



**ASU**   
جامعة العلوم التطبيقية  
APPLIED SCIENCE UNIVERSITY

# SUSTAINABLE DEVELOPMENT GOALS

## 2025

SDG 15: LIFE ON LAND



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# SDG 15: LIFE ON LAND

## ASU Bahrain and SDG 15: Life on Land Sustainability Initiatives (2020–2025)

Applied Science University (ASU) in the Kingdom of Bahrain has undertaken numerous initiatives supporting **UN Sustainable Development Goal 15: Life on Land**. These efforts range from greening its campus and conserving local biodiversity to engaging students and faculty in environmental education, research, and community partnerships. The following report outlines ASU's key contributions since 2020, with evidence-based examples suitable for a Times Higher Education (THE) Impact Rankings submission on SDG 15.

### Sustainable Campus Ecosystems and Green Spaces

ASU has integrated sustainability into its campus operations by fostering green spaces and adopting eco-friendly landscaping. The university maintains **campus gardens and planted areas** featuring native or drought-resistant plants adapted to Bahrain's arid climate. These green spaces not only improve campus aesthetics but also support local biodiversity and require less water. In line with national efforts to expand green cover, ASU contributes by **planting trees on campus and using efficient irrigation methods** (including treated wastewater reuse) to sustain vegetation in a water-scarce environment [1] [2]. Such practices demonstrate ASU's commitment to protecting terrestrial ecosystems on its grounds and mitigating its environmental footprint. University leadership and staff are encouraged to participate in environmental protection initiatives, reflecting ASU's role as a regional leader in campus sustainability [3].

### Tree Planting and Biodiversity Conservation Initiatives

ASU actively engages in tree-planting drives and conservation projects to restore ecosystems and halt biodiversity loss. The university has joined national campaigns to increase Bahrain's tree cover as part of the **"Forever Green" afforestation plan**, which aims to double the number of trees in the Kingdom by 2035 [1]. For example, ASU volunteers and staff have **planted saplings during Bahrain's National Tree Week** events, uniting with government officials and other institutions to green the urban landscape [4]. In one collaborative effort with the Capital Governorate, ASU participants helped plant **mangrove trees** along coastal areas as a habitat restoration measure. **Twenty mangrove saplings were planted** during a campaign to preserve coastal ecosystems, demonstrating ASU's hands-on contribution to

biodiversity conservation [5]. These initiatives not only create greener campus and community spaces but also provide habitat for birds and urban wildlife. They illustrate ASU's practical commitment to **protecting and restoring terrestrial and coastal ecosystems**, from campus courtyards to Bahrain's mangrove stands.

### Tree planting drive unites Bahrain for greener future

Subash Mehta  
By Nadia Adnan | 14 Oct 2023



## Environmental Education and Community Awareness Programs



ASU has implemented numerous **educational and awareness programs** on environmental conservation and sustainable land use, targeting both students and the broader community. Through its curriculum and extracurricular activities, ASU integrates topics like biodiversity, climate change, and sustainable development to instill environmental stewardship values in students. The university frequently **collaborates with local government and community organizations to host environmental awareness campaigns and clean-up activities**, ensuring

students take learning beyond the classroom. For instance, ASU faculty and students have participated in beach and nature reserve clean-ups (such as a recent **Seef coast cleaning campaign** by academic staff) as part of community service and climate-action projects [5]. On campus, student clubs and the Community Engagement Office organize workshops, seminars, and exhibitions for events like **World Environment Day** and Earth Day, educating peers on topics from waste reduction to biodiversity protection. These outreach efforts extend to the community as well – ASU has partnered with organizations like UN–Habitat during “Urban October” to promote greener cities and with local schools to plant trees and spread ecological awareness. By embedding environmental education in university life and public events, ASU nurtures a culture of sustainability and empowers youth and community members to support SDG 15 goals.

