



**Opportunities to co-finance Cross-Border Hydropower
Project in South Asia**

Under

**Infrastructure Window of SAARC Development Fund
Project in South Asia**

A

Thematic Concept Note

**Economic and Infrastructure Windows
SAARC Development Fund**

I. Title of the theme

Cross border co-financing of hydroelectric power projects: Co-financing of hydroelectric power projects in SAARC Member States with involvement of at least two SAARC Member States:

- Bhutan
- Nepal

II. Overview of the theme

The theme predominantly capture the overview of the current scenario of cross-border arrangements for electricity sector cooperation in South Asia and bring out potential opportunities of co-financing cross border hydroelectric power projects in the region. The theme is intended to highlight the enormous opportunities to harness hydropower potential in South Asia especially Bhutan and Nepal.

III. Rationale of the theme

Access to reliable, affordable and quality energy is the need of the hour in South Asia. In SAARC region (the region) poor access to electricity coupled with frequent supply interruptions hampers the economic development of the region. Strengthening cross-border electricity cooperation in South Asia can be part of the solution for providing adequate and reliable electricity to the people. However cross-border electricity cooperation and trade in the region needs to address several issues such as regional-level political climate, technology up gradation and existing electricity policies of SAARC Member States. Harnessing Hydropower generation potential in Bhutan and Nepal can address the electricity requirement in India and Bangladesh especially during the summer months when the peak load demands are high. Regional cooperation in electricity is important to promote trade and cross-border market integration in the region.

IV. Background Information

South Asian Association for Regional Cooperation (SAARC) was formed in 1985. The agreement for a South Asian Free Trade Area (SAFTA) was signed in 2004. The South Asia Regional Energy Coalition (SAREC) was formed in 2006 to promote advocacy initiatives by leading policy-oriented business associations in South Asia. The SAARC Energy Centre (SEC) was established in 2006 as a Special Purpose Vehicle (SPV) with its base in Islamabad, Pakistan to work on regional energy sector cooperation in South Asia. SAARC Development Fund was established in 2010 as an umbrella financial institution to finance projects and programs in South Asia.

In 2014, a Framework Agreement for regional cooperation in electricity was formed amongst the SAARC Member States. The agreement contains broad provisions for the

establishment of a regional electricity market, nondiscriminatory access to transmission, market driven pricing of electricity and establishment of a body for coordinating regional power integration and trade.

V. Current Scenario under Energy Cooperation in South Asia

Bilateral arrangements for power transmission and trade currently exist in the region. Bilateral generation and transmission arrangements between Nepal-India, India-Bhutan and recently India-Bangladesh are examples of regional electricity cooperation in South Asia.

VI. Power Consumption Scenario in South Asia

Power consumption varies significantly across South Asia with the region as a whole having per capita power consumption of 707 kWh in comparison to the world average of 3125 kWh. Further South Asia has 706 million people without electricity out of 1.6 billion people globally.

VII. Access to Electricity – Instrumental in Regional Integration and Cooperation

Electricity is critical to the socioeconomic development of any country. The availability of reliable and quality power at competitive rates is imperative for a competitive industry. It is also a critical input to development and sustenance of various infrastructure and its services. Regional trade in electricity will boost the economic connectivity in the region and would be instrumental in meeting the objectives of regional integration and cooperation in the region.

VIII. Country Scenario – Hydropower Generation and Potential

a. Bhutan

Per International Hydropower Association, Bhutan possesses a very high hydropower potential estimated at around 30,000 MW of which 23,760 MW has been identified as economically feasible. A total of 1,615 MW of hydropower capacity has been installed in the country to date. Bhutan is the only South Asian country with a surplus of power for export. Almost 100% of power generated in the country is hydropower—the most productive natural resource in Bhutan. The rivers and streams from the Himalayan Mountains provide an abundant source of clean energy. The hydropower development forms the backbone of Bhutan's economy and social lives.

b. Nepal

Per International Hydropower Association, Nepal is blessed with significant hydropower resources. Nepal's theoretical hydropower potential has been estimated to be around 84,000 MW of which 43,000 MW has been identified as economically viable. Currently, Nepal's installed hydropower capacity is 753 MW only. Therefore enormous opportunities exist in the development of hydropower capacity in Nepal.

IX. SAARC Development Goals in line with Sustainable Development Goals

SAARC Development Goals are in harmony with UN Sustainable Development Goals. Development of Cross Border Regional Infrastructure in SAARC region will ultimately achieve the larger mandate of Livelihood, Health, Education and Environment Sustainable Development Goals.

X. Potential Opportunity to Co-finance Cross Border Hydropower Projects

Development of Hydropower generation facility in Bhutan and Nepal provides potential opportunities for various Multilateral Development Banks, Regional Financial Institutions, Infrastructure Financing Agencies and various Commercial Banks to form consortium of funding agencies to co-finance cross border Hydropower projects in South Asia.

XI. Way Forward

SAARC Development Fund proposes to form a **Project Development and Working Group (PDWG)** among all the potential Multilateral Development Banks, Regional Financial Institutions, Infrastructure Financing Agencies and various Commercial Banks to work together with Governments of SAARC Member States and Private sector to develop Hydropower project facilities in SAARC Member States especially in Bhutan and Nepal and facilitate cross border electricity trade in the SAARC region.

XII. Contact

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