River Research Institute
Ministry of Water Resources
Govt. of the People's Republic of Bangladesh

RRI Newsletter

Issue-29 A Quarterly Newsletter of RRI March 2026

NEWLY APPOINTED AS MINISTER AND STATE MINISTER IN MoWR

Md. Shahiduddin Chowdhury Anee MP
Honorable Minister, MoWR.

Mr. S. M. Abu Horayra, Director General of the River Research Institute (RRI) welcoming the newly appointed Minister and the State Minister of the Ministry of Water Resources.

Forhad Hossain Azad MP
Honorable State Minister, MoWR.

Mr. S M Abu Horayra, Director General, on behalf of River Research Institute (RRI) greeted and congratulated Mr. Md. Shahiduddin Chowdhury Anee MP, Honorable Minister, Ministry of Water Resources, for being elected from the Lakshmipur-3 parliamentary seat. He also congratulated Mr. Forhad Hossain Azad MP, Honorable State Minister, Ministry of Water Resources, for being elected from the Panchagarh-2 parliamentary seat in the 13th National Parliament Election. Best wishes for them from RRI.

RRI PROVIDES SUSTAINABLE AND COST-EFFECTIVE SERVICES THROUGH HYBRID MODELING APPROACH IN WATER RESOURCES DEVELOPMENT PROJECTS.

-Dr. Engr. Md. Alauddin Hossain, Director, Geotechnical Research and S M Abu Horayra, Director General, RRI

River Research Institute's (RRI) journey was started in 1948 named as Hydraulic Research Laboratory (HRL) at Kuli road (at present green road) of Tejkunipara Mouza in Dhaka city under Irrigation Directorate. After independence of the country in 1972, the facilities available in the laboratory were not quite sufficient to accommodate ever-increasing tests and studies in the field of civil and hydraulic engineering. The then government establish Bangladesh Water Development Board (BWDB) from East Pakisthan Water and Power Development Authority (EPWAPDA) and took many projects related water resources development such as irrigation and drainage project, flood control project, river bank protection project, river dredging and management project etc.

To make these projects sustainable and cost-effective, the then government took initiative a project "River Research Institute" in 1973 and approved it in ECNEC in July, 1975. Following the decision, the then government merged HRL

with RRI in 1978 and founded as River Research Institute (RRI) in 1979 at Harukandi, Faridpur which is located at the left side of the Dhaka-Barisal highway. It is 140 km far away from the Dhaka City and its compacted premises cover an area of about 39 ha. At the end of the RRI project works in Faridpur, RRI was shifted from green road, Dhaka to Faridpur in July, 1989. Later on, the government of Bangladesh approved RRI as a Statutory Public Authority by an ordinance of Act No. 53, July 1990 and had placed directly under the Ministry of Water Resources with a view to enhancing its activities and to lift up the standard of service in international level in the field of water resources engineering.

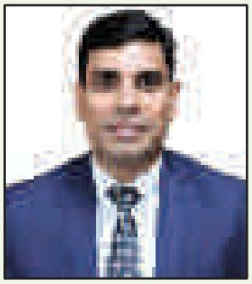
As per Act 53 of 1990, RRI has the mandate for conducting hydrodynamic and morphological study of the river through physical and mathematical modelling mainly to derive and verify the design parameters of any hydraulic structures, bank protection and river training works. For a long time, RRI has successfully conducted more than 200 physical model studies under different water resources development projects since it's establishment related to town/infrastructure/agricultural land protection projects from river bank erosion, irrigation and drainage system development projects through barrage or dam or sluice gate, communication development projects through bridge along with road/embankment, river dredging projects to increase river capacity, maintain river navigability & protect the specific area and river restoration projects through dredging with structural and non-structural measures. RRI has also been involved in mathematical modelling since 2009.

