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PROCEEDINGS

# SARI/EI Think Tank Forum India Workshop for South Asia Regional Energy Co-operation

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**Prepared by:**  
**SARI/EI Project Secretariat, IRADe**

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# Foreword



The USAID's South Asia Regional Initiative for Energy Integration (SARI/EI) program builds energy security, clean energy access and energy markets in the South Asia region through cross-border electricity trade (CBET). The region has experienced a per capita GDP growth rate of more than six percent in last five years. In order to sustain this growth, provide opportunities for entrepreneurs, and continue to develop new job opportunities, it is imperative that the countries in the region have access to clean energy. However, existing power shortages and high reliance on fossil fuels, along with rapidly increasing electricity demand are threatening to undermine economic progress.

South Asia has a diverse range of energy resources with a large potential for hydropower. Systemic development of hydropower plants, along with transmission infrastructure and a market based regional power trading system will help to optimize utilization of regional energy resources. The current phase of the program, is working with each country government through the inter-governmental task forces to harmonize policies and legislation, develop technical standards to facilitate transmission connections and develop the market rules for a South Asia Regional Power Exchange. The program has also launched a Think Tank Forum (TTF), a network of civil society organizations from South Asia, to build critical and strategic consensus amongst South Asian nations on cross-border power trade.

The members of the think tank forum will engage policy makers, media, politicians, parliamentarians, bureaucrats, and civil society to position cross-border power trade in the energy security and clean energy debates of their respective countries. They will also act as anchor and torchbearer for the program by providing country specific intelligence, that will help break down barriers and tap into opportunities to meet energy demand.

The Think Tank Forum was launched in September 2016 in Nepal with a meeting of thirteen Think Tanks from six countries. The second TTF interaction was held in October 2016 in New Delhi with civil society and think tank representatives from India. In this meeting, the members deliberated on the need for risk assessment and a plan to involve key government stakeholders such as concerned ministries and departments. The key points that emerged from the deliberations with the Indian think tank, included looking at regional acrimony and energy trade as a tool to bridge the gap between energy demand and shortages; involvement of politicians through targeted briefing and institutionalization of mechanisms for power trading that is impervious to change in the current political environment; and energy trade as a regional confidence building measures.

I am delighted that the key takeaways from the TTF meeting have been documented in this proceeding. I would like to take this opportunity to thank the excellent work done by the SARI/EI Project Secretariat at IRADe to compile this report. I am sure that this report will be informative for the energy stakeholders from South Asian countries to advance the task of integration of regional power grids in South Asia.

A handwritten signature in black ink that reads "Michael Satin". The signature is written in a cursive, flowing style.

**Mr. Michael Satin,**  
*Regional Energy Program Director,  
Clean Energy & Environment Office, USAID/India*

# Preface

Integrated Research and Action for Development (IRADe) has been the implementing partner for SARI/EI in its fourth phase from 2012-2017 to promote cross border electricity trade (CBET) providing research and analysis to garner valuable support for the programme. The fourth phase of SARI/EI programme intends to create an enabling environment for the formation of the South Asian Electricity Market and building consensus among key decision makers.



To build critical consensus and cooperation amongst the South Asian nations, IRADe developed the Think Tank Forum (TTF) involving civil society institutions from key participant countries namely Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka. It is a network of think tanks, non-government organizations, and research institutes that bring wide-ranging experience such as research, media or community related expertise.

The objective of the forum is to build local support for electricity trade and how it can deal with energy deficit and demands of economic development. In addition, positioning CBET in the climate change and clean energy debates and engaging key decision makers is another objective of the forum. The participating members of the TTF also bring with them country specific knowledge to help better understanding of local barriers and how to best break them for successful promotion and development of CBET.

Following a successful first workshop organized in Nepal in September 2016, the Think Tank Forum met for the second time in October 2016 in New Delhi. This time the Forum comprised civil society organizations and think tanks from India. The priority agenda for the Indian Think Tank Forum was whether risk assessment was required for CBET and how to prioritize stakeholders like the ministries, government officials, local communities, Parliamentarians and the private sector, which are key to a smooth approach to CBET.

