الهيئة العامة للإحصاء
General Authority for Statistics

Goal 15:
Life on Land

SDG 15: Life on Land

Indicator 15.1.1 Forest area as a proportion of total land area

Description of the indicator: Forest area as a proportion of total land area

Sources of data: Ministry of Environment, Water, and Agriculture

Unit of measurement: Forest area (million hectares) and percent %

Level of disaggregation: National

Method of calculation:

$$\frac{Forest\ area\ (reference\ year)}{Land\ area\ (reference\ year)} \times 100$$

Last updated: 2024

Note: There is currently an ongoing census project that will be completed early next year, which explains the lack of sufficient data.

Forest area as a proportion of total land area	Year				
	2020	2021	2022	2023	2024
Forest area in the Kingdom (million hectares)	27680.5	27680.5	27680.5	27680.5	27680.5
Percentage of forests to the land area of the Kingdom	1.38	1.38	1.38	1.38	1.38

Indicator 15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type

Description of the indicator: Proportion of important sites that embody land and freshwater biodiversity and are covered by protected areas Shows time trends, i.e. the percentage of each site important for land and freshwater biodiversity, i.e. those sites that contribute significantly to the continuation of the world's biodiversity and are covered by specific protected areas.

Sources of data: Ministry of Environment, Water and Agriculture – Saudi Wildlife Authority

Unit of measurement: Percent (%) (average percentage for each major terrestrial/freshwater biodiversity area)

Level of disaggregation: National

Method of calculation: This indicator is calculated from data derived from spatial intervention between the digital polygons of protected areas from the IUCN Global Database on Protected Areas and the UNEP World Conservation Monitoring Centre and the digital polygons of key marine biodiversity areas from the Global Database of Key Biodiversity Areas, including Important Bird and Biodiversity Areas, the Alliance for the Absolute Prevention of Extinction, and the Key Biodiversity Areas available through the Integrated Biodiversity Assessment tool The indicator value is calculated at a given point in time, based on data for the year of establishment of a protected area registered in the World Database of Protected Areas as the average percentage of a key biodiversity area currently recognized as protected areas
The year of designation of a protected area is unknown for about 12% of protected areas in the Global Database of Protected Areas.

Last updated: 2024

Item	Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type	
	2023	2024
Percentage of Freshwater	25	16
Percentage of Mountains	25	38
Percentage of Protected areas	21	21

Indicator 15.2.1 Progress towards sustainable forest management

Description of the indicator: Sustainable Forest management is a core concept of Goal 15 and has been formally defined by the UN General Assembly as follows:
A dynamic and evolving concept that aims to preserve and promote the economic, social and environmental values of all types of forests, for the benefit of present and future generations.
The indicator consists of five sub-indicators to measure progress towards all dimensions of sustainable forest management. Forest environmental values cover three sub-indicators focusing on expanding forest area and biomass in forest areas and protecting and preserving biodiversity and associated natural and cultural resources. The social and economic values of forests are aligned with environmental values through sustainable management plans. The sub-indicator provides further qualification for forest area management by assessing independently verified areas for compliance with a set of national or international standards.

Sources of data: Ministry of Environment, Water and Agriculture

Unit of measurement: 1000 hectares

Level of disaggregation: National

Method of calculation: At the national level, forest areas, biomass stocks, forest areas within protected areas, forest areas within a management plan and forest areas within an approved and independent system are reported directly to FAO for predetermined reference years. Based on forest management certificates, to reported country data, FAO then develops country-level estimates of the rate of change of net forest area using the compound interest formula, as well as the proportion of forest area within protected areas within Framework of a management plan. It is calculated using the areas reported for each reference year and forest area for 2015.

Last updated: 2023

Note: Covers forest area only.

