Thematic Areas

Under

Economic & Infrastructure Windows

SAARC Development Fund

SDF Partnership Conclave 2018, New Delhi
SAARC
SAARC Development Fund
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Opportunities to co-finance Cross-Border Projects in E-Commerce

Under
Economic Window of SAARC Development Fund
Project in South Asia

A
Thematic Project Concept Note
Cross-Border E-Commerce Projects facilitating Intra SAARC Trade and Investment in Commodities, Products and Services

I. Title of the theme

Co-financing of Cross-Border E-Commerce Projects facilitating Intra SAARC Trade and Investment in Commodities, Products and Services.

II. SAARC Member States likely to be involved

In the initial phase, SAARC Member States may include:

- Afghanistan - Pakistan
- Bhutan - India
- Bangladesh - India
- India - Nepal
- Maldives - India
- Sri Lanka India

III. Compliance to SAARC Development Fund Charter

- Considering that the theme involves and benefiting at least two SAARC Member States; it fulfills the basic eligibility criteria for financing stated under Article 5 of the SDF Charter.
- As per Clause # 10 of SDF approved Policy Guidelines for E&I Windows, SDF will participate in co-financing to minimize risk and to gain institutional experience of funding in the region

IV. Classification of project:

Based on the nature of the project, the project is classified under the Economic Window of SDF.

V. Overview of the theme

Background

The countries of South Asia have made significant development in recent years and the Region is one of the fastest growing regions of Asia with GDP growth rate of over 5% in FY16 and FY17 (Source: Various research reports); however, significant challenge for South Asia is the relative lack of intraregional trade.

Regional integration has been considered as one of the most important strategies for development of SAARC Member States and instrumental in promoting economic growth and development of the economy, particularly, through intra-regional trade and cross-border investment.
While South Asia made significant progress in integrating with the global economy, integration within the region remained limited, and the region is yet to harness the beneficial effects of common cultural affinity, common geography, and the proximity advantage within the region. It is estimated that Countries like Bhutan and Nepal trade mostly with other SAARC members, while, India, Pakistan, Sri Lanka, Afghanistan, Bangladesh and Maldives trade mostly with the rest of the world.

Use of Information and Communication Technology has led to boom in E-Commerce in SAARC Member States cutting across geographical boundaries. The theme proposes to enhance trade among SAARC Member States, currently estimated to be less than 4% of the total trade of SAARC Member States, by leveraging Information and Communication Technology and developing an E-Commerce model for selling and purchase products developed in SAARC Member States. Stakeholders, construed as Partners could facilitate logistic and warehousing, transportation, development and maintenance of the portal, development of payment gateway among others. This is likely to enhance trade among SAARC Member States, provide employment generation and enhance Regional Integration and economic connectivity.

**VI. Proposed model**

**Trade**

- E-Commerce portal
  - Development of an integrated E-Commerce portal.
  - In-house and the intra-SAARC capabilities in development of such portal should be encouraged.
  - Portal is managed by a Sponsor.
  - The portal could be segregated along product and services.
  - The portal list key products and services offered by entities of SAARC Member States.

- Enrolling entities providing such services
  - It could contain list of entities providing such products and services.
  - All key trading entities of SAARC Member States are encouraged to become members.

- Products and services
  - The portal, like any typical E-Commerce portal, list products and prices along with deliver charges to different SAARC Member States.

- Logistic and Warehousing solution
  - Entities providing seamless logistic solution for delivery and warehousing could be roped in.
- Last mile connectivity
  o Government/ Semi government like Department of Post in each SAARC Member State entities could be roped in to provide last mile connectivity.

- Specialized services
  o The portal could also provide specialized services with SAARC Member States notably in
    - Diagnostic and Healthcare
      • Diagnostic Medical reports could be referred to other Specialist in SAARC Member States for 2nd opinion.
    - IT Enabled Services
      • IT enabled services could be provided within specialized services rather than seeking such services from outside SAARC Region.
    - E-learning
      • Training and Development through E-learning
    - Research and Development (R&D)
      • Cross border shared R&D

- Payment gateway
  o Payment gateway could be provided by leading banks and financial institutions
  o The gateway should be encouraged to be developed by intra SAARC entities rather than relying on outside region.

SAARC Member States have immense in-house capabilities. Such an initiative could harmonise and synchronise these capabilities.

**This is likely to lead to increase in intra-SAARC trade and investment as the companies are likely to get closer to the demand/ need/ competitive advantage matrix.**

**SDF may explore co-financing of such trade provided it meets its internal requirements.**

**VII. Key requirements**
- E-portal
- Efficient Logistic solution
- Warehousing to achieve economies of scale
- Payment gateway/ e-payment
- Co-financing solution
VIII. Benefits

• Leveraging E-Commerce likely to lead to increase in intra SAARC trade, facilitate development and integration of local industries as large companies may explore sourcing solution from with SAARC Member States □ enhance intra regional dependence and job creation.
• Employment creation as intra SAARC resources are pooled in to cater to the huge demand of the SAARC region.

It is like to contribute to Regional Integration and Economic Connectivity.

