UGC CAS/SAP Seminar
of the Dept. of Political Science, University of Delhi
on
Leveraging Technological Leadership for Soft Power:
What India can Learn from Others

25 Feb. 2020
Satyakam Bhawan, University of Delhi, Delhi-07
Concept Note

Conventionally, soft power – as conceptualized by its patriarch, Joseph Nye, Jr. – implied the dissemination of non-military comparative advantages by a country to persuade the masses, and eventually the governments, of other countries. Thus, gaining soft power chiefly involved drawing political leverage from flaunting and exporting material assets, from cars to colas, cultural currents such as cinema and music, and even ideas like democracy and civil rights. Emphasizing on a country’s attractiveness, it relied on the international adulation and demand for the benchmarks set by a country in a non-military – or non-hard power – domain.

Yet, in the past three decades, just as soft power became a *sine qua non* of diplomacy, the dominance of globalization has transformed the benchmarks that characterize a country and the rest of the world’s view of it. Notwithstanding its supremacy in global exports and growing ability as an aid provider, China, for instance, extracts a significant portion of its soft power from its long-held position as a leading manufacturing destination, owing to its skilled manpower, technological adeptness, and infrastructural growth. Evidently, for nation-states – especially developing and emergent ones – to fully reap the fruits of globalization, they must establish themselves as lucrative markets, absorbents of investment, and progressive partners.

In this regard, the globally comparative ‘Soft Power 30’ rankings published annually by the University of Southern California’s Center on Public Diplomacy affirm a notable expansion of the traditional understanding of soft power. It adjudges the soft power capabilities of 60 countries based on objective metrics
such as digitization, entrepreneurship, and education, along with subjective metrics including liveability, and the manufacture of tech and luxury goods. These are reflectors of a country’s domestic progress, as opposed to more conventional parameters of soft power like foreign policy, stability of governance, and international engagements.¹

A country can obtain soft power with a distinguishable degree of attractiveness, which can be ensured by pioneering – or even simply aligning with – predominant global best practices in the domestic realm. In accordance, the US leads the world in terms of digital footprint with its wide-ranging ‘digital connectivity, [...] government online services, and the use of digital diplomacy.’² Likewise, Singapore ranks best in entrepreneurial prowess due to its reassuring ‘business model, its capacity for innovation, and its regulatory framework.’³

In times recent, India has improved its standing on the Climate Change Performance Index to 9⁰, WIPO’s Global Innovation Index to 52⁰, and the World Bank’s Ease of Doing Business Index to 63⁰.⁴ A responsible harvester of civil nuclear energy, it

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² Ibid: 60.
³ Ibid: 60.
champions the International Solar Alliance, funds one of the world’s most efficient space programs, and is aggressively mainstreaming digital solutions. It has policy designs to modernize its agrarian traditions with resourceful techniques and invest in the future, from blockchain to rare earth minerals.

These attributes have only reaffirmed India’s place in the world as an emergent economy and an aspirational power. Yet, the status of being a country with an enviable soft power apparatus still eludes India, as the nation-states that have topped 2019’s ‘Soft Power 30’ rankings are the ones that have pioneered and standardized the innovative, efficient, and consistent use of state-of-the-art technological remedies for socio-economic puzzles. For maximizing the soft power impact of its internal transitions and newfound affinity for tech-based implementation of policy, New Delhi shall do well to heed the benchmarks of attaining soft power set by the global leaders in the technological areas that it prioritizes.

This seminar is an attempt to bring together the perspectives and prescriptions of practitioners and academics on certain key priority technological sectors that India has been engaging in. The papers on these sectors shall be thematically segregated into panels on sustainable tech and emergent tech solutions. The statements and opinions of the participants in this seminar shall be expressed in their respective personal capacities.

Program Schedule

Seminar Date: Tuesday, 25 February 2020, 10 am to 4 pm.

Venue: Satyakam Bhawan, Faculty of Social Sciences, Opposite Daulat Ram College, University of Delhi, Delhi 110007.

Plenary Session: 10 am.

