Iranian universities rank fifth globally in impacting access

to clean water: Report

## **Social Desk**

The head of the Institute for Science Citation (ISC), Seyyed Ahmad Fazelzadeh, announced that Iranian universities have been ranked 17th globally in contributing to the United Nations' 17 Sustainable Development Goals (SDGs), according to the Times Institute's ranking system. In particular, Iran's efforts in promoting clean water access have earned the nation a 5th place ranking worldwide.

The SDGs, established by the United Nations in 2015, serve as a blueprint for achieving a more sustainable future for all by 2030. These goals encompass a wide range of issues, including poverty eradication, environmental protection, and the promotion of peace and prosperity, IRNA reported.

Fazelzadeh emphasized the significance of the Times Institute's impact ranking, which evaluates universities based on their participation in realizing the SDGs. He noted that Iranian universities have made considerable progress since 2015, with their best ranking being 15th place globally. In the latest ranking, Iran has published over 48,000 scientific documents related to the SDGs, securing the 17th position.

Iranian universities have also achieved notable rankings in other SDG categories, including 13th in affordable and clean energy, 14th in eradicating hunger, 15th in sustainable cities and societies, and 15th in responsible consumption and production. Additionally, they ranked 18th in health and wellness and 19th in both climate change and gender equality.

Fazelzadeh highlighted that the majority of Iran's scientific research has focused on health and well-being, while the least number of publications have been indexed in the area of peace, justice, and strong institutions. He called for increased investment and support for knowledge-based companies and related industries to apply these research findings.

The ISC head also underscored the

importance of monitoring scientific and technological advancements for policy-making and planning at the macro level, in line with sustainable development objectives. Water stress has become a pressing issue worldwide due to decades of water resource misuse, inefficient management, groundwater over-extraction, and freshwater pollution. Countries also face challenges related

change-induced water scarcity, insufficient investment in water and sanitation, and inadequate cooperation in transboundary waters.

To achieve universal access to safe

to degraded water ecosystems, climate lives annually from diseases directly

linked to unsafe water, inadequate sanitation, and poor hygiene practices.

## Scientists conduct 'interviews' with captive birds prior to release into wild



Scientists are now "interviewing" captive birds, including the critically endangered Bali myna, to determine their cognitive abilities before releasing them into the wild. With

fewer than 50 adult Bali mynas remaining in their native habitat on the island of Bali, conservationists are working to reintroduce more birds to boost the wild population.

Researchers have begun identifying the characteristics that make individual Bali mynas most suitable for release by testing their adaptability and problem-solving skills. In

a study involving 22 Bali mynas in three UK zoos, scientists observed the birds' reactions to unfamiliar food and objects, as well as their ability to solve problems like lifting a lid or pulling a string to reach hidden worms, Science Alert reported.

The findings revealed that bolder birds were quicker to solve each new problem-solving task, suggesting they may be more adaptable once released. Additionally, the presence of other bird species in their aviaries helped the Bali mynas overcome their fear of novelty when competing for food.

Many animal species face extinction due to habitat destruction, poaching, and pollution. Reintroducing species to their former environments can help counteract these losses. However, 30 percent of reintroductions have encountered problems due to the animals' behavior. Understanding how animals make decisions, adapt their behavior, and learn from other animals is crucial for assessing their potential success in

Research on captive animals' behavior can also help conservationists better prepare them for release by training them to recognize and respond appropriately to threats and find safe food sources or breeding locations. For example, pre-release training of Hawaiian crows, which are extinct in the wild, has shown promise in helping the birds learn how to react to predators like the Hawaiian hawk.

As the race to reintroduce species accelerates, understanding how different animals respond to pressures like urbanization and applying this knowledge to conservation efforts is essential. However, there are limits to what even the most adaptable animals can overcome, and certain pressures can diminish advantageous traits like being a quick learner. By collaborating across research, conservation, and education fields, experts can work together to improve the chances of protecting the natural

## Firouz Naderi, Iranian-American scientist, space visionary dies at 77

Firouz Naderi, the esteemed Iranian-American scientist and former director of Solar System Exploration at NASA's Jet Propulsion Laboratory (JPL), has died at the age of 77. Naderi's remarkable career spanned over three decades, during which he made significant contributions to the field of space exploration and inspired countless individuals with his passion for science and discovery.

Born in 1946 in Shiraz, Iran. Naderi moved to the United States in the early 1970s to pursue higher education. He earned a Bachelor's degree in electrical engineering from

Iowa State University and a Master's degree in the same field from the California Institute of Technology. Naderi joined JPL in 1979, where he would go on to play a pivotal role in numerous groundbreaking space missions.

Naderi's work at IPL included the management of the Mars Exploration Program, which saw the successful landing of the Mars rovers Spirit and Opportunity. He also oversaw the development of the Mars Science Laboratory, which later deployed the Curiosity rover. Naderi's leadership and vision were instrumental in advancing our understanding of the Red Planet and fostering international collaboration in space exploration. In addition to his work on Mars missions, Naderi contributed to the Cassini mission to Saturn and the development of Earth-observing satellites. His dedication to the pursuit of knowledge and the exploration of our solar system earned him numerous accolades, including NASA's Outstanding Leader-

ship Medal and the agency's

Distinguished Service Medal.

Naderi's impact extended

beyond his scientific achieve-

ments. As a prominent Ira-

nian-American, he served

as a role model for aspiring scientists from diverse backgrounds. He was a vocal advocate for the importance of education and the value of curiosity, inspiring countless young people to pursue careers in science, technology, engineering, and mathematics (STEM).

In May 2023, Dr. Naderi experienced a life-altering event that resulted in paralysis from the neck down. He sustained a fall in conjunction with a cardiac episode. As a consequence, he suffered an extensive neck injury that involved damage to the spinal cord. The ensuing paralysis

required surgical intervention, and some level of recovery was anticipated within a four to five month period. However, his Twitter and Instagram accounts announced his unfortunate passing due to this incident on June 9. Firouz Naderi has left behind

a legacy of scientific discovery that will continue to shape our understanding of the universe for generations to come. His unwavering passion for exploration and his commitment to fostering international collaboration in the pursuit of knowledge will be remembered as hallmarks of his distinguished career.