IX. Conclusion

Leveraging E-Commerce to facilitate Intra SAARC Trade and Investment in Products and Services is likely to enhance trade among SAARC Member States, provide employment generation and enhance Regional Integration and economic connectivity.

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Opportunities to Co-finance Cross-Border Projects enhancing Intra SAARC Trade and Investment in Commodities, Products and Services

Under
Economic Window of SAARC Development Fund Project in South Asia

A
Thematic Project Concept Note
Cross-Border Projects facilitating Intra SAARC Trade and Investment in Commodities, Products and Services

I. Title of the theme

Distribution of agro commodities: Co-financing of Cross-Border Projects facilitating Intra SAARC Trade and Investment in Commodities, Products and Services.

II. SAARC Member States likely to be involved

In the initial phase, SAARC Member States may include:

- Afghanistan - Pakistan
- Bhutan - India
- Bangladesh - India
- India – Nepal
- Maldives India
- Sri Lanka India

III. Compliance to SAARC Development Fund Charter

- Considering that the theme involves and benefiting at least two SAARC Member States; it fulfills the basic eligibility criteria for financing stated under Article 5 of the SDF Charter.
- As per Clause # 10 of SDF approved Policy Guidelines for E&I Windows, SDF will participate in co-financing to minimize risk and to gain institutional experience of funding in the region

IV. Classification of project:

Based on the nature of the project, the project is classified under the Economic Window of SDF.

V. Overview of the theme

Background

The countries of South Asia have made significant development in recent years and the Region is one of the fastest growing regions of Asia with GDP growth rate of over 5% in FY16 and FY17 (Source: Various research reports); however, significant challenge for South Asia is the relative lack of intraregional trade.

Regional integration has been considered as one of the most important strategies for development of SAARC Member States and instrumental in promoting economic growth and development of the economy, particularly, through intra-regional trade and cross-border investment.
While South Asia made significant progress in integrating with the global economy, integration within the region remained limited, and the region is yet to harness the beneficial effects of common cultural affinity, common geography, and the proximity advantage within the region. It is estimated that Countries like Bhutan and Nepal trade mostly with other SAARC members, while, India, Pakistan, Sri Lanka, Afghanistan, Bangladesh and Maldives trade mostly with the rest of the world.


An integral component of economic integration is investment. South Asia is yet to emerge as a prime destination for foreign investment. The World Investment Report, 2016, of the United Nations Conference on Trade and Development reveals that while FDI inflows to South Asia increased from USD 36 billion in 2013 to USD 50 billion in 2015, it is significantly less compared to East and Southeast Asia where these numbers stand at USD 350 billion and USD 448 billion for 2013 and 2015, respectively also driven by intra-regional FDI inflows within the Association of Southeast Asian Nations (ASEAN) region almost ~ 18 per cent of total FDI flows in the region (http://www.thehindu.com/opinion/op-ed/Coming-closer-together-for-trade/article14628676.ece). South Asia’s share in world FDI inflows in 2015 stood at a ~ 2.9 per cent.

Lack of complementarities, diversification of export baskets and supply-constraints appear to be the some of the key barriers to intra SAARC trade in Commodities, Products and Services. It is often reported that informal trade among the SAARC countries in agro commodities and other products takes place on a large scale.

VI. Proposed model

Trade

- Development of an integrated trading portal managed by a Sponsor.
- State trading companies of all SAARC Member States become member of this portal.
- All key trading entities of SAARC Member States also become members.
- The portal could be segregated along
  - Product/commodity lines: Some of the potential segregation, as a concept, could be
    - Agro products and commodities
    - Auto ancillaries
    - Cement
    - Consumer products
    - Essential commodities

Cross-Border Projects facilitating Intra SAARC Trade and Investment in Commodities, Products and Services: Economic & Infrastructure Windows, SAARC Development Fund
- Garment and Fabric
- Pharmaceuticals and Medicines
- Steel
- Textiles
- Others

- Services........ Some of the potential segregation, as a concept, could be
  - Information Technology
  - Healthcare
  - Others

- Product categorization could contain link of key companies in each SAARC Member State on these products along with contact details.
- Any entity in a SAARC Member State desirous of importing such products could contact the suitable vendors for quotes.
- Upon successful completion of negotiations, the exporter could approach its Bank for availing finance.

A conscious effort to provide incentives for intra SAARC trade could always be beneficial.

Increase in intra-SAARC trade is also likely to lead to intra SAARC Investment as the companies are likely to get closer to the demand/ need/ competitive advantage matrix.

SDF may explore co-financing of such trade provided it meets its internal requirements.

**VII. Key requirements**

- E-portal
- Efficient Logistic solution
- Warehousing to achieve economies of scale
- Payment gateway/ e-payment
- Co-financing solution
VIII. Benefits

- Increase in intra SAARC trade is like to provide facilitate development and integration of local industries as large companies may explore sourcing solution from with SAARC Member States to enhance intra regional dependence and job creation.
- It is likely to enhance competitiveness of key industries through sourcing integration and lead to development of new vendors.
- Development of supply chain that could become competitive and provide much needed foreign exchange.
- Employment creation through development of secondary and tertiary sector.

It is like to contribute to Regional Integration and Economic Connectivity.

