



# **IUCN-ROWA Programme 2020-2025**

**(Results and Action plan for Biodiversity, Protected Areas & World Heritage Programme)**

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## INTRODUCTION

Biodiversity is the foundation of life on Earth. It is crucial for the functioning of ecosystems which provide us with products and services without which we couldn't live. Oxygen, food, fresh water, fertile soil, medicines, shelter, protection from storms and floods, stable climate and recreation - all have their source in nature and healthy ecosystems. Biodiversity is extremely complex, dynamic and varied like no other feature of the Earth. Its innumerable plants, animals and microbes physically and chemically unite the atmosphere (the mixture of gases around the Earth), geosphere (the solid part of the Earth), and hydrosphere (the Earth's water, ice and water vapor) into one environmental system which makes it possible for millions of species, including people, to exist. By changing biodiversity, we strongly affect human well-being and the well-being of every other living creature. In response to the urgent need to address the issue of biodiversity loss, nearly 200 governments adopted the Strategic Plan for Biodiversity 2011-2020 (Aichi Targets) at the Convention on Biological diversity meeting in Nagoya, Japan, in October 2010. The strategic plan includes a shared vision, a mission, and 20 targets organized under five strategic goals, to inspire broad-based action by all Parties and stakeholders.

In IUCN's view the Strategic Plan for Biodiversity 2011-2020 (Aichi Targets) represents an unparalleled opportunity to galvanize all parts of society to work to tackle the crisis of ongoing biodiversity loss, on which the life on this planet depends. IUCN (its Members, Commission Members and Secretariat) played a significant role in the development and adoption of the Strategic Plan. In response to a request from the Scientific Authorities of the Biodiversity – related Conventions (CSAB), IUCN has mapped the Aichi Targets to the programmes, plans and action plans of these conventions. This is promoting greater synergy and cohesion between the conventions as well as a more streamlined approach to achieving the targets. IUCN has signed an agreement with the SCBD that aims at establishing areas of specific cooperation with the Convention.

Helping countries and communities designate and manage systems of protected areas on land and in the oceans, is one of IUCN's main areas of expertise. Together with species conservation, this has been a key focus of attention of IUCN's work and of a vast majority of IUCN Member organizations. Effectively managed systems of protected areas have been recognized as critical instruments in achieving the objectives of the Convention on Biological Diversity and the Millennium Development Goals. The World Commission on Protected Areas (WCPA) is the world's premier network of protected area expertise. It is administered by IUCN's Global Programme on Protected Areas. WCPA works by helping governments and others plan protected areas and integrate them into all sectors; by providing strategic advice to policy makers; by strengthening capacity and investment in protected areas; and by convening the diverse constituency of protected area stakeholders to address challenging issues. For more than 50 years, IUCN and WCPA have been at the forefront of global action on protected areas.

IUCN is the advisory body on nature to the UNESCO World Heritage Committee. Working closely with IUCN Members, Commissions and Partners, and especially the World Commission on Protected Areas (WCPA), and with a range of partners, IUCN's World Heritage Programme evaluates new sites nominated to the World Heritage List, monitors the conservation of listed sites, promotes the World Heritage Convention as a leading global instrument for conservation, and provides support, advice and training to site managers, governments, scientists and local communities. The IUCN World Heritage Programme also initiates innovative ways to enhance the role of the World Heritage Convention in protecting the planet's biodiversity and natural heritage



and positioning the worlds' most iconic places as exemplars of nature-based solutions to global challenges.

The Western Asia region is geographically not clearly defined and various institutions use the term to designate different geographical areas, depending on the scope of their operations. In its broadest geographic sense, the Western Asia region can comprise countries located from the eastern shores of the Red Sea and the Mediterranean Sea to the Gulf coast in the east, up to the Caucasus Mountains in the north. The United Nations Statistics Division defines Western Asia as a geographic sub-region of Asia that encompasses Armenia, Azerbaijan, Bahrain, Cyprus, Georgia, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates and Yemen. However, some organizations, even within the UN system, refer only to a sub-section of this wider geographic definition, based on regional, cultural or political identities. For instance, the membership of the United Nations Economic and Social Commission of Western Asia (ESCWA) comprises only the Arab countries of Western Asia, sometimes also referred to as Arab Western Asia or the Arab Mashrek, plus most Arab countries situated in North Africa (Egypt, Libya, Morocco, Tunisia and Sudan); as such, it excludes Cyprus, Iran, Israel, Turkey and other countries located further north towards the Caspian Sea. Within the UN and other international organizations, Western Asia has also often come to replace the narrower terms “Middle East” and “Near East”, which are regarded as Eurocentric as they designate the region in relation to Europe. Other institutions use Middle East in combination with “North Africa”, resulting in the term “MENA region”, which also includes non-Arab countries. The Western Asia region as defined in this report thus extends from the Red Sea in the west to the Gulf coast in the east, and from the north-eastern shore of the Mediterranean Sea to the Gulf of Aden in the south.

West Asia is part of three eco-regions that incorporate a variety of ecosystems, including Mediterranean forests, deserts, plains, rangelands, savannas, oases, mountains, rivers, lakes, springs, mudflats, swamps, marshes, mangroves, seagrass beds and coral reefs, all of which provide a wide array of ecosystem services and ecological corridors for migratory species through the region. On the other hand, West Asia is plagued by political instability and conflict, which are having drastic impacts on people's security, livelihoods and conservation, while it will be affected by climate change that will threaten livelihoods further through disasters. West Asia has recently undergone profound ecological changes. According to fragmented assessments, the region has suffered a substantial loss of biodiversity and a degradation of habitats as a result of human activities. The environment is dominated by limited water resources, a scarcity of arable land, fragile ecosystems and episodic droughts.

The IUCN West Asian region comprises of 13 countries including Iraq, Jordan, Lebanon, the Occupied Palestinian Territory, the Syrian Arab Republic, Yemen and Iran in addition to the Gulf countries including Bahrain, Oman, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates. The International Union for Conservation of Nature's involvement in West Asia region is being coordinated by IUCN Regional Office for West Asia (ROWA) which is based in Amman-Jordan and responsible for managing IUCN business at the regional and national levels. IUCN ROWA is working in cooperation with its members, partners, commissions and donors to shape and define future sustainable development agenda in the region. IUCN ROWA also focuses on a multi-stakeholder decision process involving governments, civil society and research institutions. Environmental awareness is a key issue for making a difference, thus the office facilitates communication, coordination, and information exchange among different actors in the region. In 2005, the IUCN ROWA was granted an observer status in the Arab League after a decision made by the Council of the Arab Ministers Responsible for the Environment (CAMRE). During 2006 and



2007, IUCN ROWA has been an active participant in the technical committee for environmental conventions in the Arab League by taking the lead on activating the RAMSAR convention in the Region.

## **SITUATION ANALYSIS IN WEST ASIA**

### **A. BIODIVERSITY**

The Arab region is a meeting place and a transitional area between various phytogeographic and zoogeographic regions of the world. Floristic elements of five floral provinces exist in the region representing the Mediterranean, Irano-Turanian, Saharo-Sindian, and the Sudano-Deccanian (Zohary 1973). The spectacular terrain and various climatic conditions that prevail in the Arab region, along with the diverse biogeographic origins of the species, contribute to the diversity of flora and fauna at the species level, particularly to the endemism of these taxa. The number of plant species varies among the sub-regions of the Arab region, reaching up to 4,000 species in some countries. A large number of endemic taxa also occur in the region; the total number of known endemic flora is about 3,397 (Boulos and others 1994; Ghabbour 1997). Of the six major faunal realms, three are represented in the region: the Palaearctic, the Ethiopian and the Oriental (Ghabbour 1997). There are approximately 1,700 mammals, of which 39 (or 3 percent) are endemic (WRI 2002; Animal Info. database 2005; SCBD 2010). In addition, 30 species of birds are endemic to the region along with 132 species of reptiles and eight amphibians (FAO 1997; WRI 2002; SCBD 2010). Endemism is highly exceptional in some localities like Socotra archipelago where more than 30 percent of the biota is endemic. For the Arab region, mammal species diversity is fairly low and ranges from 0.002 to 0.005 km<sup>2</sup> (Mackay 2009).

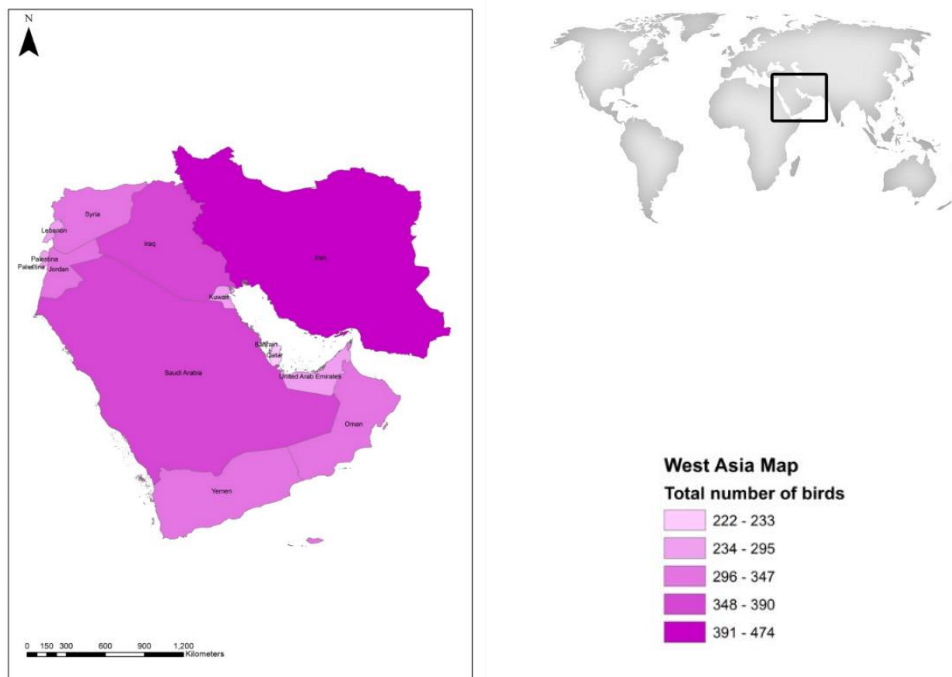
West Asia countries have a number of global Key Biodiversity Areas (KBA). One of this KBA is the Irano-Anatolian Hotspot located in part of the mountains of northern Iraq and northeast Syria, the climate is continental with an annual rainfall ranging from less than 100 to over 1000 mm. The ecosystem type consists of forest steppe, which supports oak-dominant deciduous forests on the southwestern slopes of the Anatolia and Zagros mountains. This hotspot includes four endemic and threatened species of vipers (*Vipera* sp.). The other KBA in the region is the Mediterranean Basin Hotspot. In this KBA, the region supports diverse forms of vegetation “ecoregions”, most notably: Eastern Mediterranean conifer-sclerophyllous-broadleaf forests, Mediterranean acacia-argania dry woodlands and succulent thickets, Mediterranean dry woodlands and steppe, and the true Mediterranean woodlands and forests (WWF 2001).

