



IBTTA 79th Annual Meeting and Exhibition
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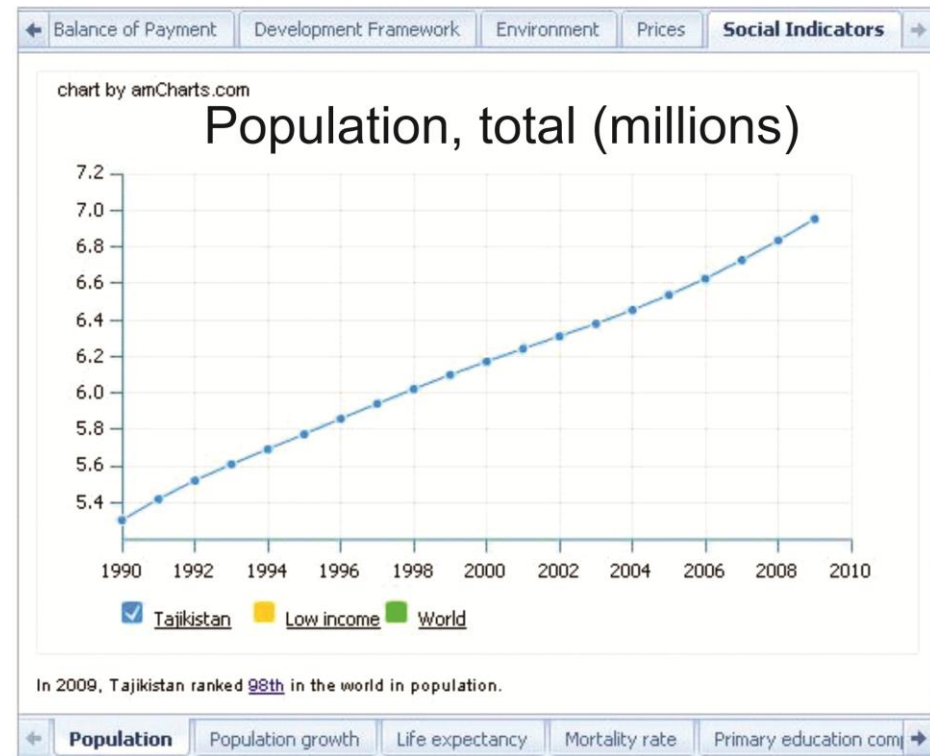
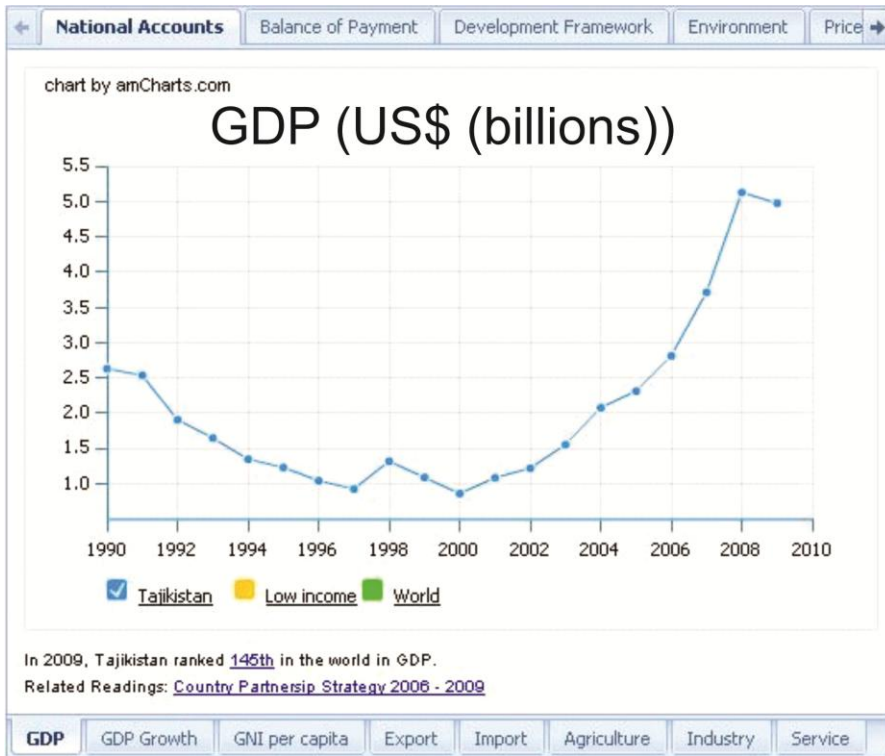


