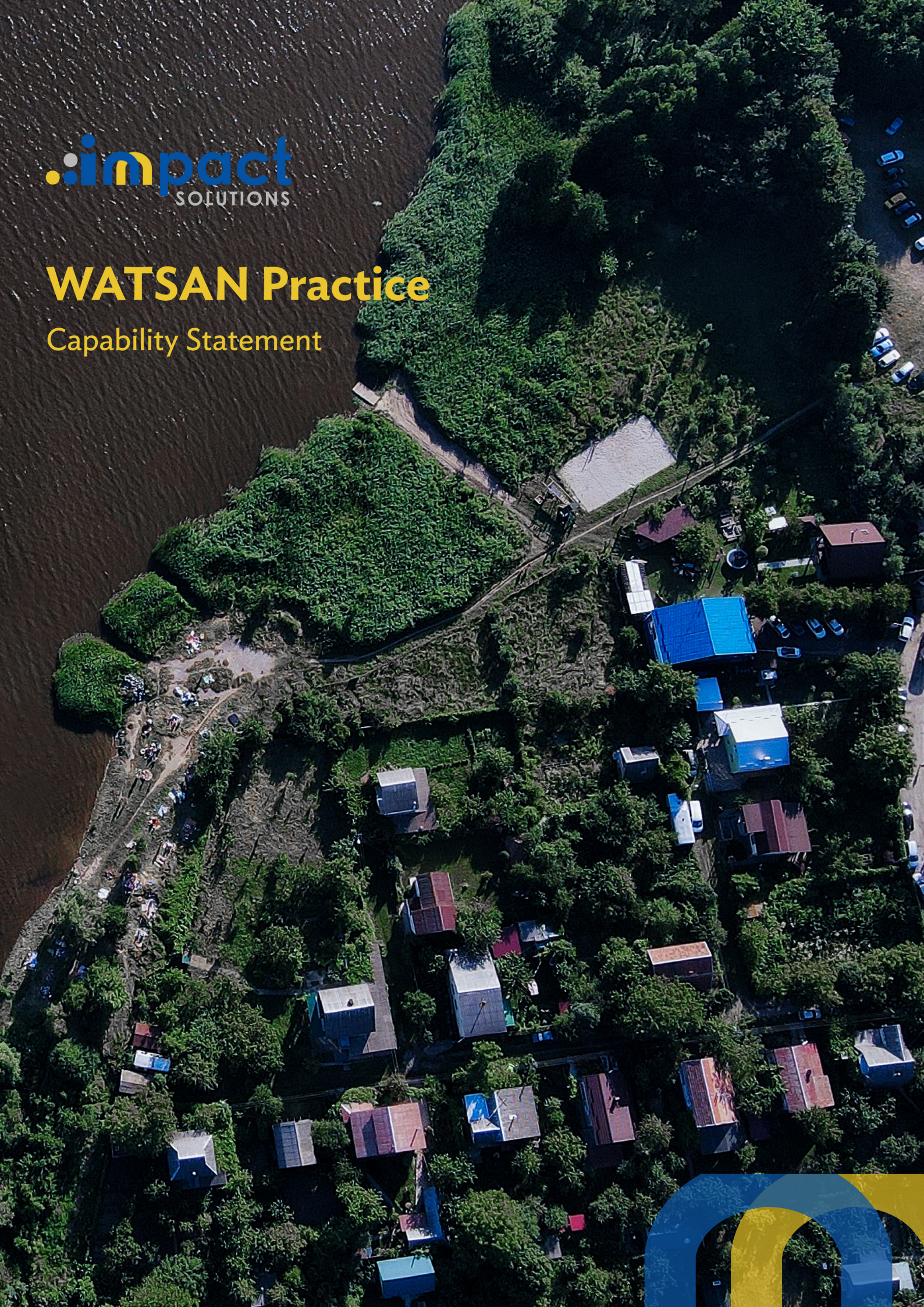
impact SOLUTIONS

WATSAN Practice

Capability Statement

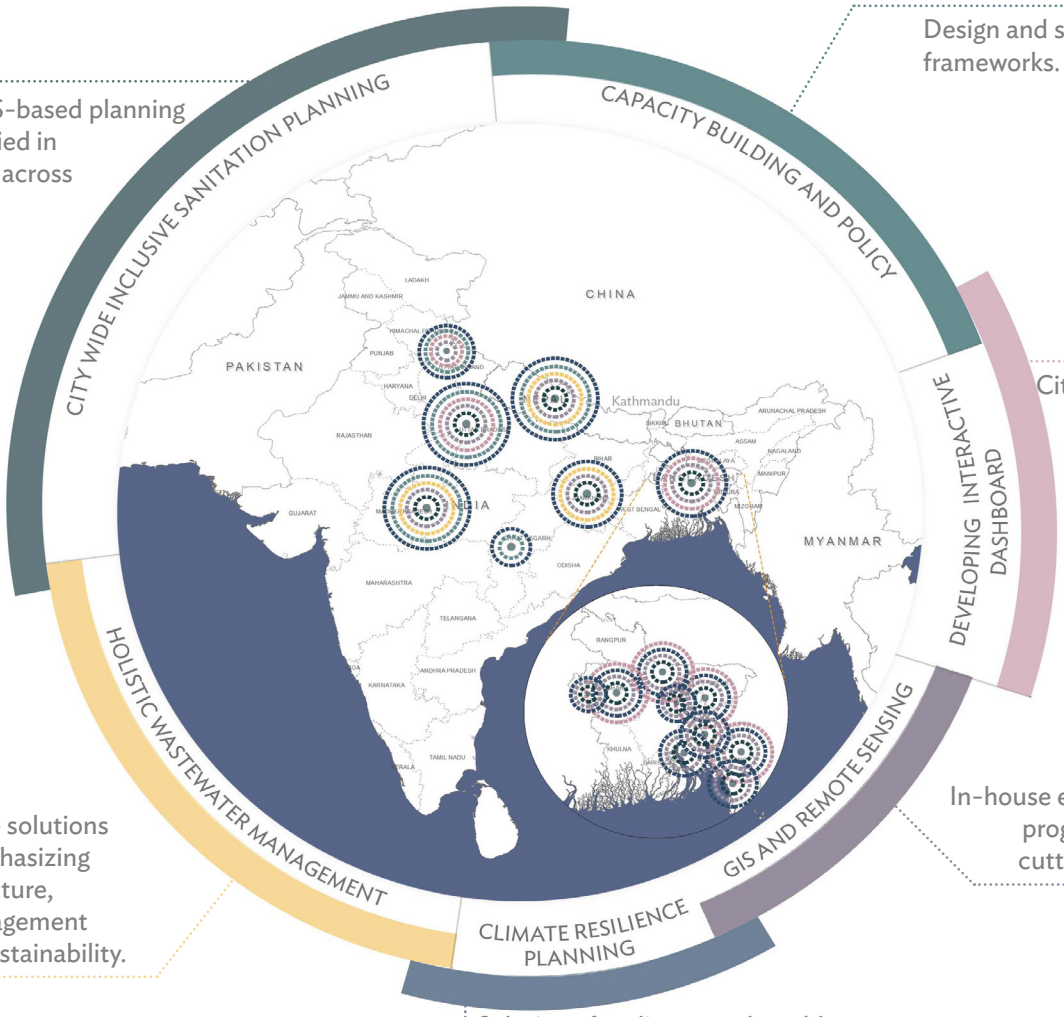


ABOUT INNPACT

At Innpact Solution, innovation for meaningful impact across the development sector is our guiding principle. We are recognized as one of the fastest-growing companies in the Indian start-up ecosystem within the sanitation and geo-informatics domain. In a brief time, our footprint has extended to over 30 cities across South Asia, focusing on water, sanitation, climate change, and remote sensing.

Our collaboration with partners such as ESRI Global, GWSC Thailand, NFSSM Alliance India, and IWA International provides access to a global network of leading professionals and institutions. Our portfolio includes technical assistance to various multilateral institutions like BMGF, ADB, WB, ISDB, and AIIB.

Our team comprises young and dynamic professionals from diverse fields, including planning, civil engineering, spatial applications, finance, and transaction advisory services. At Innpact Solution, we align expertise and innovation to shape a better future.



Developed a GIS-based planning framework, applied in around 30 cities across South Asia.

Design and skill evaluation frameworks.

