

Climate, Biodiversity, and Sustainable Development Legislation in Najaf Governorate: Legal Frameworks and Local Application

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Abstract

The Iraq Governorate of Najaf is suffering complicated situations of climate change, loss of biodiversity, and growth of unsustainable urban conditions. This paper discusses the national and international legislative frameworks touching on the environment with regard to the embrace of such legislative framework at the local levels in Najaf Governorate. Its further talks about how well the local authorities are adhering to the Iraqi own laws of nature like the Environmental Protection and Improvement Law No. (27) of 2009 and even some of the international agreements like the Paris Agreement and Convention on Biological Diversity. The study emphasizes the importance of civil society, education and religious organisations as tools of creating environmental awareness, offers some practical suggestions on how to improve environmental governance and establishment of sustainable development at the local level. The objective of the paper is to assist the decision-makers and researchers in coming up with more inclusive, equitable and effective environmental policies.

Keywords: Legislation, Climate, Biodiversity, Sustainable Development, Environmental Law.

Introduction

The past several decades has been marked by the significant intensification of environmental problems on both global and local scales, which has become the leading reason to create high-tech legislative systems that could help to find a way out of the country and the unsustainable consumption of nature and natural resources. The problem of the accumulation of environmental impacts affects many governorates in Iraq due to the superposition of man and nature causes and the most important example is the province of Najaf is one of the largest religious and tourist cities that exacerbate pressure on its environmental resources. The proposed study is in light of the need to evaluate the effectiveness of Iraqi legislative systems in environmental protection and sustainable development and to reveal the level of the implementation of the introduced legislative acts at the ground of the Najaf Governorate. It also seeks to determine the correlation between the law and institutional and societal practices and to what degree domestic affairs are in accordance with international commitments of Iraq.

Literature Review

Iraqi Environmental Legislation

In Iraq, the environmental legislation consists of a series of laws and regulations which attempt to protect the environment and make it sustainable among which there is the Environmental Protection and Environment Improvement Law No. (27) of 2009. According to this law, it has been stated that there is a need to conserve natural resources, minimize the pollution of the environment and better the livelihood of the citizens. Government agencies and private institutions also have well-defined obligations to meet in the realms of environmental governance and development program applications that are in line with the concepts of sustainability, as stipulated by the law. Moreover, we have several supporting laws governing particular matters, i.e., the Water Law No. (51) of 2008 regulates the management of water resources, whereas the Forestry and Weeds Law No. (32) of 1969 tries to maintain biodiversity through the protection of vegetation cover.

Relevant International Agreements

Iraq is a party to a number of important international conventions related to climate, biodiversity and sustainable development, including:

- **The United Nation Framework Convention on climate change (UNFCCC)** was to stabilize the level of greenhouse gases in the environment so as to spare us extreme climate changes.
- **Paris Climate Agreement (2015)**, has committed the states to work on national plans to develop low carbon consumption and decreased emission.
- **The Convention on biological diversity (CBD)** works on the sustainability of natural resources as well as safeguarding the diversity of life.

These arrangements are in order to compel Iraq in the formulation of national policies and laws in accordance with international commitments and give a guideline towards enhancing the environmental status and realization of sustainable development.

Environmental Reality in Najaf Governorate

Climate Challenges

The Najaf governorate is being confronted with fast climatic alterations in the form of the high sunshine, changes in the quantity of the rains and more droughts. The consequence of these amendments is the adverse effects on water and agricultural resources and a higher possibility of desertification and soil erosion. The impact on us the people is also influenced by heat waves since people living in dense cities have problems with the health system and infrastructure (UNFCCC).

State of Biodiversity

Najaf can be characterized by comparatively poor biodiversity with the arid climate and fast urbanization; the natural habitats are abandoned as well as the population of many native plants and animals is decreased due to the lack of natural habitats. Environmental degradation of agricultural and rural locations is caused by chemical pesticides and non-sustainable forms of farming and influences the balance of the environment and the economy of the region (Paris Agreement, 2015).

Sustainability and Urban Development Issues

Najaf is undergoing pressure due to population growth and urbanization, it is impacting natural resources, and generating solid and liquid wastes in large quantities. Besides poor development plans where the environment is considered in an integrated way, challenges in waste management, and the absence of the environmental infrastructure are dimensions that the city is plagued with. The decision not to incorporate the concept of sustainable development into the planning of urban areas in the governorate interferes with the progress made by the area in terms of environmental and social sustainability.