Indicator	Year
	2023
Forest area under an independently verified forest management certifica-tion scheme (1000 hectare)	163,546.44

Indicator 15.3.1 Proportion of land that is degraded over total land area

Description of the indicator: Land degradation is defined as the reduction or loss of biological or economic productivity, rain-fed cropland, irrigated agricultural land or pasture, forests and forest land resulting from a range of stresses, including land use and management.
Practices. This definition has been adopted and used by 196 States Parties to the United Nations Convention to Combat Desertification (UNCCD). (See also Figure 1).
Land degradation neutrality (LDN) is defined as a condition in which the quantity and quality of land resources needed to support ecosystem functions and services and enhance food security remain stable or increase within specific temporal and spatial ranges and ecosystems (Resolution 3/COP12).
Total land area is the total surface area of a country excluding the area covered by inland waters, such as major rivers and lakes.
SDG indicator 15.3.1 is a two-way estimate – deteriorating/non-deteriorating – based on the analysis of available data for three sub-indicators that are validated and reported by national authorities. The sub-indicators (trends in land cover, land productivity and carbon stocks) were adopted by the UNCCD Governing Council in 2013 as part of the monitoring and assessment approach.

Sources of data: Ministry of Environment, Water and Agriculture

Unit of measurement: Percent (%)

Level of disaggregation: National

Method of calculation:

$$\frac{Forest\ area\ (reference\ year)}{Land\ area\ (reference\ year)} \times 100$$

Last updated: 2024

Indicator	Year
	2024
Proportion of land that is degraded over total land area (%)	27.8

Indicator 15.4.2 a) Mountain Green Cover Index and (b) proportion of degraded mountain land

Description of the indicator: The indicator is composed of two sub-indicators to monitor progress towards the conservation of mountain ecosystems:
Sub-indicator 15.4.2a, Mountain Green Cover Index (MGCI), is designed to measure the extent and changes of green cover - i.e. forest, shrubs, trees, pasture land, cropland, etc. – in mountain areas. MGCI is defined as the percentage of green cover over the total surface of the mountain area of a given country and for given reporting year. The aim of the index is to monitor the evolution of green cover and thus assess the status of conservation of mountain ecosystems.
Sub-indicator 15.4.2b, Proportion of degraded mountain land, is designed to monitor the extent of degraded mountain land as a result of land cover change in a given country and for given reporting year. Similarly to sub-indicator "trends in land cover" under SDG Indicator 15.3.1 (Sims et al. 2021), mountain ecosystem degradation and recovery is assessed based on the definition of land cover type transitions that indicate improving, stable or degrading conservation status. The definition of degradation adopted for the computation of this indicator is the one established Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).

Sources of data: Ministry of Environment, Water and Agriculture

Unit of measurement: Square Kilo Meter

Level of disaggregation: National

Method of calculation: The Mountain Green Cover Index (MGCI) is defined as

$$MGCI = \frac{Mountain\ Green\ Cover\ Area}{Total\ Mountain\ Area} \times 100$$

Where:
Area of mountain green cover = total area covered by land cover categories of cropland, grasslands, forests and wetlands.
The vegetation descriptor is calculated from the land cover map using basic GIS functions.
If the country/region does not have a mountainous area, the value None is set.

Last updated: 2023

Note: Data includes tree-covered areas only.

item	Total in km² (2023)
Tree-covered areas	27,680.5

Indicator 15.5.1 Red List Index

Description of the indicator: The Red List indicator measures the change in total extinction risk across populations of species. It is based on real changes in the number of species in each of the risk categories on the IUCN Red List of Threatened Species, expressed by changes in an Indicator ranging from 0 to 1

Threatened species are those on the IUCN Red List of Threatened Species in the categories of critical, endangered or critically endangered species (i.e. species that face a high, very high or very high risk of extinction in the wild in the medium term). Changes over time in the proportion of endangered species are largely driven by improvements in knowledge and taxonomic changes. The Indicator excludes such changes to produce a more informative indicator From the simple ratio of endangered species. Thus, it measures the change in total extinction risk across populations of species over time, as a result of real improvements or degradations in the case of individual species. It can be calculated for any representative population of species that has been assessed for the IUCN Red List at least twice (Butchart et al. 2004, 2005, 2007). To calculate the Red List indicator for individual countries and regions, each type contributing to the Indicator is weighted in proportion to its global range within the particular country or region. Thus, the resulting indicator shows the overall extinction risk of species within a country or region relative to their potential contribution to the risk of global species extinction (within taxonomic groups covered).

