



waste concern consultants

consultancy services for
*waste management, sanitation,
environmental improvement,
& sustainable development*



Waste Concern Consultants





About Us

Waste Concern Consultants (WCC) is a leading consultancy firm based in Bangladesh, providing consulting services and project assistance since 2000. Waste Concern Consultants' vision is to contribute towards poverty reduction, environmental improvement, and sustainable development through professional knowledge sharing and provision of advisory services in the low and middle-income countries.

Waste Concern Consultants adopt multi-disciplinary and participatory approaches when providing consultancy services to its clients. This ensures that the most appropriate technological solutions consistent with the prevailing social, economical and institutional contexts are applied. Moreover, while planning and designing solutions or technical advisory services, we consider the perceptions, needs, and preferences of the users and their long-term financial capabilities.

Services Provided

Waste Concern Consultants provide consultancy services, project assistance, and support for institutional development, capacity building, and innovation in the fields of:

- Solid Waste Management & Resource Recovery
- Sanitation & Faecal Sludge Management and Reuse
- Wastewater Treatment
- Municipal Services Planning
- Master Plan, Strategy Development & Action Plan for Municipal Infrastructure
- Climate Change & Clean Development Mechanism
- Policy Formulation related to Waste, Sanitation and Climate Change
- Clinical and Hazardous Waste Management
- Environmental Impact Assessment
- Energy and Waste Audit
- Industrial Pollution Control
- Environmental Management System (ISO-14001)
- Eco-friendly Agriculture and Organic Farming
- Laboratory Analysis of Environmental Parameters
- Environmental and Socio-economic Studies
- Business Plan Development for Environmental Projects

Waste Concern Consultants has established a comprehensive knowledge base to support and provide consultancy services in these fields. We aim at long term cooperation with our partners/clients to build local capacity and we also strive for sustainable utilization of natural resources.



areas of activity

Solid Waste Management and Resource Recovery

■ **Integrated Resource Recovery Center (IRRC)**

- IRRC is suitable for small and medium sized towns. Eighty-five to ninety percent of the incoming waste from the community can be converted into an economic resource (such as compost, biogas, recyclables, or refuse derived fuel (RDF). In partnership with UN-ESCAP, WCC is replicating this project in many secondary cities and small towns in Vietnam, Sri Lanka, Nepal, Bhutan, Cambodia, Lao PDR, and Indonesia.
- In partnership with the Government of Bangladesh (GoB) and international development partners, WCC is replicating the IRRC model in 64 Districts of Bangladesh.

■ **Integrated Landfill & Resource Recovery Center (ILRRC) and Large-Scale Compost Plant**

- WCC initiated the concept of ILRRC among coastal towns in Bangladesh with support from Bangladesh's Local Government and Engineering Department (LGED) and ADB. ILRRC is geared towards tackling the problem of pollution and land crisis for waste disposal in a scientific manner focusing upon Public Private Partnership (PPP). Both solid waste and faecal sludge can be treated and managed in the ILRRC.
- WCC designed and constructed a large-scale compost plant in Narayanganj, Bangladesh. This plant represents the first compost plant in the world to claim carbon credits from organic waste recycling. This composting plant has a daily capacity to process 150 tons of organic waste.

■ **Energy Recovery from Waste**

- WCC has collaborated with Bangladesh University of Engineering and Technology (BUET) to generate energy using biogas technology from slaughterhouse waste, municipal waste, and faecal sludge.
- Conducted studies on Refuse Derived Fuel (RDF) production from soiled plastic, fabric, and paper as a coal substitute.
- Assisted Department of Public Health Engineering (DPHE) and ADB in preparation of technology evaluation report and bid document for use of omni processor technology for co-treatment of faecal sludge and solid waste in refugee camps located in Cox's Bazaar in Bangladesh.

• **Waste Management for Low-income Settlements and Rural Areas**

- Helping poor communities with low cost simple solutions to solve waste and sanit challenges. WCC promotes a simple system of low-cost Barrel Type Composting in slums in Bangladesh.



areas of activity

Environmental Sanitation and Faecal Sludge Management

- Designed faecal sludge treatment facility in Vang Vieng city in Lao PDR as part of controlled landfill.
- Designed Decentralized Wastewater Treatment System (DEWATS) and FSTP in the Pagla Catchment under the Dhaka Sanitation Improvement Project (DSIP).
- Prepared Sanitation Strategy and Master Plan for the City of Chittagong for CWASA.
- Designed FSTP and Faecal Sludge Collection System for CWASA.
- Sanitation Action Plan for 30 Municipalities of Bangladesh and Technology Demonstration on Faecal Sludge Management under Third Urban Governance and Infrastructure Improvement Project of ADB.
- Sanitation Plan for Four Coastal Towns under Coastal Towns Infrastructure Improvement Project and Design of FSTPs.
- Preparation of Sanitation Master Plan for Eight Towns in Bangladesh and Design of FSTPs.
- Pilot Projects on Solid Waste Management of Environmental Sanitation, Hygiene, and Water Supply in Urban Slums and Fringes.
- Design of faecal sludge collection and treatment system for secondary towns of Bangladesh.
- Design of eco-toilets for several towns. Design of wastewater treatment and management system for pesticide formulation factory, tea garden, and pathological laboratory.

Industrial Pollution and Environmental Management System

- Prepared Environmental Plan for industries.
- Promote and Support ISO 14001 (EMS) Among Business Sector in Bangladesh. Environmental auditing for several industries.
- Development of environmental management system (EMS) for different industries leading to ISO-14001 certification.
- Industrial pollution control, monitoring and abatement system.
- Industrial Waste Management.
- Environmental Plan for Selected Industries.

Clinical and Hazardous Waste Management

- Conducted a Study on Disposal of Empty Pesticide Containers in Bangladesh.
- Preparation of Inventory of Hazardous Waste in Bangladesh.
- Design of waste management systems for clinics and hospitals in Dhaka.
- Development of bio-medical waste management manuals for hospitals and clinics in Bangladesh.
- Study of lead-acid battery recycling in Bangladesh.
- Development of environmental management systems for hospitals and clinics.
- Feasibility Study for the Establishment and Operation of a Common/Central Treatment Facility (CTF) for Health Care Waste in Pokhara City, Nepal, under Public Private Partnerships (PPP) Arrangements



areas of activity

Environmental Impact Assessment

- Assessed the Economic and Environmental Impact of Irrigation by Using More Efficient Pumps with Better Installation Technique.
- Preparation of initial environmental examination (IEE) and environmental impact assessment (EIA) reports for landfill gas recovery and electricity generation, composting, and several urban infrastructure projects.
- Conducted stakeholders' meetings regarding infrastructural projects to discuss environmental implications.

Industrial Pollution Mitigation and Environmental Management System

- Environmental Plan for industries.
- Promote and Support ISO 14001 (EMS) Among Business Sector in Bangladesh.
- Environmental auditing for industries.
- Development of environmental management system (EMS) for different industries leading to ISO-14001 certification.
- Industrial pollution control, monitoring, and abatement system.

