TOWARDS A BLUE ECONOMY

LHI
Coast and Water

LANKA HYDRAULIC INSTITUTE LTD

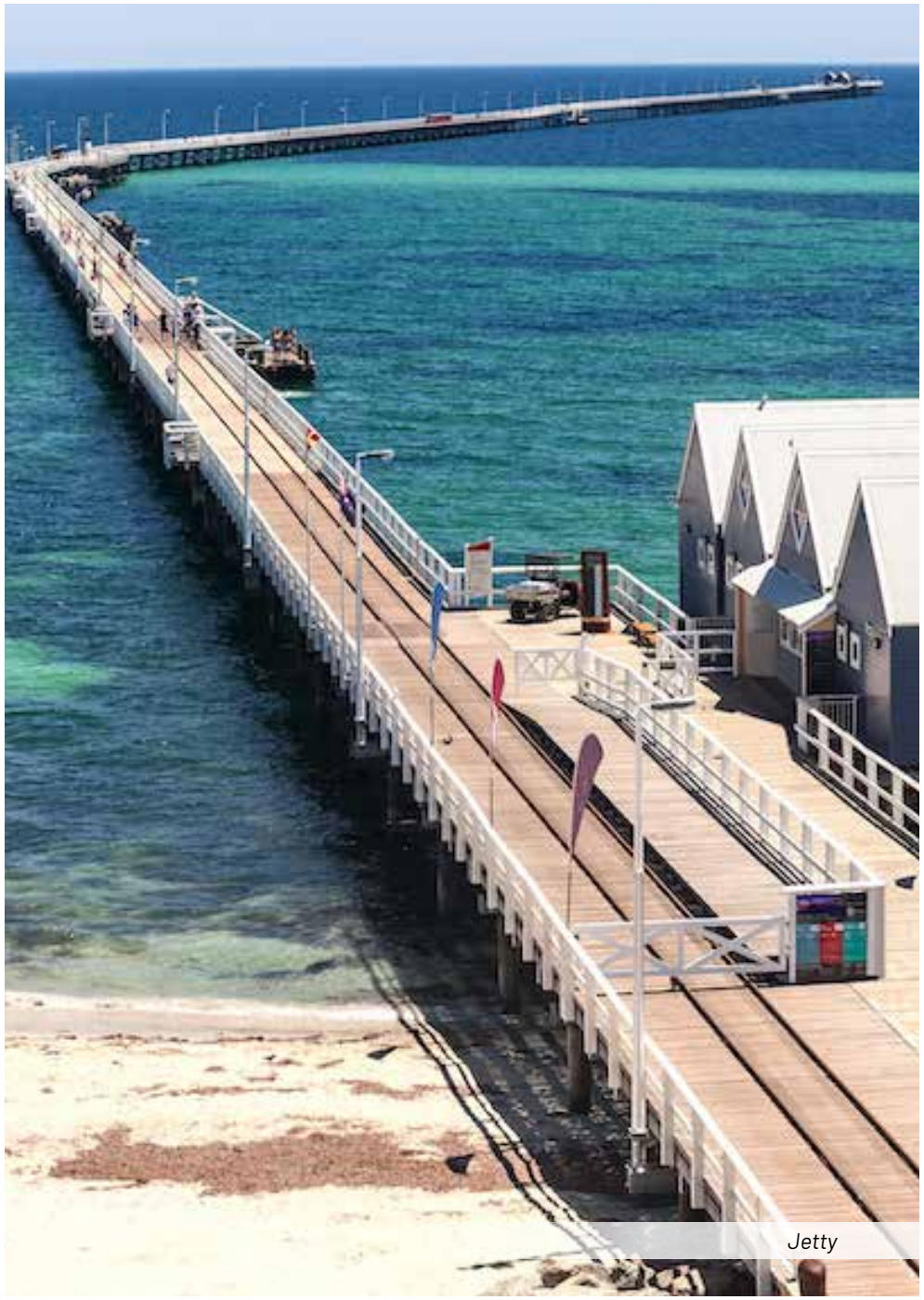
OUR PROMISE

We are a team that is committed to purpose and at the heart of that purpose is this, our promise: To understand, completely, the dynamics of your situation and the essence of your needs and to treat your challenges as our own and to walk with you to a shared destination. In lieu of offering you only solutions, we invest ourselves in your vision and commit to going that extra mile to seek that optimal strategy, that most effective methodology, that most enduring outcome. We bring our expertize, our relentless desire for analysis, our hands-on spirit of trial and experimentation to bring to fruition the strongest, most intelligent engineering designs. You will find in us the grace notes, the nuances, the subtleties of thinking others might overlook, in a driving commitment that never clocks out and in an unwavering pursuit of excellence in engineering. Good enough is not good enough. We know that your trust in us deserves much more. Therefore you will see in us a driving desire to listen, to collaborate, to collate, to consolidate, to innovate in order to work with integrity and deliver with purpose. In every tide we tweak, in every shore we shape, in every exercise we engage, we promise to stand with you – invested, inspired and all in.

TOWARDS A BLUE ECONOMY

As the world pushes strongly to achieve a, guilt-free, want-free and worry-free world, the blue economy has become the last best hope of mankind to create the enabling environment for a resilient planet. As blue custodians, we recognize that the power of water is not merely a force to be managed but a diverse living system that deserves our respect and our utmost efforts to protect and rejuvenate. As a global hydraulic engineering consultancy, we are bound by a non-negotiable responsibility to create and deliver visionary and durable designs that are not only robust but also sensitive to the pulse of our oceans, coasts and rivers. Designing complex marine and coastal works, we amalgamate engineering excellence with the poetry of nature. Working to protect ecosystems while empowering progress, we harmonize the built and natural worlds, thereby unlocking value for generations. Knowing that innovation must speak the language of sustainability, we prove at all times that when engineering is attuned with the rhythm of the waves, we can restore socioeconomic balance and natural beauty. Seeing where the world must be tomorrow, we work towards a future where coastal engineering nurtures, rather than compromises, our blue planet.

EXCELLENCE IN COASTAL AND HYDRAULIC ENGINEERING



Jetty

Wherever there is a requirement for managing water dynamics along the coast, down a river valley or in a mid of a city, LHI's proven competencies, abilities and capabilities are brought to carve out the maximum positive impact, durability and sustainability. In almost all such scenarios in Sri Lanka and in many countries worldwide, one can discern LHI's inimitable, high-end footprint.

COASTAL ENGINEERING

Ports and Terminals: LHI specializes in providing engineering designs for various aspects of large-scale infrastructure projects including designing multipurpose jetties and breakwaters, revamping and optimizing of existing port infrastructure, designs of completely new port layouts based on high quality scientific evidence identified through LHI's superior experimental, analytical and design expertise.

KEY PROJECTS

- Port of Bormes les Memosas, France
- Liquid and Builk Cargo Terminal at Mboro, Senegal
- Colombo South Port Development Project, Sri Lanka
- Krishnapatnam port, India
- Hambantota Port, Sri Lanka
- Pleasure Port Development in Tiemcen, Algeria

Fisheries harbor

Fisheries harbors: LHI rises to the top in an extremely competitive area due to the fact that its expertise and experience is now a benchmark for engineering excellence in this sector across the planet. From surveying locations to analyzing the hydraulic dynamics to creating the layouts, LHI's abilities are hailed as best-in-business by dozens of satisfied clients in over 16 countries.

KEY PROJECTS

- Messida Fisheries Harbor, Algeria
- Massawa Fishery Harbor, Eritrea
- Galle Port, Sri Lanka
- Wennappuwa Fisheries Harbor, Sri Lanka
- Sidi Ladjel Fisheries Harbor, Algeria
- Dibba, Kumzar, Mahout and Rakhyut Fisheries Harbors, Oman

Coastal and Environmental Engineering:
LHI is an industry behemoth when it comes to managing coastal dynamics including erosion, accretion, pollution and ecological impacts and takes a strong, evidence based approach to managing these issues, providing high quality insights and advice through habitat mapping, coastal resource usage trend monitoring and environment impact assessments of coastal infrastructure development projects.

KEY PROJECTS

- Coastal Protection of Pages Du Midi, Cannes, France
- Coastal Protection, Landscaping and Infrastructural Works in 16 Sites, Mauritius
- Beach and Marina Development, Fujairah, UAE
- Coastal Resources Management Project, Sri Lanka
- Sang-Do Beach Restoration, South Korea

Coastal Protection

INLAND WATER AND RIVER HYDRAULICS

In analyzing the dynamics of dam cascades, flood potential and flood protection of a river or riverine systems, assessment of river flows, lagoon water quality maintenance, development of tourism around inland water bodies and the overarching socioeconomic, cultural and conflict realities of water availability, accessibility and usage, LHI's deep insight and decades-long experience have made it one of the best in providing advice and consultancy services.

KEY PROJECTS

- Upper Kotamale Flood Forecasting System, Sri Lanka
- Salinity Barrier across Ambatale, Sri Lanka
- Feasibility Studies and Managed Aquifer Recharge (MAR) Designs, Maldives
- Dedduwa Lake Tourism, Sri Lanka
- Flood Protection Works in Torsa River, Bhutan
- Kelani River Flood Study, Sri Lanka

Flood Management

Estuary Management

Salinity Barrier

URBAN WATER

Urban water supply that uses integrated water management approach is becoming increasingly important in terms of optimizing the water resource. In this respect, LHI utilizes its expertise to provide consultancy services to mitigate impact of flooding of urban enclaves, designing and managing urban storm water systems, drainage systems and sewerage systems that are future-proofed to factor increases in urban expansion, population density and other infrastructure development.

KEY PROJECTS

- Design, Modelling and Construction Supervision of Flood Mitigation in Galle, Sri Lanka
- Feasibility study for multi-purpose development, Nyabarongo (II), Rwanda
- Badulla, Haliela and Ella Integrated Water Supply Project, Sri Lanka
- Area Drainage and Ground Water Study, Sri Lanka
- Storm Water Drainage, Provincial Towns, Sri Lanka
- CRIP Projects in Amatale, Kandakadu, Gampaha, Jaela and Anuradhapura, Sri Lanka

