



SUSTAINABLE CITIES & INFRASTRUCTURE

We are providing solutions for urban development & management and climate-resilient infrastructure for ensuring improved liveability and livelihood opportunities.





The world's urban population is rapidly increasing, accompanied by a rise in informal settlements, inadequate and overburdened infrastructure, and services, such as waste collection, water & sanitation systems, roads, and transportation. This surge exacerbates air pollution, and unplanned urban spaces, underscoring the urgent need to build cities that are inclusive, safe, resilient, and sustainable.

Drawing on our extensive experience in this domain, we leverage our people capabilities and technology to provide holistic solutions that navigate through complex urban challenges, improve quality of life and drive smart growth. We advise governments in developing countries in South Asia, Southeast Asia, Central Asia, and Africa on how to tackle urban sustainability challenges by developing and implementing strategies for a low-carbon, sustainable future. Our expertise is aligned with national & international best practices, particularly in the core areas of smart cities, climate-resilient infrastructure, water management solutions, sustainable waste management, sanitation, green infrastructure interventions, and social & gender inclusion.



Our client portfolio is diverse

International Funding Organisations

Multilateral Agencies: UNDP, ADB, World Bank, AIIB

Bilateral Agencies: USAID, FCDO, GIZ

Government Organisations

Centre and State Governments

Thematic Areas



Urban Planning and
Re-Development



Urban Resilience and
Climate Change



Infrastructure and
Engineering



Urban Transport
and Mobility



Smart Cities &
Master Planning



Water Management
Solutions



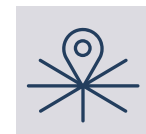
Waste Management
and Sanitation



Urban Reforms
and Governance



Municipal
Financial Reforms



Community-Based
Planning

MAKING A DIFFERENCE WITH OUR WORK

Asian Infrastructure Investment Bank (AIIB)

Preparation and Design Consultancy Services - Integrated Solid Waste Management Improvement Project (ISWMIP) | Bangladesh

Supported by the Asian Infrastructure Investment Bank (AIIB), the project was closely aligned with the priorities of Government of Bangladesh (GoB), focusing on the development of sustainable urban infrastructure, particularly in solid waste management across its cities. Aligned with the key objectives of the 8th Five Year Plan and the long-term Perspective Plan for 2020-2025, the project aimed to prioritise investment sub-projects in consultation with participating Urban Local Bodies (ULBs). This encompassed offering assistance in detailed designs, ensuring project readiness, and adhering to the policy requirements set forth by the GoB and the AIIB. Additionally, it involved supporting policy formulation and capacity building, particularly concerning waste minimisation and recycling, private sector involvement, and the inclusion of informal workers. The project activities included:

- Sub Project Identification & Pre-Feasibility Reports for Phase-1 (150 million) and entire project (500 million)
- Preparation of Policy Brief and Technology Selection Matrix for ULBs/ULB clusters to identify Best Practicable Options (BPOs) in SWM for collection, transportation, processing and disposal
- Presented Policy Brief for Private Sector Engagement in SWM Value Chain
- Final Feasibility Reports for each sub-projects (technical, social, environment, institutional and economic viability) totalling USD 150 million
- Detailed engineering designs (DEDs) and cost estimates for project investments of USD 50 million
- Business Planning and potential implementation modalities of the proposed end-to-end solid waste management service delivery



USD 150 million+

investment over next 5 years to improve urban waste management



3200

Tonnes/Day of waste generation in 10 cities addressed



Transition to new waste management approaches- Regional Integrated Landfill & Integrated Resource Recovery Facility



Karnataka Urban Water Supply & Drainage Board (KUWS&DB)
 State Urban Development Agency (SUDA), Chhattisgarh
 Housing & Urban Development Department (H&UDD), Government of J&K,

Project Development and Management Consultants (PDMC) for Atal Mission for Rejuvenation and Urban Transformation (AMRUT) in Jammu & Kashmir, Chhattisgarh, and Karnataka (AMRUT 1.0), Karnataka (AMRUT 2.0)

To meet UN SDG 6 on water and sanitation and to improve ease of living, the Govt. of India (GoI) launched the AMRUT mission in 2015 for all 500 urban local bodies (ULBs) with populations above 1 lakh. The objectives of the mission were to provide water supply through functional household tap connections (FHTCs) to all urban households, plus urban sewerage and drainage networks, and development of green spaces.