It is noticed that the world is on the shores of the 4th Industrial and Technological Revolutions. Bangladesh is not out of this event. For this, Government of Bangladesh's intension is to promote the development of new technologies in all engineering and business management areas. In continuation of this to meet the new changes and challenges, the Government of the People's Republic of Bangladesh embarked in 2009 with the initiative 'Digital Bangladesh' as the first implementation of the 4th Industrial Revolutions. As a part of that initiative, RRI had started Mathematical modelling in 2009 which is customized based software. Besides this, recently RRI has purchased modern and sophisticated equipment, machine and software (Geotechnical investigations and Hydraulic Research Study specially for Physical and Mathematical Model Study related) under Institutional Development and Capacity Development (IDCB) Project (Phase-II) of RRI which are a potent tool for achieving the objectives of the 4th Industrial Revolution. It should be mentioned that IDCB Project (Phase-II) of RRI has been implemented with a view to enhancing its activities, capacity and to uplift the standard of service at the international level in the field of water resources engineering.

It should be noted that Physical and mathematical modelling tools are complementary to each other. Both physical and mathematical model have been proved to be very essential for sound engineering judgments to find out solutions for different water resources development projects. With a view of developing, RRI has adopted hybrid modelling approach by using physical and mathematical modelling to improve the understanding of different water systems presently which may lead to SMART BANGLADESH and Improved BANGLADESH through safe, sustainable, efficient and cost-effective solutions for engineering problems in water resources development in Bangladesh.

RRI is the only one Government research organization in Bangladesh in water sector where both physical and mathematical modelling facilities are available. So, it is possible to receive specialized service through hybrid modelling approach from a single source organization as RRI at a low cost and lesser time for making a project sustainable and cost effective in water resources development.

NEW GUARDIAN OF MINISTRY OF WATER RESOURCES



Dr. A. K. M. Shahabuddin (6359) is a senior Bangladeshi civil servant recently appointed as the Secretary of the Ministry of Water Resources. He joined the Ministry on 01 February 2026. He previously served as Rector (Secretary) of the National Academy for Development Administration (NADA). The Government of Bangladesh formalized his promotion and transfer on January 29, 2026, via a notification from the Ministry of Public Administration. This role involves overseeing critical areas like flood control, river erosion, irrigation, and sustainable water policies, aligning with national challenges in water management. Dr. Shahabuddin has extensive experience in public administration and strategic planning from his time at NADA and other senior civil service positions. His expertise is seen as vital for leading the ministry effectively.

VISITING OF THE SECRETARY, MoWR TO RRI

Mr. Khondoker Azim Ahmed, NDC, served as the routine charge of the Secretary of Ministry of Water Resource, Bangladesh recently paid an official visit to River Research Institute (RRI), Head Office in Faridpur on 14 January 2026. S M Abu Horayra, Director General of RRI gave a warm welcome reception to RRI premises. As part of the program, he attended a discussion meeting with the Scientists, officers and staffs of the Institute, where he listened their perspectives on ongoing projects, operational challenges, and future development needs for RRI. Later he visited the open field physical Model Bed, 2D-3D Wave generator facilities of Hydraulic Research Directorate and then came to Geo-technical Research Directorate where he observed the Lab facilities of Soil Mechanics division, Material testing and Quality control division, also water quality and Sediment division. Beside the visit, Mr. Azim chaired a 2nd Selection Committee Meeting for administrative purpose. During his visit, Chief Engineer of BWDB, Faridpur along with other officials also accompanied him.

Photo: Director General of RRI along with other high officials welcoming Mr. Khondoker Azim Ahmed, NDC, Secretary, MoWR.

Photo: Discussion Meeting with RRI officials at the Madhumati Conference Room.

Photo: Secretary along with high officials of RRI observing physical model facilities and Lab facilities of RRI.

MEMORANDING OF UNDERSTANDING (MoU): Partnership for Sustainable River Management between RRI and MANOB HITOISHI SANGSTHA (MHS)

The River Research Institute (RRI) conducted a significant signing ceremony on February 22, 2026, marking a new chapter in sustainable river management. The signing of the Memorandum of Understanding (MoU) took place between Manob Hitoishi Sangstha (MHS) and the River Research Institute (RRI) at the RRI office located at 72, Green Road, Dhaka. Engr. Syed Imdadul Haque, Chief Executive Officer of MHS, and S M Abu Horayra, Director General of RRI, officially signed the agreement on behalf of their respective organizations. MHS is a distinguished research-based social welfare voluntary organization in Bangladesh, specializing in low-cost, long-lasting, and eco-friendly river and coastal bank protection solutions since 1991. This MoU marks a remarkable milestone for both institutions, establishing a framework to share experiences, knowledge, and facilities for joint scientific research and training programs. Together, they will conduct critical field studies evaluating innovative interconnected sand-filled geo-bags and concrete blocks, integrated with eco-biological engineering and strategic tree plantation. This collaborative effort aims to naturally bind soil, enhance ecological restoration, and significantly advance the sustainable development of the country's water resources sector.

