

The Kingdom of Saudi Arabia's Vision 2030 prominently includes a number of objectives to achieve the fifteenth goal of sustainable development. The Government of the Kingdom has also issued regulations to protect protected areas of wildlife and plants. It regulates hunting for wild animals and birds, trafficking in endangered species.

The Kingdom of Saudi Arabia's initiatives for preserving wildlife

- <u>Saudi Arabia Award for Environmental Management.</u>
- "Tree for Every Building" initiative.
- Establishment of a seed bank.
- <u>Development of the province of Ola and the Forsan Islands.</u>
- Sustainable development and management of rangelands and forests and combating desertification.
- National Program for Environmental Awareness and Sustainable Development.

"Let's Make It Green" Beats the Goal to Plant 10 Million Trees in 6 Months



The Ministry of Environment, Water and Agriculture and the National Center for Vegetation Cover announced the success of "Let's Make It Green" campaign. The green campaign was launched on October 10, 2020 to increase the vegetation cover and combat desertification by planting 10 million trees in 165 sites across Saudi Arabia.

The campaign covered all regions of Saudi Arabia with nearly 2.6 million trees planted in the Eastern Region, followed by over 2.1 million trees in Medina, about 1.3 million in Makkah, more than 1 million in Jizan, about 1 million in Riyadh, nearly 462,000 in Qassim and over 270,000 trees in Asir region.

The total number of trees planted in Al-Baha reached nearly 300 thousand, and more than 142 thousand trees were planted in the Northern Border, followed by Al-Jawf with more than 113 thousand, then

Hail with about 85 thousand trees, Tabuk with more than 75 thousand, and finally Najran with nearly 52 thousand trees.

The campaign included sustainable development projects, memoranda of understandings with government entities, private sector initiatives and active participation from all community members.

Speaking on the occasion, His Excellency Abuldrahman AlFadley, the Minister of Environment, Water and Agriculture, Chairman of the Board of Directors of the National Center of Vegetation Cover said that the success of the campaign is widely attributed to the unlimited support and care from Custodian of the Two Holy Mosques and the direction of HRH the Crown Prince to play a pioneering role in the region in protecting lands, achieving global targets in environmental protection, increasing vegetation cover, reducing carbon emissions, combating pollution and land degradation and preserving marine life.

AlFadley stressed that more trees will be planted across the country in all of its regions with tracked changes to ensure the initiatives are referenced properly as "Saudi Green Initiative" and "Middle East Green Initiative"

For his part, the CEO of the National Center for Vegetation Cover, Dr. Khaled Al-Abd Al-Qader pointed out that the close cooperation of public and private sectors, environmental associations, green associations and individuals lead to the success of this campaign which aims to restore biodiversity, rehabilitate affected natural areas, promote proenvironmental behaviors, protect the environment and improve the quality of life.

Al-Abd Al-Qader added that the campaign involves planting of endangered trees and shrubs in areas that were environmentally degraded due to overgrazing, logging, uprooting and urban sprawl.

"The campaign focused on planting native tree species which have adapted to Saudi Arabia's environment and require limited irrigation," he added.

The ministry ensured that the campaign is aligned with sustainability requirements and water conservation by using treated wastewater or seawater for irrigation, in line with the best international practices.





Environmental Protection in KSA

Environmental protection is a major factor in the battle of tackling environmental challenges. The Kingdom of Saudi Arabia has broadcasted its efforts to ensure its contribution to the protection of the environment and its resources. This section is dedicated to bringing forth the environmental challenges in the Kingdom and the Kingdom's international efforts in protecting the environment. It will also focus on wildlife and livestock, marine life and fish livestock, and the overall agricultural environment. Climate is an essential part of the environment; therefore, you will find entries dedicated to the weather, reducing air pollution, an index of air quality, reducing water pollution and reducing soil pollution. Waste recycling programs and initiatives are also introduced in this section in addition to environmental licenses, renewable energy and environmental legislation based on international systems and strategies for wildlife preservation.