Energy Efficient Building Design and Sustainable Human Settlement Planning

- Designed ecological village in Bangladesh based on 3R principles.
- Designed energy efficient industrial buildings in Bangladesh.
- Designed landscapes for various industrial, residential and institutional buildings.
- Developed manual for low-income settlement planning.
- Preparation of physical plan for several towns.
- Designed rainwater harvesting for several waste recycling facilities.



areas of activity

Climate Change and Clean Development Mechanism (CDM)

- Capacity Development for Clean Development Mechanism (CDM) in Bangladesh, under Sustainable Environment Management Program (SEMP).
- Established the world's first CDM based composting project in Bangladesh.
- Assisted Qui Nhon City of Vietnam and Matala city of Sri Lanka in adapting the Waste Concern model of solid waste management including CDM.
- Initial Environmental Examination (IEE) Report for CDM Based Compost Project located at Roopganj, Bulta, Dhaka.
- Carbon Footprint Analysis and GHG Mitigation Strategy Development for private establishments.
- Programmatic CDM Project Using Municipal Organic Waste of Towns (City Corporations/ Municipalities) in Bangladesh.
- Developed project identification note (PIN) and project design documents (PDD) for landfill gas and composting projects.
- Developed new methodology of CDM for waste sector projects.
- Evaluated potential of poultry waste management project as CDM.
- Evaluated potential of ecological sanitation and organic farming projects as CDM.
- Prepared business plan for several CDM projects.
- Identified potential sectors for CDM projects in Bangladesh.
- Supported preparation of waste NAMA for Sri Lanka and Vietnam.

Policy Level Intervention

Waste Concern also extends itself in the policy-making arena, steering environmentally-appropriate governmental regulations, both existing and new. To date, WCC influenced the development of 27 governmental policies, some of which are listed below:

- Dhaka Declaration on Waste Management by SAARC (2004)
- Dhaka Environment Management Plan (2005)
- Draft National Solid Waste Management Handling Rules (2005)
- National CDM Strategy (2005)
- National Sanitation Strategy (2005)
- Poverty Reduction Strategy Paper (PRSP) (2005)
- Solid Waste Management Action Plan for Eight Secondary Towns in Bangladesh (2005)
- Lead Acid Battery Recycling and Management Rules (2006)
- Biomedical Waste Management Rules (2008)
- Circular to Promote Compost by the Ministry of Agriculture (2008)
- Draft Hazardous Waste Management Policy of Bangladesh (2009)
- The National 3R Strategy for Waste Management (2010)

Replication of
Waste Concern's
Model in the
following countries

Nepal
Pakistan
Bhutan
Bangladesh
India
Vietnam
Cambodia
Srilanka
Indonesia



areas of activity

Cross-cutting issues

- **Development of national policies** and strategies related to waste management, sanitation, hazardous waste management, recycling, and climate change in Bangladesh.
- **Technical advisory services** for the implementation of waste and sanitation related projects in Bangladesh and the Asia Pacific region for sustainable development.
- **Preparation of business plan** for waste and sanitation related projects.
- **Capacity building training** for municipal staffs and entrepreneurs on waste and sanitation.
- **Research & Development** on waste and sanitation related solutions.
- Promotion of **Public-Private-Community Partnership** in urban services for the poor.
- Inventory and promotion of **green jobs** in Bangladesh.
- Development of comprehensive gender strategy and action plan for Bangladesh.
- Promotion of organic farming for sustainable agriculture.
- Development of knowledge products such as interactive user manuals related to 3Rs (reduce, reuse and recycling) on waste and sanitation related issues.



recent projects

Name of assignment or project: Integrated Solid Waste Management Improvement Project (ISWMIP)

Year: March, 2022 to April, 2023 ■ **Location:** Bangladesh

Client: The World Bank Group

Description of work:

The objective of the assignment is to design a pilot faecal sludge management system for Chattogram City by looking at the related institutional, technical, financial, and customer acceptability dimensions. The pilot faecal sludge management system is being considered to be part of the proposed Bank-funded Chattogram Water Supply Improvement and Sanitation Project. The tasks required to produce the design are expected to be the following:

- Conduct a field assessment, including interviews of key stakeholders in Chattogram Metro, selected households, CWASA and City Corporation staff to identify the pilot study area;
- Collect quantitative and qualitative data on FSM in the selected study area, with a focus on the quality of the existing FSM services, identifying the hurdles, gaps and bottlenecks to providing improved FSM service delivery;
- Produce estimations of sludge quantities to be collected and treated, for the current situation and future scenarios; Document based on the available literature in print and electronic media the experiences of successful models in South Asia region and recommend a couple of models which could be adopted with modifications, if any, considering local context including policy, regulatory and institutional arrangements;
- Recommend a treatment process for a the treatment (comparison of different options) and provide preliminary and final design of a faecal sludge treatment plant; and
- Develop standard Bills of Quantities, Cost Estimates, Technical Specifications and the draft bidding documents for the (a) equipment for collection and transportation, as necessary, and (b) construction of the relevant infrastructure, such as fecal sludge (FS) transfer stations (TS) and FS treatment facilities.

Location: Chattogram City, Bangladesh



recent projects

Name of assignment or project: Technical Assistance Project on Integrated Solid Waste Management Improvement Project (ISWMIP)

Year: June 2020 to November 2020 ■ **Location:** Bangladesh

Client: Local Government Engineering Department, Government of Bangladesh

Activities performed: This project is funded by the Asian Infrastructure Investment Bank (AIIB). This assignment is a Joint Venture between Waste Concern Consultants (Bangladesh, as a lead firm), IPE Global Limited (India), Aqua Consultant & Associates Ltd. (Bangladesh), and Resource Planning and Management Consultants (Pvt) Ltd. (Bangladesh). Major activities under the assignment are to improve the SWM system in selected municipal areas to help:

- improve public health and quality of life by reducing exposure to pollutants and disease vectors associated with solid waste;
- strengthen the government's capacity to plan for and implement effective waste management services; and
- improve SWM practices in the country, encouraging waste minimization, recycling, and segregation at source.

The ISWMIP has four components as mentioned below:

Component 1: Waste Collection and Transportation.

Component 2: Waste Processing and Disposal Systems. This will finance prioritized waste processing and disposal infrastructure, including closure of polluted landfill sites, construction and rehabilitation of engineered sanitary landfills (standalone or regional/ clustered), and provision of facilities related to composting, resource recovery, and waste-to-energy.

Component 3: Project Management and Supervision Support. This will support in the areas of project management, monitoring and evaluation, procurement, financial management, and environmental and social safeguards (including public awareness campaigns and public consultation), and provision of support with respect to supervision and maintenance of infrastructure investments.

Component 4: Policy Support and Capacity Building. This will support: (i) improvement of the SWM sector policy and legal framework; (ii) policy and guideline development related to waste minimization and recycling, private sector participation, inclusion of informal workers, and multi-jurisdictional waste management; and (iii) institutional capacity strengthening for relevant central and local agencies in SWM.



recent projects

Name of assignment or project: Rapid Assessment of Plastic Pollution in Rivers and Canals around Dhaka

Year: June 2020 to November 2020 ■ **Location:** Bangladesh

Client: The World Bank Group

Activities performed: Under this assignment, Waste Concern Consultants is carrying out the following activities:

- Task 1: Undertaking rapid assessment of plastic pollution along the banks of canals and khals in and around Dhaka city: Volume and composition of littered waste, environmental impact, economic losses, and value chain assessment etc.
- Task 2: Assessment of technologies tackling the problem of plastic pollution in rivers: option development.
- Task 3: Assessment of enabling environment to control the use of plastic: regulatory gap assessment.
- Task 4: Development of response strategy: Citizen awareness, policy intervention, long term investment plan etc.

