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**Between Reality and Ambition**

**Green Energy**



## His Majesty the Sultan Reviews the «Green Middle East Initiative» with the Saudi Crown Prince

ONA: His Majesty Sultan Haitham bin Tariq, may God protect him, received a phone call from His Royal Highness Prince Muhammad bin Salman bin Abdulaziz Al Saud, Crown Prince, Deputy Prime Minister and Minister of Defense of the Kingdom of Saudi Arabia. During the phone call, the Saudi Crown Prince conveyed the greetings of the Custodian of the Two Holy Mosques King Salman Bin Abdulaziz Al Saud, King of the Kingdom of Saudi



Arabia, to his brother, His Majesty the Sultan, wishing His Majesty continued health and happiness, and the Omani people further progress and prosperity. On his part, His Majesty the Sultan asked His Highness the Saudi Crown Prince to convey his greetings and wishes to his brother, the Custodian of the Two Holy Mosques, for good health and happiness, and to the brotherly Saudi people for further development and advancement. During the call, His Majesty the Sultan and the Saudi Crown Prince, reviewed the

«Green Middle East» initiative announced by His Highness, the Crown Prince of the Kingdom of Saudi Arabia, in partnership between the countries of the region, which is the largest afforestation program to face environmental challenges. His Majesty the Sultan expressed his appreciation for the efforts of the Kingdom of Saudi Arabia towards preserving the sustainability of the environment, affirming the Sultanate's support for all efforts made in this regard.



point of view

## The Green Middle East

Dr. Dawood Sulaiman Al Balushi  
Editor-in-Chief

The «Green Middle East Initiative,» launched by Prince Mohammed bin Salman, Crown Prince of Saudi Arabia, is one of the most important initiatives at the international, regional and Gulf levels in the field of protecting the environment and preserving its natural resources, as well as preserving the planet from degradation, depletion and extinction. The initiative seeks to plant 40 billion trees in the Gulf Countries and the Middle East. Thus, the initiative is the largest afforestation program at the global level. Therefore, this project recovers an area equivalent to 200 million hectares of degraded land, and represents 5% of the global goal of planting 1 trillion trees.

The initiative aims at preserving ecosystems related to vegetation, preserving fungal biodiversity, reducing carbon emissions from petrochemical industrial facilities, combating desertification and uprooting of trees, plants and forests that pose an economic threat to the region (the budget allocated for preserving ecosystems related to vegetation is 13 billion dollars, but it is depleted by sandstorms in the region every year). The initiative also aims at combating pollution in all its forms, land degradation, and combating climate change. This initiative confirms the global efforts of the Kingdom of Saudi Arabia in preserving the planet and preserving its biodiversity and to complement the Kingdom's pioneering role in the direction of common international issues.

For more than 50 years, the planet has been exposed to soil degradation with areas that amounted to 11% of the vegetation cover, and one billion people of the world's inhabitants have become threatened by hunger and poverty as a result of this phenomenon that costs the world an annual loss estimated at US\$ 42 billion, as this phenomenon is one of the most dangerous environmental issues that is facing the world.

There are global efforts and initiatives in this aspect, such as the successful initiative (China Green Wall) over an area of 4,500 km. During this initiative, more than 20% of desert lands were reclaimed and 70% of agricultural lands were protected from sand dunes. Among them are the initiatives that have faced challenges, such as the initiative of former Nigerian President «Obasanjo» to build the Great Green Wall to prevent the desertification of the African continent. This includes the afforestation of 15 million hectares of dry land, 15 km in width and 7,000 km in length. The wall started from Mauritania in the west, passing through Senegal, the Ivory Coast, Burkina Faso, Niger, Sudan, Ethiopia and Eritrea, all the way to Djibouti.

Therefore, the initiative of the Kingdom of Saudi Arabia «The Green Middle East» is a very important initiative at the level of the Gulf Countries and the Middle East region to preserve the vital ecosystems from deterioration and extinction. Therefore, all countries covered by the initiative must stand for and support this initiative. They must work to achieve the goals of this initiative. We hope that all these efforts will be crowned with success and that they will turn into successful global environmental initiatives, and that the rest of the world will follow its example and adopt environmental initiatives aimed at saving and preserving the planet.