With an original area that covered 15,000 to 20,000 km<sup>2</sup>, the Mesopotamian marshlands complex, centered at the confluence of the Tigris and Euphrates rivers in southern Iraq, was the largest wetland in the Mashreq sub-region of the Arab region. Aside from their importance to the Arab Marsh people who settled there, the marshlands are home to many resident and migratory birds. Upstream dam building coupled with water diversion and land reclamation projects in southern Iraq reduced water inflow into these swamps, which have reduced their surface area significantly, converting them to bare land and salt crusts (UNEP 2001). Less than 7 percent of their original extent remained in 2002 (UNEP 2004). By 2004, with re-flooding efforts, nearly 40 percent of the marshlands were inundated (The Eden Again Project 2004). A UNEP assessment of the marshlands restoration in 2006 concluded that about 58 percent of the marsh areas are present, though there is fragmentation of the wetland areas. Signs of biodiversity were documented in terms of the abundance of vegetation and the number of bird species; however, frequent droughts and demand for irrigation water are still the main threats to this marshland ecosystem. In 2007, Haur Al-Hawizeh, an area of 137,700 ha of

marshland in the Mesopotamian complex, was declared a Wetland of International Importance (Ramsar 2009), and in 2016 the Mesopotamian Marshlands (al-Ahwar) have been inscribed on the World Heritage List during the 40th session of the World Heritage Committee (UNESCO 2016).

The 3<sup>rd</sup> KBA in the region is the Coastal Forests. This hotspot contains the forests of southeastern Somalia. The climate is tropical to subtropical with complex vegetation composed mainly of moist and dry forests, coastal thickets, fire-climax savannah woodlands, seasonal and permanent swamps, and littoral habitats that include mangrove vegetation along parts of the coast. This hotspot is home to a variety of primate species. Of particular ecological interest, in this KBA, are the patchy mangrove forests (*Avicennia marina*) that grow along the coasts of the Gulf countries and the Red Sea. Ecologically, mangrove communities attenuate wave action, halt coastal erosion and shelter native species of flora and fauna, especially avifauna. Nearly 45 species of waterfowl were recorded in mangrove areas of Bahrain (Mohammed 1994). Mangrove forests along the coasts of the ROPME Sea Area and the Red Sea are experiencing pressures due to the combined effects of grazing and cutting, commercial shrimp farming, pollution and large-scale development along the coasts of Arabia and Egypt (PERSGA 2004). The coastal zone in Bahrain was increased by 40 km<sup>2</sup> in less than 20 years due to reclamation projects (UNEP 2004). In Saudi Arabia, more than 40 percent of the ROPME Sea Area coastline was reclaimed and almost 50 percent of the mangroves were lost (Sheppard and others 1992). Similarly, the Palm Islands on the coast of Dubai (UAE) will increase Dubai's shoreline by 120 km.

**Map (1): Total number of birds in West Asia**

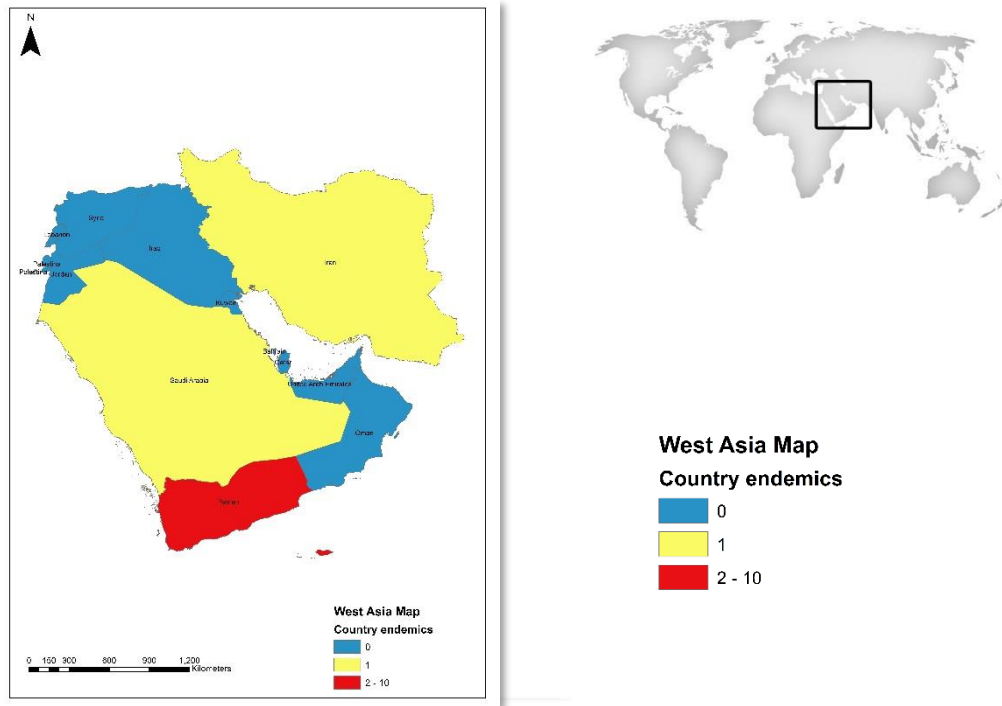


*This map developed by the expert & based on literatures*

The Arab region sits at the intersection of several flyways of waders/shorebirds, including: the West

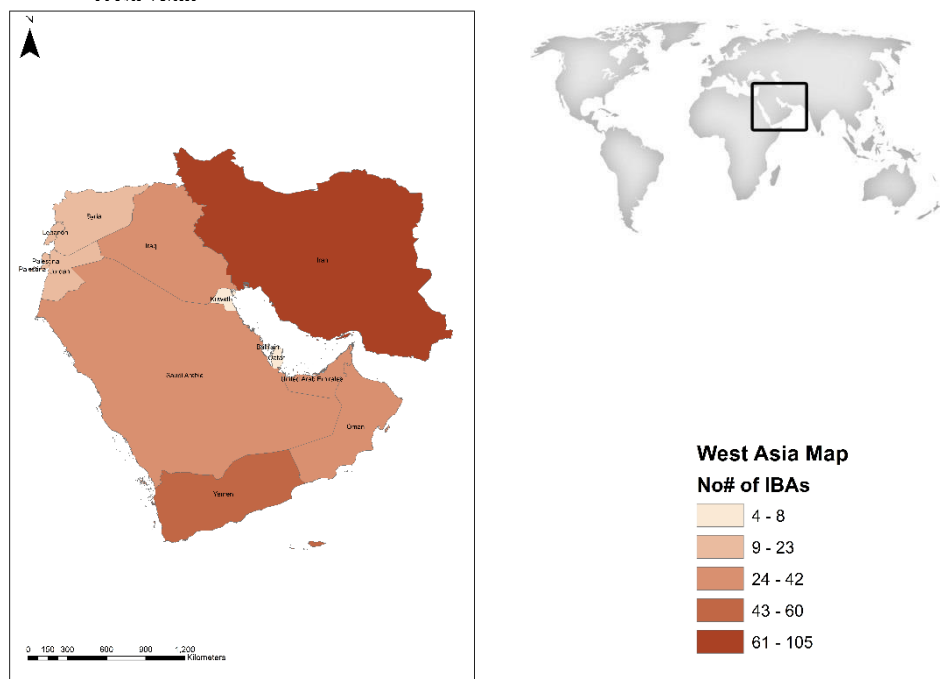
Asia/East Africa Flyway, the Mediterranean/Black Sea Flyway and the East Atlantic Flyway. The islands of the southern Red Sea, specifically the Farasan Islands, are used by many hundreds of thousands of birds during their spring and autumn migrations (PERSGA 2003). A total of 391 sites covering more than 300,000 km<sup>2</sup>, or about 5 percent of the land area of West Asia (including Iran and Afghanistan), has been identified as Important Bird Areas (IBAs) (BLI 2008). Half of these areas are wetlands, 30 percent of which are coastal and marine habitats. Over 20 percent of these are under high to moderate threat (Evans 1994, BLI 2008).

**Map (2): Total number of endemic birds in West Asia**



*This map developed by the expert & based on literatures*

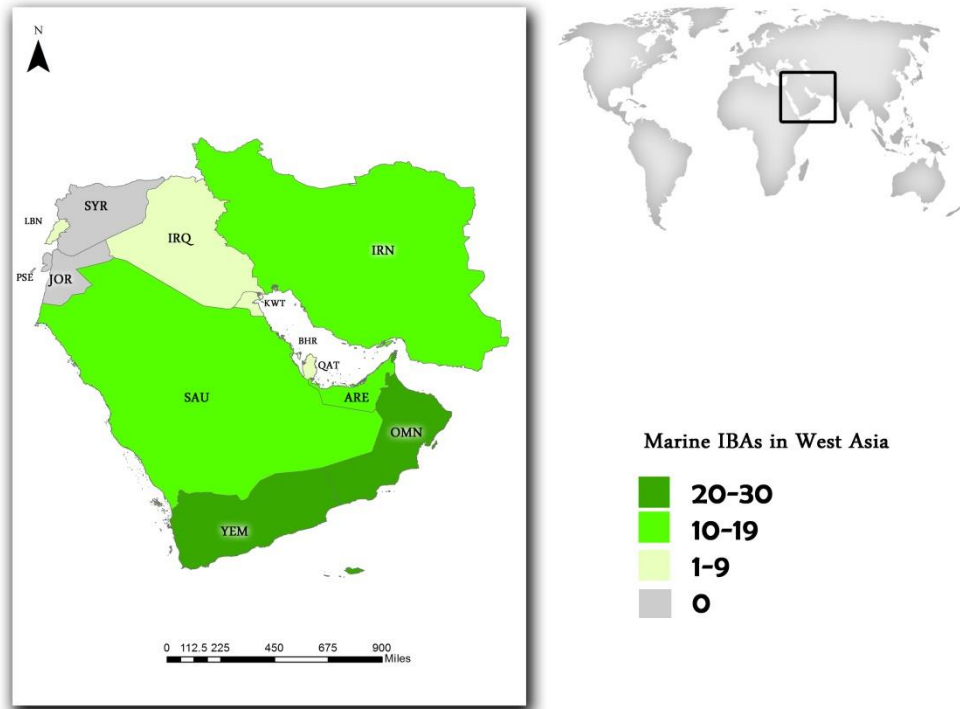
**Map (3): Number of Important Bird Areas (IBAs) in West Asia**





*This map developed by the expert & based on literatures*

**Map (4): Number of Marine Important Bird Areas (MIBAs) in West Asia**



*This map developed by the expert & based on literatures*

The total number of known threatened species in the Arab region is 1,746, thirteen percent of which are mammals, 12 percent birds, 5 percent reptiles, 0.5 percent amphibians, 25 percent fish, and 12 percent plants (IUCN 2009). A majority of these species are critically endangered (69 percent of animals and 39 percent of plants). The number of birds and reptiles threatened with extinction in the region doubled between 2002 and 2006, and the number of threatened fish species increased 14 times over this same period (IUCN 2009). In the Mediterranean, out of the nine species groups (amphibians, birds, cartilaginous fish, cetaceans, crabs and crayfish, endemic freshwater fish, mammals, dragonflies and reptiles) one-fifth are threatened with extinction - 5 percent are critically endangered, 7 percent endangered and 7 percent vulnerable (Cuttelod and others 2008).