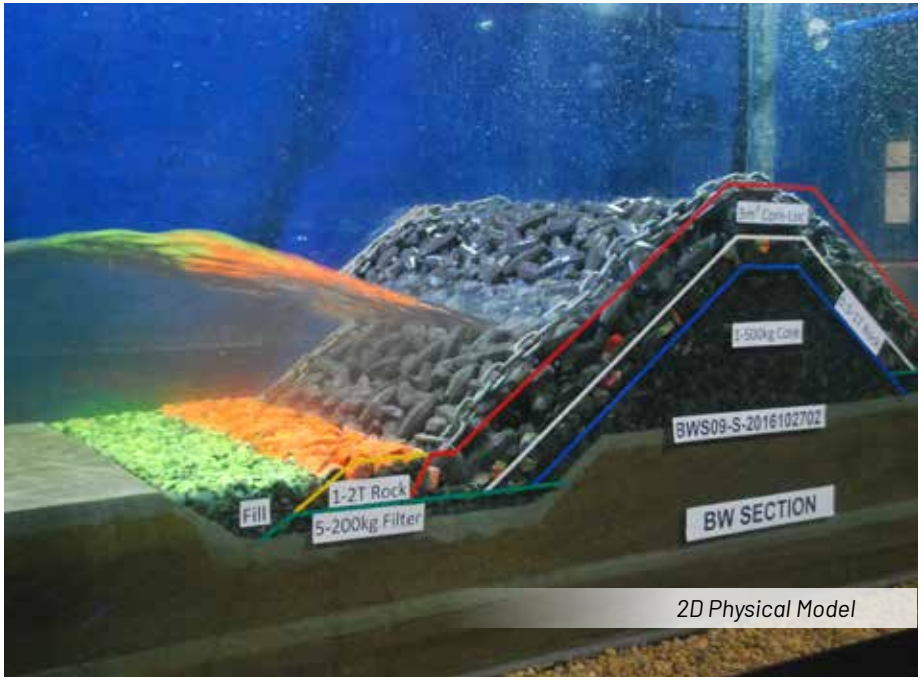
Storm water system


Sewage outfall


Intake tower

LEADING EDGE METHODS, LATEST TECHNOLOGY

3D Physical Model



2D Physical Model

2D AND 3D PHYSICAL MODELING SERVICES OF COASTAL AND WATER STRUCTURES

With the best state-of-the-art Hydraulics Laboratory in the region, LHI provides ultra-high-quality 2D and 3D modelling services that include,

- Harbor model studies including breakwater stability, overtopping, ship motion, harbor disturbance, wave and current impacts etc.
- Coastal models for erosion management and protection
- Modelling of sea outfalls (storm water and effluent outfalls)
- River and estuarine systems
- Reservoir and hydraulic structures for irrigation, water supply and hydropower works

---

Specifications of the wave basin at the LHI laboratory:

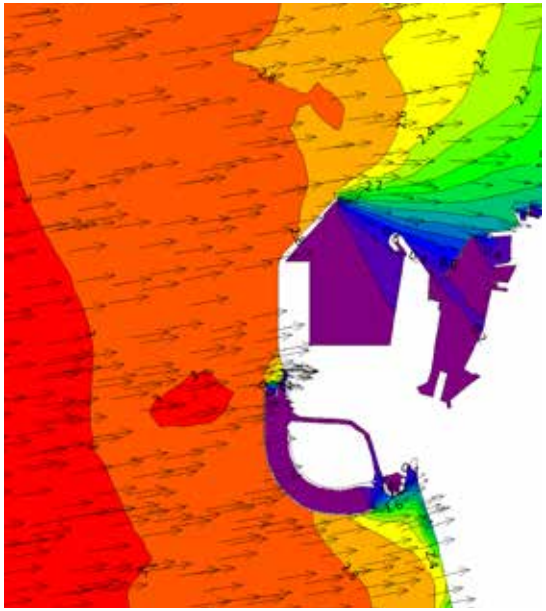
- *Basin Size: 35m (L) x 25 m (W) x 0.8 m (H)*
- *Four wave makers with facilities to simulate regular and irregular, random long crested waves*
- *Wave synthesizer software for the regulation of wave generation*
- *Capability to measure stability and overtopping of breakwaters, harbor tranquility, ship motion, and sediment transport etc.*

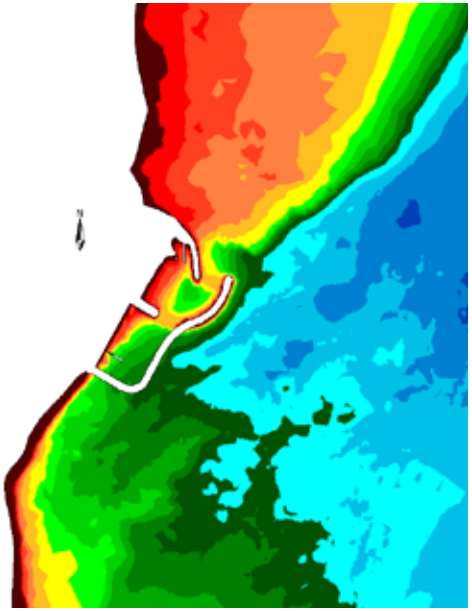
Specifications of the wave flume (I)

- *Flume Size: 30m (L) x 0.8m (W) x 1m (H)*
- *Capacity to produce regular and irregular waves of a desired spectrum*
- *Industry standard Active Wave Absorption System (AWACS)*

Specifications of the wave flume (2)

- *Flume Size: 50m (L) x 1.5m (W) x 1.9m (H)*
- *Capacity to produce regular and irregular waves of a desired spectrum*
- *Industry standard Active Wave Absorption System (AWACS)*
- *Capability to model currents, high waves, including tsunamis*





NUMERICAL MODELLING

LHI uses a vast array of software tools including MIKE products, HECRAS and CORE MIX etc for numerical modelling simulations that include

- Wave transformation and propagation
- Hydrodynamic studies
- Wave disturbance and basin resonance
- Sediment transport
- Coastal evolution
- Storm water modelling
- Waste water and heat dispersion modelling
- Modelling of dredging effects
- Oil spill analysis
- River and urban hydraulics, and hydrology
- Water resources development