Environmental protection is a primary system within the Kingdom of Saudi Arabia dedicated to tackling environmental challenges, in alignment with the Kingdom's 2030 vision, making a quantum leap in environmental protection leading to the reduction in the percentage of environmental pollution.

Environmental Challenges in the Kingdom

Economic development, continuous population growth, rapid urbanization, and increasing demand for water and energy create environmental challenges in Saudi Arabia.

The Most Prominent Environmental Challenges

Polluted well water, cement factories' wastes, increased emissions of sulfur dioxide and nitrogen oxide, land degradation and desertification, and others, which may cause an increase in environmental pollution and environmental risks.

The Kingdom's Most Prominent International Efforts in Protecting the Environment

Fulfilling its duty towards the environment, the Kingdom by launching initiatives and projects related to the protection of the environment. Some of the most prominent efforts include:

Establishing a research fund for energy and the environment

The Kingdom has the most significant environmental reconstruction project in history. The project is focused on developments, which were integrated after the Gulf War and costed the Kingdom more than. 1.1 billion US Dollars.

The Center for Desert Agriculture works on developing sustainable, low-input systems, which use water efficiently to produce food and grains and are proportionate with the coastal desert environments that depends on agriculture in relation to sea water and sunlight.

Innate Protection in the Kingdom

The Kingdom used to conduct the necessary biological and social studies and surveys to prepare the protected areas system with the World Union's expertise for Conservation of Nature. Experts from the Union and the Commission prepared a document, "a national system for preserving wildlife and sustainable rural development in the Kingdom of Saudi Arabia," based on which the announced network of regions was established protected so far in the Kingdom.

Wildlife and Livestock

The Kingdom has given great attention and importance to the wildlife initiatives and projects related to the environment by issuing regulations that preserve protected areas of wildlife and plant life aimed at controlling the trade and hunting of endangered wild animals and birds used for production purposes.

Protected Area System

The Kingdom has used the necessary biological and social studies and surveys to prepare the Protected Area System with the proficiency of the International Union for Conservation of Nature. Experts from the Union and the Commission prepared the following document, "A National System for Preserving Wildlife and Sustainable Rural Development in the Kingdom of Saudi Arabia", on the basis of which the announced network of regions was established and protected in the Kingdom thus far. The recently updated system, in accordance with environmental developments, includes a proposal dedicated to protecting 75 areas including, 62 land areas and 13 coastal and marine areas. To view the map of Protected Areas in the Kingdom and obtain information about them, please visit this page.

Classification of Wildlife in the Kingdom

- Diversity of Wild Mammals in the Kingdom
- <u>Diversity of Marine Mammals</u>
- <u>Diversity of Birds</u>

<u>The Initiative of the National Program for Environmental Awareness and Sustainable Development</u>

An initiative was established to raise awareness of environmental issues, thus raising individual and collective responsibility for preserving and enhancing every individual's role in society as a vital factor in protecting the environment by rationalizing the use of natural resources and reducing their pollution.

The initiative works in two ways:

The Performance Measurement Study: To find out current environmental awareness through field surveys at the level of individuals and institutions.

Environmental Awareness Programs: To implement campaigns that serve the main objective of the initiative and track the development of the level of environmental awareness for all segments of

The Kingdom's International Participation in Preserving the Environment

The Kingdom has participated in many international events to preserve the environment, and these examples including:

Green Riyadh

The Green Riyadh project was launched as one of the major Riyadh projects launched by the Royal Commission for Riyadh City, aims to reduce the air temperature in the city by 2°C upon completion. In line with the #Saudi_Green_Initiative, the project will include planting 7.5 million trees to provide shade and improve the quality of air. It comes as an achievement of the Kingdom's 2030 vision of raising the classification of Riyadh globally. For more details click here.

Environment Week

A week is devoted to the environment every year. The Ministry of Environment, Water, and Agriculture undertakes its establishment and implementation by inviting governmental and private agencies and environmental associations to participate in its activities in the first week of each year's spring season. The Environment Week is an important awareness initiative on the importance of the environment and its preservation. It also aims to raise each individual's awareness and responsibility towards the environment and collectively create an environmentally conscious society.

