

International Conference

On

Energy Security Challenges – Non Traditional Security Planning in India

12th & 13th December, 2014

CPPR-Centre for Strategic Studies in Association with US Consulate, Chennai

The two-day International Conference on “Energy Security: Non-Traditional Security Planning in India” was conceptualised and organised by the **Centre for Strategic Studies**, Centre Public Policy Research, Kochi with the support of the US Consulate-General Chennai Region. The conference debated on how Energy security constitutes a crucial challenge that shapes and realigns the strategic relationships between countries. The conference was organized with the imperative to focus on the various non-traditional security challenges and the means to deal with them effectively in the larger interests of national security. The Conference was attended by eminent experts in the field of security and strategy, academicians and practitioners.

Speakers for the Conference include:

Welcome and Introductory Remarks: Dr. D Dhanuraj, Chairman, CPPR

Inaugural Speech : Mr. T.P Sreenivasan, Former Ambassador of India

Key Note Address: Mr. Tom Cutler, President, Cutler International LLC and former Director of the Office of European and Asia Pacific Affairs at the U.S. Department of Energy

Remarks by: Ms. Andie DeArment, Cultural Affairs Officer, U.S. Consulate General, Chennai

Dr. A.Gopalkrishnan, Former Chairman, Indian Atomic Energy Regulatory Board

Ms. Shebonti Dadwal, Fellow, Institute for Defence Studies and Analyses (IDSA), New Delhi

Dr. Lawrence Prabhakar Williams, Associate Professor, International Relations and Strategic Studies, Dept of Political Science, Madras Christian College, Chennai

Dr. Sairam Bhat, Associate Professor of Law, National Law School of India University (NLSIU), Bangalore

Mr. Raymond E Vickery Jr., Senior Director Albright Stonebridge Group LLC And Of Counsel, Hogan Lovells, LLP Washington, D.C.

Dr. Happymon Jacob, Assistant Professor, Diplomacy and Disarmament at School of International Studies, Jawaharlal Nehru University, New Delhi

Mr. Nitin Pai, Director, Takshashila Institute, Bengaluru

Dr. M. P. Parameshwaran, Fellow, Integrated Rural Technology Centre, Palakkad

Dr. G.M Pillai ,Director General , World Institute of Sustainable Energy (WISE), Pune

Dr. Harikumar, Head – Training and Education , Energy Management Centre, Trivandrum

Dr. Ashok Das, Founder CEO, SunMoksha, Bangalore

The Proceedings of the Conference are as follows:

- ❖ The speakers stated that Energy demand was expected to continue to rise leading to huge import dependence.
- ❖ There are internal and external threats to energy security in India. The central issue is how to secure electricity production without environmental degrading effects.
- ❖ The US-China agreement on green house gas emissions would put pressures on India to comply by the International agreement.
- ❖ The cost of imported nuclear reactors is 3-4 times the coal plants and twice indigenous nuclear reactors. There is also a constant hold on fuel supply. One cannot conclude that there is a need for nuclear power without a thorough examination of the current situation with other energy sources. The Indian nuclear sector is not well managed and even in the civilian nuclear area we are unnecessarily secretive.
- ❖ Fossil fuels would remain the dominant fuel around the world in the coming years to come. The Market is getting skewed to the Asian Economies. New suppliers are coming to the market. Oil is not only about markets but about politics and control. Price is an important factor in the strategy. OPEC now is trying to increase market share. There is a possibility to move to the traditional producers of gas. There is a surge in Pipeline diplomacies across the world where India has very little option. China does not have these problems because they are buying assets all over the world. In terms of strategic petroleum reserves in India, there is the difficulty for a 90 day reserve and difficulties to store in India; Russia is moving east and is likely to be more involved in Asian politics. India has to view the politics and markets of energy and specifically oil prices.
- ❖ Electricity had the highest Green House emissions in India. It is a fact that thermal and hydro-electric power sectors affect the environment more.
- ❖ One of the critical aspects of climate change has been the need to have low carbon strategies for inclusive growth as an optimal initiative in sustainable development.
- ❖ Three theoretical approaches to look at climate change and national security for a post - colonial society like India viz: Security theory, Social constructivism, Critical or Green Theory.
- ❖ One of the major incentives for climate change mitigation could come from technology transfers and subsidies from the developed countries.
- ❖ Similarly there have been Environmental refugees from climate changes in the developing world such drastic changes in the future could involve relocation of military installations in the coastal regions. India-Pakistan-China-Bangladesh-Sri Lanka has specific issues with environmental refugees. The Indian context of climate change does not call for broader approach from Western side. The imperative is that India should focus on the regional situation. The Indian response cannot be autocratic and has to have a vital cooperation with the international community. India needs to build human security and human development to deal with climate security issues.
- ❖ The moot question raised by the speakers was whether privatization of energy sectors a good or bad idea. The conference pointed out the amendments to the Electricity Act in 2003. On the Public-Private Partnership projects it was pointed out that most states cooperate with the Centre. Public-Private Partnerships are usually smooth going until the transfer stage. Environment governance in India is now with the higher judiciary. The Supreme Court outlines how to grant licenses in India.

