101

ORF SPECIAL REPORT

February 2020

# India and South Korea: Exploring New Avenues, Outlining Goals

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**K.V. Kesavan, A. Singh, L. Powell, M. Joshi, A. Mukhopadhyay, N. Sahoo**

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ISBN: 978-93-89622-58-4

Attribution: K.V. Kesavan, et al., “India and South Korea: Exploring New Avenues, Outlining Goals”, *ORF Special Report No. 101,* February 2020, Observer Research Foundation.

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# FOREWORD

This special report is the outcome of a research project titled, "The converging interests of South Korea and India: President Moon's New Southern Policy and Prime Minister Modi's Act East Policy". With financial support from the Korea Foundation, the Observer Research Foundation (ORF) conducted the project in association with the Institute of East and West Studies of the Yonsei University in Seoul. The papers in this volume were written by my colleagues at ORF who were involved in the implementation of the project, and in October 2019, we presented these papers in a major conference that we organised in Seoul. That conference was preceded by a symposium organised at the national level in New Delhi in July 2019. The symposium, "Towards building a more robust India-Korea partnership", gathered many distinguished speakers who made insightful presentations on the need to synergise Republic of Korea's (ROK) New Southern Policy and India's Look East Policy. The New Delhi event served as a valuable precursor for the Seoul conference in October 2019.

The most important reason for selecting the subject for the project is that India-ROK partnership carries a great deal of purpose and substance**.** The two countries have successfully developed a robust, multi-dimensional partnership encompassing a wide range of interests including regional economic cooperation, maritime security, energy cooperation, counterterrorism, and nuclear disarmament. In the recent years, they have shown interest in the evolving economic and strategic architecture in the Indo-Pacific region and both strongly believe that the emerging order should be open, rules-based, and free from the undue influence of any single country. Since both depend on sea-borne trade for their economic prosperity, they share a strong commitment to ensure that every country has a right to freedom of navigation and unimpeded commerce and overflight in open seas. In addition, they have also asserted that no country should use force as a right to settle disputes or change the status quo.

After the ascent of Narendra Modi to India's prime ministership in 2014, bilateral ties with ROK received a stronger stimulus. Following his landmark official visit to South Korea in 2015, the two countries upgraded their ties to a 'special strategic partnership' and initiated annual summit meetings of their top leaders alternatively in New Delhi or Seoul or on the sidelines of multilateral meetings. Additionally, they agreed to strengthen their strategic dialogue at different levels. As relations were poised for a higher trajectory,

Moon Jae-in was elected as new president of South Korea in 2017. From the outset, President Moon showed that he was keen to give a new orientation to his foreign policy by lessening Seoul's dependence on the traditional partners like the US, China, Japan and Russia and strengthening relations with India and the ASEAN group. Calling India "a central pillar of ROK's New Southern Policy (NSP)", Moon visited the country in July 2018 and both he and Modi agreed not only to add more economic and strategic content to their cooperation, but also resolved to explore tripartite partnership for development in third countries beginning with capacity-building in Afghanistan. Moon extended his full support to India's various initiatives including "Make-in India", "Digital India", and "Skill India". His inauguration of Samsung's biggest mobile plant in Noida demonstrated his commitment.

Like Moon, Modi also regards South Korea as an "indispensable partner in India's Act East Policy". He has firmly expressed India's interest as a stakeholder in the ongoing peace process with North Korea. Further, Seoul's recognition of India's "inclusive vision for the Indo-Pacific region" underlines the convergence of their strategic interests. India's interest in Korean peace and unification is not new, but goes back to the days of the Korean War. India has always maintained its diplomatic relations with North Korea, albeit at a low level.

This compendium carries six papers written by Indian scholars and presented at ORF's Seoul conference. The topics of these papers were selected after thorough discussions and were assigned to the authors taking into consideration their respective expertise.

My article sets the tone for the rest of the volume by laying out the evolution and progress of India's Act East Policy and South Korea's significance to India's eastward drive. It is followed by Abhijit Singh's paper that discusses India-ROK's strategic and maritime relations. The third article, written by Lydia Powell, focuses on the prospects of energy cooperation between the two countries and how South Korea's experience can assist India in certain critical areas. In the fourth article, Manoj Joshi outlines the ways in which South Korea's technological prowess can contribute to India's development. In particular, he identifies defence cooperation as one area where ROK's assistance can be crucial. Abhijit Mukhopadhyay, in his article, analyses how both countries will benefit by utilising available trade tools including the Comprehensive Economic Partnership Agreement, as well as factors like India's cheap labour and South Korea's capital. Niranjan Sahoo wraps up the special report with his piece, where he emphasises that India-ROK partnership can benefit from

giving attention to cultural dimensions, people-to-people contacts, shared liberal values, and civilisational links.

As Project Director, it would be difficult for me to thank adequately all those who have helped put together this volume. I owe a debt of gratitude to the Korea Foundation for their financial assistance. In particular, I would like to mention the help and encouragement of Ms. Hyeunjoo Lee, Project Officer, Global Networking Department at the Korea Foundation.

Academic support came from many quarters and I am deeply obliged to numerous scholars and specialists both in India and South Korea for discussing many aspects of the project. I would like to mention the names of Prof. Yong Suhk Pak, Director, Institute of East and West Studies, and his colleagues for their invaluable advice. But for their support, the Seoul conference would not have achieved the success it did.

I would also like to place on record my thanks to Mr. Sunjoy Joshi, Chairman of ORF who evinced keen interest in the progress of the project at every stage. Finally, my thanks are due to H.E. SHIN Bongli, ambassador of South Korea to India and his colleagues for their continuous support for the successful completion of the project.

**Prof. K.V. Kesavan**
**Distinguished Fellow, ORF**
**February 2020**

# INDIA'S 'ACT EAST' POLICY AND REGIONAL COOPERATION

K.V. Kesavan

## INTRODUCTION

India's 'Act East' policy is a diplomatic initiative to promote economic, strategic and cultural relations with the vast Asia-Pacific region at different levels. The country's eastward drive since 1992 has underscored the importance of this region in its contemporary international relations. 'Act East' and its early avatar, 'Look East' are not different; rather, they are two sides of the same coin, representing two different, but continuing phases in the evolution of India's policy towards the Asia-Pacific region. When India launched the Look East policy in 1991, its own economic strength, its global status and the external environment were not what they are at present. At the time of its launch, India was struggling to transition from a state-controlled economic regime to a more liberalised one. It took many years for the country to get adjusted to the newly emerging economic environment. When in 2014, Prime Minister Narendra Modi launched the Act East policy, India's economy was relatively robust and its global profile was higher than it was in the decades prior. Modi gave a new thrust to intensify economic, strategic and diplomatic relations with countries that share common concerns with India on China's growing economic and military strength and its implications for the evolving regional order.[1]

The end of the Cold War in 1991 brought about a major shift in the economic and strategic policies of most countries in Asia; they were compelled to make suitable policy changes to cope with the changing economic and security situations in the region. India was no exception, and it made three significant changes in its policies. First, India's adoption of economic reforms in the early 1990s was a major shift in its development strategy.

Second, as the Cold War thawed, India began adopting a multi-dimensional foreign policy that facilitated closer economic and strategic engagements with the United States (US). Their relations steadily warmed, leading eventually to the signing of the historic civil nuclear cooperation agreement in 2008.[2] Third, the launch in 1992 of the Look East policy was India's response to the new challenges it faced in the region after the collapse of the Cold War structures.

Although India's relations particularly with Southeast Asian countries were old and historical, this advantage was not considered in the calculation of India's policies towards the region.[3]

In the post-Cold War period, there was a strong rationale for India to cultivate closer relations with the countries of the region for mutual benefit. The Gulf War of 1990-91 severely affected the Indian economy owing to an unprecedented rise in oil prices. It was further accentuated by the fall of the Soviet bloc on which the Indian economy heavily depended. India was therefore compelled to seek alternative regions for its economic sustenance. Unfortunately, its own immediate neighbourhood, South Asia, did not offer many opportunities for trade and investment. Political bickering and lack of trust, and the economic backwardness of the region compelled India to look to Southeast and East Asia for greener pastures. China, having embarked on a modernisation programme was then well on its way to becoming a major player in the Indo-Pacific region. Japan, the second biggest economy of the world at that time, had already established its footprints in the ASEAN region by setting up its manufacturing bases there. Realising that ASEAN and East Asia offered immense prospects for growth, India launched its Look East policy.

While the initial motive was predominantly economic, Look East soon acquired strategic dimensions too. Over a period of time, as India forged partnerships with several countries in the region, their relations rested on three major pillars: Elaborate institutional mechanisms; economic interests including infrastructure development and connectivity; and common strategic interests.

## INSTITUTIONAL SUPPORT

An examination of India's relations with ASEAN, Japan, South Korea, and now Australia would show how a vast network of institutional structures has lent support to expanding bilateral engagements. India joined the ASEAN in 1992 as a sectoral partner and became a full-fledged member in 1994. It is now an active member of the ASEAN Regional Forum (ARF), the East Asian Summit (EAS) and the ASEAN Defence Ministers Meeting Plus. Today there are 30 sectoral dialogue mechanisms and seven Ministerial-level interactions in addition to annual summit-level meetings.[4]

The same characteristic feature is seen in the case of both Japan and South Korea—two major pillars in India's Act East policy. A vast array of

institutional mechanisms binds their partnership in such forums like annual summit, strategic dialogue, defence dialogue, and numerous forums on energy cooperation, counter-terrorism, U.N. reforms, cyber security, and maritime cooperation. Further, India and Japan have institutionalised 2+2 Ministerial Dialogue.[5] PM Modi gave considerable importance to the need for extending the dialogue beyond the bilateral ambit, upgrading the trilateral US-Japan-India dialogue to ministerial level. Equally important is India's participation in the quadrilateral meetings with the US, Japan and Australia, particularly since 2017 which has underlined New Delhi's interest to exchange views on the strategic environment of the Indo-Pacific region. At the same time, however, India is cautious not to offend China in the process.

Similarly, both India and South Korea have forged several bilateral mechanisms to strengthen their partnership. A joint commission for bilateral cooperation at the level of foreign ministers has been regularly meeting since 1996, as well as a Foreign Policy and Security Dialogue at the secretary level. Moreover, the defence ministers and the national security advisers of both countries have been meeting regularly to promote their strategic cooperation. In early September 2019, India's defence minister Rajnath Singh visited Seoul to participate in the bilateral defence dialogue.[6]

## GROWING ECONOMIC RELATIONS

India's economic relations with the countries of ASEAN have witnessed dramatic growth in recent years. India and the ASEAN have signed two trade agreements in goods and services, creating one of the biggest trade areas with a market of 1.8 billion people and a combined GDP of about US$3 trillion. India-ASEAN annual trade today accounts for more than US$80 billion for the first time in history, although the figure is still far below the target of US$200 billion set for 2020.[7] A good deal of ASEAN private investment has also flowed into India in many sectors including construction of ports, highways, food processing, shipping, and auto components. Similarly, India's investments in ASEAN have grown considerably in recent years, with Singapore becoming its investment and trading hub.

One can see a similar pattern in India's trade with Japan and South Korea. Though India and Japan entered into a comprehensive economic partnership agreement (CEPA) in 2011, the volume of bilateral trade has been decreasing. In 2014-15, trade between the two amounted to US$15.71 billion, and came down to US$14.51 billion in 2015-16. It further declined to US$13.60 billion in 2016-17, before it recovered to a record US$15.71 billion in 2017-18.[8]

Efforts are ongoing to review the terms of the CEPA to give a boost to bilateral trade. One can see the same phenomenon in the case of India-South Korea trade. Like Japan, South Korea also signed a free trade agreement with India in 2009, but did not find the bilateral trade growing as expected. Both countries since then have reviewed the working of the CEPA to augment the volume of trade.

The story regarding Japan's and South Korea's investments in India is different. Prime Minister Modi has shown great interest in acquiring Japanese investment for several infrastructure projects. Praising Japan for having done more for India's modernisation than any other country, Modi believes that Japan's technological and economic prowess can help accelerate India's development by transforming its infrastructure and manufacturing sectors. In their first summit meeting in 2014, Modi and his Japanese counterpart, Shinzo Abe set the target of doubling Japan's direct investment and the number of Japanese companies in India. Japan agreed to extend US$ 33.5 billion public and private investments in India. This amount would be used to support projects in various sectors including infrastructure, connectivity, transport, smart cities, energy and skill development.[9] Modi decided to set up a number of Japanese industrial townships and electronic parks in India. In turn, Abe agreed to support India's 'Make-in India', 'Digital India' and 'Skill India' programmes.

The volume of Japanese private investment in India has increased since 2014 owing to the Indian government's efforts, like the creation of a special Japan Plus desk at the Ministry of Commerce and Industry to minimise the bureaucratic obstacles in clearing investment projects. The value of Japan's investment jumped from US$ 1.7 billion in 2014 to US$ 4.7 billion in 2016-17. The cumulative Japanese investment in India from April 2000 to December 2016 amounted to US$ 25.2 billion, accounting for eight percent of India's total FDI during that period.[10] Japanese investment flowed into several important sectors including automobile, telecommunications, chemicals and pharmaceuticals.

Almost similar trends could be seen in India-South Korea economic engagements. They signed a CEPA in 2009 that helped the bilateral trade to increase to US$ 20.5 billion in 2011 though it dropped in the following years. Subsequently, bilateral trade recovered and jumped to US$ 21.5 billion in 2018. Both countries believe that the full potential of the bilateral trade has not been tapped so far and they have taken measures to review the CEPA and make corrective measures to boost trade. Both countries have set a target of

reaching US$ 50 billion by 2030. Considering the potential, it appears to be an achievable goal.[11]

South Korean FDI to India has steadily increased in recent years, reaching US$ 5.71 billion by the end of 2018. Korea's presence in the automobile sector has become prominent, with Hyundai Motors playing a key role. Hyundai has also started another plant recently to increase its market presence. South Korea has virtually taken over India's electronics sector with Samsung and LG playing a prominent role. Hyundai, Samsung and LG have won the confidence of Indian consumers and have become household names across India.[12]

India's Act East Policy is closely connected with its long-term vision of developing its Northeastern region (NER) which is considered as a gateway to Southeast Asia. Prime Minister Modi has shown a strong commitment to developing the infrastructure of the region in transport, highways, communication, power and waterways. Since Japan's interests in the NER are deeply rooted in history, there is a broad bilateral consensus to cooperate for the development of the region. Several recent developments in India-Japan relations have underscored the increasing convergence of interests between the two, who will both stand to benefit by collaborating in the region. In the past, the interests of the NER did not receive as much attention as required from both the central and state governments and it hampered the development of the region which remained backward without infrastructure facilities. Further, local insurgencies, disorder and even external interference considerably came in the way of the region's progress.

Prime Ministers Modi and Abe, in their first summit meeting in 2014, emphasised the importance of the NER. The Tokyo Declaration, which they released after that meeting, underscored Japan's commitment to enhancing connectivity and development in the NER and stressed the need for linking the region with other economic corridors within India and Southeast Asia for the economic progress of the region.[13] At the next summit held in 2015, Abe expressed his intention to provide Japan's official development assistance (ODA) loans for connectivity projects in the NER. In 2016, Japan reaffirmed its commitment to enhancing connectivity and expressed satisfaction at the progress of projects in the region.

Indo-Japanese cooperation received a big push with the two prime ministers signing an agreement in 2017 to establish the India-Japan Act East Forum which is conceived of as a platform for bilateral cooperation. The forum will identify projects for the economic advancement of the region, with

focus on connectivity projects, disaster management and environment and people-to-people contacts through tourism and culture.[14] It was inaugurated in December 2017 and Japan has already extended a substantial ODA loan which would not only upgrade the National Highways (NH 40) but also support India's connectivity initiatives in Bangladesh, Myanmar, and other neighbouring countries.

A look at Japan's recent and ongoing projects in the Northeast would clearly show Tokyo's deepening involvement not only in road network connectivity, but also in many other spheres including energy, water supply, health, irrigation, environment and people-to-people exchanges.

The connectivity projects in the NER will foster greater integration not only within the NER, but also externally with neighbouring countries. After all, it is in India's Northeast where India's Act East policy and Japan's 'Open and free Indo-Pacific strategy' converge and both countries are keen to extend their cooperation to the broader Indo-Pacific region. This includes the African continent too. In May 2016, Modi announced a proposal to develop an Asia-Africa Growth Corridor (AAGC) with the support of Japan. It is a proposal for creating a "free and open Indo-Pacific region" by building a series of sea corridors that will connect with India and other countries of South and Southeast Asia. A major objective of the proposal is to bring about greater integration within the Indo-Pacific region by undertaking infrastructure projects.

It is significant to note that both India and Japan are already collaborating in projects in Sri Lanka (LNG related infrastructure), Myanmar (development efforts in the Rakhine state), Bangladesh (road and reconstruction of bridges) and in Kenya (health services). Both countries have had long engagement with the African continent which would be useful in promoting the goals of the AAGC. To be sure, they have a long way to go and it is still far-fetched to view the AAGC as a counter to China's ambitious Belt and Road Initiative (BRI). In this context, it is also necessary to understand the somewhat differing approaches of India and Japan towards the BRI as well as the improving equations between China and Japan, and China and India.

## SHARED STRATEGIC INTERESTS

The Look East policy was first intended as an economic strategy to boost India's trade and investment relations with the Southeast Asian region. Over the years, it not only expanded its geographical reach to include Japan, South Korea and Australia, but has also assumed significant strategic and political

dimensions. With Modi's adoption of the Act East policy, the strategic factor has assumed greater salience. India has now forged strategic partnerships with Indonesia, Vietnam, Malaysia, Japan, South Korea and Australia. In addition, it has also established close links with countries of the BIMSTEC group of countries and the IOR.

Prime Minister Modi has described India's vision in the region in one word, SAGAR which stands for Security and Growth for All in the Region. Incidentally, *sagar* is Hindi for 'ocean'. India's strategic interests in the region are many. First and foremost, India is concerned about the strategic uncertainties in the region following the decline of US influence and the rapid rise of China. India, therefore, is interested in contributing along with other like-minded countries to the evolving new regional order which should be open, rules-based, and free from the influence of any single hegemon. In his address at the Shangri La Dialogue in June 2018, Modi underlined, "Such an order must believe in sovereignty and territorial integrity as well as equality of all nations, irrespective of size and strength. These rules and norms should be based on the consent of all, not on the power of the few. This must be based on faith in dialogue and not on dependence on force.[15] Second, as a country dependent on sea-borne trade for its sustenance, it recognises the inherent rights of all countries to freedom of navigation, overflight, and unimpeded commerce in open seas. Maritime security is an important aspect of India's Act East policy.

Third, India also believes that no country should use force as a means of settling disputes. Fourth, India's Act East policy supports connectivity programmes for promoting regional cooperation and integration. Unlike the Look East Policy, the present Act East lays great emphasis on the connectivity programmes that link India's Northeast region with ASEAN countries. India's Act East policy has a strong synergy with Japan's Free and Open Indo-Pacific and South Korea's New Southern Policy. All three recognise the centrality of the ASEAN region and their economic and strategic interests converge in the Indo-Pacific and provide a great opportunity for mutual cooperation.

In this context, South Korean President Moon's efforts to deepen Seoul's relations with India and ASEAN have great implications for the security and stability of the Indo-Pacific region. His visit to India in 2018 provided a strong stimulus to both countries to augment their engagements in multiple spheres including trade, investment, nuclear disarmament, defence, maritime security and energy cooperation. Moon's emphasis on the centrality of the ASEAN resonates well with India's interests in cultivating closer relations

with those countries. In particular, Vietnam's rising profile in ROK's New Southern Policy is something that India would welcome given its own deepening relations with Hanoi. It is important to note that Moon and Modi, in their joint vision statement of July 2018, agreed to explore tripartite partnership for development in third countries beginning with capacity-building in Afghanistan.[16] South Korea could reinforce the efforts of India and Japan which have already undertaken development projects in countries like Bangladesh, Myanmar, Kenya and Sri Lanka.

## ENDNOTES

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# STRATEGIC AND MARITIME RELATIONS: SHARED IMPERATIVES, COMMON GOALS

**Abhijit Singh**

## INTRODUCTION

In recent years, India-South Korea relations have undergone a significant transformation. There has been a marked upturn in New Delhi's interactions with Seoul ever since President Moon Jae-in unveiled his "New Southern Policy" (NSP) in November 2017.[1] The new policy is part of the larger, overarching Northeast Asia-plus Committee plan, whose two other components are the Northeast Asia Peace and Cooperation Platform (NAPCP) and the New Northern Policy (NNP), intended at boosting cooperation with North Korea and Russia, respectively. The NSP is aimed at elevating Korea's strategic ties with the Association of Southeast Asian Nations (ASEAN) and with India to bring relations on par with South Korea's four major diplomatic partners: the United States, China, Japan and Russia.[2] The policy places Southeast Asia and India at the centre of South Korea's foreign policy agenda, so far dominated by the Korean Peninsula and the role of these four major powers.

The direction of India-South Korea engagement began shifting after President Moon assumed office in 2017. The President's desire for a different kind of relationship with ASEAN and India gave an impetus to high-level interactions, with many official delegations visiting New Delhi, a push by Seoul to upgrade political and security engagement.[3] The President's four-day visit to India in July 2018 was by itself the longest by any leader of the two countries, signaling a crucial shift in Seoul's diplomatic approach.[4] Unveiling a raft of proposals to invigorate the bilateral relationship with India, the President made it clear that deepening Seoul's strategic partnership with New Delhi was a priority for his government.

Needless to say, economics has been the principal driver of South Korea's changed outlook. Increasingly, Seoul's political elite are coming to view India and the ASEAN countries as new economic partners, driven by their need to reduce over-dependence on traditional trade allies like China and the United States.[5] But Seoul's new robust outreach is also driven by its desire to endorse the 'Indo-Pacific' construct by aligning with regional states. This ties in well with India's own approach that recognises the Indo-Pacific as a region of strategic

interest. The fact that India has no sensitive issues with South Korea helps the cause of strategic cooperation between the two states. In the words of Trade Minister Kim Hyun-Chong: "There is little risk of economic cooperation with India wavering due to external factors."[6] Unlike China, which created serious problems for South Korea over the THAAD issue,[7] India does not carry with it unknown variables.

New Delhi, too, has been keen to strengthen bilateral ties with South Korea. India sees the ROK as an indispensable partner in its 'Act-East' strategy, with the potential to contribute to peace, stability and security in the Asia Pacific Region.[8] Consequently, Indian policymakers have placed greater emphasis on security ties with South Korea. Prime Minister Narendra Modi's visit to Seoul in February 2019 witnessed a push towards a special strategic partnership, yielding seven agreements for enhanced cooperation in key areas, including infrastructure development, media, and start-ups, as well as in combating trans-border and international crime.[9] In a meeting with President Moon on the sidelines of the G-20 summit at Busan in June 2019, Mr. Modi reaffirmed the growing convergences between South Korea's New Southern Policy and India's Act East Policy, central to which is the pursuit of a stable, secure and prosperous Indo-Pacific order.[10] Recalling President Moon's visit to India in 2018, PM Modi remarked that "the coordination of Indian and South Korean approaches in the region is deepening and strengthening the Special Strategic Partnership."[11] From an Indian perspective, the essential premise of a strengthened India-ROK partnership is a shared vision of progress in Asia, and a roadmap aimed at people, peace, prosperity and strategic balance.

