

# **Water Rights and the Right for the continued Healthy Life of Iranian Wetlands and Lakes**

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1. Since its founding in 1995, the WSAEP has been conducting its activities with the aim of the promotion of an environmental culture and the protection of the environment of Iran through education, research and publications. With a leaning to the pivotal role of women in the protection of the environment for the achievement of sustainable development, the WSAEP stresses on the participation of all the people in the fight against the destruction of the environment. And for this purpose the WSAEP holds seminars, monthly sittings, education courses and environmental markets. The activities range of the Society includes all natural resources and environmental pollutions in the country.

2. Towards the realisation of the “right to water”, the subjects of articles 11 and 12 of the International Covenant on Social, Economic, and Cultural Rights, and the protection of water sources that provide the basic needs of mankind – particularly in a arid country such as Iran – waters and their pollutants have always been in the working agenda of the population which includes national conferences on wetlands and the preparation of research booklets on wetlands and lakes.

## **Summary**

3. Although within current Iranian laws notable cases regarding the prevention of water pollution for conservation and the right for life have been foreseen, but due to inattention towards the protection of all water sources, and the generality of laws and lack of existence of clear laws for the conservation of each separate water system such as rivers, wetlands and lakes, these laws do not have enough practicality. Lack of a systematic view of the current legal conditions of Iran, where wetlands are not viewed and legally protected as a separate system, and failure to recognise the effects that these water systems receive externally and internally from their system – drainage areas in other words – that include the provision of environmental water rights, have resulted in the vital systems for the preservation of the lives and health of all individuals of society and all other life species.

4. The failure to recognise the protection of wetlands and the conservation rights of these water sources as one of the fundamental rights mankind in the short term can prevent tragic and catastrophic events from occurring, but in the long term noticeable problems appear which even with great spending their full rejuvenation will not be possible.

## **Study method**

5. This report attempts to point out to the current crises in the case of three wetlands in the country, through numerous national credible studies on the country's wetlands (sources in the annex). These wetlands from various climates (Anzali Wetlands in the north of the country in the Caspian region, Tashk and Bakhtegan Wetlands in Fars Province Irani Turani Eghlim, and Shadgan Wetlands in Khuzistan Sahari Eghlim) have been selected to be examples of the complete conditions of the country's wetlands. This study, conducted by population studies, is based on over 20 years of expertise experiences and studies regarding the wetlands situation of the

country for various governmental organizations, and has been presented through library data, national and international laws.

### **Tashk and Bakhtegan Lakes**

6. With an area of 120,000 hectares these lakes are situated at the end of the Kor and Seyvan rivers in Fars Province. The water volume for full capacity of these lakes is approximately 1.2 billion sq. m. In 1971 these lakes were included in the list of the Ramsar Convention as Lake Neyriz, and in 1995 these lakes and their surrounding countryside were registered as national parks. Most of the water from these lakes originate from the sources of the Kor and Seyvand rivers and also the floodwaters of these rivers. This is why in drought years the water levels of the lakes drop. One of the most reputable historical documents regarding these lakes is the Klisneli studies of the 1970s which introduced the lakes as seasonal.

7. The watershed area of the Kor and Seyvand rivers have since the ancient times included the great agricultural plains of Fars Province, in such way that the remnants of historical knots for the taking of water for agricultural use are visible.

The beginning of the changes to lake for further water use and the development of the agricultural lands goes back to 1971 and the operation of Doroudzan dam. With the construction of this dam and the watering barriers such as the Amir, Feiz Abad, and Tikan barriers, the possibility for further use of water from Kor and Seyvan rivers for the development of agricultural lands became possible. Assessments show that the annual water usage rate of these lakes is approximately 1.8 billion cubic metres. This water usage resulted in reduction of the water levels of these lakes; in such way that in 1990 these lakes were registered in the Montro list of endangered lakes. In the 1992 inspection of international experts the conditions of the lakes were declared as critical and it was stressed that the Iranian government should adopt management measures for the protection of the survival of these lakes.

8. Following this date, the construction of the Seyvand and Molasadra dams for controlling floodwaters and extending agricultural lands continued unabated. The entry of waters into the lakes in the present conditions shows that the volume reduction of the water inlets into the lakes is so severe that as things stand in the most ideal conditions and in the winter period, only 30% of the lakes' water levels are filled up to the maximum. This figure greatly drops in the hot season, and Bakhtegan lake is in a deeper crisis than Tashk lake (Tashk has a permanent water supply from Gomban Creek), and results in full drying up of the lake bed. The drying up phenomenon of Lake Bakhtegan, greatly affects its wetlands and natural habitat, to an extent that it results in the death of the migrant birds population during drought years of the lake.