FIELD INVESTIGATIONS

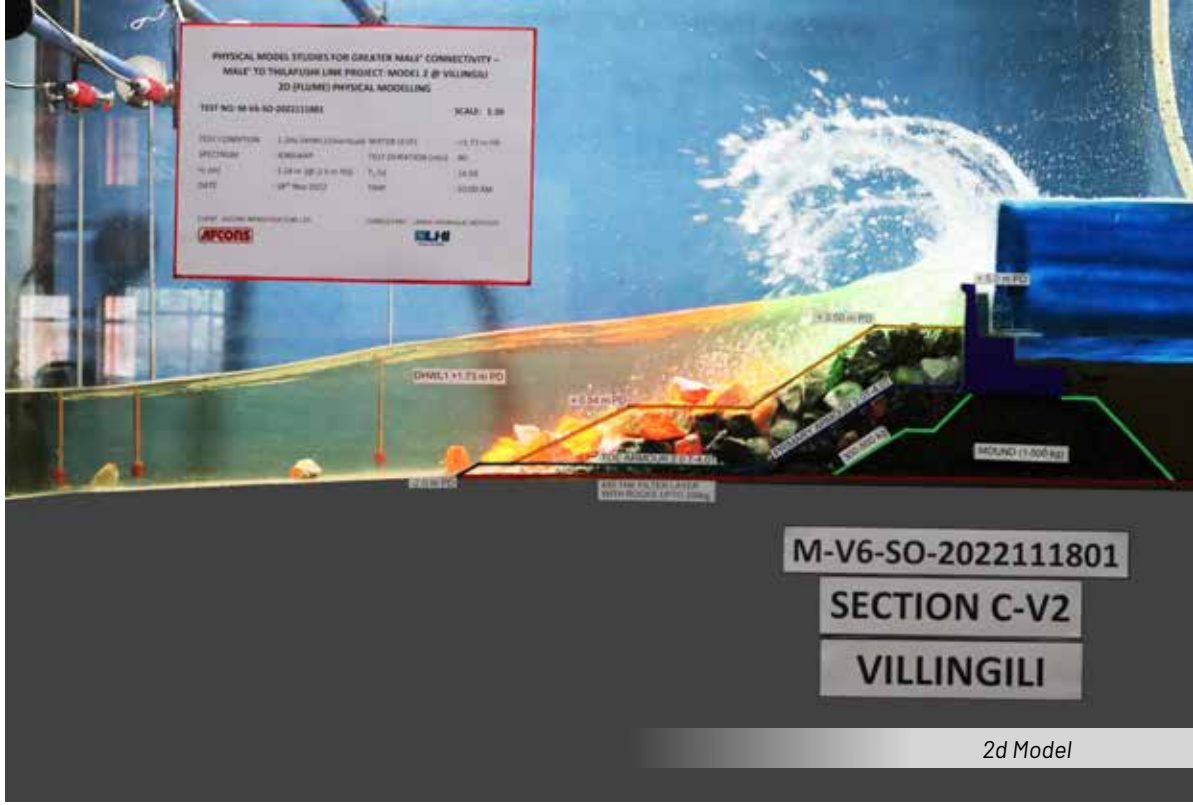
LHI is home to top-of-the-line measuring equipment that includes wave and tidal gauges, current meters (RCM and ADP), sub surface profilers, electromagnetic current meters, salinity and temperature meters, anemometers, DGPS and hand-held positioning systems, echosounders, sediment and water quality samplers, and ancillary hydrographic and land survey equipment. LHI covers all aspects of field investigations including

- Bathymetric and topographic surveys
- Geophysical surveys
- Directional wave measurements
- Water current and water level measurements
- Salinity and temperature measurements
- Wind measurements
- Sediment sampling and analysis
- Hydrographic surveys in inland water bodies
- Measurement of flow and other hydraulic and hydrologic parameters of rivers and inland water bodies
- Offshore inspection and geotechnical investigations

DETAILED ENGINEERING DESIGNS OF MARINE, COASTAL AND INLAND WATER STRUCTURES

The expert teams at LHI deliver the best hydraulic and coastal engineering designs to fit diverse needs of its clients, taking into consideration a wide range of parameters, design metrics and rubrics to deliver,

- Structural analysis and design of ports, harbours, terminals, wharves, and jetties.
- Hydraulic designs including flood mitigation and control systems, salinity barriers, dams, spillways and other riverine structures.
- Geotechnical engineering aspects including soil investigations, foundation design, slope stability analysis, and seismic design for dams, breakwaters, terminals, ports and harbors.



2d Model

ENVIRONMENTAL ASSESSMENT AND MANAGEMENT

As a leading exponent of systems to harmonize the engineering environment interface, LHI expertise is always sought after in managing the environment in and around hydraulic and coastal engineering projects that demand,

- Initial Environment Examinations
- Environment Impact Assessments
- Social Impact Assessments
- Erosion Control
- Pollution Control
- Water Quality Assessment and Management
- Habitat and Ecosystem Protection
- Social Safeguards and Social Protection

CONSTRUCTION SUPERVISION AND PROJECT MANAGEMENT

LHI frequently offers its expert services to clients who wish designers to oversee the actual engineering construction of their coastal and hydraulic engineering projects with top notch management expertise that include

- Project Management Services
- Quantity Surveying and Costing
- Tender Documentation
- Procurement (equipment, materials and human resources)
- Construction Supervision

CYNOSURE PROJECTS

Ports, Harbours and Terminals

- Detailed Design of Slipway for Development of Marina at Welipatanvila, Hambantota, Sri Lanka
- Feasibility Study on Market, Technical and Financial Aspects for Creation of Business Opportunities for Layup/Stacking Facilities of Vessels/Oil Rigs and Tankers in Sri Lankan Harbours with Emphasis on Trincomalee Port
- Establishment of Captive Coal Jetty for Udangudi Super Critical Thermal Power Project: 2D and 3D Physical Modelling , India.
- Advisory Services, Met-Oceanic Studies, Investigations and Measurements for Proposed FSRU, Mooring System and Pipeline at Kerawalapitiya, Sri Lanka.
- Réhabilitation of Bormes les Memosas Port, France
- Construction of Krishnapatnam Port: Physical Modelling , India.
- Development of ICS Marine Terminal at Mboro, Senegal.
- Colombo Port Expansion Project: Harbour Infrastructure Works, Sri Lanka
- Consultancy Services for Development of Colombo West International Terminal, Sri Lanka.
- Conceptual Design of Sea Outfall for Proposed Extension of Pipe Borne Sewerage Coverage for Dehiwala - Mt. Lavinia Municipal Council Area, Sri Lanka.
- Detailed Design and Tender documents for Beruwala, Puranawella, Hikkaduwa Fishery Harbours , Sri Lanka.
- Wave Measurements for Plan of Tests on Completion for Hambantota Port Development Project Phase II, Sri Lanka.

Coastal Protection

- 3D Physical Model Study for the Coastal Protection Development: Saint François in Ajaccio, France
- Consultancy Services for Coastal Protection, Landscaping and Infrastructural Works in 16 Sites, Mauritius
- Unawatuna Bay Shoreline Stabilization Project – Study on Beach Erosion, Sri Lanka
- Coastal Stabilization of Cannes Beach, France.
- Shore Protection in East of Mostaganem Port , Algeria
- Consultancy Services to Conduct a Hydro-Engineering Study and Prepare a Detailed Design for a Coastal Protection Structure in West Point, Monrovia, Liberia
- Coastal Protection, Landscaping and Infrastructural Works, Erithria
- Song-Do Beach Restoration Project: Physical Modelling, South Korea.

Environmental Impact Assessments

- Environmental Impact Assessment (EIA) Study for Dutch Bay Onshore Wind Farm Project, Sri Lanka.
- Bathymetric Survey and Dispersion Modelling for Environmental Impact Assessment (EIA) Study for the Proposed Refinery Project in Hambantota, Sri Lanka.
- Consultant Service for Environmental Monitoring Team for the Design, Build and Operation of 24 MLD Sea Water Reverse Osmosis (SWRO) Desalination Plant at Thalayadi, Sri Lanka.
- Ocean Modelling, Coast Conservation and Environmental Impact Study of the Mawella Bay Anchorage, Sri Lanka.

CYNOSURE PROJECTS

Environmental Impact Assessments

- Field and Modelling Investigation and Environment Study for the Desalination Plant at Maruthankerny, Sri Lanka.
- Consultancy Services for Conducting Feasibility Studies and Managed Aquifer Recharge (MAR) Designs for 13 Islands, Maldives
- Consultancy Services for Artificial Structures (Fish Aggregating Devices) to Enhance Fish Habits and Increase Fish Production in Coastal Waters, Sri Lanka.

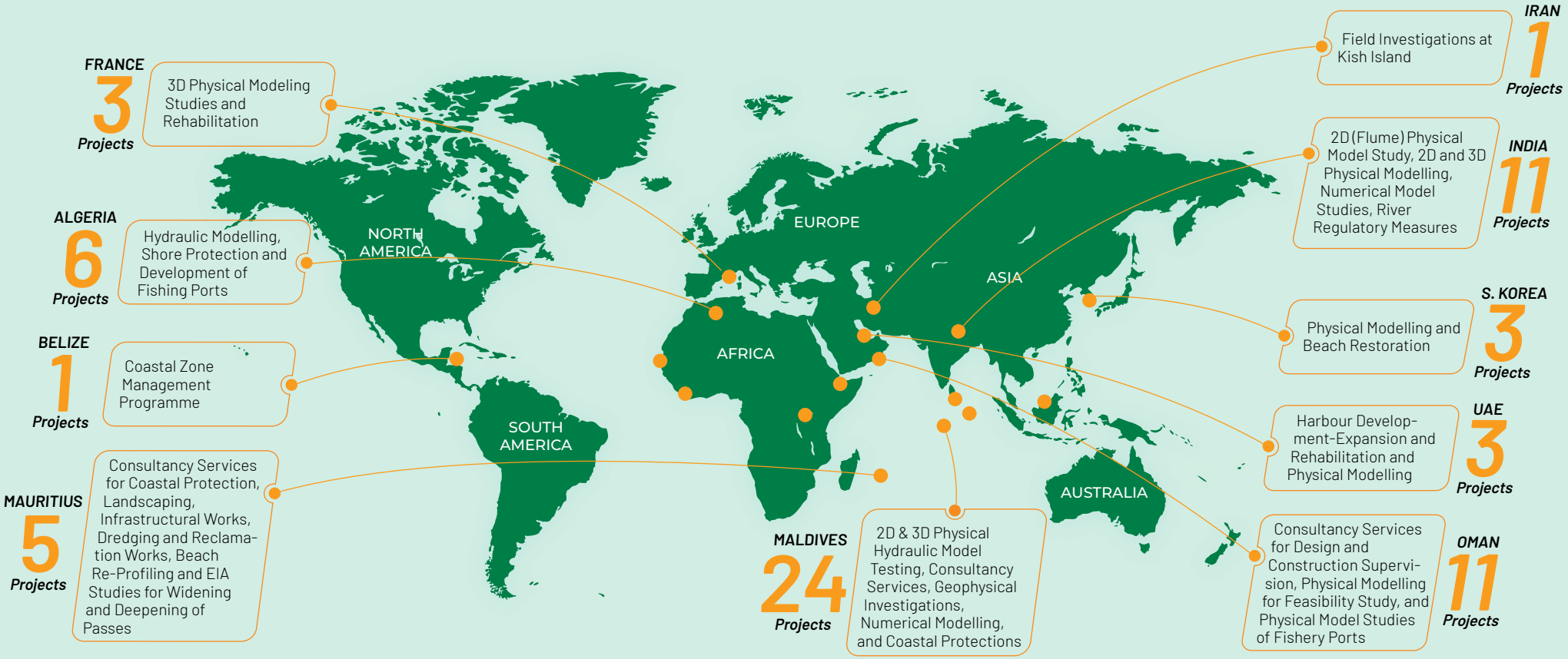
Flood Forecasting and Mitigation

- SCDP: Consultancy Services for Flood Mitigation in Galle Municipal Council Area
- Consultancy Services for Conducting Detailed Investigations for Establishing Flood Mitigation Measures in Hulhudhoo and Meedhoo, Maldives
- CRIP: Feasibility Study for Anuradhapura City Flood Protection Project
- Flood Mitigating Measures at Fares-Maathoda Island, Maldives
- Hydrological Studies at Proposed Raw Water Intake Location at Kelani River for Ruwanwella Water Supply Project
- CRIP: Preparation of Detailed Design for Proposed Salinity Barrier at Ambathale in Kelani River
- CRIP: Feasibility Study for Kandakadu Diversion Structure
- Groundwater Monitoring for Proposed Extension of Marine Drive Section from Kollupitiya Railway Station to Port City
- GKWSSP: Flood Study in Deduru Oya Weir at Bakmeegolla Intake