This is where the TTF plays a critical role, engaging in policy advocacy, communicating with media and quantifying the impacts of power trade so as to build support for CBET. Energy in South Asia has been chronically deficient and electricity development and trade among the South Asian neighbors is an effective solution. TTF can be critical in amplifying the opportunities presented by such regional exchange.

A handwritten signature in blue ink that reads "Jyoti Parikh".

**Dr. Jyoti K Parikh,**

*Executive Director,*

*Integrated Research & Action for Development (IRADe)*

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# Introduction

As a part of the SARI/EI outreach agenda, a network of leading think tanks in each participating South Asian country is established for initiating a discourse on the role of Cross Border Electricity Trade (CBET) in addressing energy demands for economic development. The local think tanks will be an important channel for positioning CBET in the national priorities of respective countries. They will play a key role in engaging politicians, government institutions, media and civil society for engraving the roles of CBET in the realm of energy security and climate change agendas of these nations.

The Think Tank Forum (TTF) will be a network of leading think tanks in South Asia for engaging the civil society and media on the importance of CBET in the socio-economic development agendas of their countries. By establishing narratives and examples of the relevance of CBET in the energy security and climate change discourses, the TTF shall take these messages to the stakeholders in respective nations.

## **Objectives of Think Tank Engagement**

- To undertake rapid socio –economic assessment/impact studies in area of energy security, clean energy access, gender and climate change
- Raising awareness and fostering a better understanding of issues related to CBET
- Providing platforms to help prioritize, fast track and push the agenda for CBET
- To organise dialogue and discussion between and among policy-makers
- Building capacity, specifically with regards to communication
- Assist in developing partnerships with national and regional institutions for strategic collaboration

## **Expected Outcomes**

- Evidences to quantify that CBET has been creating (can create) positive impacts for socio-economic development
- Advocating policy changes, organizing media events, news articles, enabling discussions
- Evidences of country government plans to widen/improve energy access especially with CBET interventions
- Indicators that can measure the benefits of CBET for socio-economic development
- Knowledge products necessary for bringing change on the ground in the favour of CBET

# Inaugural Session

## **Welcome and overview of the agenda:**

Mr. Rohit Magotra, Assistant Director, IRADe

## **Opening remarks:**

Ms. Monali Zeya Hazra, Regional Energy Manager and Clean Energy Specialist, USAID/India

## **Keynote address:**

Prof. Jyoti K Parikh, Executive Director, IRADe

## **Overview of SARI/EI programme:**

Mr. V K Kharbanda, Project Director, SARI/EI-IRADe

# Welcome and overview of the Agenda

## **Mr. Rohit Magotra, Assistant Director, IRADe**

Mr. Rohit Magotra welcomed the participants and a round of introduction was done. Brief overview of the agenda was shared with the Think Tank representatives. Mr. Magotra informed that as part of the outreach strategy of SARI/EI a launch workshop, 'Think Tank Forum for South Asia Regional Cooperation' was organized on 16<sup>th</sup> September 2016 at Kathmandu, Nepal. Representatives from 13 Think Tanks of 6 South Asian countries namely, Bangladesh, Bhutan, Pakistan, Sri Lanka, Nepal and India participated and provided in-depth insights as well as, actionable and practical suggestions which will be considered for further developing Think Tank Forum (TTF) for South Asia Regional Energy Co-operation.



# Opening Remarks

**Ms. Monali Zeya Hazra**  
**Regional Energy Manager and Clean Energy Specialist,**  
**USAID/India**



Ms. Monali Zeya Hazra, Regional Energy Manager and Clean Energy Specialist, USAID/India welcomed the participants and highlighted that the workshop was a brainstorming session for exploring opportunities to work together to promote power trade in South Asia along with the issues of climate change and energy security. She informed the participants about the purpose of establishing the Think Tank Forum and briefed about SARI programme and how it has been working towards the regional integration of power trade in South Asia. She highlighted that currently the cross border power trade amongst the countries in the region is very limited. But awareness is increasing, so it might be the right time to discuss how to promote it better through engagement with Think Tanks in the region.

