be given wide distribution in the I.R. of Iran.

Wetlands of Mazandaran Province

## a) Miankaleh Peninsula, Gorgan Bay and Lapoo-Zaghmarz Ab-Bandan Ramsar site

24. Miankaleh is a low, sandy peninsula with coastal dunes, pomegranate scrub and grassland. Gorgan Bay is a shallow, brackish embayment, almost cut off from the Caspian Sea by the 60 km long peninsula. The Lapoo-Zaghmarz Ab-Bandan (water reservoir) is a series of long, narrow freshwater lagoons located at the landward end of Miankaleh Peninsula, about 10 km west of Gorgan Bay. The essential elements of the Ramsar site's ecological character and functioning may be described as the meeting of fresh water and brackish Caspian water in a large, shallow, sheltered bay, linked to the sea, providing conditions for high biological productivity and biodiversity. Miankaleh is undoubtedly one of the most important and

spectacular of the Ramsar sites in the I.R. of Iran. It is world famous for its bird populations (both wintering and passage waterfowl); it is believed to play a major role as a spawning and nursery ground for fish; and is a site of the highest priority for biodiversity conservation. The Ramsar site boundary encompasses the whole of the Miankaleh Peninsula, Gorgan Bay and the Lapoo-Zaghmarz Ab-Bandan.

25. Much attention has been paid in the past to the presence of large numbers of wintering waterfowl recorded in the freshwater marshes of Gorgan Bay. The species concerned have a variety of diets, some feeding on benthos, others on fish, others on aquatic or terrestrial vegetation. The mission did not succeed in finding information on whether the waterfowl feed in the bay itself, or whether they simply use the bay as a daytime roost, spreading out over surrounding areas, including agricultural land, to feed at night. The answer to this question is of course fundamental to an understanding of the function of the wetland for waterfowl. The mission observed very little sign of submerged macrophyte plants within Gorgan Bay and very few mollusc shells or dead vegetation on the shoreline, which would suggest that some species do fly out at night. The Caspian beachline, on the other hand had extensive remains of washed up benthic material. It is essential for a proper understanding of the functioning of the site for waterfowl, to resolve this question.

## Recommendation 3

The mission advises that more information be obtained about the feeding ecology of the wintering waterfowl in Gorgan Bay, either through a search of existing literature or by new studies.

## <u>Size of the Ramsar site</u>

26. This large site was designated for the Ramsar List in 1975 when the extent of the site was given as "100,000 hectares". It is presumed that these 100,000 hectares coincide with the area of the Protected Region (97,200 hectares) established in May 1970. Between 1970 and 1975, a Wildlife Refuge covering 68,800 hectares was established within the Protected Region, and this was designated as a UNESCO Biosphere Reserve in June 1976. The Wildlife Refuge covers only Miankaleh Peninsula and Gorgan Bay, and not the Ab-Bandan, thus the Ramsar site has always had different boundaries from the Protected Region.

27. The Iranian national report to the 2<sup>nd</sup> meeting of the Conference of the Contracting Parties (in Groningen, Netherlands, 1984) indicated that the size of the Ramsar site had decreased from 100,000 to 40,000 hectares. The national report to the 1996 Brisbane Conference listed the size of the Ramsar site as 48,950 hectares.

28. There has thus, for some time, been some inclarity about the actual size and boundaries of the Ramsar site. This is exacerbated by the variety of maps used, none of which are based on normal topographic maps; the change in level of the Caspian Sea has, of course, made the problem much more complicated. The figure currently used in the Ramsar List is 100,000 hectares. The Ramsar Bureau urgently needs an authoritative statement on the size of the Ramsar site from the authorities of the I.R. of Iran.

## Recommendation 4

The authorities of the I.R. of Iran are encouraged to provide the Ramsar Bureau with a map (if possible at a scale of 1:100,000) showing the size and boundaries of the Miankaleh Ramsar site, and an updated Ramsar Information Sheet.

#### Current situation and management problems

29. The Ramsar Bureau received a letter about its proposed "Miankaleh project" from the Agricultural Land Reclamation and Development Company (hereafter referred to as the "LandBank") in October 1996. This letter was referred by the Bureau to the Ministry of Foreign Affairs and to the Department of Environment, and was discussed with the representatives of the I. R. of Iran who attended the meeting of the Ramsar Standing Committee in Switzerland in late October 1996. The LandBank subsequently held discussions with representatives of the Royal Netherlands Embassy in Teheran, and (through the Embassy) with the Netherlands Ministry of Agriculture, Nature Management and Fisheries.

30. The LandBank was established by the Bank of Agriculture to prepare land for agricultural use through actions such as re-allotment of agricultural land and installation of drainage or irrigation facilities; once the land has been prepared for cultivation, the Land Bank transfers it to farmers who lack the funds to undertake such actions themselves. The LandBank has developed the "Miankaleh Project" with the help of consultants from Western Australia; this project envisages development of agriculture and aquaculture facilities, including construction of a dike, on the southern shores of Gorgan Bay and the freshwater marshes at the end of the bay. The LandBank proposes to carry out a "feasibility study" over an 18 month period to look further into the environmental, ecological and economic feasibility of the project.

31. The mission was received by the Governor of Behshahr, Mr Golli, who expressed his strong desire that the proposed development of the 18,000 hectares by the LandBank should go ahead in order to combat poverty and reduce unemployment in the region.

32. The LandBank maintains that approximately 18,000 hectares in the Miankaleh area have been entrusted to it for agricultural and aquaculture improvement by the Ministry of Agriculture. At least part of this 18,000 hectares (about 8,000 ha of which is under water in Gorgan Bay) appears to be included within the designated Ramsar site, although the diversity of maps used makes identification of exact boundaries difficult.

33. The mission advises that the boundaries of the Ramsar sites are precisely defined so as to assist with the future planning and management of the Ramsar site.

## Recommendation 5

The mission advises that the boundaries of the Miankaleh Ramsar site be precisely defined.

## Ecological character of the Ramsar site

34. The following comments refer to observations by the mission after extensive field visits to the Miankaleh area and include (as requested in the Terms of Reference) some comments for the LandBank on the Terms of Reference of their proposed feasibility study. More detailed comments are included in Appendix 2.

