

Economic Corridor Development: Readiness Assessment Framework

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Outline

- ▶ ECD in South Asia
- ▶ Why do Readiness Assessment?
- ▶ Defining Assessment Dimensions
 - ▶ Hardware Components
 - ▶ Software Components
- ▶ Assessment Tools
- ▶ Nepal Case Study

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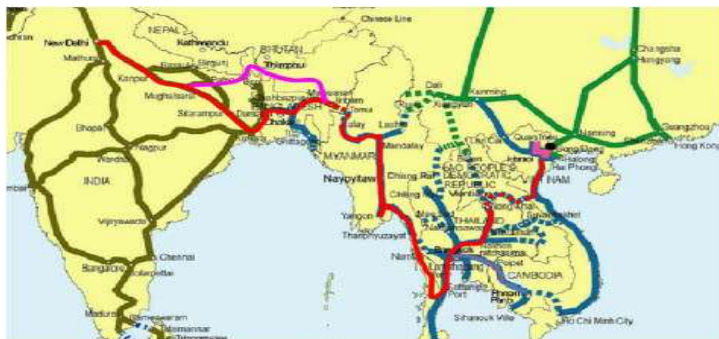
ECD in South Asia



South Asia at the crossroad of economic development

Toward a new approach of rapid industrialization

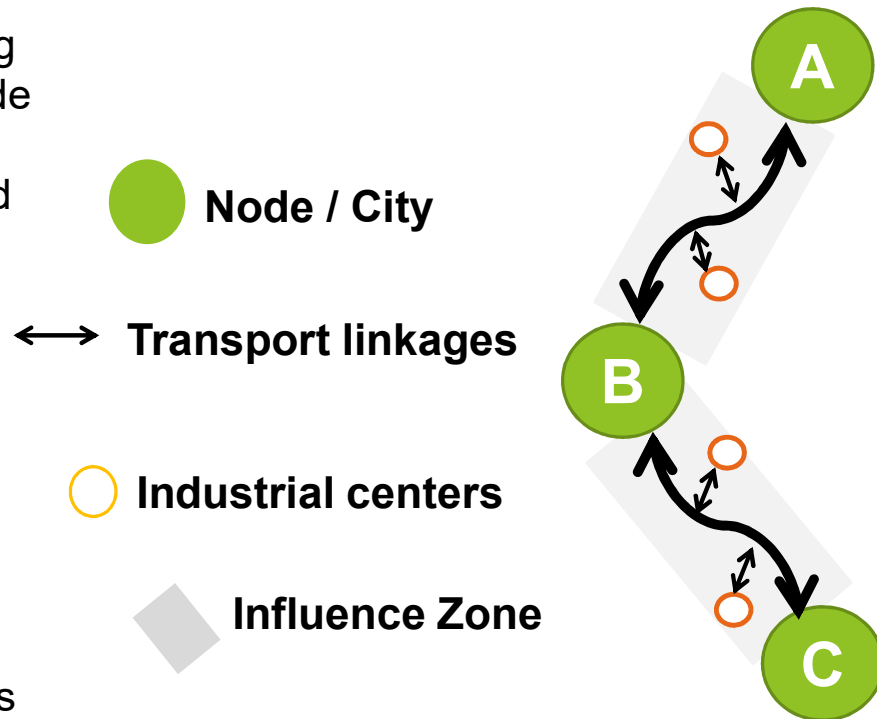
Economic corridor development (ECD) as a key strategy to spur high-value added industrial growth, unlock crucial employment opportunities, and ultimately spur economic growth



Economic Corridor

- ❖ Connect economic agents along a defined geography and provide connection between economic nodes or hubs, usually centered on urban landscapes, in which large amount of economic resources and actors are concentrated.

- ❖ Must be supported by:
 - ✓ Quality infrastructure
 - ✓ Logistics
 - ✓ Policy framework
 - ✓ Production and urban centers
 - ✓ Distribution networks



ECD Benefits

Proactive
Urbanization



Smart City
Development

Skills Upgradation



Improved
Industrial
Infrastructure



Road / Rail
Improvement



Reliable inputs to
manufacturing
(skilled labor,
power & land)

Investor friendly
Policies



Integrated &
Sustainable
Development



Economic corridors' potential to boost regional integration in South Asia

Not only spur economic growth in South Asia but also spreads its dynamism across Asia

Connecting existing and new industries with Global Production Networks

SASEC has adopted ECD as one of its pillars – transforming from national to regional corridors



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Why Do Readiness Assessment?

Ready for change?

- ❖ ECD requires substantial investments and deployment of resources from the project proponents and partners.
- ❖ The choice of ECD should be based on a judicious assessment of not just its inherent characteristics but also its future potential for delivering multiple benefits.
- ❖ Readiness assessment is the act of measuring how prepared the country is for a major change.

Purpose of the readiness assessment

The country readiness assessment will help determine if the nation is capable of successfully implementing ECD.

- Will identify available resources, institutional characteristics, and other areas that need to improve.
- As a result of the assessment, the country can prepare for any barriers that would otherwise hinder economic corridor projects and help identify national strengths.