Ms. Hazra pointed out that under current phase of SARI, TTF is being tried out in an effort to grow beyond the energy sector stakeholders and engage with other key stakeholders like civil society, media, politicians, parliamentarians, bureaucrats and more. Ms Hazra expected that through this forum the discussion on Cross Border Electricity Trade (CBET) in each South Asian country could be mainstreamed and clarified that the forum will undertake studies, surveys, media campaigns and discussions to promote the issue of power trade through the lens of climate change and energy security. She hoped that each of the participating think tank will become torch bearers of SARI in their respective countries. This shall also give SARI a local presence and may help it to engage with civil society, policy makers, media and society in a more effective manner than what they have been doing so far.

She welcomed suggestions and inputs on how to effectively take the Think Tank Forum forward. Ms Hazra concluded by thanking IRADe and SARI team for their efforts in bringing this workshop together and also the participants for sparing their valuable time to attend this workshop.

# Keynote address

**Prof. Dr. Jyoti Parikh,  
Executive Director, IRADe**



Dr. Jyoti Parikh briefed the participants on the need of a Think Tank Forum. She explained why an engagement strategy was needed. The South Asian Region has 350 Gigawatts (GW) of untapped hydro potential. However, the region is one of the least interconnected globally. So, this forum is a platform to ensure that this least interconnected tag goes away in the future. All South Asian countries have very low per capita consumption of electricity, huge untapped hydro power potential and resources that they can share. Dr. Parikh mentioned that they have been working through three task forces co-ordination of policy, regulation and legal framework; advancement of transmission interconnection; and South Asia regional electricity market. Different stakeholders from different organizations and countries have been involved and consulted.

She mentioned that IRADe has developed power models for Nepal and India (MARKAL, ANSWER TIMES and Macro models) which show the benefits of energy trade to both the countries over next 40 years. She also noted that this power trade shall be on mutually beneficial terms. The modelling work shows that the countries would benefit immensely if energy trade takes place compared to no energy trade situation. Similarly, opportunities are being explored for other South Asian countries as well.

Prof. Parikh highlighted that TTF is the need of the hour because South Asian energy sector is facing chronic problems of power supply shortage and poor quality of service, that is likely to impinge on the economic future of 1.5 billion people. Investments of USD 1.7 Trillion to USD 2.5 Trillion are required in South Asia which is 1/3rd of the total investments needed for electricity development. Similarly, regional interconnections are necessary for bringing down electricity cost and diversifying generation portfolios. India already has transmission links with Bangladesh, Bhutan and Nepal for power trade. The forum is also essential for amplification of opportunities provided by CBET. Large and untapped hydropower resources in South Asian Region (Bhutan, India and Nepal) can address South Asia's electricity requirements and harness complementarities of regional resources and diversity in demand and supply (seasonal, peak load variation) creates scope for CBET and further economic benefits.

She mentioned that Think Tank Forum would also have representatives from India apart from other South Asian countries. The project duration will be up to six months and an average grant size foreseen is within the range of INR 300,000 to INR 500,000. She also highlighted the eligibility and screening criteria for selection of the organization. Prof. Parikh shared the success and outcomes of the launch workshop, 'Think Tank Forum for South Asia Regional Cooperation' organized in Kathmandu, Nepal and finally invited suggestions and ideas from the participants on how to go forward with regards to the TTF.

# Overview of SARI/EI program

**Mr. V. K. Kharbanda,**  
**Project Director, SARI/EI-IRADe**

Mr. V. K. Kharbanda, Project Director, SARI/EI- IRADe made presentation on SARI/EI program. He highlighted that SARI/EI is a long standing program of USAID that started in 2000 and has consistently strived to address energy security in South Asia by focusing on cross border energy trade, energy market formation and regional clean energy development. In the current phase of SARI/EI, three task forces have been created in three key areas namely i) Co-ordination of regulations/policies; ii) Advancement of transmission interconnection iii) Formation of electricity market. Task Forces are the heart of SARI program. The members of the task force have been nominated by respective governments from South Asian Association for Regional Cooperation (SAARC) countries. He opined that political commitment is fundamental for the success of CBET and that is why the SAARC framework agreement has been signed by all eight SAARC member countries in November 2014. The SAARC framework agreement on energy co-operation strived for CBET through regional regulatory framework, harmonization of grid codes, model framework for open access and trading license regime, transmission pricing mechanism and methodology, standard/model Power Purchase Agreements (PPA) and Transmission Service Agreement (TSA) and mock exercise for South Asia Regional Power Exchange (SARPEX).