Water Supply and Drainage

- MCUDP: 2D Hydraulic Numerical Modelling for Madiwela Canal for Design and Building of Ambatale Stormwater Pumping Station
- Consultancy Services for Construction of Salinity Barrier across Kalu Ganga to Prevent Salinity Intrusion to Kethhena Water Intake
- Dispersion Study for Kelani Right Bank Water Supply Project - Stage II
- Storm Water Drainage System for Rigid Tyre Factory at Wagawatta, Horana
- Consultancy Services for River Modelling of New Intakes for Greater Matale Water Supply Project
- MCUDP: Improvement to Storm Water Drainage in Gregory's Canal: Hydraulic Numerical Modelling
- Greater Ratnapura Integrated Water Supply Project – Phase II: Hydraulic Modelling
- Bathymetric Survey of Kandiyapita Tank for Hambegamuwa Water Supply Scheme

GLOBAL CLIENTS



WITH US, YOU GET THE BEST IN COASTAL AND HYDRAULIC ENGINEERING CONSULTANCY

DECADES OF EXPERIENCE IN EVERY AREA OF THE SECTOR

Two new generations have commenced life on earth since LHI came into existence. That is 40 long years in which the company has advised hundreds of leading edge engineering projects on every aspect of terrestrial and maritime water dynamics, coastal and marine infrastructure, environment management and the maneuver of external dependencies including climate, waste, industry and socio-economic variances. Only a few companies in the world can lay claim to similar track record or a holistic understanding of one of the most complex spheres of engineering.

ONE OF THE BEST PERMANENT HYDRAULIC ENGINEERING TEAMS IN THE WORLD

Despite consultancy teams being totally dependent on quality and continuity of its available expertise, many organizations choose to retain a tiny core and acquire external expertise for specific tasks on a case-by-case basis. Not so is LHI! We know our clients value the longevity of teams and recognize that they may need to return long after projects are completed and commissioned. Therefore we have made sure that our key team of experts in hydraulics, physical and numerical modelling, field investigations, coastal infrastructure, disaster preparedness and ecological engineering are retained over decades. You and your project are not only in good hands - but in permanent hands.

THE LARGEST MET-OCEANIC DATABASE IN SRI LANKA

Information obviously equals power, and, quality assured data is the foundation of information. Obviously too, snapshot data in applied sciences is nearly useless. This is especially the case in hydraulic engineering as it deals primarily with the volatile element of water. LHI understands that temporally limited data sets are not as powerful as quality data gathered over decades in indicating behavioral trends of riverine and maritime environment and therefore maintains a massive information silo – the best in Sri Lanka. Additionally, data pertaining to overseas projects are equally carefully preserved so that are valued clients will have recourse to it as often as they require.

COMPREHENSIVE EQUIPMENT BASE FOR MET-OCEANIC MEASUREMENTS

Simply put, we have it all. From the merest thermometer to the most complex ocean-dynamics measuring equipment, we pride ourselves in acquiring the latest and best technology, knowing that the very success of our client's projects will depend on the level of our data quality. In this respect, our state-of-art equipment delivers superb data in areas that include but not limited to bathymetric and topographic surveys, sub bottom profile surveys as well as measurements of waves, currents, tides, salinity, and temperature. You may rest assured that when we provide evidence based consultancy services, that evidence is of the highest available quality.

STATE OF THE ART HYDRAULIC MODELING LABORATORY

Such is the complexity, subtlety and interconnectedness of the parameters that impact the outcomes of a hydraulic engineering exercise, that to field-validate designs at the point of construction is a recipe for disaster. This is why LHI has a state-of-art laboratory – the only such facility in Sri Lanka and the best in the region, replete with a large wave basin, wave flume with curring edge technology to prove its expert designs to its clientele. This is a key reason why our clients trust us – we affirm the efficacy of the designs long before they commence construction.

MODELLING EXCELLENCE

Water-related formulaic mathematics and simulations are at the heart of hydraulics engineering and LHI is one of the best in the business with a comprehensive portfolio of software coupled integrated through ICT/IOT systems including the full range of MIKE products. Our models are capable of 2D and 3D simulations of river hydraulics and marine-coastal applications that comprehensively cover the precise analysis of multiple interdependencies including all aspects of engineering, environment, costs and sustainability. Over the years its modelling capacity had grown to be top ranked making it a one-stop-shop for all modelling needs.

THE LHI TEAM

Dr. Ranjit Galappatti

BSc Eng (Hon)(Mech)(SL), PhD (Hydraulics)(UK), AAS (SL)

Chairman

With almost six decades of experience in hydraulics and water resource management, Dr. Galappatti is one of the most sort-after experts in the hydraulic engineering sector. A civil engineer with a PhD in Fluid Mechanics from the University of Cambridge UK, he is also a lifetime member of the Sri Lanka Institute for the Advancement of Science. He is a fully rounded individual who at various points in his career has been an educator, researcher, administrator and engineer, having been the Head of the Civil Engineering Department of the University of Peradeniya, a morphologist, a water resource expert and a river management specialist who has worked on top tier projects for leading public and private organizations in the Netherlands, Denmark, India, Bangladesh and Sri Lanka. Trusted across the planet to deliver high quality engineering expertise, his association with LHI goes back almost 40 years when he was first its General Manager before subsequently taking on the responsibilities of Chairmanship of its Board. With rare spectral engagement in every area of the sector, he provides the LHI team with both oversight and insight, optimizing the contribution of the entire organization in terms of global engineering consultancy excellence.

