

ADB Transport Vision 2020: Environmentally Sustainable Transport for All

Manmohan Parkash
Senior Transport Specialist
9 September 2008

ADB

Asia on the Move

- Sustained economic progress
- High GDP growth rates – 6% since 1999
- Share of global exports increased from 16% in 1980 to 27% in 2006
- Rising incomes with resulting decline in absolute poverty

Asia on the Move

- High sustained inflows of capital
- High rates of savings
- Burgeoning intraregional trade and investment
- Improved technological skills and managerial expertise
- Increasing middle class, with increasing resources to save and spend

Transport

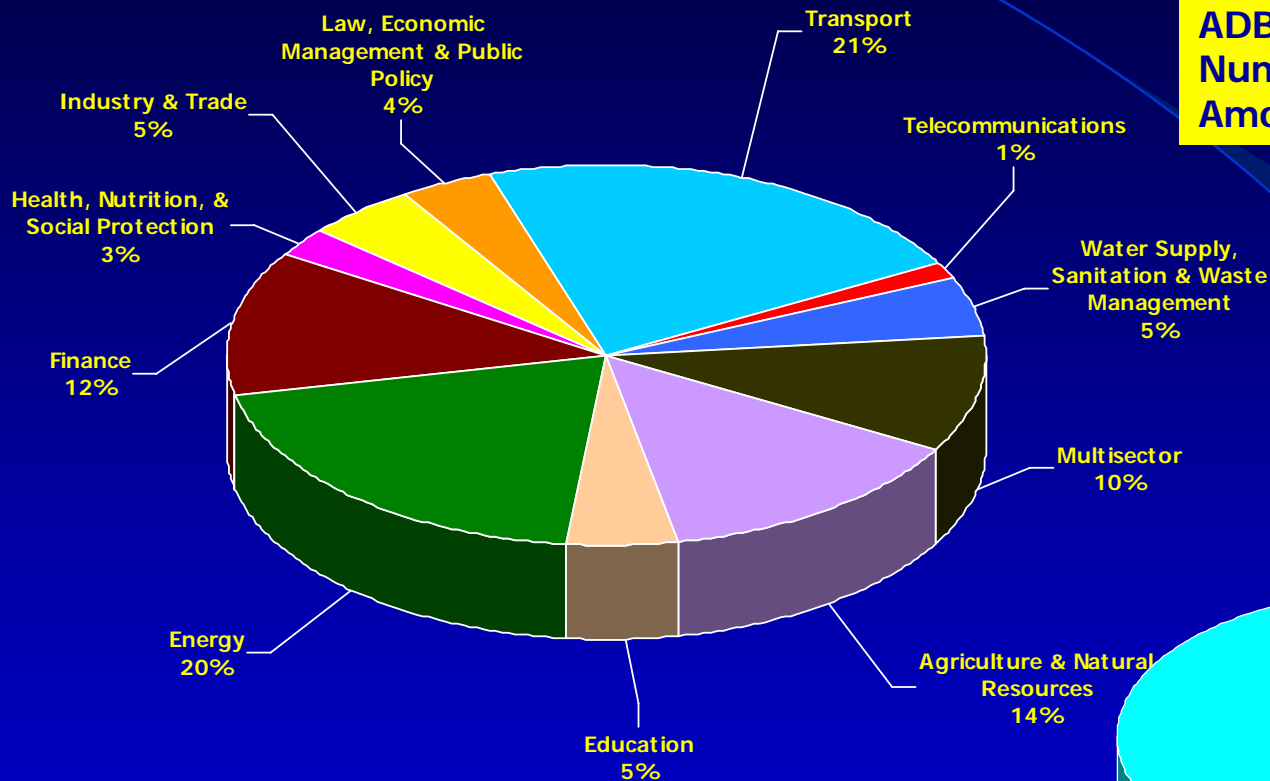
- An intermediate service industry
- Provides added value to other sectors of human life and industry
- Closely linked to economic growth and development

Transport and Development

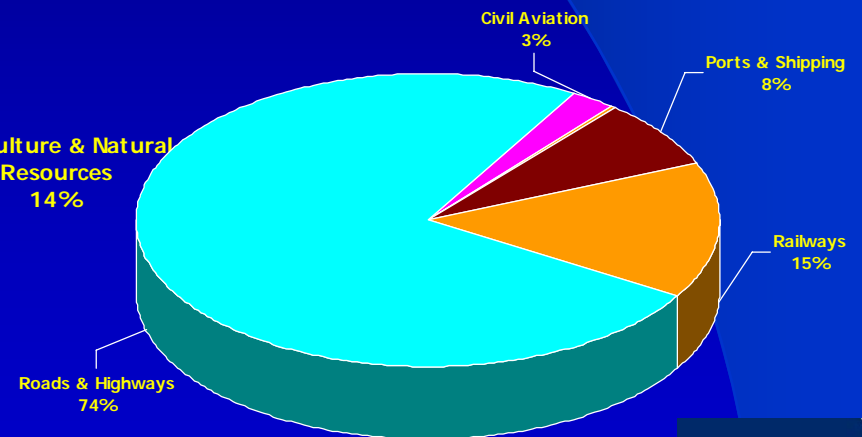
- Close Linkage: Transport and Development
- Moves People and Goods
- Provide connectivity, and accessibility to hinterland, inaccessible, and land-locked regions
- Integration of nations, regions, and beyond
- Development of major cities, towns along roads, railways, and ports
- A key driver of economic growth

