

### **UNESCAP-UNHABITAT**

National Capacity Building Workshop on Sustainable and Inclusive Transport Development

3-4 July 2014, Vientiane

# Integrated transport planning, policy formulation and coordination

Transport Division UNESCAP, Bangkok

http://www.unescap.org/ttdw

**ESCAP Transport Division** 



### Purpose of this presentation:

Two major aspects – integrated planning and policy formulation and coordination of actions

- Purpose of integration
- Dimensions of integration
- Why integration is needed
- Importance of coordination of actions
- Some suggestions
- Way Forward



# Sustainable transport development – some important basic considerations

- Travel is a derived demand the need for travel can be replaced or reduced
- Intricate relationship between activity systems (also known as land use) and transport system – often better solution in other sectoral policies
- Integrated policies and coordinated actions needed to address x-sectoral issues
- Consistent and complementary policies across sectors to have the desired results

**ESCAP Transport Division** 



### **Examples why integrated policy needed:**

- Road safety LPDR target in EST 2 fatalities per 10,000 vehicles by 2020 – can be achieved if coordinated policies and actions by transport, police, health, education
- <u>Dry ports</u> needed for Multi-modal transport Transport Ministry needs policies and actions by other ministries
- <u>Vehicle type and use</u> case of Bangkok, policy contradiction
- Inclusive highway development complementary policies and actions by other ministries needed – for example, rural logistics centres near or by highways



# Tool to support more sustainable and inclusive local development

### How to make better use of the road network?

- Development and promotion of rural logistics centre

   rural supply chain post-harvest losses of cereal due to poor storage and transport, may represent 4-16 per cent of total production; about 50% fresh food and vegetables may be lost on their way to market
- Roadside facilities
   Michinoekis







**ESCAP Transport Division** 

### **Example: Roadside facilities - Michinoeki**







Michinoekis (a Japanese concept) are roadside stations, which provide rest space and social/ commercial service (and can also be a delivery point for some public services)



### Why integrated policies and planning are important:

- Transport has a multi-sectoral dimension integration of plans and policies needed
- Multiple agencies under different levels of Govt.
   require coordinated actions based on integrative policies
- Consistency between policies in different sectors and levels of decision-making
- Greater understanding of effects on other sectors
- Each mode should be planned and used for what it does best – integration needed for seamless transport service (national and urban)

**ESCAP Transport Division** 



### Integrated planning - present practices

<u>Land Use Transport</u> (LUT) Planning – based on a 4-stage travel demand modeling - very similar approach for both national and urban/metropolitan levels - methodologies may differ

Participatory approaches (as may be mandated)

<u>Policy planning</u> supported by studies based on borrowed methodologies developed for traditional LUT planning - most common for both national and urban transport

<u>Strategic choice approach</u> – based on structuring of decision problems, decision graphs, input from technical studies - also requires direct involvement of decision makers



## Integrated transport planning (ITP) - Land Use Transport Planning (LUTP) - Process

Introduced in 1960s – based on a 4-stage demand modeling- modeling methodology vastly improved over decades. LUTP considers:

- Travel is result of people's desire to participate in activities and a firm's logistical needs
- A complex process of interaction between TS and LU
- Transport system is influenced by land use configuration and travel needs of people and businesses –
- Transport supply influence people's home and work location choices and business locations – influencing land use, which in turn influence transport

**ESCAP Transport Division** 

# An operational Land Use Transport Model | Demographic & D



### **Examples of LUTS based ITP:**

- Tens of major cities in US and Europe
- Transport impact (TIS) studies for large projects in many cities including Bangkok, Manila
- National Expressway System Plan ROK; modeling methodology – Computable General Equilibrium Model (CGEM)
- ESCAP study (CGEM based) Impact of AH1
   AH2 and AH14 (part) 2012 Theme study

"Growing Together"

**ESCAP Transport Division** 



### **Major Limitations of LUTP:**

- Lacks sustainable transport orientation
- Limited policy sensitivity
- May not meet the needs of decision-makers
- considered as "black box"
- Lacks political dimension of planning
- Expensive, limited capacity to undertake in DCs
- Environment, energy, pollution etc external to modeling but important to sustainable transport
- Other typical limitations of modeling



### Participatory approaches: why favoured

- Ensures involvement of all actors
- Better understanding of the issues from others' perspectives
- LUTP cannot accommodate all ST objectives
- A negotiated position and consensus on actions (Note: <u>transport is as much political as</u> <u>technical in nature</u>)
- Agreed set of actions and responsibilities

US DOT has a manual for transport applications; Common for local level planning; ESCAP has a manual

**ESCAP Transport Division** 



### Limitations of participatory approaches

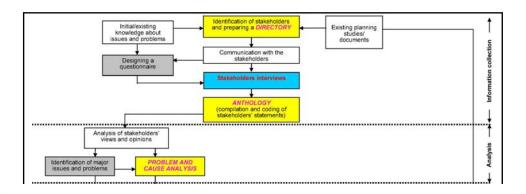
- Lacks substantive contents, knowledge and rigor of analysis
- May degenerate into venting of opinions
- Institutional framework and / or organizational capacity to follow participatory approaches may be lacking



# A compromise: Planning as a strategic choice approach - considers substantive and political dimensions

- Integrative considers a holistic approach
- Interactive supports negotiation
- Transparent clearly understood no "black box" – a common complain for LUT planning
- Communicative and educational
- Authorative analytical and political standards
   Examples: Netherlands' Second Transport Structure Plan; many examples around the world (South Side example is famous)

**ESCAP Transport Division** 



### 预览已结束,完整报告链接和二维码如下:



