

# Bangladesh in the peak of Engineering Excellence

**BRACU** Duburi is a shining example of Bangladesh's growing technological prowess. Developed by a team of students at BRAC University, **BRACU** Duburi is the first autonomous underwater vehicle (AUV) from Bangladesh to compete in an international competition.

In 2023, BRACU Duburi became the runner-up at the Robosub competition, one of the most prestigious underwater robotics competitions in the world. This achievement is a major milestone for Bangladesh and a sign of things to come

BRACU Duburi is also a source of national pride and inspiration. It shows that Bangladesh is capable of developing cutting-edge technology and competing with the best in the world.

BRACU Duburi is a beacon of hope for Bangladesh. It shows that the country is on the right track to achieving its development goals. With continued support and investment, BRACU Duburi has the potential to make a significant impact on the lives of millions of Bangladeshis.

## Grand Celebration of BRACU Duburi



#### STEPHEN IBELLI

United States Embassy
Public Affairs Counselor



SECRETARY SIR WITH TEAM DUBURI

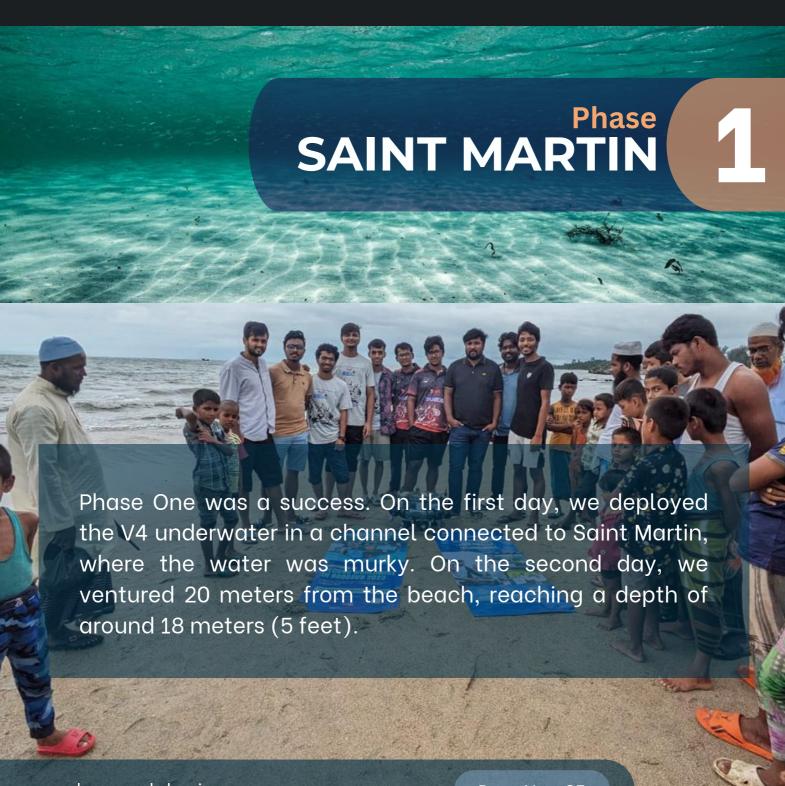
WITH HONOURABLE ICT MINISTER ZUNAID AHMED PALAK

www.bracu-duburi.com

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## Dubur The Next Stage







#### **Objective:**

To collaborate with the Bangladesh Navy for advanced underwater testing and data collection, pushing the boundaries of our technology in challenging environments.

#### **Execution Plan:**

Coordination with Bangladesh Navy:

- Engage in detailed discussions with the Bangladesh Navy to outline the scope and objectives of the collaboration.
- Define roles, responsibilities, and timelines for both parties

#### **Equipment and Safety Checks:**

- Ensure all equipment, including the DUBURI robot, is thoroughly checked and meets safety standards.
- Conduct simulated tests to identify and address any potential challenges.

## Milestone



#### **Underwater Testing:**

- With the support of the Bangladesh Navy, perform underwater tests in controlled conditions.
- Gauge the DUBURI robot's performance in varying depths, currents, and challenging underwater scenarios.

#### **Data Collection and Analysis:**

- Implement a structured data collection process, focusing on parameters such as depth, temperature, and underwater visibility.
- Collaborate with naval experts to analyze the collected data for insights and improvements.

#### **Collaborative Training Sessions:**

- Conduct training sessions with the Bangladesh Navy on operating and maintaining the DUBURI robot.
- Foster knowledge exchange between our technical team and naval personnel.

## Deep Dive Exploration



#### **Objective:**

To conduct an ambitious underwater exploration, pushing the DUBURI robot to its maximum capabilities in terms of depth and data collection.

#### **Execution Plan:**

Advanced Equipment Readiness:

- Upgrade equipment for enhanced depth capabilities, ensuring the DUBURI robot can safely operate at greater depths.
- Verify the integrity of communication systems and sensors for precise data collection.

#### **Depth Testing:**

- Perform controlled depth testing in increments, gradually pushing the DUBURI robot to greater depths.
- Monitor and evaluate its performance under different pressure conditions.

## Deep Dive Exploration



#### **Data Collection at Depth:**

- Focus on collecting detailed data at significant depths, including marine life, underwater topography, and environmental conditions.
- Implement redundancy measures to secure critical data during the exploration.

#### **Collaboration with Oceanographic Experts:**

- Engage with oceanographic experts to understand the unique challenges and opportunities of deep-sea exploration.
- Leverage their insights to optimize data collection strategies.