City to nationwide dashboards of WATSAN using Power BI and ArcGIS

In-house expertise in AI, programming, and cutting-edge tech.

Comprehensive solutions in 11 cities, emphasizing green infrastructure, greywater management and financial sustainability.

Solutions for climate-vulnerable areas across various terrains like hilly, riverine and coastal

FOOTPRINTS

EXPERIENCE MATRIX

Sl. No.	Project Name	Location	Keywords - Relevant Project Experience								
			CWIS Planning	Greywater solutions	Sewerage Systems	Rural Sanitation	Innovative Technology Solutions	Institutional Regulations & Capacities	Climate Resilient Solutions	Capacity Building Roadmap	Financial and Economic Feasibility
1	Faecal Sludge Management and Grey Water Management guided by the City-Wide Inclusive Sanitation Approach in 7 Towns of Bangladesh	Bangladesh	■	■			■	■	■	■	■
2	AIIB - IMIS CWIS Planning for Sherpur, Bogura, Rajbari, Gopalganj & Noahkhali	Bangladesh	■	■	■		■	■	■	■	■
3	TA for Madhya Pradesh Urban Services Improvement Phase II - Integrated Wastewater Management Investment Plan, Feasibility & DPR	India	■	■	■		■	■	■	■	■
4	IUAP Six Town Sanitation Reforms (SS and NSS): Technical Feasibility, Business Plan, Capacity Building Plan, Regulations, and Institutional Reforms - Madhya Pradesh (CWIS)	India	■	■	■			■	■	■	■
5	CWIS Planning of non-sewered area and grey-water management, Ranchi (India)	India	■	■		■	■	■	■	■	■
6	TA support to World Bank funded design & implementation of Sanitation Component for Nepal Water Governance & Infrastructure Support Project (NUGIP), Birendranagar	Nepal	■	■	■		■	■	■	■	■
7	Introducing Best Practices of Sanitation in Pilot Block under Namami Gange mission	India				■	■	■	■	■	■
8	ADB 3 Towns Project at Bangladesh IMIS CWIS Planning for 3 Project Towns - Bandarban, Rangamati and Lama	Bangladesh	■				■	■	■	■	■
9	Climate Resilience City Wide Inclusive Sanitation Plan, Waling Town, Nepal	Nepal	■	■			■	■	■	■	■
10	BMWSSP 30 Towns Project in Bangladesh IMIS CWIS Planning for Tarabo Municipality	Bangladesh	■				■	■	■	■	■
11	Rapid technical and financial assessment of RT + FSM + solids-free/simplified sewers for safe treatment and Disposal of domestic wastewater	India			■		■		■		■
12	Developing Rural Faecal Sludge Management policy for the state of Chhattisgarh (FSM)	India		■		■		■	■	■	■
13	Pilot Scale Faecal Sludge and Septage Management in Chunar, Uttar Pradesh	India	■						■	■	
14	Technical Support to SBM office on sanitation intervention and support in identifying top 30 Gram Panchayat pilots and developing Feasibility of sanitation interventions in Madhya Pradesh	India		■		■	■	■	■		■
15	Enhanced Feasibility Studies for the "Inclusive and Integrated Sanitation & Hygiene Project in 3 Priority Towns in Bangladesh	Bangladesh	■				■	■	■	■	■
16	GIS based Drone Mapping to implement a pipe network at Barman Kalan (Narsinghpur) and Datora (Indore)	India				■			■	■	

CREATING IMPACT THROUGH INNOVATIVE SOLUTIONS

Number of Projects
16

Countries
3

Cities
40

Improved Sanitation Outreach
5 million Population

States/Provinces
11

Investment Enabled
$ 241 million

Our Projects

Title of the project: Faecal Sludge Management and Grey Water Management guided by the City-Wide Inclusive Sanitation Approach in 7 Towns of Bangladesh
Timeline: September 2023 – March 2024
Location: Kushtia, Magura, Faridpur, Narail, Pirojpur, Jhalokathi, Bhola (Bangladesh)
Client: AFD, GWSC

Scope:

The primary objective is to prepare the feasibility study and preliminary design for the proposed Water Supply, Inclusive Sanitation & Hygiene in 7 Towns project, which will include the climate change assessment, safeguard due diligence and financial/economic analysis necessary to facilitate the preparation of an AFD investment loan.