He highlighted that the current CBET between SAARC countries is 2,313 Megawatt (MW) approximately. India exports 600 MW to Bangladesh, India imports electricity from Bhutan 1400 MW and India exports to Nepal in the range of 200-300 MW approximately. He also mentioned that as per Niti Ayog, by the year 2047, the electricity imports from India is projected at 60 GW and export by India is projected at 10 GW in a heroic effort. So, India would need to import energy to meet its demands and thus the South Asian countries can benefit from CBET. He mentioned that the participating think tanks would be working as anchors taking forward the work of socio economic development and promoting CBET among South Asian countries. He recognized that country specific intelligence is necessary to understand what barriers have been broken and what opportunities have to be tapped to promote the electricity trade. Lastly, he mentioned that a successful and effective partnership with the think tanks is very important for propagating socio-economic benefits of CBET.

# Discussions on engagement and presentation of concepts

**Dr. Kirit Parikh** requested Think Tank representatives to present their ideas for engagement for promoting South Asia Regional Co-excerpts of the session are as below;

**Ms Lydia Powell, Head, Centre for Resources Management, ORF Foundation** focussed on the fact that market rationality alone doesn't help to make a case for regional integration, people look for other values as well. There is history of acrimony between all the countries, so economic rationality can't be the only factor to justify the regional energy integration. She stressed on the fact that some ways and means should be devised to bridge the gap between the nations as they want to justify their borders. Regional markets are the very good slaves of the markets but very bad masters, similarly regional or bilateral arrangements can be good slaves for commercial arrangements but poor masters for nations.



In order to make regional energy integration work, we need to be clear it can be done through bilateral arrangements. Ms. Powell suggested that we need to zero in on what final values we are looking for -- access to electricity, energy security or commercial (economies of scale). Also while communicating to the people, the narratives should be based on the aforesaid values, which if communicated in a better way can build consensus. She stated that if one wants to convey about the cross border electricity, then it must be hooked on the accessibility factor rather than the value. Secondly, while considering energy security policies should be devised to facilitate state investments as it is the government which is going to be benefitted from the energy security. The private sector deems any cross border investment too risky. Ms. Lydia cleared that as far as market opportunities are concerned, the markets like homogeneity or uniformity and in that case the regulations, uniform policies, pricing, the issue of subsidy and the integration of regions is difficult, so for the commercial purpose all polices should be uniform.

**Mr. Pradeep Mehta, Secretary General CUTS** pointed out that political constraint is one of the major issue that comes in the way of regional power trade. Often it has been seen that political interests are in contradiction with public interests, so measures should be taken to resolve the issues. He highlighted the three major handicaps that exist. Firstly, we are competing with different issues. Ministers and bureaucrats may not be interested in the issues that we want to promote, like regional trade in electricity. The policymakers and decision makers must be approached and communicated in an effective manner. Secondly the level of understanding of the parliamentarians and bureaucrats is different from that of the scientific communities. Hence, they



must be communicated in a simple and jargon free language. He suggested that a well drafted and well laid out policy brief could be a better way for doing the same, along with priority to personal interaction. Mr. Mehta stressed on the fact that there is need to institutionalize the mechanism for regional power trade in each South Asian country which must be resilient to the changes in political set ups. Standing committees on energy can be used to raise issues of public interests and to raise attention about regional energy trade.

**Dr. Sanjib Pohit, Senior fellow, NCAER** explained that most countries have varying levels of mismatch between energy demand and supply such as seasonal, peak-off peak, etc. The diversification of energy sources and markets may improve national energy security often at significantly lower costs than through self- sufficient or autarchic approaches. Dr. Pohit presented various prospects for shared prosperity for all South Asian countries like better utilization of resources and capital assets, reduced national reserve requirements, relief from power shortages and access to wider/deeper pools of finance and institutional capacity. Dr. Sanjib concluded his presentation with various parting thoughts that have to be considered for CBET. Electricity situation in South Asia is a binding constraint to growth, stability and poverty eradication. The distribution of energy resources, varying levels of institutional and technical capacity, and varying depths of financial and energy markets in the region offer many win-win opportunities like, complementing infrastructure development for energy supplies and bringing synergies, promoting efficiency and optimum utilization of resources, supporting each other in times of contingencies. Energy trade and cooperation can act as confidence building measures by involving large number of stakeholders who may not be competitive (just like European Coal and Steel Community).