35. A summary description of the site and its general ecological character is provided in paragraph 24. Over the past 20 years, since the designation of the site, a number of changes have occurred which affect the ecological character and biodiversity of the site as follows:

36. <u>Hydrology</u>: As noted in paragraph 24, one of the essential elements in the ecological character of the wetland is the mixing of fresh and brackish water. One of the main entry points for fresh water is the western end of Gorgan Bay, which was probably in former times the estuary of the River Neka. Thus, these western freshwater marshes are one of the most important areas in ecological terms and should be regarded as a core area for protected status. Most of this highly sensitive area occurs within the 18,000 hectares covered by the LandBank project. A further important source of fresh water is constituted by the 31 intermittent streams which discharge into the southern part of Gorgan Bay.

37. The potential sources of fresh water that feed the wetland are:

- groundwater originating from the numerous intermittent mountain streams;
- surface water from the intermittent streams, channels and water reservoirs;
- surface run-off from the coastal plain;
- groundwater flow from the dune aquifer;
- direct precipitation on the lakes and marshes.

The mission had the impression that, with the exception of the dune aquifer (but see paragraph 48 below), practically all fresh water resources are already exploited for agricultural use, as indicated by the large number of ab-bandans (water reservoirs), particularly along the southern shores of Gorgan Bay. Hence fresh water inflow into the wetland and marshes is seriously reduced already, particularly during the main agricultural season in summer. Inflow of fresh water is vital for vegetation growth and other aspects of biodiversity.

38. The flat nature, especially of the western part of the Ramsar site, means that changes in water level cause substantial changes in the area of the wetland. The rise in Caspian Sea level of recent years (see paragraphs 79, 80 and 81) has not only had the effect of inundating areas that were formerly dry; the restricted inflow of fresh water means that, at present, the wetland seems to be dominated by inflow of sea water from the Caspian. This is particularly the case in the more open waters of Gorgan Bay, where (as noted in paragraph 25) little or no macrophytic vegetation was noted.

39. <u>Extension of agriculture</u>: On the peninsula itself, a number of agricultural holdings have been established within the protected area. In the freshwater marshes at the western end of Gorgan Bay, and on the southern shores of the Bay, there has been extensive agricultural and aquacultural encroachment, through development of rice fields and cultivation of cotton and cereals. It seems that nearly all potential agricultural land around the edges of Gorgan Bay is already under cultivation. These developments have undoubtedly affected the natural water regime by interrupting the inflow of both surface and ground water, and by increasing the inflow into the Wildlife Refuge of pesticides and fertilisers.

40. Much of the land under cultivation is included in the 18,000 hectares, of which the LandBank claims ownership and where it aims to promote further agricultural development through water management, drainage and planned irrigation, in order to optimise land use. If the LandBank proposal were to go ahead it would mean further agricultural encroachment.

41. <u>Grazing</u>: The settlements on the peninsula have led to an extension of grazing by cattle, including buffaloes, and thus to a degradation both of the natural pomegranate scrub vegetation and the vegetation of the surrounding marshes. On the southern shores of Gorgan Bay and particularly in the temporary wet pastures in the south west corner of the Bay, the amount of traditional grazing, mainly by sheep and goats, is considerable and appears to have increased in recent years. Much of this pasture land is included in the 18,000 hectares where the LandBank proposes to operate.

42. <u>Aquaculture</u>: Aquaculture ponds have been established, apparently by private owners, in the marshland at the western end and on the southern shores of Gorgan Bay. It must however be emphasised that the impact of aquaculture on the ecological character have not hitherto been as great as those of agriculture. The planned extension of aquaculture operations in the future could potentially affect the ecological character of the site, through:

- the introduction of exotic species which would affect the native fish fauna of the Caspian waters;
- the introduction of disease and parasites;
- intensive use of pesticides and fertilisers which run off into the marsh; and
- the effect of the voracious vegetarian Chinese Carp *Cyprinus carpio* on the natural vegetation, as noted in the Seistan wetlands by the 1992 mission.

43. <u>Fisheries</u>: The rise in Caspian sea level has caused flooding and damage to the fisheries installations at Ashuradeh, at the tip of the Miankaleh Peninsula. The National "Shilat" Fisheries Company has constructed a number of fishery installations along the seaward side of the peninsula. It is not clear to the mission to what extent the traditional fisheries activities have increased in recent years nor whether they affect the ecological conditions of the Ramsar site. If these data are not already available to the Department of Environment, they should be obtained.

## Recommendation 6

The mission recommends that information on the impact of fishery along the Caspian shore of Miankaleh Peninsula be made available and incorporated into the integrated management plan.

44. The 1992 mission suggested that proposed construction of an asphalt road along the peninsula within the Wildlife Refuge should not proceed because such a road would permit greatly increased disturbance and degradation of the Wildlife Refuge. The present mission noted with satisfaction that construction of such a road has not gone ahead within the Refuge and reiterates the recommendation of the previous mission.

## Recommendation 7

The mission advises that the proposed construction of an asphalt road along the peninsula within the Wildlife Refuge not proceed, as proposed by the 1992 MGP mission.

45. The mission also had the opportunity to discuss the importance of Gorgan Bay for fisheries and some potential management problems, with Dr Bahram Kiabi of the College of Fisheries and Environment Sciences, Gorgan University. Gorgan Bay is believed to be a very important nursery ground for mullets *Mugil auratus*, which is the major species caught by

fishermen in winter. Cage and pen culture operations in the eastern end of Gorgan Bay, could potentially threaten native fish stocks through the escape of exotic species into the marsh. For example, on three separate occasions in recent years, several cages have capsized after a storm, releasing millions of fingerlings of Rainbow Trout *Salmo trutta* into Gorgan Bay. Such escapes of course have the potential to affect not only Miankaleh but also other lagoons around the Caspian.

46. <u>Fishing and hunting</u>: The mission witnessed widespread fishing activities in Gorgan Bay, both with the use of spears and of gill nets. Such activities are prohibited under the Wildlife Refuge regulations. The mission understands that considerable illegal shooting of waterfowl is practised in the area in the winter months by local people.