Services Delivered:

The project's core mandate is to establish a pioneering benchmark for pan-city service coverage, encompassing both Faecal Sludge Management (FSM) and grey-water management. This entails undertaking exhaustive assessments to ensure interventions align with CWIS standards, addressing both infrastructural and policy-based components. A techno-economic feasibility assessment will be carried out to steer these interventions toward long-term sustainability. Geo-spatial analysis will be harnessed to craft service-level benchmarks, laying the foundation for solid regulatory frameworks and rigorous monitoring systems. A key component will be the design of a differential tariff scheme, strategically developed to secure operational cost recovery while extending necessary support to marginalized communities. Furthermore, the project will embed climate change considerations at its heart, weaving in risk assessments and emission factors directly into the sanitation design to ensure a holistic, future-proof approach.Plan (IUAP), with the aim of creating a model for Citywide Inclusive Sanitation (CWIS) planning that could be replicated in other target towns across the state.

Title of the project: AIIB - IMIS CWIS Planning for Sherpur, Bogura, Rajbari, Gopalganj & Noahkhali
Timeline: May 2022 – December 2022
Location: Sherpur, Bogura, Rajbari, Gopalganj & Noahkhali – Bangladesh
Client: Department of Public Health Engineering (Bangladesh), AIIB, CWIS TA-Hub

Scope:

The project's scope involves supporting five towns in Bangladesh under the City-Wide Inclusive Sanitation (CWIS) approach. This includes data collection, comprehensive sanitation planning, and facilitating informed decision-making to facilitate the landing as well heads of proposed reforms and enabling platform for the next step as DPR preparations and implementation.

Services Delivered:

The project supported Pourashavas in Bangladesh to develop comprehensive sanitation plans using the City-Wide Inclusive Sanitation (CWIS) approach. Extensive data collection and analysis were conducted, with a particular focus on household sanitation improvement, the management of public toilets including safe collection, transportation, treatment and disposal. Faecal sludge management protocols were reviewed, and various treatment options were assessed. A holistic CWIS sanitation plan including financial feasibility plan was formulated for five towns and expanded to cover 25 more towns, creating a detailed and actionable plan to enhance sanitation infrastructure and services. The scale of town included from 100K to 1 million populations with varying geography from river to a coastal town.

Title of the project: TA for Madhya Pradesh Urban Services Improvement Phase II - Integrated Wastewater Management Investment Plan, Feasibility & DPR
Timeline: June 2021 – December 2021
Location: Raghogarh & Betul - Madhya Pradesh, India
Client: Madhya Pradesh Urban Services Improvement Project – Additional Financing (GoMP), ADB, CWIS TA-Hub

Scope:

The scope includes undertaking techno-economic feasibility and DPR preparations for complete wastewater management with combined means of sewer and non-sewer in identified pilot towns. This is a part of the support from ADB's ongoing MPUISP program through TA support from the Bill & Melinda Gates Foundation.

Services Delivered:

A Technical Advisory Team (TAT) was established to assist in project preparations for non-sewer and greywater management in both towns. The TAT provided technical support, developed a techno-economic feasibility for both sewer and non-sewered interventions, followed by DPR and combined sanitation regulations for pan town settlement areas with both sewer and non-sewer settlement applications. Greywater components for non-sewer settlement areas were also explored for shallow sewers, community-scale DEWATs, and further with on-site pits. Capacity building assessment modules and strategy frameworks were also designed for all key stakeholders across the project cycle. Measures such as a dedicated ULB level sanitation cell and committee were structured and recommended for both ULBs to efficiently take care of smooth service delivery for both sewer and non-sewered interventions. The GIS module was used extensively in the decision-making framework, including the suitable area delineations for sewer and non-sewer interventions. Drone mapping was undertaken for both towns to create a robust geo-spatial database, including the building footprints of the entire settlement area of both towns. The goal was to create a model for Citywide Inclusive Sanitation (CWIS) planning that could be replicated in other target towns across the state.

Title of the project: IUAP Six Town Sanitation Reforms (SS and NSS): Technical Feasibility, Business Plan, Capacity Building Plan, Regulations, and Institutional Reforms - Madhya Pradesh (CWIS)
Timeline: March 2022 – May 2022
Location: Aghogarh & Betul, India
Client: Madhya Pradesh Urban Services Improvement Project –Additional Financing (GoMP), ADB, CWIS TA-Hub

Scope:

The scope includes improving water supply infrastructure, integrating stormwater and sewage systems, and implementing inclusive sanitation practices in eight towns with support from the Bill & Melinda Gates Foundation.

Services Delivered:

The Technical Advisory Team (TAT) was formed to facilitate project preparations focused on non-sewer and grey-water management across eight towns. Detailed Project Reports (DPRs) for sewerage were evaluated in six of these towns, and supplementary sections addressing non-sewer sanitation and grey-water management were incorporated. This enriched the DPRs to encompass the full town demographics. TAT offered comprehensive technical assistance, integrated a specialized section into the Integrated Management Information System (IMIS), tendered advice, suggested regulatory and institutional modifications, appraised differential tariffs, and gauged the financial sustainability of proposed measures. The feasibility report covered an examination of the intended sewerage coverage and delved into appropriate solutions for non-sewered settlement areas, including methods for greywater management. A financial model was formulated to suggest feasible tariffs, incorporating potential subsidy provisions for the urban impoverished.

Title of the project: CWIS Planning of Non-Sewered Area and Grey-Water Management, Dhanbad, Ranchi
Timeline: April 2023 – June 2023
Location: Ranchi, Jharkhand, India
Client: Jharkhand Urban Infrastructure Development Company Limited (JUIDCO), Asian Development Bank, GWSC

Scope:

The scope is to address sanitation challenges in Ranchi, including settlements beyond the sewerage network. A comprehensive study of these non-sewer settlement (NSS) areas is planned, comprising a concept report and a City-Wide Inclusive Sanitation (CWIS) spatial analysis report. The goal is seamless integration of NSS interventions with sewerage initiatives, improving sanitation access for all, especially marginalized groups.

Services Delivered:

To address the sanitation gap in Ranchi and Dhanbad, a city-wide approach integrates non-sewer sanitation (NSS) with the current sewerage infrastructure. Prioritizing marginalized groups, this strategy ensures universal safe sanitation access and adept greywater management in NSS regions. Essential actions encompass the development of a geospatial database, risk mapping, safe containment strategies,

public toilet assessments, sludge collection planning, and gauging proximity to treatment facilities. Field visits facilitate validation, culminating in the finalization of NSS investment plans. This holistic strategy also incorporates institutional reforms, social considerations, and IMIS elements, resonating with the core CWIS mission of ensuring safe sanitation. Solutions for greywater in the broader NSS regions have been explored for system optimization and integration with the proposed sewerage infrastructure. For regions unreachable by sewerage infrastructure, dedicated I&D for more extensive settlement areas and DEWATs for smaller regions were suggested.

Title of the project: TA support to World Bank funded design & implementation of sanitation component for Nepal Urban Governance and Infrastructure Project (NUGIP)
Timeline: December 2021 – January 2022
Location: Birendranagar, Nepal
Client: World Bank, CWIS TA-Hub

Scope:

The scope of the Nepal Urban Governance and Infrastructure Project (NUGIP) involves collaboration with the TA Hub Bangladesh to develop a City-Wide Inclusive Sanitation (CWIS) plan for Birendranagar. This initiative is a part of a broader framework that encompasses program development, institutional strengthening, fiscal capacity improvement, emergency response preparedness, and infrastructure enhancement. Its primary goal is to promote comprehensive and inclusive sanitation practices within Birendranagar.

Services Delivered:

In Work Package 1, a spatial analysis was conducted to pinpoint suitable sanitation options for Birendranagar. Recommendations were made concerning the most appropriate technologies for the sanitation service chain. An initial plan for implementation and investment was devised, encompassing both sewer and non-sewer interventions. Furthermore, proposals were made for regulatory and financial enhancements. In Work Package 2, there was an assessment of the available data for implementing the Information Management and Information System (IMIS). We proposed efficient data collection methods and analyzed prevailing sanitation practices to recognize opportunities for IMIS integration. We also investigated the potential for data sharing between IMIS and NWASH platforms.

Title of the project: Introducing Best Practices of Sanitation in Pilot Block under Namami Gange mission
Timeline: December 2022 – June 2023
Location: Uttarakhand, India
Client: The Bill & Melinda Gates Foundation, NMCG

Scope:

The 'Namami Gange Programme,' initiated by the Indian government in 2014, strives to address pollution in the Ganga River and rejuvenate its vitality. Central to this initiative is the emphasis on crafting innovative methods to holistically manage wastewater pollution. The present scope entails performing an in-depth techno-economic feasibility study for sanitation treatment pilots at the block level. This aligns with the overarching goal of revitalizing the Ganga River, particularly in the rural settlement areas of Uttarakhand.

Services Delivered:

The project entailed devising a decision-making framework to rank blocks across the Uttarakhand state for the establishment of block-level treatment plants. This assessment comprised finalizing pilot locations and conducting a techno-economic feasibility study to justify the investment in the proposed treatment plant technology. Additionally, scenario analysis was carried out to compare the benefits of block-level treatment plants combined with transfer stations against settlement-level treatment plants operating without any transfer stations as collection points. One notable recommendation was the establishment of an omni-processor treatment plant, accompanied by a total of eight transfer stations, to serve the identified pilot block of Bahadarabad in the Haridwar district. The economic assessment incorporated a health and environmental cost-benefit analysis to gauge the impact of the proposed investment, specifically in terms of the broader benefits conferred upon the local community.

Title of the project: ADB 3 Towns Project at Bangladesh IMIS CWIS Planning for 3 Project Towns - Bandarban, Rangamati and Lama
Timeline: February 2022 – April 2022
Location: Bandarban, Rangamati and Lama – Bangladesh
Client: Asian Development Bank, CWIS- TA Hub

Scope:

The program, funded by the Asian Development Bank for Bangladesh, seeks to enhance water supply, sanitation, and solid waste management in the Chattogram Hill Tracts. The emphasis of this project was on sanitation infrastructure, with a particular focus on climate resilience, gender equality, and social inclusion. Additionally, the project encompasses institutional capacity building and promotes behavioral change to ensure long-term sustainability.

Services Delivered:

The project adhered to its defined scope, meticulously cleaning and evaluating both spatial and non-spatial data to establish a solid foundation. Spatial analysis throughout the sanitation value chain informed strategic decisions, suggesting technological upgrades for heightened efficiency. This effort laid down a regulatory framework and set monitoring indicators for consistent compliance and evaluation. The assessments included flood modelling, pinpointing risk areas, identifying settlements near water bodies, bulk wastewater generators, and challenging-to-reach settlement areas. It also identified potential locations for FSTP in close proximity to pan town settlement areas. Detailed investment estimates and an implementation blueprint were drawn up for effective resource allocation. The project's deliverables encompass a presentation deck highlighting outputs, the CWIS framework, tools employed, and innovative technological solutions accompanied by their cost estimates. Given that all three project towns are climatically vulnerable, bespoke sanitation solutions were devised to ensure sustainable interventions across the sanitation value chain.

Title of the project: Climate Resilience City Wide Inclusive Sanitation Plan, Waling Town, Nepal
Timeline: July 2023 – August 2023
Location: Waling, Nepal
Client: ENPHO

Scope:

The project aims to develop a Climate Resilient CWIS Plan for Waling Town, Nepal, integrating data mining, spatial analysis, and water-sensitive planning. The focus is on wastewater management, regulatory reforms, and flood risk mitigation.

Services Delivered:

The team offers a comprehensive solution for Waling Town, Nepal, encompassing Data Mining, Spatial Analysis, and Water-sensitive Urban Planning. Using advanced GIS technology, we gather data, create thematic maps, and provide accurate assessments. Our flood modelling and risk assessments yield practical mitigation strategies. We design integrated wastewater management plans, evaluate facilities, and propose greywater treatment solutions. Our services include detailed cost estimates, phased implementation plans, and actionable regulatory reform recommendations, all aimed at developing a robust Climate Resilient Citywide Inclusive Sanitation Plan for Waling Town's sustainability.

