Presentation 7TH REGIONAL EST FORUM IN ASIA (BALI, INDONESIA 23-25 APRIL, 2013)

Secretary, Environment Protection Department, Punjab, Pakistan

SECTOR OVERVIEW (PUNJAB)

Total Population: Share in Pakistan's GDP: Literacy rate: Transport Authority: Legislation: 93,963,240 (Punjab) 54.7% 59.9% Punjab Transport Department Motor Vehicle Ordinance, 1965 Motor Vehicle Act, 1939

Projects Planned 2013: <u>http://www.pndpunjab.gov.pk/user_files/File/Major%20</u> <u>Development%20Initiatives.pdf</u>

SECTOR CHALLENGES

- Absence of Mass Transit System, inefficient & poor condition of public transport
- Insufficient traffic management, poor junction design and lack of traffic control
- Encroachment of road spaces and public right of way
- Roadside commercial activities and absence for sidewalks, bus stops/shelter, roadside garbage and garbage collection containers
- Illegal &/or totally uncontrolled parking
- Disorderly traffic: mixed of animal-drawn carts, auto rickshaws and bicycles and pedestrians

LAND USE AND TRANSPORT PLANNING

Actions taken:	Largely in Place
Challenges	Examples of Pilot Projects
Interventions at the policy and planning level, legislative framework and it implementation strategies	Strategic Environmental Assessment (SEA) for Spatial/Land Use Planning of Islamabad/ Rawalpindi by IUCN
Unplanned outward city expansion /rapid urbanization/population growth/Population congestion	Punjab Cities Improvement Investment Programme (P & D D Punjab)
Increasing trend of low density commercial and residential development	City Development Master Plans (P & D D Punjab)
Rural areas land use and transport planning an ignored subject	

Actions Planned: EPA will finalize the first/pilot SEA for land use planning in the country in coordination with IUCN , Pakistan.

MIXED-USED DEVELOPMENT

Actions Taken:

Challenges	Examples of Pilot Projects
Mixed-use development: complicated, costly and risky	Land use rules for different cities (small and large) describing land zoning
Lack of specialized experts and financial resources	City master plans/land zoning
Increasing trend of medium-to-low- density housing schemes	Neighborhood commercials zoning, main street residential commercial, shopping mall conversions, live work

INFORMATION & COMMUNICATION TECHNOLOGIES

Actions taken: Not Yet	
Challenges	Examples of Pilot Projects
Resources constraints	Private sector interventions
Technological constraints	
Lack of research opportunities	

NON-MOTORIZED TRANSPORT

Actions taken:

Challenges	Examples of Pilot Projects
Social segmentation	Tongas, cycles, bicycles are
Encroachment	still an integral part of
Gender sensitive environment	conveyance facilities i.e. the poor segment of the societies
Weather/climatic conditions	
Non provision of pedestrian walkways	

PUBLIC TRANSPORT SERVICES

Actions Taken:

Challenges	Examples of Pilot Projects
Population growth vs. existing facilities	Rapid Bus Transit System
Private sector monopoly	Intercity bus services
Declining energy resources	Intra city bus services
High costs of transportation	Railways
Absence of road infrastructure in rural communities	Rikshaws/tongas
Cost regularization /pricing mechanism	
Mismanagements in Pakistan Railways /National Airline	

TRANSPORTATION DEMAND MANAGEMENT

Actions taken:

Challenges	Examples of Pilot Projects
Lack of awareness/information/ technologies	Development of road infrastructure
Development of new road infrastructure	
Reviving Pakistan Railways	Administrative changes in the
Distribution of travel demand vs. cost and infrastructure	national railways and airline system to improve efficiency
Political pressures	Town planning/city planning

INTER-CITY PASSENGER & GOODS TRANSPORT

Actions taken:

Largely in Place

Challenges	Examples of Pilot Projects
Pakistan Railway Network downfall	Pakistan Railway Network
Private sector monopoly	Heavy Duty Vehicles
Air freight/cargo	
Lack of road infrastructure	

Actions Planned: 37 new projects planned for infrastructure development of Pakistan Railways in 2013

http://www.dailytimes.com.pk/default.asp?page=2013%5C03%5C26%5Cstory_26-3-2013_pg5_11

TRANSPORT FUEL AND TECHNOLOGIES INNOVATIONS

Actions taken:



Challenges	Examples of Pilot Projects
Lack of planning and policy making tools	Policies to promote use of natural gas
Lack of research and development funds/facilities	
Lack of availability of environment friendly fuels like CNG	

STANDARDS FOR FUEL QUALITY

Actions Taken: <u>Some (designing-piloting)</u>

Challenges	Examples of Pilot Projects
Stringent emission standards and its implementation challenges in the current	Following Euro II fuel emission standards
socio-economic and political situation of Pakistan	NEQS for motor vehicle exhaust and noise – EPA Pakistan
Lack of research and development facilities	
High sulfur content diesel and sub-standard petroleum products	

PERIODIC VEHICLE INSPECTION AND MAINTENANCE

Actions taken:

Challenges	Examples of Pilot Projects
Resource constraints at the Vehicular Inspection and Examiner Department	Punjab Vehicle Inspection and Certification System
Tax relief and subsidization at individual and institutional level	Rules and Regulations for Vehicle inspection and maintenance i.e. Motor Vehicles Rules , 1969
	National Environmental Quality Standards (NEQS) for exhaust emissions – EPA

INTELLIGENT TRANSPORTATION SYSTEM

Actions taken: Largely Placed

Challenges	Examples
Restricted to urban settings	ITS surveillance system on intercity road
Technological impediments	infrastructures e.g. National Highways and Motorways
Geographic Information System (GIS) applicability	ITS-Based Traffic Management Model for Karachi
Education and awareness level of general masses	Print media campaign for optimal utilization/protection of Public sector Transport Facilities e.g. Metro Bus Service

Actions Planned: completion of Metro Bus System and devising a maintenance strategy for its operational phase

FREIGHT TRANSPORT EFFICIENCY (Road, Rail, Air)

Actions Taken:

Challenges	Examples
Air vs. Rail freight network	Administrative restructuring of Pakistan
Lack of competition and market failure	Airline
Resource efficiency, effectiveness and utilization	Administrative restructuring and infrastructure development for Pakistan
Energy/fuel efficiency of freight transport	Railways
Institutional and policy framework and local/regional planning	Developing loading/unloading point for HOV
Rural vs. urban freight transport	Devising market reform strategies for
Research and innovation	agriculture sector goods transportation

ZERO FATALITY TRANSPORT POLICY

Actions taken: <u>Largely in Place</u>		
Challenges	Examples of Pilot Projects	
Institutional issues: Lack of coordination, cooperation, collaboration among safety stakeholders	National Road Safety Secretariat (NRSS) -established in September, 2006	
Pedestrian especially vulnerable road users and their road safety awareness level	Drivers licensing	
Public transportation and road infrastructure issues		
Vehicle safety issues caused due to a lenient inspection and monitoring system		
Legislative framework and weaknesses in the implementation mechanism		
Insufficient hospital/emergency response system	Post accident care system e.g. Rescue 1122	

Actions Planned: Establishment of vehicle inspection and certification system in Punjab by Transport Planning Unit, Transport Department, Pakistan

MONITORING OF HEALTH IMPACT FROM EMISSIONS

Actions taken:

Largely in Place

Challenges	Examples of Pilot Projects
Technological impediments for surveillance/pollution monitoring	EPA to set up air quality monitoring stations at appropriate locations
Resource deficiencies: financial and human resource	EURO II standards to be followed strictly by vehicle owners/fuel production/importing units.
Implementation of NEQS /EURO II Standards is becoming difficult due to fuel quality	New vehicle emission standards and corresponding fuel quality for Lahore
Awareness among concerned stakeholders	

Actions Planned: Phasing out of two stroke engine rikshaws & introduction of 4 stroke CNG Motorcab/Autocab Rikshaws

AIR QUALITY AND NOISE STANDARDS

Actions Taken:

Some (Piloting-Design)

Challenges	Examples of Pilot Projects
Insufficient fund/resources	Establishment of Ambient Air Quality Monitoring Squad & Stations by City
Technological impediments	District Government
Awareness and capacity building initiatives	
Revision of NEQS for Transport sector	Application of EURO II Standards promotion of Lead free fuel

Actions Planned: Phasing out of two stroke engine rikshaws & introduction of 4 stroke CNG Motorcab/Autocab Rikshaws

GLOBAL CLIMATE CHANGE & NATIONAL ENERGY SECURITY

Actions Taken: Largely in Place

Challenges	Examples of Pilot Projects
Hindrances in policy formulation and implementation and absence of a strategic framework for climate change mitigation	Clean Development Mechanism and carbon credits/certified emission reduction projects
No formal research has been done to assess the GHG emissions from air, water, in land means of transport	Promoting use of CNG
Emission reduction and monitoring plans	Pakistan Iran Gas Pipeline Agreement to overcome the current energy deficit in the country
Biofuel/alternate sources of energy for transport sector	
Capacity building and awareness	

FINANCING MECHANISM

Actions Taken:

Largely in Place

Challenges	Examples of Pilot Projects
Efficient resource distribution/utilization	Rapid Bus Transit Project/Lahore Ring Road Project
Infrastructure investment gap	Provincial highways/infrastructure development
Infrastructure need (demand vs. supply)	Urban development including transport sector reforms

Actions Planned: Green Fund was established to incentivize cleaner fuel and vehicles / involve State Bank of Pakistan for Green Financing of Transport Industry

FINANCING MECHANISM

Actions Taken:

Largely in Place

Challenges	Examples of Pilot Projects
Efficient resource distribution/utilization	Rapid Bus Transit Project/Lahore Ring Road Project
Infrastructure investment gap	Provincial highways/infrastructure development
Infrastructure need (demand vs. supply)	Urban development including transport sector reforms

Actions Planned: Green Fund was established to incentivize cleaner fuel and vehicles / involve State Bank of Pakistan for Green Financing of Transport Industry Thank you