



Energy and Environment in China under Xi Jinping

Speaker – Dr. Avinash Godbole, Research Fellow, ICWA

Chair – Amb. Ashok K. Kantha

Date – 20 September 2017

Venue – ICS Seminar Room

The seminar began with Amb Ashok Kantha introducing Dr. Godbole and giving opening remarks on China's environmental scenario where he said that Chinese have heavily damaged their environment in pursuit of high economic growth but recently they have started to take measures for correcting this problem.

After the Chair's remark Dr. Avinash Godbole laid out his presentation in four parts – Background; China's environmental challenges and counter-strategies; energy trends in last five years and; summary. Providing the background of China's environmental problem, the speaker stated that China's ecological environment has improved and downgraded in cyclical phases since the beginning of reforms and opening up of Chinese economy and it has diminished rapidly after its admission into the World Trade Organisation, owing to the fact that pollution prone industries like cement, iron and steel, chemicals and fertilizers, paper have grown rapidly in the years since 2001 particularly during 2002-2005. He also highlighted host of environmental challenges faced by China like urban air pollution, cancer villages, contamination of food, water pollution coupled with scarcity. Urban pollution became evident when Beijing hosted 2008 Olympic event. While explaining the cancer village problem in China he said that these villages are located in downstream areas and all the untreated water from heavy industries comes to these villages resulting in water and food contamination which has caused cancer amongst village population. It is estimated that there are as many as 2050 cancer villages that exist in China having the ratio of 1: 1000 affected by cancer.

Going further, the speaker talked about some important trends and events in China's environment scenario including various protests erupted against environmental degradation for

example, Anti-PX protest since 2007. While referring to the Tianjin blasts (August 2015) and Shenzhen landslide (December 2015) in which 173 and 69 people died respectively, the speaker said it shows that the implementation capacity of the Chinese environmental apparatus is still limited and needs to undergo major reforms.

The role of media and information was also brought to the notice by speaker in dealing with environmental challenges and spreading awareness regarding it. Mass media and social media play a very crucial role in China's environmental strategy as in many cases investigative journalists have switched to managing environmental NGOs forming a 'Media-NGO nexus' to scrutinize government policies and actions. Media sees NGOs as an important source to gain information about government's actions and such other stories whereas NGOs look up to the media when official channels of petition, appeal and notice yield no fruits. Social media and mass media have also become tools for organising protests and spreading mass awareness regarding environmental scenario in the country. But the negative side of the story is that many journalists reporting on environmental issues have been detained or others have their licenses revoked under 'anti-national' activities which show how China is putting substantial amount of efforts into information control if the message is questioning the success of government policies, for example, the documentary entitled 'Under the Dome' alleging that the petroleum standards committee was dominated and influenced by China's oil giants was blocked and taken offline.

Despite gruesome environmental conditions prevalent in China, the leadership has taken many policy initiatives to improve environmental scenario in the country. The process was initiated by the top leadership at the third plenum of 2013 when Premier Li Keqiang launched 'war on pollution'. Beijing has taken slew of measures for environment protection prominent amongst them is 'pollutant discharge fees' which is a tool innovated by several provinces/cities for penalizing industries that violate environmental norms. In 2016, 600 arrests were made and 5000 fines issued for breaching environmental standards. The Ministry of Environment Protection (MEP) has issued new emissions standards for energy intensive and pollution prone industries. The MEP also aims to achieve PM_{2.5} control annually by 6 per cent beginning in 2015 in three core regions namely Yangtze River Delta in the east, Pearl River Delta in the south, and Beijing-Tianjin-Hebei area in the north. Besides, the MEP is also engaged in carrying out inspection tours that have become more common and involve naming and shaming.

In later part of his presentation, the speaker focusing on China's energy trends said there is a cyclical pattern of efficiency. China's GDP quadrupled during 1980-2000 but energy consumption only doubled whereas the overall energy consumption grew faster than the GDP growth in 10th Five Year Plan marking a negative trend. While elaborating upon China's energy consumption reduction strategy speaker highlighted Top-1000 and Top-10000 programmes initiated during 11th and 12th FYP which saw China achieving its biggest energy efficiency targets. Top-1000 was programme was intended to target and improve the efficiency numbers of the highest energy consuming companies as these were responsible for countries one third energy requirements. The programme missed the target of 20 per cent overall energy intensity

improvement, being able to achieve only 14.4 per cent in exceeded time period, saving 150 millions of coal equivalent (mtce). Top-10000 programme was also akin to Top-1000 in its objectives, targeting saving of 250 mtce by 2015 which is estimated to have reduced. Other than reducing energy consumption, China also aims to reduce its coal dependence and its share of overall energy basket, but this seems to have been rather reversing as its coal consumption may have peaked in 2015-2016 which essentially implies altering of China's aggregate emissions and substantially improve its energy intensity ratio over the next few years. Speaker also pointed out ongoing research and innovation in China for increasing energy efficiency by using more renewable resources and reducing dependency on renewable resources. China is the largest manufacturer of solar panels and it has also become the largest producer and consumer of solar energy. China has the largest non-fossil energy generation capacity spending 120 billion dollar in 2015 for renewable energy programme. Research and innovation is also undergoing through Special Economic Zones like Shenzhen being at the forefront for focusing research on clean energy and transportation by making electric cars and busses. The Energy Action Innovation Plan launched by the NDRC and NEA aims to address issues like resource insecurity, energy restructuring, pollution, energy efficiency, and grid inflexibility. As far as the nuclear energy in China is concerned, it is estimated that China will triple its nuclear energy capacity by 2026 surpassing the US. As of now 1.7% of China's electricity comes from nuclear and by 2026, it is expected to reduce its coal's share of overall energy basket from 64% to 50%.

The speaker identified conflict of interest between Beijing and provinces pertaining to coal usage as the main roadblock for implementing supply side reforms, because on the one hand provinces are favouring production and utilization of coal essential for revenue generation and job creation but on the other hand Beijing is keen to rein in the coal dependence. Local resistance to supply side reforms is also a major roadblock.

To conclude, the speaker summarized his presentation in few points: one, environment has expanded the discourse of accountability in China; two, energy sector has done well than overall pollution in China; three, supply-side reforms one of the key to its success and research and innovation will help China do better in these areas; and four, Urbanization and Make in China 2025 are two policies to watch out for.

There were many questions asked during discussion such as whether accountability has spilled into domain other than environment, main causes to China's environmental degradation and what can India learn from China's environmental legal structure and implementation. Responding to questions speaker said that accountability has enhanced in terms of penalizing corrupt officials, making system more responsible driven by 'rule by law' principle; industrial pollution and coal dependence remain main causes for environmental degradation, and India can learn from China's public transport system especially Rapid Transit System and how odd/even policies are structurally placed.

Report prepared by Mr. Patil Chetananand, Research Intern, ICS

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About the Speaker -

Dr. Avinash Godbole is a Research Fellow at the Indian Council of World Affairs since March 2016. Prior to this he was Research Assistant at IDSA. He was awarded Doctor of Philosophy at CEAS, SIS, JNU. His doctoral thesis is on the Political Economy of China's Environment. He was a Visiting Fox Fellow at the Macmillan Center at Yale in 2007-08. His research interests are in the fields of Chinese Foreign Policy, Environmental Changes in China, Minorities in China, Domestic Politics in China, China's Asia strategy and India-China Relations. He has written extensively on these subjects in academic and media publications.