47. <u>Amirabad Harbour</u>. This large, new deepwater harbour facility, almost complete, has been constructed on the seaward side of the Miankaleh Peninsula just north of the Ab-Bandan, alongside the power station, and apparently within the confines of the Ramsar site. It is intended as an important feature in the expansion of Iranian trade with other Caspian littoral states. The presence of this harbour is likely to cause serious coastal erosion to the east (the direction of the offshore current).

48. The mission understands that plans exists for construction of extensive buildings on the landward side of the Peninsula to provide warehouses, shops, offices and other port infrastructure. This construction can only occur on land which is a part of the Ramsar site. These facilities will undoubtedly need supplies of fresh water, which are likely to be sought in the dune aquifer (see paragraph 37), and thus seriously depleting this, as yet untapped, water source.

49. <u>Railway to Amirabad Harbour</u>: The foundation for a railway line between Rostam Kula (west of Behshahr) and Amirabad has already been constructed. Because of the inclarity of the maps it is not clear whether the line runs inside or along the boundary of the Ramsar site. Nevertheless, it is evident that this foundation will affect the water regime of the Ramsar site by reducing surface water inflow.

50. <u>Tourist facilities</u>: A tourist complex has been established on the south shore of Gorgan Bay at Galougah and is likely to be extended in coming years. The facility is likely to place further stress on the ecosystem (e.g. by its water requirements) and the use of outboard motorboats is likely to cause additional disturbance in the Ramsar site.

## <u>Conclusions</u>

51. It will be evident from the above observations that the Department of Environment has had great difficulty in maintaining the integrity of the Wildlife Refuge. Indeed, it may be that there has already been a serious change, caused by human intervention, in the ecological character of the Wildlife Refuge which forms the major part of the Ramsar site. The mission is particularly concerned at the impact of these activities on the most sensitive area of the Wildlife Refuge, the freshwater marsh at the western end of Gorgan Bay; this is the site of one of the major inflows of fresh water to the whole system and the quantity of this inflow, which governs the productivity of the area, has been seriously reduced; on the southern shores of Gorgan Bay, most of the fresh water inflow is now used for agriculture and other purposes. Throughout the site, the quality of fresh water inflow has been impaired by pesticides and chemicals. Other changes, of a more natural character, have been caused by the long term fluctuations in the level of the Caspian Sea.

52. Whether or not the LandBank feasibility study is approved, there is therefore a need for an integrated management plan, to regulate the use of water and agricultural pesticides, to determine what hunting and fishing is allowed, and to moderate the impacts of the harbour, the railway, the power station and other existing facilities. Such an integrated plan should be drawn up in consultation with local communities, so as to ensure their support for its implementation (see paragraph 18).

## Recommendation 8

The mission advises that an integrated management plan be developed for the Miankaleh Ramsar site incorporating a zonation system with core protected area, buffer zone and areas of sustainable use, such as agriculture or aquaculture. Such a management plan should define ecological targets to be achieved in restoration work. It could serve as a pilot project for other Ramsar sites in the I.R. of Iran, as well as for other wetlands in states of the Caspian littoral.

53. The mission recalls that the Ramsar site includes the Lapoo-Zaghmarz Ab-Bandan which does not form part of the Wildlife Refuge. The mission emphasises the importance of this Ab-Bandan to the whole Ramsar site since it acts as a channel for freshwater to reach the sensitive fresh water marshes at the western end of Gorgan Bay and recommends that it be afforded additional protection. The mission had the impression, from brief meetings with villagers, that they had little contact with local Department of Environment personnel and little understanding or sympathy for the aims of the Wildlife Refuge. The mission recommends that particular efforts be made to improve communication and exchange of information between the local Department of Environment office and the local village communities which manage the Ab-Bandan.

## Recommendation 9

The mission advises that particular attention be attached to conservation of the ecologically important area of Lapoo-Zaghmarz Ab-Bandan which acts as a channel for freshwater to reach the sensitive freshwater marshes at the western end of Gorgan Bay.

## Recommendation 10

The mission advises that increased efforts be made to improve communication and exchange of information between the local Department of Environment office and the local village communities which manage the Ab-Bandan.

54. The mission suggests that the Department of Environment give consideration to the proposed LandBank feasibility study. The mission emphasises that the purpose of the study is simply to assess the feasibility of the proposed activities in ecological, environmental and economic terms. It would naturally be important to ensure that any actions taken do not effect the central core area of the Ramsar site, especially the freshwater marshes in the western end of Gorgan Bay. Since only a feasibility study is involved at this stage, there would be ample opportunity to review the results and to decide after the study what actions, if any, could be authorised. The LandBank has indicated that it would welcome close involvement of the Department of Environment and its experts in this feasibility study. (The mission suggests that involvement of the LandBank, with its considerable powers and prestige, and its

influence with local authorities and communities, could help to gain acceptance for the concept of integrated management within the area covered by the LandBank project, and thus facilitate the implementation of an integrated conservation and wise use management plan for the whole wetland area). Taking into account the LandBank's desire for a rapid decision on this issue for commercial and financial reasons, the Department of Environment is encouraged to give a rapid response to the issue of the feasibility study. The mission's detailed comments on the Terms of Reference for this study are contained in Appendix 2. (The mission suggests that the term "feasibility study" may be misleading and that it might be more accurate to term the operation an "environmental assessment of the Land Bank development plan").

## Recommendation 11

The Department of Environment is advised to give consideration to the proposed LandBank feasibility (environmental assessment) study, to be carried out in close cooperation with the Department of Environment and its experts.

55. The mission suggests that, whether or not the LandBank proposal goes ahead, the Iranian authorities should consider inclusion of the site in the Montreux Record (see paragraph 6) and should consider whether part(s) of the wetland should be deleted from the Ramsar site, with designation of other wetlands in compensation. In any case, development of an integrated management plan incorporating a zonation system with core protected area, buffer zone and areas of sustainable use (see paragraph 18 and Recommendation 8) will be necessary.

## Recommendation 12

In view of the ecological changes which have taken place at the site, the I.R. of Iran is encouraged to consider the inclusion of the Miankaleh Ramsar site on the Montreux Record and consider, at the time of provision of updated maps and Ramsar Information Sheets under Recommendation 4, whether part(s) of the wetland should be deleted from the Ramsar site, with designation of other wetlands in compensation.