Captive breeding programmes for threatened species began in the region in the 1980s, with the Arabian oryx, houbara bustard and some gazelle species in Jordan, Oman, Saudi Arabia and Syria (GCEP 2000). The number of Ramsar protected sites in the region is 109 with a total area of 12,410,436 ha, 44 percent of which are in West Asia countries (Ramsar 2007); the number of World Heritage Sites totals 65 and covers an area of 1,063,259 (8 percent) in the Arab region (UNESCO 2010). On the marine side, the protected and managed areas in the Mediterranean are 4 percent of its total area (Abdulla and others 2008); by contrast, the amount of protected area in the Red Sea is 12 percent (Wood 2007).

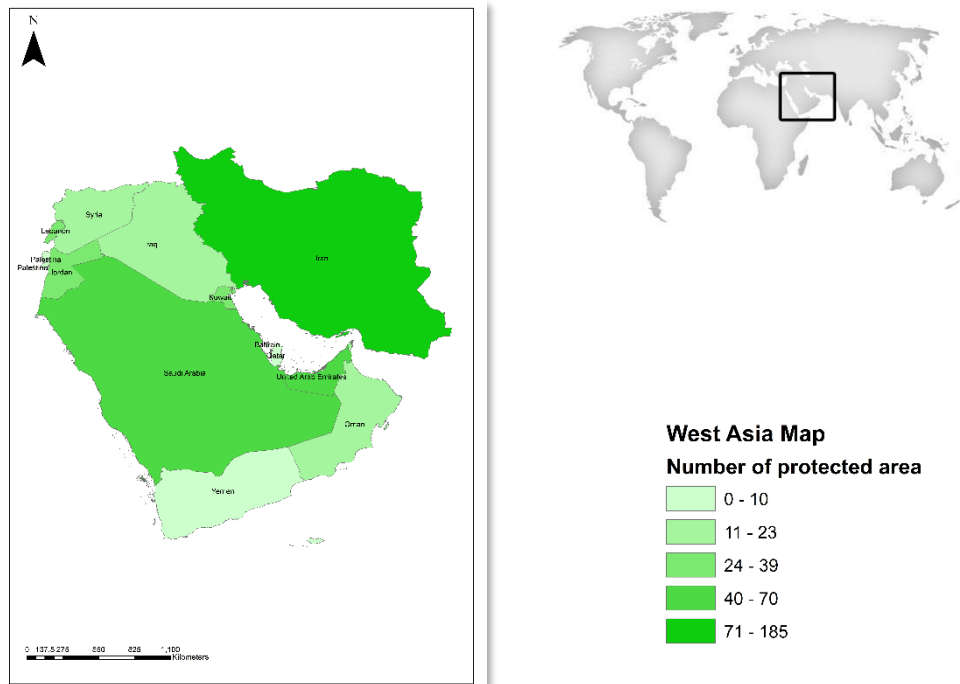
The driving forces and pressures of this biodiversity loss can be attributed to urban, agricultural and industrial development, specifically, overgrazing by domestic animals, over-utilization of land and water resources, commercial exploitation of biodiversity resources and overpopulation. Invasive

alien species are another threat to biodiversity and native fauna and flora. Alien species are species, sub-species, or lower taxon occurring outside of their natural range and dispersal potential, and includes any part, gametes or propagule of such species that might survive and subsequently reproduce (IUCN 2000). A total of 554 invasive species have been reported in the Arab region. Thirty-six percent of them are classified as aliens, whereas 51 percent are native and the bio-status of 75 species is yet to be determined. Nearly 15 per cent of reported invasive species are marine species introduced mostly by migration and ballast water from ships (GISD, 2012).

## B. PROTECTED AREAS

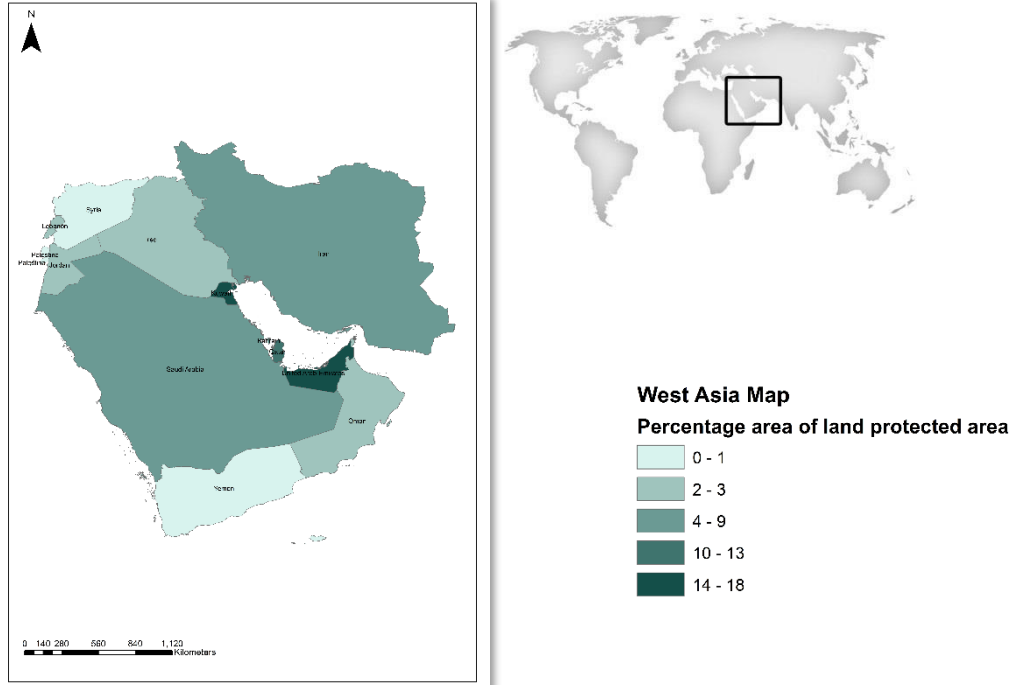
There are ongoing schemes to establish protected areas all over the Arab region. Many of these schemes have already proven successful as the countries of the region currently have over 150 protected terrestrial areas and 24 biosphere reserves, according to the Classification of the World Nature Conservation Federation. These reserves exist in 11 Arab countries and cover a total area of 12,733,710 ha, (UNESCO-MAP 1987). In West Asia, a total of 534 protected areas have been designated—Saudi Arabia leads the other West Asian countries in the number of designated areas (existing & future PAs), followed by Jordan and Kuwait. In 2019, the amount of protected areas in West Asia amounted to 28,912,000 ha, or less than 10 percent of the total land area (protected planet 2019). West Asia lags behind the world average in proportion of protected areas but is expanding efforts to increase the amount of lands under protection to reach 10 to 15 per cent of overall land cover by 2020 (UNEP 2010).

**Map (5): Number of Terrestrial Protected Areas within West Asia**



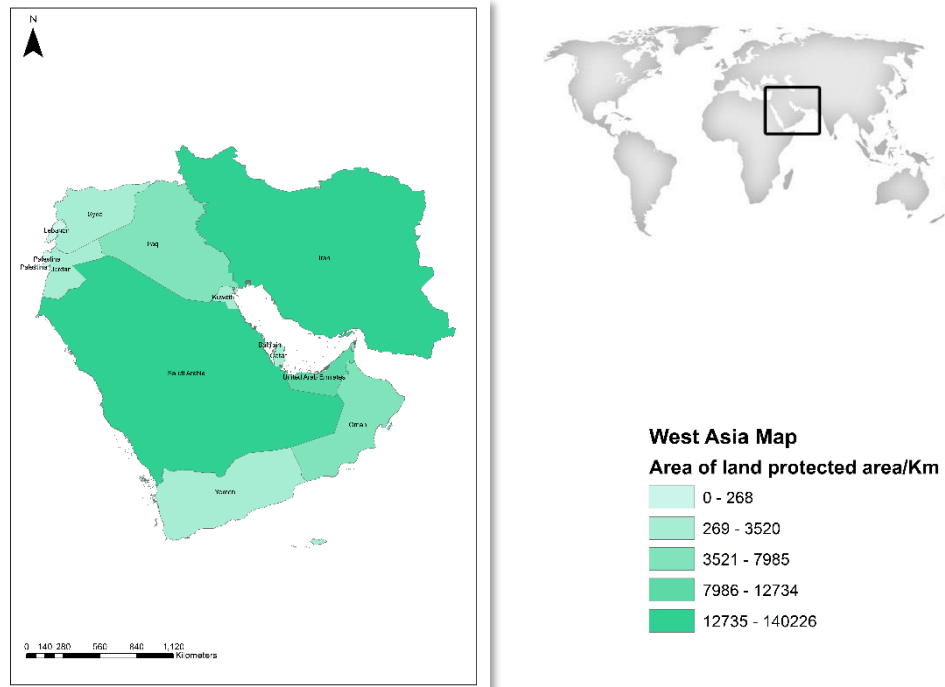
*This map developed by the expert & based on literatures*

**Map (6): Percentage of total area of Terrestrial PAs compared to country's area within West Asia**



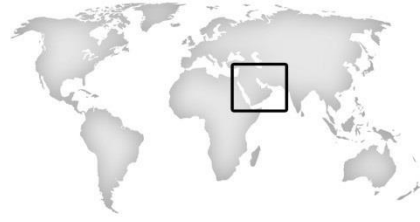
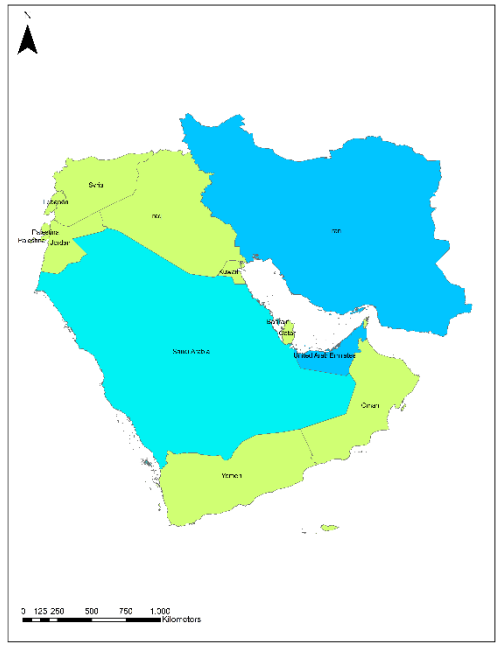
*This map developed by the expert & based on literatures*

**Map (7): Total Area of Terrestrial Areas with in west Asia**



*This map developed by the expert & based on literatures*

**Map (8): Number of Marine Protected Areas within West Asia**

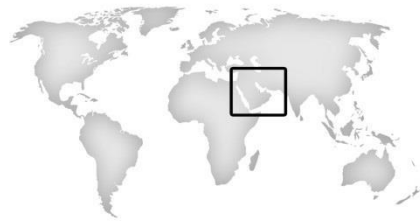
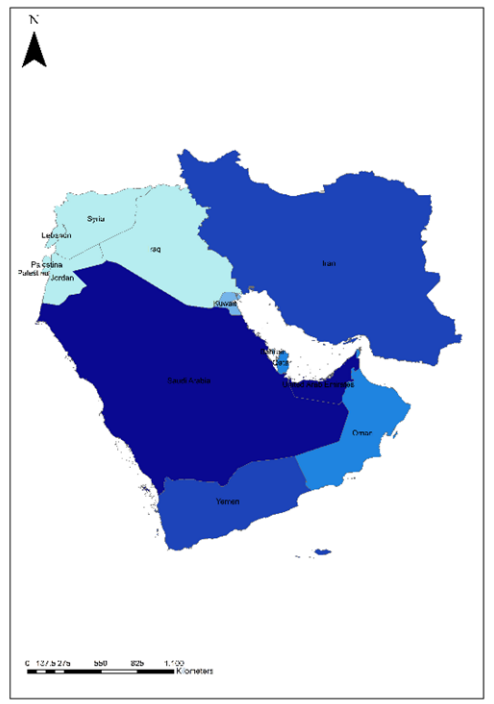