Photo: Engr. Syed Imdadul Haque, Chief Executive Officer of MHS (left) and S M Abu Horayra, Director General of RRI (right) officially signed the agreement on behalf of their respective organizations.

58TH BOG MEETING OF RRI HELD AT FARIDPUR

The River Research Institute has a Board of Governors (BoG), which is the apex board of the Institute that takes decisions on various important issues based on arising from time to time and the River Research Institute implements those decisions. Honorable Advisor/Minister of the Ministry of Water Resources is the Chairman of BoG of RRI. The 58th Board of Governors (BoG) meeting of RRI held at RRI Main Campus, Harukandi, Faridpur on 31th January 2026. Syeda Rizwana Hasan, Honorable Advisor, Ministry of Water Resources, and the Chairman of BoG, chaired the meeting. Mr. Khondoker Azim Ahmed, NDC, Secretary, Ministry of Water Resources, and other respected members of BoG were present at the meeting through Zoom platform. Director General, S M Abu Horayra, Joint Secretary attended this BoG meeting as the member secretary. Some important decisions and directions were taken in this meeting.

FIELD INVESTIGATION CONDUCTED REGARDING WATER POLLUTION CLAIMS BY THE DEPARTMENT OF ENVIRONMENT, FARIDPUR

A crucial meeting and field visit were conducted on the dated February 24, 2026 in response to claims of severe water pollution caused by waste from the Faridpur Sugar Mill. In the last month of the district coordination meeting in Faridpur, the Deputy Commissioner directed the UNO of Madhukhali Upazila to address the issue. As per direction of the Deputy Commissioner, the UNO hold discussions with the Department of Environment, Faridpur, the River Research Institute (RRI), and the Sugar Mill authorities to take necessary action regarding the pollution of the mill-adjacent canal and the Chandana River, which has resulted in the death of river fish and degradation of the surrounding environment. Consequently, Mr. Dulal Bawali and Mr. Omar Al Maimun, Senior Scientific Officer represented the River Research Institute at the discussion meeting and took necessary action to investigate the required test of the discharged water from the sugar mill.

Photo: The mill-adjacent canal and the Chandana River are heavily polluted by sugar mill discharge.

Photo: A meeting was held at the office of the Madhukhali UNO. Mr. Dulal Bawali and Mr. Omar Al Maimun, Senior Scientific Officer represented the River Research Institute at the discussion.

RIVER SUMMIT 2026 (নদী সম্মেলন-২০২৬): A MILESTONE OF RRI HISTORY

With the aim of creating a national platform for dialogue among representatives of various environmental and river-related organizations, researchers, professionals and relevant stakeholders, River Research Institute organized 'River Summit 2026' a day long programme on Saturday, January 31, 2026 .The 'River Summit 2026,' a national-level summit on the important and multifaceted topics of environmental protection, river management, conservation, and research, was organized by River Research Institute to foster a synthesis of research-based knowledge, practical experience, and policy perspectives.

The conference was attended by the representatives of various organizations working on rivers and the environment. This included researchers, academics and experts, as well as government officials (bureaucrats). Representatives from relevant government and non-government organizations were also present. Furthermore, the participants included media professionals, interested individuals, and the younger generation, comprising college and university students.

