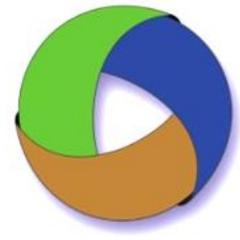




Republic of Iraq

Ministry of Environment



Republic of Iraq



**The National Environmental Strategy
and Action Plan for Iraq
(2013 – 2017)**

This document has been prepared in collaboration with the United Nations Environment Programme, United Nations Development Programme and the World Health Organization





Prime Minister Speech

Iraqis today look to upgrading their livelihood to the level of what was described by the country's constitution in its thirty-third article, "Everyone has the right to live in a sound environmental conditions," and it really is what the Ministry of Environment try to achieve and is represented by its sober emblem "environment gives us life, let's care for it". Perhaps this is what distinguishes the relentless pursuit of the government, and all its sectors, to achieve those aspirations and environmental benefits and privileges to live in a healthy, safe, beautiful, sustainable, multipurpose and productive environment.

The country has suffered in the past from a failure in the political and administrative decisions which led to a serious deterioration, and for decades, in the social and living conditions for Iraqis. Those circumstances later shadowed, and still, most of the wealth and environmental features in Iraq, and led to the aggravation of the suffering of individuals from the low level of welfare services associated with local ecosystems, and in conjunction with the weakness and lack of clear commitment to the application of the provisions of the legislation and the environmental laws and regulations .

The development and protection of environmental quality and sustainability for future generations is a national duty, popular, and governmental, with shared responsibilities to achieve it by individuals, organizations and government departments alike. However, this ultimate goal will not come to light without the availability of several factors, not least the proper environmental planning and identifying approaches and environmental policies to be stated in a strategy for the future that is clearly defined and has guaranteed results .

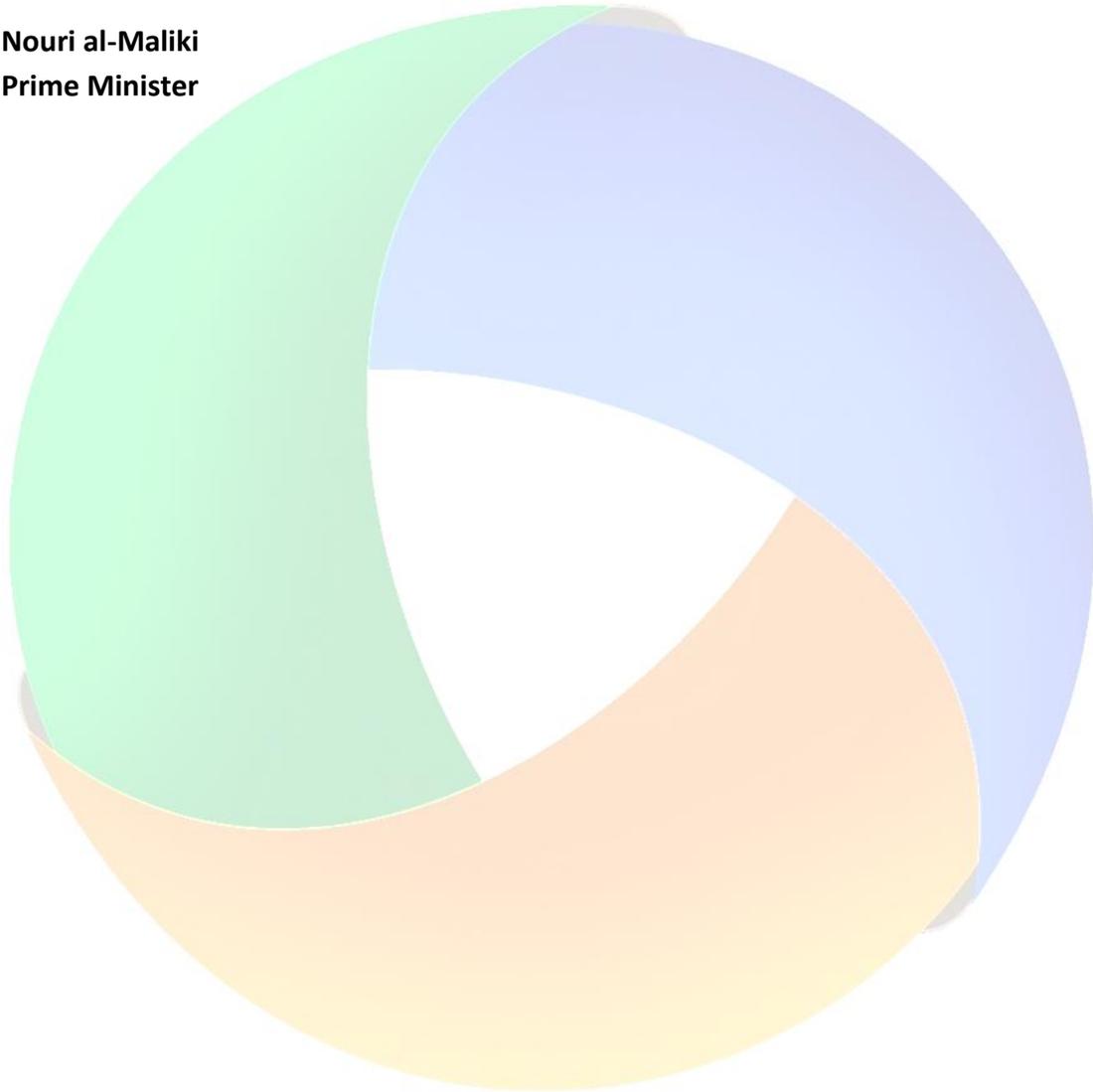
The government, over its past years has tackled the tasks of environmental protection and conservation of natural resources through the issuance of laws and regulations that aimed at that. As well, has ratified many regional and global conventions and protocols which have high content of support to what Iraq sought to achieve for the aspirations and objectives in this area.