Name of assignment or project: Design of Integrated Landfill and Resource Recovery Facility for Khulna City Corporation, Bangladesh

Year: June 2020 to October 2020 ■ **Location:** Bangladesh

Client: City Region Development Project 2, Local Government Engineering Department (LGED)

Activities performed: Under this assignment, Waste Concern Consultants are undertaking (but are not limited to) the tasks described below:

- Task 1: Prepared a feasibility study for landfill and resource recovery facility in Khulna City.
- Task 2: Prepared a detailed engineering design and BOQ for the proposed facility.
- Task 3: Supported LGED to develop an IEE report and environmental management plan (EMP).
- Task 4: Prepared specifications for equipment required to operate the facility.



recent projects

Name of assignment or project: Rapid Assessment of Plastic Pollution in Rivers and Canals around Dhaka

Year: June 2020 to November 2020 ■ **Location:** Bangladesh

Client: The World Bank Group

Activities performed: Under this assignment, Waste Concern Consultants is carrying out the following activities:

- Task 1: Undertaking rapid assessment of plastic pollution along the banks of canals and khals in and around Dhaka city: Volume and composition of littered waste, environmental impact, economic losses, and value chain assessment etc.
- Task 2: Assessment of technologies tackling the problem of plastic pollution in rivers: option development.
- Task 3: Assessment of enabling environment to control the use of plastic: regulatory gap assessment.
- Task 4: Development of response strategy: Citizen awareness, policy intervention, long term investment plan etc.

Name of assignment or project: Design of Integrated Landfill and Resource Recovery Facility for Khulna City Corporation, Bangladesh

Year: June 2020 to October 2020 ■ **Location:** Bangladesh

Client: City Region Development Project 2, Local Government Engineering Department (LGED)

Activities performed: Under this assignment, Waste Concern Consultants are undertaking (but are not limited to) the tasks described below:

- Task 1: Prepared a feasibility study for landfill and resource recovery facility in Khulna City.
- Task 2: Prepared a detailed engineering design and BOQ for the proposed facility.
- Task 3: Supported LGED to develop an IEE report and environmental management plan (EMP).
- Task 4: Prepared specifications for equipment required to operate the facility.



recent projects

Name of assignment or project: Promotion of 3R (Reduce, Reuse & Recycle) Principles in the Solid Waste Management Sector in Bangladesh

Year: February 2020 to May 2021

■ **Location:** Bangladesh

Client: Department of Environment

Description of work: Under this assignment, Waste Concern is undertaking (but is not limited to) the tasks described below:

Task 1: To support the Ministry of Environment Forests and Climate Change (MoEFCC) & Department of Environment (DOE) towards finalization and approval of SWM Rules through a consultative process involving relevant stakeholders.

Task 2: To prepare a database on solid waste and its management practices in Bangladesh.

Task 3: To map the stakeholders in SWM and recycling trade chain.

Task 4: To conduct an assessment study to identify feasible technological options for integrated SWM.

Name of assignment or project: Baseline Survey for the Material Flow Analysis for Waste Plastics and Hotspots Assessment for Marine Plastic Debris in Bangladesh

Year: November 2019 to October 2020

■ **Location:** Bangladesh

Client: The World Bank Group

Description of work: Under this assignment, Waste Concern Consultants is undertaking (but is not limited to) the tasks described below:

Task 1: Hotspots assessment for marine plastic debris.

Task 2: Waste composition and material flow analysis for waste plastics.

Task 3: Stakeholder analysis for Dhaka Metropolitan Area.

Task 4: Develop a framework towards a multi-sectoral, sustainable, plastic management plan.

Task 5: Informing and Influencing Decision-Making.



recent projects

Name of assignment or project: Mapping and Screening Study of Marine Littering Projects in Bangladesh

Year: November 2019 to December 2019

■ **Location:** Bangladesh

Client: The Royal Norwegian Embassy, Dhaka

Description of work: The purpose of this consultancy work was to map and screen ongoing and/or potential new projects in Bangladesh connected to preventing or significantly reducing the extent of marine litter from major sources. Closely coordinated with the Government of Bangladesh's policies and plans, Waste Concern Consultants identified existing/ongoing cooperation projects as well as new but already planned projects. This assignment supported the Government of Norway in identifying and supporting the most appropriate and efficient projects that aim to prevent marine littering by:

- (i) Mapping and ranking according to a long-list of potentially suitable projects;
- (ii) Identification of a short-list to include three projects to be agreed with the Embassy;
- (iii) Providing analysis of the short-listed projects.

Name of assignment or project: Design of Integrated Waste Management Facilities in Cambodia and Lao PDR

Year: October 2019 to July 2020

■ **Location:** Bangladesh

Client: Rambøll Denmark A/S

Description of work: As sub-consultant of Rambøll Denmark A/S, Waste Concern Consultants (WCC) provided the following services:

- Design the master plan for all three landfill sites.
- Prepare detailed design, BOQ and specifications for landfill site.
- Prepare design and BOQ for Material Recovery Facility (MRF) with specifications.
- Prepare the specifications for all equipment for the landfill sites and MRF.



recent projects

Name of assignment or project: Consulting Services on Non-network Sanitation in Pagla Catchment under the Dhaka Sanitation Improvement Project (DSIP)

Year: September 2019 to June 2020

■ **Location:** Bangladesh

Client: The World Bank Group

Description of work: Under this assignment, WCC was involved in the planning and engineering design of interventions across:

- (a) Faecal Sludge Treatment Plant (FSTP)
- (b) Decentralized wastewater Treatment System (DEWATS) and
- (c) Communal Septic Tank in the Pagla Catchment area of DSIP.

The scope of work is detailed further as follows:

- Conceptual design of a faecal sludge treatment plant (FSTP) in Pagla catchment;
 - Design of a DEWATS system;
 - Design of Communal Septic Tank; and
 - Preparation of BOQ and design reports for FSTP, DEWATS and communal septic tanks.
-



recent projects

Name of assignment or project: Consultancy Services for Solid Waste Management under MDS Consultant of City Region Development Project

Year: May 2015 to April 2016

■ **Location:** Bangladesh

■ **Client:** LGED/ADB

Main Project Features: The main aims of the assignment were as follows: to identify the most appropriate intervention on solid waste management for the CRDP project; develop a detailed engineering design of the most appropriate intervention, and preparation of a contract document for the involvement of the private sector for O&M of the appropriate intervention.