Janaka Kurukulasuriya

BSc Eng (SL), PG Dip (Port & Coastal Eng)(Norway), MA(Economics),CEng, FIE(SL)

Chief Executive Officer

Mr. Kurukulasuriya brings 40 years of global experience to his executive leadership at LHI. A multi-sectoral expert who has held top positions in both the public and private sectors in Sri Lanka, he has a Masters in Economics from the University of Colombo, a bachelors in Civil Engineering from the University of Moratuwa and a Masters equivalent Diploma in Coastal and Civil Engineering. He has successively been a project engineer, chief engineer and project director of major port development projects while also serving as an additional secretary in a number of macro-level national exercises with planning strategies related to coastal infrastructure. During his illustrious and ongoing career in the field of hydraulic engineering, he has not only provided substantive consultative expertise in coastal engineering but also in environment management - including areas covered under Sustainable Development Goals 13,14 and 15 related to water, land and climate change. In managing and administering LHI operations, he is an innovative executor constantly improving the service excellence of LHI and optimizing the experiential aspects of the service offering to its global clientele.

Dr. Karthigesu Raveenthiran

BSc Eng (Hon) (SL), MEng (Hydraulics) (Thailand),
D. Eng (Coastal Eng) (Japan)

Principal Specialist – Coastal / WR. Eng.

With a Masters in Hydraulic Engineering from the Asian Institute of Technology and a PhD in Coastal Engineering from the Tokyo Institute of Technology, Dr. Raveenthiran is not only one of the strongest coastal engineering professional but also a project strategist, designer and a business manager with a comprehensive understanding of the multiple intermeshed facets that form the foundation for delivering high quality consultative advice to the discerning global demand for these services. At various points in his 31 year career in the field, he has been a lecturer, engineering researcher, engineering manager, project specialist and project manager who has been a mission critical contributor to turnkey coastal and hydraulic engineering projects in Africa, Asia-Pacific, Middle East and South Asia, providing LHI clients with his knowledge and experience in project planning and designing, feasibility studies, field investigations and numerical & physical modelling. His multifaceted approach based on his many areas of experience have been instrumental in constantly providing the best possible solutions to complex hydraulic engineering problems across the world.

Dr. Sanjeewa Wickramaratne

BSc Eng (Hon) (SL), PhD (Coastal / Project Mgt) (Canada),
CEng, FIE (SL), Int PE

Senior Specialist– Coastal / WR. Eng.

An expert in coastal engineering, inland water hydraulics, and disaster management, counting over 22 years' experience, he has successfully completed over 55 consultancy projects related to commercial & fishery harbours, LNG & cargo terminals, and coastal protection schemes in nine countries. He also spearheads the company in its revenue growth objectives through strategic business planning, relationship-building, and networking. Sanjeewa has a PhD in Civil Engineering (Coastal Disaster Management) from the University of Calgary, Canada (2010). One of the best hydraulic engineers in Sri Lanka, he is an international Professional Engineer (IntPE) and a Fellow of the Institution of Engineers Sri Lanka (IESL). His sheer professional progress coupled with voluntary work, had him winning many prestigious awards including Ten Outstanding Young Persons Award (TOYP) by JCI in 2015 and Young Chartered Engineer Award by the IESL in 2013. His long involvement in coastal engineering and disaster research had enabled publication of over 40 research articles in reputed, peer reviewed international journals/conferences. He enhances the impact of his great passion for hydraulic and coastal engineering, imparting his insights as a mentor for each new generation of engineers.

Dr. D.P.C. Laknath

BSc. Eng (Hon)(SL), MEng. (Water Res)(Thailand), DEng(Coastal Eng)(Japan), MBA (SL), CEng, FIE (SL), Int PE

Senior Specialist– Coastal / WR. Eng.

An expert in Port and Harbour Engineering, Coastal Protection, and Coastal Process Simulations with 23 years of experience, he has hands-on knowledge and insight into extreme weather and tsunami events, and disaster prevention and management. He is a Chartered Engineer and has a PhD in Engineering from YNU, Japan, a Master's degree in Engineering from AIT, Thailand, an MBA from the USJ, Sri Lanka. He is an International Professional Engineer (IntPE) and fellow of the Institute of Engineers Sri Lanka (IESL). Scientifically striving to understand the complex dynamics of the sea-coast interface, he is passionate about numerical simulation, application of modern technological tools and advanced methodologies. He has led many national and international engineering projects, provided technical and managerial leadership for Sri Lanka's largest fishing harbor, developed a modelling system for simulating storm surges, as a Post-doctoral Researcher at the Taisei Technology Center, Japan. A recipient of international research awards, has published over 40 papers for top journals and conferences.

Dr. Prasanthi Ranasinghe

BSc Eng (Hon)(SL), MSc. (Coastal Eng)(SL), PhD (Coastal Eng) (Japan), CEng, MIE (SL)

Specialist – Coastal / WR. Eng.

A 2D and 3D Physical modelling expert with 19 years of experience, additionally involved in Numerical Modelling, Sea Outfall designs, Design and planning of port and coastal structures, she has a PhD in Coastal Engineering from Tohoku University, Japan and is also a Corporate Member of the Institute of Engineers Sri Lanka (IESL). She has worked in projects across the world including those in Oman, Maldives, India and Sri Lanka. She has the great ability to link experiences in multiple areas in multiple sectors to optimize solutions to emerging hydraulic engineering problems that require durable and strong responses with an ultra-quick turnaround and has won the respect and regard of a formidable international clientele who keep returning to acquire her informed, insightful experience in the management of their projects. In many instances she has fronted LHI as a chairperson, evaluator and presenter at international technical sessions. Always ready with quality solutions, she is also a key go-to person when others are faced with knotty problems, sharing her expertise with all who require it.