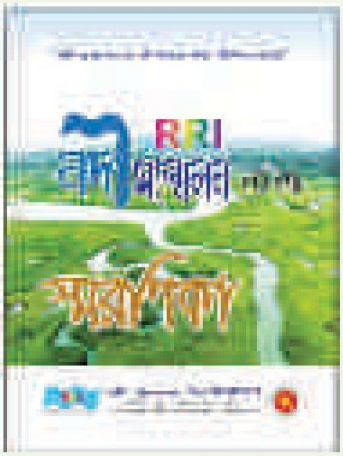
The inaugural session began at 10:15 AM with the chief guest, Syeda Rizwana Hasan, Honorable Adviser, Ministry of Water Resources. The inaugural ceremony commenced with a welcome address by Dr. Md. Alauddin Hossain, Director, Geo-technical Research, RRI. The session was presided over by S M Abu Horayra, Director General, RRI. Special guests were presented Professor Dr. Md. Manzoorul Kibria, Vice-Chancellor, BGC Trust University Bangladesh, Md. Kamrul Hasan Mollah, District Administrator, Faridpur, Khokan Kanti Saha, Director (Admin & Monitoring), National River Conservation Commission, Muhammad Monir Hossain, Chairman, Bangladesh River Foundation, Prof. Dr. Md. Ahiduzzaman, Dept. of Farm Mechanization and Precision Engineering, Gazipur Agriculture University.

The discussions of the River Summit were divided into three sessions. The 1st theme of the session was: " The cost-effective and sustainable water resource management through Hybrid Modelling Approaches and Research." The session was chaired by Engr. Md. Motiar Rahman Mondol, Director, Hydraulic Research Directorate. The keynote presentation was delivered by Md. Moniruzzaman, Senior Scientific Officer, River Research Institute. The theme of the 2nd session was 'River and Environmental Conservation in the Context of Climate Change.' The session was chaired of the 2nd session by Mr. Md. Bakahid Hussain, Chief Executive Officer, Zilla Porishod, Faridpur, and the keynote presentation was delivered by Masud Iqbal Md.Shameem, Director (Environment clearance), Department of Environment, Dhaka.

The theme of the 3rd session was, "Interactive Networking Discussion: River Conservation and Sustainable Management." The moderator was Mr. Md. Monir Hossain, Chairman, River Foundation. During the 3rd session, several guests made a number of recommendations to strengthen and make the River Research Institute more effective. Notably, river enthusiasts from different parts of the country recommended increasing the budget for research at this institution, which possesses such excellent infrastructure for river research. They also recommended incorporating the River Research Institute into the monitoring system to control the quality of work of various organizations.

After the lunch break, all the invited guests observed various activities of the River Research Institute (RRI). This included visiting exhibition models of different rivers in Bangladesh, visiting the open and indoor model areas for physical model studies, and visiting various laboratories of the Geotechnical Research Directorate. A small-scale Pitha Utsab (cake festival) was arranged in the RRI's guitar-shaped Lake for the invited guests. The guests enjoyed the festival and the traditional cakes with great joy and enthusiasm in the festive atmosphere.It is hoped that the River Conference - 2026 will serve as an important platform to make the activities of the River Research Institute more effective, participatory, and policy-oriented.

Photo: Few glimpses from the River Summit 2026



The Memorial publication "স্মরণিকা" has already been published. It can be accessed by scanning the following QR code:

INAUGURAL OF FIRST BATCH OF INTERNSHIP AND CLOSING CEREMONY OF INDUSTRIAL ATTACHMENT OF CUET STUDENTS.

River Research Institute (RRI) started its first ever 3-month long Internship program for a group of six students from different academic background. They were selected through rigorous interview screening. Total 12 students were selected for 2 batch for tri-month duration. All the internee of January-March'2026, 1st batch have already done the 1 week long overall activity of RRI. Later they were distributed into two sub group and appointed to Hydraulic Research Directorate and Geotechnical Research Directorate. Dr. Fatima Rukshana, Principal Scientific Officer in addition to her office work also act as supervisor for the running batch program.

During their stay, the intern students actively engaged in hands-on learning across various laboratory units, including sediment analysis, hydrology, geotechnical investigation, and hydraulic modeling. They had the opportunity to observe real-time research activities, interact with technical experts, and gain practical exposure to river management and water-related project studies. The training program enriched their academic knowledge with field-oriented experience and provided valuable insights into the applied aspects of water resources research and engineering.

Meanwhile a team of eight students from the Department of Water Resources Engineering (WRE), Chattogram University of Engineering & Technology (CUET) participated on a three-week-long industrial training program at River Research Institute (RRI). Both Inaugural and Closing ceremony of First batch of Internship and Industrial Attachment of CUET students were conducted on 1st January of 2026.