We are delighted today to reap the first fruits of scientific work organized and played by the Ministry of Environment for planning and determining priorities, launching the first national environmental strategy specializing in environmental issues. Thereby, achieving the launch of attested work and effective realization of the

Action Plan, all aimed to protect ecosystems and biodiversity and to address environmental problems within the nature of Iraq .

Sincere thanks and appreciation is offered to all who contributed to the completion of this work, calling for God to help us all for the goodness of Iraq and humanity. Peace and mercy and blessings of God.

Nouri al-Maliki
Prime Minister





Minister of Environment Speech

I'm pleased to present the National Environmental Strategy and Action Plan (NESAP) for Iraq (2013 – 2017) to both citizens and decision makers in order to take all necessary measures to preserve the environment and ensure safe life and good health for Iraqis.

After the creation of the Ministry of Environment (MoE) in 2003, there was a need to develop programs and plans to address the deteriorating environmental situation in Iraq. In order to adopt an accurate technical approach, decisions makers sensed the need for an integrated national environmental strategy in Iraq taking the current situation and future prospects into consideration.

A nation's development and advancement can be truly measured by having future visions based on clearly defined strategies for different social goals and activities. Relations between governments and people are based on a series of commitments which can't be satisfied without previous knowledge of current and future conditions including environmental and strategic planning and long-term plans, as a trait of developed nations, which provide a true opportunity to address the actual and complicated environmental problems. Consequently, it leads to building an integrated national environment corresponding to the aspirations of the state and society. Lack of proper strategic environmental planning and random decision making have caused significant environmental deterioration in Iraq and reflected negatively on public health, ecosystems and living organisms in Iraq.

As everyone knows, Iraq has gone through extremely difficult conditions because of the repeated and continuous wars causing significant damage to all aspects of life. Today, the environment requires a practical reconsideration of the requirements to halt deterioration, protect the environment and biodiversity from pollution, change ways of addressing natural resources to sustainable approaches and activate the role of local authorities and population in planning proper environmental development and management.

NESAP highlights a vital issue, that is "state institutions and society shall adopt a proper and integrated environmental management approach by applying the concepts of sustainable development, encourage cleaner production, use environment-friendly technology and cleaner fuel, implement policies of optimal utilization of natural resources and promote environmental awareness to build a generation well aware of environmental issues."

NESAP aims at providing a distinguished quality guide for state institutions and society for environment protection in Iraq. Previous development plans were based on excluding environment protection projects from the priorities of other ministries and sectors for institutional and financial considerations. This Strategy, however, obliges the bodies concerned (as they have participated in the preparation process) to adopt environment-protection procedures and implement relevant activities during the period (2013-2017).

