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## *Press Release*

### **Power Trade with India to Boost Nepal's Economic Growth, Finds USAID Report**

**SARI/EI Report Released by the U.S. Government and National Planning Commission of Nepal.**

**Kathmandu, Nepal, January 19, 2017:** Michael Gonzales, Chargé d'Affaires, U.S. Embassy in Nepal, Dr. Swarnim Wagle, Member, National Planning Commission, Government of Nepal, and Smt. Mala Narendra, Second Secretary, Indian Embassy, Nepal, released today an analytical study titled "Economic Benefits from Nepal-India Electricity Trade" in Kathmandu. The report analyses the potential of cross-border electricity trade (CBET) between Nepal and India, and its feasibility and impact on the economy, power systems and power infrastructure of both countries.

A first of its kind study, it has been carried out by the Integrated Research and Action for Development (IRADe) under the fourth phase of the South Asia Regional Initiative for Energy Integration (SARI/EI) Program. SARI/EI is a United States Agency for International Development's (USAID) program that works to promote cross-border electricity trade to revitalize and accelerate regional economic development in South Asia.

Highlighting the key findings from the report, Dr. Kirit Parikh, Chairman, IRADe, said: "With accelerated power trade between India and Nepal, Nepal's gross domestic product could reach NPR 13,100 billion (over \$120 billion) in 2045, which is 39 percent more than with existing trading mechanisms. This growth in GDP is driven in part by the three-fold increase from NPR 310 billion in 2030 to NPR 1,069 billion in 2045 in revenue earned from electricity trade."

Moreover, increased power trade will also fuel Nepal's per capita electricity demand to jump from the current 139 kWh/year to 1,500 kWh/year by 2045. The report attributes this to increased domestic hydropower production (34.4 Gigawatt in 2045). Per capita electricity demand reflects strongly on the Human Development Index of a country as increased access to electricity is directly linked to better quality of life.

Speaking at the report launch, Michael Gonzales, Chargé d'Affaires, U.S. Embassy in Nepal, thanked IRADe for conducting the techno-economic study and for outlining the benefits of increased power trade. "Asia is the fastest growing region in the world but lacks reliable power infrastructure. With optimum utilization of resources and a coherent regulatory framework in place, better regional integration could be achieved through CBET. The report rightly points out Nepal can gain tremendously from CBET," he said.



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For India, the benefits are more in terms of lower electricity system costs due to electricity imports from Nepal. Additionally, the import of hydropower electricity from Nepal will reduce the carbon emissions of the power sector in India as the country's electricity generation is largely coal-based.

Calling the findings of the report “a win-win opportunity for both India and Nepal,” Smt. Mala Narendra, Second Secretary, Indian Embassy, Nepal, added: “India is committed to cross-border electricity trade in South Asia. To facilitate this, India's Ministry of Power in consultation with Ministry of External Affairs recently issued the ‘Guidelines on Cross Border Trade of Electricity.’”

Addressing the event, Dr. Swarnim Wagle, Member, National Planning Commission of Nepal, said: “The report prepared by IRADe is a first-of-its-kind and I hope it will be useful for the Government of Nepal as well as the Planning Commission of Nepal. USAID's support and assistance is extremely useful for Nepal particularly in expansion of the transmission capacity. Electricity trade and hydropower development can significantly energize Nepal's economy and can help in the process of industrialization. Both countries stand to gain from India-Nepal electricity trade and going forward, Bangladesh and other South Asian countries also stand to reap benefits from the power trade.”

Based on the IRADe-System for Analysis of Power Trade and Economic Growth (I-SAPTEG) modeling system, the research uses five models-three power system models and two macro-economic models to capture the impacts of electricity trade on India and Nepal under three scenarios namely accelerated trade, business as usual and delayed capacity addition.

Dr. Jyoti Parikh of IRADe said: “It has been a painstaking and novel exercise. The power systems of the two countries are linked for different periods i.e. peak and off-peak hours to capture the compatibility for trade in the model. This gave us very different insights. We also linked this to the economic models of each country to capture macro-economic benefits, especially to Nepal. Our aim was to see if Nepal too can follow Bhutan's example in transforming its economy. The primary objective of the study is to provide critical research on the viability and advantages of CBET so as to assist policy-makers in making strategic decisions. I am happy that we have succeeded in providing the evidence.”

### **Notes to the Editor**

#### **For the complete study and the executive summary:**

<http://sari-energy.org/wp-content/uploads/2017/01/Executive-Summary-Economic-Benefits-from-Nepal-India-Electricity-Trade-SARI-EI-IRADe-Rajiv-3.pdf>

#### **For more details on the study, contact:**

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