## A HISTORICAL OVERVIEW

To assess the conditions that have led to a deepening of the India-South Korea security cooperation, studying past developments may prove useful. It was in May 2007 that Indian and South Korean defence ministers held their first-ever consultations. At the time, Indian officials noted that "the military field needed to keep up with the development of the two sides' economic cooperation."[12] In January 2010, South Korean President Lee Myung-bak and Indian Prime Minister Manmohan Singh upgraded ties to a "strategic partnership" that included an enhanced focus on political and security cooperation. Among the issues discussed was an agreement for an annual security dialogue between the two countries and cooperation in the joint development of defence technologies. There was also recognition of the potential for enhanced cooperation in terms of India's role as a provider of maritime security in the Indian Ocean region.[13]

This also brought up the possibility of greater defence trade between India and South Korea, which was limited prior to 2005. The South Korean defence industry had been virtually locked out of the Indian arms market throughout the Cold War and immediately thereafter. After 2005, defence industry cooperation between India and South Korea picked up some degree of momentum with projects like the joint development of self-propelled artillery and mine-countermeasure vessels. In March 2007, India and South Korea also began talks on the development and purchase by India of frigates, armored vehicles, and military trucks. These talks would fail to come to fruition, but South Korea remained hopeful of being able to sell military equipment and platforms to India.[14]

Even so, direct cooperation between Indian and South Korean maritime forces remained limited. India proceeded cautiously on this front, beginning with a memorandum of understanding relating to Indian and South Korean coast guards signed in March 2005. This led to joint coast guard exercises in July 2006, which coincided with nearby India-US bilateral naval exercises.[15]India and South Korea subsequently agreed to hold joint naval exercises and regular military consultations. In the following years, India and ROK cooperated regularly in anti-piracy operations in the Gulf of Aden. With almost 99 percent of its international trade conducted by sea, South Korea has been an eager participant in measures to secure Indian Ocean SLOCs. Yet Seoul seemed reluctant to partner with India in any initiative in South Asia that challenged other regional powers.

Today, India and South Korea seem more assured about their maritime and strategic ties. Both sides have taken steps towards operationalising joint plans that better reflect shared interests in their maritime commons. Political observers say the common experiences of the two nations have created grounds for greater synergy in military cooperation. Both nations share a history of partition, and confrontation with Pakistan and North Korea, respectively, as well as an uneasy relationship with China. Importantly, while both sides have sought to tackle their principal adversary through coercive diplomacy, they have adopted similar approaches to dealing with China.[16] New Delhi and Seoul have sought to simultaneously accommodate and balance rising Chinese power–expanding economic ties with Beijing while deepening their strategic relationship with the United States, in an attempt contain growing Chinese presence in their neighbourhood.

## TOWARDS A STRATEGIC PARTNERSHIP

Recent months have revealed the contours of a truly strategic bilateral India-ROK relationship. Indian Defense Minister Rajnath Singh's visit to South Korea in August 2019 showed greater intent on the part of New Delhi to strengthen military ties.[17]In his meeting with ROK defence minister, Jeong Kyeong-doo, Mr. Singh made a pitch for a deepened partnership in the defence and security sectors. A comprehensive review of the defence relations followed, resulting in the signing of two far-reaching agreements: one to extend logistical support to each other's navies, and a second one to deepen defence educational exchanges. The agreement on naval logistics sharing is a particularly significant one, as it is an arrangement that India presently shares only with the US and France.[18]

In New Delhi, there is an expectation that the military logistics agreement with South Korea will enhance India's strategic reach and naval presence in the Pacific. The Indian navy is often seen as lacking the maritime legs for sustained operations in the Pacific. A partnership with South Korea will help in creating the reach in a theatre of growing strategic importance for India. New Delhi and Seoul are also working on a plan to strengthen bilateral defence industry collaboration, with the former keen to find an alternate source for Chinese systems and components in the broad defence electronics sector.[19] A partnership with South Korea could help in the development of indigenous capability to fill the vital technology gap. According to a statement by India's defence ministry, at a meeting of the CEOs of Korean and Indian defence industries in Seoul, Rajnath Singh listed a number of possible areas for cooperation including land systems, aero systems, naval systems, R&D co-operation and collaboration in testing, certification, and quality assurance.[20] The high-end and sophisticated nature of the South Korean defence electronic capabilities makes Seoul an indispensable defence partner.

Other initiatives are equally significant. According to media reports, the Indian defence minister has also invited the Korean defence industry to participate in DefExpo 2020 to be held in Lucknow in February 2020.[21] A joint task force will identify military systems and hardware that can be produced in India through the participation of Korean defence industries, which will be useful in avoiding the import costs of these systems. In November 2019, the Indian Army inducted the K9 VAJRA-T 155mm/ 52, a tracked self-propelled howitzer, which has its roots in the K9 Thunder, the mainstay of the South Korean Army.[22] South Korean defence industry, Samsung-Techwin, and India's Larsen & Toubro have entered into an agreement for the sale of 100 howitzers in May 2017. Efforts are underway to strengthen bilateral collaboration to develop remote control systems in India's defence sector.[23]

## AN INDO-PACIFIC CONVERGENCE

The most interesting aspect of the growing proximity between India and South Korea is the Indo-Pacific focus, and the increased accent on a maritime convergence in the region. South Korea's growing support for a rules-based and inclusive regional architecture is aimed at addressing what South Korean diplomats and officials have described as the difficulty in managing the pulls and pressures from competing initiatives from the US and China. Indeed, as a treaty ally of the US, with China as its biggest trading partner, Seoul increasingly faces problems in managing its relations with these important associates. South Korea is displaying an increased desire for close interactions with regional partners like India on key strategic issues.

Even so, the Indo-Pacific presents a dilemma for both India and South Korea. This is because the US, through its 'Free and Open Indo Pacific' (FOIP) strategy, has adopted a confrontational stance vis-a-vis China. The US strategy focuses excessively on rules of behaviour in the maritime domain, emphasising China's infringement of norms in the South China Sea. Trump administration officials also lay inordinate stress on power competition with rivals, and Washington's need to dominate its presumed adversaries.[24]

As many in Washington see it, there is an inherent asymmetry in maritime-Southeast Asia – which it believes lies at the heart of the construct – a power imbalance driven by China's assertive behaviour in the South China Sea and Western Pacific. US officials view China's reclamation activities in the South China Sea as a violation of international law amounting to "intimidation and coercion". American experts also deem problematic Beijing's deployment of big Coast Guard ships and survey vessels in the EEZs of Vietnam and the Philippines, and the installation of military hardware on islands under Chinese control.

In contrast, the Indian version of the Indo-Pacific is more conciliatory, emphasising stakeholdership and inclusion. For India's strategic elite, the concept goes beyond political and strategic considerations to also include economic, cultural and historical elements, each underscoring the imperative for pan-regional participation and multilateral cooperation. The clearest articulation of India's conception of the Indo-Pacific came at the 2018 Shangri La dialogue where Prime Minister Modi comprehensively expounded on the five basic principles that undergird India's strategic appreciation of the Indo-Pacific construct. [25]

(a) *Inclusiveness*: India does not see the Indo-Pacific region as a strategy or as a club of limited members. It is not a grouping that seeks to dominate, the Prime Minister said, and by no means directed against any country. Mr Modi spoke of India's deepening ties with Indo-Pacific powers, particularly the United States, Russia, Singapore and Japan. He also stressed the need for greater trust and confidence in the India-China relationship, stressing that both sides need to put their differences aside and work with each other.

(b) *Regional Powers as Anchors of Stability:* The need for regional powers to take greater responsibility in matters of maritime security, and serve as anchors of stability in Asia. If the Indo-Pacific is one integrated space, the responsibility for keeping it together rests equally on countries like India, Sri Lanka, Bangladesh, Myanmar, Thailand, and most importantly the ASEAN bloc, which India regards as a lynchpin of the Indo-Pacific.

(c) *Connectivity:* An issue that lies at the heart of Asia's development. Connectivity is vital for more reasons than just the enhancement of trade and prosperity. Beyond physical infrastructure, it also unites a region, "building bridges of trust" of the region. Connectivity is more than material; it has a metaphysical quality as it can unite countries in a region.

(d) *Rule of Law:* For any of our collective initiatives in the Indo-Pacific to come to fruition, as Mr. Modi observed, all sides need to adhere to some basic rules. These are: respect for sovereignty and territorial integrity, consultation, good governance, transparency, viability and sustainability. The rules-based order must also apply to interactions in the global commons (in terms of freedom of navigation, unimpeded commerce, equal access, and peaceful settlement of disputes). Trans-national economic initiatives should be empowering for other nations and not place them under impossible debt burden.

(e) *Strategic Cooperation, not Conflict:* The Indo-Pacific takes us back to the era of great power rivalries. What we need is an Asia of cooperation, not one of conflict. There is a need to manage differences and forge partnerships on the basis of shared values and interests.

## MARITIME COOPERATION

Since the early 2000s, India and South Korea have cooperated in search-and-rescue and anti-piracy operations in the Indian Ocean. South Korea, like Japan, remains concerned with India's ability to provide maritime security in vital sea lines of communication in the Indian Ocean Region, including through

the Strait of Malacca. New Delhi has welcomed South Korea's recognition of India's dominant security role, and is seeking to promote closer naval ties with the latter.

India, however, has been reluctant to play a maritime role in Northeast Asia. While supporting measures for the establishment of a strong and unified Korea, Delhi has desisted from playing a more direct role in the Korean Peninsula. In the past, political observers have called India a legitimate dialogue partner in any future settlement with North Korea; the South Korean government has even requested that India use its "special status" with the two Koreas to support its position in the Six-Party Talks, playing an honest broker role between South Korea and North Korea as it did during the Korean War.[26] During Prime Minister Modi's visit to Seoul in May 2015, then President Park Geun-hye evinced interest in an Indian role in the ROK's Northeast Asia Peace and Cooperation Initiative (NAPCI).[27]Despite efforts to find complementarities between NAPCI and Act East Policy, Delhi, however, has displayed no desire to become involved in Northeast Asian security issues, whether on the Korean Peninsula or in the Taiwan Strait.

President Moon's New Southern Policy reveals that there might be other areas concerning maritime security where the ROK might be willing to make common cause with India. These include shipbuilding (where the two nations already have an MoU in place), joint capacity building, maritime domain awareness, humanitarian assistance and disaster relief, search and rescue, marine pollution, anti-piracy, counter-terrorism and counter-trafficking, and combating marine pollution. In recent years, the Indian military has upgraded its naval, coast guard, and air capabilities in mainland coastal and island territories to better monitor the security situation in the South Asian seas. Much work has focused on the Lakshadweep archipelago off India's west coast and the Andaman and Nicobar Islands in the east. These are areas in which India could benefit from South Korea's capacity-building assistance.

Another area of possible cooperation is maritime domain awareness (MDA). The Indian navy has also worked to boost its situational awareness in the maritime commons, establishing an Information Fusion Centre (IFC) for the Indian Ocean Region. Launched in 2018, the centre processes radar and sensor data from participating countries and offers the data to partners, including all members of the Indian Ocean Rim Association. India has sought assistance of extra-regional players and could benefit from South Korean participation in the project. Seoul could start by posting a liaison officer to the IFC, but could also assist India with creating capacity in small Indian

Ocean island states. Seoul could also help boost Indian capacity to provide humanitarian aid and disaster relief (HADR) in the neighbourhood.

Naval capacity building is a fourth area of India-ROK maritime cooperation. South Korean company Daewoo Shipbuilding & Marine Engineering response to the Indian Navy's Expression of Interest (EoI) for six advanced conventional submarines under Project-75I (India) has already enthused Indian observers.[28]India's state-owned Hindustan Shipyard Limited will also cooperate with a shipyard nominated by South Korea on a joint shipbuilding project.[29] As many see it, the navy-to-navy cooperation holds the most potential. As part of deployment of the Eastern Fleet to the South China Sea in April 2019, Indian naval ships *Kolkata* and *Shakti* visited Busan to participate in the ADMM-Plus Maritime Security Field Training Exercise (FTX).[30] There has been greater willingness on the part of the Indian navy to engage with its South Korean counterpart, and there is need to improve even Coast Guard cooperation. This could also help enhance collaboration in the North Eastern Pacific.

South Korea's deteriorating relationship with Japan, however, might pose a problem for New Delhi. In August 2019, a simmering conflict between Japan and the ROK erupted into a full diplomatic crisis, when Japan threatened to slow down exports of materials essential to South Korean industries. Tokyo had earlier announced that it was not inviting South Korea to a multinational naval review it is hosting in October because of strained ties over history, trade and defence.[31] Following the threats by Japan, thousands of protesters marched in the streets of Seoul, accusing Japan of an "economic invasion" and threatening an intelligence-sharing agreement that the US considers crucial to monitoring North Korea's nuclear buildup.[32] This places New Delhi in a difficult position since Japan is a close partner of India, and a prime collaborator in the Indian Ocean. Yet, India hopes that relations between Seoul and Tokyo would ultimately improve.