## The Environment Authority Discusses Investment in a Number of Natural Reserves

Muscata - ONA: Under the chairmanship of His Excellency Dr. Abdullah bin Ali Al-Amri, President of the Environment Authority, a meeting was held to discuss investment in the Natural Reserves. The meeting discussed the implementation of sustainability with its environmental, economic and social pillars to preserve and protect the biological and physical diversity of the reserves, encourage specialized research, activate the wheel of the local economy (producer, distributors, sellers, and consumers), and the exchange of benefits between the external and local investor as well as the

cooperation with those who are related to the reserve in operations and provision of products and services. During the meeting, investment opportunities in a number of natural reserves were presented, including the Green Mountain Landscape Reserve, which was declared as a natural reserve by the Royal Decree No. (802011/), Alsilail Natural Reserve, which was announced by the Royal Decree No. (50) / 1997), and Khawr Taqah, which was included in the Royal Decree No. (491997/), regarding the establishment of Al-Akhwat Reserves in Dhofar Governorate.

## Presence of the Arabian Leopard Detected in Harweb in Dhofar

The results of a scientific study conducted during this year 2021 by the Office for Conservation of the Environment at the Diwan of the Royal Court, represented by the Department of Environmental Affairs in Salalah on the conservation of the Arabian Leopard project, revealed a new scientific registration confirming the presence of the Arabian Leopard in Harweb, north of Jabal al-Qamar

in Dhofar Governorate. This scientific documentation is considered a success and a continuation of the strong efforts made to preserve this rare and critically endangered animal, according to the classification of the International Union for Conservation of Nature (IUCN). This detailed environmental study was conducted within the areas of the historical spread of the Arabian Leopard in the mountains of Dhofar Governorate. The Office for Conservation of Environment at the Diwan of the Royal Court has worked in recent years to expand the scope of these scientific field environmental studies, monitoring and tracking through the Arabian Leopard Project, to include the



extension of the northern chain of mountains in the Dhofar Governorate, known as Najdia Regions, in the southern chain from Hasik in East to Sarfait in the west. During the past 50 years, indicators showed that the Arabian Leopard was not detected in these areas, with the exception of Jabal Samhan. In 2014, the office was able to monitor the presence of the Leopard in al-Najd, which is located in the area north of Jabal al-Qara.

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## The Fifth Session of the UN Environment Assembly

# Aimed at Protecting and Restoring Nature and Achieving the Goals of Sustainable Development

By: Dr. Mohammed Saif Al Kalbani  
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The United Nations Environment Assembly is the world's highest decision-making body on environment issues. It brings together representatives of 193 UN member states, businesses, civil society leaders and other stakeholders to agree on policies that address climate change, pollution and biodiversity loss. The establishment of the United Nations Environment Assembly came in June 2012 during the World Summit on Sustainable Development (Rio + 20) to develop and strengthen the United Nations system in the environmental fields. The environment has been placed among the main priorities of the international community, along with peace, poverty, health and security. These developments came as a result of the decades-old public efforts that established the United Nations Environment Program during the United Nations Conference on Human and the Environment in Stockholm in 1972.

### Assembly Sessions

The United Nations Environment Assembly sessions have been organized since 2014, with the first session held in Nairobi, Republic of Kenya, from 23 to 27 June 2014. That session dealt with the main topics: "Illicit trade of living organisms, air quality, environmental law, financing the Green Economy and the 2030 Sustainable Development Goals." The second session was held from 23 to 27 May 2016 in Nairobi, Republic of Kenya, under the title "Enhancing the Interaction between Science and Policy". During the period from 4 to 6 December 2017, the third session was held under the title «Towards a Pollution-Free Planet». The fourth session dealt with the topic «Innovative Solutions to Environmental Challenges, and Sustainable Consumption and Production», which was held in Nairobi, Republic of Kenya, from 11 to 15 March 2019. The fifth session of the United Nations Environment Assembly was held this year in an approach different than the previous sessions. This session came in two phases, given the current conditions of the Corona pandemic (Covid-19). The first phase of the fifth session of the United Nations Environment Assembly

was held from February 22 to 23, 2021, via online visual communication, with a simplified agenda focusing on urgent and procedural decisions. Substantive matters requiring in-depth negotiations were postponed to another resumed session to complete the fifth session of the United Nations Environment Assembly in February 2022.