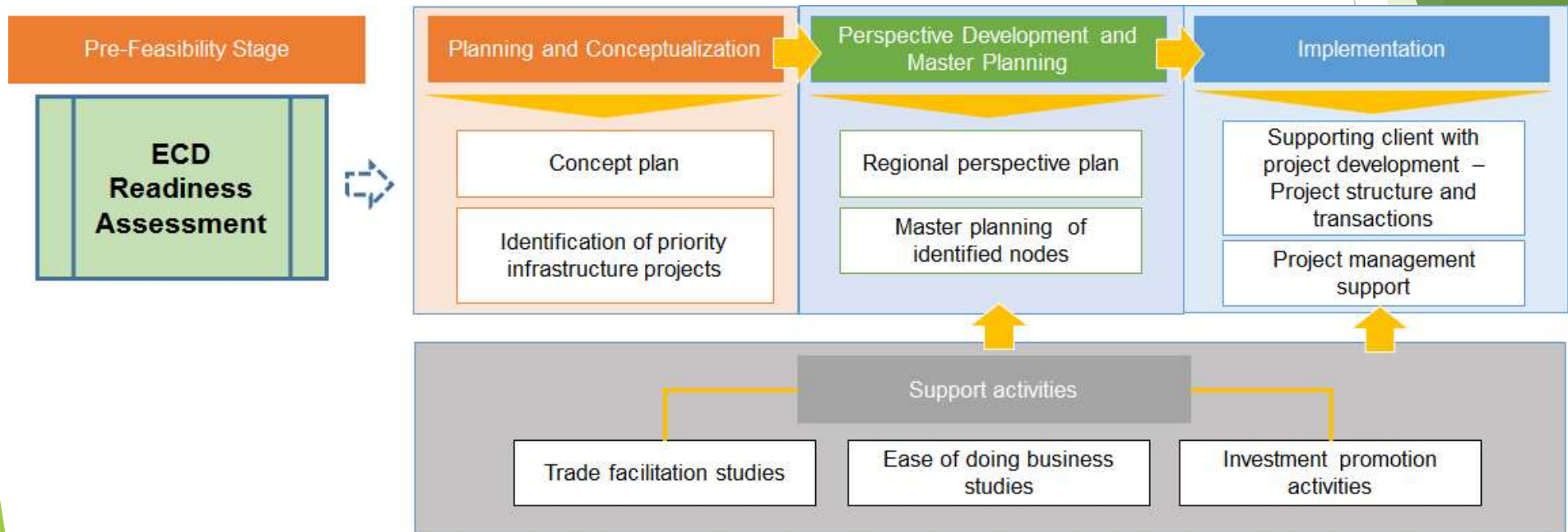
The framework!

This study's readiness assessment framework (RAF) has been designed to support an economical and action-orientated assessment of the readiness of a country to evaluate, design and implement an ECD program.



Where is RAF situated in the analytical approach to ECD?

The ECD Analytical Process



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Defining Assessment Dimensions

Translating ECD pillars to Assessment Dimensions

In order to assess the suitability of ECD strategy for a country, the framework proposes evaluation of a country at two aggregate dimensions:

- ❖ present condition of the physical infrastructure dimension of ECD -- i.e. asset heavy dimension (“hardware”); and
- ❖ present condition of the policy, institutional, regulations, governance and financing dimension -- i.e. asset light dimension (“software”).

Further points to consider

The ordering of the different dimensions is not significant; it does not indicate their relative importance.

- Both the importance and the amount of attention to be given to each dimension will need to be determined according to the objectives of a specific assessment.