IX. Conclusion

Co-financing of Cross-Border Projects facilitating Intra SAARC Trade and Investment in Commodities, Products and Services is likely to enhance trade among SAARC Member States, provide employment generation and enhance Regional Integration and economic connectivity.

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Opportunities to co-finance Cross-Border Integrated Procurement and Distribution of Agro Commodities

Under Economic Window of SAARC Development Fund Project in South Asia

A Thematic Project Concept Note

Economic and Infrastructure Windows
SAARC Development Fund
Cross-Border Integrated Backward and Forward linkages for Procurement and Distribution of Agro Commodities

I. Title of the theme

Distribution of agro commodities: Co-financing of Cross-Border Integrated Backward and Forward linkages for Procurement and Distribution of Agro Commodities

II. SAARC Member States likely to be involved

In the initial phase, SAARC Member States may include:

- Bhutan - India
- Bangladesh India
- India – Nepal
- Maldives India
- Sri Lanka India

III. Compliance to SAARC Development Fund Charter

- Considering that the theme involves and benefiting at least two SAARC Member States; it fulfills the basic eligibility criteria for financing stated under Article 5 of the SDF Charter.
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IV. Classification of project:

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V. Overview of the theme

Background

The countries of South Asia have made significant development in recent years and the Region is one of the fastest growing regions of Asia with GDP growth rate of over 5% in FY16 and FY17 (Source: Various research reports); however, significant challenge for South Asia is the relative lack of intraregional trade.

It is estimated that agriculture export trade of SAARC Countries grew to USD 32 billion from about USD 5.6 billion over the period 2010-1990. Another, study shows that about 53% of intra-regional import trade was excluded from tariff liberalization under SAFTA in 2006 (World Bank, 2016: http://www.worldbank.org/en/news/infographic/2016/05/24/the-potential-of-intra-regional-trade-for-south-asia).
Lack of complementarities, diversification of export baskets and supply-constraints appear to be the some of the key barriers to agro commodity trade. It is often reported that informal agricultural trade among the SAARC countries takes place on a large scale.

Some of the problems in agro commodities supply chain are:

- Multiple stake holders working in isolation: The agro commodities supply chain is complex with perishable goods and numerous uncoordinated small stake holders.
- Presence of large number of unorganized retailers: At present the unorganized retailers are linked with farmers through wholesalers or commission agents. The commission agents and wholesalers redundant supply chain practices make unorganized further inefficient.
- Lack of demand estimation: Demand forecasting is totally absent and the farmers and suppliers try to push whatever they produce into the market.
- Lack of technology applications: agro commodities supply chains may take advantage of technology improvements in data capture and processing, product tracking and tracing, synchronized freight transport transmit times for time compression along the supply chain and supply-demand matching.

(Source: Facilitating vegetable production and marketing by developing efficient Vegetable Supply Chain in Bhutan – Dr. Tayan R. Gurung, Specialist-II, DoA, Royal Government of Bhutan).

VI. Proposed model

Farmers → local purchasing at village level → aggregation at local level → warehousing → district level aggregation → warehousing → distribution using Spoke and Hub Model → demand assessment → release of agro commodities to retail outlets → surplus → exports

- **Formation of apolitical bodies**: Formation of Special Purpose Vehicle with producer of agro commodities as stakeholders like cooperatives at local level (working under professional management along the lines of corporate entities) that facilitate
  - agro commodities produce management
  - Seed distribution
  - Purchase of the agro commodities
  - Crop insurance, if available
  - Availability of finance

- **Farmers Welfare/ Service Centre**: Works along the lines of ‘e-chaupal’ and Kisan Seva Kendra in India
  - Disseminates information about weather
  - Mobile application
o Soil and crop
o Availability of pest resistant, drought resistant seeds
o Coordination with
  – Aggregators
  – Mobile operators for timely dissemination of information

- **Aggregators** like cooperatives/ federations for purchase of agro commodities
- **Warehousing** for the purchases using traditional/ local techniques for enhancing the life of the agro commodities like warehousing in cold climate/ air cooled warehouses that facilitate modulated air flow.
- Retailing: retail outlets at major towns along the lines of outlets in other SAARC Countries.
- **Demand estimation**: Retail outlets to feed in daily/ weekly demand on web portal/ through mobile application as is the mandatory requirement in outlets in other SAARC Countries.
- **Tie up with Outlets under Modern Trade** to sell the products.
- **Exports**: Produce/ stock in warehouse net of the demand forecast could be exported
  o Tie up with retail outlets selling similar products in other SAARC Member States,
  o Tie up with Modern trade outlets at local level,
  o Tie up with outlets under Modern Trade in other SAARC Member States (for e.g. retail chains that also sell agro commodities).
- **Imports**: The logistics so developed could be used for imports leveraging logistic, warehousing and retail network.