### The Main Topic of the Fifth Session

The meetings of the fifth session of the United Nations Environment Assembly will focus on the main theme «Promoting Action to Protect and Restore Nature and Nature-Based Solutions to Achieve the Sustainable Development Goals» with its three complementary dimensions (social, economic and environmental). This requires the implementation of successful approaches that contribute to achieving the environmental dimension of the 2030 Agenda and the effective and sustainable recovery from COVID-19 pandemic, as well as ensuring that investments in post-pandemic economic and environmental recovery contribute to sustainable development. The meetings of the fifth session of the United Nations Environment Assembly witnessed the participation of ministers, heads of governments and bodies concerned with the environment or their representatives from member states of the United Nations, as well as the participation of regional and international organizations, civil society organizations and youth associations concerned with the environment, in the presence of more than 160 countries, more than 100 ministers, and more than 12,000 participants via teleconference.

During the fifth session of the United Nations Environment Assembly, several meetings and dialogues were held by high-level leaderships. During such meetings and dialogues, countries reviewed their policies, initiatives and projects to achieve the sustainable development goals, the outcomes of which were summarized, including that the recovery from the Covid-19 pandemic crisis shall not be at the expense of the environment and human health. The outcomes of the fifth session also emphasized the importance of encouraging

the green economy that aims to provide job opportunities, proceeding with development, reducing environmental risks and pollutants, moving towards the goal of eliminating and removing carbon that causes high temperatures and the occurrence of climate change problems, more relying on renewable energy sources, combating desertification and deforestation operations to prevent the degradation of natural habitats, combating all kinds of environmental pollution in air, water and land, and focusing on the problem of disposing plastic wastes and the great damage it causes to natural life and the environment.

### Dialogue Session

A dialogue session was also devoted on how to build a resilient and inclusive post-Covid-19 pandemic. World Countries reaffirmed the mandate of the United Nations Environment Program (UNEP) as the leading global environmental authority and called for greater and more comprehensive effectiveness to address environmental challenges, as well as the importance of teamwork to successfully meet global challenges, and that human health and well-being depend on nature and the solutions it provides more than ever before. Countries expressed concern about how the epidemic is causing new and dangerous health, social, economic and environmental problems that may exacerbate existing challenges around the world, which may face recurring risks of epidemics in the future if it continues with its unsustainable practices and interaction with nature. A dialogue session was also devoted to talking about national efforts and measures that contribute to addressing the important environmental issues, which are climate change, protecting biodiversity and reducing pollution. The session dealt with efforts to preserve forests, waste management, change the pattern of production and consumption, use of environmental-friendly resources and clean energy, adopt a green and circular economy, review legislations and strategies, including those related to climate and pollution control, restore degraded areas and use some of them in ecotourism, and manage natural resources.



☛ **The countries of the world are interested in green energy, as it is environmental friendly and produces renewable natural resources. But this interest is still much less than hoped, as the expansion of the use of fossil energy has severe harms to humans and the environment. Green Energy is a term from which green buildings have emerged. Green Buildings are smart buildings. They are self-sufficient facilities that generate electricity from solar energy, wind, water or thermal energy in the ground and other natural and renewable energy sources, as it reduces water depletion by recycling it or managing its exploitation, and also contributes to making the world green by planting trees and plants.** ☛

# Between Reality and Ambition

# Green Energy



**G**reen Energy has many benefits for the environment, including that it reduces air pollution, enhances food security and provides oxygen through its contribution to the increase in the number of agricultural crops, in addition to preserving the health of humans and other living organisms. It contributes to protecting the earth from global warming and preserving the ozone layer, in addition to preventing acid rain. They are renewable natural resources that decorate the general scene and have contributions to the mental health of individuals, contribute to the environmental balance and many other benefits.