**Ms. Meera Shankar, Former Ambassador of India,** shared her experience and observations on CBET. She discussed that CBET with Bangladesh is proceeding well and now there may be some private sector investment in India as well for supplying energy to Bangladesh. It is likely to be substantial quantity of over 1000 MW. Similarly, electricity trade with Bhutan is going well and there is a perspective plan to develop a hydro power plant of 9000 MW capacity. Ms. Shankar suggested SARI/EI team to focus on Nepal for building a political consensus in the country for CBET, wherein the focus should be subtle. She further suggested the idea of taking members of different political parties from Nepal on a trip to Bhutan to show them the benefits of electricity trade or hydel development. Also conducting a workshop in Bhutan may be equally helpful wherein some key leaders, opinion makers as an addendum, can be invited to demonstrate to them the hydel power plants and for citing examples of Cross Border Energy Trade going on in Bangladesh. Nepal has over 80000 MW of hydel power potential and 40000 MW that can be developed. Ms Shankar finally recommended that the focus of SARI programme should be now on mobilizing the necessary resources for CBET in Nepal.



## Session Discussions

**Ms. Monali Hazra** explained that under SARI/EI programme a trip for Nepalese parliamentarians was organized to Bhutan wherein they interacted with Bhutanese Government and energy stakeholders and were also taken to visit a power plant. But only parliamentarians were targeted and due to sudden political changes, only a few of them could be involved. She welcomed the suggestion of Ms. Shankar and informed that the current phase of SARI will refocus the attention on India-Nepal bilateral engagements. The study tour was done in the same direction. Besides IRADe is doing macro-economic analytical studies just to focus on India Nepal power trade. There are other engagements as well in terms of Nepali stakeholders getting training in India with power trade corporations along with PTC financial services as a due diligence of large hydro power plants and power trading as part of the other engagements with United States Energy Association (USEA).

**Ms. Meera Shankar** informed that initially in Bhutan there were lots of reservations about CBET as they were apprehensive that it may increase their dependence, but this transformed from the situation of dependence into one of co-dependence. Bhutan is dependent on India for the sale of electricity and India is dependent on Bhutan for their energy. Same point can be conveyed to Nepal that a situation of co-dependence can be created for a mutually win-win situation. Another issue with Nepal is that they are losing economically as water is just a flowing resource where people have to pay price in terms of lost opportunities and lost development. Water being their biggest resource should be treated as the biggest economical resource rather than as a political issue. This will be the challenge for SARI/EI programme and hence, it is required to work with opinion makers, parliamentarians, potential beneficiaries, and industries that can create jobs. So, Nepal must see the things which are in their interest and must understand co-dependency.

**Prof. Jyoti Parikh** highlighted another concern of Nepal that what if they invest and India doesn't buy, there can be substantial losses. Prof. Kirit Parikh further clarified that water is not merely a resource flowing down and that Nepalese are missing the opportunity but this is a very small window of opportunity because 30-40 years down the line electricity storage would become cheap and widespread and then we might find the need for balancing power from India very less. So their opportunity to export to India will disappear.

**Mr. Magotra** cited example of the launch workshop in Nepal. He shared that Think Tanks in Nepal and other South Asian Think Tanks are interested in engagement for enhancing regional energy co-operation and some of the ideas of the current workshop could be further taken for engagement.

**Ms. Shankar** asked whether it would be a good idea to set up a small pilot project on part grant/ part credit in Nepal as a confidence building measure. Similar projects have been done in Bhutan which were purely for development of Bhutan, rather than for Cross Border Energy Trade. Such examples can be helpful in improving relationship with Nepal.

**Dr. Kirit Parikh** shared his ideas over the fact that there are environmental benefits of energy trade to Nepal. If Nepal decides not to trade but develop on its own, then for meeting its fluctuating energy demand it needs to have a storage reservoir based plan. Whereas on doing trade with India run of the river plants will be needed which have much lesser environmental consequences. Concluding the discussion Ms. Meera Shankar cited the example of projects in Bhutan which are all run of the river ones and Bhutanese Government is clear that it won't develop any storage based power plant considering the environment benefits accrued from the former.