Following the success of this mission, the GoI launched the AMRUT 2.0 mission in 2021, with the aim of making cities 'water secure' and providing FHTCs to every household in all 4000+ statutory towns. This mission also aims at 100% sewage/septage management in 500 AMRUT cities. This is being achieved through water source conservation, rejuvenation of water bodies and wells, reuse of treated wastewater, and rainwater harvesting.

As the PDMC, IPE Global has been providing overall planning, feasibility, engineering design, procurement, construction supervision, contract management, project monitoring, and project management services for the mission in respective states.

AMRUT 1.0 ACHIEVEMENTS



Successfully managed infrastructure projects representing **9%** of the national portfolio under AMRUT



Supported states ranked among **top 10** performers nationally.



Improved urban services in **37 cities**, with piped water connections to **5,00,000+ households** and sewer connections to 2,00,000+ households



Under AMRUT 2.0, we are creating water supply infrastructure across 227 cities in Karnataka, enriching the lives of nearly **10 million people**



UNDP

Multi-Hazard Vulnerability and Risk Assessment for the Brihanmumbai Municipal Corporation | Mumbai, India (2023-2024)

The safety of Mumbai city is of significant concern owing to its geographical location and prevailing weather conditions. Floods, landslides, cyclones, fires, and chemical disasters are recurrent hazards in the area. Moreover, the impact of climate change is anticipated to amplify the frequency and intensity of these occurrences, consequently heightening the vulnerability of local communities. To address this challenge, the Brihanmumbai Municipal Corporation (BMC) and UNDP have initiated the development of a multi-hazard risk atlas for crisis and disaster management. The ongoing assignment aims to evaluate the risks and vulnerabilities of Mumbai city.

We have been engaged to recommend solutions that will strengthen disaster management policies, plans and build resilience. The proposed assessment will help the city administration plan and respond to disasters more effectively, making Mumbai a safer and more resilient city.



ADB

Awareness and Public Participation (CAPP) Consultants for Rajasthan Urban Infrastructure Development Project | India (2021-2028)

Rajasthan Secondary Towns Development Sector Project (RSTDSP) has engaged consultants to facilitate coordination among the executing and implementing agencies as well as public, private, and community stakeholders. As part of the implementation arrangement, a Community Awareness & Participation Program (CAPP) Consultant is recruited at project level to assist Project management Unit (PMU) in managing RSTDSP by conducting meaningful and widespread consultations and public awareness during project implementation. The CAPP will have a core unit based at the central office in Jaipur and City Level Units based in six major project towns. The CAPP will be required to work/ interact with city-level NGOs, civil society organisations, and other stakeholders. The project advocates for engagement of city-based NGOs, and if such entities are enlisted the CAPP consultant will be responsible for coordinating and supervising their activities.

UK Foreign, Commonwealth & Development Office

Cities and Infrastructure for Growth Ghana: Phase 2 (2022-2023)

The Cities and Infrastructure for Growth – Ghana (CIG Ghana) Programme in its first phase delivered support to two cities (Sekondi-Takoradi and Tamale) in Ghana to address climate change issues. This included conducting flood modelling work, identifying potential soft and hard infrastructure interventions and provided guidance on sources of climate finance. A key finding from the first phase was the absence of dedicated assistance for cities to address climate actions, particularly in accessing finance. It also highlighted the substantial resources required to develop climate interventions to get to the feasibility and financing stage.

While national-level technical assistance can be directed to support these stages of project development, such assistance at the city level is rare. Therefore, the second phase of the CIG programme will seek to bridge this gap. An essential next step involves building on the technical guidance and data generated in Phase 1 to support the two cities identify potential solutions and collaborate to move forward. Additionally, Phase 2 will extend the flood risk analysis conducted in Phase 1 to one or two additional towns, aligning with the British High Commission Ghana's renewed focus on Northern Ghana and responding to the original ask of the Government of Ghana under Phase 1 to expand activities in the North.