Analysis of the Extent of Application of Legislation in Najaf Governorate

Institutions of Implant and Control

Several government agencies in Najaf implement and supervise the usage of environmental laws notably the Environment Directorate within the governorate and the Central Ministry of Environment. The municipalities are also acting as an importer of the environment protection laws particularly the waste management and the urban pollution guidelines. Nonetheless, these institutions are restricted in the performance of their task due to lack of financial and human resources (Convention on Biological Diversity, 1992).

Legal and Administrative Challenges

There are various challenges that are associated with the implementation of environmental legislation in Najaf; these challenges include:

- Lack of proper coordination among various government institutions that results to duplication of roles and slowing down of the process of policy execution.
- The absence of stiff management of the industrial and agricultural activities which lead to environmental degradation.
- Ignorance by certain officials and citizens in appreciating the need to follow the environmental laws.
- Neglecting to revise the laws and adapt them to the changes taking place at the international and local levels, particularly when it comes to climate changes and biodiversity.

These issues make the environmental laws less viable, and therefore, effective mechanisms of implementation and follow-up have to be developed to create conditions, under which the targeted objectives will be realized.

The Importance of Civil Society and Religion Buildings Towards Creating Environmental Awareness

The Civil Society and religious institutes can be very instrumental in propagating the environmental consciousness in the Governorate of Najaf because they provide strong social and cultural influence to the local populations.

Civil Society

The civil society organizations are also instrumental in creating awareness regarding the problems of climate, biodiversity and the sustainable development by means of education campaigns, workshops and local based environmental projects. Those organizations also help to keep track of environmental policies implementation and require the enhancement of legal and operating systems.

Religious Foundations

There is the wide role of religious institutions in Najaf in direction of social conducts and values. Several academicians and activists have come to their senses to treat the subject of environment religiously and ethically and they emphasize that the preservation of the creation of God and protection of the natural foods are some of their religious obligations. The step encourages the populations to accept environmental policies, as well as encourages the environmental development at the local fronts.

Unity Among Various Parties

The co-operation of government agencies, civil society and religious organizations is to be enhanced to create a common front in the battle towards embracing and achieving the sustainability agenda. This involves holding programs together, information sharing, and the establishment of integrated educational programs that would see to it that culture of sustainability is realized in the governorate.

Results and Discussion

Najaf is under several environmental threats such as climate change, loss of biodiversity and pressure on sustainable urban development. The legislative frameworks of Iraq are a good framework to base the activation of the environment and the realization of sustainable development, however, the execution of the legislation in the local level is poor in its coordination and control. The relevant government institutions have no resources and abilities to manage the environmental issues effectively. Civil society and religious institutions have a role and necessity in enhancing environmental awareness and helping in sustainable development activities. Collaboration between official organizations and the civil society should be reinforced to improve the execution of environmental laws in Najaf as a matter of urgency.

Fig. 1 displays a line graph indicating the average annual change in temperature in Najaf between 2005 and 2024 whereby we note that there is a gradual increase in the temperature which is a sign of climate change. Fig. 2 shows a circular graph showing the distribution of pollution sources in Najaf Governorate, where solid waste constitutes the largest percentage, followed by industrial and agricultural pollution and water pollution. Fig. 3 present the bar graph that depicts the relationship of the vegetation ratio and biodiversity index of Najaf and other Iraqi governorates and reveals that the proportion of vegetation is relatively low in comparison to particular regions.