Mrs. Manori Fernando

BSc Eng (Hon) (SL), MSc (Coastal Eng) (SL), Masters in Env Mgt (SL), AMIE (SL)

Specialist – Coastal / WR. Eng.

One of the best project managers in the field of coastal/hydraulic engineering with over 22 years of experience who has overseen the complexities of optimizing impact while ensuring efficiency, productivity and cost-effectiveness, she has overseen over 40 projects including 16 foreign projects in India, Maldives, Senegal, Oman and Mauritius. Her work is significantly enhanced by her skills in coastal structural design, numerical modelling, communications and environmental assessment with top-tier expertise in evaluating the nature friendly coastal engineering projects from their initial design phase.

She holds a Master's in Coastal Engineering (University of Moratuwa) and Environmental Management (University of Colombo) and has contributed to the Export Development Board's Advisory Forum on Marine and Offshore Engineering. Her work includes coastal infrastructure developments, sea defenses and protection measures, fishery harbor/port development, and EIA, often incorporating practical field experience into robust engineering designs.

Mr. Lakshan Fernando

BSc Eng (Hon) (SL), MSc. (Coastal Eng) (SL), CEng, MIE (SL)

Specialist – Coastal / WR. Eng.

A dynamic coastal engineer with extensive experience in managing and overseeing coastal engineering projects, ranging from small initiatives to large-scale developments. He has a Masters in Engineering from the University of Moratuwa, Sri Lanka and is a Member of the Institute of Engineers of Sri Lanka (IESL). He possesses a broad range of technical, personal effectiveness and leadership skills and uses rigorous logic and methods to come up with effective solutions to difficult problems in coastal/hydraulic sector such as numerical and physical modelling studies, numerical model development, and port and marina planning with the design of coastal structures. He has provided consultancy services for coastal projects across multiple countries, including Sri Lanka, Algeria, Oman, Maldives, Mauritius, and Liberia, demonstrating adaptability and international project proficiency.

Mrs. S.M.C. Kaushalya Subasinghe

BSc Eng (Hon) (SL), M Eng (Water Res) (Thailand), CEng, MIE (SL)

Specialist – Coastal / WR. Eng.

A specialist in inland and urban water related engineering exercises with 17 years of experience, her core competencies include project formulation, hydrological data analysis (IDF, DDF), development of flood models, riverine hydrological and hydraulic modelling, physical modelling, field investigations, hydraulic design and their applications in water resources and hydraulic projects including dams/reservoirs and establishment of real-time inflow/flood forecasting and early warning systems. She has a Masters in Engineering (Water and Engineering Management) from the Asian Institute of Technology, Thailand and is a Member of the Institute of Engineers, Sri Lanka (IESL). Working as a senior hydrologist in hydrological and hydraulic modelling, she has provided her expertise to projects on flood forecasting, flood mitigation, urban micro-drainage, assessment and validation of hydraulic design on rivers, dams and water management systems in Sri Lanka as well as in the Maldives.

RESEARCH ENGINEERS (SRE) & (RE)

I. G. I. K. Kumara
B. Sc. Eng (Hon) (Earth Res) (SL), PG Dip (Env Eng & Mgt) (SL)
Senior Research Engineer

D. E. N. Senarathne
B. Sc. Eng (Hon) (Earth Res) (SL), M. Eng. (Geotechnical Eng) (SL), M. A (Financial Econ.) (SL)
Senior Research Engineer

D. M. S. S. Dissanayake
B. Sc. Eng (Hon) (Earth Res) (SL), M. Sc. (Water Sc. & Eng) (Netherlands), M.Sc.(Hydro-Science and Engineering), (Germany)
Senior Research Engineer

I. Abeygoonasekera
B. Sc. Eng (Hon) (Civil & Environ) (SL), M.Sc. Env. Management
Senior Research Engineer

S. M. Hewavidane
B. Sc. Eng (Hon) (Earth Res) (SL), M. Sc. (Water Sc. & Eng) (Netherlands)
Research Engineer

S. S. de S. Gunasekera
B. Sc. Eng (Hon) (Civil & Environ) (SL)
Research Engineer

M. K. D. Kavishka
B. Sc. Eng (Hon) (Civil)
Research Engineer

P. I. D. Heshani
B. Sc. Eng (Hon) (Civil)
Research Engineer

Piyumi De Silva
MBA (PIM-SJP), ACA, BSc. Finance (Special)
Finance Manager

BOARD OF DIRECTORS

Dr. Ranjit Galappatti
Eng. M. R. Amarasinghe
Prof. C. Pattiaratchi
Mr. B. R. L. Fernando
Mr. A. M. C. K. S. Bandara
Mr. D. A. De S Wickramanayake
Mr. W. Dharmasena

OUR CLIENTS

INTERNATIONAL

OUR CLIENTS

INTERNATIONAL

OUR CLIENTS

LOCAL

NIPPON KOEI

ICS
Industries Chimiques du Sénégal

WAPCOS

NHRI Since 1935 南京水利科学研究院

adani

ADEC ENGINEERING CONSULTANCY

KOLON

MTHøjgaard

BOI SRI LANKA

CFHC

EDB SRI LANKA

John Keells Group

LITRO GAS

Araliya Group

LAKDHANAVI LIMITED

WALKERS CML

cecb

UNI - CONSULTANCY SERVICES
Serving the Nations through Technology Transfer in Architecture, Engineering and Information Technology

...EXPLORING THE INFINITY OF HYDRAULIC AND COASTAL ENGINEERING!

Lanka Hydraulic Institute Ltd.
No.177, John Rodrigo Mawatha,
Katubedda, Moratuwa, Sri Lanka.
+94 11 265 0409
+94 11 265 0470
lhi@lhi.lk www.lhi.lk