

Physical properties

In the westernmost part of the Atrak basin area in the north of Golestan province, there are three wetlands from the collection of international wetlands registered in the Ramsar Convention, close to each other. They are called Alagol, Almagol, Ajigol, which are also known as the collection of three international wetlands. These are the forty-ninth wetlands added to the list of critical international wetlands (Ramsar List), registered in the Ramsar Convention on June 23, 1975.

With an area of 2500 hectares, Alagol is the largest wetland of this collection and is located in a geographical position of 37 degrees and 22 minutes north latitude and 54 degrees and 35 minutes east longitude. The smallest wetland in this collection is Almagol, with 207 hectares and is located at 37 degrees and 25 minutes north latitude and 54 degrees and 38 minutes east longitude.

Ajigol, with 320 hectares, is located at 37 degrees and 24 minutes north latitude and 54 degrees and 40 minutes east longitude. Due to the new criteria of the Ramsar Convention, 1, 2, 5, and 6 criteria, and also, as they are considered examples of freshwater and brackish lakes belonging to the vast plains of the eastern Caspian Sea, these wetlands are of international significance.

There are lowlands in the wetlands also, and the environment around the wetlands is a steppe area where low-height dunes can be seen. All three Alagol, Almagol, and Ajigol wetlands are classified into salt, brackish, calcareous, seasonal/periodic lagoons; Seasonal / periodic freshwater lagoons and ponds; Seasonal / periodic brackish, brackish and calcareous lakes; Seasonal / periodic freshwater lakes; and wetland shrubs.

The altitude at the deepest point of Alagol wetland is 6 meters, and the maximum depth is 4.5 meters at the time of flooding. In most areas, the depth of Almagol differs from one to 1.5 meters, and at most, it is up to three meters in some areas. The western area of Ajigol is more profound than other areas, and its depth differs from one to 1.5 meters and a maximum of three meters in most places. Based on the De Martonne climate classification, this region is arid.

The average annual rainfall in the wetlands is about 263, and the average evaporation from the free water level of the studied area is about 1068 mm. All three wetlands are permanent and their water supply sources include rainfall, surface water, and regional effluents and Atrak river overflows. Therefore, they are classified as wetlands composed of surface water. The seasonal and temporary area and the bed of the wetlands have changed over the years. The most significant reasons for the increase and decrease of the wetlands water volume are the change of the Atrak river water regime due to drought and the construction of a dam upstream of this river, including in North Khorasan Province, which is one of the most critical threatening factors despite recent droughts. Overall, the soil of the area is considered saline and alkaline soil. Natural factors such as high static water level and human factors such as insufficient irrigation systems have been influential in the salinity of the Alagol region.

Management plan

According to the experiences gained in other countries in developing a management plan, integrated ecological management can play a significant role in improving the condition of the country's wetlands as a modern scientific and practical method. The beginning of the comprehensive ecological management program of Alagol International Wetlands was fulfilled with the active and associative presence of various stakeholders in the form of holding workshops and creating the essential working groups.

To develop comprehensive management of the wetland, a series of workshops and also a process was operated, which was unique due to the participation of many responsible organizations and the local community and all stakeholders in the process.

A Guideline for Resolving Land Disputes and Obtaining Title Deeds for the Wetlands

Trespassing on areas controlled by the Department of Environment has become a continuous phenomenon. The weakness of the organization and the lack of awareness of the importance of biodiversity led to the fact that the authorities, which were legally supposed to support the Department of Environment, helped to the erosion of the regions. Although considerable changes have taken place during recent years, the conflict between the limited livelihoods of a few still dominates the broader social benefits. Unfortunately, the significance of biodiversity conservation and the role of conservation areas have not been adequately informed. In many cases, inhabitants around these areas, especially the wetlands, consider the guardians of these regions enemies. Due to the lack of title deeds, confronting the illegal trespassing on areas by commencing an action faces many problems. Therefore, it is necessary to pay special attention to this issue in the first step for promoting the ecological management of the country's wetlands. Resolving conflicts at the beginning of the implementation of wetland management will prevent subsequent effective disputes in the future. It will also lead to a more efficient wetland management program.

At first glance, it may seem that to gain the environment right and preserve the wetland integrity we should take advantage of all the potentials. However, it should be noted that this guideline has been prepared in the framework of ecological management. Therefore, it proposes the resolution of land disputes regarding this framework. Accordingly, it is necessary to consider reducing and resolving the disputes, especially with the local community, from this point of view, because local people are supposed to essentially contribute to rehabilitating and preserving the wetland. Of course, this does not mean that we should not react to the old or new trespasses. Rather, it means that the land issue must be regarded in a broader and longer-term framework. The goal should not merely include consolidating land ownership of the environment, but also creating cooperation opportunities.

Although it is difficult to turn conflict into a condition of cooperation, appropriate solutions can be fulfilled at any stage if an ecological approach and the belief in the necessity of the local community participation are applied from the starting point.

Accordingly, first, it is necessary to identify the land dispute status and to raise the awareness of the significance of the rehabilitation and conservation of wetlands by evaluating the other parties.