Princess Noura University trees 45 campus locations

On Tuesday, 3/11/2020, the Deanship of Student Affairs participated in the National Afforestation Campaign, launched by the Ministry of Environment, Water and Agriculture and the National Centre for Vegetation Development and Combating Desertification, under the slogan "Let's make it green." The campaign saw the participation of the staff and employees of Princess Noura University, in the presence of employees of the Ministry of Environment, Water and Agriculture, and the participation of female students of the Faculty of Science.

The campaign aims to contribute to the preservation of the environment, combat desertification, and contribute to increasing vegetation, by afforestation 45 sites on campus, infused with about 750 seedlings of Gulf ghaf trees and talisman.

The campaign coordinator, Dr. Najla Al-Shaya, explained that the participation of Princess Noura University promotes positive behaviors to maintain the integrity of the university environment, which reflects positively on the national environment and its development, in addition to improving the quality of life by urging students and university staff to afforestation, contributing to the activation of the activities of female students in the design of awareness messages for the community, and raising awareness of the harm of negative practices towards vegetation.

It is noteworthy that the importance of this participation aims to achieve the vision of the Kingdom 2030, and to activate the memorandum of understanding between Princess Noura University and the Ministry of Environment and Water through the cultivation of local trees low water consumption, adapted to the conditions of drought and high temperature within the university, which will be provided by the Ministry, and then attention and care by the university to ensure its sustainability.

Projects for this year:

1. Establishment of a center specialized in sustainability and building management

- The project aims to establish a permanent and accredited center of local and international organizations and bodies specialized in managing sustainability and facilities
- The center performs the following tasks:

- - Counteringand publishing research on energy, the environment and the management of university facilities
- Regular professional conferences and seminars
- - Granting professional accreditations in various fields

2. Adopt the Noora Health Initiative

- In the context of seeking accreditation from who and achieving the required standards, the Sustainability Department seeks as part of its participation in the initiative to:
- WHO standards continue to operate permanently within the university city
- Periodic annual review of the application of standards
- Adding new standards that promote health and sustainability in the university city

3. Afforestation and Gardening Project

The project aims to upgrade the aesthetic view of the university city by raising the level of afforestation and planting flowers and increasing the green cover and the project is based on the completion of the following tasks

- - Study the need of the university city of gardens, afforestation, green spaces, fountains and waterfalls
- Work a 3D design for the project and offer it for approval
- Preparing a phased action plan for the implementation of the project

Environmental Sustainability Department

Energy management:

- Activation of BMS building management system for building energy management

- - Check the performance efficiency of the cooling plant, pumps and heaters
- Construction of wind and solar power plants
- Review the operation of pumps and heaters and ensure that they are suitable for energy policies
- - Follow-up project (rationalization) to monitor the consumption of electricity and appropriate solutions to avoid it
- Check automatic lighting sensors and ensure the efficiency of their work

Water management:

- - Ensure that the procedure and results of periodic examination of drinking water and use
- Review the operation and distribution of grey water plants
- Introducing products and practices that will reduce water use for irrigation and use

Environmental management:

- Conducting an internal air quality check in buildings
- Review of collection and waste disposal procedures and their suitability for standard environmental management policies
- - Providing awareness courses in colleges to deal with waste
- Field noise tests
- Develop policies aimed at reducing the use of carpets and curtains in buildings
- - Ensure the amount of natural and electrical lighting and the appropriateness of the type of headquarters
- - Ascertain the quantities used of pesticides, fertilizers and cleaning fluids

Garden management:

- Administrative supervision of the operation of gardens
- - Provide a study on the current need for gardens and afforestation in the university city
- Replanting desolate areas
- Work a new aesthetic design for afforestation and green spaces and adopt and implement it
- Review periodic maintenance schedules for irrigation systems

Princess Noura Bint AbdulRahman University launches Geo-Environment Forum with Vision 2030 in collaboration with the Ministry of Environment, Water and Agriculture

Under the auspices of His Excellency the Director of the University, Dr. Inas Bint Suleiman al-Issa, Princess Noura Bint Abdul Rahman University, represented by the Faculty of Arts, launched the "Geographical Environment Forum with Vision 2030" in cooperation with the Ministry of Environment, Water and Agriculture, in the University's Conference Center, in the presence of a number of leaders, representatives of ministries and a group of experts and interested people from various universities in the Kingdom.