GIZ

Developing Viable Technical Solutions for Planning a LEZ at Lingaraj Temple area | Bhubaneswar, India (2022-2023)

The proposed Low Emission Zone (LEZ) at 'EkamraKshetra' Heritage Zone in Bhubaneswar revolves around the development of LEZ around Lingaraj Temple. Spearheaded by the Odisha State Pollution Control Board (OSPCB) in their concept report on LEZ- Bhubaneswar, the framework incorporates key strategies for emission reduction within the designated zone, including (i) Ambient Air Quality Monitoring and Communication systems, (ii) Green – Sticker System for the private vehicles owned by local residents, (iii) Intensive emission monitoring of resident's emission; (iv) Promotion of EVs/ Shared EVs for Tourists; (v) Un-Interrupted Electricity Supply; and (vi) Promotion of Cycling and Pedestrian Passage.

We were engaged to prepare a detailed plan for EkamraKshetra Low Emission Zones (LEZ) for improving urban air quality by incorporating socially/culturally relevant, technically sound and financially viable solutions. Our approach encompassed a range of measures spanning traffic and transportation, replanning of the area, heritage conservation, tourism promotion with a focus on environmentally sensitive practices, emission control strategies, plantation & landscaping, air quality monitoring, waste management, and dust control for reducing air pollution and improving air quality in the selected area. It provided the citizens of Bhubaneswar and the visitors to the city with clean air for better health and improved quality of life, without compromising employment growth and ensuring preservation of diverse historical and cultural heritage.

ADB

TA-9897 REG II Accelerating Sanitation for All in Asia and the Pacific Waste Water Management Master Plan for Khulna City | Bangladesh (2022)

The Wastewater Management Master Plan for Khulna city was initially developed in 2016 with the technical assistance of ADB. To achieve the target of the Citywide Inclusive Sanitation (CWIS) for Khulna city, IPE Global is currently supporting Khulna Water Supply and Sewerage Authority (KWASA) in updating of the existing Waste Water Master Plan by (i) incorporating the ongoing Khulna Sewerage and Sanitation Development Project (KSSDP) components; (ii) preparing the detailed plans on the expansion of sewerage systems to the areas uncovered by the ongoing KSSDP; (iii) identifying effective faecal sludge management and on-site sanitation solutions for the areas where sewer network connection is not feasible (iv) Identifying new areas for a phase-wise expansion of sewerage and sanitation facilities-both for on-site (de-centralised) and centralised sanitation perspectives; (v) Outlining an institutional capacity development plan and resource requirements for KWASA to sustainably manage wastewater and sludge, and (vi) developing a phase wise investment plan as appropriate.



World Bank/ Shimla Jal Prabandhan Nigam Limited (SJPNL)

Selection of Program Management Consultant under World Bank funded Program for Results (PforR) – Himachal Pradesh Water Supply and Sewerage Services (WSS) Improvement Program | Shimla, India (2022-2027)

With a focus on modifying its funding process, the World Bank decided to become more performance-focused, in the midst of the pandemic and the ongoing economic crisis. Thus, the Program for Result (PforR) was introduced to build on the achievements of Phase 1 reforms under DPL 1, supporting the Government of Himachal Pradesh in strengthening the operational and financial performance of Shimla Jal Prabandhan Nigam Limited (SJPNL) Utility and improving access to water supply and sewerage services. The program will primarily focus on Shimla Municipal Corporation (SMC) area and will be implemented by SJPNL.