Activities performed: Activities performed: Reviewed existing data on solid waste for selected cities and towns as well as identification of gaps in the service chain of solid waste management. Identified potential options for solid waste recycling, treatment, and disposal, and recommended the best possible options for the selected city for project implementation. Prepared the conceptual design and supervised the detailed engineering design and bill of quantity (BOQ) of regional controlled landfill and resource recovery facility for Jessore city (the selected city for intervention). Recommended the most suitable options for implementation of the project involving the private sector. Prepared the business plan, bidding document as well as contract document for the private sector for O& M of the landfill and resource recovery facility. Provided inputs for preparation of IEE report for the regional integrated landfill and resource recovery facility for Jessore city.



recent projects

Name of assignment or project: 3R (Reduce, Reuse and Recycle) Pilot Initiative to Reduce the Impact of Greenhouse Gas (GHG) in Dhaka and Chittagong Cities (Phase 1)

Year: September 2016 to June 2020 ■ **Location:** Bangladesh ■ **Client:** DoE, GoB

Main project features: Preparation of detailed design of compost plants (capacity 20 Tons per day for each city corporation) for both the city corporations (DSCC & DNCC).

Activities performed: Under this project Waste Concern Consultants (WCC) provided the following technical supports:

- Prepared detailed technical architectural and structural design drawings for the construction of 2 (two) compost plants, 1 (one) in Dhaka North City Corporation (DNCC) and 1 (one) in Dhaka South City Corporation (DSCC).
- Prepared detailed technical architectural and structural design drawings for the construction of 4 (four) Transfer Stations for municipal solid waste, 2 (two) in DNCC area and 2 (two) in DSCC area.
- Assisted Department of Environment (DoE) to carry out capacity building training and income generating activities. Developed awareness generating materials for DoE to carry out awareness generation programs on waste recycling, composting and segregation of waste for citizens, local NGOs, CBOs and private sectors.
- Supported DOE to link the project under the existing 64 District CDM project of the Government.



recent projects

Name of assignment or project: TA-9546 BAN: Emergency Assistance Project - DPHE- Component

Year: October 2018 to June 2019 (Intermittent) ■ **Location:** Bangladesh ■ **Client:** ADB

Main project features: Preparation of detailed design, bidding and contract documents for the waste management and faecal sludge subprojects for displaced persons from Myanmar in Cox's Bazar District. The project was aligned with accelerating the social recovery of displaced persons in Teknaf and Ukhia camps. It had the outcome of improving living conditions and resilience of displaced persons.

Activities performed: The duties and responsibilities being performed were as follows:

(i) Lead technical and socioeconomic analysis and preparation of solid waste and faecal sludge management feasibility study and identify the suitable/appropriate interventions (both hard and soft);(ii) Initiate the subproject selection and other engineering and safeguards due diligences, land acquisition, liaising with other development partners and ADB, for waste management subprojects;(iii) Propose the implementation process stemming from climate-resilient integrated waste management;(iv) Prepare detailed engineering design (in difficult terrain/slope etc.), specifications, drawings, and detailed cost estimates and operation and maintenance arrangements for solid waste and faecal sludge interventions;(v) Prepare drawing, specifications and bill of quantities;(vi) Prepare procurement packages, bidding document and conduct procurement;(vii) Propose an institutional and implementation modality for construction and O&M, such as service contracts, build-operate, and performance-based contract, with special attention to sustainability and the scope of private sector/community/NGO involvement;(viii) Work out a strategy for community-based integrated waste management including collection mechanism particularly in low income areas; (ix) Prepare detailed cost estimates and specifications for proposed SWM and Faecal Sludge equipment (x) Explore the viability for developing regional treatment and/or disposal facilities involving towns and/or urban centers of near proximities; and (xi) Provide orientation and training to the concerned staff on waste management process, its socio economic viability, overall environmental improvement and importance from climate resilience aspects.



recent projects

Name of assignment or project: Pilot Project to Create a Scalable Model to Responsibly Manage Solid Waste and Expand Recycling in Argentina and Indonesia

Year: Aug 2018 to Aug 2019 ■ **Location:** Bangladesh, Indonesia, Argentina ■ **Client:** McKinsey.org, USA.

Main project features: Assist McKinsey, USA to establish a sustainable solution for source segregation of waste, collection and transportation of segregated waste along with promotion of composting & recycling of waste.

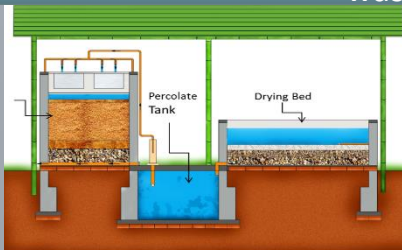
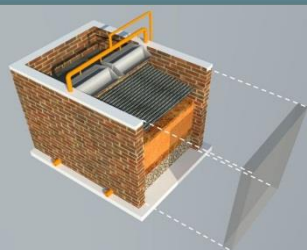
Activities performed: As a member of the global design team, responsible for designing the solution and guiding the implementation of specific portions of the project. The project's objective was to responsibly manage solid waste and expand recycling in Indonesia and Argentina while providing advice and guidance to McKinsey.org, and to any other partners determined by McKinsey.org in connection with the implementation of the project. At the initial stage, responsible for providing necessary inputs in locating infrastructures related to waste transfer stations and Integrated resource recovery centres using maps and satellite images. Also provided support towards preparation of architectural detailed designs for relevant infrastructures.

Name of assignment or project: Preparation for Environmentally Sound Management of Mercury Containing Lighting Sources with a Life-Cycle Approach

Year: May 2018 to May 2018 ■ **Location:** Bangladesh ■ **Client:** DOE/UNIDO

Main project features: Conducted baseline survey on CFL and preparation of revised guidelines on proper management of CFL in Bangladesh.

Activities performed: Under this assignment WCC updated the guidelines on the management of used compact fluorescent lamps (CFLs), prepared the national management plan to implement the guidelines and updated the legal framework for environmentally sound management of mercury waste for Bangladesh.



recent projects

Name of assignment or project: Consulting Service to Improve Slaughterhouse Waste Management Using Biogas Technology at Gazipur City Corporation

Year: May 2017 to October 2018 ■ **Location:** Bangladesh ■ **Client:** GIZ

Main project features: The main aim of the assignment was to manage bio-slurry from biogas digester along with introduction of sand filter, trickling filter and co-composting dry slurry with organic waste using aerobic composting technology.

Activities performed: Under this assignment, Waste Concern Consultants provided technical support to assess slaughterhouse waste management using biogas technology at Gazipur City Corporation and provided practical solutions to improve operational efficiency and the bio-slurry management system.

Name of assignment or project: Consultancy Services for Disposal of Empty Pesticide Containers

Year: August 2016 to October 2016 ■ **Location:** Bangladesh ■ **Client:** USAID

Main project features: The main aim of the assignment was to identify proper procedures for cleaning and disposal of used empty pesticide containers.

Activities performed: Organized laboratory testing and data collection regarding use and disposal of empty pesticide containers. Prepared a plan for environmentally sound management of used pesticide containers.



recent projects

Name of assignment or project: Consultancy Services for Sanitation and Solid Waste Management under the DDS Consultant, Coastal Towns Environmental Infrastructure Project (CTEIP) .

Year: June 2016 to February 2017 ■ **Location:** Bangladesh ■ **Client:** LGED/ADB

Main project features: Identify the most appropriate intervention on sanitation, wastewater management and solid waste management for the CTEIP project; develop a detailed engineering design and estimate of the most appropriate interventions for sanitation, solid waste management and wastewater treatment, and preparation of a contract document for the involvement of the private sector for O&M of the appropriate intervention.