ADB and Transport (1966-2005)

ADB's Total Lending:
Number of Loans: 2,198
Amount: \$116 Bn



Transport sector loans: 333
Amount: \$26 Bn



But Challenges remain

- High economic growth
- Increasing regional disparities
- Rapid urbanization
- High energy costs
- Increasing environmental impacts

Trends – World

- Continued high economic growth – will result in substantial worldwide growth in transport use – particularly in Asia
- Trade will continue to grow – so will consumption
- Motorization rate likely to triple between 2000 and 2050

Trends – World

- Container movements expected to increase six fold from 2000 to 2020
- Air passenger traffic will be two and half times higher in 2025 than in 2005
- Air cargo and maritime shipping volumes will be three times higher in 2025 than in 2005

Trends – Asia

- Population expected to increase by 13% in PRC and 37% in India (2000 to 2025)
- Urban population expected to double in Asia (2000 to 2025)
- 50% of world's poor (600 million) live in Asia and Pacific
- Poverty increasingly becoming an urban phenomenon

Trends – Asia

- Home to 200 cities with a population of more than 1 million
- Home to 10 of 25 world's largest cities

Cities are Growing

- By 2015 – population of Mumbai, Shanghai, Jakarta, and Karachi will be 20–30 million
- By 2015 – nine cities will have population of 10–20 million

Impacts

- Transport is almost entirely dependent on oil/fossil fuels
- Transport sector used over 20% of total energy consumption in 2005
- Growth in transport demand will lead to increased demand for oil and substantial increase in CO₂ emissions

Impacts – Energy Use

- Emerging Asia will account for much of future consumption growth in oil and GHG emissions due to economic and population growth by 2025
- On road transport fuel consumption expected to grow 6 times in India and 3.5 times for PRC (2005 to 2035)
- Emerging Asia to account for 45% of the total world increase in oil use by 2025

Impacts – Energy Use

- PRC's energy use for transportation projected to grow by 5.5% per year (2005–2030)
- India's energy use for transportation sector projected to grow by 6.1% (2005–2030)
- Emerging Asia – a net oil importer
- More than 50% of oil consumption is imported

Impacts – Vehicle Use

- Increase in per capita income will increase vehicle ownership
- 10 countries in the world with highest private-vehicle future demand index are in Asia – PRC, India, Indonesia...
- Motorization rates in some countries doubling every 5–7 years
- 2006–2009 – additional 35 million vehicles (excluding 2- and 3-wheelers) of which 80% in the PRC

Impacts – Vehicle Use

- PRC – 45 personal vehicles for every 1,000 people, of which only 17 are 4-wheelers compared to 530 in Japan of which 430 are 4-wheelers
- In emerging Asia – Car and SUV ownership rates are likely to grow much faster than GDP
- SUVs are inefficient – leading to higher fuel consumption and increased GHG emissions

Impacts – Vehicle Use

- Active population of cars and SUVs in the PRC forecast to grow 15 times its present size in 30 years (12.9 million in 2005 to around 193 million in 2035)
- India – 13 times (6.2 million in 2005 to 80 million in 2035)
- Two wheelers: PRC – 2.4 times (55.3 million to 130 million) and India – 6.6 times (35.8 million to 236 million)

Impacts – Emissions

Transport accounts for:

- 13% of all world green house gases (GhG)
- 23% of CO₂ emissions from fuel combustion of which
 - Road transport - 75%
 - Aviation - 11.5%
 - Maritime - 10.3%
- Cars and SUVs account for 10% of global CO₂ emissions

Impacts – Emissions (2005–2030)

- Increase by 57% (worldwide)
- PRC and India account for 56% of increase in this period
- In the PRC transport related CO₂ emission increases four-fold
- Increases to 27% from 19% of total emissions
- India-transport emissions increases to 13% from 8% of total emissions

Transport – Key Challenges

- Energy security
- Climate change
- Congestion
- Air quality
- Traffic safety
- Quality of life

A Reality

Combination of accelerating incomes, urban growth, and accelerating vehicle ownership will

- lead to environmental disaster and
- affect economic development of Asian cities and economies

A Reality

Such considerable increases in the number of vehicles, congestion, and fuel consumption will

- threaten to severely limit the quality of life and economic growth of Asia, and
- increasingly contribute to climate change which has a severe implication and will require substantial adaptation in many areas

-Need for a Change

How to Affect Change?