**INNOVATIVE ROAD
SOLUTIONS**

**Institutional Innovative Mechanism
in Toll Road Industry**
**Case study – Public Private Partnership (PPP) Dushanbe-
Chanak Project, Republic of Tajikistan**

Presenter: Mr. Ilkhom Shoev, CPA, MSA, MS
Berlin,
September 11-14, 2011

Tajikistan at Glance



Real GDP growth (ave) 8%*
 Ex. Public Debt, 33% of GDP
 GDP per ca 700 USD**

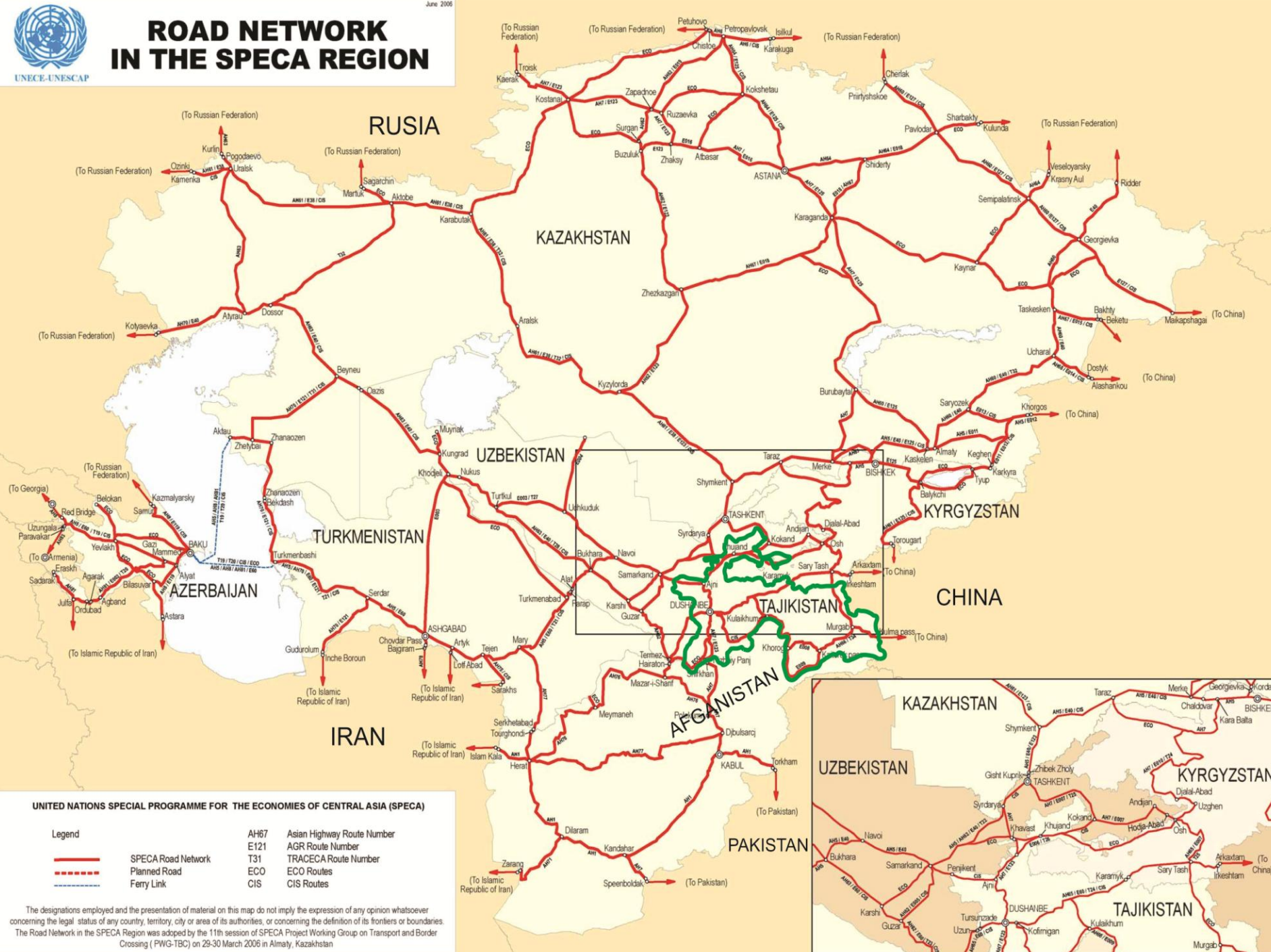
Territory – 143,100 km²
 Topography – 93% mountains
 Borders – UZ / KG / CN / AF