Activities performed: i) finalize sub-projects for implementation (integrated sanitation, wastewater and solid waste management facility at the landfill site), ii) preparation of detailed Engineering Design Reports, inclusive of preparation of the specifications, cost estimate, drawings and bill of quantities iii) supporting the DDS Consultants on preparation of bidding documents, DDR and IEE/EIA reports for the selected interventions for implementation.



recent projects

Name of assignment or project: TA-8913 REG: Promoting Urban Climate Change Resilience in Selected Asian Cities - Developing Integrated Urban Development Plans in Selected DMC Cities Incorporating Urban Climate Change Resilience Principles (ADB TA-8913 REG)

Year: May 2016 to October 2016

■ **Location:** Bangladesh

■ **Client:**

ADB

Main project features: Prepare solid waste and faecal sludge management sub projects and feasibility reports for seven additional towns under UGIIP-3 and CTEIP of LGED.

Activities performed: (i) Led technical and socio economic analysis and preparation of solid waste management and faecal sludge management feasibility study report and engineering designs for 2 CTEIP towns (Bagerhat and Patuakhali) and 5 UGIIP III towns (Cox's Bazar, Faridpur, Gopalganj, Kushtia and Mymensingh) under the project;(ii) Identified the suitable/appropriate interventions (both hard and soft) for the subject towns and propose the implementation process stemming from climate-resilient integrated urban planning;(iii) Identified priority investment projects including outlines for engineering design incorporating climate resilience into the designs, costs, municipal capacity, and operation and maintenance arrangements;(iv) Proposed an institutional and implementation modality for construction and O&M, such as service contracts, design-build-operate, and performance-based contract, with special attention to technical and financial sustainability and the scope of private sector involvement



recent projects

Name of assignment or project: Pro-poor and Sustainable Solid Waste Management in Secondary Cities and Small Towns

Year: Mar 2016 to Jul 2016 ■ **Location:** Indonesia and Sri Lanka ■ **Client:** UN-ESCAP

Main project features: Provide advice and technical inputs to the implementation of pilot waste-to-energy projects in Indonesia, and the completion of Nationally Appropriate Mitigation Actions (NAMA) studies in Viet Nam and Sri Lanka.

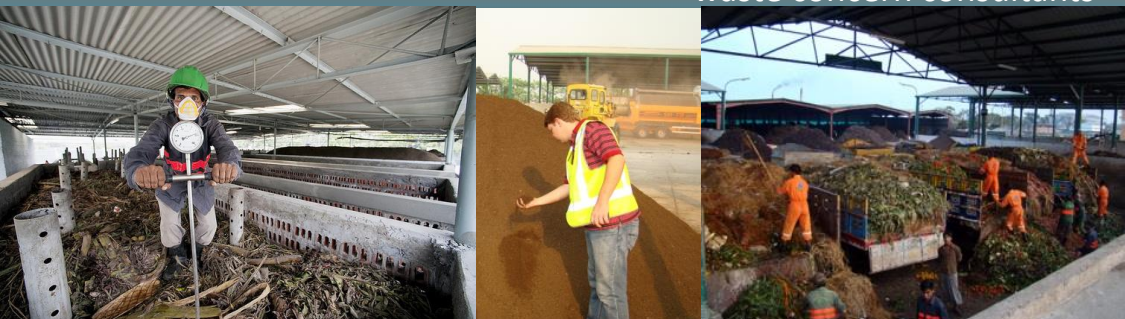
Activities performed: In order to review and advise on project implementation arrangements, joined a technical assessment mission to the cities of Jambi and Malang Regency; prepared detailed designs of the waste-to-energy plant, including equipment requirements; reviewed designs adapted to local characteristics, and provided technical advice to local engineers. Supported the preparation and finalization of NAMA design studies for the waste sector in Sri Lanka (including feedback to the NAMA–design study prepared for Sri Lanka), especially in the application of the first order decay model (FOD model).

Name of assignment or project: Consultancy Services for Solid Waste Management under MDS Consultant of City Region Development Project

Year: September 2015 to April 2016 ■ **Location:** Bangladesh ■ **Client:** LGED/ADB

Main project features: Identify the most appropriate intervention on solid waste management for the CRDP project; develop a detailed engineering design of the most appropriate intervention, and preparation of a contract document for the involvement of the private sector for O&M of the appropriate intervention.

Activities performed: Reviewed existing data and Identified potential options for solid waste recycling, treatment, and disposal, and recommended the best possible options for the selected city for project implementation. Recommended the most suitable options for implementation of the project involving the private sector. Prepared the business plan, bidding document as well as contract document.



recent projects

Name of assignment or project: Third Urban Governance and Infrastructure Improvement Project (ADB TA-8339 PPTA)

Year: 2015

■ **Location:** Bangladesh

■ **Client:** LGED/ADB

Main project features: Prepare sanitation action plans for 30 municipalities of Bangladesh, as well as undertake technology demonstrations on faecal sludge management in selected municipalities.

Activities performed: As a key member of the consultant's team, developed approach and methodology for collection of secondary and primary data from municipalities. Provided inputs for preparation of inception report, data collection and compilation. Prepared broad cost estimates and implementation strategies including development of business models for service delivery. Prepared pre-feasibility of different options for sanitation including faecal sludge management.

Name of assignment or project: Preparation of Sanitation and Drainage Improvement Strategy and Master Plan Project for the City of Chittagong

Year: 2015 to Present

■ **Location:** Bangladesh

■ **Client:** CWASA/World Bank

Main project features: The main aim of the project was to prepare sanitation and drainage strategy and master plan for Chittagong City.

Activities performed: As a key member of the consultant's team, was responsible for preparation of strategy, action plan, and master plan for solid waste and faecal sludge management sub-component of the project. Provided input for design of a pilot faecal sludge treatment plant, co-compost plant, as well as collection option of faecal sludge. Also was responsible for preparation of business plan for faecal sludge management as well as identification of solid waste management projects for collection, storage, transportation, recycling, and disposal of solid waste. Prepared capital cost and operational cost of different priority projects on solid waste management for financing by the World Bank.



recent projects

Name of assignment or project: Programmatic CDM Project on Solid Waste Management for 64 Districts of Bangladesh

Year: 2011 to Present

■ **Location:** Bangladesh

■ **Client:** (DoE)/GoB

Main project features: Design and implementation of a Clean Development Mechanism (CDM) project based on waste composting and recycling in 64 districts of Bangladesh. Phase 1 of the project covers the areas of Narayanganj, Rangpur, Mymensingh and Cox's Bazar Municipalities. The projects aim to reduce greenhouse gas emissions by having an improved waste recycling system.

Activities performed: Provide technical advice to the DoE to prepare the Program of Activities (PoA) and CPA for programmatic CDM project for 64 districts of Bangladesh. Responsible for preparation of design as well as cost estimate of compost plants, waste collection system, biogas plants, and transfer stations. Preparation of Public-Private Partnership (PPP) documents. Preparation of Initial Environmental Examination (IEE)/Environmental Impact Assessment (EIA) reports for compost plants/landfills under the project. Capacity building of municipal officials during implementation of the project.