**VII. Key requirements**

- Warehouses: low cost warehouses
- E-portal that also facilitates demand estimation
- MIS: Reliable MIS for tracking the purchases, material in warehouse, material in transit and material sold
- Payment gateway/ e-payment
- Co-financing for
  – Construction of warehouses
  – Containers for transportation
  – Purchase of agro commodities from farmers
  – Development of e-portal
  – Availability of reliable seeds
- Farmers Welfare/ Service Centre
- Mobile application
- Land/ space availability and Construction of retail outlets

**VIII. Benefits**

<table>
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<tr>
<th>S No</th>
<th>Challenges</th>
<th>Likely Benefits</th>
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<tbody>
<tr>
<td>1.</td>
<td>Multiple stakeholders working in isolation</td>
<td>• Stake holders working in coordination</td>
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<td>2.</td>
<td>Presence of large number of unorganized retailers</td>
<td>• Outlets at multiple ender user</td>
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<td>3.</td>
<td>Lack of demand estimation</td>
<td>• Forecasted daily/ weekly demand by the retail outlet as is the practice in Safal outlets</td>
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<td>4.</td>
<td>Lack of technology applications</td>
<td>• Technology application for</td>
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<td></td>
<td>o Weather</td>
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<td></td>
<td></td>
<td>o Demand estimation from end consumers</td>
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<tr>
<td>5.</td>
<td>Price advantage to farmers</td>
<td>• Selling of produce at reasonable price without involvement of multiple retailers</td>
</tr>
<tr>
<td>6.</td>
<td>Price advantage to retailers</td>
<td>• Affordable price of agro commodities as middlemen are removed</td>
</tr>
<tr>
<td>7.</td>
<td>Extension of the model to sell other products</td>
<td>• The model and the infrastructure could be replicated to sell other products produced at village level notably handicrafts</td>
</tr>
<tr>
<td>8.</td>
<td>Replication</td>
<td>• Replication in other SAARC Member States</td>
</tr>
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**IX. Cost implications**

Detailed cost may be worked out in consultation with the stakeholders.

**X. Conclusion**

Co-financing of Cross-Border Integrated Backward and Forward linkages for Procurement and Distribution of Agro Commodities in SAARC Member States is likely to eliminate presence of multiple layers of middle men, provide value to farmers and purchasers and enhance regional trade of Agro Commodities in SAARC Member States.
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Opportunities to co-finance Cross-Border Projects related to Climate Change Project in South Asia

Under Infrastructure Window of SAARC Development Fund

A Thematic Project Concept Note
Environment and Climate Change

I. Theme

Environment and Climate Change: Co-financing of cross border project in SAARC Member States related climate change in all SAARC Member States with focus on reduction in air pollutants thereby facilitating in reduction of air pollution. Key areas that may be covered include:

a. Develop air quality projects to comply with World Health Organization air quality guidelines
b. Projects related to air quality monitoring networks, assessment systems.
c. Reduce emissions from major industrial and manufacturing sources
d. Adopt and enforce advanced vehicles emissions standards
e. Develop and adopt electric and hybrid vehicles
f. Provide access to public transport and nonmotorized transport infrastructure in cities
g. Increase investment in renewable energy and energy efficiency
h. Improve access to clean cooking fuels and green technologies for residential heating
i. Protect and restore ecosystems to avoid erosion, fires and dust storms
j. Reduce emissions of ammonium and methane from agriculture
k. Designate and expand green spaces in urban areas
l. Enhance climate change activities of Governments and businesses to better tackle local and regional pollution

II. SAARC Member States likely to involved:

Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

III. Compliance to SAARC Development Fund Charter

- Considering that the theme involves and benefiting at least two SAARC Member States; it fulfills the basic eligibility criteria for financing stated under Article 5 of the SDF Charter.
- As per Clause # 10 of SDF approved Policy Guidelines for E&I Windows, SDF will participate in co-financing to minimize risk and to gain institutional experience of funding in the region

IV. Background

Climate change is one of the major challenges and adds considerable stress to societies and to the environment arising from shifting weather patterns that threaten food production, to rising sea levels that increase the risk of catastrophic
flooding, the impacts of climate change are global in scope and unprecedented in scale.

Climate change is change in the world’s weather, as a result of human activity leading to increasing the level of Greenhouse Gases (GHG) in the atmosphere. As per United Nations Framework Convention on Climate Change (UNFCCC):

"Climate change“ means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

Climate change, largely due to industrialization, including clear-felling forests and certain farming methods, has driven up quantities of green house gases (GHG) in the atmosphere that continues to grow as populations, economies and standards of living grow. As per various studies:

- The concentration of GHGs in the earth’s atmosphere is directly linked to the average global temperature on Earth;
- The concentration has been rising steadily, and mean global temperatures along with it, since the time of the Industrial Revolution;
- The most abundant GHG, carbon dioxide (CO2), is the product of burning fossil fuels.


Paris Convention/ Agreement: At the 21st Conference of the Parties (COP) in Paris, Parties to the UNFCCC, Paris agreement was formulated that aim is to: strengthen the global response to the threat of climate change by keeping the global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

In line with Paris Convention and United Nations Environment Program (UN Environment), there is requirement to protect the environment, reduce pollutants being discharged in the air and reduce GHG emissions.

Rationale

Air pollution is the world’s single greatest environmental risk to health. Some 6.5 million people across the world die prematurely every year from exposure to outdoor and indoor air pollution and nine out of ten people breathe outdoor air polluted beyond acceptable World Health Organization guidelines levels.