As the PMC, IPE Global is performing a critical role in program implementation, monitoring, and disbursement of funds for Shimla Jal Prabandhan Nigam Limited (SJPNL). We have set up a Program Management Unit (PMU) under SJPNL and are handholding various activities and initiatives by SJPNL. We are also providing end-to-end support in institutional strengthening and in successfully achieving targets envisaged under the program. We are supporting in successful delivery around three result areas by tracking progress of quarterly targets against seven Disbursement Linked Indicators (DLIs). We are also providing comprehensive support in facilitating disbursements from the World Bank. The scope of work entails streamlining of all procurement, financial management, monitoring and evaluation, operations, and governance processes. As the PMC, we are supporting in procurement policy /manual preparation and implementation and in proper documentation and process mapping for baseline establishment



World Bank/Government of Kerala

Technical Support Consultancy (TSC) Services for Kerala Solid Waste Management Project (KSWMP) for Package B (Alappuzha, Ernakulam, Idukki, and Kottayam) and D (Kannur, Kasaragod, Kozhikode and Wayanad) India (2022-2027)

The project objective for the Kerala Solid Waste Management Project (KSWMP) is to strengthen the institutional and service delivery systems for SWM in Kerala. KSWMP aims to adopt sector wide integrated value chain approach for enhancing the service delivery for waste management in Kerala. The KSWMP project includes the following components:

COMPONENT 1: Institutional development, capacity building and project management

COMPONENT 2: Support to ULBs for SWM

COMPONENT 3: Development of regional SWM facilities

State Programme Management Unit (SPMU) under Local Self Government Department (LSGD), Government of Kerala has appointed IPE Global as Technical Support Consultants (TSC) for 8 districts and 52 ULBs (under two packages) to provide end to end support to ULBs in preparation and implementation of 5-year city wide SWM plan including technical/engineering, environment, social and overall institutional/governance support to the ULBs for SWM services improvement. This includes sub-project planning and design; contract management and implementation supervision; supporting in environmental and social safeguard requirements.

IPE Global as TSC has deployed dedicated teams in each district to support the ULBs in the respective districts and provide support respective ULBs on:

ACTIVITY 1: Technical assistance for SWM planning and institutional reforms

ACTIVITY 2: Technical support for SWM sub-project preparation and implementation

ACTIVITY 3: Environmental safeguard management support for SWM sub-project planning, preparation, and implementation

ACTIVITY 4: Social safeguard, gender inclusion, citizen engagement and communications support for SWM sub-project planning, preparation, and implementation.

ADB

Implementing a Differentiated Approach to Urban Development in the Pacific | Pacific Islands (2023-2024)

ADB's regional knowledge and Technical Assistance (TA) supports the integration of a differentiated approach to operations in urban environments across the Pacific region. It focuses on strengthening the resilience of urban areas in Pacific small island developing states (SIDS) and fragile and conflict-affected situations (FCAS) by addressing the root causes of their vulnerability and fragility, including low institutional capacities for planning, and managing urban development. The TA will help SIDS and FCAS adopt a longer-term horizon for urban planning, and support governments in preparing a more programmatic and multisector approach to urban infrastructure investments in developing member countries (DMC).

IPE Triple Line has been engaged to carry out the following activities -

- i. Conduct a rapid review of the intended outcomes, outputs, and approaches identified under the original TA
- ii. Develop/improve the technical dimensions of ongoing TA components
- iii. Identify and develop potential additional TA components, with particular emphasis on the technical dimensions
- iv. Identify and expand on necessary variations for the TA
- v. Document the decisions made and actions identified by management in response to the proposed variation



ADB

Strengthening Institutional Capacity for Project Development and Urban Governance | Tamil Nadu, India (2019-2022)

The Tamil Nadu Urban Flagship Investment Program aimed to develop priority water supply, sewerage, and drainage infrastructure in at least 10 cities in strategic industrial corridors in Tamil Nadu. Output 3 of the program – Strengthening Institutional Capacity focused on soft components to address the key institutional challenges including (i) weak capacity of ULBs to plan, design and implement projects in a timely, cost effective manner, and to sustainably operate and maintain such facilities; and (ii) the weak capacity of CMA to support ULBs.

IPE Global supported GoTN in (i) developing a series of technical manuals (covering nine key thematic areas) relevant for 5-10 years after its operation; (ii) Capacity building to help introduce, train and guide staff in the preparation of: Feasibility studies, detailed project report proposals, and engineering designs and smart, innovative approaches to urban project design, planning, sustainable service delivery etc.