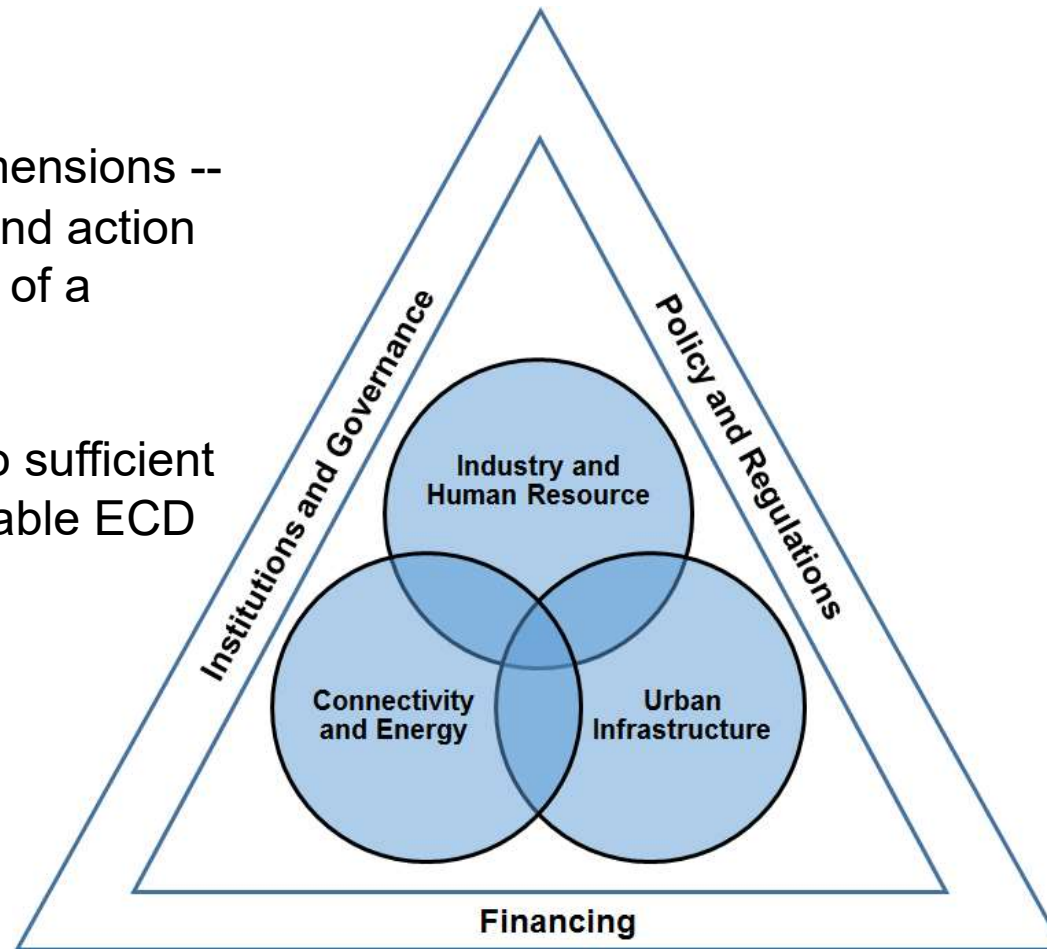
The dimensions are not designed to cover all the possible elements for a successful ECD program.

- Other issues could be important in particular local circumstances or at later stages in corridor development

Components of an Economic Corridor

6 most important dimensions --
need consideration and action
at the earliest stages of a
typical ECD program

- From necessary to sufficient
conditions that enable ECD



Key information collected for each Assessment Dimension

Significance and scope of functional role

Diagnostics parameters measuring -
access, capacity, and level of performance

Impediments to efficiency and
opportunities for improvement

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Hardware Dimensions

Significance and scope of functional role



Industry and Human Resource

- Some degree of economic vibrancy even at the initial stage
- Industrial investments are easier to attract in brown field locations as compared to green field locations



Urban Infrastructure

- Urban amenities in close proximity to industrial development makes development more competitive
- Large urban agglomerations lead to creation of education, recreational and healthcare infrastructure



Connectivity and Energy

- Efficient transport, trade, logistics and gateway infrastructure is crucial enabler for trade and industry
- Ensure that the movement of goods and people across corridors is done in optimal time and cost

Diagnostics Parameters



Industry and Human Resource

- Industry value added
- Manufacturing value added
- Merchandise trade
- Employment in industry
- Labor force participation
- Wage and salaried workers
- Adult literacy rate



Urban Infrastructure

- Improved sanitation facilities,
- Improved water source
- Population in the largest city
- Urban population



Connectivity and Energy

- Air transport
- Quality of port infrastructure
- Electric power consumption
- Internet users
- Annual freshwater withdrawals of industry
- Logistics performance index: Quality of trade and transport-related infrastructure

Selected indicators

| INDUSTRY and HUMAN RESOURCE | |
|---|--|
| Industry, value added (% of GDP) | |
| Manufacturing, value added (% of GDP) | |
| Merchandise trade (% of GDP) | |
| Employment in industry (% of total employment) | |
| Labor force participation rate, total (% of total population ages 15+) (modeled ILO estimate) | |
| Wage and salaried workers, total (% of total employed) | |
| Adult literacy rate, population 15+ years, both sexes (%) | |

| URBAN INFRASTRUCTURE | |
|---|--|
| Improved sanitation facilities, urban (% of urban population with access) | |
| Improved water source, urban (% of urban population with access) | |
| Population in the largest city (% of urban population) | |
| Urban population (% of total) | |

| CONNECTIVITY and ENERGY | |
|---|--|
| Air transport, freight (million ton-km) | |
| Quality of port infrastructure, WEF (1=extremely underdeveloped to 7=well developed and efficient by international standards) | |
| Electric power consumption (kWh per capita) | |
| Internet users (per 100 people) | |
| Annual freshwater withdrawals, industry (% of total freshwater withdrawal) | |
| Logistics performance index: Quality of trade and transport-related infrastructure (1=low to 5=high) | |

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Software Dimensions

Significance and scope of functional role



Institutions and Governance

- For planning, governing and managing corridors, nodal agencies/ institutions will need to be setup
- Current level of cohesiveness of institutional and governance setup is necessary



Policy and Regulations

- Governments proactively promoted structural change, encouraging the search for new business models and markets, and channeling resources into promising and socially desirable new activities



Financing

- Corridor locators, particularly small and medium-sized enterprises need reliable access to a wide range of financial services
- Access to competitive export financing promote firms' productivity and integrate with GPNs

Diagnostics Parameters



Institutions and Governance

- Economic management cluster
- Public sector management and institutions cluster
- Overall level of statistical capacity