Sources of data: Ministry of Environment, Water and Agriculture

Unit of measurement: Number

Level of disaggregation: National

Method of calculation: The Red List indicator is calculated at a certain point in time by first multiplying the number of species in each Red List category by a weight (ranging from 1 for "near threat" to 5 for "extinct" and "extinct in the wild") and adding up these values. This is then divided by the maximum threat score, which is the total number of species multiplied by the weight assigned to the "extinct" category. This final value is subtracted from 1 to get the red list indicator value.

This calculation is expressed mathematically as follows:

$$RLI_t = 1 - \frac{\Sigma_s W_{c(t,s)}}{(W_{EX} * N)}$$

$W_{c(t,s)}$ is the weight of category C at time T of species (species) (weight for "severely endangered" = 4, "endangered" = 3, "weak" = 2, "close to threatened" = 1, "less of concern" = 0

A weight of 5 is assigned to endangered species that are classified as "probably extinct" or "likely extinct in the wild."

W_{EX} = 5

The weight assigned to "extinct" or "extinct in the wild" species; N is the total number of species assessed, excluding those assessed as lacking data in the current time period, and those considered "extinct" in the year the species group was first assessed.

The law requires the following:

Include exactly the same set of types in all time periods

The only changes in the Red List category are those resulting from a real improvement or deterioration in the situation (i.e. excluding changes resulting from improved knowledge or taxonomic revisions), and

Exclude data-deficient species (or process them according to the procedure described above).

Last updated: 2024

Item	2024			
	Status	Reptiles	fowls	Mammals
Extinct Species	-	-	1	3
Including Endemic	-	-	1	1
Extinct in the Wild	-	-	3	1
Including Endemic	-	-		No species
Immediately Threatened	-	1	2	1
Including Native		1	-	1
Threatened Species	1	-	12	3
Including Native	1	-	1	3
Vulnerable Species	-	28	13	6
Including Native	-	28	-	6
Under Threatened Species	1	5	32	4
Including Native	1	5	-	4
Least Concern	5	41	491	43
Indigenous	5	41	392	40
Total Threatened Species	-	29	27	10
Including Native	-	29	1	10
Known Species	7	137	-	79
Including Native	7	136	-	76
Species for which no data is available	-	55	-	21
Including Native	-	55	-	20
Unclassified Species	-	7	-	1
Including Native	-	7	-	1

Indicator 15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species.

Description of the indicator: This indicator aims to identify trends in:

Commitment of countries to relevant multilateral conventions, specifically:

(1) National adoption of policies related to invasive alien species.

Percentage of countries that have:

(a) National legislation and policies relevant to invasive alien species.

(b) Goals and targets within national strategies for the prevention and control of invasive alien species are compatible with Aichi Target 9.

Translate political arrangements into actions by countries to implement policies and actively prevent and control invasive alien species and provide the necessary resources for such action, specifically:

(2) Allocate national resources for the prevention and control of invasive alien species.

Sources of data: Ministry of Environment, Water and Agriculture

Unit of measurement: Strategy

Level of disaggregation: National

Method of calculation: The components of this sub-indicator are calculated as the number of countries with (a) national legislation and policies rele-vant to invasive alien species concerns; and (b) national strategies for the prevention and control of invasive alien species, each divided by the total number of countries (196 to date) for which data are available. The first data point for component (1) (a) of this sub-indicator is 2010; and the first data point for component (1) (b) is 2016.

Part II:

This sub-indicator is calculated as the number of national respondents to the annual survey on funding for the invasive alien species response who reported adequate resources, divided by the total number of countries (142 to date) for which data are available. The first data point for this sub-indicator is 2016. Part 2 includes 18 specific components obtained from the follow-ing questions used in the annual survey on invasive alien species, as follows:

Does your country have a government department, agency or national agencies (including supranational institu-tions/ organizations) responsible for managing invasive alien species affecting the natural environment, economic sectors (e.g. agriculture, forestry, tourism, etc.) or human health?

Are there institutions (including supranational institutions/organizations) with a clear legal mandate and powers to develop national plans and policies regarding invasive alien species?

The table in Part II includes 18 specific components obtained from the following questions used in the annual survey of inva-sive alien species related to functions, legal authorization, necessary powers and resources of national institutions related to invasive alien species. Each question is answered with "yes", "no" or no.