## b) Gomishan Marshes

## <u>Introduction</u>

56. The 1992 MGP report referred to the ecological values of this area and suggested that investigations be carried out on the possibility of establishing a protected area and Ramsar site here. The Department of Environment has already established a protected area covering part of the wetland. In 1996, it presented a proposal for a more detailed survey of Gomishan, with a view to Ramsar listing, to the Ramsar Small Grants Fund and this was approved by the Standing Committee in October 1996. The mission discussed with the Department of Environment a number of administrative details relating to this project and looks forward to receiving the signed contract for the project in the near future. If the signed contract is not received soon, there is a danger that the funds may be reallocated for other Small Grants Fund projects.

## Recommendation 13

## The Department of the Environment is encouraged to return the signed contract for the Gomishan Project to the Ramsar Bureau as soon as possible.

## <u>Observations</u>

57. The mission had an opportunity to visit the site in the company of local officials of the Department of Environment and the LandBank. The mission was very highly impressed by the quality of the site and its biodiversity values. It strongly recommends that Gomishan be designated as a Ramsar site as soon as possible and that efforts be made to maintain the pristine natural qualities of a wetland site on the edge of the Turkoman Steppes with outstanding examples of natural vegetation and remarkable ornithological qualities. According to Dr Bahram Kiabi, Gomishan Marshes, like Gorgan Bay, is probably an important nursery ground for mullets (see paragraph 45 above). This aspect of the site should be given major importance in the proposed survey. It would probably meet Ramsar criteria 1a (good representative example of a natural or near-natural wetland), 1c (transborder), 2b (genetic and ecological diversity), 3a (regularly supports 20,000 waterfowl), 3c (1% of population of species of waterfowl); and 4b (important for fishes).

## Recommendation 14

The mission advises that Gomishan Marsh be designated as a Ramsar site as soon as possible, taking into account its outstanding ornithological qualities and function for fisheries.

## Wetlands of Gilan Province

## a) Anzali Mordab (Talab) Complex Ramsar site

## <u>Introduction</u>

58. The Anzali Mordab Ramsar site on the Caspian coast of Gilan Province was included in the Montreux Record on 31 December 1993, because of changing water levels and increased eutrophication, leading to the rapid spread of the reed *Phragmites australis*. The 1992 MGP report stated that there were serious problems at the site related to the spread of the water fern *Azolla*, increased hunting pressure on the waterfowl population and poaching within the Siahkesheem Protected Area. The report also recommended the establishment of other non-hunting areas in other parts of the Ramsar site.

59. The Ramsar site comprises the whole of the Anzali Mordab (15,000 hectares), though only two sections enjoy protected status by the Department of the Environment: Siahkesheem (as a Protected Area of 4,500 hectares) and Selke (as a Wildlife Refuge of 360 hectares).

## <u>Observations</u>

60. The mission paid a brief visit to these two protected areas and noted the following:

- the vegetation within the site appeared to be in good condition, perhaps because the rise in Caspian sea level has reduced the effect of eutrophication;
- the number of illegal cabins used by hunters within the area has greatly decreased and a number of Department of Environment guard points are now operating efficiently;
- the nesting of two breeding birds, Pygmy Cormorant *Phalacrocorax pygmaeus* (a world endangered species) and White-tailed Eagle *Haliaeetus albicilla*, a top predator, was recorded for the first time, indicating the biodiversity values of the area;
- in the agricultural areas immediately surrounding the Ramsar site the mission noted the presence of extensive rafts of the floating weed pest, *Azolla*.

The mission understands that a detailed research project has been carried out in recent years at Anzali Mordab and that this project has at its disposal much more detailed information than that available to the mission.

61. Nevertheless it is clear that, with intensive agriculture extending right up to the edges of the Ramsar site, the types of conflict between agriculture and wetland conservation noted at Miankaleh, and in particular the heavy use of pesticides and fertilisers, could affect the Ramsar site in future.

## Recommendation 15

The Department of Environment is encouraged to arrange for the Montreux Record questionnaire to be completed on the basis of the information from the research project, so that a decision can be taken on whether it would be appropriate to remove Anzali Mordab from the Montreux Record.

Recommendation 16

The mission advises that further studies be undertaken on the extent and impact of *Azolla* infestation and methods for its elimination.

Recommendation 17

The present mission reiterates the 1992 recommendation for the establishment of additional non-hunting areas within the Ramsar site.

Recommendation 18

As at Miankaleh, the mission advises that an integrated management plan for the whole of the Mordab be drawn up, taking account of the requirements of all the users of the wetland, and developing detailed zonation measures.

## b) Bandar Kiashahr Lagoon and mouth of Sefid Rud Ramsar site.

## Introduction

62. This site, which borders the Caspian in Gilan, was also mentioned in the report of the 1992 MGP mission. At that time, Department of Environment personnel reported that fewer waterfowl utilise the Ramsar site because of increased disturbance from fishing activities, and the small flock of Dalmatian Pelicans *Pelecanus crispus* (a world endangered species) which frequented the area in the 1970s had not been reported for some years. One of the reasons for the original designation of the site was the presence of this wintering pelican flock, which no longer seems to occur, though the site meets other Ramsar criteria. It would be valuable to intensify studies of the site, especially of its wintering waterfowl populations.

## **Observations**

63. The present mission was able to make a short visit to the site. Here too, the rise in Caspian sea level has had marked effects since its designation in 1975. The site is now a brackish lagoon in which extensive clumps of *Phragmites* can be observed. The site does not enjoy protected status from the Department of Environment. Some efforts have been made, using a powerful dredge and pipeline, to remove part of the coastal sand dune, thereby allowing exit of lagoon water to the sea. Such action, though hitherto unsuccessful, does not appear to favour maintenance of the ecological character. A small ship-breaking facility exists just inside the mouth of the Sefid Rud, and is likely to have an impact on the site. The area is also a popular recreation spot for fishermen in the lagoon and bathers along the beach. Thus, as at other sites, there are a number of conflicting and uncoordinated impacts on the site. It would seem desirable for the Department of Environment to have greater powers of coordinating and regulating human impacts, notably through development and implementation of a management plan.

## Recommendation 19

The mission advises that additional studies be made of the wintering waterfowl populations at the site.