**West Asia Map**  
**Number of Marine Protected area**

- 0 - 2
- 3 - 5
- 6 - 10

*This map developed by the expert & based on literatures*

**Map (9): Total area of Marine Protected Areas within West Asia (km<sup>2</sup>)**

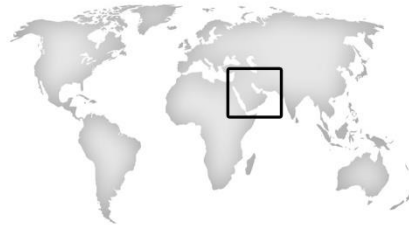
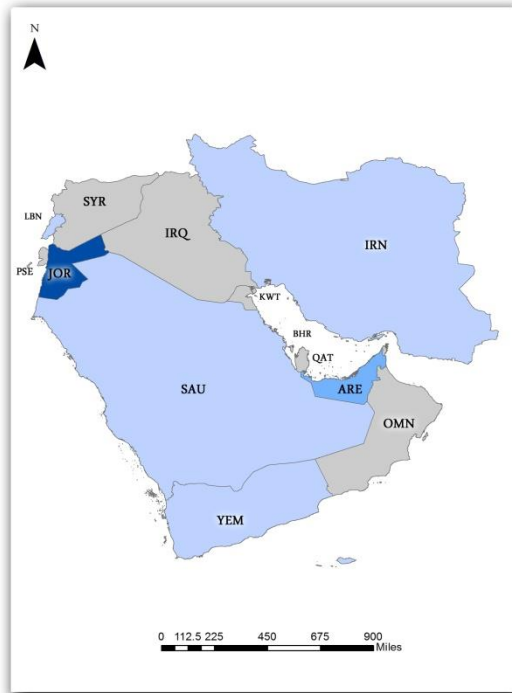


**West Asia Map**  
**Area of marine protected area-Km2**

- 0 - 41
- 42 - 176
- 177 - 664
- 665 - 2562
- 2563 - 6167

*This map developed by the expert & based on literatures*

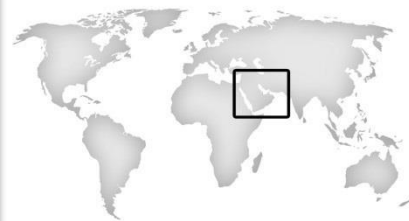
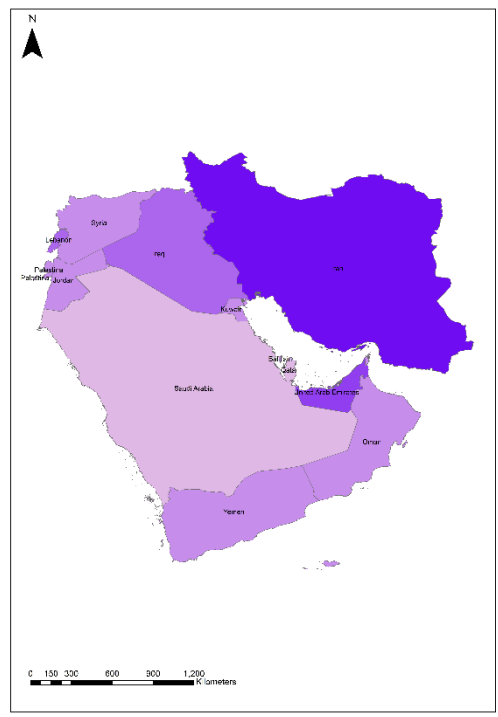
**Map (10): Percentage of total area of Marine PAs compared to country's EEZ within West Asia**



MPAs compared to country EEZ % area in West Asia

*This map developed by the expert & based on literatures*

**Map (11): Ramsar sites within West Asia**



West Asia Map Ramsar Site

*This map developed by the expert & based on literatures*

At the country level, Saudi Arabia announced the presence of 70 between declared and suggested



protectorates with a total area of 92,064 km<sup>2</sup> whereas the total protected land area barely exceeds 6 percent in Jordan, Oman and Sudan. Certain Arab countries comprise other forms of protected sites, which fall under the category of nationally-declared protected areas or ecosystems. However, in the Arab region as a whole, less than 5 percent of the total land area has been officially protected, which is below the world standard of 10 per cent (UNEP 2008). Among the most significant achievements regarding biodiversity conservation is the restoration of the Mesopotamian Marshlands of Iraq after being almost dried off (despite the shortage of water in the area as a result of the scarcity of the river water that feeds it) and declaring them as world heritage site. Furthermore, the creation of large water impoundments in Iraq, Jordan and Syria have provided new habitat opportunities for resident and migrating species, especially avian, offsetting the negative impacts of natural wetland destruction.

## IUCN MISSION, NICHE AND PROGRAMMES

*“A just world that values and conserves nature”*, this is IUCN’s Vision. Nature is our life support system. The diversity of life and nature must be conserved for its own sake and also for development to be sustainable. This requires fundamental change in all dimensions of life and society, including politics and economics, far beyond IUCN’s mandate and capacities. IUCN advances nature-based solutions to halt the destruction of biodiversity and to sustain development for all, especially the poorest people and communities who depend directly on nature for their livelihoods. A just world must guarantee equitable rights of access to biodiversity and nature’s benefits across generations, gender, and economic, social and geopolitical lines. This vision echoes the principles and values embodied in IUCN Resolutions on the Earth Charter and on the Intergenerational Partnership for Sustainability.

IUCN’s mission is *“To influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable”*. The world needs IUCN’s leadership to address the growing crisis in biodiversity loss and to show how nature can provide solutions to the world’s most pressing issues – and how environmental governance can be improved for biodiversity conservation. IUCN is the leading provider of biodiversity knowledge, tools and standards used to influence policy, undertake conservation planning and guide action on the ground. As a Union, IUCN is well placed to bring together the key actors at all levels.

IUCN Niche is *“To provide the knowledge-based platform to connect practice to policy at global and local levels and to influence decisions and actions relating to the sustainability of the earth and its people”*.

The IUCN Charter: *“This Charter calls upon the Secretariat, Commissions, and National and Regional Committees to work together to develop and implement the IUCN Programme collaboratively. It invites Members, where their priorities and capacities align with the Programme, to participate in its implementation.”*

The IUCN Programme provides the framework for planning, implementing, monitoring and evaluating the conservation work undertaken by the Commissions and the Secretariat with and on



behalf of IUCN Members. The IUCN Programme 2017-2020 was approved by Member organizations at IUCN's World Conservation Congress in September 2016 in Hawai'i, United States of America. The 2017-2020 Programme was developed as a result of a six-month consultation process across IUCN Members and Commissions.

The IUCN Programme 2017–2020 aims *“to mobilize communities working for biodiversity conservation, sustainable development and poverty reduction in common efforts to halt biodiversity loss and apply nature-based solutions to conserve biodiversity, enhance resilience, strengthen equity, reduce poverty and so improve the wellbeing of people on this planet”*. The Programme builds upon IUCN's niche as the world's authority on biodiversity conservation, nature-based solutions and related environmental governance. It has three Programme Areas:

1. Valuing and Conserving Nature enhances IUCN's heartland work on biodiversity conservation, emphasizing both tangible and intangible values of nature.
2. Effective and Equitable Governance of Nature's Use consolidates IUCN's work on people-nature relations, rights and responsibilities, and the political economy of nature.
3. Deploying Nature-based Solutions to Global Challenges in Climate, Food and Development expands IUCN's work on nature's contribution to tackling problems of sustainable development, particularly in climate change, food security and social and economic development.

## **PROGRESS TOWARD ACHIEVING IUCN PROGRAMMES**

IUCN works under the principle that nature conservation and human progress are not mutually exclusive. Facing tremendous forces of transformation such as climate change and dramatic socioeconomic inequality across the world, there are credible and accessible political, economic, cultural and technological choices that can promote general welfare in ways that support and even enhance our planet's natural assets.

To inform these choices, IUCN has been aligning conservation efforts all over the world around three solid lines of work: **valuing and conserving nature's diversity, advancing effective and equitable governance of the use of nature, and deploying nature-based solutions to climate, food and development challenges**. The approach that is emerging from its collective efforts demonstrates that nature is not an obstacle to human aspirations, but rather an essential partner, offering valuable

Contributions towards all our endeavors.

On 2017 IUCN's work Programme upended the litany of human threats to ecosystems by asking, and answering, what nature can do for humanity. In addition to documenting the increasingly degraded and unstable condition of the atmosphere, IUCN expanded its nature-based efforts for results within the sustainable use of nature.

### **I. Valuing and conserving nature:**



### A. IUCN Red List:

IUCN's 2017 portfolio is strong on knowledge products (IUCN Red Lists and Protected Areas) and related policy influencing, and is moving more into results on the ground with programmes such as SOS (Save Our Species) and BIOPAMA (Biodiversity and Protected Areas Management), which were scaled up with existing donor contacts. New Programme development in 2013 focused on spatial data integration of the flagship knowledge products, including work on Key Biodiversity Areas (KBAs). Regarding the West Asia region the following activities done as follows:

- *Regional Red List Status of Carnivores in the Arabian Peninsula:*

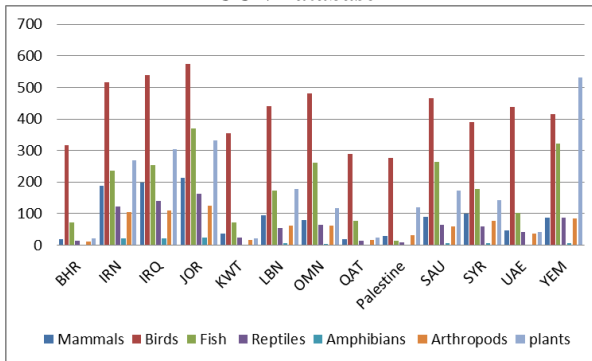
Thirty species of terrestrial carnivores have been reported to occur within the Arabian region and 20 of these have been recorded within the Arabian Peninsula. Out of the 20 species, one was assessed as Regionally Extinct, one as Critically Endangered, two as Endangered, one Vulnerable, four Near Threatened, five Least Concern and two Data Deficient. The four remaining species were deemed Not Applicable for regional assessment, according to the IUCN guidelines. Eight (50%) species are more threatened at a regional level than they are globally, the three largest species (wolf – leopard - cheeta) by 2-3 categories of threat. Populations of 12 species are considered to be declining, two are increasing and trends in two are unknown. The main threat to all carnivores is indiscriminate and sustained persecution through hunting, trapping and poisoning. Other threats include habitat destruction and degradation through overgrazing, expansion of roads and settlements and commercial and industrial development.