Asian Development Bank and Greater Chennai Corporation**Integrated Urban Flood Management for the Chennai-Kosasthalaiyar Basin Project: Institutional Strengthening and Reform Consultant | Tamil Nadu, India (2023-2027)**

The Integrated Urban Flood Management for the Chennai-Kosasthalaiyar Basin Project, supported by ADB, aims to enhance Chennai's resilience to extreme weather events. Through a loan of \$251 million from ADB's resources, this \$470.5 million project is set to bolster flood management assets in the Kosasthalaiyar basin while strengthening Greater Chennai Corporation (GCC) capacity. IPE Global as Institutional Strengthening and Reform consultants (ISRC) is supporting GCC in improvement of flood protection infrastructure, groundwater recharge, and institutional capacity. Key outputs involve sustainable operation measures, flood preparedness training, and gender-responsive relief camps.

IPE Global through ISRC has designed Performance Based Incentive mechanism to provide financing of US\$ 6.9 Million to GCC, for improving storm water drainage O&M by zonal offices. Funds provided to GCC will be distributed amongst zonal offices based on Key Performance Indicators and will be used for eligible expenditure (creating green infrastructure + expenditure in sustainable O&M activities related to Storm Water Drainage). In a span of 1 year, We have trained ~200+ GCC officials and ~300+ community members on sustainable operation measures and PBI and flood preparedness & awareness. The project promotes gender equality, stakeholder engagement, and knowledge-sharing for long-term resilience. Surveys will gauge community satisfaction with drainage improvements. Overall, it's a vital step towards a more resilient and inclusive Chennai.

Government of India Smart City Mission/ Shillong Smart City Limited/Ujjain smart City Limited**Project Development and Management Consultant for Smart City Projects | Shillong and Ujjain, India (2017-2023)**

The Shillong Smart City Project is focused on developing the city as liveable, clean, green, inclusive, modern, safe, and citizen-friendly. Our role in this endeavour was to provide consultancy services supporting in planning, designing, implementing, and monitoring Shillong Smart City.

Similarly, in Ujjain, the scope of work was broadly divided into two phases: area-based development and ICT based pan city solutions. This involved three key phases: Project Development Phase, Project Implementation Phase, and Monitoring Phase. Through meticulous analysis and understanding the cities' requirement, early bird projects were identified, which included water ATM, NRW reduction, Smart Schools, Public Bike Sharing, Wi-fi Hot Spots and Point of Sale (PoS) system for Municipal Services.