**Ms. Lydia Powell** questioned why regional integration of power is taken as the initial point and considered good? Dr. Kirit Parikh explained that voluntary trade between two countries should be mutually beneficial. Similarly, with electricity trade, in order to persuade people and build their consensus on energy integration, it is important to quantify the gains accrued from the electricity trade. As a part of the SARI/EI programme IRADe is engaged in one such study based on India and Nepal power trade.

Further Mr. V.K Kharbanda elaborated that surplus power in one country can be transferred to the other country in the region. Moreover, for achieving the GDP growth rate of 6-7%, electricity plays an important role and electricity should be 1.5 times more than the GDP growth rate. Dr. Kirit Parikh also added that trading of energy would also reduce the pressure of power storage leading to minimal impact on the environment and thus may bring a mutually win-win situation.

**Dr. Gaurav Kapoor** requested organizers to share experience of SARI/EI program with regards to various technical aspects and findings (the detailed regulations, transmission prices, uniform grid codes, technical mechanisms) with the experts the PGCIL (Power Grid Corporation of India Ltd.) and POSOCO (Power System Operation Corporation Limited)

**Prof. Kirit Parikh** explained that one of the important outcomes of the SARI/EI program is creation of three task forces with representatives from each of the South Asian countries that have been able to create significant consensus for all the technical aspects among the senior technicians and policy makers in South Asia. More can be done to pursue people about the accrued benefits of energy integration among the countries and measures should be taken to balance the losses and benefits brought by energy integration.

**Mr. V.K Kharbanda** added that all the SARI/EI studies have been carried out keeping in mind SAARC intergovernmental framework agreement on energy cooperation signed by eight member states, regional regulatory guidelines, suggested changes or amendments in the policies/regulations/acts of each country to promote CBET, harmonization of grid code study, model PPA, TSA etc. He mentioned that electricity is a highly regulated sector, therefore regulations play an important role. Further, he emphasized that there is need to incorporate an institutional mechanism such as South Asia Forum of Electricity Regulators to take care of coordination of regulations in the region like in Europe. There is Agency for Cooperation of Energy Regulators (ACER) despite of political differences between them.

**Ms. Monali Zeya Hazra** also shared that most important challenge for SARI/EI programme has been a big success in bringing significant changes in power trade among India, Bhutan and Nepal.

# Way Forward

## Objectives:

### Priority engagement areas to be addressed by Indian Think Tanks

- How to prioritize engaging stakeholders in order to smoothen the road to CBET and how? eg: MEA, other ministries, local affected communities, Parliamentarians, private sector etc.
- Do we need to carry out risk assessment?

## Moderator: Ms Meera Shankar

### Panelists

- Ms. Monali Zeya Hazra, Regional Energy Manager and Clean Energy Specialist, USAID/India
- Dr Gaurav Kapoor, Principal Research Scientist, Centre for Study of Science, Technology and Policy (CSTEP)
- Dr. Jyoti Parikh, Executive Director, IRADe

## Discussions

### **Dr. Gaurav Kapoor, Principal Research Scientist, Center for Study of Science, Technology and Policy (CSTEP)**

Dr. Gaurav Kapoor stated that SARI/EI team has identified the entities in India that will drive the energy co-operation further like Ministry of Power, Ministry of External Affairs. Dr. Kapoor recommended that the list of stakeholders and list of priorities should be clear. So, before approaching the Ministry of External Affairs there must be complete buy in from Ministry of Power, because a decision maker may raise a question on the need of Cross Border Energy Trade. He stressed on the fact that the technical aspects must be sold to the Ministries or entities in a better way. The aspects which are of grave importance are unified grid codes, tariff mechanisms and market regulations and there is need to carry out enough studies on these aspects.



Dr. Kapoor suggested that Think Tanks like Prayas Energy foundation or other technical energy foundations can be involved to carry out such studies. He further recommended a technology, pumped hydro energy storage for closed loop off river system, and suggested that if topology of Nepal or Bhutan lends itself to the same then the technology is far less intrusive and ecologically beneficial method of storage. As far as the risk assessments are concerned he said that it is a very important aspect because it is impossible to get investments without the same.