Name of assignment or project: Pro-poor and Sustainable Solid Waste Management in Secondary Cities and Small Towns

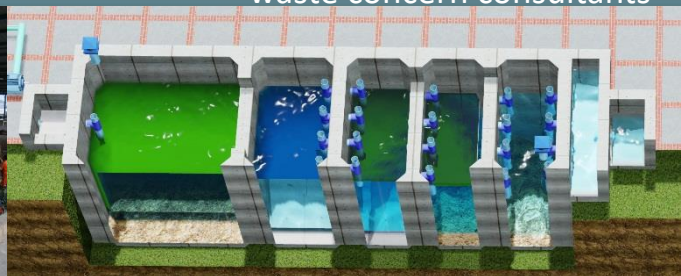
Year: 2009 to 2017

■ **Location:** Vietnam, Cambodia, Sri Lanka, and Indonesia

Client: UN-ESCAP

Main project features: The project was comprised of strategy development as well as pilot interventions for solid waste management to reduce the greenhouse gas emissions from solid waste management. The following countries were involved: Vietnam, Sri Lanka, Bangladesh, and Indonesia.

Activities performed: Provided advice/guidance to the participating towns towards operationalizing the Integrated Resource Recovery Center (IRRC) approach. Developed town-wide strategies for municipal solid waste management based on the up-scaling of IRRC, including recovery of capital costs through carbon credits. Prepared engineering design and cost estimates for waste management treatment plants (compost, biogas, biodiesel, co-composting/faecal sludge treatment, and refuse derived fuel plants), as well as different options for waste collection and transportation.



recent projects

Name of assignment or project: Prefeasibility Study of Power Generation from Sewerage of DWASA Through Biogas Generation Project

Year: 2015 ■ **Location:** Bangladesh

Main project features: The prefeasibility study explored the potential of energy generation from septic tank and pit latrine sludge as a climate change mitigation option. Moreover, the prefeasibility also explored the potential of refuse derived fuel from sludge of Pagla Sewerage Treatment Plant of DWASA.

Activities performed: Designed the experiment in a biogas plant using faecal sludge as feed stock. Collected data on gas generation as well as electricity generation. Analyzed feed stock in terms of chemical composition as well as calorific value. Prepared the pre-feasibility report including business plan for a pilot project.

Name of assignment or project: Coastal Towns Infrastructure Improvement Project (ADB TA-8128 BAN)

Year: 2013 to 2014 ■ **Location:** Bangladesh ■ **Client:** LGED/ADB

Main project features: The main aim of the project was to prepare a sanitation action plan for four coastal towns of Bangladesh.

Activities performed: As a Sanitation Planning Expert, prepared sanitation action plan for 4 coastal towns of Bangladesh. Sanitation action plan included business strategy for sustainable O&M faecal sludge management facilities. As part of the action plan, conducted a baseline survey on sanitation situation and willingness to pay survey for improvement of sanitation. As part of the business plan, prepared a capacity building program for implementation of such plan, and prepared model contracts for collection and treatment of faecal sludge. Prepared basic engineering design for the faecal sludge management system for the four towns, as well as cost estimates for the intervention. Identified priority interventions for the project.



recent projects

Name of assignment or project: Pro-poor and Sustainable Solid Waste Management in Secondary Cities and Small Towns Project

Year: 2012 to 2013

■ **Location:** Bangladesh

■ **Client:** (UN-ESCAP)

Main project features: The project activities comprised of the following: baseline survey, design and support in relation to the operation and treatment of the faecal sludge management system, and development of business plan and policy document on faecal sludge management.

Activities performed: Conducted a baseline survey on the sanitation situation in Kushtia municipality and designed a faecal sludge collection, treatment, and recycling system. Prepared cost estimates for the project. Monitored the performance of the faecal sludge collection and treatment system. Monitored laboratory analysis of the treated wastewater. Prepared policy paper on faecal sludge management. Prepared business plan for faecal sludge management for Kushtia municipality.

Name of assignment or project: Municipal Services Project, Phase II

Year: 2012 ■ **Location:** Bangladesh

Client: Bangladesh Municipal Development Fund (BMDF)

Main project features: The assignment aimed to ensure effective and efficient identification and implementation of the sub-projects on solid waste management by assisting the BMDF and participating City Corporations and Municipalities.

Activities performed: Identified and prioritized projects for investment by the BMDF/World Bank in the solid waste sector in Chittagong, Rajshahi, Rangpur, and Patuakhali municipalities using PPP approach and carbon financing. Conducted field survey on solid waste management. Identified scope for improvement of solid waste management system (collection, storage, transportation, recycling, and disposal), as well as identified and prioritized projects for investment. Prepared investment costs for different intervention.



recent projects

Name of assignment or project: 19 Towns Solid Waste Management Project

Year: 2009 to 2012

Location: Bangladesh

Client: UNICEF

Main project features: The assignment comprised of preparation of an action plan for solid waste management for 19 secondary towns of Bangladesh. Based on the action plan, UNICEF and DPHE selected 6 towns for priority project intervention and implementation.

Activities performed: Prepared action plan for solid waste management in 19 towns of Bangladesh based on 3R (Reduce, Reuse, and Recycle) principle and carbon financing options. Conducted detailed survey in all the 19 towns regarding different aspects of solid waste management in order to identify areas of improvement. Prepared investment plan for six municipalities as well as engineering designs and bill of quantity.

Name of assignment : Feasibility Study for Health Care Waste Management Project

Year: 2011

Location: Nepal

Client: Government of Nepal / UNDP

Main project features: The project included preparation of a feasibility study for establishment and operation of a common central treatment facility (CTF) for health care waste under PPP financing arrangements in Nepal's Pokhara city.

Activities performed: Responsible for project management, including preparation of the feasibility study for the establishment and operation of a common CTF for health care waste. Investigation of PPP financing options.

Name of assignment : Desk Study for Organic Waste Management Project in South Asia

Year: 2010 to 2011

Location: Bangladesh, Sri Lanka, Nepal

Client: ADB

Main project features: The desk study investigated options for management of organic wastes in South Asia.

Activities performed: Prepared a technical report on organic waste management for South Asian cities, comprising identification of appropriate waste management options given the specific regional and local contexts of each South Asian country. The report also included summary findings of CDM financing options for waste management projects.



recent projects

Name of assignment or project: 3R Modules for Waste Management and Development of National 3R Strategy for Waste Management

Year: 2008 to 2010

Location: Bangladesh

Client: Institute of Global Environmental Strategies/UNCRD

Main project features: The objective of the assignment was to prepare 3R (Reduce, Reuse, Recycle) Modules on 5 (five) key sectors, including: (i) Municipal Waste; (ii) Business & SMEs; (iii) Hospital & Medical Sectors; (iv) Agricultural Waste; and (v) Hotel & Tourism

Activities performed: Prepared 3R (Reduce, Reuse, and Recycle) Modules covering the 5 (five) key sectors. Drafted the National 3R Strategy of Bangladesh focusing on waste management.

Name of assignment or project: Capacity Development for CDM Project

Year: 2008 to 2009

Location: Bangladesh

Client: UNEP Risoe Centre

Main project features: The project supported capacity building on CDM project development in Bangladesh.