- ❖ The involvement of the state institutions in environment policy regulation is flawed since they place the accountability on private players and absolved themselves of any primary responsibility. The reason is that the state and its institutions lack monitoring and compliance mechanisms to evaluate environment clearances.
- ❖ India and US should go across the board to deal with India's energy crisis as that would aid for the positive dimensions for climate change. There is an Indian energy crisis which is very broad in its dimension. Infrastructure is one way for India to move forward. Energy and environment cannot be kept in a vacuum they have to be dealt in synchronization. Coal and Biomass are dominant in Indian energy requirements. There are specific health consequences in this situation. There is a hopeless situation in this scenario. The US wants to partner with India on confronting these issues. There is a need to move forward in regards to transportation too. The need for natural gas in India is a bridge to the future; it is one of the least polluting of the hydro carbons. US-China Agreement has a substance and will be of use to India to follow a similar commitment; Both US and India should have a holistic approach, integrated planning, with regard to availability, affordability, environment and security affairs
- ❖ Private players are not allowed to invest in the nuclear energy sector, while the government is keen to invest in the nuclear sector and wants to expand its position. India has vast resources of Thorium that it is keen on developing the Thorium cycle for its nuclear energy future.
- ❖ On the Liability Law, there is a context for the law coming into being. There are fears on the Indian law that are conveyed by the International community. Regarding the liability of the supplier to the government of India, the US is worried of clause 46 about the litigation possibilities in US in case of an accident in India and on India signing Convention on Assistance in case of a Nuclear Accidents. The Russians on the other hand agree to go by Indian law but has asked for an insurance cover, GIC will cover each component of the reactor and the Indian operates will pay the premium. The French agree and wishes to continue with the Russian template. Domestic Suppliers of India are also unhappy with the law. The law basically says that safety and welfare of the people should be considered. However, the law runs counter to various agreements signed by India; Abiding by the law puts a burden on the tax payers and the law also cannot be amended. The speaker concluded that India contends a dilemma with regard to nuclear energy and its liability provisions.
- ❖ Supply Security of India's Nuclear Energy Infrastructure. The speaker pointed about human ingenuity, which can ensure safety and welfare of the people.
- ❖ As the economy grows there will be a demand and newer targets; expectations of people will also be growing alongside. Having sufficient fuel will become a political issue.
- ❖ How do we ensure this requirement of nuclear fuel? There is an 8-fold path. The imperative is for a National Energy Supplier and Risk Assessment and Management Framework for India as an important democratic document. The following factors are the eight-fold path 1: diversity in fuels, reactors and more of everything for us; means there is cost to it, a premium for security; 2: Trade with countries that are suppliers and with whom we have a broader trading relationships; two way process we have to buy and trade; 3: Buy fuel from competitive markets rather than on specific companies, or suspicion of markets is the barrier; 4: Make markets more competitive all along the supply chain, strategy to break the cartels; 5: Fungible fuel 6: Insurance not for the reactors but the people, insurance to people near the reactor premium paid by people who benefit from it; The type of Insurance: would help to identify the

reactors locations based on what extent of risk people are willing to take for the reactors; 7: To secure supply routes: geo political 8: Investment in the domestic nuclear industry: Fear and career choice in education/science of nuclear technology.

- ❖ Some of the speakers raised the fact that Nuclear energy is not abundant, safe or cheap: Only when controlled fission is feasible it will become abundant; third stage is just imagination. Nuclear reactors produce new radioactive materials on the earth. Bomb equivalents of radioactive material are being produced; Accident and evacuation: Accident management is unimaginably complicated and costly and in India there is no preparedness. The second stage of nuclear reactors: taming the nuclear material; India should not go more than any more nuclear reactors than today. How much energy do we require and for what? Even if coal production is stopped, yet global warming will take place and in fact we have already crossed the tipping point. It is not shortage of energy that causes blackouts in the country. The factors of per capita energy and longevity: There is practically no impact on longevity.
- ❖ Speakers opined that 75 per cent of the entire requirement can be produced from alternative sources of energy. Materials constraint by 2050 will stop economic growth. Way for the future is to phase out imports and use indigenous sources. The constraints will be from macroeconomic factors. The Market for oil dependence to be reduced Need to cut imports and move to new technologies.
- ❖ Energy efficiency and conservation is another form of energy creation. The imperative is for consumer knowledge on using energy effectively. In India there is no energy information bureau. India need to have innovative finance mechanisms; branding of renewable energy; The other issues are centralized supplies; high technical and managerial skills are required in energy programmes; technology transfer with respect to energy efficiency is still lacking.