* 2005-2009 years, ADB, Transport outlook

** 2009 year ,



ROAD NETWORK IN THE SPECA REGION



UNITED NATIONS SPECIAL PROGRAMME FOR THE ECONOMIES OF CENTRAL ASIA (SPECA)

Legend	AH67 Asian Highway Route Number
	E121 AGR Route Number
	T31 TRACECA Route Number
	ECO ECO Routes
	CIS CIS Routes

The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever concerning the legal status of any country, territory, city or area of its authorities, or concerning the definition of its frontiers or boundaries. The Road Network in the SPECA Region was adopted by the 11th session of SPECA Project Working Group on Transport and Border Crossing (PWG-TBC) on 29-30 March 2006 in Almaty, Kazakhstan

Infrastructure Network Profile

Road profile *

Network	Km	%
Local roads	8670	62
Republic roads	2120	15
International roads	3178	23
Total Road network:	13968	100

Country Annual Road State Budget – \$8,000,000 which complies with 15% of required amount and equal to \$572 per km.

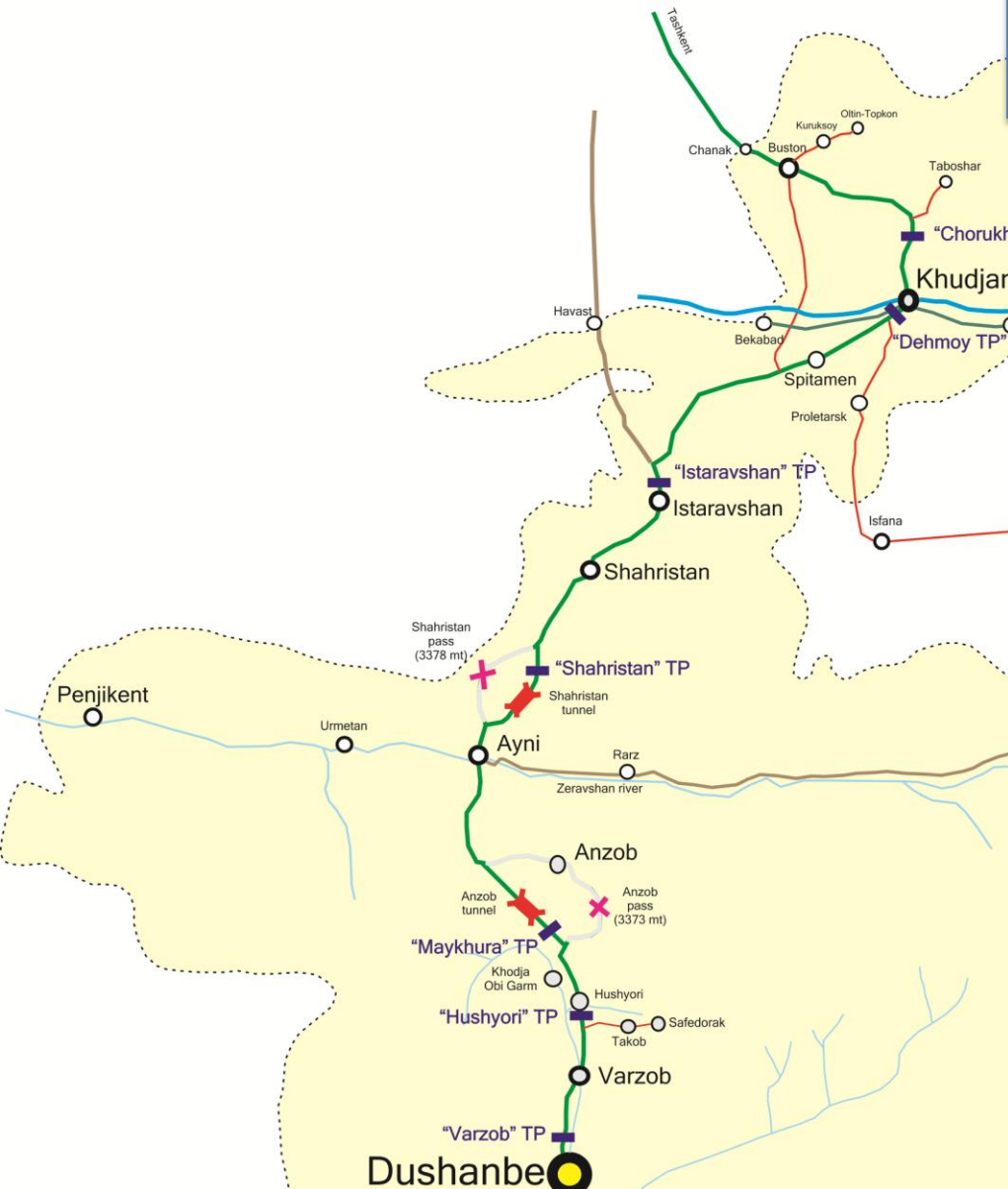
Local transportation

	Passenger traffic %	Freight traffic %
Road transport	99,8	96,6
Railway transport	0,2	3,4
Air transport	Insignificant	Insignificant

International transportation

	Passenger traffic %	Freight traffic %
Road transport	27	3,5
Railway transport	32	95,9
Air transport	41	0,6

Dushanbe-Chanak Toll Road Project



- Length – 358.2 km
- Width – 7-11 m
- Category – II / III
- Bridges – 58/2447m
- Tunnels – 3/11253m
- Galleries – 21/3290 m
- Road type – open
- Qty of crosses – 247
- Population along the road – over 2 mil.
- Altitude range – 247-2700
- Topography – Mountains