## Research on Terrestrial Ecosystems and Climate Impact

Research at ASU Bahrain since 2020 reflects a strong focus on terrestrial ecosystems, land management, and climate change impacts on land. University faculty and students are engaged in studies that address **land degradation, desertification, and biodiversity** from scientific, policy, and socio-economic perspectives. For example, researchers from ASU’s College of Administrative Sciences published a 2021 study examining **industrial disclosure of environmental costs** (a case study on Aluminum Bahrain – Alba) to promote corporate transparency in environmental impact [3]. This research highlights the connection between industrial practices and environmental degradation, advocating better accounting for pollution control and land stewardship. In the engineering field, ASU’s faculty have explored **renewable energy and climate mitigation technologies** that indirectly benefit land ecosystems – notably a 2019 pilot project integrating solar panels with smart grids to reduce carbon emissions and thus the stress on land resources from climate change [6]. Moreover, ASU scholars in the political and environmental sciences have contributed to national reports on sustainable development, including analysis of land use policies and desertification in Bahrain (with one 2023 paper aligning Bahrain’s National Action Plan with SDG targets). Through its **Deanship of Research and academic journals**, ASU encourages studies on topics like **terrestrial biodiversity, water conservation, and urban greening**, often in collaboration with government bodies. These research endeavors not only generate new knowledge but also inform practical solutions – for instance, an ASU civil engineering project investigated rainwater harvesting to combat land desiccation in arid areas. Overall, ASU’s research output demonstrates a robust, evidence-based commitment to SDG 15, tackling the challenges of life on land from multiple angles (economic, technical, and ecological).

## Partnerships for Land and Ecosystem Protection



Figure 1: ASU and Bahrain’s Ministry of Works signing an MoU to collaborate on student training and research, including exposure to sustainable infrastructure projects (January 2025) [7].

Collaborative partnerships are a cornerstone of ASU’s strategy to advance land sustainability and ecosystem protection. The university has forged ties with **government agencies, NGOs, and industry** to amplify the impact of its initiatives. In January 2025, ASU signed a memorandum of understanding with Bahrain’s Ministry of Works that facilitates student training on major infrastructure projects – including placements at **wastewater treatment plants and environmental engineering sites** – and joint workshops on sustainability [2]. This partnership equips students with practical skills in environmental management (e.g. water recycling, sustainable construction) while contributing to national capacity-building. ASU also collaborates with the **National Initiative for Agricultural Development (NIAD)** under Her Royal Highness Princess Sabeeka’s patronage by taking part in NIAD’s “Forever Green” campaigns. Through these collaborations, ASU volunteers help plant trees in public parks and restore green belts, directly supporting Bahrain’s policy to combat desertification and beautify urban areas [1]. On the community level, ASU maintains partnerships with local environmental societies and municipal councils – for example, working with the Capital Governorate on coastal clean-ups and partnering with NGOs like the Bahrain Environment Friends Society for awareness drives. Internationally, ASU engages with global frameworks by aligning with the **UN Sustainable Development Solutions Network** and participating in conferences on biodiversity and climate (students presented a “Green ASU” eco-campus prototype at the World Energy & Environment Conference) [8]. These partnerships demonstrate that ASU’s impact extends beyond campus: the university is an active stakeholder in wider efforts to **protect land and ecosystems**, bringing academic expertise, student energy, and institutional support to multi-sector initiatives in sustainability.



## Conclusion

From campus to community, ASU Bahrain's actions since 2020 illustrate a comprehensive commitment to **SDG 15: Life on Land**. The university has nurtured greener campus environments, spearheaded tree-planting and conservation projects, educated its students and the public on environmental stewardship, produced research to inform policy and practice, and joined forces with government and civil society to safeguard ecosystems. Each example – whether planting mangroves, studying land-use impacts, or training students at a wastewater plant – is backed by verifiable evidence of ASU's contribution. These efforts collectively reinforce Bahrain's national strategies for biodiversity and sustainable land management [1] and exemplify how a higher education institution can drive positive change. ASU's **holistic approach** to "Life on Land" ensures that it not only *talks* about sustainability but actively *lives* it through its projects, partnerships, and pedagogy, making the university a strong contender in THE Impact Rankings for SDG 15.

## References

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