Activities performed: Responsible for improving Bangladesh's institutional preparedness for hosting CDM projects, including capacity building of the Designated National Authority (DNA) enabling it to efficiently approve CDM projects consistent with the country's sustainable development priorities. Capacity building of local experts in key sectors with regard to identification, design and implementation of CDM. Capacity building of relevant institutions in appraising, funding, and promoting CDM projects and carbon offset investments in Bangladesh. Support the development of a pipeline of actual CDM projects.

Name of assignment or project: Environmental Management Plan (EMP) for Industries

Year: 2008

Location: Bangladesh

Client: Local Enterprise Investment Center (LEIC) under IIDLC Finance Ltd

Main project features: The project supported development of EMPs in Bangladesh.

Activities performed: Prepared environmental plan for 20 industries which included waste and energy management action plans as well as pollution mitigation strategies for the industries.



recent projects

Name of assignment or project: Development of an Interactive User's Manual on Community-Based Solid Waste Management

Year: 2007 ■ **Location:** Bangladesh/Thailand ■ **Client:** UNESCAP

Main project features: Preparation of an interactive user's manual on community-based solid waste management as well as a research paper on carbon trading and financing options for SWM.

Activities performed: Prepared an interactive user's manual on community-based solid waste management approach of Waste Concern. Prepared a research paper on the potential of carbon trading to finance the implementation, replication, and up-scaling of this community-based solid waste management approach.

Name of assignment or project: Inventory of Hazardous Waste in Bangladesh

Year: 2007 ■ **Location:** Bangladesh ■ **Client:** ADB/DOE

Main project features: Preparation of an inventory of Hazardous Waste in Bangladesh.

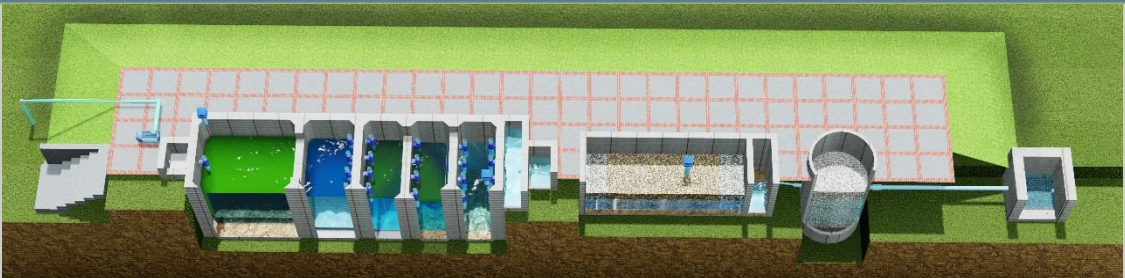
Activities performed: i) Updated the inventory of hazardous wastes, as a basis to formulate the hazardous wastes management regulation; ii) Reviewed the present studies on hospital wastes and lead batteries, as well as POPs iii) Identified key industries to be included in the survey; iv) Prepared an approach and designed a survey for collecting primary data; v) Assisted the DOE in conducting workshops with the chamber of commerce and industry and other relevant sectors to test the survey tools; and v) undertook the survey and analysed the results of the survey and made predictions about waste generation for the next 5 to 10 years.

Name of assignment : Promoting Sustainable & Efficient Waste Recycling Project

Year: 2006 to 2007 ■ **Location:** Bangladesh ■ **Client:** Swisscontact-Katalyst

Main project features: The project was aimed at promotion of sustainable and efficient waste recycling systems in Bangladesh, particularly plastic wastes.

Activities performed: Responsible for promotion of Environmental Management Systems (EMS) amongst the plastic industries. Supported awareness campaign for source separation of plastic. Management of pilot intervention for collection of source separated plastic waste in residential areas of Bangladesh. Development and implementation of capacity building training programs and policy intervention for efficient plastic waste recycling in Bangladesh.



recent projects

Name of assignment or project: Adaptation of Model for Decentralized Solid Waste Management and Composting for Qui Nhon City, Vietnam, Matale City, Sri Lanka

Year: 2005 to 2006 ■ **Location:** Vietnam and Sri Lanka ■ **Client:** UN-ESCAP

Main project features: The assignment set out to adapt and implement the 'Waste Concern Model' for decentralized solid waste management and composting.

Activities performed: Responsible for assisting in adapting the 'Waste Concern Model' for decentralized solid waste management and composting to fit the context of Qui Nhon City and Matale City. Conducted pre-feasibility study for establishment of a community-based solid waste management and composting system for the 2 cities. Conducted a pre-feasibility study for primary collection of waste.

Name of assignment or project: Preparation of Action Plan for Sanitation and Solid Waste Management for 8 Secondary Towns under STIFPP-II Project

Year: 2004 to 2005 ■ **Location:** Bangladesh ■ **Client:** LGED/ADB

Main project features: The project supported the preparation of action plans for 8 secondary towns with regards to solid waste management.

Activities performed: Prepared solid waste management action plans and assessed alternative technical options for improvement of solid waste management value chain. Estimated the quantity of waste generated in each of the 8 secondary towns. Projected future need for waste management over a 10-year period, considering short- and medium-term investments required. Evaluated the opportunities for CDM in waste management in the 8 towns.

Name of assignment or project: DhakaCommunity-Based Urban Solid Waste Management under Sustainable Environment Management Program (SEMP)

Year: 1998 to 2005 ■ **Location:** Bangladesh

Client: Ministry of Environment and Forest (MoEF) / UNDP

Main project features: The assignment included laying out national waste management rules, as well as design and implementation of pilot schemes.

Activities performed: Drafted rules on solid waste management, hospital waste management, and battery waste management for Bangladesh. Designed and implemented pilot solid waste hospital waste collection, treatment and recycling (composting projects) in Dhaka.



recent projects

Name of assignment or project: Pilot Projects on Solid Waste Management of Environmental Sanitation, Hygiene and Water Supply in Urban Slums and Fringes

Year: 2002 to 2004

■ **Location:** Bangladesh

■ **Client:** DPHE / UNICEF

Main project features: The project included capacity building on waste management, baseline survey, and research on waste generation rates in 14 municipalities.

Activities performed: Carried out a baseline survey on waste generation in 14 municipalities. Developed training manual on community mobilization on solid waste management. Imparted training to local NGOs and municipal staff on proper disposal of solid waste, recycling, and involvement of informal sector on waste management. Supervised on-the-job training of local GO/NGO staff on community mobilization for proper solid waste management. Prepared engineering design of community-based solid waste recycling and composting plant for 14 municipalities. Prepared engineering design of composting toilet, rainwater collection, and wastewater recycling system and ecological toilets for the composting plants. Promoted marketing of compost. Monitored performance of composting units.

Name of assignment or project: Capacity Development for CDM in Bangladesh under Sustainable Environment Management Program

Year: 2002 to 2003

■ **Location:** Bangladesh

■ **Client:** MoEF / UNDP

Main project features: The project supported the development of an institutional framework and capacity building for implementation of CDM projects in Bangladesh.