Seoul, too, remains concerned about New Delhi's growing suspicions of Chinese maritime activity in South Asia. As South Korean scholars and policymakers see it, China's growing economic interests in the Indian Ocean justify a commensurate Chinese naval presence in the region. Any suggestion by New Delhi then that South Korea could form part of a multilateral coalition aimed at containing China in the IOR is treated with skepticism in Seoul. South Korea wishes to develop a security relationship with India, but not as a ploy to contain growing Chinese power. 'Strategic equilibrium' is more what Seoul seeks in Asia, and it is willing to partner the US for a desirable end-state.

## CONCLUSION

In many ways, India and South Korea face similar imperatives in defining their strategic equation. Both states feel the pressure to balance between the United States and China, whilst collaborating with other regional powers in South and Southeast Asia. New Delhi and Seoul remain keen to promote strategic stability in the Asia Pacific, but recognise that the long-standing "hub and spoke" system of separate bilateral alliances between the US is at risk, with many regional powers following independent policies without publicly breaking away from Washington.

The reasons underlying the positive trajectory of the India-South Korea relationship are then contingent. There are strategic and economic factors pushing New Delhi and Seoul into a close embrace, impelling them to cooperate for the achievement of common goals. Given the complexities of geopolitics in the Indo-Pacific, India would perhaps desist from drifting militarily northwards, and Seoul too would be careful not to be seen siding with New Delhi. For the time being, India and the ROK would perhaps be content developing close economic ties. Yet both sides know a geopolitical crisis could occur at any time, compelling them to review their options.

Not surprisingly, there seems ever greater resolve in Delhi and Seoul to take the military maritime relationship to the next level. The two states are working to leverage their commonalities to expand military exchanges and deepen cooperation. Beyond meetings between high-ranking military officers, and cooperation in combating transnational threats such as maritime terrorism and piracy, both sides are exploring ways of expanding their strategic engagement. What direction India-ROK strategic ties might ultimately take depends on the ability of both to deliver on the promise embodied by their maritime partnership.

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# ADDRESSING CHALLENGES IN DECARBONISING ENERGY SYSTEMS

Lydia Powell

## INTRODUCTION

India's population is 26 times larger than that of South Korea, but its economy—valued at US$2.7 trillion (as of 2020)—is less than twice South Korea's—valued at just over US$1.6 trillion (as of 2018).[1] South Korea's per-capita income is US$31,000, 15 times that of India. However, despite the enormous economic gap, the two countries share some attributes in the energy sector.

South Korea and India are heavily dependent on fossil fuels, i.e. coal, oil and natural gas, which poses a critical challenge to their efforts to decarbonise their energy systems. Simultaneous reduction of urban pollution at the local level and greenhouse gas (GHG) emissions at the global level are urgent challenges that both countries face. This involves balancing short-term economic costs of reducing GHG emissions (e.g. the cost of new technologies) with long-term benefits, such as the stimulation of the economy and better health outcomes. Both South Korea and India are heavily dependent on imports to meet their energy demand, which exposes them to the vagaries of geopolitics and geo-economics. They have also invested heavily in nuclear energy to diversify their energy baskets, but this has meant grappling with the inherent contradictions of nuclear power.

## SHARED ENERGY CHALLENGES

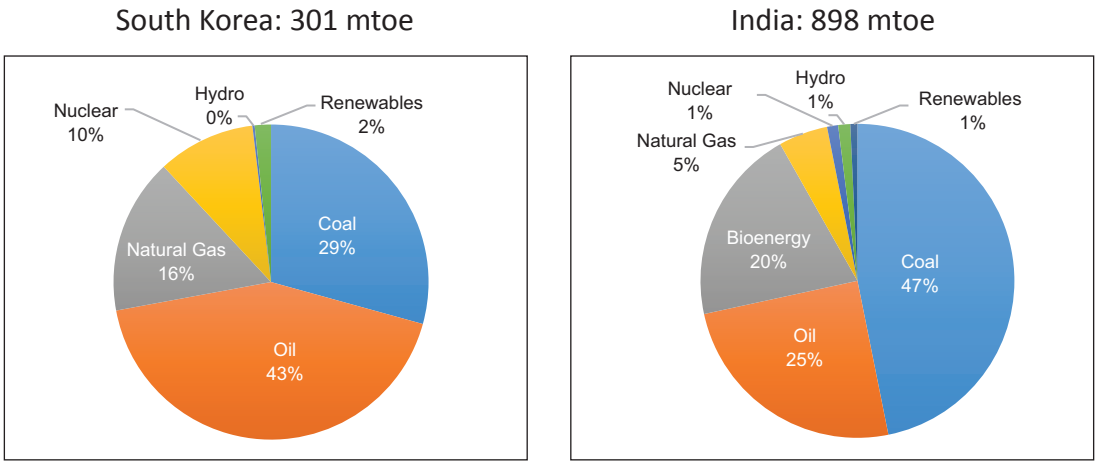
### *Dependence on Fossil Fuels*

In 2016, 83 percent of South Korea's primary energy was derived from fossil fuels (coal, oil and natural gas); the proportion was 75 percent for India.[2] India is relatively less dependent on fossil fuels because unprocessed biomass (firewood and dried animal dung) that accounts for 22 percent of energy consumption is used for cooking in poor rural households. However, if biomass that is not commercially traded on a national scale is excluded, the share of fossil fuels in India's *commercial* energy basket[3] is a staggering 95 percent (See Figure 1).[4]

## *Import Dependence*

Over 95 percent of South Korea's energy is imported as the country has poor resource endowments for coal, oil and gas.[5] India's abundant coal reserves give it a lower import share of 34 percent, but for crude oil—associated with critical economic and geopolitical risks—the share of imports is 84 percent.[6] South Korea and India share geopolitical risks in importing oil, which includes a volume-risk component and a price-risk component.

**Figures 1a and 1b. Primary Energy Consumption by Fuel Share 2018**




*Source: BP Statistical Review of World Energy 2019; for India, the figure for biomass is taken from the World Energy Outlook 2018 of the International Energy Agency.*

The volume risk component arises from supply disruptions caused by conflict in oil producing countries or on account of US sanctions on them. Such disruptions can upset long-term contracts for oil supply by South Korea and India, which would, in turn, require changes in prices as well as refinery output. The price-risk component arises from the volatility in crude oil prices and its impact on the domestic economy and on external trade. The Indian economy is more exposed to both dimensions of oil-price risk due to the country's "twin deficit" problem.[7] High crude prices push up the fiscal deficit of India's domestic budget and increase the cost of subsiding the consumption of certain oil-derived products. It also increases the magnitude of India's trade deficit with the rest of the world.

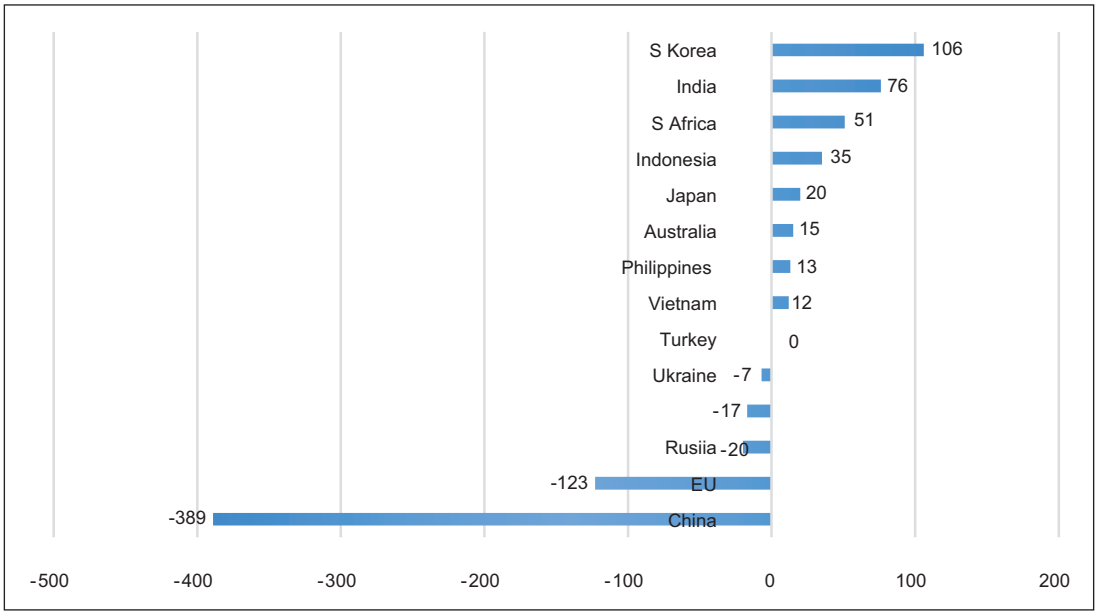
## *Dependence on Coal-Based Power Generation*

In 2017, coal accounted for 40 percent of South Korea's electricity and 74 percent of India's.[8] The use of coal for power generation is a challenge in the context of meeting goals set in the nationally determined contributions

(NDCs) to the Paris Agreement. According to the international energy agency (IEA), carbon dioxide ($CO_2$) emitted from coal combustion was responsible for over 0.3°C of the 1°C increase in global average annual surface temperatures above pre-industrial levels.[9] Activist organisations that oppose investments in fossil fuels are likely to leverage this observation, to portray South Korea and India as climate-change offenders. Within the framework of climate change, multilateral obligations can also create pressure on the two nations to accelerate the phasing out of coal use. This will necessarily mean an increase in short-term economic, social and political costs for both countries.

A recent report by the "Carbon Tracker Initiative," a non-governmental agency opposing the use of fossil fuels, concludes that South Korea has the highest stranded asset risk of US$106 billion from existing and future coal-based power plants amongst the 34 countries modelled. India comes second, with a stranded asset risk of $76 billion (See Figure 2).[10]

**Figure 2. Stranded Asset Risk in US$ Billion**




*Source: Matt Gray and Durand D'souza, 2019.*

These narratives present South Korea and India in poor light, coercing them to reconfigure their energy baskets. However, such measures would alter the global economic competitiveness of both countries. For South Korea, especially, this is a huge risk since it is a highly industrialised export-oriented economy.

## NATIONALLY DETERMINED CONTRIBUTIONS TO CLIMATE-CHANGE ACTION

### *South Korea*

South Korea's NDCs include a target of reducing GHG emissions, excluding land use, land-use change and forestry (LULUCF). By 2030, the country aims to reduce emissions by 37 percent below "business as usual" (BAU) emissions (or 18 percent below the 2010 level), and increase the share of renewable energy to 20 percent.[11]

### *India*

As part of its NDCs, India aims, by 2030, to reduce the emissions intensity of its gross domestic product (GDP) by 33–35 percent compared to the 2005 level; achieve 40 percent cumulative installed capacity for electric power generation from non-fossil fuel energy, through transfer of technology and low-cost international finance, including support from the Green Climate Fund (GCF); and create an additional carbon sink of 2.5–3 billion tonnes of $CO_2$ equivalent through additional forest and tree cover.[12]

### *Impact of NDCs of South Korea and India*

The NDC commitments of South Korea and India are likely to help decarbonise the global energy system. However, organisations that rate and track country-wise NDCs describe them as not "sufficiently ambitious" to limit the global average temperature increase to 1.5°C. For example, the "Climate Action Tracker" observes that more stringent policies would be required to meet even the "weak" target in South Korea's NDC.[13]

While the agency is more favourable towards India, it is critical of the country's plans to build coal-based power plants.[14] Both South Korea and India have been accused of continuing with the use of coal for power generation, despite the availability of what the agency suggests are "cheaper" renewable energy options.[15] Under the framework of the NDC commitments, countries that are dependent on coal are singled out as climate offenders. This narrative not only oversimplifies the complexity of reducing carbon emissions, but also ignores the economic and social cost of implementing the relevant policies.

## ECONOMIC COST OF REDUCING CARBON EMISSIONS

### *South Korea*

Currently available empirical studies from South Korea show that introducing low-carbon technological solutions will mean significant economic costs. For example, under a BAU scenario projected by the Korea Energy Economics Institute (KEEI) in 2016, even by 2050, fossil fuels will continue to account for over 81 percent of South Korea's primary energy demand. The relative shares of oil, gas and coal will increase only marginally, compared to 2014.[16] By 2050, fossil fuels will account for 49 percent and 45 percent of the primary energy supply, under the "Moderate Transition Scenario" and the "Advanced Transition Scenario," respectively. Under the "Visionary Transition Scenario" (VTS), both fossil fuels and import dependence can be eliminated from South Korea's energy supply. However, "job creation"—a parameter that may be considered a proxy for economic growth—is lowest under the VTS, as overall energy consumption reduces.

A study on reducing urban air pollutants, e.g. particulate matter < 2.5 micro-meter ($PM_{2.5}$) and GHGs, concludes that the effort could cost 0.34–1.75 percent of South Korea's GDP and impose asymmetric damage on emission-intensive industries such as primary metals, chemicals and transportation, with outputs from these sectors falling by 2 to 30 percent.[17] For an industrial economy such as South Korea, the implication of this is uncertain. However, the experience of Germany, a frontrunner in implementing low-carbon energy policies, offers some clues.[18] Germany, along with other countries in the European Union (EU), has high household electricity tariff account of levies, which have been included to finance the cost of renewable energy.[19] The much-acclaimed EU market for carbon does not apply to emissions from transport, industry and buildings that are energy- and emission-intensive, to sustain the industrial competitiveness of EU economies.[20] Moreover, Germany faces protests against the phasing out of lignite (the dirtiest form of coal), by workers employed in its lignite industry. Studies have found that Germany's continued use of lignite will compromise its climate goals for 2030.[21] South Korea's own experiment with green growth, briefly discussed in a latter section of this article, highlights similar challenges.

### *India*

In the case of India, projections by the Planning Commission (renamed NITI Aayog in 2014) estimate the cumulative cost of "inclusive" low-carbon growth (increase access to energy for poor households) to be about US$834

billion (in 2011 prices) between 2011 and 2030. The loss in economic output in the same period is projected to be about US$1.3 trillion.[22] The low-carbon growth scenarios envisaged by the Planning Commission results in an overall increase in $CO_2$ emissions on account of increase in energy consumption, but the analysis foresees a reduction in $CO_2$ emission intensity ($CO_2$ emission per unit GDP).

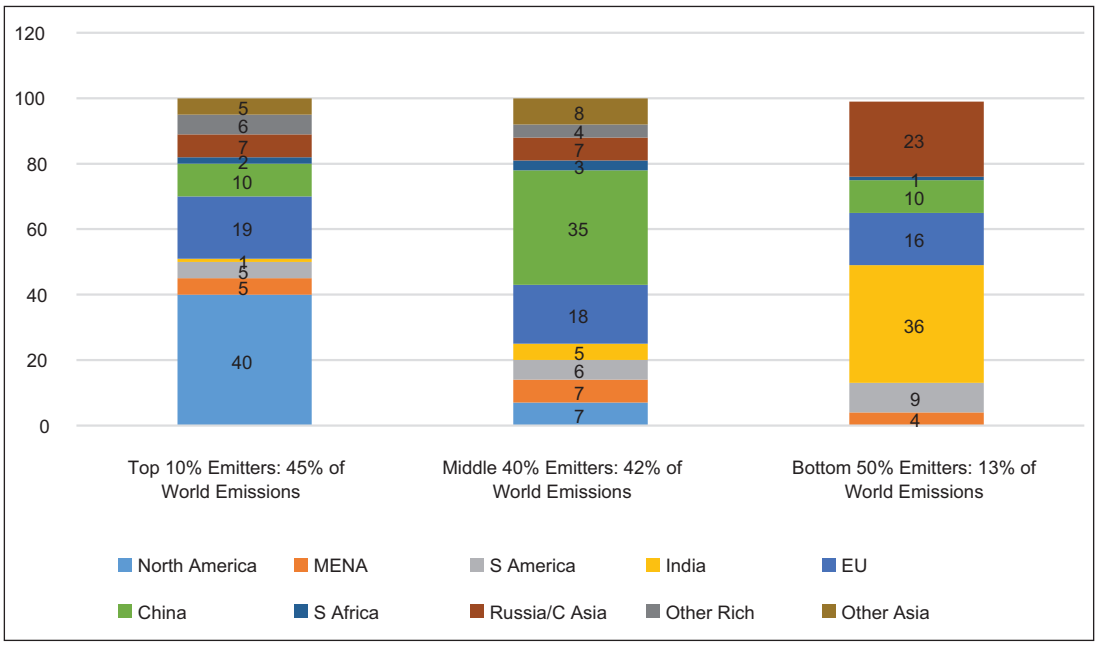
Inequality in access to energy and, consequently, inequality in $CO_2$ emissions further raise serious distributional questions regarding the implementation of low-carbon policies. Only one percent of the global top 10 percent of $CO_2$ emitters and five percent of the top 10 percent $CO_2$ emitters—who account for 45 percent and 42 percent of $CO_2$ emissions globally—are in India.[23] However, 36 percent of the bottom 50 percent of $CO_2$ emitters (with emissions lower than world average), who account for the remaining 13 percent of emissions, are in India. This is the largest share of low $CO_2$ emitters from any country in the world.

These low emitters are part of the energy-poor of the world, with marginal or no access to basic energy services such as lighting for electricity. Distributing the cost of decarbonisation amongst the poor ("socialisation of costs of decarbonisation") who have not contributed to $CO_2$ emissions raises serious questions over equity. This points to the political complexity of decarbonising economies at the cost of distributional equity. The case of the "*gilets jaunes*" (yellow vests) protests in France illustrates this complexity.[24]

To mediate this conflict between the pursuit of distributional equity and that of environmental security, many development funding agencies have promoted decentralised solar-energy solutions, which can provide access to modern lighting without increasing the $CO_2$ emissions in India.[25] However, despite the efforts of these often well-funded programmes, the grid (coal)-based electrification programme of successive federal and state governments in India have been more successful in increasing electricity access to rural India than the decentralised solar solutions.[26]

Studies in villages that have been electrified with decentralised solar systems have demonstrated an unambiguous preference for grid-based power because of lower tariff, higher quality of service (availability of higher-quality lighting for longer periods) and lower demand for their time and intervention (lower transaction costs).[27] Even wealthier electricity consumers in California, who routinely signal a strong commitment to reducing their carbon footprint, have reportedly turned to petrol (gasoline)-based standby and portable generators during power outages caused by wildfires.[28]

**Figure 3. Distribution of Global Carbon Emitters**




*Source: Iddri Lucas Chancel and Thomas Piketty, 2015.*

Thus, the behavioural choices of both the affluent in California and the poor in India are based on economic self-interest rather than national/global climate-change considerations. Are consumers hiding their true preference behind the so-called political inertia? This is a critical policymaking challenge, especially for South Korea and India. Can the governments in these countries be blamed for inaction (or slow action/lack of political will) when consumers signal a preference for the status quo? Can the South Korean government choose decarbonisation over economic competitiveness and the Indian government socialise economic costs of decarbonisation amongst the poor? Sectors such as telecommunications and information technology have clearly demonstrated that when consumers shift to alternatives (albeit due to self-interest, i.e. lower costs and higher convenience and utility), government policy has little choice but to follow.

## SOUTH KOREA'S EXPERIMENT WITH GREEN GROWTH

South Korea's experiment with "green growth" offers useful insights on the complexities of decarbonising the energy system of a country. Following a decade of slow growth, shrinking middle class and growing income inequality, South Korea embraced the idea of green growth in the late 2000s, to invigorate its economy.[29]

The 2010 Seoul G-20 Summit, where the concept of green growth was first introduced formally, knowledge and innovation in clean, low-carbon technologies were promoted to accelerate growth, create new competencies and stimulate job creation, without compromising on the environment.[30] Under the green growth initiative, aggressive targets were set for 2030—of reducing energy intensity, the share of nuclear energy, oil dependence and energy poverty; while increasing the share of renewable energy and green jobs.[31]

However, an analysis of the trajectory of green growth policy outcomes in 2016 showed a departure from the trajectory required to achieve these goals.[32] Despite substantial investment in the sectors selected for green growth, compared to the levels in 2006, only marginal improvements were achieved in areas such as energy intensity, utility-scale solar photovoltaic (PV), the share of low carbon renewables, oil dependency and green jobs. Moreover, energy poverty rates increased from about seven percent in 2006 to about 10 percent in 2016.

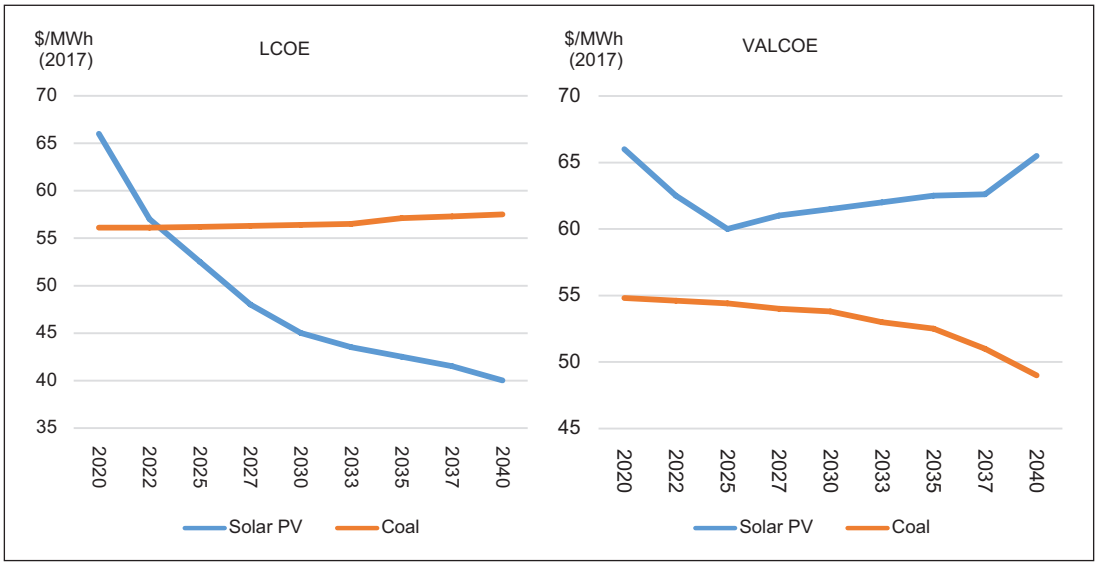
The reasons identified by empirical studies for the failure of South Korea's "green growth" initiative include: (1) the "more is better" ideology on energy consumption; and (2) the technological optimism of large-scale systems managed by experts. The first reason raises a much larger question regarding capitalism as the guiding philosophy of the global economic system, which is beyond the scope of this paper. The second reason is discussed in the following sections.

## SOUTH KOREA AND INDIA: THE WAY FORWARD

### *Investing in Low-Carbon Energy*

The Government of India has set a target of 175 GW renewable power installed capacity by the end of 2022.[33] This includes 60 GW from wind power, 100 GW from solar power, 10 GW from biomass power, and 5 GW from small hydro-power. The targets are routinely revised upwards by political leaders.[34] This is based on the premise that the cost of renewable energy is lower than that of conventional energy, even when health benefits of the former are not monetised, along with technological optimism over an exponential decline in the costs of renewable energy in the future.[35] The IEA has stated that the cost of electricity generated by solar energy is not necessarily lower than that of the electricity generated from fossil fuels at the system level for uninterrupted

**Figure 4. Solar PV Levelised Cost of Electricity vs. Value-Adjusted Cost of Electricity**




*Source: IEA, 2018*

supply of electricity.[36] It also estimates that the costs of integrating intermittent energy is likely to increase with higher shares for renewable energy.

According to the IEA, the value-adjusted levelised cost of electricity (VALCOE), which takes into account the cost of managing intermittency and unpredictability of solar and wind energy, is still well above the cost of coal-based power generation (existing and planned). This is true in India as well, where the balance of system (BOS) costs of solar projects (excluding the cost of solar panels) is low due to low labour costs.[37] While the estimation of renewable-energy integration[38] costs vary, according to one of the most authoritative papers on this subject, integration costs (costs that do not occur at the plant level but at the system level) are quite high, in the range of 35–50 percent of generation costs at 30–40 percent renewable energy penetration levels.[39]

This is an important observation for South Korea and India. The dominant (popular) technologically optimistic narratives narrowly focus on shifts at the supply end—where low-intensity energy sources (e.g. solar energy) replace high-intensity energy sources (e.g. fossil fuels), ignoring the need for spatial, temporal, economic and individual behavioural changes that are required at the demand end.[40] Technological substitution of high-carbon fossil fuels with low-carbon renewables at the supply end that ignore changes required at the demand end is likely to fail. Technological optimism is again invoked in the ability of smart grids, smart devices and the blockchain to mediate and substitute the complex social, temporal and behavioural changes required.

Can South Korea and India afford to make substantial investments based on technological optimism? Or should they instead take technology-agnostic policy paths towards decarbonisation?

### *The Role of Small Modular Nuclear Reactors*

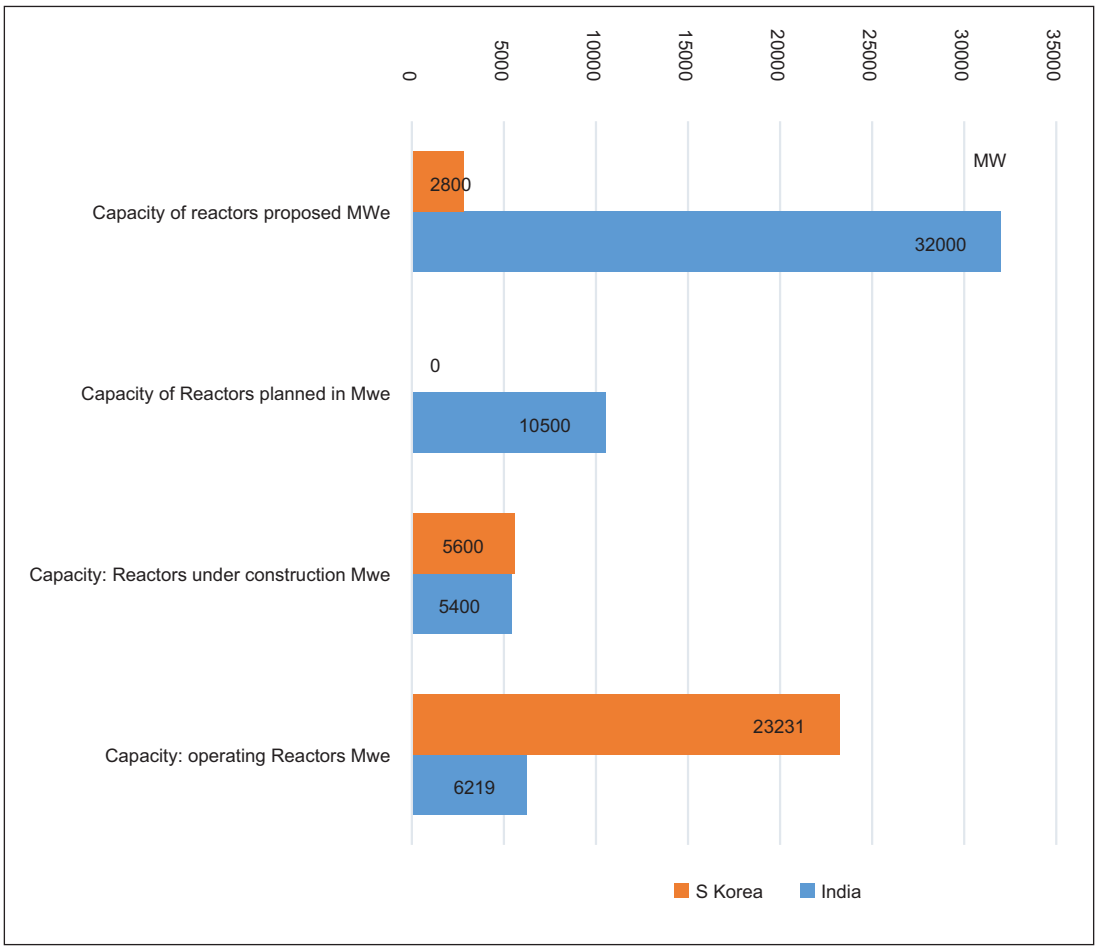
South Korea is amongst the prominent users of nuclear energy and a key exporter of nuclear technology. Nuclear power generated from 24 reactors, with a total capacity of about 23 GW, meet about 23 percent of South Korea's electricity needs.[41] South Korea exports its nuclear technology widely and is currently involved in the building of four reactors in the UAE, under a US$20-billion contract.[42] India's nuclear energy generation capacity is much smaller in comparison, with 22 reactors of total capacity 6,219 MW that meet only about three percent of the country's electricity needs.[43]

After the nuclear accident in Japan in 2011, the South Korean public expressed concerns regarding the safety of nuclear plants. In response, the South Korean Government decided to phase out nuclear energy. In India, too, there is anxiety amongst those living in the vicinity of nuclear plants. However, the Government of India is pressing ahead with plans to expand its nuclear power generation capacity. Despite government-led push, the pace of progress in nuclear-energy capacity addition in India has been slow. In this context, the key question for both South Korea and India is whether the two countries can afford to limit the role of nuclear energy in decarbonising their energy systems.

In 2018, the combustion of fossil fuels emitted 33.7 billion tonnes (bt) of CO2. To reduce those emissions to zero, about 12 billion tonnes of oil equivalent (btoe) of energy needs to be replaced. To reduce emissions to zero by 2050, about 1.6 million tonnes of oil equivalent (mtoe) of zero carbon energy must be deployed every day for the next three decades (to meet current and future increase in energy demands).[44]

This would require either the building of a nuclear plant of about 1,600 MWe capacity every two days for the next three decades or putting up wind turbines of 2,500 MW capacity every day for the next three decades. Apart from the technological and financial complexities of making these investments, there is the question of whether adequate land will be available for the wind energy option, which would also require space for arrays of batteries. Between the two, the nuclear option is more effective in terms of energy generation, affordability and resource use (land in particular).

**Figure 5. Nuclear Capacity in South Korea and India**




*Source: World Nuclear Association.*

South Korea and India can explore opportunities presented by small modular reactors (SMR) to meet the growing demand for decarbonised, safe and competitive electricity generation, leveraging years of nuclear experience in both countries. South Korea has recently signed an agreement with Saudi Arabia to work together on the commercialisation of the Korean SMART SMR design.[45] South Korea and Saudi Arabia are also planning a joint nuclear energy research centre. If the former successfully implements SMR contracts with the latter, it can convince its own citizens that such reactors are safe and affordable. For India, the challenges include not only safety concerns, but also questions regarding additional nuclear-capacity creation when there is already surplus capacity in coal-based generation and plans for over 400 GW of renewable energy capacity. Apprehensions about the liability of nuclear technology suppliers also inhibit investment, which is an impediment to attracting foreign investment in the sector. SMR technology can simultaneously address Indian concerns over economic, environmental and safety issues. Moreover, it can substantially reduce investors' concern over liability.

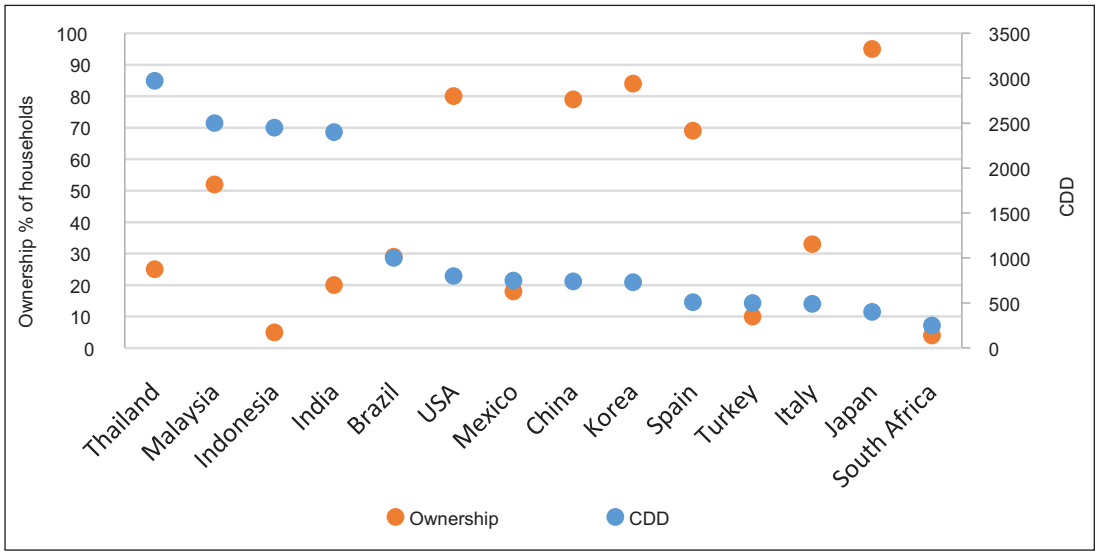
### *The Challenge for Space-Cooling Technologies*

According to the IEA, the use of energy for space cooling is growing faster than any other form of energy use in buildings, having tripled between 1990 and 2016.[46] Since 1990, the sale of air conditioners (ACs) has quadrupled to 135 million units. ACs consume over 2,000 Terawatt hours (TWh) of electricity every year, which is 2.5 times the total electricity use of Africa. $CO_2$ emission from cooling has tripled since 1990 to 1,130 million tonnes (Mt), equivalent to the total emissions of Japan.[47] According to estimates, a 1°C increase in temperature in the future will increase electricity consumption for cooling by around 15 percent.[48]

There are enormous disparities in access to space cooling across the world, with the poorest countries located in tropical parts of the world having the lowest share of space-cooling technologies. India, which has more than 3,000 cooling degree days (CDD)[49] consumes only 70 kilowatt hours (kWh) for space-cooling, compared to 800 kWh in South Korea that has only 750 CDDs (See Figure 6).[50]

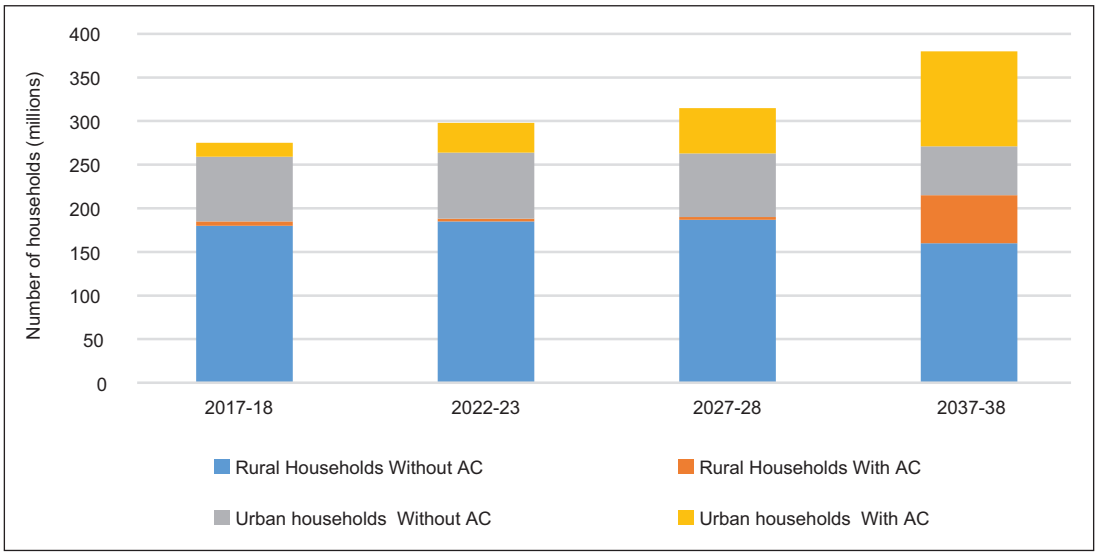
This disparity is mainly due to the low affordability of AC use in India. Currently, only about six percent of India's households own ACs, but demand is growing rapidly with a 15-fold increase since 1990 (See Figure 7). By 2050, India, China and Indonesia are projected to account for most of the growth in energy use for space cooling.

**Figure 6. AC Ownership and Climate: Select Countries**




*Source: Bruno Lapillonne, 2019*

**Figure 7. Number of Households with Room ACs in India**

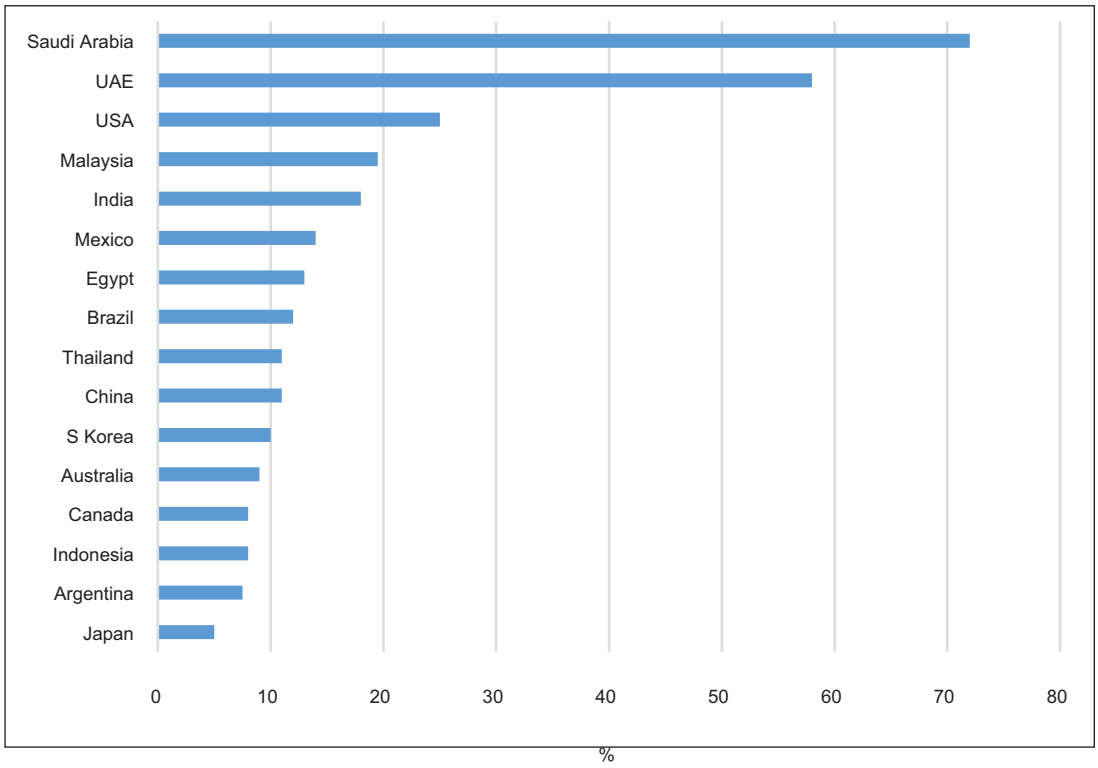



*Source: MOEF&CC, 2018, India Cooling Action Plan (Draft).*

As global average temperatures increase, AC use in India and elsewhere is likely to become more of a necessity than a luxury. Therefore, improving the efficiency of AC systems is the only means to substantially reduce electricity consumption and, consequently, GHG emissions from space-cooling systems. The average efficiency of ACs in India is relatively low, given the cost-sensitive nature of the Indian market.

In this regard, South Korean companies active in the Indian market for space cooling can play an important role. The market for household space cooling is near saturation in South Korea, but the Indian market is just beginning to take off (See Figure 8). South Korean companies meet roughly a quarter of the demand for room ACs in India. As a large country with a growing demand for space cooling, India presents a great opportunity for suppliers from South Korea to introduce highly efficient but affordable space-cooling systems based on low-carbon technologies.

**Figure 8. Share of ACs in Household Energy Use**




*Source: World Nuclear Association.*

## CONCLUSION

Despite wide economic and social differences, South Korea and India share challenges in their efforts to decarbonise their energy systems. For South Korea, the critical challenge is to find a balance between maintaining industrial competitiveness and decarbonising. For India, the challenge is to balance between industrialising and decarbonising. By working together, the two countries can formulate technology-neutral policies for decarbonisation that are not only politically effective but also economically beneficial.

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# PARTNERSHIPS IN TECHNOLOGY

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## INTRODUCTION

The Republic of Korea (ROK) may be called one of the great success stories of our times. Beginning as a war-torn former colony, the ROK systematically built itself up from the 1950s to become the major industrial power that it is today. It initially relied on foreign loans to build up select industries—whose owners were chosen by the government— that later evolved into its *chaebols* (industrial conglomerates). Eventually, in the early 1980s, the country launched a major national research and development (R&D) programme focusing on private R&D and workers training.[1] The 1997 Asian economic crisis encouraged the ROK to push its *chaebols* to restructure and innovate.[2]

The success of South Korea's transformation is apparent from the fact that where, in the 1970s, the government financed 80 percent of the country's R&D, today the private sector has a bigger role. At first, Indian leaders who visited the ROK viewed it primarily as an economic partner and focused on issues of trade and commerce.[3] Over time, it became apparent that the ROK, which has emerged as a technology powerhouse, can be a vehicle for India to pursue its long cherished path of industrialisation. Further, with the linkage of the ROK's New Southern Policy with India's Act East Policy, the two countries can form the hinges of a larger Indo-Pacific policy in conjunction with other partners including the US, Japan, Taiwan, Vietnam, Australia, and the ASEAN countries.

## INDIA AND THE ROK: EARLY YEARS OF COOPERATION

The ROK was among the first countries to bet on India's economic liberalisation in the early 1990s. Korean companies like Hyundai, Daewoo, and Samsung became strong investors in India. India's Look East policy of the time fitted well with this development. According to the 1995-96 annual report of the Ministry of External Affairs, the then president of the ROK, Kim Young Sam came to India with a large delegation of foreign ministry and trade officials. The relationship has been kept up since. Following the visit of President Roh Moo-hyun in October 2004 and the return visit of President APJ Abdul

Kalam in February 2006, the two sides began a process that concluded in the Comprehensive Economic Partnership Agreement (CEPA). They also entered into a memorandum of understanding (MoU) for cooperation in defence industry and logistics as well as one between India's Department of Science and Technology and the Korea Industrial Technology Foundation.[4] A hallmark of the growing ties between the two countries was President Lee Myung-bak's visit as chief guest of the Republic Day celebrations on 26 January 2010, an occasion when the level of ties was raised to a "strategic partnership." Once again, the agreements and MoUs signed between the two countries featured science and technology (S&T) as well as information technology.[5]

The growing diplomatic relations have also been reflected in trade and commerce between the two countries. The ROK's direct investment in India from 1991 to 30 September 1995 amounted to only US$ 46.5 million mainly in goods such as nylon yard, tyres, automobiles, TV tubes, electronics, garments, stone cutting, and glass.[6] In contrast, Japanese foreign investment in the same period was worth US$ 211 million. Similarly, India's two-way trade with South Korea was only around US$ 984.9 million at this time, as compared to the Indo-Japan trade of US$ 2.3 billion.

Trade figures improved over time. Bilateral trade crossed US$ 20.5 billion in 2011, registering a 70-percent growth in two years. While the two sides initially aimed to take their trade up to US$ 40 billion by 2015, trade declined for a few years. It has since recovered to US$ 21.5 billion in 2018. South Korea's main exports to India are in auto parts, telecommunications equipment, hot rolled iron products, petroleum refined products, base lubricating oils, nuclear reactors, mechanical appliances, electrical machinery and parts, and iron and steel products. India exports iron, steel, cereals, and naphtha to South Korea.

Today, the ROK is also the 14th largest source of foreign direct investment in India. The ROK has invested nearly US$ 4 billion in the period from 2000 to June 2019 in metals, automobiles, electronics, machine tools, and medical equipment. The most significant South Korean investments are in the automobile and telecommunications sector; companies such as Samsung, Hyundai, and LG are well-known brands in India.

Hyundai came into the country in 1998 with its popular Santro car model. Today, Hyundai is the second largest car manufacturer in the country as well as a major exporter of automobiles. The company produces around 700,000 cars per annum in its Indian plants and exports more than 150,000. It has also set up a major R&D facility in Hyderabad and there are plans to expand its Sriperumbudur plant to facilitate exports.

Samsung, for its part, began operations in the country in 1995 and set up its first R&D centre in Bengaluru in 1996. It is another company that upholds the banner of 'Make in India' and is one of the largest electronics manufacturers in the country.[7] Samsung has five R&D units, one design centre, and two manufacturing facilities in the country. In July 2018, it inaugurated the world's largest mobile factory in Noida. LG, a leading consumer durables company, began operations in India in 1997, although it had set up its R&D centre a year earlier in 1996. This research centre, LG Soft India, is now the largest one outside Korea.[8] LG also has two manufacturing facilities in the country, one in Noida and another in Pune. Around 10 percent of its sales from India are exported, with 95 percent of the components domestically sourced or produced.

Recently, Kia Motors has also set up a plant in India. Other South Korean companies active in the country are Posco, Lotte, Doosan, and Rotem. Meanwhile, India has invested approximately US$ 3 billion in Korea: Mahindra & Mahindra invested around US$ 360 million in SsangYong Motor in 2011; Tata Motors acquired Daewoo Commercial Vehicle Company for US$ 102 million in March 2004; and Novelis, a Hindalco subsidiary, acquired Alcan Taihan Aluminum in January 2005 with a stake worth US$ 700 million.

## 'SPECIAL STRATEGIC PARTNERSHIP' FROM 2015

Prime Minister Modi returned President Park Geun-hye's January 2014 visit to India in May 2015 with a state visit to the ROK. It was during this 2015 visit that the two sides elevated their relationship to a "special strategic partnership," aimed at adding "speed and content" to their relationship in the areas of foreign affairs, trade and investment, defence, and S&T. During the discussions, India reaffirmed its view of the ROK as an integral part of its newly articulated Act East Policy while President Park explained the ROK's Northeast Asia Peace and Cooperation Initiative.

The joint statement issued regarding the "special strategic partnership" laid out a new structure for the India-ROK relationship and put a new emphasis on security and defence cooperation; it also referred to the countries' ongoing relationship in the areas of trade, energy, environment, and cooperation in S&T. Subsequent visits in the next three years saw these ideas being fleshed out in more detail.[9] Further, in 2017, under President Park's successor Moon Jae-in, the ROK launched the New Southern Policy—a policy complementary to India's Act East Policy. The goal of both policies is to enhance the links between the two countries and ASEAN.

## COOPERATION IN SCIENCE AND TECHNOLOGY

President Moon Jae-in's official visit from 8-11 July 2018—the longest by any leader of the two countries—marked both sides' growing interest in the relationship. The joint statement issued following the visit emphasised that the two countries saw a synergy between India's Act East Policy and the ROK's New Southern Policy. The statement also recognised the "strong complementarities between the two countries in the area of science and technology" and sought to encourage collaboration at all levels.[10]

A number of MoUs were signed to this effect. Among them was one designed to establish a Future Strategy Group. The signatories were Suresh Prabhu, minister of commerce and industry, and Harsh Vardhan, minister of S&T, from the Indian side, and South Korea's Kim Hyun-chong, minister for trade, industry, and energy, and Young Min, minister for science and ICT. The MoU's goal was to foster cooperation in building pioneering technologies to benefit from the fourth industrial revolution. The thrust areas included Internet of things (IoT), artificial intelligence (AI), big data, smart factories, 3D printing, electric vehicles (EV), advanced materials like ceramics, composites, semiconductors and polymers, and affordable healthcare for the elderly and disabled.[11]

Additionally, an MoU on cooperation in the field of S&T was also signed between Girish Sahni, the head of the Council for Scientific and Industrial Research (CSIR), and Wuhn Kwang Yun, the chairman of ROK's National Research Council of Science and Technology. Its target areas were affordable water purification, intelligent transport systems, and new materials. MoUs were also signed in the areas of biotechnology, information and communication technology (ICT), and railways technology.[12]

Extending the theme of cooperation in S&T, the 2018 visit witnessed the fourth meeting of the India-Korea S&T Ministers Steering Committee. Among the important decisions taken was the agreement to establish an Indo-Korean Centre for Research and Innovation. The centre is intended to act as a hub for the systematic operation and management of all cooperative programmes in research, innovation, and technology transfer.[13] The ministers also agreed that the proposed Future Strategy Group would build a collaborative platform to utilise the potential of the two countries for innovation. In the first stage of the plan, the two sides will co-fund collaborative, enterprise-led R&D projects dealing with a) Digital Transformation b) Future Manufacturing c) Future Utilities and d) Healthcare. In addition to this, a decision was taken to set up

two more India-Korea Joint Network Centres in the areas of cyber physical systems, AI, IoT, and semiconductor electronics.[14]

Shortly after President Moon's visit, the South Korean National IT Industry Promotion Agency opened a new India office in Bengaluru. It also announced a three-month boot camp called KIB India Lounge 10, a co-working and co-living space for ROK startups looking to expand into India. The idea is to assist them in understanding the Indian ecosystem and facilitate their entry into Indian and South Asian markets.[15]

Later that year, the Seoul Peace Prize Committee conferred the 2018 prize to Prime Minister Narendra Modi in recognition of his work in "improving international cooperation, raising global economic growth, and accelerating the human development of India by promoting economic growth and reducing social and economic disparities."[16] Prime Minister Modi made an official visit to the ROK in February 2019 to receive the prize as well as hold discussions with his counterpart. There, the two countries launched a Startup Hub to step up increased cooperation in high-tech. India's 'Startup India' initiative is currently funded at US$ 1.4 billion while South Korea plans to spend US$ 9.4 billion till 2020 to increase the supply of capital for startups and create a venture-friendly environment. A theme that emerged from his speeches and talks with ROK leaders and businessmen was the ambition to collaborate in exploiting the fourth industrial revolution.