Air pollution (one of its main causes is the

fossil fuels) kills an estimated seven million people in the world every year, according to the World Health Organization. The WHO data shows that 9 out of 10 people breathe air that exceeds the guideline limits, confirming that air pollution poses a major threat to health and climate. The combined effects of (outdoor) and (indoor) air pollution causes an increase in deaths from stroke, heart disease, chronic obstructive pulmonary disease, lung cancer, and acute respiratory diseases.

#### Models of Green Buildings

Green Buildings is comprehensive term for various buildings, having the necessary spaces to place solar panels, such as mosques, schools, government and residential

buildings, private institutions, farms, and others.

There are many models of Green Buildings around the world, including the GCC Countries, which have the ingredients to generate an abundance of solar energy due to their strategic location and hot climate. Thus, they create an economy based on alternative energy. In the Sultanate of Oman, many institutions are making efforts in this aspect. PDO is one of the first institutions to establish a project to generate solar energy in car parking lots. PDO's Amin Photovoltaic or solar power plant entered the commercial operation phase in mid-2020 with a production capacity of 100 megawatts.



## Suggested Solutions

- To raise awareness about the importance of using green energy
- To increase scientific studies and research on green energy, and how to benefit widely from it
- To expand the governments and private sectors' adoption to the green economy
- To encourage community members to adopt the green building approach
- To conduct awareness campaigns to increase investment contribution in green energy
- To support investment in green energy
- To stimulate innovations and inventions in green energy
- To teach children in various ways about the importance of using green energy.

## Some of the Green Energy Benefits

- Preserving the health of humans and other living organisms
- Reducing air pollution
- Enhancing food security
- Increase the green area and thus provide oxygen
- Protect the Earth from global warming
- Preserving the ozone layer
- Prevent acid rain
- Contribute to the ecological balance

Sultan Qaboos University also has initiatives in the use of solar energy, including its use in the parking lots of the College of Engineering with a production capacity of 80 kilowatts, as well as Environment-Friendly House with a production capacity of 20 kilowatts. In the Governorate of Dhofar, there is a wind power plant in the Fatakhiat area in the Shaleem Wilayat. In Al Hallaniyat Islands, there is one of the largest plant for the production of electricity from wind energy in the Arabian Gulf region, with a production capacity of 50 MW. There is also the Al Mazyona solar power plant, with an estimated annual production capacity of 550 MW/h. With regard to the mosques, the "Amanah Foundation for the Management of Endowment Funds and Institutions," recently announced that it had completed its first investment projects in converting mosques into green, environmental-friendly facilities powered by solar energy. It installed an integrated system to generate electricity from solar energy to provide the energy needed for the mosque. The area of the mosque is 130 square meters, and the production volume of solar panels that power it reaches 10 kilowatts. The solar panels were installed in cooperation with a specialized Omani company. The project reduces energy consumption in prayer areas by 40% and generates surplus energy of up to 20%. The green economy approach in the Sultanate based on Oman Vision 2040 to create a sustainable environment by adopting a green economy approach in development projects.

As for the Gulf trend of using green energy, the Kingdom of Saudi Arabia is making strong efforts to adopt investment in green energy. Among these efforts, to name a few, is the Haya Al-Subaih mosque in Riyadh, which benefits from solar energy and uses ablution water to irrigate trees. Same the case with the United Arab Emirates. An example of the

UAE is the mosque in the Deira area near Dubai's Clock Roundabout. Other Gulf Countries also have many contributions to adopting this approach. As for the Arab Countries, according to the news published in «Iwan Libya» newspaper, the Kingdom of Morocco plans a project until 2030, to produce 52% of its electrical energy needs from renewable energy sources, especially from the solar power generation reactor. On the global level, there is the Central Mosque in Cambridge, UK (Morley von Sternberg), which combined solar panels and water harvesting facilities with innovative environmental solutions. These are just a few examples of many other.