## Recommendation 20

The mission advises that an integrated management plan be drawn up, identifying the impacts of fishing, tourist and other activities on the ecological character of the site, developing appropriate zonation for the different activities, and giving the Department of Environment a co-ordinating role in these activities.

## c) Amirkelayeh Lake Ramsar site.

## <u>Introduction</u>

64. The 1992 mission was unable to visit this site, where local villagers had resisted resumption of duties by the Department of Environment staff. This situation has happily been resolved, and the Department of Environment office is now functioning normally.

## <u>Observations</u>

65. The mission was able to make a short trip by boat on the lake and noted the apparently healthy state of the submerged vegetation. This vegetation is the basis for the large populations of wintering waterfowl for which Amirkelayeh Lake is famous. In the short time available, the mission was unable to discern any particular problems at this site. This is one of the smaller Ramsar sites in the I.R. of Iran, over which the Department of Environment has good management powers. It is situated in the middle of an area of intensive agriculture (mainly rice paddies), where pesticides and fertilisers are routinely used, and where, as a result, there could be problems of water quality. Here too, it would be desirable to develop an integrated management plan, giving high priority to strict conservation activities, but also including an element of public awareness activities and involvement of local communities.

## Recommendation 21

The mission advises that an integrated management plan be developed for Amirkelayeh Lake, including zonation, involvement of local people, public awareness activities and regulated use of pesticides and fertilisers.

## d) Neyriz Lakes & Kamjan Marshes Ramsar site.

## <u>Introduction</u>

66. The 1992 MGP mission visited this site, which had been degraded by drainage and agricultural activities and had, as a result, been included on the Montreux Record on 4 July 1990. The 1992 mission recommended that the site should not be deleted from the Ramsar List (as originally suggested by the Iranian authorities), and that restoration of the site was practicable and should be attempted.

67. The present mission was unable to visit Kamjan Marshes in the time available, though it understood that agricultural developments may have continued since the 1992 mission. The Ramsar Bureau will remain in contact with the Iranian authorities about this site and would welcome formal information on any changes which may have taken place at the site since the 1992 mission, as requested by Diplomatic Note (see paragraph 71). The possibility of restoring Kamjan marshes, suggested in the 1992 report, should be considered in the context of an overall management plan for the whole of this very large Ramsar site.

## Recommendation 22

The Department of Environment is encouraged to inform the Ramsar Bureau of any changes which may have taken place at the Neyriz Lakes & Kamjan Marshes Ramsar site since the 1992 mission.

## Recommendation 23

The mission advises that an integrated management plan be drawn up for the whole Ramsar site, including the possible restoration of Kamjan Marshes.

## e) Shadegan Marshes and mudflats of Khor-al Amaya & Khor Musa Ramsar site

#### Introduction

68. Shadegan Marshes were included on the Montreux Record on 16 June 1993 because of the effects of chemical pollution which resulted from the Iran-Iraq war. Neither the 1992 mission nor the present mission was able to visit this site. However, the present mission was informed that plans are under consideration to drain a large area of the Shadegan Ramsar site with a view to agricultural development. The mission was concerned at this information, since such activities could hardly fail to affect the ecological character of the Ramsar site. The saline nature of the soils would be likely to render agriculture an activity of marginal economic benefit. Once again, an integrated management plan, incorporating all possible land users, would seem to be needed.

## **Recommendation 24**

The Department of Environment is encouraged to provide the Ramsar Bureau with further information on the proposed drainage of a large area of the Shadegan Ramsar site for agricultural development, and to develop an integrated management plan for the whole site.

## 4. Comments on general issues

## Information for the Ramsar Database

69. <u>Maps and Ramsar Information Sheets (RIS)</u>: In order for the database to fulfil its function of documenting the status of Ramsar sites and of providing advice and feedback on a world-wide basis to Contracting Parties, it is essential for accurate up-to-date information to be provided for each site, as acknowledged by Brisbane Resolution VI.13 (see paragraph 4).

70. The information on Iranian Ramsar sites included in the Ramsar Database is, in many cases, incomplete or out of date. At the time of accession to the Convention in 1975, maps and brief descriptions of the 18 designated sites were submitted to UNESCO. In order to assist the I.R. of Iran in improving the datasheets, the Ramsar Database Unit has prepared draft RIS for 14 of the Iranian Ramsar sites (Miankaleh; Lake Parishan and Dasht-i-Arjan; Neyriz Lakes and Kamjan Marshes; Shadegan Marshes; Lake Kobi; Hamun-e-Puzak; Shurgol, Yadegarlu and Dorgeh Sangi; Bandar Kiashahr; Amirkelayeh Lake; Lake Gori; Alagol, Ulmagol and Ajigol Lakes; Khuran Straits; Lake Orumiyeh; and Hamun-e-Sabari & Hamun-e-Helmand). During the mission, these were submitted to the Department of Environment for their comment, amendment and formal submission to the Bureau. Drafts for the other four are in preparation and will be sent to the Department of Environment in due course.

## Recommendation 25

The Department of Environment is encouraged to review the draft Ramsar Information Sheets, make any necessary corrections and amendments, and formally submit them, together with definitive maps showing the boundaries of the sites, to the Ramsar Bureau.

71. <u>Information on Montreux Record sites</u>: In a Diplomatic Note dated 27 September 1996 (copy attached as Appendix 3), the Bureau requested information on additional steps taken or planned at sites included on the Montreux Record since the compilation of the National Report to the Brisbane Conference. The Bureau would be glad to receive formal written information on steps taken or planned at the seven Iranian sites included on the Montreux Record, on whether their ecological condition now warrants continued inclusion in the Montreux Record, or, if the problems have been resolved, whether they might be removed from the Record. The Montreux Record questionnaires, approved under Brisbane Resolution VI.1, should be used in this process. The I.R. of Iran would thus give a lead to other Contracting Parties in the implementation of this new procedure. As noted in paragraph 55, the Iranian authorities should consider inclusion of the Miankaleh Ramsar site in the Montreux Record (see Recommendation 12).

## Recommendation 26

The Department of Environment is encouraged to provide the Ramsar Bureau with information on the status of the seven sites included on the Montreux Record, and to consider whether their ecological condition warrants continued inclusion in the Record. The Department of Environment is encouraged to use the Montreux Record questionnaires in this process.

