

Protecting Abu Dhabi's Environment

An Interview with H.E. Dr. Shaikha Salem Al Dhaheri, Secretary General, Environment Agency - Abu Dhabi (EAD)

EDITORS' NOTE *Dr. Shaikha Salem Al Dhaheri is the Secretary General of the Environment Agency – Abu Dhabi (EAD), the largest environmental regulator in the Middle East, responsible for protecting and preserving the natural resources and promoting sustainable development in the emirate. Dr. Al Dhaheri holds a PhD in Wildlife Conservation and Protection from the University of Aberdeen in the United Kingdom, which makes her the first Emirati woman to earn the accolade. She also holds two masters degrees, one in environmental science from UAE University (UAEU) in Al Ain, and another in biological conservation from the University of Kent in the United Kingdom. She earned her bachelor's degree in environmental species from UAEU. Dr. Al Dhaheri began her career at EAD as a Researcher Assistant in the Agency's Terrestrial Environment Research in 2000 and was later appointed as Executive Director of the Terrestrial and Marine Biodiversity Sector in 2012. In this role, she spearheaded initiatives to promote a comprehensive understanding of the state of biodiversity in Abu Dhabi and ensured that the sector's goals were in line with Abu Dhabi Environment Vision 2030 and the Abu Dhabi Plan, among other national and emirate-level directives. She has played a defining role in establishing a clear vision for the sector to facilitate a sustainable environment and future for Abu Dhabi.*



H.E. Dr. Shaikha Salem Al Dhaheri

What is your vision for leading the Environment Agency – Abu Dhabi (EAD) and how do you define its mission?

As the largest environmental regulator in the Middle East and as mandated under our establishment Law No. (16) of 2005, our goal is to protect Abu Dhabi's environment. This is also perfectly aligned with our vision, "A sustainable, well-protected and healthy environment that enhances quality of life."

Our mission – "To protect the environment and promote sustainability, through innovative environmental management, and impact-oriented policies and regulations, in collaboration with our partners and the broader community" – helps us work towards our vision and we do that by using innovative and best in the business conservation management tools and effective policy and regulatory measures. We also work closely with our partners and, most importantly, we engage with local communities as we believe that no environmental issues and challenges can be resolved without the buy-in and active engagement of our biggest

stakeholders, which is our people. By achieving our mission, we use the best human resources from across the world and some of the most advanced and innovative technologies available today.

As the Secretary General of the Environment Agency, I am responsible for leading the Agency towards our vision. I not only wholeheartedly believe in it, but I constantly strive to achieve this through our institutional process and our five-year strategy.

Will you provide an overview of EAD's five-year strategy?

Our five-year strategy is our guiding force. It not only mainstreams our vision and mission, but it also clearly details a series of initiatives across our work areas to help us bring the strategy to life.

To achieve our vision of a sustainable, well-protected and healthy environment, we need to protect our biodiversity, keep our air, water and soil clean and take actions to mitigate and adapt to the impacts of climate change. To do this, we undertake several main programs of work, namely:

- Monitoring and assessment
- Regulation, inspection and enforcement
- Establishing protected areas



EAD monitors a wide variety of biodiversity in the emirates, including the Arabian Oryx show above

AGENCY BRIEF *Established in 1996, the Environment Agency – Abu Dhabi (EAD) is committed to protecting and enhancing air quality, groundwater as well as the biodiversity of Abu Dhabi's desert and marine ecosystem. By partnering with other government entities, the private sector, NGOs and global environmental agencies, it embraces international best practice, innovation and hard work to institute effective policy measures. EAD (ead.gov.ae) seeks to raise environmental awareness, facilitate sustainable development and ensure environmental issues remain a top priority on the Abu Dhabi national agenda.*

- Captive breeding and restoration of biodiversity
- Outreach and awareness

Our monitoring and assessment program comprises all aspects of terrestrial and marine biodiversity of the emirate, from small insects to large charismatic species, such as the Arabian Oryx and Dugong, to monitoring the quality of our air, soil and water. These provide us with a good understanding of the state of our environment and help inform the development of regulations and policies, and management actions.

We have programs in place to monitor and protect the biodiversity of the emirate. Our protected areas program helps us identify and establish terrestrial and marine protected areas to help protect some of the most endangered species and their habitats within the Sheikh Zayed Protected Area Network.