### The Green Technology

Green technology is the utilization of technology to conserve the environment. People use green technology unevenly. Some depend entirely on it to produce electrical energy, while others depend on it at specific times. Among the goals of green technology is to find ways to obtain energy, without depleting or damaging natural organisms, as well as to develop technologies that benefit the environment and create a safe environment for future generations through the sustainability of energy resources adding that such methods stimulate the recycling of waste to benefit from it. Recently, the uses of green technology have increased, especially in technologies specialized in lighting, as the expansion of this technology will provide the necessary protection for the environment that has been exhausted by air pollutants.

There are challenges that cause the slow spread of green energy globally, including the difficulty of storing renewable energy sources such as solar energy, as well as the high cost of green technology and the amount of electricity generated by it compared to fossil energy which is of lower cost and more electricity production. Added to that is the need to clean solar panels continuously to ensure their efficiency.



## ➤ The Volunteer Diving Team in Qurayyat Contributes to Preserving the Marine Environment

“The volunteer diving team of Quriyat Club conducted 11 campaigns and initiatives to clean up debris, waste and nets stuck on the seabed, while practicing diving. The team strives to achieve leadership in spreading marine awareness in order to preserve marine environmental life and keep our seas blue, clean and safe. The idea of forming the team was based on observations of divers in the Wilayat and what they saw in the seabed, such as waste and nets stuck on the sea floor, while they practice diving and helping fishermen.”



Jumah Khamis Al Ameri, a diving coach and chairman of the volunteer diving team, said that the team includes a group of Omani youth. It started with 27 members, including a diving instructor, diving guide, rescue diver and an advanced diver. In 2019, the team was declared to be qualified as one of the volunteer

teams in Quriyat Club. Jumah added that the team launched its first initiative in Ras Abu Dawud marine area in Quriyat and recovered the nets stuck in the coral reefs, the anchors stuck between the rocks, the piles of stranded ropes and other trapped materials and fishing tools lost in the seabed, as well as a lot of waste that

negatively affects marine life. The team also prepared a place for divers who practice diving through beautiful mountainous sites to encourage them to practice their hobby in a clean and safe marine environment, noting that the volume of waste recovered in the first campaign amounted to about 800 kilograms.

### KSA

#### Launching of Saudi «Environment Week» Activities

His Excellency the Minister of Environment, Water and Agriculture Eng. Abdul Rahman Al-Fadhli inaugurated the activities of the Saudi «Environment Week» under the slogan «The Environment is Ours and for Our Generations», in a ceremony held for this occasion at the Ministry's headquarters in Riyadh, with the presence of a number of the Ministry's leaders and their affiliated bodies, and the participation of more than 40 entities representing the governmental and private sectors. The «Environment Week» aims to educate the

community about the importance of protecting and preserving the environment and natural resources, for their pivotal role in achieving sustainable development and community well-being, as well as contributing to achieving food security and quality of life. Meanwhile, the Ministry of Environment, Water and Agriculture works through its strategies, plans and initiatives to achieve the highest levels of environment and vegetation cover preservation and the sustainable management of non-renewable natural resources.

### Kuwait

#### Director General of the Environment Public Authority holds meeting with the Regional Representative of UNEP

A quarterly meeting, via video call, was held between His Excellency Sheikh Abdullah Al-Ahmad Al-Hamoud Al-Sabah, Director General of the Environment Public Authority, Chairman of the Board of Directors, and the Regional Representative of the United Nations Environment Program - West Asia Office, Mr. Sami Dimassi. The meeting comes as a result of the Memorandum of Understanding signed between the Environment Public Authority and the United Nations Environment Program - West Asia Office. A number of projects were reviewed, the most important of which are: projects of the Gulf Green Initiative, the priorities of the State of Kuwait regarding various environmental issues and the contribution of the State of Kuwait to the budget of the United Nations Environment Program.