Activities performed: Developed policy guideline and institutional framework for implementation of CDM projects in Bangladesh. Drafted National Strategy for CDM. Developed the structure of the Designated National Authority (DNA) for CDM projects in Bangladesh. Developed CDM project approval process as well as sustainable development criteria for project evaluation and CDM strategy. Organized training programs on CDM for government and private sectors on potential CDM projects. Assisted in development of baseline and preparation of a business plan for a Landfill Gas Recovery (LFG) project in Dhaka. Developed awareness raising materials on CDM.



Waste Concern Consultants Team

Waste Concern Consultants has a team of twenty-one professionals, headed by Mr. Abu Hasnat Md. Maqsood Sinha as Principal Architect-Urban and Regional Planner and Mr. Iftekhar Enayetullah as Principal Civil/Environmental Engineer-Urban Planner. WCC has more than 23 years experience with consulting firms, international agencies, universities and non-governmental organizations. Both Mr. Sinha and Mr. Enayetullah are managing partners of WCC. For their professional excellence, they have been awarded several international and national awards, which include:

- Received **United Nations Poverty Eradication Award 2002** from Mr. Kofi Annan, Secretary General of United Nations, New York USA
- Elected as an **Outstanding Social Entrepreneur for the year 2003** for contribution in the field of solid waste management and environment by Schwab Foundation, Geneva, Switzerland
- Received **Professional Excellence Award 2003** from Bangladesh Institute of Engineers, Bangladesh (IEB) & the Daily Star a prominent Newspaper of Dhaka.
- Received **Intel Environmental Award 2003** from TECH MUSEUM, San Jose, California, USA.
- Received the '**First 50 Social Entrepreneur**', of the Fast Company Magazine, USA in 2001 and 2006
- Received '**Environment Award-2007**' from Department of Environment, Ministry of Environment and Forest, Government of Bangladesh, 2007.
- Honored in the '**List of 100 Asia**' by the Purpose Economy, 2014

What we do

In addition to professional consultancies, our services include:

- Engineering design of various infrastructures.
- Quality control, laboratory analysis and field testing.
- Preparation of concepts and master plans.
- Organizing workshops and training programs.
- Preparation of publications (technical reports, manuals, guidelines, information materials).
- Undertaking socio-economic studies and surveys.
- Environmental auditing and conducting environmental studies.
- Preparation of business plans for environmental projects.
- Designing environmental management systems for industries.
- Preparation of strategies, action plans and policies.



facilities we have

The type of facilities available in-house include:

- State of the art environmental engineering laboratory.
- Computerized architectural and engineering design facility.
- Geographic Information System (GIS) laboratory
- Library facility with latest books, journals, and reports on various subjects including engineering, architecture, urban and regional planning, and environmental management.
- Publication and graphics design facility.
- Fully networked (LAN) system office with online facilities.
- Seminar, training, workshop facility with multi-media equipment.
- Hands-on training and demonstration facility for waste management, ecological sanitation, rainwater harvesting, wastewater treatment, and organic/eco-friendly agriculture within Dhaka city.

- ✓ WCC developed and patented a technology entitled '**Box Type Method of Composting System**' to convert organic waste into a sanitized product called soil enricher or compost.



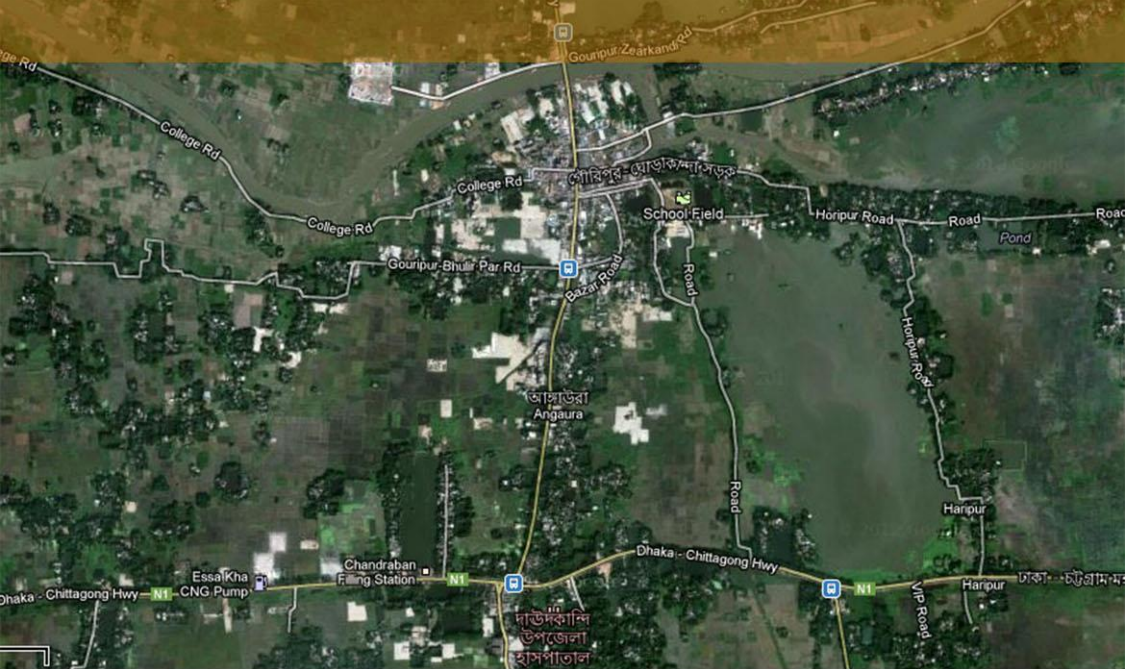
Recycling Training Center (RTC)

WCC is operating this RTC to build the capacity/ technical and managerial expertise of municipal staffs and entrepreneurs to initiate, operate and maintain recycling initiatives. This RTC is located in Dhaka, Bangladesh.



Clients and Partners

- Ashoka: Innovators of the Public
- Asian Development Bank (ADB)
- Asian Infrastructure Investment Bank (AIIB)
- Bangladesh Agriculture Research Institute (BARI)
- Bangladesh University of Engineering and Technology (BUET)
- BORDA, Germany
- Department of Public Health Engineering
- Danish Embassy, Dhaka
- GIZ, Deutsche Gesellschaft Für Internationale Zusammenarbeit, GMBH
- International Labor Organization (ILO)
- Local Government Engineering Department (LGED)
- McKinsey, USA
- Ministry of Environment and Forest of Government of Bangladesh
- Royal Netherlands Embassy, Dhaka
- Royal Norwegian Embassy, Dhaka
- United Nations Development Program (UNDP)
- UNCRD
- UN-ESCAP
- UNICEF
- UNIDO
- Schwab Foundation for Social Entrepreneurship
- Soil Science Department, Dhaka University
- Swisscontact-Katalyst
- Swiss Development Agency for Cooperation (SDC)
- Swiss Federal Institute of Environmental Engineering (SANDEC)
- The World Bank
- World Wide Recycling, Netherlands
- World Economic Forum (WEF)



contact:

Waste Concern Consultants

Level-3, House No-270, Road No. 19

New DOHS, Mohakhali

Dhaka -1206, Bangladesh

Telephone: +880-2-48810-841, +880-2-48810-842

Fax: + 880-2-2222-99486

Email: maqsood@wasteconcern.org

Web: www.wasteconcern.org

web: www.wasteconcern.org

Published: 2023