## Number of Ramsar sites in the I.R. of Iran

72. At the time of accession, 18 sites were designated for the Ramsar List. Several Iranian national reports to the Conference of Contracting Parties have suggested that current composite sites might be split into a number of individual sites (thus for example, the national report to the 1996 Brisbane Conference suggested that the 18 sites be subdivided into 42 sites). Since some of the sites include several wetlands located at some distance from one another (eg. Parishan and Dasht-i-Arjan, or Lakes Alagol, Ulmagol and Ajigol) it may be more practical to consider them as different sites; on the other hand, since wetlands may be affected by events occurring outside their immediate boundaries, it may be easier to maintain their ecological character if different sites, especially those which share a common catchment, are considered as a single ecological unit. While this is clearly a decision for the authorities of the I.R of Iran, the Ramsar Bureau urgently requires clarification on this issue and formal confirmation of how the sites should be presented in the official Ramsar List. This matter will clearly affect the maps and RIS mentioned in paragraph 70.

## Recommendation 27

The authorities of the I.R. of Iran are encouraged to present formal confirmation to the Ramsar Bureau on whether the current 18 sites are to be retained in the Ramsar List as at present or whether they are to be subdivided into a larger number of sites.

Possible new Ramsar sites in the I.R. of Iran

73. As noted in paragraphs 100 - 106 of the 1992 mission report, listing of additional Ramsar sites (notably Gomishan, Gandoman and Chogakur Marshes, Ghara Gheshlaq marshes and Kaftar Lake) is under consideration, but formal notification of this has not been forwarded to the Ramsar Bureau.

## Recommendation 28

The authorities of the I.R. of Iran are encouraged to decide on whether additional Ramsar sites are to be listed and inform the Ramsar Bureau accordingly.

Administrative issues

## a. <u>Establishment of a National Ramsar Committee</u>

74. Many Ramsar Contracting Parties have found it useful to establish a National Ramsar or Wetland Committee which brings together the various governmental, non-government and specialist (i.e. universities or technical institutes) bodies involved in the conservation and wise use of wetlands in the country concerned. The Ramsar Strategic Plan (Action 8.1.9) calls for the establishment of such committees by Contracting Parties. One of the principal recommendations of the present mission, Recommendation 2, calls for the establishment of a National Ramsar/Wetland Committee in the I.R. of Iran.

75. At the meeting in the Ministry of Foreign Affairs on 29 April, it was suggested that a National Ramsar Committee be established in the I.R. of Iran, with the Department of Environment as the co-ordinating organisation, to ensure that other ministries and institutions are aware of wetland values and take account of them as a matter of policy. Among the members of this committee might be the Ministries of National Planning, Agriculture,

Fisheries, Jihad-e-Sazandegi and Transport. The mission strongly recommends that such a committee be established and calls upon the authorities of the I.R. of Iran to draw up a list of appropriate members. Such a committee could play a leading part in the establishment of a National Wetland Policy, in promoting integrated management planning at Ramsar sites and other wetlands, and in the implementation of the GEF proposal (see paragraphs 97 - 100), if approved. The Ramsar Bureau would be pleased to provide background information on the operation of such committees in other Contracting Parties.

## b. <u>Management Planning Questionnaire</u>

76. Under Diplomatic Note No. 2/1997 of 24 January 1997 (attached as Appendix 4), the Bureau requested, for the use of the Scientific and Technical Review Panel, comments from all Contracting Parties on their use of the Convention's "Guidelines on management planning for Ramsar sites and other wetlands". The mission was pleased to learn that the I.R. of Iran intends to submit the questionnaire to the Ramsar Bureau in the near future.

## Recommendation 29

The Department of Environment should provide the Ramsar Bureau with a completed version of the Questionnaire on "Management Planning for Ramsar sites and other wetlands".

## Use of pesticides and fertilisers

77. At the Brisbane Conference in March 1996, a presentation was made by WWF-International, on the effect of toxins on wetlands. The Conference approved Recommendation 6.14 on pesticides, and the Bureau and Scientific and Technical Review Panel, are currently working with WWF-International, to provide guidance for Contracting Parties on the crucial question of the effect of toxins on wetlands, and the people who use and live in them.

78. The mission noted, with some concern, the heavy use of pesticides and fertilisers in agricultural areas immediately adjoining several Ramsar sites. This is particularly the case in rice fields, where pesticides are commonly applied directly from plastic bottles. The mission suggests there is a need to provide general guidance to farmers on the use of pesticides. Such guidance should cover the dangers of over-use and the economies that can be made by efficient use of pesticides. The mission will investigate with WWF-International the possibility of developing a pilot project on Pollutant Release and Transfer Registers (PRTR) in the I.R. of Iran.

## Recommendation 30

The mission advises that general guidance be provided to farmers on the use of pesticides, such guidance to cover the dangers of over-use, both to human health and the environment, and the economies that can be made by efficient use of pesticides.

## Recommendation 31

# The mission should investigate, with WWF-International, the possibility of developing a pilot project on Pollutant Release and Transfer Registers in the I.R. of Iran.

#### Caspian sea level rise

79. As noted in the 1992 mission report, the phenomenon of Caspian sea level rise is of immediate international interest. Global sea level rises are predicted as a result of climate change, yet little international attention has been paid to the Caspian Sea, where the phenomenon is already under way.

80. As has been well documented, the level of the Caspian dropped until 1978 and then rose until 1995. It has currently begun to drop again but experts from the Research and Study Centre of the Caspian Sea (affiliated to the Ministry of Energy) in Sari informed the mission that official predictions indicate a rise of a further 1.5 metres by the year 2015. There is, as yet, little agreement on the underlying reasons for the variation in Caspian sea level. Representatives of UNDP in the I.R. of Iran informed the mission that there is some co-ordination between Caspian littoral states in investigating the phenomenon and developing appropriate policies to deal with it.

81. As noted in the mission's accounts of individual Caspian wetland sites, sea level rise has already had a considerable impact on these sites, in some instances favourable and in others, causing practical problems. The mission understands that considerable research work and practical consultation has already been carried out on this subject in the Caspian littoral states and that focal points for studies and action may already exist. The mission requests the I.R. of Iran and the office of UNDP in the I.R of Iran to provide the Ramsar Bureau with information on any studies and actions which might affect the coastal wetlands in the Caspian region. The Bureau undertakes to provide technical input as appropriate, and to give publicity to the information provided.