Dushanbe - Chanak Road Before Rehabilitation



WHY Tolling framework must be introduced in Tajikistan (1)



- Government inability to adequately maintain Road Project given its rehabilitation was externally financed by Chinese Loan \$281 Mln
- Reducing the financial burden from the state budget towards enhanced demand for current maintenance spending of road infrastructure (i.e. Tunnel, Bridge, Galleries Mountain Roads Force Major threats)
- Increasing State Budget's savings from current spending towards servicing public debt to China
- Ambitious spending already required to fix the road, utilized 3 years before it was transferred to private concessionaire
- Providing an access throughout a year between capital and north part of the country (currently 6 month limitation due to heavy snowfalls, lack of timely road services)

Primary Goals of Toll Road Framework in Tajikistan (2)



- Attracting private investment through PPP framework in a country with a challenging investment environment (FDI = 5% of GDP)*
- Creating additional job opportunities & increasing their household income for 580 local people
- Introducing an efficient know-how technology in modernized tolling infrastructure
- Creating institutional capacity in road management industry by educating local human capacity
- Maintaining the value of the concessional assets and quality of the road by transforming from unsustainable towards sustainable long term path
- Diminishing costs to road users by shortening travel time (up to 48 hours to 3-5 hours) and distance (from 400 to 348.2 km), providing unmatched comfort, saving thousand lives and money