We also maintain and protect and propagate species in our collections for reintroduction and release programs, both in the UAE and outside of the country. We have two conservation breeding facilities for animals and have a plant nursery which produces nearly 500,000 plants of nearly 69 native plant species for restoring our habitats. We are developing another native plant nursery, a seed storage facility, and a state-of-the-art plant genetic resource center for supporting our habitat restoration initiatives.

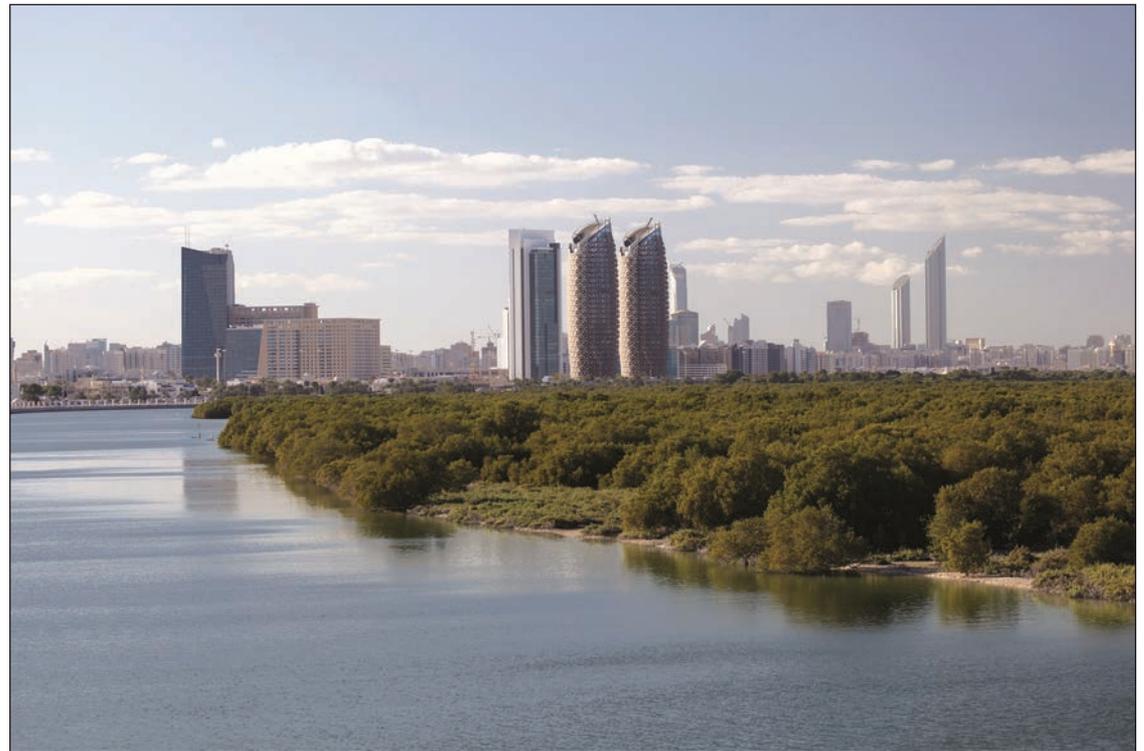
Our outreach programs help raise awareness and change behavior to protect the environment. We have a long running and highly successful program with schools, called the Sustainable School Initiative, as well as with several colleges and universities under the Sustainable Campus Initiative, which also helps raise awareness, build capacity, and promote overall sustainability.

We maintain an ever-growing environmental database on all aspects of Abu Dhabi's environment. We have automated our field data collection for our scientists and inspectors to allow seamless integration of data from the field into our environmental database. The availability of accurate and credible datasets and advanced computing and analyses capabilities helps us in quick decision-making.

Of course, developing regulations and policies is of little benefit if we do not monitor compliance, so we also have a program of inspections and enforcement for non-compliance with permit conditions.

What are the keys to protecting and preserving the natural resources and promoting sustainable development in the emirate?

One of the main keys to protect and preserve natural resources is through an in-depth understanding of how both the natural and anthropogenic systems of Abu Dhabi function and interact with each other. As we know, most of the current environmental challenges are outcomes of how we have used and interacted with our environment.