- *The Conservation Status and Distribution of Reptiles of the Arabian Peninsula:*

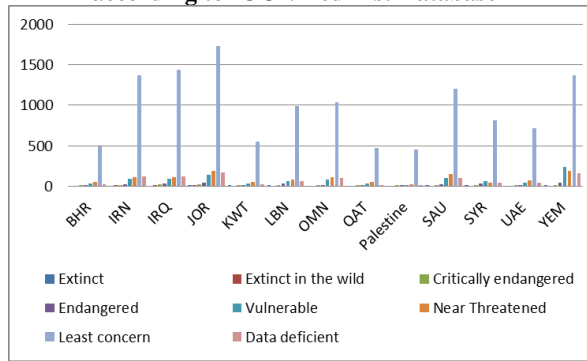
Reptile species richness is high, with 172 species currently recognized. Among these, 89 species (52%) are endemic to the Arabian Peninsula. Overall, reptile species richness is highest around the edge of the Peninsula, especially the south-western mountains and Dhofar, with the least diverse area being the Rub' al Khali (or Empty Quarter) and the areas of high endemism largely follow the same pattern. The island of Socotra has an especially high number of endemic species (26). Encouragingly, only six of the Arabian Peninsula's 172 reptiles are considered to be globally threatened, and only 10 are of regional concern. Habitat loss remains the overriding threat to reptiles within the region, particularly the conversion of land to agricultural use. Notably, 144 of the 172 species are represented in protected areas. The dataset provides a valuable baseline to inform the conservation and development planning process.



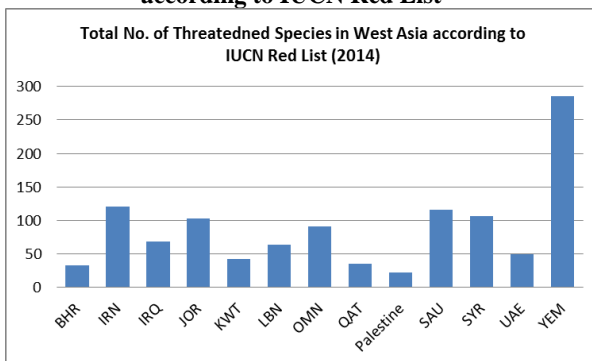
**Total recorded species within West Asia according to IUCN Database**



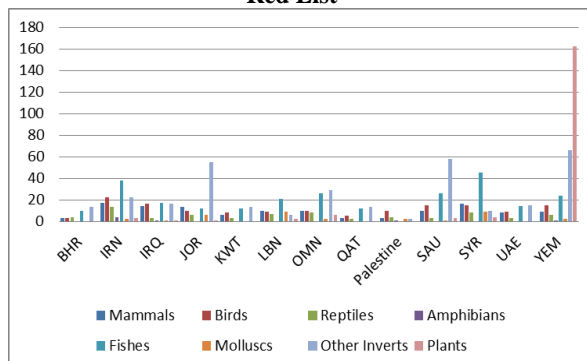
**IUCN Red List Categories within West Asia according to IUCN Red List Database**



**Total No. of Threatened Species in West Asia according to IUCN Red List**



**Threatened Species in West Asia according to IUCN Red List**



Source: IUCN Red List (Last accessed April 2015)

As indicated in the previous figures a lot of efforts done by IUCN Red List to provide such statistics summary about the recorded numbers of each country in West Asia region. Yemen comes on the top of the list that needs more conservation efforts in the future (Socotra Island is the major reason for this). No systematic assessment to develop a national Red List for each country. The current national assessments for threatened species are *ad hoc* ones. It is recommended to concentrate in the future to develop a regional assessment for plants and birds in West Asia region to be reflected in 6<sup>th</sup> National Report of CBD.

### B. Measuring risks to conserve natural and human communities

By assessing twenty ecosystem case studies on six continents by May 2013, IUCN had developed and tested a new environmental risk method to discover which ecosystems are tracking well and which are in trouble. A joint effort led by the Commission for Ecosystem Management and the Global Ecosystem Management Programme, the IUCN Red List of Ecosystems will identify an ecosystem as vulnerable, endangered or critically endangered in a method that is applicable worldwide across terrestrial, freshwater and marine ecosystems.

In order to reduce impacts of disasters and to be better prepared, a number of achievements have been attained in the Arab region:

- *Political commitment has increased.* In 2012, Heads of Arab States adopted the Arab Strategy for Disaster Risk Reduction 2020, under the auspices of the League of Arab States. The Strategy had been adopted by the Council of Arab Ministers Responsible for the Environment (CAMRE) and the Socio-Economic Council of the League of Arab States in 2011. This blue print is currently being translated into a framework of action to facilitate regional and national implementation. In early 2013, the Gulf Cooperation Council (GCC) committed itself to take steps to develop a risk reduction road map. The Secretary-General of the Cooperation Council

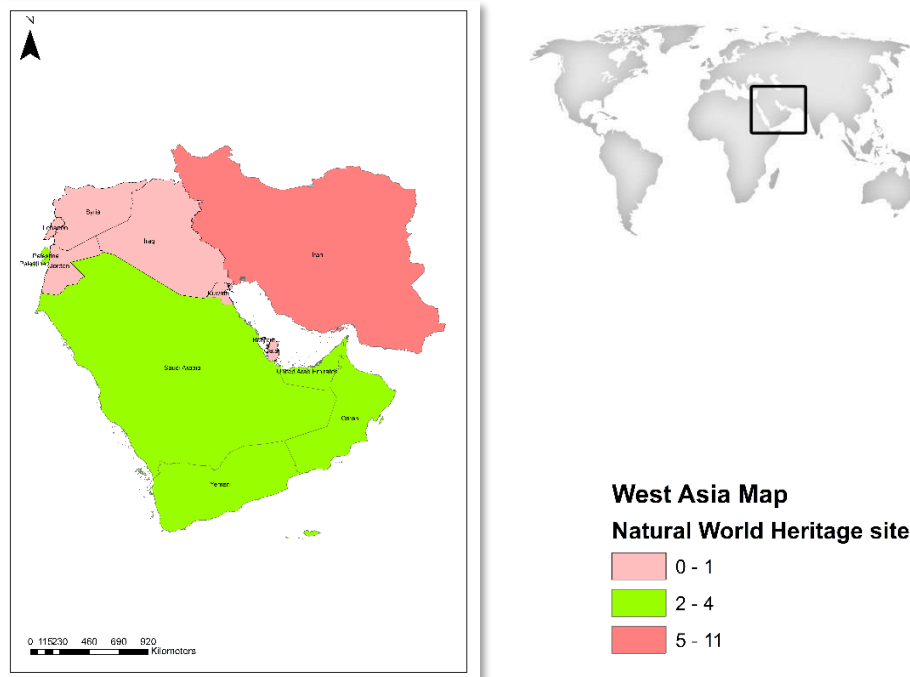
for the Arab States of the Gulf has called for strong regional commitment towards development of a disaster risk reduction strategy to strengthen the resilience of nations and individuals to natural hazards.

- **Awareness raised:** UNISDR has continued to promote the “Making Cities Resilient” campaign to support urban areas to become more resilient to disasters. Almost 300 cities and municipalities in the Arab region have joined the campaign (20% of all cities worldwide). The Mayors Handbook on “How to Make Cities More Resilient” was translated to Arabic and has been disseminated widely in the region. UNISDR provided a self-monitoring tool to all participating cities; the Local Government Self-Assessment Tool (LGSAT) assists local governments to assess DRR progress, and aids them in addressing gaps and challenges.
- Databases to account for disaster losses have been established. A number of Arab countries have started to report on their disaster losses. This will provide a practical basis for informed risk analysis and the development of disaster risk reduction policies. The UNISDR supported disaster inventories that enable countries to analyse disaster trends and their impacts in a systematic manner through the collection of historical disaster data.
- Reporting: A number of national partners drafted national progress reports on the implementation of the Hyogo Framework for Action (HFA). Bahrain, Jordan, Lebanon, Palestine, Syria, and Yemen have provided progress reports in this regard.

### C. Natural World Heritage sites

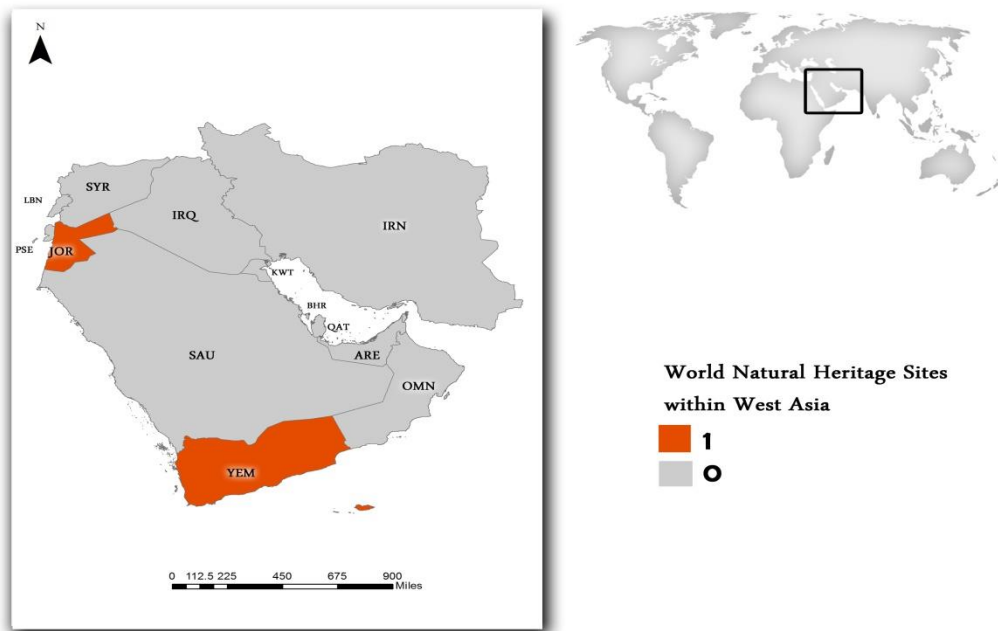
West Asia region is home to a wealth and diversity of natural heritage, with desert landscapes and marine sites being particularly noteworthy. There are currently (UNESCO 2019) Twenty Eight natural World Heritage sites and eleven mixed World Heritage sites in West Asia. At present, a total of 39 natural and mixed sites appear on the Tentative Lists of 13 West Asia Parties. UNESCO, in its report on the First Periodic Reporting Cycle<sup>3</sup> for the Arab States 2000-2003, called for a better representation of the wealth and diversity of cultural and particularly natural heritage of the Arab region on the World Heritage List.