MoE has adopted an ambitious plan to pursue this task by bringing together its experts, other academic professionals from the Ministry of Higher Education and Scientific Research and international experts from UNDP and UNEP. The Strategy identifies urgent priorities such as protecting and improving the quality of water, soil and air; preserving biodiversity and marine and coastal environment; minimizing oil, radioactive and chemical pollution and waste in general; and developing the institutional and legislative framework. Furthermore, the Strategy has an implementation plan that includes several programs to protect and enhance the environment over the next five years. We should praise the efforts of the representatives of all ministries in the preparation of the strategic environmental analysis in collaboration with the World Health Organization, which has been one of the important sources that have been relied upon to develop this Strategy.

We extend our gratitude to all parties participating in accomplishing NESAP, especially UNDP-Iraq office, UNEP-West Asia office, MoE experts and academics from the University of Baghdad. Special thanks to head and members of Health and Environment Committee in Iraqi parliament for their valuable comments on this documents. May God grant us all success to do good for our beloved country and serve humanity.

Eng. Sargon Lazar Slewa

Minister of Environment



Speech of the Head of Health and Environment Committee at the Iraqi parliament

One of the most important features of progress today is the care and attention a nation may provide to environment. Environment has direct and indirect impact on the human health and also on various social and economic aspects of life in different countries.

Having suffered much from the scourge of wars, Iraq needs diligent and methodical efforts to repair the ravage caused by those wars. Meanwhile, natural changes, most prominently the climate change and drought, have started to negatively affect our environment.

The first step toward improving the environmental conditions is an in-depth analysis of the environmental circumstances in Iraq and the development of adequate strategies and action plans to reform the whole environmental system and protect environment against the so many wrong practices which are unfortunately still prevalent as mentioned in this document.

We highly appreciate the MoE initiative to develop the national environment strategy and the related 5-year action plan. This document, which was developed last year by national experts in collaboration with UNEP/UNDP consultants, provides a realistic strategic analysis of the environmental situations in Iraq.

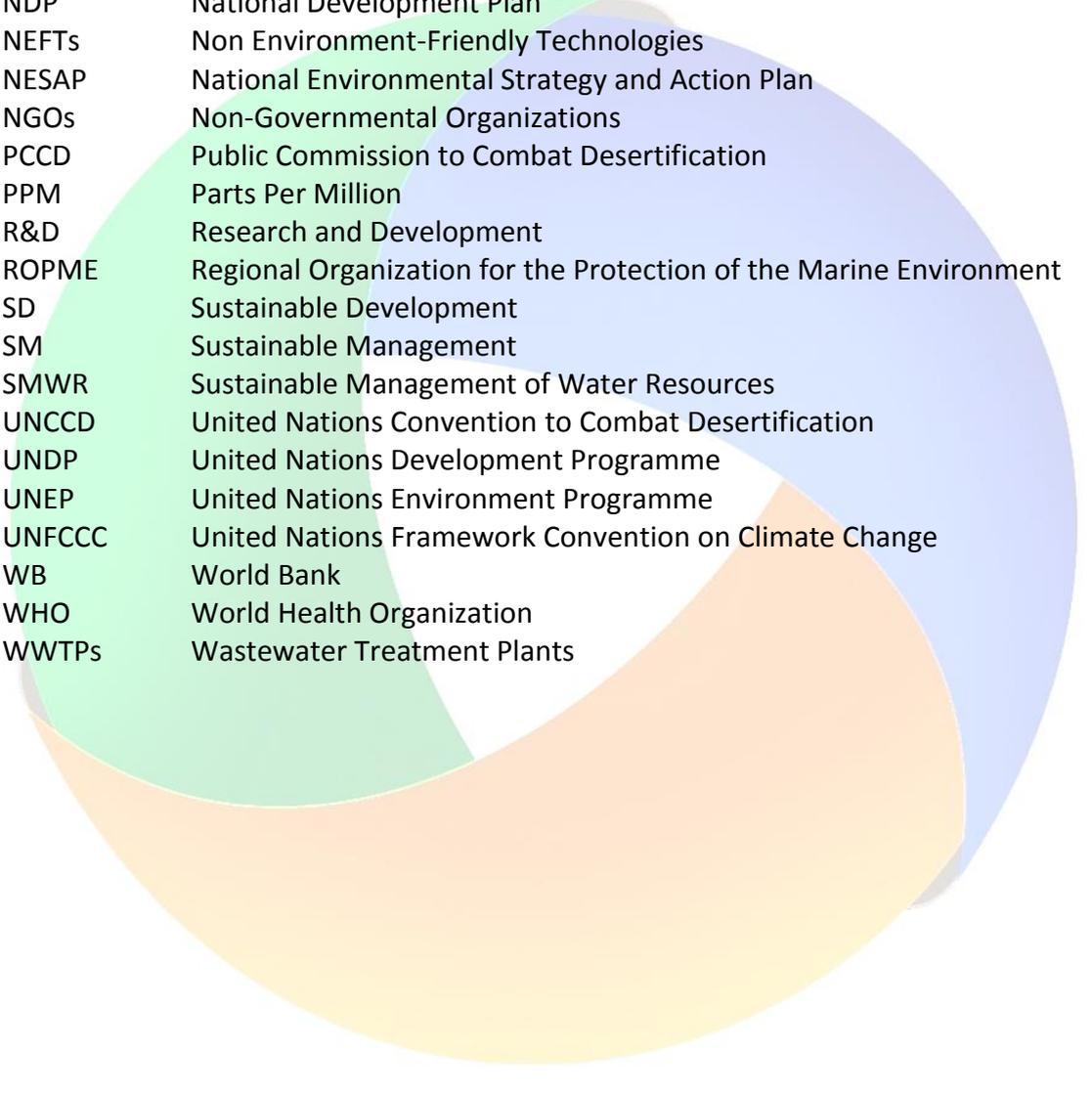
What distinguishes this MoE strategy prepared is the realistic identification of the priorities of environmental action in Iraq as well as the most important environmental challenges and problems facing the country. The strategy proposes programs and projects to address these problems in order to protect and improve the environment in Iraq. We, as a legislature, are responsible of this sector. We support and adopt this document with a view to providing a good environment worthy of the children of our country. We recommend all parties to cooperate with MoE in implementing its tasks. We also call all individuals, government institutions and NGOs to provide physical as well as moral support to MoE to enable it to fulfill its duties.

