# Faculty of Engineering Science & Technology October 2023 No.10

# **FEST Students Travel to Europe**



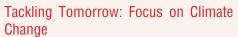
The CHILDRN project has waved off 14 of our students from the Faculty of Engineering Science and Technology, Faculty of Health Sciences, and the Faculty of Arts on an enlightening journey to the University of Liege, Belgium! These students sat foot in Liege on October 2nd and will remain in Liege for a month-long academic and cultural whirlwind.

During their first week, the students familiarised themselves with the University of Liege campus. With their bags unpacked and their curiosity piqued, they are now fully immersed in the student life in Liege. And what better way to dive in than joining the heartwarming mid-autumn festivals at the Sart Tilmon Campus?

By:Ahmed Aslam Waheed So, what's on the horizon for our students in this mobility programme?

### Global Classroom

Beyond the traditional four walls, our students will be mingling, debating, and sharing insights with top-tier experts, researchers, and fellow students from around the globe.



Climate change isn't just a buzzword—it's a call to action. Our students will deep dive into understanding its impacts, brainstorming mitigation strategies, and formulating climatesmart policies.

### **Cultural Carousel**

From the rhythmic dances to the flavorful cuisines and age-old traditions,





Liege is a melting pot of experiences. Our students are not just on an academic trip but on a voyage of cultural discovery too!

### **Building Bridges for the Future**

Our students will be forging lifelong connections, creating avenues for future collaborations and academic pursuits.



Stay tuned for more updates from our students in Belgium! And to our wandering scholars, soak in every moment and bring back a treasure trove of memories and knowledge!



Expanding minds... extending horizons

Faculty of Engineering Science and Technology

## **Huraa Mangrove: A Maldivian Ecological Treasure**

By:Ahmed Aslam Waheed

Earlier in August our Bachelor of Marine Science students were in Laamu taking part in a natural capital accounting survey led by the University of New South Wales. Our students had the invaluable opportunity to acquire indepth knowledge and hands-on expertise in a diverse array of methods for sampling seagrass ecosystems and discerning various species within them. This immersive learning experience enriched their understanding of marine ecosystems further.

Additionally, this partnership between FEST and ENDHERI Project of the Ministry of Environment and The University of New South Wales afforded students the chance to undergo comprehensive training in Geographic Information Systems (GIS) for Ground Truthing various data that were collected pre-surveying.



This training encompassed the utilization of cutting-edge technology, including the analysis of satellite imagery, and hands-on data collection during on-site visits. These newly acquired skills equipped students with the tools necessary to contribute effectively to environmental monitoring and research efforts they would perhaps apply in their prospective job positions in the future.

Nestled in the heart of the Maldives, the Huraa mangrove and its surroundings have been protected under the Environmental Protection and Preservation Act of Maldives (Act no.4/1993) since June 14th, 2006. Spanning 9 hectares on the island's western front, this lush mangrove is home to an impressive count of over 4,000 genuine mangrove trees.

Mangroves are unique ecosystems that not only bolster biodiversity by offering sanctuary to diverse plants, fish, and other wildlife, but their murky waters also shield juvenile fish from potential predators. Positioned along coastlines, mangroves serve as natural barriers, trapping sediments and fortifying shores against wave erosion.



For the Maldives, a nation grappling with the threats of climate change, mangroves stand as nature's protective barrier against the ravages of storm surges, fierce winds, and flooding from tropical tempests. Notably. decimation of mangroves has been directly linked to heightened island erosion. Furthermore, research shows that during the devastating tsunami of 2004, mangroves played a crucial role in dampening its impact; their dense roots absorbed much of the wave energy, shielding islands with mangroves from more extensive damage compared to those without.



Historically, the Maldivian community revered mangroves for their diverse uses. Mangrove wood fueled kitchens, became integral in construction, and even served medicinal purposes. Delicacies like the Mangrove Apple and the Small-leaved Orange Mangrove were once staple foods. Additionally, timber from varieties like the Large-leafed Orange Mangrove and the Red Mangrove was crafted into boats, fishing poles, and vital construction materials.

Today, the allure of mangroves has transcended traditional uses. They're emerging as ecotourism hotspots, with the Huraa mangrove attracting significant attention, especially for



sightings of its juvenile black-tip reef sharks.

Hura mangrove holds a cherished spot in the hearts of our first and second-year students. It's a living classroom where they immerse themselves in diverse ecosystems, honing their environmental fieldwork techniques. For many, experiences at Hura become some of the most vivid memories of their degree.

Here are some of our student experiences quoted directly from them.

"Our trip to Huraa was an exciting opportunity to explore natural ecosystems and get outdoor learning experience. We learnt how to collect data from beach, mangrove, seagrass, and even the ocean. The seagrass was a great experience - there were many small fish using it as a nursery, and we collected samples of different seagrass species.



"We trialed out different methods of survey for different ecosystems and species. We also saw the threats to the environment including reclamation near the mangrove, bones and scutes of a turtle that was possibly poached, and got to reflect on human impacts. It was varied and insightful, and we had a great time in Huraa."



"Huraa is a gem in Male' atoll with a diverse island ecosystem. As Environmental students it's one of the best places to have a field trip. During our short trip we learnt various data collection methods in a variety of habitats such as seagrass meadows, mangroves, sandy beaches and the sea as well."



During our September field visit, our first year environmental management students explored Hura mangrove's rich tapestry. They learned to distinguish various mangrove species, became familiar with seagrasses, and grasped the fundamentals of benthic measurements.

Tucked within the nation's most ecologically challenged atoll due to its rapid and demanding developmental needs, Hura is a testament to nature's

resilience and splendor. Yet, it was distressing to find ample evidence of turtle poaching in the otherwise pristine seagrass meadows of Hura.

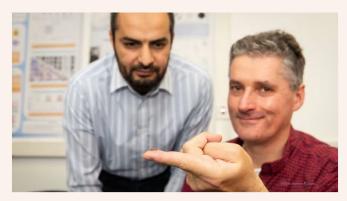
Turtle poaching is forbidden in the Maldives, recognizing the vital role these creatures play in our ecosystem. All turtle species in the Maldives enjoy protection under the law. In fact, since 1995, there has been a strict prohibition against capturing or killing these magnificent beings, including their eggs. And while Maldives is committed, both nationally and internationally, to preserving biodiversity, there's always room to intensify enforcement and public awareness. Sadly, poaching incidents, though isolated, do persist. Conservationists and communities must remain vigilant, continuously striving to amplify their protective efforts.



Another unforgettable part of our trip was a visit to the Marine Discovery Centre at Four Seasons Kuda Hura. Here, our students embarked on an enlightening journey, guided by experts, learning about the center's commendable efforts in rehabilitating sea turtles and rejuvenating coral reefs.



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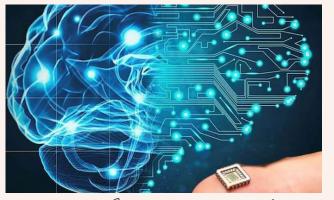


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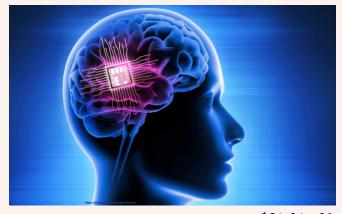
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