**Map (12): Tentative Natural World Heritage Sites within West Asia**



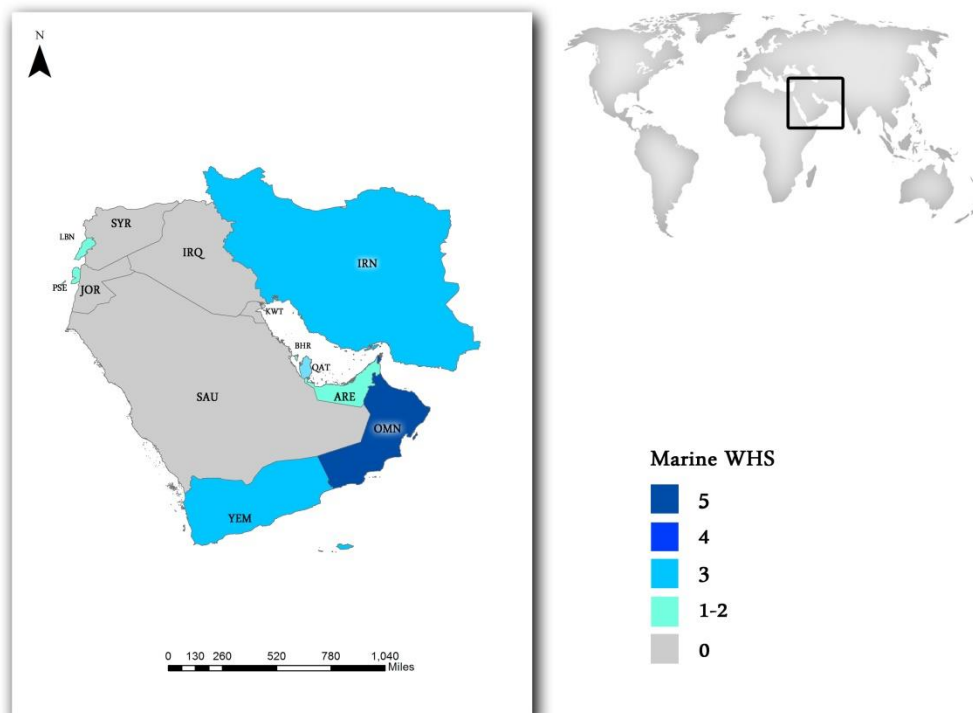
*This map developed by the expert & based on literatures*

**Map (13): Inscribed Natural World Heritage Sites within West Asia**



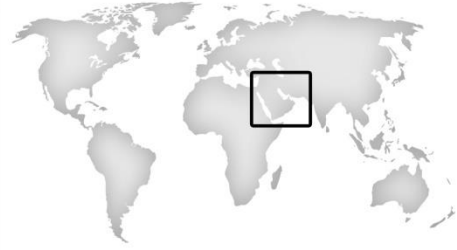
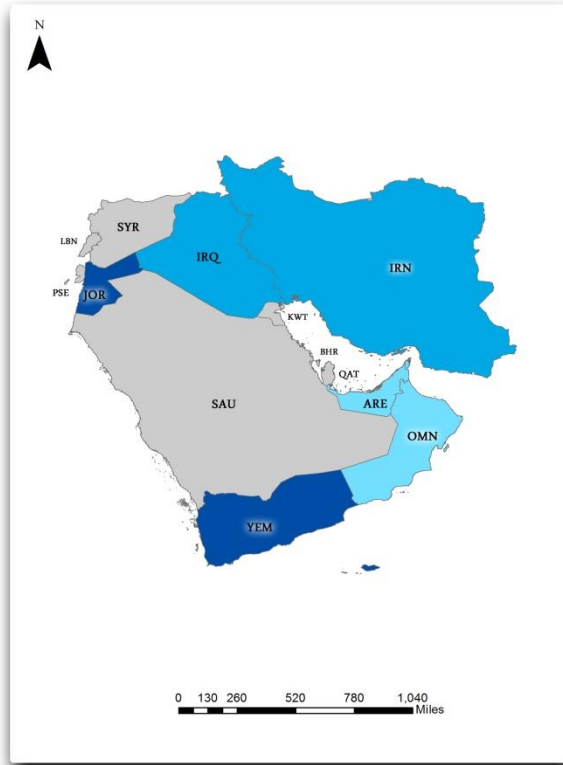
*This map developed by the expert & based on literatures*

**Map (14): Number of Tentative Marine World Heritage Sites within West Asia**



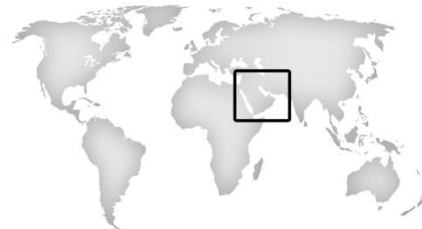
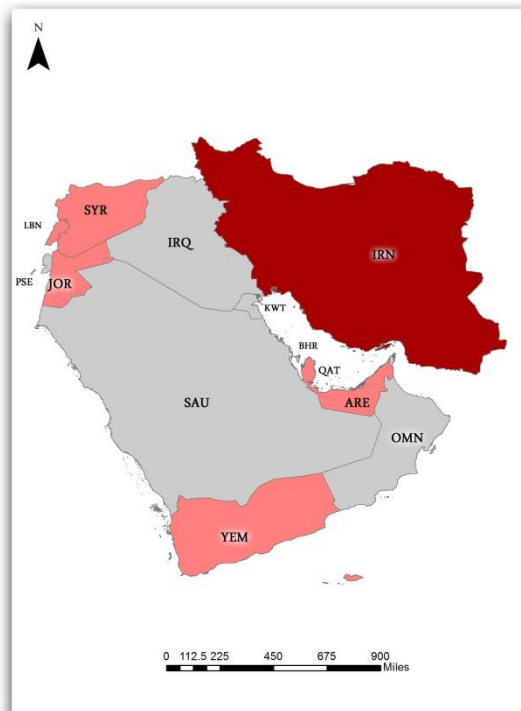
*This map developed by the expert & based on literatures*

**Map (15): Number of Tentative Mixed World Heritage Sites within West Asia**



*This map developed by the expert & based on literatures*

**Map (16): Number of UNESCO-MAP Biosphere Reserve within West Asia**

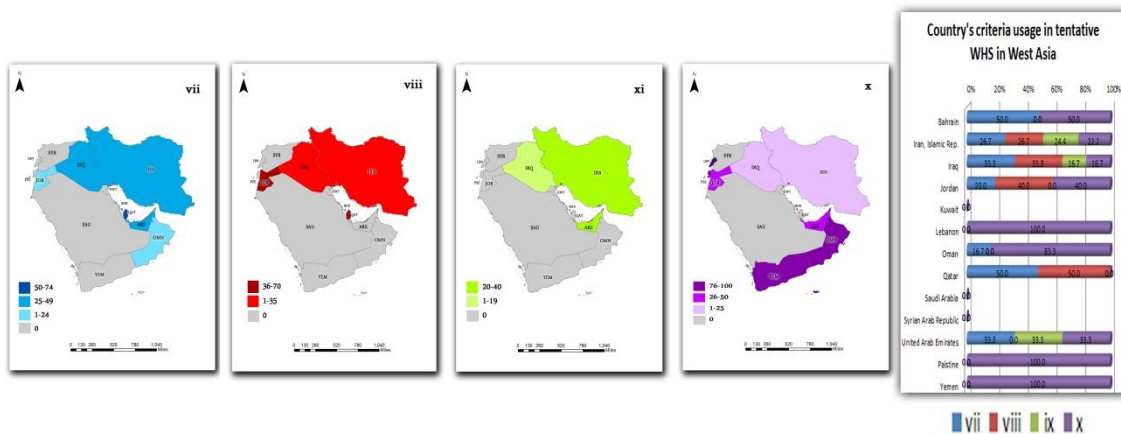


*This map developed by the expert & based on literatures*

There have been marked improvements in the recognition and management of natural and mixed heritage sites between the first and the second cycle of periodic reporting in the Arab States, but significant challenges remain. The 2010 Report on the Second Cycle of Periodic Reporting (WHC-10/34.COM/10A) states that the Arab States "...remain largely under-represented in terms of natural properties and trans-boundary nominations thereby not adequately reflecting the diversity of heritage in the Arab region on the World Heritage List... the need to focus more actively on presenting nominations of natural sites in the Arab region was considered a priority." Six State Parties had finalized inventories of natural heritage at the national or sub-national level as a step to informing Tentative List entries of such sites by 2010. These general statements on natural and mixed World Heritage sites in Arab States from the second cycle of Periodic Reporting show that a more in-depth analysis of the current status of their values, pressures and potential threats as well as protection and management – on a site by site basis – could contribute significantly to an improved understanding and, ultimately, management of these sites.

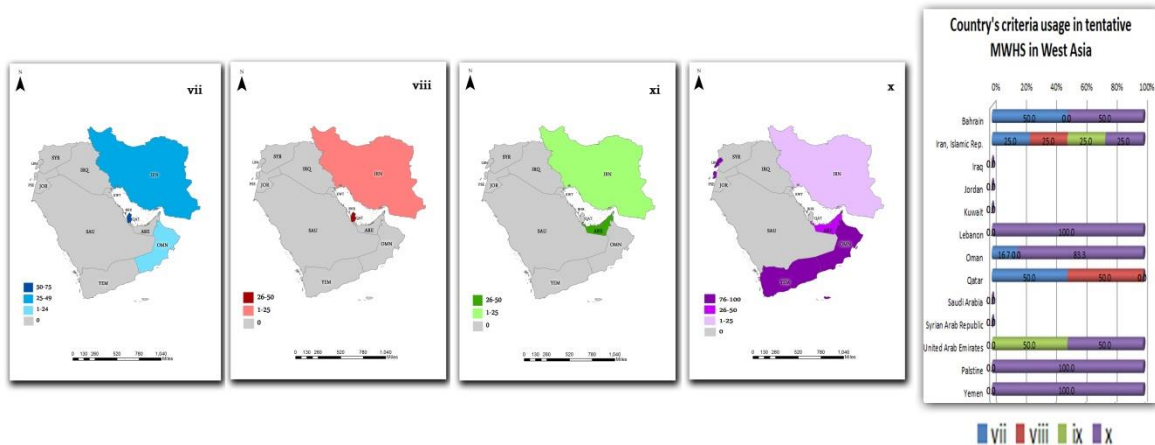
Currently, there are 35 natural and mixed sites included in the Tentative Lists of 12 Arab States. The number of sites on the Tentative Lists has grown steadily over the last 15 years, the number of inscribed sites has remained almost constant. It thus appears that the Tentative List process has not been fully effective in supporting new nominations from the Arab States.

**Map (17): Country's natural criteria usage in the tentative WHS within West Asia**



*This map developed by the expert & based on literatures*

**Map (18): Country’s natural criteria usage in the tentative marine WHS within West Asia**



*This map developed by the expert & based on literatures*

#### D. Planet of Protected Areas

Over the last months of 2013, IUCN hosted, elevated, clarified and accelerated goals of Biodiversity and Protected Areas Management (BIOPAMA), an ambitious programme which aims to improve the long-term conservation and sustainable use of natural resources in African, Caribbean and Pacific (ACP) countries, in protected areas and surrounding communities. It is an initiative of the ACP Group of States financed by the European Union’s 11th European Development Fund (EDF), jointly implemented by the International Union for Conservation of Nature (IUCN) and the Joint Research Centre of the European Commission (JRC).

BIOPAMA will enhance existing institutions and networks by making the best science and knowledge available for building capacity to improve policies and better decision making on biodiversity conservation and protected area management. Another important tool is Protected Planet it is the most up to date and complete source of information on protected areas, updated monthly with submissions from governments, non-governmental organizations, landowners and communities. It is managed by the United Nations Environment World Conservation Monitoring Centre (UNEP-WCMC) with support from IUCN and its World Commission on Protected Areas (WCPA). It is a publicly available online platform where users can discover terrestrial and marine protected areas, access related statistics and download data from the World Database on Protected Areas (WDPA). The goals of Protected Planet are that:

- The Protected Planet Initiative informs decision-making and enhances action;
- The Protected Planet Initiative is the global platform for the communication, exchange, acquisition and analysis of knowledge and data on the status and trends of protected areas;
- The Protected Planet Initiative provides the world's policy-makers with the best possible information on protected areas and their value for conserving biodiversity and ecosystem services, and supporting human communities.