God bless

Dr. Liqaa Alyassin
Head of Health and Environment Committee-Iraqi Parliament

Abbreviations

BOD	Biochemical Oxygen Demand
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CNG	Compared Natural Gas
CoR	Council of Representatives
COSIT	Central Office for Statistics and Information Technology
CSOs	Civil Society Organizations
DNT	NESAP's Development National Team
EFTs	Environment-Friendly Technologies
EIA	Environmental Impact Assessment
EPI	Environment Protection and Improvement
EPIA	Environment Protection and Improvement Authority in Kurdistan
EPIC	Environment Protection and Improvement Council
EPICGs	Environment Protection and Improvement Councils in the governorates
GIS	Geographic Information System
GoI	Government of Iraq
HECP	Health and Environment Committee in the Parliament
HECGs	Health and Environment Committee in the Governorates
HR	Human Resources
ID	Iraqi Dinar
IDP	Institutional Development Program
IM	Integrated Management
IT	Information Technology
IUCN	International Union for Conservation of Nature
IWRM	Integrated Water Resources Management
IWTs	Industrial Wastewater Treatment Plants
KRSO	Kurdistan Regional Statistics Office
KVA	Kilovolt-Ampere
LNG	Liquid Natural Gas
LPG	Liquid Petroleum Gas
M&E	Monitoring and Evaluation
MMPW	Ministry of Municipalities and Public Works
MoA	Ministry of Agriculture
MoB	Mayoralty of Baghdad
MoC	Ministry of Culture
MoCH	Ministry of Construction and Housing
MoCom	Ministry of Communication
MoD	Ministry of Defense
MoE	Ministry of Environment
MoElc	Ministry of Electricity
MoH	Ministry of Health
MoHESR	Ministry of Higher Education and Scientific Research
MoHR	Ministry of Human Rights
MoI	Ministry of Interior



MoIM	Ministry of Industry and Minerals
MoJ	Ministry of Justice
MoLSA	Ministry of Labor and Social Affairs
MoO	Ministry of Oil
MoPDC	Ministry of Planning and Developmental Cooperation
MoST	Ministry of Science and Technology
MoT	Ministry of Trade
MoTr	Ministry of Transportation
MoWR	Ministry of Water Resources
NDP	National Development Plan
NEFTs	Non Environment-Friendly Technologies
NESAP	National Environmental Strategy and Action Plan
NGOs	Non-Governmental Organizations
PCCD	Public Commission to Combat Desertification
PPM	Parts Per Million
R&D	Research and Development
ROPME	Regional Organization for the Protection of the Marine Environment
SD	Sustainable Development
SM	Sustainable Management
SMWR	Sustainable Management of Water Resources
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank
WHO	World Health Organization
WWTPs	Wastewater Treatment Plants