Chief Guest: Ali Chegeni (His Excellency, the Ambassador of Iran to India).

- Plenary Speakers: Dr. Navnita C. Behera (Professor, DoPS, DU) and Dr. Dhananjay Tripathi (Senior Asst. Professor, Dept. of International Relations, South Asian University).

Tea: 11 am.

Session 1: Sustainable Technologies: 11.30 am

Chair: Dr. Sanjeev Kumar HM (Professor, DoPS, DU).

- Forging towards an Adaptation Ambition: From Vulnerable to Resilient Energy Systems: Dr. Manashvi Kumar, IAS (Secretary, Revenue and Relief, Govt. of Punjab).
- France’s Civil Nuclear Advancements: An Indian Assessment: Sanjana Gogna (Research Associate, Center for Air Power Studies).

Lunch: 1 pm.
Session 2: Emergent Technologies: 2 pm

Chair: Dr. Bipin Tiwary (OSD, Equal Opportunity Cell, DU).

- **Going Digital for Diplomatic Clout: How a ‘Smart India’ can Boost Its Brand:** Dr. Ashish Abrol, IRS (Commissioner, National e-Assessment Center, Central Board of Direct Taxes, Govt. of India).

- **Blockchain and Estonia: Learnings for India:** Nikhil Dubey (Asst. Director, MP Agency for Promotion of IT, Govt. of Madhya Pradesh).

- **Digitization in Commercial and Border Transits: Lessons from the EU:** Naveen Agrawal, IRS (Assistant Commissioner, GST and Central Excise Commissionerate, Madurai, Govt. of India).

- **Harnessing Rare Earth Elements for Soft Power: What India Can Borrow from China:** Swathi Taduru (PhD Scholar, DoPS, DU).

High Tea: 4 pm.
Session 1: Sustainable Technologies

“Forging towards an Adaptation Ambition: From Vulnerable to Resilient Energy Systems”
By Dr. Manashvi Kumar, IAS, Secretary, Revenue and Relief, Govt. of Punjab

In most of the 194 countries of the world that house about 95% of its population, one can see the demand for coal remain steady over the next few decades. Evidently, ‘coal’ is very much functional and alive. In its December report, titled ‘Coal 2019’, the International Energy Agency (IEA), in fact, noted that global coal use has never been higher, accounting for about 40 percent of electricity generation. China, India, and other Asian economies led this expansion, while coal power generation fell in Europe and North America. The IEA forecasts that global coal power generation will increase by 4.6 percent per year through 2024 and stabilize through 2040.

The enthusiasm generated in Paris laid the foundations for a great headway on clean energy this decade. Advances in technology and policies have made cleaner energy solutions like wind turbines, solar panels, lithium-ion batteries, and LED lighting familiar parts of our world, implying renewable and low-carbon solutions for power, improved industrial energy efficiency, cleaner homes and transport systems, reduced emissions from oil and gas companies, and bolstered nuclear and
With ambitious plans to use renewables – particularly solar – to satisfy rapidly increasing electricity demand, this paper studies why India is a country with immense need for additional power system flexibility for its future. It underlines how increasing digital interconnected is only increasing our dependence on electricity, advocating the need for lowering the carbon footprint of power usage through technology acculturation.

“France’s Civil Nuclear Advancements: An Indian Assessment”
By Sanjana Gogna, Research Associate, Center for Air Power Studies