FAREWELL CEREMONY

River Research Institute (RRI) organized a formal farewell ceremony on 05 January 2026 to honor the retirement of Ms. Nasima Khatun, in recognition of her long and dedicated service to the Institute. Ms. Khatun was born and raised in Faridpur town. Under a rigorous recruitment process, she was appointed as a Computer Operator in 07 September 1997. Over the years, she served with distinction in various directorates under the guidance of several Directors. In 28 September 2009, she was entrusted with the responsibility of Personal Secretary to the Director General, a role she performed with sincerity and professionalism until the later part of her service. Toward the end of her tenure, she also served as the Routine Charge Officer of the Deputy Director, Administration & Finance Directorate, from 23 December 2025. In her academic career, Ms. Khatun earned a

Photo: Farewell ceremony of Ms. Nasima Khatun PS to DG.

Photo: Token Gift handover to Ms. Nasima Khatun in connection to Farewell ceremony from female association.

Bachelor's

degree in Social Welfare from Rajendra College, Faridpur. Throughout her service, she participated in several professional training programs such as workshop on Election Manifesto'2024, contributing to her skill development and institutional effectiveness. Beyond her official responsibilities, she possessed a strong cultural orientation and played an active role in enriching RRI's observance of various national and cultural events, including Pohela Boishakh, Independence Day, and Victory Day. After a highly successful career of 34 years, Ms. Khatun commenced her post-retirement leave (PRL) on 31 December 2025. Due to unavoidable circumstances, the farewell ceremony was held subsequently on 05 January 2026. The RRI family will remember her lasting contributions and dedicated service with deep appreciation and respect. River Research Institute extends its heartfelt wishes to Ms. Nasima Khatun for good health, happiness, and continued success in all her future endeavors.

ONGOING RESEARCH PROJECTS IN RRI

There are a handsome number of research projects in RRI at this moment including a development project. In addition, few physical model study projects are being in pipeline. Recently five research projects have been approved and the field work as well as procurement have been started. A short description of all research projects is described below.

ASSESSMENT OF SPATIO-TEMPORAL VARIABILITY OF SOIL AND WATER SALINITY AND THEIR IMPACT IN SHATKHIRA DISTRICT OF BANGLADESH

The objective involved determining water quality parameters such as Temperature, pH, DO, EC, TDS and Salinity in-situ in various rivers of the Satkhira district, all the way from north, the border of Jashore district to south, the start of the Sundarban, spread over Kalaroa, Satkhira Sadar, Debhata, Kaliganj, Tala, Ashashuni and Shayamnagar Upazila.

The expected output indicates that the salinity values for the surface water are much more than the values of groundwater near the sea. As it goes away from the sea, the salinity value decreases rapidly for the surface water than the groundwater and becomes equivalent to each other at nearly 120km from the sea. TDS and EC levels also follow a similar trend. Soil salinity also follows a similar trend.

Regarding the duration, the initiation of the field work of the study has been kicked off on 20th May 2025 in the form of a short field visit to the study area. Further field visits had been done in July 2025 and an extensive field visit has been conducted on 9-14th November 2025. For the budget, the first installment of funding has been received in June 2025, which was 30% of the total budget of research. The field survey and test work for this project is currently underway.

PERFORMANCE EVALUATION OF SOME MAGNETICALLY RESPONSIVE NANOPARTICLES (NPS) AND METAL ORGANIC FRAMEWORKS (MOFS) FOR HEAVY METAL REMOVAL AND ORGANIC DYE DEGRADATION IN POLLUTED WATER.

The objective of the project involves an extensive field survey that was carried out during the pre-monsoon and post-monsoon seasons to assess the water quality of inland surface water bodies in and around Dhaka city, with particular emphasis on variations in dissolved oxygen (DO) as depicted in the corresponding graph.

The expected output of the comparative assessment of dissolved oxygen (DO) concentrations between the pre-monsoon (May) and post-monsoon (September) periods reveals a clear seasonal variation across all investigated river systems. Upon completion, these instruments will enable detailed elemental, structural, and optical analyses, thereby significantly improving the analytical depth and overall research capacity of the project.