Title of the project: BMWSSP 30 Towns Project in Bangladesh IMIS CWIS Planning for Tarabo Municipality
Timeline: February 2022 – May 2022
Location: Tarabo, Bangladesh
Client: World Bank, CWIS- TA Hub, Bangladesh

Scope:

The project, aligned with the World Bank's urban sector investment approach, seeks to mitigate climate change impacts and bolster inclusive access to enhanced sanitation and employment in approximately 30 towns of Bangladesh, prioritizing marginalized communities, women, and the disabled. While the overarching aim supports municipalities in elevating service delivery, this specific endeavour concentrates on elevating sanitation services across the value chain in the Tarabo municipality.

Services Delivered:

In alignment with the defined scope, rigorous data cleaning and evaluation were undertaken to establish a robust foundation for further analysis. Spatial insights from the sanitation value chain informed decision-making processes, identifying technological advancements for increased efficiency. Regulatory frameworks and monitoring indicators were developed to ensure compliance and consistent performance assessment. Detailed investment estimates and an implementation strategy were formulated for effective resource allocation. The deliverables include comprehensive presentations and reports highlighting project outcomes, the CWIS framework, and insights gathered during the project's preparatory stages.

Title of the project: Rapid technical and financial assessment of RT + FSM + solids-free/simplified sewers for safe treatment and disposal of domestic wastewater
Timeline: February 2023 – June 2023
Location: Pan Country, India
Client: GWSC

Scope:

The project's scope involves evaluating onsite solutions like FSM and Reinvented Toilets (RT), combined with a simplified sewer system, for domestic wastewater management. It includes technical and financial analysis for different community sizes, ranging from 10 to 10,000 households, and compares these solutions with alternatives. The study also explores cost-effective scalability scenarios to generate interest among government officials, Development Finance Institutions (DFIs), and development partners.

Services Delivered:

In this project, several pivotal outcomes were realized. A technical report was produced that juxtaposed the integrated FSM, RT, and solids-free/simplified sewer system against conventional systems, shedding light on the advantages of the proposed approach. An Excel-driven financial model was crafted to elucidate the fiscal implications of adopting the new system. Additionally, a web application was devised to illustrate the scalability of the recommended system across India. Current efforts are centered on hosting consultative and dissemination workshops to acquaint key stakeholders with the merits of an integrated wastewater management strategy. Alongside this, the market potential of s-HRT has been probed, pinpointing promising locations throughout India where this system might enjoy a first-mover advantage. To support these initiatives, a dashboard highlighting the nationwide potential for system implementation was developed, capturing a spectrum of relevant parameters and presenting locations with their associated attributes in a structured manner.

Title of the project: Developing Drafting Rural Faecal Sludge Management policy for the state of Chhattisgarh (FSM)
Timeline: January 2023 – March 2023
Location: Chhattisgarh, India
Client: Water Aid India

Scope:

Drafting an FSM policy for rural Chhattisgarh with a focus on providing a clear roadmap to achieve safe sanitation throughout the value chain across the rural settlement areas of the state. This policy also clearly highlights the tangible high-level priorities the state should adopt to ensure successful policy implementation.

Services Delivered:

A thorough examination of the rural sanitation landscape in Chhattisgarh led to the identification of FSM needs, shaping the rationale and objectives for the state's rural FSM policy. Collaborations with local government officials and sanitation stakeholders yielded valuable insights and validated our

preliminary findings. Revenue models for desludging activities were formulated, and a clear delineation of responsibilities was established across various governance tiers and local institutions. This policy also sets forth the standards for commissioning Faecal Sludge Treatment Plants and integrates post-construction monitoring mechanisms, ensuring the long-term success of our FSM initiatives. The essence of this research and its recommendations are encapsulated in this concise draft policy document.

Title of the project: Pilot Scale Faecal Sludge and Septage Management in Chunar, Uttar Pradesh
Timeline: December 2021 – February 2022
Location: Waling, Nepal
Client: Centre for Science and Environment

Scope:

In alignment with the NMCG and SBM mandate, the ULB of Chunar considered establishing an FSTP and implementing a scheduled desludging framework to ensure project sustainability. The project received financial support from BMGF for the technical assistance offered to CSE.