### **Ms Monali Zeya Hazra**

Ms. Hazra explained that the risk assessment must be backed by evidences and in current phase lots of analysis and assessment is being carried out which would create a concrete background. She welcomed everyone to engage with SARI/EI programme and provide suggestions on how to take things forward and involve parliamentarians for their suggestions on how to take CBET further.

### **Dr. Kirit Parikh, Chairman, IRADe**

Dr. Kirit Parikh appreciated the point raised by Dr. Gaurav Kapoor about questions that can be raised by decision makers over CBET. He explained that IRADe's study is more of a strategic study wherein risk of every individual project can be assessed and that can only be done at the stage of the project. But we must first accept the strategic dimension and the direction in which we should move. Even when India agrees with Nepal on having close cooperation and trade electricity as a common market with a 30 years agreement. Based on that, even if Nepal starts today it won't be able to set up plants which can export to India for the next 8-10 years. Nepal will initially benefit from importing power from India and will export in the future. It will really stimulate Nepal's growth over this period of time. By that time hopefully India will keep growing at a pace of 8% or so and all the surplus will disappear if power sector policies are at place. So for a long term perspective one has to move in a slightly different way.



Dr. Parikh explained the need of balancing power in India as ironically people in India think that they don't need a balancing power or a gas based power plant. The country can use coal more flexibly and can operate the coal power plants with a load factor varying from 55-85%. But the issue is that if the coal based power plant would be operated at the aforesaid load factor then power plants can be damaged, cost will go up, life of the plant and fuel use efficiency will go down. So taking into account all the factors it may not be a good idea to depend solely on coal based power plant. In addition to this, from long term perspectives, by 2050 we must reduce coal use as climate change concerns are becoming important globally. So there is need for more and more balancing power.

### **Ms. Arushi Sen, Senior Communication Officer, Communication and Policy Engagement Team**

Ms. Arushi Sen suggested to develop a communication forum wherein think tank representatives from South Asian countries can participate and can develop a comprehensive media strategy as a part of this phase of SARI. Even if SARI doesn't receive further funding at least the strategies developed and the respective institutions involved that are non-political actors, can reach out and get engaged to their respective nations. As media has a huge hand to play in terms of information and policies, work can then continue and CBET can move forward.



**Prof. Jyoti Parikh, Executive Director, IRADe**

Prof. Parikh invited suggestions from the think tanks and welcomed their contribution in taking the programme further and develop a comprehensive communication strategy.

The representative from CUTS suggested to work with parliamentarians and given that the expertise of CUTS lies in engaging with policy makers, they proposed to develop a policy brief. Further details will be deciphered after having in-house consultations. CSTEP proposed to develop a programme based media strategy involving other Think Tanks which are part of the TTF Forum

Ms. Lydia Powell (ORF) expressed an idea to bring a paper on India and Bangladesh as ORF has already worked on the same. Mr. Rohit Magotra highlighted that Think Tanks from Bangladesh are also interested in doing such studies. Hence it can be assessed whether there can be linkages with other South Asian Think Tanks or they should grant independent studies.

Ms Meera Shankar stressed that SARI/EI programme must take interest in Nepal as the country is short of power. So we need to build technical infrastructure for interchange and exchange. In a way India is helping them to meet their need which might change in future, but if this can be done then a trend of co-operation can be developed which may bring change.

# Vote of Thanks

**Mr. V.K Kharbanda, Project Director SARI/EI** thanked all the participants for sparing their valuable time and participating in the workshop. He thanked the participants for their suggestions and comments, and highlighted important discussions of the workshop which are as follows

- Need for Involvement of Parliamentarians on CBET and regional trade
- Need for focusing on Nepal to interact with various Nepal stakeholders like government, politicians, ministries, civil society, media and so on to promote hydro power development vis-a-vis cross border electricity trade.
- Thinking beyond economic considerations while considering regional trade issues in South Asia
- Poor access to electricity, low per capita consumption, optimal utilization of resources, (resource crunch in Bangladesh) these are the key drivers for electricity trade among the South-Asian countries and adequate supply of electricity is important in all aspects of life like education, health or industry. Example of Europe wherein the concept of power pool has been pushed by industries. So sometimes industry and civil society can play a better role.
- South Asian countries can consider joint development of power projects and associated transmission infrastructure

Mr. Kharbanda in his concluding remarks stated that SARI/EI programme has been continuously working on above mentioned areas in the South Asian region. The programme will associate with think tanks to achieve the goal of promoting CBET for the social and economic benefits as well as to bring stability in the region.