Setting an Institutional Tolling Framework

- Implementing an open type of tolling system,
- Installing 7 tolling plazas along the road,
- Simplifying all types of vehicles into 4 categories, (I- up to 2 ton, II – up to 7 ton, III – up to 14 ton, IV – over than 14 ton)
- Introducing cash based semi-automatic system of payment at initial stage of the project
- Setting an additional surveillance and monitoring system through fiber system



Creating Regional Road Management System

- Setting 4 ambitious technical bases with 3 regional offices
- Supplying more than 100 units of specialized road maintenance machineries
- Employing local road professionals (engineers, mechanization experts, technical staff, etc (580 people))
- Due to lack of professional services provided by contractors or (sub) in the country on road rehabilitation purposes, concessionaire does all the work i.e., make available use of internal funds and technical capacity



Social Responsibility

- Providing significant discounted fares for local road users by Road Operator given government's limited resources to compensate safety nets to low income households
- Campaigning safe driving habits via multiple multimedia equipment as well as the removal of road police throughout the road
- Establishing unmatched customer service (24 / 7)
- Accountability to the public, enhancing transparency through annual reporting



- Improving security and collaboration with government to prevent crime etc

▪ Environmental benefits

Average traffic time reduced (from 24 hours to 4 up to 6 hours) Target is 3 hours!

Global challenges (1)

✓ **Geographic barriers**



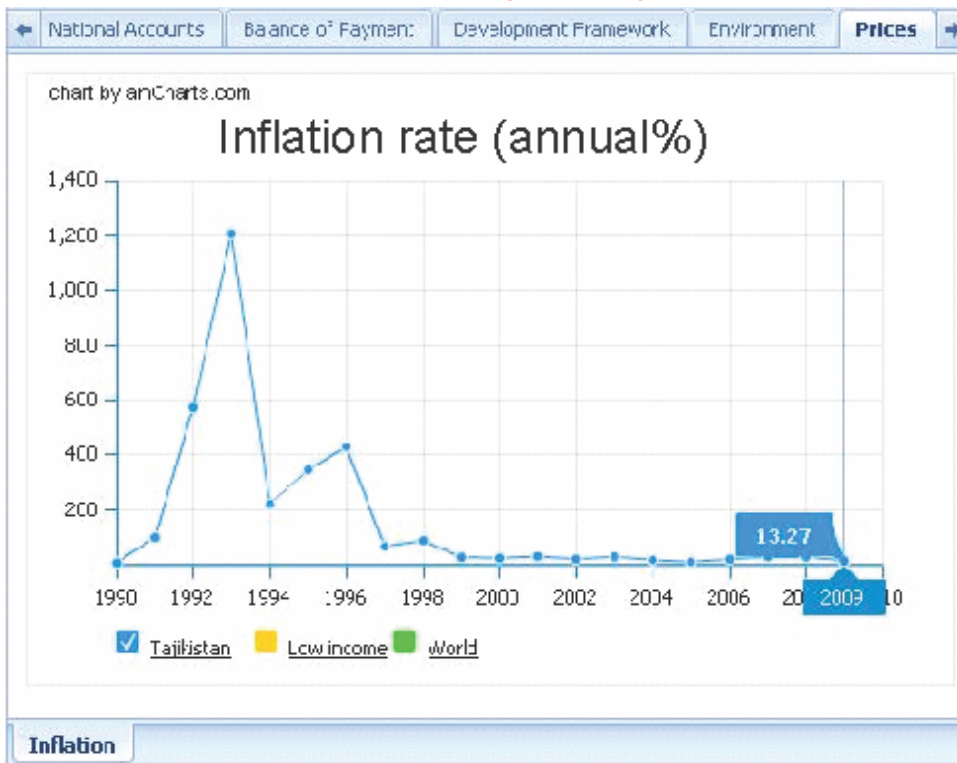
✓ **Climatic constraints**



Project key challenges (2)