9. The drying up of the lake also affects the economic and social conditions of the human societies around the lake. Around these lakes there are a lot of population centres whose main economic survival is dependent on farming. The complete drying up of these lakes has resulted in the exposed salt bed to the winds that blow the salt onto the surrounding farmlands that causes the gradual destruction of these lands. Furthermore with the current underground sweet water conditions around the lakes are in balance with their salt water. The drying up of the lakes, Lake Tashk, will cause the water reserves' destruction. A closer look at the farmlands to the south of the Abadeh-Tashk town and its comparison with the Dahzir farmlands which is situated in the dry part of the lake clearly shows a difference in the produce quality of between the two areas which are located not far apart from each other.

10. In fact it can be said that the dams that have been constructed for the development of farmlands, will be the cause of the destruction of the lakes and the existing farmlands.

### **Anzali wetlands**

11. These wetlands are located in the south of the Caspian Sea and in Gilan Province. With an approximate area of 180 to 200 square kilometres these wetlands are situated on the outskirts of Anzali town. The Anzali wetlands have hydrological connections with the Caspian Sea, and as the sea levels change so do the levels of the wetlands. The Anzali wetlands were registered in the Ramsar Convention and seven national protected regions under the title of wildlife sanctuary, protected and no hunting areas. The wetlands are an ecosystem that is made up of a lagoon, a thick covering of cane, and seasonal grasslands and meadows. This situation has created an important habitat for fish, birds and migrant birds. Geologically the wetlands are very young and it is assumed that the wetlands formed in a number of stages. The most common possibility of the wetlands creation could be put down to the drop in the Caspian Sea levels in the 19<sup>th</sup> century when the Anzali port town peninsula was formed, and also the blockages to other creeks (due to the closing of the inlets to the Siah Darvishan, Pirbazar and Pasikhan rivers), and these conditions caused the speedy appearance of forks. Seventy-seven out of 140 species of migrant birds that enter Iran have been identified in these wetlands. Thirty-four species of macrofite , 27 species of fish, 31 species of mammals, and various local and migrant birds species live in the wetlands and surrounding areas. The vegetation of the wetlands are noticeably diverse in species.

12. The expanse of the basin are of the wetlands which collects the waters of approximately 40 rivers and pours into the wetlands is 3610 square kilometres. The total volume of the water that enters from rivers into the wetlands is 2400 million cubic metres, or 76 cubic metres per second.

13. The pollution that threatens the Anzali wetlands is originated from industrial, agricultural and urban origins.

14. The industrial waste that is emitted into the wetlands annually is approximately 20000 cubic metres. According to the Protection and Reconstruction of Anzali Wetlands Proposal studies of Gilan University, the waste from several industries is ejected into the waters without proper filtering and purification or none at all.

15. 95% of the farming activities of the coastal lands include up to 100 metres above sea level, and higher grounds are generally used for forestry. The main agricultural activities of the region under study are rice plantation, and the uncontrolled extensive use of chemical fertilisers and pesticides which are transferred through water into the wetlands is very noticeable. The amount of minerals that enter into Anzali wetlands due to forests and woods erosion and agricultural activities is approximately 200000 tons per year, 113000 tons of which remain in the wetlands each year.

16. According to the Comprehensive Rejuvenation of the Anzali Wetlands Proposal studies, the total sediments that enter into the wetlands annually is approximately 585000 tons, and 50% of which settles at the bottom of the wetlands. According to this the volume of the wetlands is reduced by 20000 cubic metres per year. The sediments that are carried by rivers into the wetlands in relation to natural conditions is very high in volume and pollution levels, to such extent that the depth of the sediments in some parts of the wetlands has reached approximately 11 metres, and the pollutants that enter the wetlands are in excess of permitted levels based on the waste emission standards set by the Environmental Protection Organization.

17. According to these reports the Anzali wetlands are under great threat of destruction and pollution. Invasion of the wetlands, taking of water from the wetlands for agricultural use, the emission of polluted water from industrial and agricultural centres, fish farms and residential areas, the existence of fish floats, illegal fishing, the introduction of non-local species such as anzula, increase in the erosion and sedimentation of the water outlets of the wetlands and the entry of unnatural amounts of sediments into the wetlands, the entry of garbage and other factors are all things that threaten the wetlands' ecosystem.

### **Shadgan wetlands**

18. With an area of 537700 hectares Shadgan is the biggest wetland in Iran. It is located in south-eastern Tehran and in the south of the Khuzistan plateau between Shadgan, Abadan and Mahshahr towns. In 1975 Shadgan wetland was registered in the Ramsar Convention on Wetlands, and 327765 hectares of which have been registered as wildlife sanctuary. Shadgan is a sweet water with salty lips. Each year approximately 900 million cubic metres of water from Jarahi River enters Shadgan. As well as this the floodwaters of Karun river, sea tides, and through coastal inlets the water of this wetland is supplied. To-date 152 birds species and 40 mammals species have been identified in this wetland the most important of which is the bottlenose dolphin (*tursiops turncatus*), wildcat (*felis chaus*) and the lutra lutra.