Policy and Regulations

- Burden of customs procedure
- Business regulatory environment
- Ease of doing business index
- Tariff rate, applied, simple mean, manufactured products



Financing

- Financial sector rating
- Domestic credit to private sector by banks
- Firms using banks to finance investment
- Market capitalization of listed domestic companies
- Foreign direct investment
- Interest rate spread

Selected indicators

INSTITUTIONS AND GOVERNANCE

CPIA economic management cluster average (1=low to 6=high)

CPIA public sector management and institutions cluster average (1=low to 6=high)

Overall level of statistical capacity (scale 0 - 100)

POLICY AND REGULATIONS

Burden of customs procedure, WEF (1=extremely inefficient to 7=extremely efficient)

CPIA business regulatory environment rating (1=low to 6=high)

Ease of doing business index (1=most business-friendly regulations)

Tariff rate, applied, simple mean, manufactured products (%)

FINANCING

CPIA financial sector rating (1=low to 6=high)

Domestic credit to private sector by banks (% of GDP)

Firms using banks to finance investment (% of firms)

Market capitalization of listed domestic companies (% of GDP)

Foreign direct investment, net inflows (% of GDP)

Interest rate spread (lending rate minus deposit rate, %)

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Assessment Tools

Economical and action-oriented assessment tool

Basic Scorecard

- Uses key variables as proxies to benchmark countries on the aforementioned six ECD dimensions/components and derive their overall ECD assessment indexes.

Cross Country Comparison

- The scorecard allows comparisons for several number of countries for the most recent available year.
- Allows chart comparison of countries on their assessment indexes while demonstrating the relative contribution of different ECD dimensions to the countries' overall readiness.

Custom Scorecards

- Allows any combination of the parameter-variables and to compare countries or regions for the most recent available year.

Over Time Comparison

- Demonstrates countries' progress on ECD dimensions and indexes from a starting point to the most recent year.

Sample dimension scorecard

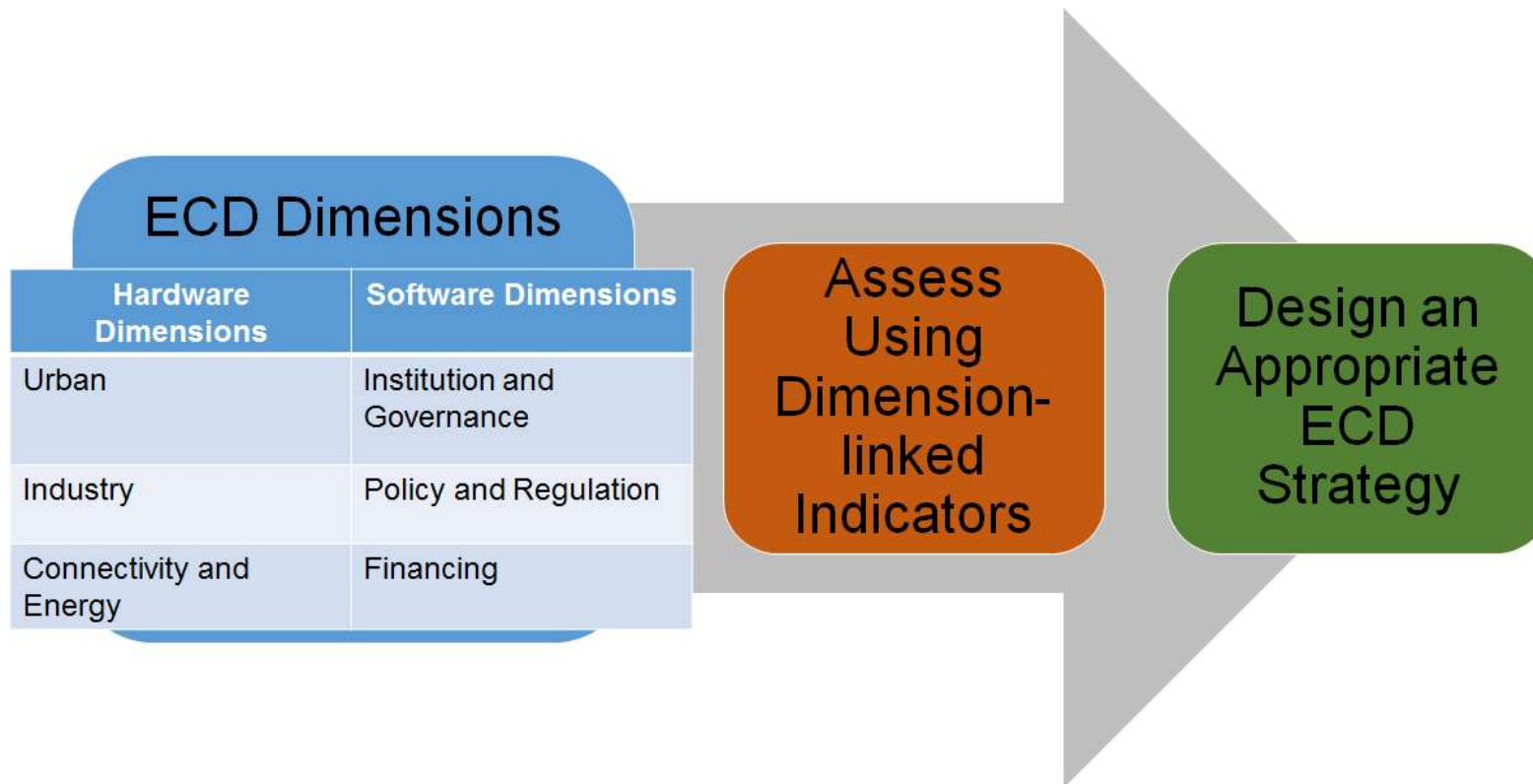
| Assessment Dimension | | | | | |
|----------------------|-----------------------|------|------------|-------|-----------|
| | | LMIC | Bangladesh | Nepal | Sri Lanka |
| Indicator | 2015 or Latest Figure | xx | xx | xx | xx |
| • | Rank-Score | x | x | x | x |
| • | | | | | |
| • | | | • | | |
| • | | | • | | |
| • | | | | | |
| Indicator | 2015 or Latest Figure | Xx | xx | xx | xx |
| | Rank-Score | X | x | x | x |
| | | | | | |
| | INDEX | x | x | x | x |

