COURSE SYNOPSIS

Towards "Sustainable Urban Mobility (SUM)" in developing urban context"

6th November 2024 – 19th November 2024

(2 weeks)

Course Introduction, Proposed Dates and Location:

HUDCO's Human Settlement Management Institute (HSMI) proposes to conduct a two week training course for overseas professionals from ITEC partner countries on the theme – "Towards "Sustainable Urban Mobility (SUM)" in developing urban context. The course is scheduled from 6^{th} November 2024 – 19^{th} November 2024 at HUDCO's Human Settlement Management Institute, New Delhi.

Programme Rationale:

Cities being engines of economic growth are challenged globally with concentrated, dense urban nodes of development areas, which attract movement of people and freight at an alarmingly increasing number and pace. Congestion, pollution and lack of safety pose varied urban planning and management challenges. Urban mobility systems contribute to at least 7-8 of the Sustainable Development Goals (SDG), 2030. This being the case, should such developing cities rely on the traditional approaches and implementation of traffic & transportation planning which is seen to crumble city infrastructure and affect potential economic returns? Or should such cities /urban nodes adopt and adapt gradually to the emerging Sustainable Urban Mobility options in choice of modes, systems, and technology integration, transit-oriented development patterns? Can ease of access, reduce time and help people to do multi functions effectively? Can digital innovations reduce commuter's daily hassles? Can mass transits be made affordable and accessible for all including the vulnerable groups? Should private car usage be encouraged in large numbers in the concentrated nodes? Are there alternatives to conveniently integrate active mobility through bikes, shared modes? Many of these could be dealt with when cities/urban areas avoid modes causing extreme negative externalities and shift to improving SUM. This programme intends to move in this direction of Sustainable Development for growing cities across the globe.

New India envisions being a "Developed Nation" in the medium range and has started to address the SDG Goals, which intends to make its urban cities and towns livable, economically viable and sustainable. Local solutions are being grounded and outcomes are being measured under the flagship "Smart Cities Programme ". Simultaneously, mass transit in most populated cities, faster trains to the regions, Electric buses, redesigning shared street spaces, promoting bikes for short/safe distances, integrating transport hubs and nodes are being rolled out pan India, in addition to improving State connectivity through physical road infrastructure networks, grade separators, parking provisions etc., Yet miles to go... towards SUM. In this training programme, participants would be able to witness the progress of SUM on ground and the policy, economic and financial reforms that are facilitating this shifting approach towards Sustainable Urban Development.

Aim and objectives of the Programme:

The training is intended to help participants increase their knowledge, learn from and equip themselves with innovative tools and know-how for influencing policy making, visioning future directions of sustainable growth to their aspiring cities, intelligently choose Sustainable Urban Mobility options/ digital tools for integration, increase capacity to take optimal approaches, devise transit oriented programmes/projects and help in the greater good of reducing Greenhouse Gas emissions.

Programme objectives & Outcomes:

The participants of this programme would be exposed to understanding the sustainable concepts of Urban mobility, accessibility, interaction and integration of mobility systems, financing options, Smart Intelligent systems through classroom lectures, dialogue sessions with local/International experts, practicing / implementing professionals, site visits, case studies and stimulating desk exercises. It will also project the approaches adopted by Govt of India under the "Smart Cities Mission" towards actioning sustainable urban mobility measures at local levels and equip them to take away key learnings suitable to their specific country contexts.

Expected Outcomes

At the end of the programme, participants will be able:

- Understand the meaning of Sustainable Urban Mobity (SUM) how it could be achieved ;
- To examine the role and responsibilities of urban managers in the context of planning and implementation and management of integrated urban mobility programmes & projects;



- How to influence policy making with SUM and mobilise finance for SUM programmes/projects.
- How to use "Internet of Things (IoT)" with Big Data that is reliable to predict , forecast, analyse and deliver Integrated digital solutions.
- Share experiences with urban development managers from other countries.

Eligibility Conditions

This programme has been specifically designed for policy makers, public managers, urban planners, transportation experts, engineers, architects, urban designers, Information Science & Technology experts, social scientists, economists, statisticians, finance professionals, community development professionals from the developing countries. Bachelor's degree or diploma or any other relevant qualifications in the mentioned disciplines with at least 3-4 years of relevant experience, and in the age group of 25-55 years, are eligible to apply for the Course. The course will be conducted in English and language proficiency is a must.

Programme Contents

MODULE 1 Understanding the role of "Urban Mobility Ecosystem" for Sustainable Urban Development & Management

This module will introduce the concept and need for Sustainable Urban Mobility and will include:

- 1. Urban Transportation vs Urban Mobility
- 2. Urban Mobility as an Integral part of Sustainable Development
- 3. Need for paradigm shift towards Sustainable Urban Mobility (SUM)
- 4. Present context in fast growing cities adaptation challenges & approaches.