The main sources of outdoor air pollution are fossil fuel emissions from coal burning for power and heat, transport, industrial furnaces, brick kilns, agriculture, domestic solid fuel heating, and the unregulated burning of waste materials such as plastics and batteries in open pits and incinerators.
Some of the key sources of air pollution include:

**Power**: Combustion of coal, oil, gas, bioenergy and waste; **Industry**: fuel combustion, process emissions

**Transport**: Exhaust, brake and tyre and road wear, fuel evaporation.

As per UN Environment report on air pollution, Indoor and outdoor air pollution costs USD 5 322 million (in year 2015). Stockholm Declaration (1972) and Rio Declaration (1992) focus on the human right to a safe and clean environment. Implementation of the Paris Agreement on climate change will be a major step forward in tackling air pollution.

Specific air pollution-related agreements, such as the Convention on Long-Range Transboundary Air Pollution, provide additional protocols to address transboundary issues, such as acid rain.


**V. SAARC Action Plan on Climate Change**

The Fourteenth SAARC Summit (New Delhi, 3-4 April 2007) expressed “deep concern” over the global climate change. As a follow up action, the New Delhi Declaration called for pursuing a climate resilient development in South Asia (Annexure 1).

During Sixteenth SAARC Summit in Thimphu Bhutan held on 8-29 April 2010, SAARC Member States raised concern on the unabated degradation of the environment and the adverse impacts of climate change in the region and their shared interest in its conservation for the well-being of present and future generations and reiterated their commitment to promote sustainable management of environment and natural resources.

**VI. Financing Mechanism to address Climate Change**

As funds are needed to address climate change and achieve goals in line with Paris Convention, financing mechanism are *(Source: https://unfccc.int/topics#:11565fd6-dd29-4d61-8085-27dba428982f:e8803e9b-4324-4598-84c9-23a5b94d8219):*

Standing Committee on Finance: A Standing Committee on Finance has been established to assist the Member States or Conference of Parties for:
- improving coherence and coordination in the delivery of climate change financing,
- rationalization of the Financial Mechanism,
• mobilization of financial resources, and
• measurement, reporting and verification of support provided to developing country Parties

**Green Climate Fund (GCF):** GCF, established by countries party to the UN Framework Convention on Climate Change (UNFCCC) in 2010, is an operating entity of UNFCCC financial mechanism with headquarters in the South Korea. GCF aims to support low-emission and climate-resilient projects and programmes in developing countries including highly vulnerable societies to the effects of climate change.

World Bank is the Trustee of the fund to support projects, programmes, policies and other activities in developing country Parties

**Global Environment Facility (GEF):** GEF established on the eve of the 1992 Rio Earth Summit, Provides financial, technical and other supports. It also supports projects, programmes, policies and other activities in developing country Parties. It also administers *Least Developed Countries Fund* and *the Special Climate Change Fund*.

The GEF is a partnership of various agencies — including United Nations agencies, multilateral development banks, national entities and international NGOs to address the environmental issues. The GEF has a large network of civil society organizations, works closely with the private sector around the world.

GEF supports multi-stakeholder alliances to preserve threatened ecosystems on land, oceans, build greener cities, boost food security and promote clean energy for a more prosperous, climate-resilient world

**Adaptation Fund:** The Adaptation Fund (AF) was established in 2001 to finance concrete adaptation projects and programmes in developing countries that are particularly vulnerable to the adverse effects of climate change. The Adaptation Fund is supervised and managed by the Adaptation Fund Board composed of 16 members and 16 alternates.

**United Nations Environment Fund (UNEF):** UNEF, established in 1973 by the United Nations General Assembly to fund projects in Member States that among others include financing for projects in Green Energy, projects that lead to reduction in GHG, reduce air, water and other types of pollutions.

**VII. Themes to be supported by SDF on air pollution, subject to internal approvals**

In line with UN Environment Report, SDF will support co-financing of above projects subject to internal approvals.
VIII. Benefit to SAARC Member States

- Reduction in toxic particles, sulphur dioxide and nitrogen dioxide
- Promote clean air and facilitate reduction in air pollution

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

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A. Introduction

The Fourteenth SAARC Summit (New Delhi, 3-4 April 2007) expressed “deep concern” over the global climate change. As a follow up action, the New Delhi Declaration called for pursuing a climate resilient development in South Asia. As a way forward and a first step, Bangladesh proposed to organize an expert meeting.

At the Twenty-ninth session of the SAARC Council of Ministers (New Delhi, 7-8 December 2007), the issue of climate change, particularly the increasing vulnerability of the region due to environmental degradation and climate change were discussed. The ministers felt that given all vulnerabilities, inadequate means and limited capacities, we need to ensure rapid social and economic development in our region to make SAARC climate change resilient. They welcomed the offer of Bangladesh to hold a SAARC Ministerial Meeting on Climate Change to be preceded by an Expert Group Meeting on Climate Change.

After detailed discussion, the Expert Group Meeting recommended a draft SAARC Action Plan on Climate Change as follows:

B. Objectives of the SAARC Action Plan on Climate Change

The action plan would seek to achieve the following objectives:

- To identify and create opportunities for activities achievable through regional cooperation and south-south support in terms of technology and knowledge transfer.
- To provide impetus for regional level action plan on climate change through national level activities.
- To support the global negotiation process of the UNFCCC such as the Bali Action Plan, through a common understanding or elaboration of the various negotiating issues to effectively reflect the concerns of SAARC Member States.