Aggregate index scorecard

AGGREGATE INDEX PER DIMENSION

| | URBAN | INDUSTRY | CONNECTIVITY & ENERGY | INSTITUTIONS AND GOVERNANCE | POLICY AND REGULATIONS | FINANCING |
|-------------------|-------|----------|--------------------------|--------------------------------|---------------------------|-----------|
| Low middle income | 2.75 | 3.57 | 3.67 | 2.00 | 2.25 | 3.00 |
| Bangladesh | 2.50 | 2.14 | 1.83 | 3.00 | 1.25 | 2.17 |
| Nepal | 1.75 | 1.71 | 1.50 | 2.00 | 2.50 | 2.17 |
| Sri Lanka | 3.00 | 2.57 | 3.00 | 2.67 | 3.75 | 2.67 |

Assessment framework for prioritizing ECD candidates



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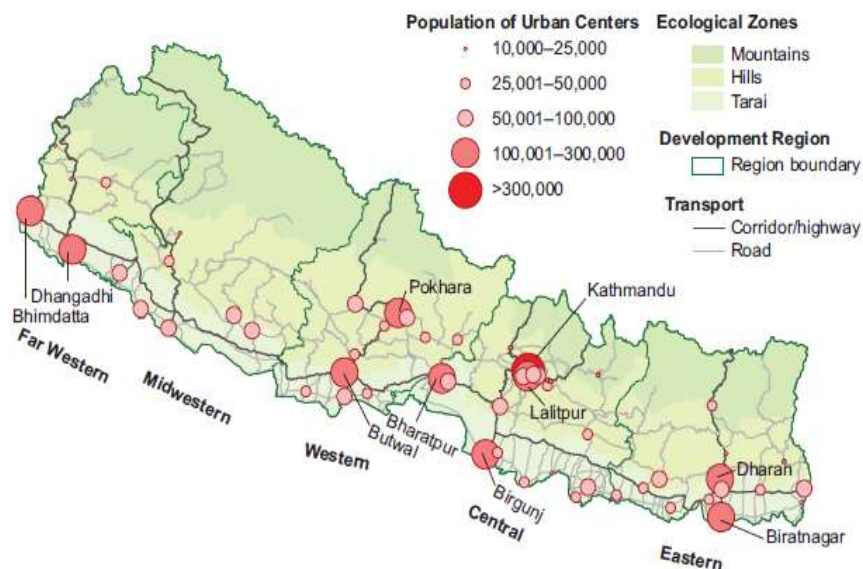
Nepal Readiness Assessment

Background - economy

- ❑ Nepal is among the poorest and least developed countries in the world, with about one-quarter of its population living below the poverty line.
- ❑ The country is heavily dependent on remittances, which amount to as much as 22-25% of GDP.
- ❑ Agriculture is the mainstay of the economy, providing a livelihood for more than 70% of the population and accounting for a little over one-third of GDP.
- ❑ Industrial activity mainly involves the processing of agricultural products, including pulses, jute, sugarcane, tobacco, and grain.
- ❑ The export-oriented carpet and garment industries have grown rapidly in recent years and together now account for approximately 70% of merchandise exports.
- ❑ Nepal has used a series of five-year plans in an attempt to make progress in economic development.
- ❑ Foreign aid to Nepal accounts for more than half of the development budget.