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Preface

The environment of Iraq has suffered, and still, many problems caused by natural and human factors, and wrong policies which isolated Iraq from the world for many years, and as a result of successive wars and international sanctions. During the recent decades, in particular, Iraq has been affected by a range of political changes, wars, which were negatively and directly reflected on the reality of Iraqi society and the Iraqi citizen. As a result, the issue of preserving and upgrading the environment and protection of the resources from depletion has come on top of interest, at the lead of local level, and a national responsibility in general. Nothing is more indicative than what it was confirmed by the Prime Minister HE Mr. Nouri al-Maliki in his opening speech of the strategy document: " Protection of the environment is a national duty that requires stakeholders to work hard to take care of it and take the necessary measures to preserve it". He also stressed the urgent need for the procedures, regulations and laws related to the required level of seriousness and rigor to protect the environment. In addition, it was also confirmed by HE Eng Sargon Lazar Slewa, the Minister of Environment, in introducing the strategy: "the true measure of the civilization of the nation and progress comes through ownership of future visions which are based on strategies and the goals and activities of interest to the community, including environmental planning, and for the long-term strategic plans". As pointed out by Dr. Liqaa Alyassin, Chairman of the Health and Environment Committee in the Iraqi Council for Representatives (the parliament), about "the importance of setting priorities for environmental action in Iraq and identifying the most important environmental challenges and problems facing the country and then propose programs and projects to address these problems in order to protect and improve the environment".

The causes of environmental degradation can be attributed to the increasing population growth (population pressure) and the increasing need for resources of food, energy, housing and water, and the increasing pressure on the environment due to increased disposed solid and liquid wastes, and those practices that threaten the continuation of life in ecosystems such as deforestation and destruction of forest areas and soil degradation and illegal hunting of wild animals and birds and urbanization (urban growth), desertification and land degradation, and poor environmental awareness and poor environmental monitoring systems, wars and political situation. The effects of environmental degradation in Iraq can be summarized by several aspects, including scarcity of water sources and pollution of water and air, and the degradation of biodiversity and pollution of the marine waters. The Ministry of Environment has recently prepared the first study of its kind in which it calculated the cost of environmental degradation in Iraq, where the cost was estimated between 4.9% - 8.0% of the annual gross national production.

Since the establishment of the Ministry of Environment in 2003 concern was focused on the implementation of the state policy in the field of protecting and improving the environment and to meet the challenges and complex problems facing the Iraqi environment. The Ministry seeks, in its general approach, the adoption of the concepts of sustainable development and integrated environmental management.

The pursuit also encouraged the use of clean energy and environmentally friendly technology, and the consideration of the optimal use of natural resources, and consolidates the principles of re-use and recycling. The ministry has also sought to activate the role of Iraq in the international arena, which has by now become an active member in several international environmental agreements and protocols, such as those on climate change, biodiversity, combating desertification and ozone, RAMSAR, and others. Also, the Ministry of Environment actively cooperates with the United Nations Environment Program and with other UN organizations in the implementation of capacity-building projects for the Iraqi staff officials.

The Ministry of the Environment envisaged the urgent need for the preparation of the National Strategy for Environment and the executive work plan, to realize the aim of improving the quality of life for the population of Iraq. The ministry seeks, from the perspective of environmental and health, as well as the assessment and inventory of all issues related to the reality of environment, to propose solutions and alternatives of environmentally sound green technology, green economy, eco-tourism and the concepts of changing types of fuel currently in use to those of less harmful-to-humans and the environment. It is hoped to help developing a strategic reference guide for those who are responsible for environmental affairs in the various sectors of the country and for inclusion in the new environmental policy strategies and future plans for these sectors and institutions. The environmental strategy will also help to build awareness of the application of the principles of sound environmental management for various projects including the creation of, and the reality of new, concepts of values of volunteerism in environmental practices at all levels of social classes, and the optimal use of environmental resources, without waste or abuse to the natural balance of ecosystem or to the biodiversity. The National Environmental Strategy will also contribute to the development of short and long-term solutions for significant problems on the local and regional levels such as climate change and potential environmental disasters and to build the necessary capacity in the field of advanced environmental monitoring systems.