The program opened with fragrant verses from the Holy Quran, followed by a speech delivered by H.E. The University's Undersecretary for Graduate Studies and Scientific Research Dr. Ahmed Al Ghadeer on behalf of His Excellency the University's Director Dr. Inas Bint Suleiman al-Issa, Inas Bint Suleiman al-Issa, in his speech welcomed the generous presence and expressed his pride and gratitude for the blessed efforts our leadership has given to support the processes of education and learning to promote the country in its present and future.

The Dean of the Faculty of Arts, Dr. Mona Al-Loiba, then delivered the opening speech of the forum, explaining that the Faculty of Arts represented by the Department of Geography initiated this forum based

on the vision of Princess Noura Bint AbdulRahman University to invest knowledge to be a beacon in the development of a sustainable national environmental community, where the forum (Geographical Environment vision 2030) aims to deepen and enrich the environmental culture in society, promote scientific research to serve environmental issues using giss, and highlight the original and innovative experiences leading in environmental work. Sustainable, promoting national values in maintaining quality of life by reducing pollution in all its forms, increasing the efficiency of waste management and reuse, reducing the phenomenon of desertification, preserving natural wealth and consolidating the value of the sustainable environment in our dear country.

Dr. Al-Loiba's speech was followed by a panel discussion introducing the process of space and geospatial information in the Kingdom presented by the former Chairman of the General Authority for Space, His Excellency Lt. Gen. Mareh Al-Shahrani, and the Undersecretary of the Ministry of Land and Space at the Ministry of Municipal and Rural Affairs, Dr. Mohammed Al Rajhi.

The forum was then launched on its first day with two sessions in which nine working papers were presented, the first session was entitled "Modern technical applications in the field of environment using GIS" under the management of Dr. Abdullah Al-Briki Al-Shammari, in which the associate professor of geography from Qassim University, Dr. Ahmed Al-Daghiri, participated in the talk about: "The contribution of spatial analysis techniques in the study and preparation of naturality in the Tesia reserve in Saudi Arabia", as addressed by Engineer Talaat Al-Rahali to "plan the expansion of the investment of the metric industry for more accurate measurements and economy of the world." "Monitoring sand creep and predicting its movement using remote sensing and geographic information systems techniques in Badr province in Medina," said Dr. Nasser Al-Zabneh, Assistant Professor of Geography at Taiba University, "Monitoring sand creep and predicting its movement using remote sensing and geographic information systems techniques in Badr province of Medina," while Princess Noura University Assistant Professor of Geography Dr. Iman al-Banna presented her scientific paper entitled "The impact of sea level rise on land uses in damietta and Rashid regions using GIS and remote sensing." Professor of Geographic Information Systems at Princess Noura Afnan University of Turkey and Sita Al-Oufi, with a scientific paper entitled "Using GIS in Environmental Planning".

The second session was entitled "How to make our environment sustainable Ramadan?" From King Saud University and its scientific paper entitled "Major transport projects for sustainable development in Riyadh and its expected impact to reduce pollution and raise the level of air quality in 2030". At the end of the second session, Professor of Islamic History Dr. Alia Al-Jubaili of Princess Noura University discussed "Islamic solutions to the problems of the environment and its impact on Islamic civilization".

The forum has been attended by 16 entities, including ministries, institutions and government and private sectors, and will continue its activities until Thursday with two dialogue sessions entitled "Environmental Challenges" and "Waste Recycling to maintain a sustainable environment".