Background – spatial development

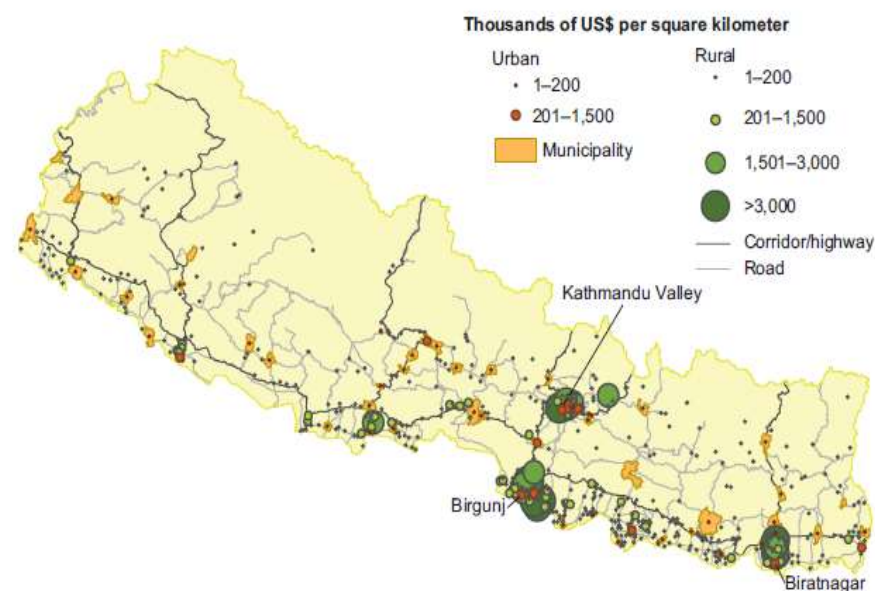
Map O.1 Development Regions, Corridors, and Urban Centers, 2011 Population



Source: Based on 2011 population census data (CBS 2012).

Note: Kathmandu refers to Kathmandu Metropolitan City; Biratnagar, Birgunj, Lalitpur, and Pokhara refer to the submetropolitan cities; and all other urban local governments are referred to as municipalities.

Map O.2 Manufacturing Output Density, 2007



Source: Based on Census of Manufacturing 2007 (CBS 2007).

Note: Analysis includes firms with more than 10 employees. Biratnagar and Birgunj refer to the submetropolitan cities.

Source: World Bank. 2013. Nepal's urban growth and spatial transition : an initial assessment / Elisa Muzzini and Gabriela Aparicio.

- ❑ Rapid, but haphazard, urbanization
- ❑ Infrastructure challenges

Challenges towards industrialization

- ☐ Growth challenges
- ☐ Weak governance
- ☐ Infrastructure bottlenecks and slow structural transformation
- ☐ Low capital spending
- ☐ Low human capital



ECD readiness assessment results

An abstract graphic design featuring overlapping green triangles and polygons in various shades of green, creating a dynamic, layered effect on the right side of the slide. A thin, light gray line extends diagonally from the bottom right towards the center of the slide.

INDUSTRY and HUMAN RESOURCE DIMENSION

| | | LMIC | Bangladesh | Nepal | Sri Lanka |
|--|-----------------------|-------|------------|-------|-----------|
| Industry, value added (% of GDP) | 2015 or Latest Figure | 34.46 | 27.61 | 15.63 | 30.06 |
| | Rank-Score | 4 | 2 | 1 | 3 |
| Manufacturing, value added (% of GDP) | 2015 or Latest Figure | 20.27 | 17.43 | 6.51 | 18.80 |
| | Rank-Score | 4 | 2 | 1 | 3 |
| Merchandise trade (% of GDP) | 2015 or Latest Figure | 45.81 | 42.03 | 42.74 | 38.96 |
| | Rank-Score | 4 | 2 | 3 | 1 |
| Employment in industry (% of total employment) | 2015 or Latest Figure | 30.62 | 17.70 | 11.20 | 25.50 |
| | Rank-Score | 4 | 2 | 1 | 3 |
| Labor force participation rate, total (% of total population ages 15+) (modeled ILO estimate) | 2015 or Latest Figure | 64.25 | 70.90 | 83.20 | 54.90 |
| | Rank-Score | 2 | 3 | 4 | 1 |
| Wage and salaried workers, total (% of total employed) | 2015 or Latest Figure | 56.93 | 29.40 | 24.60 | 53.80 |
| | Rank-Score | 4 | 2 | 1 | 3 |
| Adult literacy rate, population 15+ years, both sexes (%) | 2015 or Latest Figure | 81.41 | 59.72 | 59.63 | 91.18 |
| | Rank-Score | 3 | 2 | 1 | 4 |
| | | | | | |
| | INDEX | 3.57 | 2.14 | 1.71 | 2.57 |

URBAN INFRASTRUCTURE DIMENSION

| | | LMIC | Bangladesh | Nepal | Sri Lanka |
|--|-----------------------|-------|------------|-------|-----------|
| Improved sanitation facilities, urban (% of urban population with access) | 2015 or Latest Figure | 76.26 | 57.70 | 56.00 | 88.10 |
| | Rank-Score | 3 | 2 | 1 | 4 |
| Improved water source, urban (% of urban population with access) | 2015 or Latest Figure | 95.27 | 86.50 | 90.90 | 98.50 |
| | Rank-Score | 3 | 1 | 2 | 4 |
| Population in the largest city (% of urban population) | 2015 or Latest Figure | 15.30 | 31.89 | 22.28 | 18.44 |
| | Rank-Score | 1 | 4 | 3 | 2 |
| Urban population (% of total) | 2015 or Latest Figure | 46.99 | 33.52 | 18.24 | 18.32 |
| | Rank-Score | 4 | 3 | 1 | 2 |
| | INDEX | 2.75 | 2.50 | 1.75 | 3.00 |