19. The living of more than 5000 residents of Shadgan villages is directly connected to the wetland ecosystem. The vegetation inside the wetland is the feeding ground for domesticated farm animals of the villagers around the wetland.

20. Some of the incidents and projects that have put the wetland under threat are as follows:

- Diversion of the waste water of the sugarcane industry to the Shadgan wetland and the emptying of the drainage from the eastern unit into the wetland (20 to 25 cubic metres per year).
- The widening of the Abadan to Ahwaz-Ghafaz highway towards the wetland project
- Earth removal from the edges and inside of the wetland.
- Passing through of old oil pipes that are corroded which results in the spillage of oil into the wetland. (In 2000 due to the spillage of oil more than 100 hectares of polluted wetland caused serious damage to the plants, marine life and birds of the area)
- Dropping of garbage into the wetland (in October 2004 Abadan municipality unearthed 35,000 cubic metres of petroleum waste and poured it into the Shadgan wetland. This took place during the construction of a boulevard in one of Abadan's districts).
- Industrial wastewater entry into the wetland (annually 40 to 60 thousand cubic metres of wastewater from steel industries).
- Entrance of chemical fertilisers and cattle and poultry farmers' disinfectant materials.
- Entrance of town sewage into the wetland.
- Expansion of Shadgan town towards the wetland.

### **International Laws**

21. As a member state of the United Nations, the Islamic Republic of Iran is committed to "the right to water" as stated in articles 11 and 12 of the International Covenant on Economic, Social and Cultural Rights. Iran has also joined several

international instruments and conventions with regards the preservation of water, lakes and wetlands which are:

- International Convention on the Preservation of Water and Water Resources
- Ramsar Convention
- Biological Diversity Convention
- Climate Change Convention
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- Rotterdam Convention
- Stockholm Convention
- Montreal Protocol
- Kyoto Convention

### **Domestic Laws**

22. Article 50 of the Iranian Constitution states: “The preservation of the environment, in which the present as well as the future generations have a right to flourishing social existence, is regarded as a public duty in the Islamic Republic. Economic and other activities that inevitably involve pollution of the environment or cause irreparable damage to it as thereof are forbidden.” Waters, lakes and wetlands also in some laws and internal Environmental Protection Organization guidelines are also protected:

- Executive Guidelines for the Prevention of Water Pollution ratified by the Environmental Protection Organization (1994)
- Regulations Regarding Riverbeds and Surrounds, Streams, Ravines, Swamps, Natural Pools and Waterways, Water Grids and Drainage.
- Environmental Hygiene Regulations (1992)
- Correct Use of Water Resources Act (1981)
- Protection and Preservation of the Environment Act (ratified in 1974 and amended in 1992)
- Sewage Outlets Standards – Environmental Protection Organization

23. Despite the existence of the abovementioned laws, guidelines and regulations, the environmental conditions of the lakes and wetlands shows that because of the generality of these laws, they have not been able to protect these habitats. Furthermore, the law does not consider lakes and wetlands as environmental systems, and other social, economic, and cultural effects on the environment have not been foreseen in these generalities.

24. As well as the above stated, unfortunately the existing laws, also due to the weakness in the executive powers of the Environmental Protection Organization, and the lack of proportionality in the punishment of environmental offences, the destruction and pollution process of the wetlands continues with a severity.

The failure of enforcement within the laws and the destruction of wetlands process has resulted in the violation of the right to life of the region’s ecosystem and its negative effects on healthy lives and the economy of the human communities that live around the wetland, all of which bring about the basis for the violation of other human and environmental rights.

### **Conclusions and recommendations**

25. The Iranian government must officially recognise all the country's lakes and wetlands as protective systems for the survival of life (including human populations, other life species and the environment).

26. Comprehensive and nationwide planning for the sustainability of delicate systems must be done.

27. The need for water, the quality of the water that enters, the area and the form of legal exploitations for each wetland must be conducted separately.

28. For the elimination of the existing legal vacuum, the abovementioned solutions must be considered through legal enforceable legislations for all development projects that include dam constructions, residential constructions and agricultural developments.

29. The professional and executive powers of the Environmental Protection Organization must be strengthened, and the existing laws must become applicable and be complemented with legal mechanism guarantees.

30. Implementation of the presented recommendations will result in the protection of the living environments of the delicate wetlands systems of the country which in itself is the guarantee for the continuation of the lives and sustainable development of local communities that exist near lakes and wetlands.<sup>1</sup>

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<sup>1</sup> This report includes two appendixes containing the references and current Iranian laws concerning the water rights and the right for the continued healthy life of wetlands and lakes. Please refer to: [www.wsaep.ir/uprreport.html](http://www.wsaep.ir/uprreport.html)