Another aspect of EAD's mission is to protect the air quality of Abu Dhabi

Our primary objective is protecting the emirate's natural capital, and as an Agency, we devote ourselves to this task. However, we also have a duty to ensure that Abu Dhabi achieves its economic and social aspirations. Sustainable development can only be achieved by balancing social, economic and environmental forces, both locally and globally.

EAD, as a science-based entity, has a good understanding of the natural environment and how it functions. As a government regulator, we are also positioned to have insight into the political and economic workings of the emirate. As individual members of the communities in which we live, we have a good understanding of society's needs, wants, and aspirations.

The key, of course, is being able to turn this knowledge and understanding into actions that align all three elements, or at least into a state of balance that supports sustainable development. This requires excellent negotiation and communication skills to convince others of the importance of preserving natural resources, while at the same time achieving the balance that is sustainable development.

There are three other key elements to protect our natural resources and ensure sustainable development in the emirate. These are: a) understanding and appreciation of our natural resources; b) demonstrating its importance to a wider group of stakeholders to protect and conserve them and create awareness for the benefits that follow; and c) recognition of the emirate's ambitions and aspirations for sustainable economic growth.

Our long-term monitoring of Abu Dhabi's environment has allowed us to understand our environment and our natural resources and helped to communicate this to everyone, from leadership to the general public, thus

creating an appreciation for them and recognition of their values. It is vital to demonstrate the values of protecting Abu Dhabi's biodiversity – to government entities, private sector and business entities – and how it benefits and helps Abu Dhabi towards its development and growth and positioning the emirate on a global scale.

The third key element is recognizing the need for development and ensuring that we help Abu Dhabi develop sustainably, balancing the needs of economic growth, environmental protection and preservation of cultures and traditions.

How do you focus your efforts in leading EAD and what excited you about the opportunity to lead the Agency?

Abu Dhabi's natural heritage is literally in my blood. I am Emirati – this is my homeland. I live and breathe the environment.

As our nation's founder, the late Sheikh Zayed bin Sultan Al Nahyan said, "We cherish our environment because it is an integral part of our country, our history and our heritage. On land and in the sea, our forefathers lived and survived in this environment. They were able to do so only because they recognized the need to conserve it, to take from it only what they needed to live, and to preserve it for succeeding generations. With God's will, we shall continue to work to protect our environment and our wildlife, as did our forefathers before us. It is a duty, and, if we fail, our children, rightly, will reproach us for squandering an essential part of their inheritance, and of our heritage."

I am fortunate to be of the generation that has seen the rapid development of our country. I have seen the desert bloom; I have also seen it bulldozed. I know that to develop sustainably, we need to compromise to achieve a balance between our natural capital and our economic and human capital.

As Secretary General of the Environment Agency, I am so blessed to be entrusted to make sure that we take from the environment only what we need to live and preserve it for succeeding generations. As a mother of five, I take this responsibility very seriously. I want my children and their children to experience the bountiful natural capital Abu Dhabi offers.

How critical are metrics to measure the impact of EAD's efforts?

That well-known saying, "you cannot manage what you do not measure," may sound cliché, but it is true, especially when trying to manage the environment. We need to measure and monitor both the environment and the effectiveness of our actions. Unless we understand what is going on in the environment, how it functions, what pressures it faces, the impacts of those pressures, etc., we cannot even begin to manage them.

We have extensive environmental monitoring programs in place that provide us with world-class information on the state of our environment. We know the quality of our ambient air from our sophisticated, e-linked ambient air quality monitoring network, made up of 20 monitoring stations across the emirate. We see the extent and distribution of our ecosystems from our world-leading remote sensed mapping. We know both the quantity and quality of our precious groundwater reserves from our extensive network of monitoring wells, and the quality of our marine waters from our network of automated buoys.

We have long-term trend data on important terrestrial and marine species which helps us with the management of our species. We undertake assessment of species and ecosystems to identify the risk that they face, and we use that information in setting priorities for conservation of species and ecosystems. Our monitoring and assessment of species and habitats provides us with the critical information on areas and species to restore and rehabilitate or implement conservation actions to improve their status.