CONNECTIVITY and ENERGY INFRASTRUCTURE DIMENSION

| | | LMIC | Bangladesh | Nepal | Sri Lanka |
|--|-----------------------|-----------|------------|--------|-----------|
| Air transport, freight (million ton-km) | 2015 or Latest Figure | 37,192.24 | 260.29 | 4.60 | 384.50 |
| | Rank-Score | 4 | 2 | 1 | 3 |
| Quality of port infrastructure, WEF (1=extremely underdeveloped to 7=well developed and efficient by international standards) | 2015 or Latest Figure | 3.46 | 3.56 | 1.56 | 4.28 |
| | Rank-Score | 2 | 3 | 1 | 4 |
| Electric power consumption (kWh per capita) | 2015 or Latest Figure | 1,750.13 | 293.02 | 128.15 | 525.88 |
| | Rank-Score | 4 | 2 | 1 | 3 |
| Internet users (per 100 people) | 2015 or Latest Figure | 31.14 | 9.60 | 15.44 | 25.80 |
| | Rank-Score | 4 | 1 | 2 | 3 |
| Annual freshwater withdrawals, industry (% of total freshwater withdrawal) | 2015 or Latest Figure | 17.13 | 2.15 | 0.31 | 6.42 |
| | Rank-Score | 4 | 2 | 1 | 3 |
| Logistics performance index: Quality of trade and transport-related infrastructure (1=low to 5=high) | 2015 or Latest Figure | 2.42 | 2.11 | 2.26 | 2.23 |
| | Rank-Score | 4 | 1 | 3 | 2 |
| | INDEX | 3.67 | 1.83 | 1.50 | 3.00 |

INSTITUTIONS AND GOVERNANCE DIMENSION

| | | LMIC | Bangladesh | Nepal | Sri Lanka |
|---|-----------------------|-------|------------|-------|-----------|
| CPIA economic management cluster average (1=low to 6=high) | 2015 or Latest Figure | 3.36 | 3.83 | 3.17 | 3.17 |
| | Rank-Score | 3 | 4 | 1 | 1 |
| CPIA public sector management and institutions cluster average (1=low to 6=high) | 2015 or Latest Figure | 3.06 | 2.90 | 3.10 | 3.30 |
| | Rank-Score | 2 | 1 | 3 | 4 |
| Overall level of statistical capacity (scale 0 - 100) | 2015 or Latest Figure | 67.97 | 76.67 | 72.22 | 73.33 |
| | Rank-Score | 1 | 4 | 2 | 3 |
| | INDEX | 2.00 | 3.00 | 2.00 | 2.67 |