The duration of the project is scheduled for January 2025 - June 2027, with a total budget of 434 Lac and a budget for the 2025-2026 FY of 220.20 Lac. The field survey and test work for this project is currently underway.

DEVELOPMENT OF A COST-EFFECTIVE AND SUSTAINABLE EROSION PROTECTION STRATEGY FOR BANGLADESH'S MEDIUM AND SMALL RIVERS, AND ENHANCEMENT OF THE RESEARCH FACILITIES OF THE RIVER RESEARCH INSTITUTE

The main objective of this project is to devise site specific, cost effective and environment friendly solutions to the riverbank erosion problems using either low cost bandle type structures based on indigenous knowledge or combination of traditional protective works and bandle type structures using hybrid modelling approach of state-of the art physical and numerical modelling technology.

As an expected output together with this research, this project aims to enhance and upgrade the research laboratories including establishment of physical infrastructures and procurement of equipment to facilitate research capability of RRI to conduct test and research in the field of water resources sector in accordance with its mandate.

Regarding the duration and budget, the project has been approved with a total budget of BDT 45.82 crore, fully funded by the Government of Bangladesh, and will be implemented from July 2025 to June 2029. The field survey for this project is currently underway.

NEWLY APPROVED RESEARCH: INTEGRATED EVALUATION OF SAND/ STONE MINING IN HAOR AREAS: RESOURCE MAPPING AND SOCIO-ECONOMIC ANALYSIS

The overall objective of this project is to conduct an integrated evaluation of sand/ stone mining in haor areas through resource mapping, hotspot identification and socioeconomic analysis for sustainable resource management. The specific objectives are following: To map sand/ stone resources in haor area using GIS & RS techniques and field data. To identify and quantify extraction hotspots and analyze spatial and temporal patterns of mining activities. To understand the sediment transport mechanism. To investigate socioeconomic drivers of sand/ stone extraction and assess the livelihoods. To suggest alternative and better options of sand management. To recommend sustainable management strategies and specific zoning guidelines for policymakers.

The expected output includes a spatial database and maps of sediment sand /gravel/stone resources map in the north-eastern hydrological region (haor areas). Hotspot of extraction zones. Understanding the sediment transport mechanism. Quantifying legal and illegal extraction. Socio-economic condition. Proposing a nature-based economy rather than mining. Legal audit highlighting policy gaps, enforcement weaknesses and reform needs. Recommendations for sustainable extraction, zoning and management. Dissemination of findings through seminar/workshop and article publications.

The duration of this project is 18 (Eighteen) months (from November 2025), and it has a budget of 147 Lac. The field survey and procurement work for this project is currently underway.

NEWLY APPROVED RESEARCH: ESTIMATING FLOODS IN THE MUHURI-SELONIA-FENI WATERSHED IN BANGLADESH USING HYDROLOGICAL MODELING

The broad objective is to comprehensively understand and analyze the change in rainfall pattern and to establish a rainfall-runoff relationship to flood for Muhuri river watershed in Bangladesh part. Followings are the specific objectives- To assess the likelihood of extreme rainfall events in future in the watershed of Muhuri-Selonia-Feni River system. To assess rainfall-runoff relation to flood level for the watershed of Muhuri-Selonia-Feni River system. To assess the social perception relating to flood mitigation measurement. To devise the alternative solutions to flooding problem of Muhuri-Selonia-Feni River system.

Regarding the expected output, the proposed study is expected to generate both scientific knowledge and practical solutions to flooding problems in the Muhuri–Selonia–Feni river system. Major expected outcomes include the following— Improved understanding of rainfall variability for the watershed. A reliable relationship between rainfall–runoff to flood level for the selected river system. Flood inundation and hazard maps. Practical recommendations for flood mitigation. Scientific evidence for supporting future research.

The duration of the project is 18 (Eighteenth) months (from November 2025) with a budget of 40 Lac. The field survey and procurement work for this project is currently underway.