C. Thematic Areas of the Regional Action Plan on Climate Change

Specific areas of action in the regional action plan for climate change for SAARC region are to be identified according to the priorities outlined and actions envisaged in the national action plan of the SAARC Member States. However, with a view to facilitate the process
of formulating Action Plan, consistent with the national action plans of SAARC Member States, possible thematic areas are, below:

**Thematic area one:** Adaptation to Climate Change
- Adaptation to climate change impacts and risks in vulnerable communities, locations and ecosystems,
- Adaptation in sectors (e.g. water, agriculture, fisheries, health and biodiversity)
- Adaptation to extreme climate events (e.g. flood, cyclone, glacial lake outburst, droughts and heat and cold waves)
- Adaptation to climate change impact (e.g. sea level rise, salinity intrusion, glacial melt and coastal and soil erosion,)
- Adaptation suited to urban settlements, coastal structures and mountain terrain.

**Thematic area two:** Policies and Actions for Climate Change Mitigation
- Sharing of best practices on nationally appropriate mitigation actions (e.g. energy, waste management and transport)
- Capacity building for developing CDM projects including DNA and stakeholders.
- Sharing of best practices on sustainable forest management based on experiences.

**Thematic Area Three:** Policies and Actions for Technology Transfer
- Technology needs assessment including R&D and capacity development
- Assessing barriers to technology development for adaptation and mitigation options.

**Thematic Area Four:** Finance and Investment
- Methods for assessing financing needs to deal with climate change in the short, medium and long term,
- Climate change projects should be given priority and be financed as per SAARC norms.
- Determine the quantum of additional funding required to implement the action
- Plans as identified under various thematic areas.

**Thematic Area Five:** Education and Awareness – New Delhi Work Program
- Development of a tool kit on mass awareness raising on climate change
- Incorporating climate change awareness in educational curricula
- Involvement of the mass media on climate change issues with adequate information

**Thematic area Six:** Management of impacts and risks due to climate Change
- Climate risk modeling and capacity building in the region on impact assessment of climate change.
• Sharing of information and capacity building in the management of climate change impacts and risks through cooperation among SAARC member states in early forecasting, warning and adaptation measures,

• Cooperation amongst the SAARC member states in exchange of information on climate and climate change impacts (e.g. sea level rise, glacial melts, droughts, floods, etc.).

• Cooperation and sharing of good practices in disaster management.

**Thematic area Seven: Capacity building for international negotiations**

• Capacity building of Member States in the international negotiation process.

**D. Priority Action Plan**

• Capacity building for CDM Projects

• Exchange of information on disaster preparedness and extreme events

• Exchange of meteorological data.

• To consider capacity building and exchange of information on climate change impacts (e.g. Sea level rise, glacial melting, biodiversity and forestry).

• Mutual consultation in international negotiation process.

Media briefing as and when required.

**E. Duration – Time Line**

The Action Plan is proposed for an initial period of three years (2009-2011).

**F. Implementation Responsibility**

The primary responsibility for implementing the Action Plan on Climate Change rests with the national governments. With regard to regional cooperation, a mechanism should be agreed upon to effectively use the existing institutional arrangements of SAARC by giving clear directions and guidance. As for national level implementation, each government has to undertake its regulatory measures, technological interventions, stake holder’s participation and institutional arrangements.

**G. Reporting and Reviewing**

The review of the action plan should be periodically undertaken by the appropriate institutional mechanism in SAARC at the technical level. Their national reports on the implementation will be submitted to the SAARC Secretariat for subsequent consideration by the Ministers.
Opportunities to co-finance Cross-Border Projects in Micro, Small and Medium Enterprises

Under
Economic Window of SAARC Development Fund Project in South Asia

A
Thematic Project Concept Note
Cross-Border Projects in Shared Infrastructure for Micro, Small and Medium Enterprises

I. Title of the theme


SDF proposes to co-finance projects in SAARC Member States that facilitate:

i. Shared Infrastructure creation
ii. Cross Border Shared industrial cluster development and shared industrial cluster upgradation that benefit MSME and encourage development of MSME
iii. Development of Supply Chain in focus areas like
   a. Climate Change
   b. Industrial Machinery
   c. Export Promotion
   d. Import Substitution
   e. Medical equipment
   f. Non Conventional Energy
   i. Solar
   ii. Wind Energy
   iii. Waste Management
   iv. Waste to Energy
   v. Other such areas
   g. Power Generation
   h. Power Transmission
   i. Projects entailing development of secondary and tertiary sector in focus areas of each SAARC Member State
   j. Other emerging sectors
   iv. SDF also proposes to cofinance projects that facilitate intra-SAARC Member State Trade and Investment

II. SAARC Member States likely to be involved

Target industrial cluster in SAARC Member States i.e. Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka
III. Compliance to SAARC Development Fund Charter

- Considering that the theme involves and benefiting at least two SAARC Member States; it fulfills the basic eligibility criteria for financing stated under Article 5 of the SDF Charter.