Despite the ongoing shift towards its cleaner alternatives, energy remains a potent tool of international influence, as states continue to exploit their advantages in energy output and technology to promote their strategic interests. However, as the coal and petroleum industries face an uncertain future, and solar and wind options are still nascent, countries that enjoy a competitive advantage in the field of clean civil nuclear power hold that strategic edge. Given India’s old nuclear collaboration with it, the paper would study the progress of France’s nuclear energy program, and highlight its diplomatic and strategic aspects. Next, it would take a comparative stock of India’s civil nuclear energy capabilities and explore how the French practices could be applied to augment India's nuclear energy commerce. Lastly, it would offer policy recommendations that may allow India to leverage its expertise and appreciable record in the nuclear energy sector to enhance its soft power influence.
For India, its inability to break into the globally regarded ‘Soft Power 30’ index, despite its vibrant socio-cultural, economic, and democratic branding, is a matter of noticeable concern. One of the reasons behind this is the expanding ambit of what constitutes a soft power asset. The mere export of noble ideals, intellect, cinema, arts, crafts, commodities, and skills alone can no longer be the lone pillar of a nation’s soft power generation, diplomatic goodwill, and branding overseas. It must improve itself internally on several accords – from revamping infrastructure to accepting the global standards for healthcare – to attract the international gaze. In this regard, a nation-state’s ability to adapt to climate change and sustainability challenges is a coveted metric in any calculation of a country’s global image today. The modernization and cleansing of its road transport system is one of the obvious initial steps that a state must take in that direction. India, to its credit, has warmly embraced this fact, and has, for a start, embarked on a state-backed mission to shift to e-vehicles (or EVs).

The paper, divided into three parts, explores the current status and possibilities of India’s ambitions to upgrade to a crude-free, low-emission, EV-friendly transport ecosystem. First, it assesses the progress that the private and public sectors have been making in promoting, manufacturing, and rolling-out EVs on India’s roads. Second, since India cannot meet sustainability benchmarks by promoting EVs in isolation without rectifying its coal-intensive power sector in general, an analysis of the benefits
of linking India’s National Solar Mission with its Faster Adoption and Manufacturing of EVs (FAME) program follows. Lastly, the paper shall underline the takeaways for Indian automobile companies with an edge in this technology – such as Tata Motors – from the leadership of Tesla, Inc. in the US’ EV industry.

Session 2: Emergent Technologies

“Going Digital for Diplomatic Clout: How a ‘Smart India’ can Boost Its Brand”
By Dr. Ashish Abrol, IRS, Commissioner, National e-Assessment Center, CBDT, Govt. of India

The importance of soft power in the contexts of globalization, the all-pervasive ability of digital surveillance, and the rise of Industrial Organisations (IOs) with capabilities to control information cannot be understated. The paper explores India’s recent initiatives that leverage technology, especially digital technology – Digital India, Start-up India, Incredible India, Digital by Default standards, faceless assessment, and the likes – as policy tools to communicate the nation’s emerging identity and brand to the world. It contextualises and assesses the efficacy of India’s technological push and calibration to smart solutions in relation to the initiatives of China, Brazil, the EU, and the United States, along with those of multilateral agencies.

The world’s growing digital connectedness is fast challenging its certitudes of border, territory, and identity. Yet, the weaponization of digital code with surveillance-from-below (or ‘sous-veilllance’), the expanding role of non-state actors, and the
increasing digital-divide in favour of the privileged and entitled poses a threat to the aims of reaping soft power through digitization for nations like India. While India has more Unicorns (or billion-dollar start-ups) than any country besides the United States and China, its digital penetration and outreach remains low. The efficacy of encouraging organic private and citizen-led efforts such as ‘frugal innovation’ may hold the key of remedy. Thus, policy initiatives in this regard require critical academic examination, which this paper intends to conduct. From Bangladesh and Nepal to the Maldives and Afghanistan, developing nations continue to trust technical support from India for conducting their elections and delivering their services. Given such an advantage, the global footprint of a ‘Smart India’ shall define the future of its soft power appeal.

“Blockchain and Estonia: Learnings for India”
By Nikhil Dubey,
Assistant Director, Madhya Pradesh Agency for Promotion of IT, Govt. of Madhya Pradesh

The rise of Estonia as a major technology-state has made it an attractive case study for countries on the road to significant technological reforms. The paper examines the path and approaches adopted by the Estonian government to transform its public delivery system and the lessons in them for India. While drifting away from its Soviet past, Estonia managed to digitize its economy to an extent that by 2016, almost 99% of its public services were accessible online. While placing the Estonian case within its larger geo-political milieu, the paper elaborates on the internal and external socio-economic and political factors that led the Baltic state to extensively adopt emerging technologies such as Blockchain and Artificial Intelligence (AI). Borrowing from the case, it chiefly highlights how the presence or absence of such
factors determines the ability of a state to drive its economy through technology.