Last updated: 2024

Part I: (1) (a) National legislation deemed relevant to the prevention and control of the introduction of invasive alien spe-cies.			
Item	**YES**	**NO**	**Not applicable**
Saudi Arabia is a recipient of global funding that has access to any funding from global financial mechanisms for projects related to the management of invasive alien species (1 = yes, 0 = no)			✓
Legislation, regulations and laws relating to the prevention of the intro-duction and management of invasive alien species (1 = yes, 0 = no)	✓		
The objectives of the Biodiversity Strategy and the National Plan of Action are aligned with Aichi Biodiversity Target 9 set out in the Strategic Plan for Biodiversity 2011-2020 (1=Yes, 0=No)	✓		

Part II: Translating political arrangements into action by countries to implement policies, prevention and effective control of species Invasive alien and allocate resources for the procedure.	
Item	**Answer**
Does your country have a government department, agency or national agencies (including supranational institutions/organizations) responsible for managing invasive alien species affecting the natural environment, economic sectors (e.g. agriculture, forestry, tourism, etc.) or human health?	Yes
Are there institutions (including TNCs) that have a clear legal mandate and powers to conduct risk analyses of potential invasive species?	Yes
Are there institutions (including supranational institutions/organizations) with a clear legal mandate and powers to conduct risk analyses related to potential invasive species?	Yes
Are there institutions (including supranational institutions/organizations) with a clear legal mandate and powers to prevent the deliberate introduction of species assessed as potentially gaseous (including import for agriculture, aquaculture, nursery trade, animal husbandry, pet husbandry, etc.)?	Yes
Are there institutions (including supranational institutions/organizations) with a clear legal mandate and powers to limit the unintentional introduction of alien species?	Yes
Are there institutions (including supranational institutions/organizations) with a clear legal mandate and powers to promote public awareness of alien invasive species issues?	Yes
Are there institutions (including supranational institutions/organizations) with a clear legal mandate and authority to monitor and implement surveillance programmes to detect groups of founders of invasive alien species at an early stage?	Yes
Are there institutions (including supranational institutions/organizations) with a clear legal mandate and powers to contain and eradicate invasive alien species populations within the country?	Yes
Are there institutions (including supranational institutions/organizations) with a clear legal mandate and powers to record and preserve information about invasive alien species?	Yes

Part II: Translating political arrangements into action by countries to implement policies, prevention and effective control of species Invasive alien and allocate resources for the procedure.	
Item	**Answer**
Are there institutions (including supranational institutions/organizations) with a clear legal mandate and powers to enforce relevant legal provisions regarding the control of invasive alien species?	Yes
Are there any legal provisions or institutional arrangements in place to facilitate cooperation between different government bodies in decision-making on invasive alien species?	Yes
Has your country allocated from the national budget to manage the threat of invasive alien species?	Yes
Can you provide an estimate of this allocation?	It is not possible to provide a single, exact number for the national budget allocation specifically for Invasive Alien Species (IAS) management.
If your country is a recipient of global funding (e.g. GEF – has your country received any funding from the GFF for projects related to the management of invasive alien species?	No
If the answer is yes, are these actions being implemented?	Not applicable
Does your biodiversity strategy (local, national, regional or supranational) include one or more targets and actions related to the management of invasive alien species?	Yes
If yes, are these actions being implemented?	Partial implementation
Are there budgetary allocations or are there any financial instruments (such as dedicated financial programs) available for this implementation?	Yes
Has your country developed a national strategy and action plan for invasive alien species?	
If yes, are these actions being implemented?	Partial implementation
Is there budget allocation or are there any financial instruments (e.g. dedicated financial programs) available for this implementation?	Yes
"If your country has not developed a National Invasive Alien Species Strategy and Action Plan (NISSAP), under what national regulatory or policy framework is IAS prevention, control and management currently done in your country? "	No answer
Do you know of any NGOs or civil society groups working on invasive species management in your country?	Yes
What is the level of involvement?	High involvement
Are there institutions (including supranational institutions/organizations, e.g. EU) with a clear legal mandate and the necessary powers to develop national plans and policies in relation to invasive alien species?	Yes
Are there any forms of collaboration with other countries that your government engages in on a regular basis?	Yes
Please enter the name of your country (not entering a name will invalidate the survey).	Kingdom of Saudi Arabia