#### **Real-time Monitoring and Adaptation:**

- Establish real-time monitoring capabilities to ensure immediate response to any challenges or opportunities encountered during the exploration.
- Continuously adapt exploration strategies based on live data and insights.

## We are From and For BANGLADESH?

## DUBURI





### Media Coverages













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## Media Covered by



The Baily Star























as well as 50+ print & electronics media covered our news..



BRACU Duburi has the potential to revolutionize the way that underwater tasks are carried out in Bangladesh. It can be used to improve search and rescue capabilities, enhance environmental monitoring, streamline underwater inspection, and explore for new resources.

For example, BRACU Duburi can be used to:

- Search for missing persons or vessels in rivers, lakes, and coastal waters.
- Monitor water quality, track the movement of pollutants, and study marine life.
- Inspect bridges, dams, and other underwater structures for damage or defects.
- Explore oil, gas, and other natural resources on the seabed.

The BRACU Duburi team is committed to using AUV technology to solve real-world problems in Bangladesh. They are currently working on a number of projects, including developing a low-cost AUV for use in disaster relief and developing new AUV applications for the fisheries and aquaculture industries.





In the heart of our endeavor lies a profound journey into the unknown depths of the ocean. Picture this: the DUBURI robot, a testament to Bangladeshi engineering prowess, poised for a groundbreaking deep-sea exploration. This isn't just about technological innovation; it's a quest that resonates with the very essence of our nation.

As we prepare for the Deep Dive phase, imagine the wonders waiting to unfold beneath the waves. It's not merely a venture into the ocean; it's a voyage into the soul of Bangladesh's maritime potential. With each dive, we're not only unlocking the secrets of the sea but also unlocking doors of opportunity for our beloved country.

Why does this matter? Because beyond the intricate machinery and cutting-edge technology lies the heartbeat of Bangladesh's future. The data we collect isn't just a series of numbers; it's a narrative of our oceans, a tale of marine life, and a blueprint for sustainable development.

This isn't just about us; it's about every Bangladeshi who dreams of a thriving blue economy, where our oceans become a source of prosperity and pride. The support we seek isn't just for technology; it's an investment in the dreams and aspirations of a nation.

Imagine a Bangladesh globally recognized for its prowess in underwater exploration, contributing to marine research, and leading the charge in the blue economy. Envision economic growth fueled by sustainable practices, environmental conservation championed by our discoveries, and a nation proud of its maritime heritage.

In every splash of water, we hear the echoes of the future. This journey is not just about the Deep Dive phase; it's about the deep-seated belief that our actions today shape the destiny of generations to come. So, let's support, let's believe, and let's embark on this voyage together – for a Bangladesh that sails confidently into the uncharted waters of progress.

## Support for the IMPACT



## A R&D for Bangladesh

PRODUCT	QUANTITY	PRICE
Aluminum Body	1 pc	150000 BDT
T200 Thrusters	6 pc	134000 BDT
ESC	10 pc	40,320 BDT
Low Light Camera	1 pc	56,720 BDT
Jetson Nano	1 pc	30,000 BDT
Pixhawk	2 pc	30,000 BDT
Actuator	2 pc	15,000 BDT
Lumen Light	1 pc	36,400 BDT
Imaging Sonar	1 pc	994,500 BDT
Phase 2 in Saint Martin		150000 BDT
Phase 3 in Saint Martin		150000 BDT

Total(BDT)

17,86,940/-

(according to BRAC Bank's currency rate - 16th November, 2023)



## Join Us

Join us on an extraordinary voyage as we set sail into the uncharted waters of innovation. Over the last 5 years, BRACU DUBURI has evolved into the world's most innovative team, clinching the Second Runner-Up title in Robosub 23 against the best global universities.

Now, we invite you to partner with us in the Deep Dive phase, a venture that goes beyond exploration — it symbolizes our nation's resilience and technological prowess. Be a crucial part of uncovering the secrets of the sea, contributing to marine research, and positioning Bangladesh as a global leader in the blue economy.

Sponsorship with BRACU DUBURI isn't just an investment; it's a journey into the future of underwater exploration. Your support echoes in halls of innovation, environmental stewardship, and national pride.

Let's redefine what's possible beneath the surface.







#### Sponsors Benefits

As a sponsor of Duburi, your company will enjoy numerous benefits and exclusive opportunities

#### These include:

- 1. Priority acknowledgment in every event and competition organized and participated in by the Robotics Club of BRAC University ROBU. Our title sponsor will receive special promotions in all national events and club fairs arranged by ROBU.
- 2. Prominent display of your company's name and logo on all official posters, videos, certificates, crests, and T-shirts.
- 3. Promotion of your company's name and logo on all Duburi posts, reaching a large and engaged audience.
- 4. Opportunity for media coverage and promotion of your company through hosts or coordinators in live sessions.
- 5. Promotion of your company on Duburi's official Facebook page and website homepage.
- 6. Opportunity for a whole page (black and white) color advertisement in Duburi's magazine, providing significant exposure to our readers.
- 7. Offer collaboration on industrial projects related to technology at a discounted rate, allowing your company to access our expertise and resources.
- 8. Advertisement of your company's products in any national event that BRACU Duburi participates in, with a chance to brand your products on national platforms such as National Industrial Conferences, Technological Exposures, and Meetups.



## Sponsors









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