Thus, when it comes to still evolving technologies like Blockchain and AI, while India can learn several lessons from Estonia, it shall have to devise its own unique application strategy taking its socio-economic and political institutions into account. After studying Estonia’s Keyless Signature Infrastructure (KSI) Blockchain capability and its effectiveness in creating a transparent public service delivery network, the paper discusses India’s progress in implementing Blockchain. It also assesses the efforts made by India’s states towards applying the technology, underscores the challenges faced in these early days of policy rollout, and ponders on a way forward.

“Digitization in Commercial and Border Transits: Lessons from the EU”
By Naveen Agrawal, IRS, Assistant Commissioner, GST and Central Excise Commissionerate, Madurai, Govt. of India

The paper is based on the liberal premise that trade is a positive-sum game, and in the long run, cooperation produces a win-win situation for all the stakeholders. It emphasized on the globalist framework and argues for the active role of the state as a positive arbiter that delivers mutual benefits. It further uses the functionalist lens of theorist David Mitrany to identify areas that can boost India’s ranking on global soft power indexes. First, the paper studies the technological and administrative best practices of the European Customs Union that India can replicate at home. It highlights how 27 national customs authorities within the European Union (EU) converge on a single EU customs to facilitate a volume of commerce higher than the Indian case. It
further assesses how the calibrated interplay of proper legislation, guiding codes such as the Union Customs Code (UCC), swift arbitration, a proactive executive, and technological smartness, enable a supranational customs union such as that of the EU to manage such a feat.

Second, the paper investigates how, by adopting modern immigration and border control technologies like the automated border control system (or e-gates) and e-passport services, states can improve their global brand and destination worth. It showcases the success story of the EU in this regard, as its adoption of smart transit mechanisms allows seamless immigration clearance for EU citizens. Lastly, the paper suggests why and how India should identify its indirect tax reform, the Goods and Services Tax (GST), as an apt functional area for the application of such digitized smart transit solutions. It argues how a fully digital mechanism for GST shall provide enough fodder for other state agencies to adopt. In doing so, it does not overlook the challenges, most notably, its long reform curve, that India faces in this regard.

“Harnessing Rare Earth Elements for Soft Power: What India Can Borrow from China”
By Swathi Taduru,
PhD Candidate, Dept. of Political Science, University of Delhi

The success story of China’s economy since the 1990s has earned it a tag of the world’s choicest manufacturing base, especially in the field of technological goods. One of the key advantages that enabled China’s rise as a tech-manufacturing hub is its monopoly over rare earth elements (REEs). Not only does it hold an estimated one-third of the global reserves of REEs, but it also
positions itself as their leading supplier and producer. The prominence of REEs is evident in China’s technological progress and superiority across industrial sectors ranging from high-grade military weaponry and medicine to electronics and automobiles. Today, most of the top-selling mobile brands in India have their primary manufacturing units in China, owing to the easy availability and production of REEs: a key component in their parts. Additionally, China exports nearly 80 percent of its mined REEs to the US, which is another dominant player in the field of tech-manufacture.

Meanwhile, India holds about 6.9 million metric tons of rare earths, which accounts for one-fifth of the world’s reserves. Yet, ironically, it imports most of its REEs in finished form largely from China, Hong Kong, and South Africa. The partnership of the state-owned firms, Indian Rare Earths Limited (IREL) and National Mineral Development Corporation (NMDC), can play a major role in the exploration of rare earth opportunities at home and abroad. Securing these minerals is crucial for India if it aims to jumpstart its lagging indigenous manufacturing and industrial outputs. The paper, thus, seeks to closely examine the Chinese model of REE production and export in order to prescribe sustainable solutions for the Indian rare earth industry to fully realise its potential in this vital sector at the heart of global digitization.