Services Delivered:

The study's key output entailed a comprehensive property survey in Chunar, utilizing web/Android-based applications for real-time tracking and georeferencing of each sample. The survey encompassed the entire town, capturing around 29,000 residents across Residential Units, Commercial Units, Government/ Private Offices, Medical and Educational Institutions, and Industries. Using the survey data and open satellite images, we created a geospatial database. This database facilitated the development of an interactive Power BI dashboard for real-time updates on desludging services in the pilot town. The survey findings were vital in determining the treatment plant's capacity and implementing a desludging framework across various land uses and income categories. Additionally, the household survey data was utilized to produce thematic maps, shedding light on potential interventions and situations across the value chain for the entire settlement area of Chunar.

Title of the project: Technical Support to SBM office on sanitation intervention and support in identifying top 30 Gram Panchayat pilots and developing Feasibility of sanitation interventions in Madhya Pradesh
Timeline: May 2023 – June 2023
Location: Madhya Pradesh, India
Client: WaterAid India (Jal Seva Charitable Foundation)

Scope:

The project addresses sanitation challenges in rural Madhya Pradesh, characterized by its geographical diversity. It seeks to devise tailored, sustainable sewage management solutions using cluster-level treatment methods and collection frameworks. The emphasis is on context-specific strategies, beginning with leading Gram Panchayats (GPs) and considering potential expansion to broader clusters at the block level.

Services Delivered:

A framework was developed to prioritize 30 Gram Panchayats for system implementation using GIS-based spatial analysis. Rapid technical assessments, inclusive of consultations and data collection, spotlighted challenges and opportunities. Fact-files detailing FS treatment options were curated for each Gram Panchayat. These were showcased to government officials, prompting financial assistance from the Government of India for the Madhya Pradesh rural Swachh Bharat Mission team. Various modules were recommended for GPs, considering options like clustering, standalone systems, FS management, and combined FS with greywater management in areas near the Narmada basin. Technology solutions were identified, and preliminary cost estimates were determined. The project has since secured funding from the Ministry and is now in the implementation phase.

Title of the project: Enhanced Feasibility Studies for the "Inclusive and Integrated Sanitation & Hygiene Project in 3 Priority Towns in Bangladesh
Timeline: October 2021 – December 2021
Location: Natore, Lakhshmupur, and Cummila, Bangladesh
Client: Department of Public Health Engineering (Bangladesh) and CWIS TA Hub

Scope:

The project's scope is to address concerns related to FSM service chains in three towns, funded by the Livelihoods Fund (LLF) and the IsDB. It includes developing an 'Environmental and Social Management Plan Framework' for these towns, conducting financial and climate risk assessments, evaluating the existing Institutional and Regulatory Framework (IRF) for CWIS implementation, and assessing the extent and sustainability of the FSM service value chain.

Services Delivered:

During the initial phase of the project, activities such as stakeholder mapping, finalizing the work plan, and tool selection were undertaken. Literature reviews identified best practices from other towns, standard CWIS frameworks, and pertinent policy and institutional documents. This review was supplemented by the analysis of Legal, Institutional, Policy, and Regulatory documents. Questionnaires for Key Informant Interviews (KII) were drafted, disseminated to, and retrieved from the municipality. Field visits ensured data validation and gap identification. Collaborative consultations with partners distilled these findings, culminating in the final report's preparation and submission, incorporating feedback from the TA Hub. Furthermore, detailed geospatial analyses informed the CWIS plans for Natore, Lakhshmupur, and Cummila, amplifying the project's impact.

Title of the project: GIS based Drone Mapping to implement a pipe network at Barman Kalan (Narsinghpur) and Datora (Indore)
Timeline: March 2021 – April 2021
Location: Barman Kalan and Datora - Madhya Pradesh, India
Client: Jal Seva Charitable Foundation (Associate member of WaterAid International)

Scope:

The study conducted by WaterAid India (Jal Seva Charitable Foundation) aims to implement a sewerage pipe network and ECO-STP for sustainable liquid waste management at Karman Kalan and Datora Panchayats in Madhya Pradesh. These Panchayats are considered model Panchayats; once the system is successfully implemented here, it is likely to be scaled up to other Panchayats, especially those with water-sensitive concerns.

Services Delivered:

The study's output included conducting drone and GIS-based mapping of the study region to implement a piped sewerage network. Information such as orthorectified images, digital elevation data, and road and building-level details were collected in GIS format. Detailed city and ward level maps were generated for the project, along with high-resolution elevation and land cover profiles of both project Panchayats.