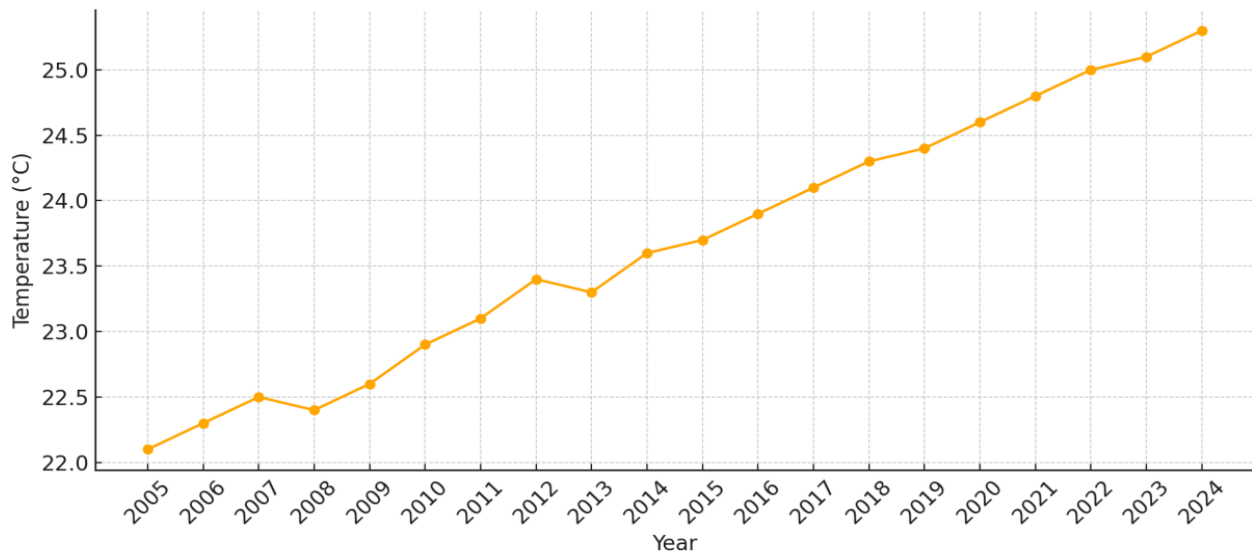


Fig. 1: Change in Annual Average Temperature in Najaf (2005-2024)

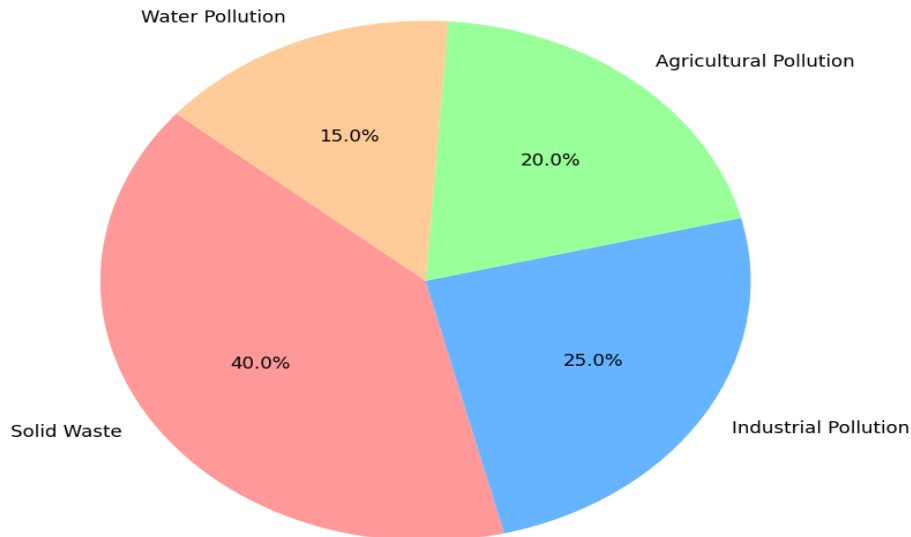


Fig. 2: Pollution Sources Distribution in Najaf Province

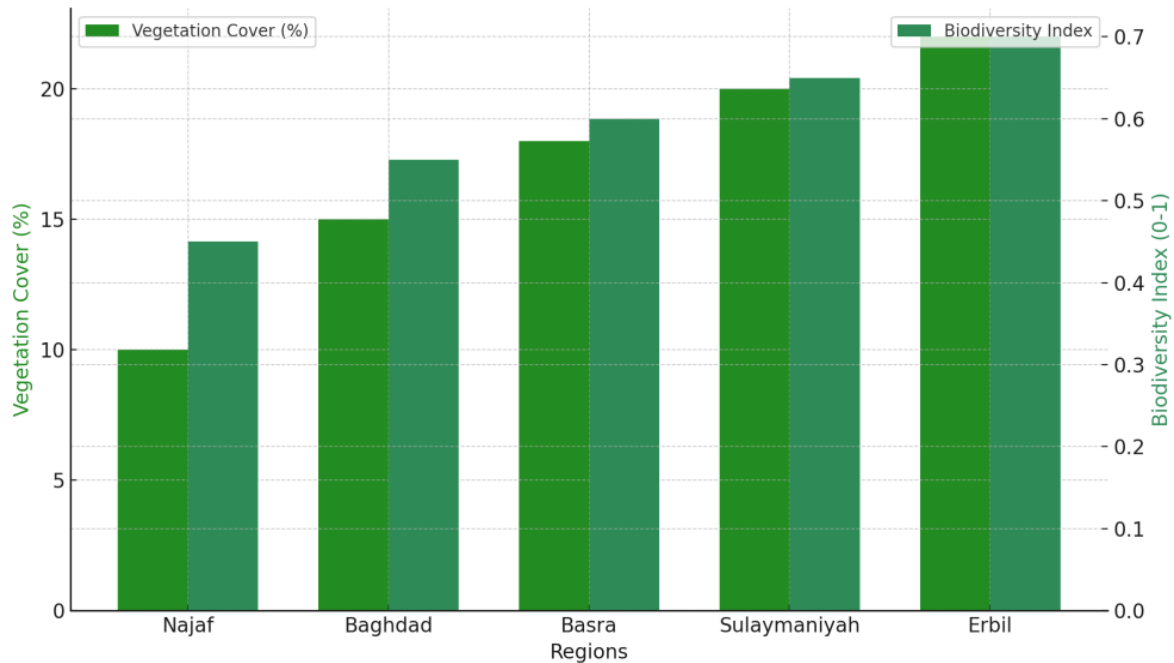


Fig. 3: Vegetation Cover and Biodiversity in Najaf Compared to Another Iraqi Region

Table 1 shows national environmental legislations and Table 2 international environmental agreements joined by Iraq (KadhemAl-Jashaami et al., 2024; Al-Jashaami et al., 2024)

Table 1: National Environmental Legislations in Iraq

Law	Number	Year	Scope of Application
Law for Environmental Protection and Improvement	27	2009	Protection of natural resources and pollution reduction
Water	51	2008	Management of water resources
Forests and Pastures Law	32	1969	Protection of biodiversity and vegetation cover

Table 2: International Environmental Agreements Joined by Iraq

Agreement	Year	Main Objective
United Nations Framework Convention on Climate Change (UNFCCC), art.	1992	Stabilizing greenhouse gas concentrations in the atmosphere
Paris Agreement on Climate Change	2015	Reducing emissions and promoting low-carbon development
Convention on Biological Diversity	1992	Protecting biodiversity and sustainable use of natural resources

Recommendations

Institutional capacities: There is a need to offer financial, human and technical resources to the Directorate of Environment and the concerned authorities to enhance control and application of law. **Creation of law:** Revision of environment laws to ensure they comply with the current international standards chiefly regarding climate change and biodiversity hedge.

Enhancing coordination: Enacting coordination system among ministries as well as governorates to realize a coordinated implementation of environment policies. **Creating environmental awareness:** The promotion of environmental educational activities in secondary schools and universities and the boosting of media campaigns and community activities. **Empowering the position of the religious establishments:** Collaboration with the religious leaders in providing fatwa and instructions aimed at the affection of the natural resources and protecting the environment. **Advancement of sustainable development strategies:** The incorporation of environmental and social elements in the local development's strategies according to consideration of the universality of Najaf.

Conclusions

Enactment of Climate, biodiversity and sustainable development legislation is one of the pillars to guard the environment in order to consolidate the quality of life within Najaf Governorate. Despite the sophisticated legal systems that exist on the national level, and that meet the requirements of international standards and conventions, the difficulties that have to be faced by the implementation of these laws on the local stage are high. The institutional capacities and coordination should be strengthened among stakeholders as well as the involvement of the civil society and religious institutions in the processes of awareness creation and implementation. The real integration of SDGs into the local development plans is an important step in the direction of balanced development that conserves natural resources and makes them sustainable even in the future. Thus, the political willpower must be robust and the masses must support the milieu so that environmental laws can be put into motion and healthy and sustainable environment can be attained in Najaf.

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