NEWLY APPROVED RESEARCH: SURVEY OF RIVERS IN THE HILL TRACTS AND SUNDARBANS REGIONS OF BANGLADESH

The overall objective of this study is to conduct a comprehensive assessment and enumeration of rivers in the Hill Tracts and Sundarbans regions of Bangladesh. The specific objectives are as follows: To develop a comprehensive geodatabase of rivers, streams and canals in the Hill Tracts and Sundarbans regions of Bangladesh using remote sensing, GIS, and field validation. To prepare an inventory of rivers in the Hill Tracts and Sundarbans regions, categorized by flow regime (perennial, seasonal, tidal), morphology and ecological significance. To identify and document transboundary rivers in the Hill Tracts and Sundarbans regions, highlighting their spatial distribution and management implications. To design a framework for long-term monitoring and updating of river information, ensuring institutionalization within RRI for sustained application. To explore future research directions related to river ecosystems, biodiversity, and water resource management in ecologically sensitive regions of Bangladesh.

The expected output includes a Comprehensive geodatabase of rivers in the Hill Tracts and Sundarbans Regions of Bangladesh. Inventory of rivers in the Hill Tracts and Sundarbans Regions of Bangladesh. Identification and compilation of a list of transboundary rivers in the Hill Tracts and Sundarbans regions of Bangladesh. Framework for Long-term Monitoring, ensuring the river inventory can be updated and institutionalized within RRI for continued relevance. Dissemination and Knowledge Sharing through a final workshop with stakeholders.

The duration of the project is 18 (eighteenth) months, (from November 2025) with a budget of 50 Lac. The field survey and procurement work for this project is currently underway.

NEWLY APPROVED RESEARCH: HYDRAULIC PERFORMANCE AND OPTIMIZATION OF MAIN AND MINOR GROIN CONFIGURATIONS FOR BANK PROTECTION IN ALLUVIAL RIVERS

The objective of this study is mainly aimed at the reduction of local scour on the groins placed in a series. The specific objectives are to examine scour development at conventional groins under upstream parallel flow, to investigate scour–deposition patterns for various groin configurations and arrangements, and to evaluate hydraulic performance to identify the most effective design for practical applications.

The expected output of this study is to reveal an advanced concept of stabilizing the groins in a series for long-term through modification of main and minor groin configurations and arrangements. It will help designers and field engineers to take steps for improving the longevity and functionality of groins.

The duration of the study is planned for 22 months with a budget at an estimated cost of BDT 49 lakh from the RRI Research Budget. The field survey and procurement work for this project is currently underway.

NEWLY APPROVED RESEARCH: REASSESSING THE NUMBER OF TRANSBOUNDARY RIVERS IN BANGLADESH THROUGH HYDRAULIC CHARACTERIZATION AND MULTI-SOURCE DATA ANALYSIS

The objective of this study aims to update and refine the inventory of transboundary rivers through hydraulic characteristics and multi-source data integration. The specific objectives are: To delineate transboundary rivers networks across Bangladesh using GIS and satellite data. To collect, compare, and consolidate existing institutional records. To verify river presence, characteristics, and naming through targeted field investigations. To assess and document hydraulic characteristics of identified rivers. To prepare a geo-database and map of verified transboundary rivers with hydraulic data.

The expected output includes a verified inventory of transboundary rivers to support water management, sharing, and climate resilience. Geo-hydraulic database with river details and key hydraulic features. High-resolution geospatial map showing transboundary river networks and cross-border connectivity. Analytical report highlighting data gaps, discrepancies, and policy implications. Recommendations for integrating national water resources management with JRC mandates.

Regarding the duration and budget, the study is planned for 18 months with an estimated cost of BDT 1 Crore 40 Lakh from the RRI Research Budget. The field survey and procurement work for this project is currently underway.

INTERNATIONAL MOTHER LANGUAGE DAY CELEBRATION IN RRI

The River Research Institute observed the 2026 International Mother Language Day with deep respect and great honor. To properly remember this very important national day, many different meaningful events were carefully planned out across the institute. These activities brought all the staffs and leaders together to pause and deeply think about our shared history and culture. Everyone gathered to show their true love and respect for the brave people who gave their lives to protect our right to speak our mother tongue. The most meaningful part of the day's events was the special prayers and quiet moments of reflection. These times were spent praying for the peace of the fallen language martyrs, making sure that we will always remember everything they sacrificed for our words and our voice.

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