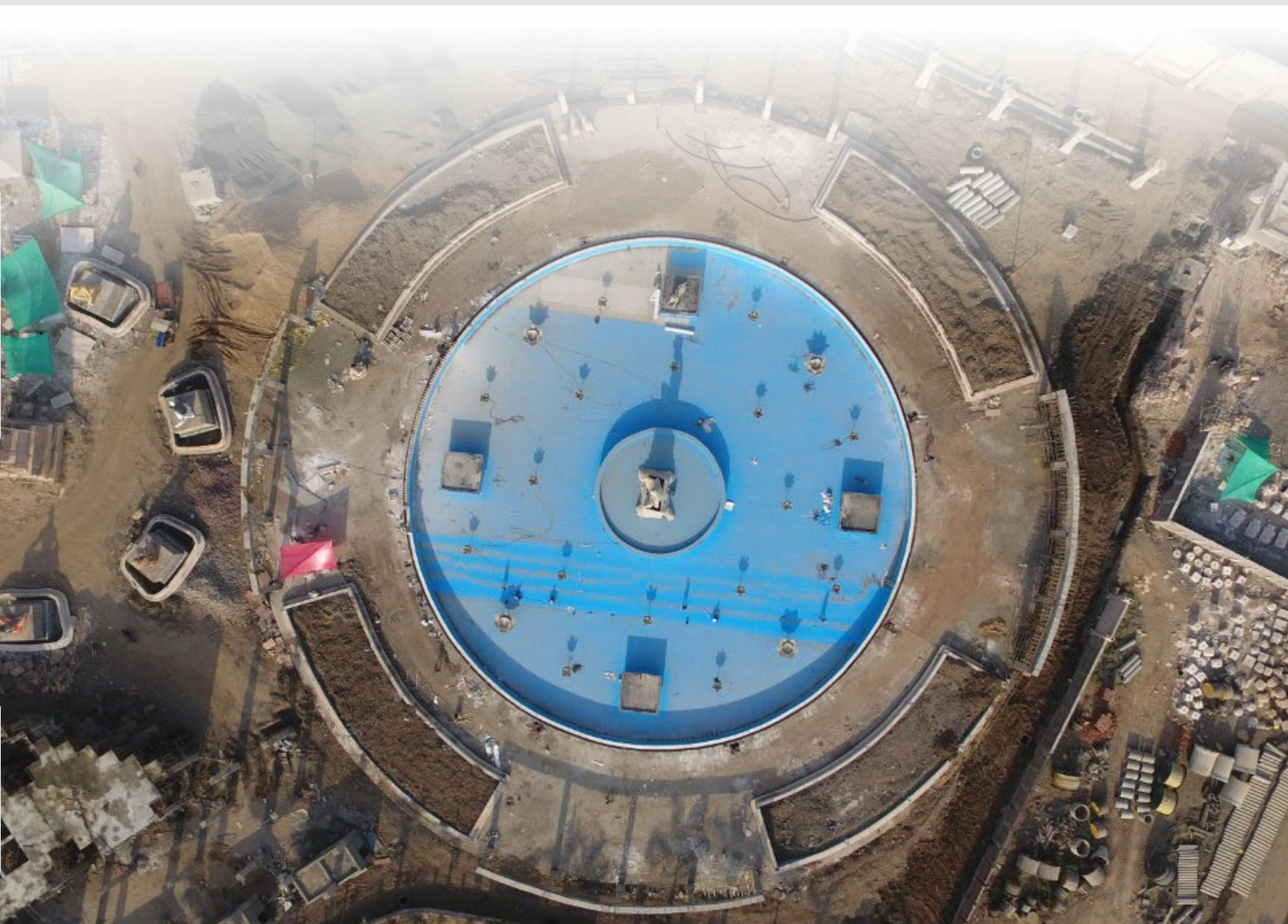
The World Bank and Madhya Pradesh Urban Development Corporation Limited

Reform Support Consultancy for Madhya Pradesh Urban Development Programme (MPUDP) (2018-2024)

The project aims to enhance revenue streams for urban local bodies, strengthen institutional capacity and unlock innovative financing mechanisms for urban services in the chosen ULBs. The project is operational from 2018 to 2024, and is backed by a USD 166 million investment from the World Bank. Spearheading the development of the Vision Document 2035, IPE Global as Reform Support Consultancy has outlined a strategic blueprint for sustainable urban growth, emphasizing infrastructure enhancement, economic prosperity, and social equity.

Our robust advocacy efforts have secured a substantial INR 200 CR aid from the Central Government for the implementation of the innovative “Sponge Cities” proposal, aimed at bolstering the region’s resilience to climate change through efficient water management strategies. High level policy support for Madhya Pradesh Urban Development Company Limited (MPUDCL) restructuring and sustainability of reforms, are some of the marque-support in the project. Recognition by Sundarlal Patwa National Institute for Urban Management (SPNIUM) as a training partner highlights Reform Support Consultant (RSC) commitment to capacity building, with four specialised modules integrated into the training calendar to empower stakeholders. Till date, we have trained 1,632+ officials in Property Tax expansion through GIS and budgeting.

We have rolled out 35+ rules and bylaws, aiding GoMP in areas across enhanced revenue, accounting, and budgeting, credit enhancement and land monetisation reforms for the state. We have assisted 116 ULBs with financial statements and opening balances for FYs 2019-2022, 78 for FY 2022-2023, and 21 for 2023-2024. Moreover, RSC has immensely supported in improvement of revenue, especially in Property Tax (78.6%) and Non-Tax revenue (312%) in the last five years.



