United Nations Institute for Training and Research

Unitar Online Catalogue

Sustainable Urban Mobility in Developing Countries

□□□□ : 9 □□□ 2012

□□ :	Course
□□ :	Web-based
□□ :	3 □□□ 2012 to 22 □□ 2013
□□ :	16 Weeks
□□□□ :	Governance, , Local Development
□□ :	http://www.unitar.org/ldp
□□ :	US$400.00
□□□□□ email:	e-ldp@unitar.org
□□ :	GIZ

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The rapid and often unplanned and uncoordinated growth of cities has seriously compromised existing transportation systems and significantly increased the challenge of creating future transportation systems especially in developing countries. It is indeed in developing countries that the greatest growth in motor vehicles has been seen in the past few years and is expected in the future, primarily in urban areas. The environmental and social impacts are significant and directly related to quality of life and urban productivity. These impacts

include congestion, energy consumption, air pollution, and traffic crashes. Thus, urban transportation issues are of foremost importance to support the mobility requirements in these growing cities and require new approaches.

However, urban transport is a political rather than a technical issue. The technical aspects are relatively simple. The difficult decisions relate to the type of city we want and the way we want to live. Who is going to benefit from the models adopted? Do we dare to create a transport model different from that of the so-called advanced world cities? Do we dare create a transport system giving priority to the needs of the poor majority rather than the automobile owning minority? Are we trying to find the most efficient, economical way to move a city's population, as cleanly and as comfortable as possible? Or are we just trying to minimize the upper class's traffic jams? These questions are posed by Enrique Peñalosa, the former mayor of Bogotá (Columbia), who introduced a number of sustainable measures in his city.

This online course on *Sustainable Urban Mobility in Developing Countries*, based on the material jointly developed by GIZ and UNITAR, is designed to provide answers to the abovementioned questions, as well as solutions and alternative approaches in the area of urban transport planning that target a more sustainable transport system in Developing Cities.

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The course aims to enhance the capacity of local decision makers and urban and transportation planners to formulate and implement appropriate policies that contribute to sustainability in urban transport in developing countries. It allows an analysis of the important issues of sustainable transport including transport demand management, improved public and non-motorized transport, environmental protection, road safety, and gender in transport. In order to achieve sustainability, it also provides some means such as economic and financial instruments, institutional improvements, capacity building, regulation of markets and environmental standards.

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- Analyze the deficit of conventional transport approaches with respect to sustainability and apply alternative and integrated approaches for transport planning

- Design non motorized transport infrastructures that contribute to pro-poor mobility systems
- Recommend appropriate planning and regulation measures to accommodate for sustainable and safe walking and cycling
- Plan and implement Intelligent Transport Systems
- Plan and regulate bus systems in large developing world cities
- Conduct planning process for Bus Rapid Transit Systems
- Recommend institutional frameworks for the development of integrated regional transport and land-use plans
- Recommend measures to organize institutions in the road and Public Transport sector
- Recommend institutional, legal and regulatory framework for PPP transport projects
- Recommend measures to control transport emissions
- Propose abatement measures to reduce transport noise
- Propose strategies to reduce Green House Gas Emissions
- Design measures to improve transport safety
- Formulate planning and design measures to improve the situation of women in urban transport

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The course consists of 6 modules:

Module 1
Urban growth and strategies for sustainable development
• Transport and urban development policy
• Motorization , transport demand and urban development
• Land use planning and urban transport
• Conventional transportation planning process
• Transportation planning and modeling – new directions

Module 2
Municipal mobility management
• Types and features of Transport Demand Management (TDM)
• Improving mobility options
• Restraining car usage
• Mobility management policies
• Benefits of non motorized Transport (NMT)

- Planning of NMT network and facilities
- Safe road design for NMT
- Planning and implementation of ITS

Module 3
Public transport services
- Choosing a Mass Transit System
- Bus policy objectives and implementation strategies
- Bus Rapid Transit Systems planning phases
- Light rail and Metro Systems
- Regulatory framework for public transport services

Module 4
Management, financing and institutions
- Basis of urban transport financing
- Fuel taxation and urban road financing
- Vehicle taxation and parking fees
- Public transport pricing and finance
- Responsibilities of urban transport institutions
- Institutional reform of the road sector
- Institutional, legal and regulatory framework of PPP in urban transport

Module 5
Energy and environment
- Techniques for air quality management
- Emissions control in cities from developing countries
- Cleaner fuels and vehicle technologies
- Alternative vehicle technologies
- EcoDriving
- Technical features of noise
- Health effects of transports noise and noise abatement measures
- Transport and climate change

Module 6
Safety and social issues
- Accident control and its effects
- Organization of local road safety
- Vehicle safety
- Driver behavior
- Organization of safety and emergency operations
- Importance of public awareness and proposed actions

• Gender and urban transport planning
• Female transport patterns, public transport and women

Learning activities are based on sound adult learning pedagogical principles. They are distributed in such a way to ensure the achievement of the learning objectives in a flexible manner: learning materials can indeed be consulted in a non-linear way so as to provide participants with a high degree of flexibility in choosing the learning pace that is the most adequate to them. Thus, participants are responsible for their own learning throughout the course. All learning activities are moderated by a high level transportation expert.

Learning materials include the following elements:

- Basic reading materials (compulsory) intended to understand the basic concepts and principles of modules' subject-matter;
- Advanced reading materials (optional) for participants willing to learn more about the topic;
- External links to relevant publications, reports and websites;
- Glossaries of terms and of acronyms as supportive learning tools.
- A community discussion board (forum) will allow participants to discuss topics initiated by the course moderator and to post questions, comments or new discussions.

The learning time is estimated to be about 5 hours per week. This includes study time (about 3 hours/week) and participation in collaborative activities (about 2 hours/week). Time dedicated to assessment activities is not taken into account in this estimation.

Course Completion & Certification
Successful completion of the course requires participants to achieve a minimum total score of 70% and entitles to a certificate of completion. A certificate of participation will be issued to participants who took all the exercises but achieved a score inferior to 70%.

Assessment Activities
The assessment activities are organized as follows:

- Self-assessment quizzes which enable participants to analyze their level of knowledge before and during the course, making them able to decide how to approach the learning materials and which parts to focus on. Self-assessment quizzes are not graded and can be taken as many times as desired.
- 6 mandatory quizzes which aim at evaluating participants' comprehension of the course content. The 6 tests altogether account for 30% of the final grade.
- A case study where participants can apply their knowledge practically. The basis of the case study scenario takes as a basis the concrete situation participants' municipality/region faces with regards to urban mobility. Some participants will have to work on a predefined case study scenario. The case study accounts for 50% of the final grade.
- An innovative peer-to-peer review exercise providing an ideal breeding ground for knowledge and experience sharing. Participants evaluate and discuss each other's case study in the framework of specific group forums. Ultimately, the moderator will provide comments and grade to each participant related to his/her review of another participant's case study and subsequent discussions with fellow-participants. The peer-to-peer review accounts for 20% of the final grade.

Course Schedule
The course is divided into 2 phases, with an intermediate break as follows:

Phase 1: 3 December - 21 December 2012 (3 weeks).
Break: 22 December 2012 - 6 January 2013 (2 weeks). During the break, participants will still be able to access the platform and the learning materials, but the course will not be moderated.
Phase 2: 7 January - 22 march 2013 (11 weeks).

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The course is open to urban and transportation planners, decision-makers from local governments as well as representatives of service providers (national governments, private sector, NGOs) and international organizations involved in the transport sector worldwide. It is advisable to have prior basic knowledge of urban transport and/or urban planning issues.