## Recommendation 32

The I.R. of Iran and the office of UNDP in the I.R. of Iran are encouraged to provide the Ramsar Bureau with information (via any appropriate focal points) on any studies and actions which might affect the coastal wetlands in the Caspian region. The Bureau will provide technical input, as appropriate, and give publicity to the information provided.

## Integrated management planning at Iranian Ramsar sites

82. In the I.R. of Iran, as in many other countries of the world, Ramsar sites are the subject of conflicts over land use. As noted in paragraph 18 and the accounts of the mission's visits to individual sites, it will be essential to adopt a long term policy of developing integrated management plans, involving all stakeholders, for Ramsar sites in the I.R. of Iran. One of the principal requirements of the Ramsar Strategic Plan 1997-2002 is for 50% of all Ramsar sites world-wide to have management plans by the year 2002. The Strategic Plan also gives great prominence to use of the "Guidelines for Management Planning at Ramsar sites", approved by the Conference of the Parties. The principal recommendation of the present mission, Recommendation 1, lays stress on the need for integrated management plans at Ramsar sites in the I.R. of Iran.

83. The current crisis in the Aral Sea was caused by a lack of properly integrated planning and in particular, through excessive use of pesticides and excessive water diversion. It is essential to ensure that no such crisis ever occurs in the Caspian littoral states.

84. The mission was particularly pleased to learn that technical staff from the Department of the Environment will be attending the fourth International Course on Wetland Management to be held in Lelystad, Netherlands, under the auspices of the Wetland Advisory and Training Centre of the Institute for Inland Water Management and Waste Water Treatment (RIZA) in May-July 1997. The Ramsar Convention has always had close links with this course, which uses the Ramsar Management Planning Guidelines as a basis for drawing up integrated management plans of Ramsar sites and other wetlands. This experience should act as a useful basis for the necessary work of developing and implementing integrated management plans for all Ramsar sites.

## Species issues

85. While the Ramsar Convention is essentially concerned with wetland ecosystems, it has always been closely identified with individual species using these ecosystems. In this respect, the Ramsar Bureau has established Memoranda of Understanding with the secretariats of the Convention on Biological Diversity and the Convention on Migratory Species (Bonn Convention), both of which devote particular attention to species conservation. The following paragraphs refer to several species issues.

86. <u>Slender-billed Curlew Numenius tenuirostris</u>: This world endangered species is estimated to have a global population of no more than 300 individuals and is included on Appendix 1 of the Bonn Convention, which has developed a "Memorandum of Understanding concerning conservation measures for the Slender-billed Curlew". Although there are no recent reliable records of the species in the I.R. of Iran, it used to occur on passage or in winter, and may still do so. The Department of Environment wishes to develop a survey and research project on the species. The mission will contact the Bonn Convention Secretariat with a view to finding support for such a project.

## Recommendation 33

The mission should seek support from the Bonn Convention Secretariat for a survey and research project on the Slender-billed Curlew in the I.R. of Iran.

87. <u>Flamingo Phoenicopterus ruber</u>: Ringing of flamingo chicks using metal rings has been carried out for many years at the Ramsar site of Lake Orumiyeh. The resulting ring recoveries demonstrate that Orumiyeh flamingos winter in a wide arc extending from Tunisia in the west via the Rift Valley Lakes of East Africa, to the Bay of Bengal in the east.

88. In the western Mediterranean, similar ringing studies have been carried out using large plastic rings, legible with a telescope at distances of up to 300 metres. Given the proven overlap between flamingo populations from the western Mediterranean and Orumiyeh, it would be valuable to develop co-operation between specialists in the two areas with a view to the possible use of plastic rings at Orumiyeh. The mission will investigate the possibilities of Iranian experts visiting the research stations in the western Mediterranean (notably in France, Spain and Italy) and of return visits to Orumiyeh by experts from these stations.

## Recommendation 34

The mission advises that the Department of Environment and the Ramsar Bureau seek to develop co-operation between specialists in the western Mediterranean and Lake Orumiyeh areas, with a view to the possible use of plastic rings for the flamingos at Lake Orumiyeh, through visits by Iranian experts to the research stations in the western Mediterranean (notably in France, Spain and Italy) and of return visits to Lake Orumiyeh by experts from these stations.

89. <u>Waterfowl counts</u>: For many years, specialists from the Department of Environment have taken part in the annual census of waterfowl in the I.R. of Iran, especially in midwinter. The results have been communicated to the international co-ordinating body, Wetlands International, for inclusion in their databases. These data are used, among other things, for the identification of possible Ramsar sites. It would be of the greatest value if Iranian specialists could visit Wetlands International's offices in the Netherlands to review, update and exploit these databases.

## Recommendation 35

The mission encourages greater technical exchanges (including visits by Iranian specialist personnel) between the Department of Environment and Wetlands International, on waterfowl data collection, management and analysis.

90. <u>Exotic fishes</u>: The mission observed the use of exotic species (ie. non-native fish such Grass Carp *Ctenopharyngodon idella*, Silver Carp *Hypophthalmichthys molitrix* and Rainbow Trout) in aquaculture operations in the I.R. of Iran. Several experts met by the mission warned of the potential and actual problems caused to native fish fauna by such introductions (see paragraphs 42 and 45). In addition, the mission was informed of the possible adoption of a more systematic policy of introduction of exotic species to many Ramsar sites and other wetlands in the I.R. of Iran.

91. The mission urges the Iranian authorities to review with extreme caution the introduction of exotic fish into natural wetland ecosystems in the I.R. of Iran. There are many examples throughout the world where such introductions have destroyed natural vegetation and the native fish fauna. The best known perhaps, is Lake Victoria, where introduction of the Nile Perch *Lates niloticus* in 1962, has led to a drastic reduction of the formerly highly diverse native fish fauna comprising more than 400 species.

## Recommendation 36

The relevant Iranian authorities are encouraged to review, with extreme caution, the introduction of exotic fish into natural wetland ecosystems in the I.R. of Iran.