- As per Clause # 10 of SDF approved Policy Guidelines for E&I Windows, SDF will participate in co-financing to minimize risk and to gain institutional experience of funding in the region

IV. Classification of project:

Based on the nature of the project, the project is classified under the Economic Window of SDF.

V. Overview of the theme

Background

The countries of South Asia have made significant development in recent years and the Region is one of the fastest growing regions of Asia with GDP growth rate of over 5% in FY16 and FY17 (Source: Various research reports); however, significant challenge for South Asia is the relative lack of intraregional trade.

Regional integration has been considered as one of the most important strategies for development of SAARC Member States and instrumental in promoting economic growth and development of the economy, particularly, through intra-regional trade and cross-border investment.

Micro, Small and Medium Enterprises are an important channel for providing intra-SAARC trade, inclusive and sustainable regional development of South Asia thereby facilitating regional integration. As per United Nations Development Programme (UNDP) report, 2017: “MSME serve as the backbone of all sectors in the economy and are an important source of employment and poverty reduction. They can play an important role in promoting spatially balanced inclusive growth and ensuring more equitable distribution outcomes”.

SDF proposes to co-finance projects that facilitate shared industrial cluster development and shared industrial cluster upgradation, product development, research and development and technology upgradation among others in SAARC Member states.

VI. Proposed model

- E-MSME portal for South Asia
  - Development of an integrated E-MSME portal.
  - In-house and the intra-SAARC capabilities in development of such portal should be encouraged.
Portal is managed by a Sponsor.
- The portal could be segregated along product and services.
- The portal list key products and services offered by MSME of SAARC Member States.

- Enrolling entities providing such services
  - It could contain list of entities providing such products and services.
  - All key MSME of SAARC Member States are encouraged to become members

- Setting of Information and Communication Technology (ICT) enabled Shared Infrastructure
  - MSME Cluster is identified in each SAARC Member State
  - Sponsor is identified
  - Sponsor creates Common Infrastructure facilities that also includes

- IT enabled services
- Communication availability
- Availability of Financial Technology Services
- Audit and Accounting Services
- Other shared services
- Sponsor also brings in development partners that include
  - Banks and Financial Institutions
  - ICT Companies
  - Leading corporate that encourage development of supply chain
  - Utility Companies
  - Logistic Solution Provider
  - Others

These Development Partners provide low cost services to the MSMEs who become members of the shared Infrastructure.

- MSME registers in the industrial cluster
- Part of the shared space is leased to the MSME
- Development Partners facilitate customized solution to the MSME for
  - IT services
  - Banking Services
  - Specialised services in foreign Exchange
  - Accounting, Audit and Taxation Services
  - Payment gateway
Payment gateway could be provided by leading banks and financial institutions.

The gateway should be encouraged to be developed by intra SAARC entities rather than relying on outside region.

SDF may explore co-financing of such projects provided it meets its internal requirements.

**VII. Key requirements**

- Shared Infrastructure
- E-Portal
- Sponsor
- Payment gateway/ e-payment
- Co-financing solution
- Others

**VIII. Benefits**

- Cofinancing projects in Shared Infrastructure is likely to facilitate development of MSME entailing job creation, intra-SAARC trade and development of supply chain in focus areas.
- It is likely to facilitate development and integration of local industries as large companies may explore sourcing solution from with SAARC Member States → enhance intra regional dependence and job creation.

*It is like to contribute to Regional Integration and Economic Connectivity.*

**IX. Conclusion**

Cofinancing projects in shared infrastructure is likely to facilitate development of MSME entailing job creation, intra-SAARC trade and development of supply chain in focus areas thereby enhance Regional Integration and economic connectivity.

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

Under
Infrastructure Window of SAARC Development Fund

A
Thematic Concept Note
Under the Infrastructure Window
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 feasible.
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. Reference Document**

Report by International Hydropower Association.

Energy Trade in South Asia by Asian Development Bank.

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Opportunities to Co-finance
Wind Energy Projects in South Asia

A
Thematic Concept Note
Under the Infrastructure Window
I. **Title of the theme**

Co-financing of Wind energy generation projects and associated supply chain: Co-financing of wind energy projects along with associated supply chain in SAARC Member States.

II. **Overview of the theme**

The theme predominantly captures the potential opportunities in generation of wind energy projects in SAARC Member States with focus on Afghanistan, Bangladesh, India, Maldives, Pakistan and Sri Lanka. Development of indigenous technology and competence in energy generation projects within the region can address the issues of climate change and pave ways to development of renewable energy in SAARC Member States.

III. **Rationale of the theme**

The main advantages of wind energy are unlimited, free, renewable resource of generation. Wind energy addresses the challenges of climate change and energy security. These days it is also becoming increasingly cost competitive. Evidence shows that the levelized cost of wind energy is approaching the cost of new build thermal power production. Wind energy is abundant in most South Asian countries – in spite of this the total installed wind generation capacity in region is very low. There is a huge potential of harnessing wind energy facilities in South Asia.