## List of workshop participants

S.No	Name	Designation & Organization
1.	Ms. Lydia Powell	Head, Centre for Resources Management, ORF Foundation
2.	Mr. Pradeep Mehta	Secretary General, CUTS
3.	Dr. Sanjib Pohit	Senior Fellow, NCAER
4.	Ms Meera Shankar	Former Ambassador of India to US
5.	Mr. Ajay Shankar	Former Secretary Gol, & Sr. Consultant, IRADe
6.	Mr. Gaurav Kapoor	Principal Research Scientist, CSTEP
7.	Ms. Arushi Sen	Senior Communication Officer, CSTEP
8.	Mr. Milind Rabindranath	Research Engineer, CSTEP
9.	Ms. Monali Zeya Hazra	Regional Energy Manager & Clean Energy Specialist, USAID/India
10.	Dr. Jyoti Parikh	Executive Director, IRADe
11.	Dr. Kirit Parikh	Chairman, IRADe
12.	Mr. V.K Kharbanda	Project Director, SARI/EI-IRADe
13.	Mr. Rohit Magotra	Assistant Director, IRADe
14.	Ms Asha Kaushik	Sr. Research Associate, IRADe

## Think Tank Forum Members

Nepal	Bangladesh	Sri Lanka	Bhutan	India
Institute for Social and Environmental Transition Nepal (ISET)	Bangladesh Centre for Advanced Studies (BCAS)	SLYCAN Trust	QED Group	Consumer Unity & Trust Society (CUTS)
Institute for Integrated Development Studies (IIDS)	Bangladesh Institute of Developmental Studies (BIDS)	University of Paradeniya	Royal Society for Protection of Nature (RSPN)	Centre for Study of Science, Technology & Policy (CSTEP)
International Center for Integrated Mountain Development (ICIMOD)	Bangladesh Enterprise Institute (BEI)	Climate and Development Research, Munasinghe institute for Development (MIND)		Observer Research Foundation (ORF)
Samridhhi foundation	International Centre for Climate Change and Development (ICCCAD)			National Council of Applied Economic Research (NCAER)
Niti Foundation				Research and Information System for Developing Countries (RIS)



**SARI/EI**

For more information on the South Asia Regional Initiative for Energy Integration (SARI/EI) Program, please visit the project website:

[www.sari-energy.org](http://www.sari-energy.org)





## **ABOUT SARI/EI**

Over the past decade, USAID's South Asia Regional Initiative/Energy (SARI/E) has been advocating energy cooperation in South Asia via regional energy integration and cross border electricity trade in eight South Asian countries (Afghanistan, Bangladesh, Bhutan, India, Pakistan, Nepal, Sri Lanka and the Maldives). This fourth and the final phase, titled South Asia Regional Initiative for Energy Integration (SARI/EI), was launched in 2012 and is implemented in partnership with Integrated Research and Action for Development (IRADe) through a cooperative agreement with USAID. SARI/ EI addresses policy, legal and regulatory issues related to cross border electricity trade in the region, promote transmission interconnections and works toward establishing a regional market exchange for electricity.

## **ABOUT USAID**

The United States Agency for International Development (USAID) is an independent government agency that provides economic, development, and humanitarian assistance around the world in support of the foreign policy goals of the United States. USAID's mission is to advance broad-based economic growth, democracy, and human progress in developing countries and emerging economies. To do so, it is partnering with governments and other actors, making innovative use of science, technology, and human capital to bring the most profound results to a greatest number of people.

## **ABOUT IRADe**

IRADe is a fully autonomous advanced research institute, which aims to conduct research and policy analysis and connect various stakeholders including government, non-governmental organizations (NGOs), corporations, and academic and financial institutions. Its research covers many areas such as energy and power systems, urban development, climate change and environment, poverty alleviation and gender, food security and agriculture, as well as the policies that affect these areas.

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