## Need for greater public awareness of wetland values

92. At the meeting at the Ministry of Foreign Affairs on 29 April, it was emphasised that General Objectives 3 and 4 (Awareness of wetlands and Capacity building) of the Ramsar Strategic Plan are of particular relevance to the I.R. of Iran. Most wetland management in the I.R. of Iran has hitherto been concentrated on conservation of wetland biodiversity through establishment of protected areas. As yet, there has been little development of the wise use concept and of consultation with local communities and stakeholders in the management of

large wetland areas. Thus, for example, at Miankaleh, there was little evidence of recognition and understanding by local villagers of the conservation work of the Department of Environment. Similarly, at Anzali Mordab, there is a need to involve people from neighbouring agricultural communities in the conservation operations, rather than simply prohibiting hunting and confiscating illegal fishing equipment.

93. There is therefore, a need to develop every opportunity to publicise the values of wetlands as clearly stated in many Ramsar documents (e.g. wise use guidelines 3b). Such public awareness activities could be carried out in the vicinity of designated Ramsar sites to involve local people.

94. In other countries, organisation of a national wetland seminar, with participation of all sectors involved, has proved a useful first step in promoting public awareness of wetland values. It would also be appropriate for representatives of the I.R. of Iran to participate in regional wetland workshops. The mission understands that Wetlands International proposes to convene a sub-regional workshop in 1998 covering countries of Central and South Asia, and in particular those around the Caspian. Given its role in the development of the original Convention text, it would be highly appropriate for the I.R. of Iran to play a major part in the proposed workshop, to promote membership of the Convention amongst the non-Contracting Parties in the region.

95. It would also be appropriate to develop exchanges between the I.R. of Iran and neighbouring countries which are confronted by similar problems of reconciling conservation of protected areas and wise use of wetland resources. Such exchanges would contribute to capacity-building of Iranian staff and the mission will attempt to promote such exchanges. Other exchanges, such as the co-operation on flamingos mentioned in paragraph 88, should also be promoted.

96. The mission suggests that the proposal to GEF (see paragraphs 97 - 100) lay great emphasis on public awareness of wetland values and on capacity-building of staff responsible for the management of wetlands.

## Recommendation 37

The mission advises that public awareness activities be developed and implemented, particularly in the vicinity of designated Ramsar sites and involving local people, to increase awareness and understanding of the values of wetlands; a first step could be the organisation of a national seminar on wetlands.

Recommendation 38

Representatives of the I.R. of Iran are encouraged to increase their level of participation in regional wetland workshops.

Recommendation 39

The mission advises that exchanges be developed between the I.R. of Iran and neighbouring countries, on issues of common interest and concern (e.g. Caspian sea level rise, shared water resources and endangered species conservation), to promote exchange of information and contribute towards capacity-building of staff responsible for the management of wetlands in the country.

Recommendation 40

The mission advises that the proposal to GEF lay great emphasis on increasing public awareness of wetland values, and on capacity-building of staff responsible for the management of wetlands.

<u>Global Environment Facility (GEF) proposal : "Protection & Management of Major</u> <u>Wetlands and Mangrove Forests in Iran"</u>

97. The mission was informed by representatives of UNDP that a PDF Block A proposal is being prepared for a project under the above title, for submission to GEF by the end of this year. A first draft has already been prepared by a GEF expert, in consultation with the Department of Environment. UNDP representatives suggested that the Ramsar Bureau might also be involved in further refining this proposal in order to ensure that it is in line with the objectives of the Strategic Plan, and the implementation of the Ramsar Convention in the I.R. of Iran. In this way, the proposal would enjoy the full support of the Ramsar Bureau and possibly pave the way for approval by the GEF Council.

98. The proposal aims to develop and implement a national strategy for the conservation and management of wetlands in the I.R. of Iran, and strengthen the institutional capacity of existing organisations dealing with wetland management. It would thus further the two principal recommendations (Recommendations 1 and 2) of the present mission. The proposal would lay particular emphasis on:

- integration of socio-economic factors into wetland management plans;
- demonstration of the economic benefits, especially for local communities, that can be obtained from sustainable use of wetlands;
- compatibility with the GEF Operational Strategy and in particular the Operational Programs on Coastal, Marine and Freshwater Ecosystems in the chapter on Biological Diversity; and
- need for sustainability of any measures carried out.

The proposal also intends to mobilise resources for further international collaboration in wetland protection and management.

99. The proposal will complement existing efforts to develop a national strategy for the sustainable management of floral and faunal biodiversity in the I.R. of Iran.

100. The mission fully appreciates that the recommendations on awareness activities, Montreux Record and management planning suggested in the preceding paragraphs, will require considerable time and effort from Iranian professionals and in particular, staff of the Department of Environment, and suggests that the proposed submission to GEF on Iranian wetlands could provide an ideal context and the necessary support for a comprehensive wetland conservation and wise use programme in the I.R. of Iran. As stated in Recommendation 40 above, it is suggested that the proposal should also lay great emphasis on increasing public awareness of wetland values.

## Recommendation 41

The mission advises that the Ramsar Bureau work with the Department of Environment, UNDP and the World Bank, to develop a comprehensive proposal on wetland conservation and wise use in the I.R. of Iran, for submission to the GEF.

## 5. Secretary-General's visit

101. At the invitation of the I.R. of Iran, the Secretary-General of the Ramsar Convention Bureau, is to make an official visit to the country (see paragraph 11).

102. It was decided that the present Management Guidance Procedure mission should be undertaken prior to the visit of the Secretary-General, to provide a framework for discussions on the implementation of the Convention and on the important role of the I.R. of Iran in the promotion of the Convention.

103. It is suggested that the visit of the Secretary-General would offer an ideal opportunity for follow-up discussions with the relevant authorities on the main recommendations of this mission, notably the

- establishment of a National Wetland/Ramsar Committee.
- development of a National Wetland Policy for the I.R. of Iran.
- implementation of integrated management planning at Ramsar and other wetland sites in the I.R. of Iran.

- support of the Ramsar Bureau for the GEF proposal on <u>"Protection &</u> <u>Management of Major Wetlands and Mangrove Forests in Iran"</u>

## Recommendation 42

The mission advises that the main recommendations of this mission be discussed during the visit of the Secretary General of the Ramsar Convention Bureau to the I.R. of Iran.