The National Strategy and Action Plan for Conservation of Wetlands in Islamic Republic of Iran

Wetlands are among the most important ecosystems on the plant, and they constitute valuable centers for biodiversity as well as the livelihood of human beings. Considering its diverse climate and specific topography, Iran is host to a number of different wetlands including coral reefs, mangrove jungles, salty lakes, and lowland swamps, many of which threatened by serious dangers. In general, there are hundreds of wetlands in Iran, among which 94 wetlands have been considered as internationally-important wetlands. Among these 94 important wetlands, 35 wetlands were registered in the form of 24 titles in the list of wetlands of Ramsar Convention until March, 2017. This convention was signed in 1971 in Ramsar, Iran.

The mutual effects of the physical, biological, and chemical components of a wetland, such as water, soil, flora, and fauna, create numerous critical functions for the wetland. Some of these functions include storing water, protecting against storms, mitigating the effects of floods and reducing their destructive force, stabilizing coastal lines and inhibiting erosion, feeding underground water reservoirs (from the wetland to the aquifers), discharging underground water (from aquifers to the wetland), filtering the sediments and other pollutions from the water, and adjusting local climate.

Among the various economic values provided by wetlands, maintaining genetic reserves for flora and fauna, supplying water (quantitative and qualitative), facilitating aquaculture (more than two thirds of the global fish harvest depends on the health of wetland regions), producing agricultural crops (through supplying water and nutrients), producing wood, supplying energy, producing sludge and

plant-based materials, transportation, and entertainment and tourism functions can be mentioned.

Economists and scholars are increasingly involves in evaluating and investigating the ecosystemic values and services of natural environments, including wetlands. This difficult task is accompanied by numerous approximations and uncertainties. Some recent studies show that ecosystems create an annual service value of at least 33 trillion dollars, 4.9 trillion dollars of which are supplied by the wetlands.

Neglecting the status of wetlands in the course of development has created serious challenges for these valuable ecosystems in many regions of the world. The effects of this destructive trend on the life of human beings and biodiversity have forced many countries to take measures for conservation and restoration of wetlands by utilizing inhibitive strategies and applying new management methods in line with the realization of sustainable development.

Accordingly, the current document titled "The National Strategy and Action Plan for Conservation of Wetlands" provides a framework for implementing the ecosystem approach in all wetlands in the country in a way that wetlands can be managed in a sustainable manner in the future, biodiversity is conserved, and people can take advantage of healthy and generative ecological systems.

The Purpose and Necessity of Developing this Document

Due to the negative effects of many activities, a lot of wetlands, which are highly important sources for nature, economy, health, food, security, water, and tourism, are on the course of being destroyed. The conservative activities implemented so far have not been able to prevent or mitigate the destruction of wetlands due to their scattered nature and inefficiency. In order to respond to these dire circumstances, the Department of Environment and the United Nations Development Programme (UNDP) with the support of Global Environment Facility (GEF) have defined a project in order to show how a new management approach can result in conservation of wetlands, biodiversity, and healthy ecological systems in a way that all the stakeholders, especially the general public, can participate in the management, conservation, and reasonable utilization of the wetlands. The Conservation of Iranian Wetlands Project (CIWP) started in 2004, and it started working on selected important wetlands, including Lake Urmia, Parishan Wetland, and Shadegan Wetland, in order to mitigate or eliminate threats in particular, and facilitate the sustainability and survival of wetland ecosystems in Iran in general. The project tries to extend the acquired experiences to other wetlands in the country by introducing the ecosystem approach and establishing a new management system, while providing legal mechanisms for implementation. One of the most important features of the approach utilized in this project is its cross-departmental and participatory nature as a way to show how we can restore and conserve wetlands while realizing ecological, economic, and social objectives.

The ecosystem approach has been used in various ecosystems and regions of the world. This approach places people and the way they utilize and take advantage of natural resources at the center of the decision-making process. Therefore, the ecosystem approach can be used for striking a proper balance between conservation and utilization of the biodiversity in regions where various resource users and important natural values are present.

In order to make use of the achievements obtained from implementing this approach in the selected wetlands, the Department of Environment needs to develop national strategies and action plans for conservation of wetlands. These strategies and action plan must mandate the use of the ecosystem approach for all the wetlands in the country in a way that they can be managed in a sustainable manner in the future, biodiversity is conserved, and people can take advantage of healthy and generative ecological systems. The above-mentioned strategy and action plan require informing the society about the features and importance of the wetlands and their multifaceted values. The action plan must facilitate partnership and cooperation and set clear directions and priorities for all the governmental organizations whose activities impact wetlands. This plan will help with establishing an integrated approach for managing water sources and lands. It is necessary for wetlands to be influential in improving the socioeconomic state of the country. This strategy and action plan constitute a framework for facilitating the following:

- A clear long-term perspective for wetlands in Iran; and
- Setting the overall objectives and identifying prioritized measures that must be adopted or directed at the national level for realizing the required objectives.

The National Strategy and Action Plan for Conservation of Wetlands in the country is the result of years of collaborative work by a large number of national and provincial managers and experts along with the representatives of stakeholder sectors, including various public organizations, non-governmental organizations (NGOs), and local communities, who have played a role in developing this document by participating in meetings or providing comments about the drafts submitted from 2008 to 2010. After the cabinet ratified a directive on wetlands, this document was revised and updated in 2015 and 2016 by key stakeholders. In these sessions, the utilization of the ecosystem approach and the experiences in the three selected wetlands during the first phase and ten new wetlands during the next phases were discussed and evaluated. The participants in this process devised the vision, general goals, strategies, and the action plan. During the development process, various governmental departments and all the non-governmental stakeholder groups were extensively consulted.

In the framework of these activities, by taking measures such as defining and implementing "The National Plan for the Conservation of Endangered Wetlands in the Country" and allocating specific budgets for the management and restoration of wetlands, the Department of Environment has started a national movement for the conservation of wetlands. Moreover, based on the ratification and communication of "the Directive for Conservation, Restoration, and Management of Wetlands in the Country" by the cabinet on June 23, 2015, the Department of Environment was required to work with the Ministries for Energy and Agricultural Jihad and other stakeholders to update "The National Strategy and Action Plan for Conservation of Wetlands in Islamic Republic of Iran" within six month of the communication.