Align with ADB's Long Term Strategic Framework or Strategy 2020

- Corporate Vision: An Asia and Pacific Region free of Poverty
- Mission: Help DMCs reduce poverty and improve living conditions and quality of life

Strategy 2020

Three complementary agendas

- Inclusive economic growth
- Environmentally sustainable growth
- Regional cooperation and integration

Strategy 2020

Focus into Five Core Areas:

1. Infrastructure
2. Environment, including Climate Change
3. Regional Cooperation and Integration
4. Financial Sector Development and
5. Education

Transport Vision 2020

Promote an environmentally sustainable transport system that is **inclusive** and helps in achieving **sustained and equitable development**, improving the **quality of life** and eradicating **poverty**

How to Implement?

- Business as usual approach is not going to work and is unsustainable
- Incremental approach needs to be replaced with a Paradigm shift

Paradigm Shift

Decouple growth in transport from

- rising fuel demand and CO₂ emissions, and
- economic and population growth

Paradigm shift – How?

- Promote Environmentally Sustainable Transport
- Shift focus from mobility to accessibility

Environmentally Sustainable Transport

Long term goal:

- Absolute reduction or decoupling of transport demand from economic and population growth

Immediate goal:

- Initiate reduction in annual increase of energy demand and CO₂ emissions

Environmentally Sustainable Transport

Reduction of transport demand, volumes, and emissions to be supported by relevant policies such as:

- Land use planning
- Fiscal, industry, regional, and spatial planning policies

Environmentally Sustainable Transport

- Need an integrated approach with better coherence between these policies
- Used as actively and widely as possible all kinds of policy instruments – economic, legislative, and technical instruments to reduce transport demand and related emissions
- Economic instruments can be used more widely to have an impact on transport behavior and consumer choices

Environmentally Sustainable Transport

- Central platform for enhancing sustainability including energy efficiency; and inclusiveness in the transport sector
- Set out detailed plans for enhancing the energy efficiency and wider sustainability of the transport sector
- Should aim at the review of all existing and potential policy interventions with the overall aim of achieving an environmentally sustainable transport system by 2020

How Can ADB Help?

- Total investments expected in Asia's transport sector upto 2020: \$2–3 trillion
- Possible ADB support for transport sector: \$20–30 billion or about 1%
- ADB support – to be well targeted, add significant value, and a catalytic role

ADB: A Partner and a catalyst for change

ADB: A Partner and a Catalyst for Change

- Reorient transport strategy to promote environmentally sustainable transport
- Diversify operations – promote urban transport, railways, and water transport
- Change focus from construction to investment support for infrastructure that values full societal benefits of energy efficiency gain
- Lead cross sectoral measures such as policy and regulation to help create conditions for change and support sector-specific actions

ADB: A Partner and a Catalyst for Change

- Demonstrate long-term commitment to agenda/policies, creating a stable environment for market interest and investment
- Focus on soft support particularly on development of regional and national strategies, policy related issues, research, and capacity development
- Raise awareness, build support, commitment and momentum for good practices, efficiency products, and services

Influence Policy Makers to Change

ADB: A Partner and a Catalyst for Change

- Focus to shift from traditional model of development banking
- Promote new modalities of development assistance and financial resources
- Promote innovation and superior knowledge

ADB: A Partner and a Catalyst for Change

- Helps DMCs gain access to long-term funds at reasonable rates, manage risks, take collective action, and deploy cutting-edge knowledge and technical services to complement financing
- Supports improved governance, catalyze private investments, and arrange partnerships with a broad range of institutions

ADB: A Partner and a Catalyst for Change

ADB: A focal point for cooperation and coordination in the development of environmentally sustainable and inclusive transport sector of the Asia and Pacific region

ADB Transport Forum

- Discuss the emerging challenges in the transport sector of Asia and the Pacific
- Discuss possible strategies
- Learn from experience
- Seven key topics

Key Topics of ADB Transport Forum

- Transport and Climate Change
- Rural Transport Accessibility
- Urban Transport Mobility
- Improved Governance
- Inclusive Transport and Social Development
- Road Safety
- Innovative Finance

Conclusion

- Asia and Pacific region is growing rapidly
- Faces key challenges of inclusiveness, environmental impacts and sustainability
- People's aspirations are changing
- Requires a paradigm shift in approach, innovative thinking, and cooperative actions/relationships
- Promote Environmentally Sustainable Transport
- ADB's role: A Partner and a Catalyst for Change
- Transport Forum: A key engagement with stakeholders

Vision 2020

Asia and Pacific:
A great place to live, work,
visit and do business

ADB

Thank you

For further details, contact
mparkash@adb.org

ADB