



Challenges facing Iraq's Environment

There are many factors and practices in Iraq that has a negative effect on the overall health of the environment. Some of these issues are included below, fast and immediate remedies should be put in place to prevent further degradation of ecosystems in Iraq and start the healing process for a healthier and restored environment in the country.

We can see that some of the factors which negatively affect the environment in Iraq are due to practices from across the borders of Iraq; others are due to internal practices, policy shortfalls and lack of enforcement mechanisms.

FIRST: Water

Water is one of the most valuable elements in nature. Adequate availability of clean, well-managed water resources is a key indicator of a healthy ecosystem.

The main **external** factor that has a devastating effect on Iraq's environment is the reduced flow of surface water that comes to it through neighboring countries. While some of this water reduction may be due to climate change and drought conditions, it is clear that the main factor in the reduction of water entering Iraq from Turkey, Iran and Syria is due to water projects erected in these countries; and other local practices that are preventing the water from flowing into the Tigris and the Euphrates as it has done throughout history.

These external factors can only be addressed by Governmental Political Initiatives to open dialogues with our neighboring countries for a fair and equitable use of our shared water resources and also to get the support of the International community for equal water distribution in the basin.

Internal factors for reduction of available water and for the poor quality of what is available are due mainly to the following practices:

- a. Lack of domestic water usage regulations and/or the lack of an enforcement policy for these regulations when they exist. (Washing Car/Porch, Pipe tapping, well drilling, private lawn wateringetc.)

- b. Municipality authorities lack of modern **Leak Detection** techniques for water mains and water networks.
- c. Lack of **awareness** within the public and the absence of effective educational and awareness campaigns to build the knowledge base of the public for responsible water usage.
- d. No adequate **Industrial waste management** system (practices, regulations, enforcement)
- e. Lack of adequate **sewage treatment plants**.
- f. Lack of a National **Water Quality Index**, to help set the guidelines for passing regulations regarding water-related practices affecting surface and groundwater.
- g. Lack of rules regulating in-stream gravel mining which can have adverse affects to water quality, biodiversity and aquifers.
- h. Inadequate Trash collection, Trash burning and the absence of Trash recycling.
- i. Inadequate **Rivers and Lakes cleaning**, and lack of projects to dredge the refuse deposited on the beds and banks.
- j. Unregulated recycling mechanism of cars and domestic power generators; oil, diesel and spare parts (Substances would leak to contaminate groundwater tables)
- k. The wide, unregulated use of **Poison and Pesticides** in fishing and farming.
- l. Regulating the use of water in the **Oil production** sectors with coordination with the water-related authorities.
- m. Using old techniques and practices in farming irrigation (Flooding rather than using drip irrigation or controlled sprinkler systems)
- n. Lack of assistance/demonstration/incentive programs that encourage and promote water conservation/protection practices

Second: Air Quality & Land

Iraq is suffering from unhealthy air quality and impacts to land due to practices that both the government and the public are adopting such as:

1. The unregulated use of **Power Generators** due to the insufficient output of electricity generated by the government
2. Lack of **Car emission** regulations and modern car inspection techniques.

3. **Trash burning** (due to inadequate trash collection) & **Tire burning** (in social and ethnic celebrations)
4. **Tree cutting/burning** (reducing photosynthesis which helps reducing the CO₂ from the air)
5. Lack of **Green Belts** and **Parks** in and around urban areas.
6. Lack of standards and unregulated **construction practices** for buildings, roads and facilities as well as dumping of construction materials also poor quality construction materials and methods reduce efficiency and cause unnecessary emissions.

Minimal use of alternative, less-polluting energy sources (**Solar / Wind power**)

Third: Biodiversity

A rich and healthy environment is clearly portrayed on the ground whenever we find a rich and diverse flora and fauna. In Iraq's case, both are suffering a great setback from the levels that existed even a few decades ago. This degradation of Iraq's biodiversity is due to a number of factors, some of which are easy to remedy simply by adopting strong and effective regulations, while others are very complicated and require long-term solutions with stakeholder involvement.

One of the major setbacks (probably the most devastating of all) is what happened to the **Marshes of Mesopotamia**, which were nearly destroyed by the criminal act by the deposed regime when it decided to dry-up the marshes for political and military conveniences. Some of these devastating effects have actually been reversed immediately after the fall of the regime, when the **Marsh Arabs** broke some of the dykes that the old regime had built to drain the marshlands.. As a result of this action between 40-60% of the Marshes were re-flooded in 2003 and life started to return to the area.

Nature Iraq (www.natureiraq.org) has been active since 2004 in the Marsh areas, as well as Kurdistan, Northern Iraq and Central and Western Iraq, surveying areas to determine sites with the highest biodiversity and best water quality. Current needs include:

1. Development of a network of **National Parks** and **protected areas** throughout Iraq (e.g. there are efforts to establish a Mesopotamian Marshlands National Park in the Central Marsh and the Hawizeh Marsh has been established as a Ramsar wetland site of international importance. There are also smaller initiatives, cultural sites and some areas under tribal protection. These areas all need resources, laws, enforcement and development for their proper protection.
2. **Unregulated hunting** and killing/harvesting of threatened species has driven some species in Iraq to the brink of extinction or threatened their global populations. Education as well as legal and enforcement mechanisms are needed.
3. Trade in endangered species (such as birds of prey) has a long history in Iraq and Iraq needs to join in international conventions such as CITES to stop the illegal trade of these species. Training and education needs to focus on police and border officials as well as the general public
4. Many of Iraq's most important sites are threatened with rampant, **uncontrolled development** or face the threat of further degradation. Some areas it may be possible to restore and others

may be destroyed by industrial, hydroelectric or oil development. Environmental Impact Assessments rules now exist in Iraq but they are not effective. Development projects need to address environmental impacts in order for them to succeed.

Conclusions

Many of these issues are overlapping and require a number of actions that are suited for government ministries, law enforcement agencies and will require dedicated resources to achieve.

NGO's, with their strong ties to local communities and ability to act quickly without entrenched bureaucracy, can perform many of these tasks to aid the government in effective implementation of programs and projects but few funds are available for straightforward environment-oriented projects. In addition, the government agencies that are responsible for addressing Iraq's pressing environmental problems often have the least funding or capacity to do this work.

Nature Iraq recommends increased funding to both responsible ministries who are charged with the duty to resolve these issues and the creation of an independent fund that NGOs can apply to receive funds for environmental projects

Throwing money at the situation though is also problematic and Nature Iraq recommends open public accounting and a clear plan with pragmatic and achievable benchmarks for evaluating progress towards improving the environment in Iraq.