In this context, the ministry has embarked on the preparation of this strategy and its Executive program with the active participation of all the relevant authorities and experts at the national level, and with the technical support of United Nations Development Program UNDP, the United Nations Environment Program UNEP and the World Health Organization WHO during the period July, 2011 to June, 2012. The Ministry of Environment as a national umbrella and supervisory environment sector has adopted the preparation of strategic and operational plan as a participatory approach between stakeholders of government and non-government and was taking into account the lessons learned from their experiences and comparative advantages that they attain. A working group was formed from national experts in addition to a number of distinguished international experts.

In this context, several meetings for the team were held and bilateral meetings between the team members and experts and stakeholders in the various institutions, in addition to organizing workshops for centralized groups to discuss some of the issues and consultation.

The strategy consists of four chapters in addition to the fifth special chapter on the executive plan. The first chapter includes the introduction while Chapter II deals with a general description of the state of the environment in Iraq and the third chapter covers the diagnosis and analysis of key environmental issues and identify strategic objectives, and finally monitoring and evaluation mechanisms and roles of different institutions has been included in the fourth chapter. The fifth chapter presents the Executive Program and the National Plan for Environmental Protection, which includes an array of programs and projects for the implementation of each of the strategic goals. Ten key objectives of the strategy (strategic goals) have been identified including all subjects and environmental affairs. These goals came as a result of in-depth analysis of the environmental issues and priorities, and the active participation of all stakeholders and intensive consultations that took place during the preparation of the strategy. The report forms strategic analysis of the environmental sector in Iraq, which was prepared in cooperation between the Ministry and the World Health Organization (WHO), is an important source and a key for the preparation of the present document. It has been taken into account the compatibility of those goals with the five axes of environmental sustainability which appeared in the National Development Plan 2010-2014, namely: air pollution, water pollution and soil pollution, desertification, solid waste and waste. It should be noted that these strategic objectives are integrated and interrelate with each other, and were here arranged by the logical sequence of the objectives and must be dealt with through a unified and comprehensive perspective. Solutions and interventions needed to deal with each issue have also been proposed. These ten objectives are to protect and improve air quality, protect and improve water quality, reduce land degradation and desertification, preserve coastal and marine environment, conserve sustainable use of biodiversity, development and improvement of waste management, reduction of oil pollution, reduction of radioactive contamination, Integrated Management to hazardous chemicals, and the development of the institutional and legal framework for the sector of environment.

The process of monitoring and evaluation is considered the most important tool to review progress made in the implementation of the strategy, and thus improve performance efficiency and optimum utilization of resources. It is therefore a burden on the shoulders of the Ministry of Environment that the monitoring process will be carried out by its competent provincial directorates and institutional structures. With regard to the assessment process, it will be implemented by third parties during 2014 and 2017. Instructive Indicators have been identified for monitoring and evaluation. It should be noted that these indicators are only indicative, and more specific numerical indicators will be selected for the Plan and the consequent strategies, so that they will be linked with and determinants to national standards and be measurable and reviewable.

The executive program and the national plan for the protection of the environment are an interpretation program for the implementation of the ten strategic objectives of the environment during the period 2013 – 2017. Each of the strategic objective is comprised a set of axes, which were also identified a set of related issues in the strategy document. When preparing this plan It has been taken into account a group

of programs and projects contained in the National Development Plan for the period 2010 - 2014, which is currently being implemented or will be implemented by the end of 2014. These were noted in the matrix of programs and projects in addition to propose a set of new projects needed to achieve strategic objectives through the three-year-plan. This plan covers the first phase of the implementation of the strategy will be followed by a future plan, or plans, to coincide with other forthcoming national development plans. The total estimated cost will be assessed through preparation of an operational plan that describes the stages of implementation and the amount of time and resources, and human and technical resources necessary to determine in detail the responsibility for implementation. It is worth mentioning that a number of ministries and government and non-governmental and private institutions will co-share the implementation of this plan. The Ministry of Environment, as well as sharing implementation of some projects that do not fall within the business of other institutions' responsibilities, will function as coordinator and evaluation and monitoring body for programs and projects of the plan.

Finally, the full implementation of the objectives of this strategy on both, the near- and long-term, perspectives will ensure a balanced and healthy environment for individuals and the society, and maintain the numerous natural resources from pollution. It will also help to disseminate the culture, and the application, of the principles of sustainable development as a concept that is fundamental to future generations, to enable them interacting with the environmental challenges faced by Iraq.