

# **NEEDS AND BENEFITS OF INFRASTRUCTURE INVESTMENTS IN CAREC REGION: 2016-2030- AN OVERVIEW**

**Presented by: Yergali Dosmagambet, Ph.D**  
**Deputy Director**

# RATIONALE OF THE STUDY

- World is witnessing very slow growth in advanced economies such as US, Japan and Europe as well as in emerging economies;
- For sustainable growth & resilience against external shocks, CAREC region needs to rebalance their export-oriented (mostly to advanced economies)/commodity-driven production and growth towards CAREC/Asian markets & regional demand, & trade-driven growth through increased intraregional infrastructure connectivity.



## RATIONALE CONT....

- Large national/regional infrastructure projects involving several CAREC countries for enhanced connectivity can:
  - (i) Act as new engines for inclusive and sustainable growth;
  - (ii) Create large employment opportunities and increased investment, not only in the projects itself, but can also have multiplier effects on secondary and supporting industries and supply chains;
  - (iii) Enhance national/regional competitiveness and productivity.



<b>Country</b>	<b>Estimated Investment Needs (US \$ Million)</b>	<b>Total Investment Per Year</b>	<b>Total Investment Per Capita (US \$)</b>	<b>New Capacity (investment as % of total)</b>
<b>Afghanistan</b>	<b>26142</b>	<b>2377</b>	<b>901</b>	<b>57</b>
<b>Azerbaijan</b>	<b>28317</b>	<b>2574</b>	<b>3262</b>	<b>64</b>
<b>People's Republic of China</b>	<b>4, 367, 642</b>	<b>397058</b>	<b>3297</b>	<b>72</b>
<b>Kazakhstan</b>	<b>69538</b>	<b>6322</b>	<b>4436</b>	<b>61</b>
<b>Kyrgyz Republic</b>	<b>8789</b>	<b>799</b>	<b>1655</b>	<b>38</b>
<b>Mongolia</b>	<b>10,069</b>	<b>915</b>	<b>3812</b>	<b>37</b>
<b>Pakistan</b>	<b>178558</b>	<b>16233</b>	<b>1075</b>	<b>53</b>
<b>Tajikistan</b>	<b>11468</b>	<b>1043</b>	<b>1678</b>	<b>47</b>
<b>Turkmenistan</b>	<b>Not Available</b>			
<b>Uzbekistan</b>	<b>41764</b>	<b>3797</b>	<b>1529</b>	<b>48</b>
<b>CAREC Region</b>	<b>4,742,287</b>			

# OBJECTIVES OF THE STUDY

- **Infrastructure financing needs for CAREC economies are available until 2020 (Bhattacharyay, 2012). For long-term planning, these are required for a longer period up to 2030;**
- **CAREC institute is undertaking a study on “Needs and Benefits of Infrastructure Investments in the CAREC Region: 2016-2030;**
- **Objectives of the study are as follows:**
  - (i) To update financing needs for infrastructure of the CAREC region (by country) for 2016-2030;**



## OBJECTIVES OF THE STUDY CONT...

- (i) To estimate potential benefits of such investments for CAREC region in terms of income;**
- (ii) To measure potential benefits of the implementation of trade facilitation in existing CAREC infrastructure (transport corridors);**
- (iii) To provide policy recommendation to develop quality & efficient infrastructure and enhance connectivity in the CAREC region.**



# SCOPE OF THE STUDY

- **Update infrastructure investment needs of CAREC countries for 2016 – 2030 based on the estimation by the paper of Bhattacharyay (2012);**
- **Use “The standard Global Trade Analysis Project” (GTAP) models to estimate potential benefits of such investments by country, neighboring countries and the global economy;**



# SCOPE OF THE STUDY CONT...

- Use GTAP model to estimate impact or benefits trade facilitation, by incorporating time & monetary costs reduction parameters computed from existing data of ADB and WB.
- The study will include 10 countries: PRC, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, Uzbekistan, Afghanistan and Azerbaijan;





## METHODOLOGY

- At the 1st stage, financing needs of CAREC region countries are estimated by a simple model using findings of the paper of Bhattacharyay (2012) & the forecast of key economic parameters, namely GDP & inflation;
- The model will assume a fixed relationship between infrastructure need and key economic parameters such as GDP and inflation— consistent with results of ISA study.



## METHODOLOGY CONT....

- At the 2nd stage, following the methodology of the ISA study, these estimated financing needs at the first stage will be fed into a GTAP CGE model to find the impact of these investments on the economy; and
- For estimating the impact of trade facilitation, the study may use ADB's "corridor performance measurement and monitoring" (CPMM) results or WB Logistics Indicators as parameters in the GTAP models.



# EXPECTED CONTRIBUTIONS OF THE STUDY

- **Updating existing information and knowledge of CAREC region, in terms of infrastructure investment needs, and the potential benefits of such investments.**
- **Facilitate the government decision-making and planning in effective and quality infrastructure investment in national/regional infrastructure projects;**



# EXPECTED CONTRIBUTIONS OF THE STUDY CONT...

- Providing further economic arguments in support of enhancing national/regional connectivity through improved transport, ITC, energy and water connectivity and “soft infrastructure” such as trade facilitation, and other business supporting policies and measures;
- Providing evidence to benefits of, and adding support to more and effective CAREC infrastructure projects; and
- Strengthening advocacy for infrastructure investments in general public debate & public opinion at local, national & regional levels.



Thank You