Performance metrics are essential for our values of "Results-Oriented" and "Ownership and Accountability" to keep us on track and accountable.

How do you define success for EAD?

As a member of the community, success is also my ability to go and see Abu Dhabi's wildlife in protected areas, or to be able to go kayaking in the mangroves, against the stunning backdrop of the Abu Dhabi skyline. Success is also about going to the beach and being able to enjoy a swim in clean waters or even for recreational fishing in our waters.

As Secretary General, success means the same, but somewhat differently. Success is fulfilling our yearly targets as per our five-year strategy. Success is maintaining a stable number of dugongs as the second biggest population in the world or maintaining the only breeding population of the flamingos in the Arabian Gulf or maintaining the air quality to an acceptable level.

Success to me is discovering species new to science; in hosting and protecting the largest population of the Indian Ocean Humpback Dolphin, to restoring the Arabian Oryx in our protected areas and seeing their status improve from being once extinct in the wild, to being listed as vulnerable.

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Success is also seeing Abu Dhabi and EAD help towards conserving species outside of the UAE. For more than a decade we have helped support the conservation of migratory species of birds of prey and dugongs across their range and we have successfully hosted the CMS Abu Dhabi Office. Success to me is fostering partnerships with international institutions, such as the International Union for the Conservation of Nature, in conserving species globally. Success is also developing facilities, resources, and skills within EAD to see the return of the Scimitar-horned Oryx in the wild in Chad and reversing its status for good.

For me, success is also not resting on our past laurels but using them to step up efforts to further improve our environment. This can be achieved through recovering our fisheries from less than 6 percent caught sustainably to nearly 57 percent caught sustainably in just three years or restoring mangroves. It could also be developing our plant genetic resources to help us in developing the best varieties of native species for restoration.

Success to me is also introducing regulatory and policy measures, such as to sustainably manage our rangelands to prevent overgrazing or help entities maintain important aspects of our culture and traditions such as falconry.

I truly believe the success of my organization is being part of the sustainable economic growth and development of the emirate, recognizing socio-cultural needs, community

aspirations and maintenance of culture and traditions linked to our biological resources.

Success is also to position EAD and Abu Dhabi in shaping the global conservation agenda, when one of our own becomes the President of the largest and oldest conservation organization in the world. Here, I am talking about our Managing Director of EAD and Mohamed bin Zayed Species Conservation Fund, Her Excellency Razan Al Mubarak. Global recognition of our protected areas or EAD winning the outstanding contribution to biodiversity and other awards by reputed international organizations are also measures of our success.

What are your key priorities for EAD as you look to the future?

Moving forward, we will continue to work and implement initiatives or introduce new initiatives to help us make real progress to achieve our seven strategic priorities of our five-year strategy. They are linked to air, water, soil, ground water, biodiversity, climate change and creating knowledge and data which helps us develop policies, regulations to manage our environment, and create an environmentally conscious community.

Having said that, the next few decades will be extremely important for all of us. Climate change and the Net to Zero by 2050 strategic initiative, announced by the UAE government last year, will be the driving forces and will define growth and development. My priority will be to ensure EAD is helping the emirate move towards climate neutrality and act as an important player in mitigating and adapting to the impacts of climate change.

Another important priority will be to ensure we continue to manage our ground water resources and continue to build our strategic water reservoir so that it provides us with water security during any kind of emergency. We will also continue to work around the clock to ensure that our air and water are clean more than 90 percent of the time.

On the biodiversity front, we will continue to invest in monitoring our biological resources in a manner that helps us protect our species and ecosystems, so that we continue to avoid development in environmentally important areas. We will increase our protected area coverage to 30 percent by 2030 and make the network more representative.

Moreover, we will continue to be one of the leaders when it comes to urban biodiversity, reducing our ecological footprint and undertaking restoration of our degraded coastal and marine areas to complement the UN decade on Ecosystem Restoration 2021-2030. Our priorities will also be to restore areas where it is needed, without impacting other equally important habitats. We will continue to restore fisheries to ensure more than 90 percent are caught sustainably in the coming decade, and we will restore mangroves and corals to acceptable levels.

Finally, we will continue to undertake efforts to build partnerships globally and maintain EAD's leading role in defining the global conservation priorities. ●