IV. **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.

V. **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.

VI. **Supply Chain for Wind Energy Projects**

Cooperation and partnership within the SAARC Member States can facilitate development of indigenous supply chain for wind generation facilities within the region to enable to meet the cost effective demand of both technology and equipments.
## VII. Country Scenario – Wind Power Generation Potential

### Afghanistan – Opportunities

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<table>
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<tbody>
<tr>
<td>1</td>
<td>Afghanistan is rich in renewable energy resources</td>
</tr>
<tr>
<td>2</td>
<td>Small Wind Turbines can be used for rural electrification</td>
</tr>
<tr>
<td>3</td>
<td>The lowlands in southern and western Afghanistan have around 120 windy days in a year. Up to 8 m/sec wind speeds are reported.</td>
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### Bangladesh – Opportunities

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<tbody>
<tr>
<td>1</td>
<td>Large Utility-Scale Turbines may be viable in coastal and higher altitude areas where there is abundant wind flow.</td>
</tr>
<tr>
<td>2</td>
<td>Small Wind Turbines (SWT) can be installed where there is limitation on availability of land. They can be transported and installed with minimum land and infrastructure requirement</td>
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### India – Opportunities

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<tbody>
<tr>
<td>1</td>
<td>India has manufacturing competence – as such there is an element of cost advantage.</td>
</tr>
<tr>
<td>2</td>
<td>Wind turbine manufacturers provide turn-key solutions for wind projects.</td>
</tr>
<tr>
<td>3</td>
<td>Independent Power Producers are opting for wind energy projects based on cost advantages and clean mode of generation.</td>
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### Maldives – Opportunities

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<tbody>
<tr>
<td>1</td>
<td>Small-scale wind projects suitable for Maldives</td>
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<tr>
<td>2</td>
<td>The Islands in Maldives have relatively low electricity demand due to small populations. As such small wind turbines projects are well suited.</td>
</tr>
<tr>
<td>3</td>
<td>Wind flows are considered to be potentially adequate to opt for wind energy projects.</td>
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### Pakistan – Opportunities

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<tr>
<td>1</td>
<td>Pakistan has good potential of wind energy especially in Southern and western part of Pakistan</td>
</tr>
<tr>
<td>2</td>
<td>Renewable energy has been incentivized by the Government and Tariffs are attractive for producers.</td>
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Sri Lanka – Opportunities

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<tbody>
<tr>
<td>1</td>
<td>Government offers high feed-in-tariff</td>
</tr>
<tr>
<td>2</td>
<td>Good wind potential in the country</td>
</tr>
</tbody>
</table>

VIII. 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.

IX. Potential Opportunity to Co-financing Cross Border Hydropower Projects

Development of Wind Generation Facilities in SAARC Member States provides potential opportunities for various Multilateral Development Banks, Regional Financial Institutions, Infrastructure Financing Agencies and various Commercial Banks to co-finance various Wind energy projects in South Asia.

X. 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 Wind Energy facilities in SAARC Member States.

XI. Reference Document

Wind Energy Future in Asia by Asian Development Bank

XII. Contact

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Intra SAARC

Energy Grid and Intra SAARC Trading in Energy

A

Thematic Concept Note

Under the Infrastructure Window
I. Title of the theme

Intra SAARC Energy Grid and Intra SAARC Trading in Energy: Co-financing of cross border energy projects in SAARC Member states thereby facilitating development of intra SAARC Energy Grid and facilitating intra SAARC trade in energy sector.

II. Overview of the theme

The theme shall predominantly capture the overview of the energy sector in South Asia and bring out potential opportunities of co-financing cross border energy projects in the region. The theme is intended to highlight the opportunities to facilitate intra SAARC trading in energy sector.

III. Rationale of the theme

South Asia covering the countries of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka, comprises 3% of the world’s area, about 23% of the world population and about 3.3% of the global economy as of 2017. A large proportion of the population is living below the poverty line. There is a wide variation in the energy resource endowments among the SAARC Member States. The energy demand in the region is expected to grow further with both the domestic consumers and industry sectors as main contributors. Significant challenges faced by the energy sector in the South Asia region include energy deficits, large dependence on fossil fuel and inadequate energy infrastructure. Intra-regional energy trade is needed to enhance the energy supply within the region and to meet the energy needs of the people.

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 Intra-Regional Energy Trade

The existing intra-regional energy trade among SAARC Member States is limited to electricity trade between India and Bhutan and India and Nepal on hydropower generation. The petroleum trade is based on India importing and refining crude oil and exporting petroleum products to Bhutan, Nepal, and Sri Lanka. India is also exporting diesel to Bangladesh.

VI. 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.

VII. 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.

VIII. 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.

IX. SAARC Energy Grid and Intra-Regional Energy Trade

The existing intra-regional energy trades among SAARC Member States are primarily limited to electricity trade between India - Bhutan and India - Nepal on hydropower generation. The Intra-regional trade among the SAARC Member States needs to be enhanced on a diverse mix of energy portfolio to cater to growing energy demand in the region. The concept of SAARC Grid is much envisaged by policy planners of the region from many years. It is imperative to move forward in this direction to establish SAARC Grid by interconnection of regional power grids.
X. **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.

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 cooperation in intra SAARC energy trade in SAARC Member States.

XII. **Reference Document**

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