GIZ

Consultancy Contract to conduct Baseline of the Plastic, Non-biodegradable waste Monitoring at National, State and City Level | India (2020-2021)

GIZ in collaboration with the Ministry of Housing and Urban Affairs (MoHUA), is implementing Cities Combatting Plastic Entering the Marine Environment (CCP-ME) Program. This initiative is focused on preventing marine litter within urban areas. We were engaged with GIZ to conduct a baseline study on plastic & nonbiodegradable waste monitoring in the country for developing a digital platform to track the reuse and recycling activities at city, state and national level. The platform aims at facilitating linkages between the ULBs, large aggregators & recyclers.

To facilitate data collection and reporting, tailored data input formats were devised for 66 recyclable categories, covering both plastics and other non-biodegradable materials. A robust reporting and monitoring mechanism was established to ensure effective management of these materials. This also entailed aiding in the development and enhancement of the National Digital Platform in collaboration with the MoHUA and respective states. Additionally, recommendations were provided foster portal utilisation, ensuring that the platform serves as a dynamic conduit between buyers (recyclers) and sellers (cities), thereby facilitating regular and effective engagement.

FCDO, UK

India Programme - Technical Assistance to better Recover, Recycle, Re-use, Construction & Demolition (C&D) Waste | India (2020)

We collaborated with FCDO, UK to support the Central Public Works Department (CPWD), MoHUA, GOI in implementing a National Strategy for the management of Construction and Demolition (C&D) waste that aimed to improve the applicability and uptake of C&D waste recycling practices across India.

The strategy aims to achieve a high rate of recovery, reuse, and recycling of C&D waste while establishing stable and competitive markets for recycled materials. It focuses on enhancing the management of the C&D value chain through initiatives such as inventory tracking, improving recycling efficiency, and implementing quality standards. Additionally, it seeks to strengthen enabling environments by developing industry roadmaps, implementing Nationally Appropriate Mitigation Actions (NAMAs) and fostering private sector engagement. Furthermore, the strategy aims to enhance the marketability of recycled products by establishing demand-supply mechanisms and integrating recycled materials into Sustainable Public Procurement Guidelines. Through these concerted efforts, the strategy seeks to drive the transition towards a circular economy in the construction sector, promoting resource efficiency and economic growth.

The World Bank

Technical Advisory Services for Scaling up Urban Upgrading Project (SUUP) | Vietnam (2019-2020)

The project focused on providing implementation support to seven provincial cities of Vietnam (Bac Lieu, Ben Tre, Long Xuyen, Vinh Long, Tan An, Vi Thanh, Soc Trang) that are in the early stages of urbanisation to adopt green infrastructure principles in design and urban planning, considering adaptability to climate change particularly water-related hazards.

We assisted the World Bank in its long-term engagement in urban upgrading programmes within the Mekong Delta Region (MDR) including Vietnam Urban Upgrading Program (VUUP). Our role involved enhancing the capacities of these cities to conceive well-designed upgrading plans that incorporate appropriate resilience measures. We carried out preparatory tasks for design review, provided advisory services on detailed design for green infrastructure, reviewed city master plan, zoning plan and development regulations, prepared design guidelines and training manuals on green infrastructure principles.





Making Development a Ground Reality

IPE Global is the largest international development consulting firm in South Asia that partners with governments, businesses, and leaders to deliver scalable and sustainable solutions. Over the last 25 years, IPE Global has successfully implemented projects in over 100 countries. Focusing on **human development, inclusive growth & resilience**, and **good governance**, we create value for clients and communities to achieve economic growth & social equity by offering a range of integrated, innovative, and high-quality consulting services across various sectors.

We are an ISO certified organisation with a focus on quality and integrity to empower growth and drive positive change in the development space.

Global Expertise. **Applied Locally**

Headquartered in India with five international offices in Bangladesh, Ethiopia, Kenya, Philippines, and United Kingdom, we have been creating a lasting impact through our tailor-made solutions for over two decades.

100+

Countries

1200+

Global Team

1200+

Projects Delivered

600 M+

People Reached

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