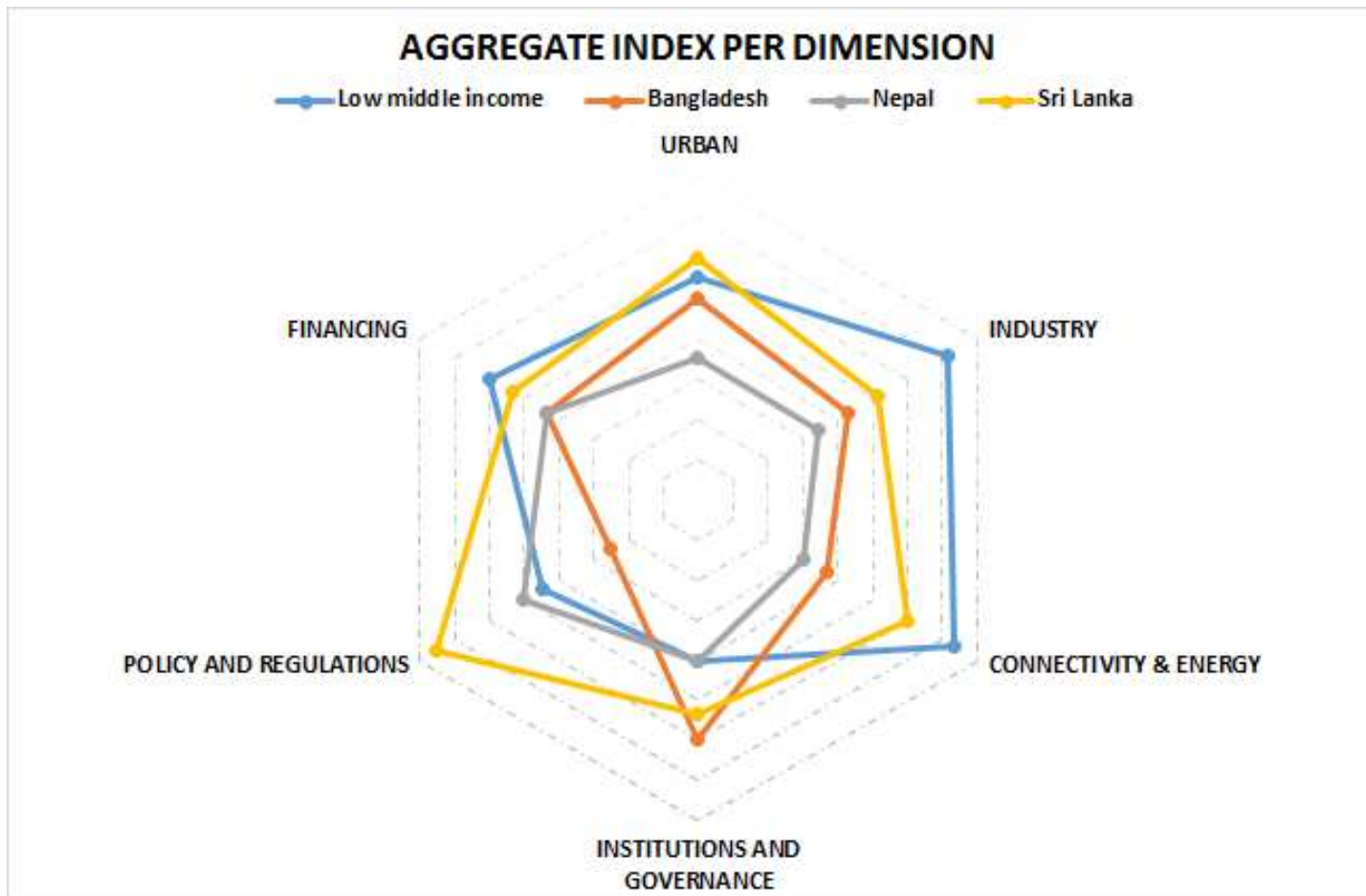
POLICY AND REGULATIONS DIMENSION

| | | LMIC | Bangladesh | Nepal | Sri Lanka |
|--|--------------------------|--------|------------|-------|-----------|
| Burden of customs procedure, WEF (1=extremely inefficient to 7=extremely efficient) | 2015 or Latest Figure | 3.66 | 3.20 | 3.31 | 4.17 |
| | Rank-Score | 3 | 1 | 2 | 4 |
| CPIA business regulatory environment rating (1=low to 6=high) | 2015 or Latest Figure | 3.14 | 3.50 | 3.50 | 4.00 |
| | Rank-Score | 1 | 2 | 2 | 4 |
| Ease of doing business index (1=most business-friendly regulations) | 2015 or Latest Figure | 116.40 | 174.00 | 99.00 | 107.00 |
| | Rank-Score | 2 | 1 | 4 | 3 |
| Tariff rate, applied, simple mean, manufactured products (%) | 2015 or Latest Figure | 8.21 | 13.49 | 12.11 | 7.27 |
| | Rank-Score | 3 | 1 | 2 | 4 |
| | INDEX | 2.25 | 1.25 | 2.50 | 3.75 |

FINANCING DIMENSION

| | | LMIC | Bangladesh | Nepal | Sri Lanka |
|--|-----------------------|-------|------------|-------|-----------|
| CPIA financial sector rating (1=low to 6=high) | 2015 or Latest Figure | 2.94 | 2.50 | 3.50 | 4.00 |
| | Rank-Score | 2 | 1 | 3 | 4 |
| Domestic credit to private sector by banks (% of GDP) | 2015 or Latest Figure | 88.19 | 42.13 | 62.34 | 26.78 |
| | Rank-Score | 4 | 2 | 3 | 1 |
| Firms using banks to finance investment (% of firms) | 2015 or Latest Figure | 23.93 | 19.80 | 17.00 | 43.60 |
| | Rank-Score | 3 | 2 | 1 | 4 |
| Market capitalization of listed domestic companies (% of GDP) | 2015 or Latest Figure | 56.50 | 37.08 | 46.57 | 30.02 |
| | Rank-Score | 4 | 2 | 3 | 1 |
| Foreign direct investment, net inflows (% of GDP) | 2015 or Latest Figure | 2.66 | 1.44 | 0.03 | 1.20 |
| | Rank-Score | 4 | 3 | 1 | 2 |
| Interest rate spread (lending rate minus deposit rate, %) | 2015 or Latest Figure | 6.73 | 3.92 | 4.38 | 0.34 |
| | Rank-Score | 1 | 3 | 2 | 4 |
| | INDEX | 3.00 | 2.17 | 2.17 | 2.67 |

Summary of assessment results



Recommendations

Strategic Approach to Nepal ECD

- A. Define economic development direction and an effective industrial development plan
- B. Identify a suitable form of ECD and approach to its development

Stage 1: Transport Corridor

Stage 2: Logistics and Trade Facilitation Corridor

Stage 3: Economic Corridor

Parting Words

- ✓ ECD is a viable strategy for a sustainable economic development
- ✓ There is merit to undertaking a Readiness Assessment prior to ECD conceptualization and planning - considering the substantial resources required
- ✓ RAF is also applicable to countries outside the South Asia region
- ✓ Alignment of ECD program to national development agenda and ADB country partnership strategy is vital to achieve maximum benefits

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THANK YOU