Learning outcomes:

At the end of the session, participants would be in a position to understand the crucial role of Urban Mobility in embracing Sustainable Development visions and step up actions towards the SDG goals 2030, in fast growing urban areas and cities. They will understand the challenges and the adaptational processes required to gradually shift towards these New Sustainable Urban Development models for Global benefit with Local Actions.

MODULE 2 Need for Integration of Urban Mobility Systems to achieve sustainability

This module will expose the participants in moving towards seamless integration across various mobility modes and integrated urban transport hubs.

- 1. Mobility modes Varieties and choices at present and future
- 2. Public , Non-motorised & Private modal integration
- 3. First and Last mile connectivity Challenges
- 4. "Accessibility" a crucial element of interaction & integration.

Learning outcomes:

Participants would be exposed to the behavioral choices & preferences that would unfold based on the present context and the projected economic growth of their respective urban/city areas.

Participants would be guided in visioning IIntegrated Urban mobility systems , with a complementary approach rather than a competing approach for achieving overall economic, social and environmental benefits.

MODULE 3 Policy instruments for Integrated Urban Mobility

This module will highlight the policy level options, directions and interventions required while integrating sustainable urban mobility systems.

- 1. "Decarbonisation and Green mobility" for reducing GHG emissions.
- 2. Reimagining cities- revitalisation of old /dense Urban Neighbourhoods with inclusive, vibrant land use mixes and change in regulations.
- 3. Transit oriented development for emerging New Urban nodes and centres.

- 4. Parking policies.
- 5. Pricing for congestion, pollution and exploitation.

Learning Outcomes:

At the end of the session participants would be in a position to influence policy formulation, decision making process, conceptualise integrated land use and mobility models, design revitalised urban neighbourhoods /plan for Sustainable New Cities and Urban areas with the crux of Transit Oriented Urban development.

MODULE 4 Sustainable Urban Mobility - Mobilising finance

This module will analyse capital investments required for seeding, scaling and operational & maintenance costs for sustaining SUM options.

- 1. Prioritization for financing SUM
- 2. Financial sharing across tiers of Government
- 3. Access to funds International, Central/local Govts, Corporates & community.
- 4. Technical assistance for Increasing capacity of local government to conceptualise, plan, be eligible to implement Sustainable Urban Mobility programmes & Projects.

Learning outcomes:

Participants would be made aware of the bottom up capacity building requirements across Governmental functionaries and organisational set-ups, need for collaboration and stakeholding to be eligible for accessing funding,step up recovery mechanisms to continuously mobilise funds during implementation,break even period and over long range.

MODULE 5 SMART SUM from "vision to action".

This module will introduce Big Data and innovations that can be achieved by embracing integration of digital/technological tools, applications, solutions.

- 1. Data collection by classifying commuter behavioral patterns and data analysis for decision making.
- 2. "Internet of Things (IoT)" for intelligent & integrated solutions of SUM using various tools like GIS, GPS, Wi-fi, mobile apps etc.,

Learning outcomes:

Participants would understand the importance of collection of robust and reliable Big data, need for quick information dissemination, analysis with innovative digital tools, softwares and applications in the digitised/networked world.

Dialogue sessions, case studies from International & Indian experiences, Site visit to complement understanding the ground realities of key themes would enrich the classroom learning experiences.

Course Faculty

HUDCOs HSMI has a core faculty exclusively for undertaking training, research, documentation and networking activities, who are working with HSMI. Further, Resource persons would be from HUDCO in-house professionals, other Development finance Institutions, Indian Institutes of repute with professional expertise in Policy framing, stakeholding, partnership negotiations, International experts online, City managers of Metros, Community experts etc.,

Further, eminent sector experts, officers, functionaries and researchers also act as resource persons in various activities. The officers posted in HUDCO Corporate Office and Regional Offices are also a resource pool for HUDCOs HSMI and these officers are continuously guiding and strengthening HUDCOs HSMI by way of sharing their rich practical experience in the field of urban development. The profile of HSMI faculty and external resource persons is being given separately.

USP of the course

Sustainable Urban Mobility (SUM) offers enormous scope and opportunities for cities in the transforming trajectory of growth. Challenges faced in present times can be addressed efficiently and effectively based on their respective country context through classroom learning, knowledge exchanges about SUM. The course will be conducted with the help of subject experts drawn from the field and professionals as well as senior Government of India rank officials who would sensitise the participants about various aspects related to the subject and also provide strategies and action plans for practical use in the near term.