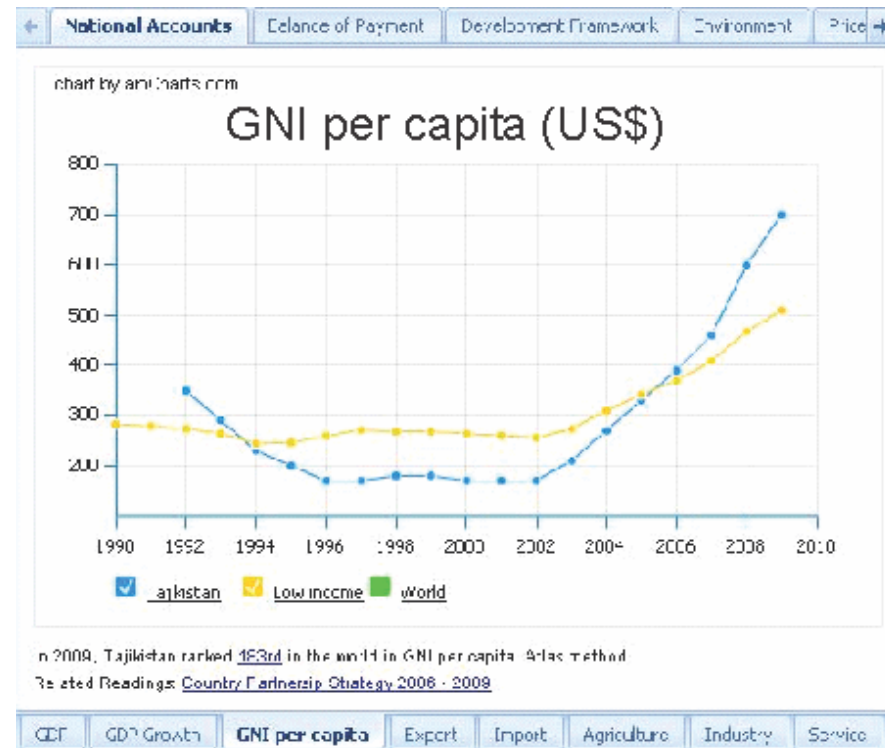
✓ Financial indicators

Fluctuating exchange rate (6.02%)
&
Inflation rate (14.5%)



✓ Socio-economic indicators

Poverty (53%)*



* 2007, ADB, Tajikistan Transport Outlook

Systematic challenges (1)

✓ Extremely low traffic flows

✓ 70 % of cargo vehicles are old
✓ Overloaded vehicles



Systematic challenges (2)

- ✓ Legislation requires further improvements
- ✓ Operational challenges

- ✓ Initial social protest due to unfamiliarity with the system and local mentality,
- ✓ From transitional to market oriented reforms



Short Term Project Achievements

✓ Higher level of public acceptance (yet with some conservatives)

✓ Accelerated road rehabilitation and maintenance process



Short Term Project Achievements

- ✓ Gradually striving towards improving the regulatory framework in toll road system,
- ✓ Increasing the role of private sector in one of the transitional economies in the region
- ✓ Obtaining consecutively within two years recognition awards by one of the top ten corporations in the world, XCMG: “Best Partner in 2010”, “Innovation of the Year in 2011”



Company's Strategic Development Plan (SDP) 2010-2015

- Modernization and up scaling current toll road system
- Widening toll plazas to avoid traffic and provide faster services (given limited physical structure of the road)
- Development of forecasting system based on the data obtained by surveillance to headquarter
- Building road supporting technical infrastructure (i.e., mobile asphalt and stone crusher plants, specialized vehicles tailored to specifics of this project)
- Maintaining corporate ethics and social responsibilities
- Replicating existing institutional innovative mechanism to other similar projects by executing expansion strategy of SDP 2010-2015 and Business Plan 2009

Tajikistan's solution – tolling is for better future!





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Dushanbe - Chanak
project presentation

Thank you!

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