Sustainable Transport Evaluation

Developing Practical Tools for Evaluation in the Context of the CSD Process

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The transport paradox

“Transport is unique as the only development sector that worsens as incomes rise. While sanitation, health, education and employment tend to improve through economic development, traffic congestion tends to worsen.”
What is sustainable transport?
Example: Urban transport

Traditional focus was given to road design:
- More infrastructure for cars
- More space for motorized vehicles
- Neglecting of alternative modes such as public transport, walking, cycling

=> Unsustainable focus!
What is sustainable transport?
Example: Urban transport

Sustainable principles shift the focus of policies and investments:
- Less individual motorized transport
- Less flyovers and expressways
- More public transport
- More infrastructure for walking and cycling
- Corresponding institutional setting: Integration of land use and transport planning etc.
What is sustainable transport?

Similar challenges on a national level:

- Fostering more environmentally friendly and energy efficient modes

- More efficient use of existing (road) infrastructure vs. building additional freeways etc.

- …
Summary: Benefits of sustainable transport

- **Better energy security**
  - Lower energy costs
  - Less imported fuel

- **Less externalities**
  - Less noise
  - Better road safety & less accidents

- **Sustainable transport**
- Stronger economic development
  - Reduced congestion & time savings
  - More local jobs

- Increased Quality of Life
  - Increased private investments
  - Better air quality
  - Lower welfare costs (hospitals etc.)

- Better air quality
  - Less health risks

**Summary:** Benefits of sustainable transport
Why do we need indicators & evaluation methods?

- Sustainability challenges in the transport sector are generally widely acknowledged, **but**…
- Policymakers need **information** about specific problems and trends on a national/local level!
- A comprehensive evaluation scheme could provide such information and deliver several **benefits**…:
Benefits of evaluating sustainable transport
Principles for relevant Indicators

- cover all dimensions of sustainability (social, environmental, economic and governance) and correspond to underlying sustainability goals
- selected in a participatory process, involving experts and policymakers
- limited in number
- Preferably include quantitative indicators and additional qualitative information and interpretation
An initial suggestion: Ten key indicators for sustainable transport

<table>
<thead>
<tr>
<th>Dimension/Indicator</th>
<th>Data availability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environment</strong></td>
<td></td>
</tr>
<tr>
<td>Land consumption by transport infrastructure</td>
<td>Low</td>
</tr>
<tr>
<td>Transport GHG emissions per capita</td>
<td>Medium</td>
</tr>
<tr>
<td>Percentage of population affected by local air pollutants</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Equity/Social</strong></td>
<td></td>
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<tr>
<td>Road fatalities</td>
<td>High</td>
</tr>
<tr>
<td>Modal share of PT/NMT</td>
<td>Medium</td>
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<tr>
<td>Share of transport cost from total household expenditure</td>
<td>Medium</td>
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<tr>
<td><strong>Economy</strong></td>
<td></td>
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<tr>
<td>Minimum taxation on fuel</td>
<td>High</td>
</tr>
<tr>
<td>Transport investments by mode</td>
<td>High</td>
</tr>
<tr>
<td>PKM/TKM per unit GDP</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Governance</strong></td>
<td></td>
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<tr>
<td>Participatory transport planning</td>
<td>Low</td>
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</table>
Frameworks for sustainability indicators

- Ranking
- Benchmarking
- SWOT-Analysis
- Audits
- Labels
- Awards
## Existing concepts (selection)

<table>
<thead>
<tr>
<th>Project/concept</th>
<th>Main application</th>
<th>Status</th>
<th>Dimensions of sustainability</th>
<th>Governance</th>
<th>Level</th>
<th>Data availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB/PSUTA – Indicators for sustainable transport</td>
<td>Identification of challenges</td>
<td>Trialled in case studies</td>
<td>Environmental Environmental Social Economic Public participation</td>
<td>Considering the institutional environment and current efforts towards sustainability in transport</td>
<td>Urban</td>
<td>Significant gaps</td>
</tr>
<tr>
<td>SLoCaT Indicators</td>
<td>Transparency and information</td>
<td>Preliminary concept</td>
<td>All levels</td>
<td>Large gaps</td>
<td>All levels</td>
<td></td>
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<tr>
<td>Urban Transport Benchmarking Initiative</td>
<td>Knowledge transfer</td>
<td>Trial phase terminated</td>
<td>Urban</td>
<td>Significant gaps</td>
<td>All levels</td>
<td></td>
</tr>
<tr>
<td>EST Bangkok Declaration</td>
<td>Benchmarking and policy target setting</td>
<td>Preliminary concept</td>
<td>International (urban focus)</td>
<td>Large gaps</td>
<td>All levels</td>
<td></td>
</tr>
<tr>
<td>OECD</td>
<td>Monitoring process toward sustainability</td>
<td>Ongoing (Core indicators only)</td>
<td>International</td>
<td>Some gaps</td>
<td>International</td>
<td></td>
</tr>
<tr>
<td>RMU – Local Agenda 21</td>
<td>Gaining competitive advantages</td>
<td>Trial phase terminated</td>
<td>Urban</td>
<td>Large gaps</td>
<td>Urban</td>
<td></td>
</tr>
<tr>
<td>The Urban Audit</td>
<td></td>
<td>One-time trial (terminated)</td>
<td>Urban</td>
<td>Large gaps</td>
<td>Urban</td>
<td></td>
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<tr>
<td>TERM</td>
<td></td>
<td>Ongoing</td>
<td>International</td>
<td>Significant gaps</td>
<td>International</td>
<td>Significant gaps</td>
</tr>
<tr>
<td>CSD / UNDESA Indicators</td>
<td></td>
<td>Ongoing (last report from 2007)</td>
<td>International</td>
<td>Some gaps</td>
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<td>Some gaps</td>
</tr>
</tbody>
</table>
Existing concepts

Transport and Environment Reporting Mechanism (TERM)

- **Concept:**
  - European Environmental Agency (EEA) is monitoring, assessing and reporting progress towards sustainability
  - Existing data from various sources are used

- **Advantages:**
  - Proven concept on an international level
  - Repeated collection => identification of trends
  - Underlying policy/sustainability goals

=> Template for application on a global level?
Existing concepts in the transport sector

- Insufficient Availability of indicators on a global level
- Currently no scheme is suitable and mature to be used on a global scale
- Huge potential to learn from good practices
Towards Evaluation of Sustainable Transport

**Member Countries**
- Share various challenges with regard to sustainable transportation
- Have a common interest to assess their situation
- Possess some or most of the necessary data

**Forum (CSD)**
- Initiates a discussion about sustainability goals in the transport sector
- Serves as a platform to identify suitable indicators and assessment schemes
- Secures funding from international donors where necessary
- Tasks a neutral agency with implementing the scheme

**Coordinating agency**
- Compiles necessary data from participating parties
- Links with other ongoing work especially in the field of data collection (e.g. UNFCCC emission inventory, poverty research)
- Supports data gathering (surveys, measurement etc.) financially and with technical assistance where necessary
- Is responsible for presentation and dissemination of results
- May provide policy advise and/or link with other relevant stakeholders

Results serve the member countries to assess progress towards sustainability, to receive policy advice and assistance if necessary, and to raise public awareness about sustainable transport.
Thank you for your attention!

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