In 2018 and during COP14 14 countries joined global ‘Green List of Protected Areas’ 4 of which are from west Asia. IUCN Green List of Protected and Conserved Areas is the first global standard of best practice for area-based conservation. It is a programme of certification for protected and conserved areas – national parks, natural World Heritage sites, community conserved areas, nature reserves and so on – that are effectively managed and fairly governed. .

## **II. Effective and equitable governance of nature's use**

Governance of protected and conserved areas is now clearly understood as a main element in the legal, policy, institutional and practical framework of conservation around the world. No longer a novelty, the concept and its application remain however a challenge for most countries and agencies. Fortunately, in line with the vision of the promise of Sydney, countries are committed to foster governance diversity, equity and vitality for their systems of protected and conserved areas, and to strengthen their relevant policies, practices and capacities. Technical tools such as the IUCN/WCPA Best Practice Guidelines on Governance of Protected Areas and the Primer on Governance for Protected and Conserved Areas are also available to offer guidance.

### **A. Important sites for biodiversity**

The World Database of Key Biodiversity Areas hosts data on Key Biodiversity Areas (KBAs). This database can support strategic decisions on protected areas by governments or civil society towards achieving Aichi Biodiversity Targets. It also guides the identification of sites under international conventions and in the setting of private sector policies and standards. The database is managed by the KBA Partnership, which comprises 11 founding partners and is served by the KBA secretariat hosted jointly by BirdLife International and IUCN. This work aims to provide the foundation for the creation of a representative Protected Areas network for freshwater species.

### **B. Integration of the knowledge products**

Over the period 2013 till 2018, IUCN began to integrate the six flagship knowledge products mobilized through the Union, with a goal of making information both accessible and useful to guide decision making. This will focus on supporting conservation and sustainability in four decision contexts: international policy (for example, in tracking progress towards the Convention on Biological Diversity's Aichi Targets); investment standards and safeguards for the private sector and financial institutions; conservation agencies; and land-and seascape planning. The integration of knowledge products is well advanced in the second of these, through the Integrated Biodiversity Assessment Tool, and with publication of: Biodiversity for Business: A guide to using knowledge products delivered through IUCN, which have set an example for the others.

## **III. Deploying nature-based solutions to climate, food and development**

### **A. Unlocking the Water, Energy, Food Nexus**

In January 2013, IUCN and the International Water Association (IWA) launched a "Nexus Dialogue on Water Infrastructure Solutions" to build partnerships and open the doors to innovation in water, food and energy security. The silent, invisible but measurable interdependence of water, energy and food has led to new demands for solutions that value water's "natural infrastructure," such as wetlands, watersheds, aquifers, rivers and floodplains. The Nexus Dialogue sought transformations in water infrastructure planning, financing and operation through a forum where water, energy and food professionals in each sector could share experiences and ideas for how water infrastructure portfolios and technologies can provide resources for the future. Innovative professionals in farming, energy production, natural resource management and engineering have the expertise and practical knowledge to address this challenge, but all too often cannot share their wisdom. Working across sectors, the Nexus Dialogue will let all sectors share solutions as they emerge around the world.



## ACTION PLAN FOR BIODIVERSITY, PROTECTED AREAS AND WORLD HERITAGE PROGRAMME IN WESTASIA ACCORDING TO IUCN GLOBAL PROGRAMME

### I. Programme Area 1: Valuing and Conserving Nature

Programme Area 1: Valuing and Conserving Nature.							
Global result 1.1: Credible and trusted knowledge for valuing and conserving biodiversity leads to better policy and action on the ground.							
Impact: The conservation status of species and ecosystems is improved.							
Common impact indicators: The proportion of the most important areas for biodiversity effectively managed for the conservation of species, ecosystems and genetic diversity							
Result indicators: (1) Extent, representativeness and connectivity of effectively managed protected areas; (2) Proportion of identified key biodiversity areas within and outside protected areas; (3) Number of exports of data from the IUCN Red List; (4) Extent to which IUCN advice and positions are followed in CBD, CITES and WHC.							
ROWA results	Sub-results	Delivery time	Indicators	Frequency	Budget (\$ 1000)	CBD (Aichi targets)	GEF Programs
Regional information platform about the values of biodiversity established and awareness of the people of the region is double increased as steps to conserve biodiversity and use it sustainably.	Target groups in the region analyzed and identified and their levels of understanding biodiversity values assessed.	By October 2020	<ul style="list-style-type: none"> <li>Trends in awareness levels related to biodiversity.</li> <li>Trends in communication programmes and actions promoting social corporate responsibility toward biodiversity.</li> </ul>	Annually	50	All targets	All BD programs
	Key partners that will help IUCN/ROWA to improve the effectiveness of the awareness programs involved.	By December 2020		Annually	40		
	Key messages and implementing tools for each target group developed and transmitted to them.	By December 2021		Annually	2		
	Annual regional awareness campaigns in the region implemented effectively.	By December 2022		Annually	280		
Rate of ecosystems degradation and habitats fragmentation in the region, reduced by 50% at	Major habitats in the region assessed and identified using GIS based mapping.	By December 2021	<ul style="list-style-type: none"> <li>Trends in proportion of</li> </ul>	Annually	350	Targets 6,7,8,11,12,13,14,15,16	BD Programs 1, 2, 9
	Size of degraded and fragmented habitats in the region identified their	By December 2021		annually	100		



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ROWA results	Sub-results	Delivery time	Indicators	Frequency	Budget (\$ 1000)	CBD (Aichi targets)	GEF Programs
least to the current situation.	rates of degradation reported and their tipping points clearly stated.		<ul style="list-style-type: none"> <li>degraded/threatened habitats</li> <li>Trends in condition and vulnerability of ecosystems</li> <li>Trends in fragmentation of natural habitats</li> </ul>				
	Institutional capacities to restore the degraded habitats enhanced by 50% to what exist now.	By December 2022		Annually	500		
	Financial, human and technical resources to restore the degraded habitats secured and effectively used.	By December 2022		Annually	30		
Regional programme on invasive alien species (IAS) well established with their pathways identified and managed and their priority species controlled.	All invasive alien species in the region and their pathways identified and prioritized at both national and regional levels.	By April 2021	<ul style="list-style-type: none"> <li>Trends in number of invasive alien species</li> <li>Trends in the impact of invasive alien species on extinction risk trends</li> <li>Trends in the economic impacts of selected invasive alien species</li> </ul>	Annually	25	Targets 5,6,7,9,10,11,12,13,14, 15	BD Program 4
	Regional measures and guidelines to control and eradicate invasive alien species and their pathways developed and well implemented.	By December 2022		Annually	200		
	Pilot projects for at least 3 countries (within the region) to control invasive alien species successfully implemented	By December 2022		Annually	2500		
Ecologically representative and well-connected regional system of protected areas established and integrated into the wider landscape and	Country based gap analysis for the national protected areas network assessed and gaps in habitats representativeness identified.	By June 2021	<ul style="list-style-type: none"> <li>Trends in extent of marine protected areas, coverage of key biodiversity areas.</li> </ul>	Annually	100	Targets 1,2,5,6,7,8,10,12,14,15	BD Programs 1,2,7,9
	Key Biodiversity Areas in the region identified and well documented.	By December 2021		Annually	400		

Programme Area 1: Valuing and Conserving Nature.								
Global result 1.1: Credible and trusted knowledge for valuing and conserving biodiversity leads to better policy and action on the ground.								
Impact: The conservation status of species and ecosystems is improved.								
Common impact indicators: The proportion of the most important areas for biodiversity effectively managed for the conservation of species, ecosystems and genetic diversity								
Result indicators: (1) Extent, representativeness and connectivity of effectively managed protected areas; (2) Proportion of identified key biodiversity areas within and outside protected areas; (3) Number of exports of data from the IUCN Red List; (4) Extent to which IUCN advice and positions are followed in CBD, CITES and WHC.								
ROWA results	Sub-results	Delivery time	Indicators	Frequency	Budget (\$ 1000)	CBD (Aichi targets)	GEF Programs	
seascape according to the CBD/PoWPA as well as IUCN management effectiveness standards and guidelines.	Technical support to the proposed Arab Union of Protected Areas secured with close collaboration with Arab League.	By December 2022	<ul style="list-style-type: none"> <li>Trends in protected area management plans and/or management effectiveness.</li> <li>Trends in representative coverage of protected areas.</li> </ul>	Bi-annually	50			
	The management effectiveness of 70% of the existing protected areas networks in the region assessed and evaluated according to the IUCN management effectiveness standards and guidelines.	By December 2022		Bi-annually	600			
	Regionally specific approaches for collaborative community-based management of protected areas demonstrated and documented in at least 5 countries of the region.	By December 2022		Bi-annually	120			
The role of IUCN/ROWA to support the UNESCO's world heritage convention (WHC) recognized at regional and global levels.	National Tentative Lists in the region updated with specific attention to deeper analysis of the potential Outstanding Universal Value (OUV) of sites on the Tentative Lists.	By June 2021	<ul style="list-style-type: none"> <li>Trends in extent of WH sites coverage.</li> <li>Trends in WHS management effectiveness.</li> <li>Trends in WHS inscribed.</li> </ul>	Bi-annually	150	Targets 1,2,5,6,7,8,10,12,14,15	BD Programs 1,2,7,9	
	At least one natural WH site in the region managed effectively and recognized globally with strong involvement of stakeholders in the management of the WHS.	By December 2022		Bi-annually				200
	Capacity of at least 5 WH site management teams enhanced to undertake Management Effectiveness	By December 2023		Bi-annually				150

<b>Programme Area 1: Valuing and Conserving Nature.</b>							
<b>Global result 1.1:</b> Credible and trusted knowledge for valuing and conserving biodiversity leads to better policy and action on the ground.							
<b>Impact:</b> The conservation status of species and ecosystems is improved.							
<b>Common impact indicators:</b> The proportion of the most important areas for biodiversity effectively managed for the conservation of species, ecosystems and genetic diversity							
<b>Result indicators:</b> (1) Extent, representativeness and connectivity of effectively managed protected areas; (2) Proportion of identified key biodiversity areas within and outside protected areas; (3) Number of exports of data from the IUCN Red List; (4) Extent to which IUCN advice and positions are followed in CBD, CITES and WHC.							
ROWA results	Sub-results	Delivery time	Indicators	Frequency	Budget (\$ 1000)	CBD (Aichi targets)	GEF Programs
	Assessments and use them as a tool to address threats to sites.						
The conservation status of the threatened species in the region improved and sustained according to the IUCN Red List criteria and guidelines.	Threatened species within at least 4 countries in the region assessed against the IUCN criteria.	By December 2023	<ul style="list-style-type: none"> <li>Number of exports of data from the IUCN Red List</li> </ul>	Bi-annually	600	Targets 5,11,12,13	BD Programs 1,2,3,4,5,9
	Capacity to undertake Red Listing and conservation action enhanced in relation to the identified species.	By December 2022		Annually	200		

## II. Programme Area 2: Effective and equitable governance of nature's use

<b>Programme Area 2: Effective and equitable governance of nature's use.</b>							
<b>Global result 2.1:</b> Improved governance arrangements over natural resources deliver rights-based and equitable conservation with tangible livelihoods benefits.							
<b>Impact:</b> Effective, just, gender responsive and equitable conservation yields tangible livelihoods benefits.							
<b>Common impact indicators:</b> Increased contribution from sustainably managed natural resources to household members.							
<b>Result indicators:</b> (1) Enhancement of institutional and governance arrangements based on a new IUCN natural resource governance framework; (2) Extent of protected areas managed in accordance with the IUCN's natural resource governance framework; (3) 3. Area (in ha.) of agriculture, fisheries and forestry managed according to IUCN's natural resource governance framework; (4) Extent of high seas administered in accordance with the ecosystem approach and IUCN's natural resource governance framework							
ROWA results	Sub-results	Delivery time	Indicators	Frequency	Budget (\$ 1000)	CBD (Aichi targets)	GEF Programs
Valuation of ecosystems' services well reported and 25% or these services	Ecosystems that are particularly important for human wellbeing in the region identified.	By December 2020	<ul style="list-style-type: none"> <li>Trends in benefits that humans derive</li> </ul>	Annually	20	Targets 5,10,11,12,13,14	BD Programs 2,9



<b>Programme Area 2:</b> Effective and equitable governance of nature's use.							
<b>Global result 2.1:</b> Improved governance arrangements over natural resources deliver rights-based and equitable conservation with tangible livelihoods benefits.							
<b>Impact:</b> Effective, just, gender responsive and equitable conservation yields tangible livelihoods benefits.							
<b>Common impact indicators:</b> Increased contribution from sustainably managed natural resources to household members.							
<b>Result indicators:</b> (1) Enhancement of institutional and governance arrangements based on a new IUCN natural resource governance framework; (2) Extent of protected areas managed in accordance with the IUCN's natural resource governance framework; (3) 3. Area (in ha.) of agriculture, fisheries and forestry managed according to IUCN's natural resource governance framework; (4) Extent of high seas administered in accordance with the ecosystem approach and IUCN's natural resource governance framework							
ROWA results	Sub-results	Delivery time	Indicators	Frequency	Budget (\$ 1000)	CBD (Aichi targets)	GEF Programs
(including services contribute to health, livelihoods and well-being) restored and safeguarded.	Valuation of ecosystems' services within at least 3 countries in the region assessed and reported.	By December 2023	from selected ecosystem services	Annually	550		
	Capacity to restore ecosystems' services enhanced in the region.	By December 2022		Annually	200		
Traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity reported and respected.	Indigenous, local or traditional communities in the region identified.	By June 2021	<ul style="list-style-type: none"> <li>Trends in degree to which traditional knowledge and practices are respected</li> </ul>	Annually	30	Targets 7,13,14,15,16,18,19	All BD programs
	Traditional knowledge of the targeted communities and groups collected and documented in a regional database.	By December 2022		Annually	120		



### III. Programme Area 3: Deploying nature-based solutions to global challenges in climate, food and development

<b>Programme Area 3:</b> Deploying nature-based solutions to global challenges in climate, food and development.							
<b>Global result 2.1:</b> Healthy and restored ecosystems make cost-effective contributions to meeting global challenges of climate change, food security and economic and social development.							
<b>Impact:</b> Global challenges (climate, food, development) are addressed through the use of nature based solutions.							
<b>Common impact indicators:</b> Trends in benefits that people derive from selected ecosystem services (e.g. gender-differentiated changes in security of water access and food security).							
<b>Result indicators:</b> (1) Extent of incorporation of nature-based solutions in policies on climate change, food security and economic and social development at international, national and corporate levels; (2) Extent (in ha.) of resilient and diverse landscapes sustainably managed, protected or restored for food, climate change or economic benefit; (3) Number of governments and public/private companies that have incorporated biodiversity values into planning and/or accounting systems							
ROWA results	Sub-results	Delivery time	Indicators	Frequency	Budget (\$ 1000)	CBD (Aichi targets)	GEF Programs
Sustainable management practices of marine living resources in the region implemented effectively.	Harvested fish, invertebrates and aquatic plants stocks in the region assessed and reported.	By December 2021	<ul style="list-style-type: none"> <li>Trends in area, frequency, and/or intensity of destructive fishing practices.</li> </ul>	Annually	60	Targets 6,10,12,13	BD Program 2,6
	Modern and traditional fishing techniques in the region recorded.	By December 2016		Annually	150		
	Management plans for sustainable management of fisheries in the region developed and implemented.	By December 2022	<ul style="list-style-type: none"> <li>Trends in catch per unit effort.</li> <li>Trends in extinction risk of target and by catch aquatic species</li> <li>Trends in fishing effort capacity.</li> </ul>	Annually	350		

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## Appendix I: Total endemic and threatened endemic species in West Asia (totals by taxonomic group)

Total endemic and threatened endemic species in West Asia (totals by taxonomic group)															
Species		BHR	IRN	IRQ	JOR	KWT	LBN	OMN	QAT	Palestine	SAU	SYR	UAE	YEM	Total
Mammals	Total endemics	0	8	0	0	0	0	0	0	0	0	1	0	3	12
	Threatened endemics	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Birds	Total endemics	0	1	0	0	0	0	1	0	0	1	0	0	10	13
	Threatened endemics	0	0	0	0	0	0	0	0	0	1	0	0	2	3
Amphibians	Total endemics	0	4	0	0	0	0	0	0	0	0	0	0	1	5
	Threatened endemics	0	2	0	0	0	0	0	0	0	0	0	0	1	2
Sturgeons	Total endemics	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Threatened endemics	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FW Crabs	Total endemics	0	3	0	0	0	0	0	0	0	0	0	0	3	6
	Threatened endemics	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reef-forming Corals	Total endemics	0	0	0	0	0	0	2	0	0	0	0	0	0	2
	Threatened endemics	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seahorses & Pipefishes	Total endemics	0	0	0	1	0	0	1	0	0	0	0	0	0	2
	Threatened endemics	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wrasses & Parrotfishes	Total endemics	0	0	0	0	0	0	4	0	0	0	0	0	0	4
	Threatened endemics	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sharks and Rays	Total endemics	0	0	0	0	0	0	1	0	0	0	0	0	5	6
	Threatened endemics	0	0	0	0	0	0	0	0	0	0	0	0	2	2
<b>Total</b>		<b>0</b>	<b>18</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>28</b>	
<i>Source: IUCN Red List Database (Last Updated: 21 February 2018)</i>															

## Appendix 2: Human Development Index trends in West Asia, 1980-2013

HDI rank	Country	Human Development Index (HDI)				Average annual HDI growth (%)			
		2014	2015	2016	2017	Change (2012 – 2017)	1990-2000	2000-2010	2010-2017
37	Qatar	0.853	0.854	0.855	0.856	-1	0.72	0.19	0.52
39	Saudi Arabia	0.852	0.854	0.854	0.853	0	0.64	0.84	0.78
43	Bahrain	0.810	0.832	0.846	0.846	7	0.60	0.06	0.87
48	Oman	0.815	0.822	0.822	0.821	0	..	1.19	0.50
56	Kuwait	0.799	0.802	0.804	0.803	-3	0.99	0.07	0.20
40	United Arab Emirates	0.824	0.824	0.825	0.827	-5	1.25	0.95	0.28
60	Iran (Islamic Republic of)	0.788	0.789	0.796	0.798	-2	1.52	1.20	0.79
80	Lebanon	0.751	0.752	0.753	0.757	-4	..	..	-0.03
95	Jordan	0.730	0.733	0.735	0.735	-5	1.31	0.36	0.14
119	Palestine, State of	0.679	0.687	0.689	0.686	-12	..	..	0.30
120	Iraq	0.666	0.668	0.672	0.685	0.685	0.60	0.67	0.77
178	Yemen	0.505	0.483	0.462	0.452	-20	1.03	1.18	-1.37
	<b>Arab States</b>	0.690	0.694	0.697	0.699	—	0.95	0.96	0.51
	<b>World</b>	0.718	0.722	0.726	0.728	—	0.72	0.84	0.60

### Appendix 3: Status of West Asia countries regarding International Environmental Agreements and its Instruments

Countries (years)	BHR	IRN	IRQ	JOR	KWT	LBN	OMN	QAT	Palestine	SAU	SYR	UAE	YEM
CBD convention	1996	1996	2009	1994	2002	1995	1995	1996	No	2002	1996	2000	1996
Cartagena Protocol	2012	2004	2014	2004	2017	2013	2003	2007	No	2007	2004	2014	2006
Nagoya Protocol on Access and Benefit-sharing	No	No	No	2015	2017	2012	No	2017	No	2013	2014	2014	No
Nagoya – Kuala Lumpur Protocol	No	No	No	No	No	No	No	No	No	No	2018	2018	No
Updated NBSAP	2016	2016	2016	2015	2019	2016	No	2016	No	Yes	No	2014	2017
Action Plan for Programme of Work on Protected Areas (PoWPA)	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	No
Climate Change Convention	1995	1996	2009	1993	1994	1994	1995	1996	No	1994	1996	1995	1996
Kyoto Protocol	2006	2005	2009	2005	2005	2007	2005	2005	No	2005	2006	2005	2005
Convention to Combat Desertification	1997	1997	2010	1997	1997	1996	1996	1999	No	1997	1997	1999	1997
UNESCO	1991	1975	1974	1975	2002	1983	1981	1984	2011	1978	1975	2001	1980
Ramsar Convention	1998	1975	2008	1977	No	1999	2013	No	No	No	1998	2007	2008
Convention on the Conservation of Migratory Species of Wild Animals (CMS)	RS	2008	2016	2001	RS	RS	RS	RS	RS	1991	2003	2016	2006
CMS Instrument (Marine Turtles)	2007	2001	RS	2004	RS	No	2004	RS	No	2005	No	2007	2008
CMS Instrument (Dugong)	2010	RS	RS	No	RS	No	RS	RS	No	2013	No	2007	2010
CMS Instrument (Bird of Prey)	RS	2015	RS	RS	RS	2014	RS	RS	No	RS	2014	2008	2008
CMS Instrument (AWEA)	RS	RS	RS	1999	RS	2002	RS	RS	No	RS	2003	RS	RS
CMS Instrument (Sharks)	RS	RS	RS	2014	RS	RS	RS	RS	No	RS	2014	2014	2014
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	2012	1976	2014	1979	2002	2013	2008	2001	No	1996	2003	1990	1997
CITES (Amendment to Article XI)	2012	1988	2014	1987	2002	2013	2008	2001	No	1996	2003	1990	1997
CITES (Amendment to Article XXI)	No	No	2014	No	No	No	No	No	No	No	No	No	No
UN Convention on the Law of the Sea	1985	1998	1985	1995	1986	1995	2008	2002	2015	1996	No	No	1987
<b>Total no. of agreements and instruments signed (out of 21)</b>	<b>12</b>	<b>13</b>	<b>9</b>	<b>16</b>	<b>8</b>	<b>14</b>	<b>11</b>	<b>9</b>	<b>2</b>	<b>13</b>	<b>14</b>	<b>16</b>	<b>16</b>

RS = Range State

Source: Conventions' websites (last accessed on March 2019)