### Qatar

#### First International Waste Management Conference held on April 5

The Ministry of Municipality and Environment held a press conference to announce the organization of the first international waste management conference (visible and virtual), with the participation of a number of governmental and semi-governmental institutions, the private sector, the local factories, as well as some external parties, an elite of local and international experts and specialists in the field of waste management and treatment.

### Bahrain

#### Great Success for Automated Garbage Bags Dispenser

The Director General of the Southern District Municipality, Eng. Asim Abd Al-Latif Abdullah, stated that the number of users of the automatic garbage bag dispensing device (Sahl) has reached about 103,364 users since the start of its launch. It is noteworthy that the (Sahl) device for disposing garbage bags has a capacity of 300 packages, and it is a simple and easy-to-use device that does not require much effort except to choose the appropriate language, then enter the subscriber's account number with the Electricity Authority and then the personal number, so that the citizen can obtain the bags without the need to present to the Bags Offices in the municipality buildings.

### UAE

#### UAE Ready to host the «Climate Week 2022» of the Middle East and North Africa

In support of the shift towards a new sustainable growth paradigm, as well as highlighting the importance of addressing climate change issues and facing global development challenges, the UAE will host the «Regional Climate Week 2022», the first of its kind in the countries of the Middle East and North Africa, during the period from 2 to 3 March, 2022, in

conjunction with the «Expo 2020 Dubai». The event aims to boost the momentum of climate action in the MENA region. The Regional Climate Week 2022 for the countries of the Middle East and North Africa will be organized by the UAE Ministry of Climate Change and Environment and the World Green Economy Organization (WGEO).

## Google Maps Will Soon Display the Greener Routes

New York - AFP: Google announced a number of improvements to its artificial intelligence-based map service, Google Maps, including automatic display of paths that allow users to improve their carbon footprint. "Soon, the path that leads to emitting less carbon dioxide will be the first suggestion that Google Maps provides to users if the time it takes to get through it to the destination is equal to the fastest route," wrote Dane Glasgow, vice president of products at Google Maps. "Almost the fastest route," he added. If the more environmentally friendly path leads to a significant increase in the time to reach the destination, the user will have the opportunity to compare the relative carbon footprint of the two roads, before choosing one of them. «Google» clarified that limiting the

suggestions to the shortest way will still be possible by modifying the preferences in the application settings. The California-based group explained that it had cooperated to develop this new tool with the National Renewable Energy Laboratory of the US Department of Energy. The internet giant relied on determining the extent to which the path is environmentally friendly, based on several factors, including "the steepness of the road and the slowdowns caused by traffic jams. Glasgow noted that «the proposal for more environmentally friendly methods will start in the United States later this year, with its coverage eventually becoming global.»



Environmental Vocabulary

## The Two Horned

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The night is its sleep, and the day is its activity. It knows from the night only the darkness when it goes to comfort and stillness, while it knows nothing from the day except the light when the sun dissipates with its rays the darkness of the night. Then it opens its eyes to a new day actively with full energy restored from the stillness and calmness of the night. For it, the day is its freedom from the prison of the night, in which it swims with its lightness and agility in the high mountains and deep cliffs searching for water and food. It strikes with its hard anti-slipping hooves on the surface of hard rocks which feel its strength and hardness then realize that despite their cruelty they are weak under its will, strength, and courage. The high mountains are its twin, paradise, and its life. Both give each other an eternal spirit that loves life and resists its fluctuation and both give the life a symbol of defiance and survival.

This animal lives in isolation from humans in high mountains, climbing them with high skill despite its slightly heavy weight (35 - 150 kg). It is a wild, mountainous, herbivore animal that looks very much like a goat. It is about 1.7 m long, while its height is one meter. The environment gave it the ability to adapt to it. Its body colour mixed with the gradients of rock colours, hardly known except through its movement. The male may have black stripes on its front legs, and a black line along the middle of its back, while black bristles beard-like descend from its chin, which have added to its beauty another beauty, and to its courage prestige and dignity. While the female flaunts her two 30 cm long horns that extend up and backwards and down as if they were a crescent lunar month, the male highlights its prestige by its the longest two curved horns that reach a meter long. The two horns of the male are a strong weapon of defense and fighting, especially for struggling against the female when his sexual desire ignites in autumn and gains his female to pour into her his unbridled virility. Then she gives birth after five months one or twin in spring, distancing herself from the herd to surround them with care. This mountainous goat lives in small herds. It has been observed that each gender has a herd, and they meet at mating season that managed by the law (The mating for the strongest).

This wild goat, that is called in Arabic (Albadan), its male called «Aaddfa», while the female (Alarwa) has not become safe from human's myth. It has ascended to the throne of archaeological sculptures of many civilizations, in which its shapes are most prominent by its long-curved horns, which are bestowed by sanctification and deity in the Arab Region, especially in the pre-Islamic Arabian Peninsula. This animal, particularly its horns, still have cultural and spiritual connotations in some Arab Countries. It has been chosen by ancient astronomers as a symbol of 10th Horoscope which is Capricorn.

The demand for its meat and horns affected its spread, disappearing from most Arab Regions. In some of Countries remained in dilemma to survive between the human and other predators and raptors, and if it becomes safe, it remained alive for 15 years. In Oman, the Dhofar Mountains have given it a haven to live in a freedom, vulnerable to danger and requires conservation. The numbers of Nubian Ibex are decreasing and is threatened to be extinct as per international standards. Protection and breeding are of the alphabets of emergency work to save the Nubian Ibex before we end up with zero number in the wild.

## Deadly Virus Threatens Fate of India's last Asiatic lions

Non-National Park (India) «AFP»: Gir Forest National Park in western India contains the last group of Asiatic lions, but these animals are facing a threat from a viral disease that may eliminate them permanently, which worries local experts. In the nineteenth century, the numbers of Asiatic lions were large on the lands stretching from Syria to the East India, but their indiscriminate hunting operations, in addition to the incursion of humans to their homeland, almost led to their demise. The Asiatic lion differs slightly

from its African counterpart, in that its mane and hair are dense. In 1913, there were no more than twenty animals in the world, in Gir National Park that spans fourteen kilometers of forest in the western Indian state of Gujarat. After years of efforts at the government level to ensure their preservation and gradually increase their number, their number officially reached 674 in 2020. But three years ago, the deaths of at least 11 cats alerted the authorities to the highly contagious Virus Distemper Disease. Immediately, a vaccination process was organized for all the lions.



## Significant Increase in Tropical Deforestation During 2020

Paris - ONA: The annual Global Rust Watch report, based on satellite data, recorded the elimination of 4.2 million hectares in 2020 of primary tropical forests, which are essential for the planet's biodiversity and carbon storage. This is an increase of 12 percent from last year. The area of virgin tropical forests destroyed in 2020 is equivalent to the size of the Netherlands, where fires and logging are constantly increasing, despite the economic crisis associated with the Covid-19 pandemic. The report showed that Brazil is the country most affected in this area, as it lost areas of forests, three times the area that the Democratic Republic of the Congo, ranked second, lost. Last year, the tropics lost 12.2 million hectares of forests and farms, and the report indicated that agriculture is still the main cause of this destruction, but researchers attributed the cause this year to heat waves and droughts that set fires in Australia, Siberia, and reaching the Amazon.



# Nuclear waste

Hi Ali ,  
Do you know anything about  
nuclear waste



Yes, I do  
Nuclear power happens when atoms are  
split apart. This process is  
called fission



Fission  
happens inside nuclear reactors .  
Material that is left inside the nuclear reactor  
after fission occurrence is called  
nuclear waste

Believe it or not,  
nuclear waste takes hundreds of thousands or  
even millions of years to decompose



Nuclear waste  
is radioactive, which means the  
nuclei (or middle of the atoms in the waste) aren't  
holding together, which  
makes them very unstable

Radioactive material  
kills body cells and can cause cancer. This  
makes nuclear waste very dangerous  
to human's health