The next step is likely to be the setting up of a Korean industry park, in line with the ones set up by countries like Japan. The Koreans have shortlisted Bengaluru and Gurgaon as two potential cities for its location. The aim is to create an ecosystem that would encourage smaller Korean companies to set up facilities in India.

## LOOKING AHEAD

### *Healthcare*

India has been looking at the South Korean experience in a number of other areas. One example is the effort to give its flagship universal healthcare scheme, *Ayushman Bharat*, some depth using technology. South Korea was one of the first countries to ensure universal healthcare through an Act of parliament—beginning with its Medical Insurance Act in 1963 and leading up to the National Health Insurance Act in 1999. A full 97 percent of the ROK population is covered by a contributory health insurance scheme, and

the poorest three percent are provided for by a government public health insurance scheme. [17]

### *Automobile Industry*

As noted earlier, India and the ROK have a solid base for cooperation in technology. India also has high hopes from the continued progress of the South Korean automobile industry in the country. In 2019, the ROK company Kia Motors debuted in the Indian market with the launch of the SUV Seltos, which soon became a runaway hit. Given their role in establishing the Indian automobile industry, it is more than likely that Korean automobile companies will also play a significant role in the spread of electric and autonomous vehicles in the country. Hyundai Motors is already marketing Kona Electric, the first all-electric SUV in India.[18] The company's ancillary, Hyundai Mobis, has also emerged as a major supplier of high-tech automotive parts used for autonomous and electric cars, such as sensors, displays, and lamps. Other companies active in this area are Samsung and LG Chem; their business in auto components often overtakes that in items like semiconductors and batteries.

The one area where India has so far been unable to exploit its ROK connection is shipbuilding. It is well known that South Korea is one of the leading shipbuilders in the world. This could be crucial for India. Given India's economic trajectory, the government would be interested in positioning India as a manufacturing hub of inland vessels as well as LPG, LNG, cruise, and chemical tanker ships.[19] India and the ROK did sign an inter-governmental MoU for defence industry cooperation in shipbuilding in April 2017.[20] However, though India has expanded its shipyard facilities, especially in the private sector, it has not modified its policies appropriately. If the government wants to enter into a partnership with South Korean and Japanese shipyards to build modern facilities in India, corresponding policy changes have to occur.

### *Defence*

Most people in India often underestimate South Korea's defence industrial base. Its forces are mainly equipped with Korean-designed and made equipment: small arms, tanks, armoured fighting vehicles, engineering vehicles, radar systems, communications equipment, optics and night vision systems, artillery, surface-to-surface missiles, military robots, fighter aircraft, destroyers, frigates, and submarines. Many of the companies involved in defence production have familiar ancestry, such as Daweoo, Samsung, Posco, and Hyundai.[21]

Perhaps the real extent of Korean defence capability was revealed when it began the KF-X 5th generation fighter programme in 2001. In 2010, the ROK roped in Indonesia to finance 20 percent of the project in return for 50 fighters. The ROK has also linked up with the aeronautical company Lockheed to provide technical assistance and take up some portion of the project's costs. Earlier this year work began on the first prototype, which will be powered by a GE 414 engine.[22]

India and South Korea's defence ties go back to the Korean War of 1950-53. Most recently, these ties have been strengthened with the "special strategic partnership" formed during Modi's visit to South Korea in 2015. Over the years, the two sides have signed many MoUs and agreements. They also conduct regular interactions; these began at a deputy minister level in 2013 and have since been elevated to the ministerial level. A Joint Committee meeting—a bilateral dialogue for cooperation in defence industries and logistics that takes place between the minister of defence acquisition and programme administration and the secretary of defence production—is held every year, with a total of seven having been held so far. A total of four Steering Committee meetings—bilateral dialogues for joint defence R&D that take place between Defence Research and Development Organisation (DRDO) & Defence Acquisition Program Administration (DAPA) / Agency for Defense Development (ADD) of ROK—have also been held till 2017.

Earlier, in the early 1980s, India had purchased Korean Sukanya-class offshore patrol vessels for the Indian Navy. Its recently inducted K-9 Vajra self-propelled howitzer is also based on South Korea's K-9 Thunder and was built in partnership between Samsung Techwin and Larsen & Toubro. In 2019, India selected the Korean Hanwha K30 Biho mobile air defence system for its army, which beat out the Russian Tunguska system.

During Defence Minister Rajnath Singh's visit to Seoul in early September 2019, the two sides signed an agreement extending logistical support to each other's navies. They also signed an agreement to further defence educational exchanges.[23] This is an important development that must be seen in conjunction with the ROK government's recent deliberations about whether to play a role in the American-led security efforts in the Straits of Hormuz.[24]

This area is, of course, in India's backyard. Moreover, both the ROK and India have a shared interest in maintaining peace and stability in the Persian Gulf region because of their dependence on oil from there. India, too, has a naval mission providing security to its civilian vessels in the area. There is no reason why the two countries cannot collaborate in the region given their

"special strategic partnership." India can provide the ROK's vessels with military logistic support, as it does with the US, France, and Japan. In turn, should India need logistics support in the Pacific Ocean, the ROK could fulfil that role.

### *Shipbuilding*

Again, the one area in which progress has been elusive is shipbuilding. The 2017 MoU on defence shipbuilding envisioned a Korean shipyard being designated to assist Hindustan Shipyards Limited (HSL) in upgrading and modernising its facilities for executing naval shipbuilding projects.[25] The MoU aimed to operationalise a deal between Hyundai Heavy Industries and HSL to collaborate in the making of five fleet support ships, one of which would be made in Korea and the others in HSL. The deal, however, did not go through because some conditions placed by its ROK partner were not agreeable to the Indian Ministry of Defence.[26]

Something similar happened to another US$ 5-billion deal between India and ROK. The Indian Navy is currently operating six obsolete, Soviet-era MCMVs; however, an agreement to locally build 12 high-tech mine countermeasure vessels collapsed in 2018. The South Korean company Kangnam had won the 2008 global tender, but the deal remained unsigned because of issues over costs and technology transfer.[27] The deal has since been refloated, and Kangnam has expressed a continuing interest in competing for it. No decision has been taken as of the time of writing this article.[28]

## CONCLUSION

The India-ROK relationship has grown steadily in the last 20 years and today, the two countries have a mature, mutually beneficial trade and technology association between them. Slowly and steadily, the countries are also exploring and building their relationship on security. One key aspect of this is in the realm of defence industry; the ROK is a good fit for India's ambitions to create a defence industrial base. Much like India—and unlike the US, Japan, UK, Germany or France—the ROK had no defence industry to speak of in the 1950s. But over the years it has built up an impressive defence industry that manufactures submarines, fighter jets, helicopters, tanks, artillery systems, missiles, and EW systems. Therefore, there are lessons in the ROK experience that would be invaluable for India. Further, there is the vast, unexplored area of shipbuilding—both military and civilian—that the two countries must engage in with a greater sense of urgency than they have shown so far.

For India, which has an ambitious 'Make in India' vision, the ROK could be the country it most needs to work with. After all, the ROK's development experience share more in common with India's compared to that of the other developed countries. Beyond trade and commerce, India would do well to also study various aspects of the ROK's governmental policies that have guided its path from an underdeveloped colony to a highly developed country.

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# CEPA: FULCRUM OF FUTURE TRADE AND ECONOMIC RELATIONS?

**Abhijit Mukhopadhyay**

## INTRODUCTION

The Comprehensive Economic Partnership Agreement (CEPA), signed between India and South Korea on 7 August 2009 and operationalised with effect from 1 January 2010, was a watershed in the relationship between the two countries. The CEPA is a bilateral agreement that covers trade in goods and services, investment, competition, and intellectual property rights (IPRs).

The agreement was signed at a time when India seemed to be keen to shed its "protectionist" tag in the light of the stalemate in Doha Round of negotiations at World Trade Organization (WTO). India was then witnessing a growth phase for five years or so, which was unprecedented in its history. Such economic growth attracted potential partners and also prompted India to undertake an ambitious trade policy—in terms of engagement in bilateral trade and investment agreements. In this phase, India engaged itself with the Association of South East Asian Nations (ASEAN) and the South Asian Free Trade Area (SAFTA), as well as bilaterally with countries like Singapore, South Korea and Sri Lanka, among others.[1]

However, since 2011 India has witnessed a slowdown in its growth path and the country appears to be going through a phase of lack in aggregate demand.

Table 1 shows that although India's GDP (at market exchange rate) is converging towards the US$ 3-trillion mark, a large population makes India's per-capita GDP much lower than that of other major economies. In fact, India falls under the category of lower-middle income economies in terms of per-capita GDP, according to the classification made by the World Bank.[2] And although population growth has gone down over the years, it is still at 0.9 percent.

As mentioned earlier, the GDP growth has slowed down—relatively lower than what it was before CEPA was signed in 2009. Inflation is relatively on the lower side, mainly due to lower food inflation. Average domestic demand

growth was found to be 6.2 percent during the period 2014–18, but the demand in recent times has shown signs of slowing down as well. So has foreign direct investment (FDI). This is a phenomenon being experienced by most of the major economies of the world, due to a global slowdown and prevalent trade tensions. However, the worrisome aspect of Indian trade scenario is its current account deficit at an average of 1.4 percent of GDP during 2014–18. Being a net oil-importing country, India stands at a disadvantage if international oil prices rise in the near future.

**Table 1. India: Economy in a Snapshot**

| Annual data | 2018 | Historical average (in %) | 2014–18 |
|---|---|---|---|
| Population (mn) | 1,353 | Population growth | 0.9 |
| GDP (US$ bn; market exchange rate) | 2,718 | Real GDP growth | 6.0 |
| GDP (US$ bn; purchasing power parity) | 10,473 | Real domestic demand growth | 6.2 |
| GDP per head (US$; market exchange rate) | 2,010 | Inflation | 3.4 |
| GDP per head (US$; purchasing power parity) | 7,742 | Current account balance (% of GDP) | -1.4 |
| Exchange rate (av) Rs: US$ | 68.4 | FDI inflows (% of GDP) | 1.8 |

** Actual figures*

*Source: Country Report: India, The Economist Intelligence Unit (EIU)*

The economy of South Korea is also experiencing difficult times in the current global scenario. Although South Korea is a high-income economy with per-capita GDP at US$ 33,634, it is presently facing a low inflation situation and a probable slowdown in its GDP growth ((See Table 2).

International trade is one of the important drivers of South Korean economy, as can be observed from its average current account surplus at 5.7 percent during 2014–18. However, with domestic demand and GDP growth slowing down, the economy needs a boost to sustain its growth path. In the second quarter of 2019, the economy of South Korea bounced back from a relatively poor performance of the first quarter, mainly due to the spurt in government spending. Private sector investment remained at a lower level, signifying the fact that government investment drove the expansion in the second quarter.[3] Volatile trade tensions with Japan are also hampering the economic progress of South Korea.

**Table 2. Republic of Korea: Economy in a Snapshot**

| Annual data | 2018[a] | Historical average (%) | 2014–18 |
|---|---|---|---|
| Population (mn) | 51.2 | Population growth | 0.3 |
| GDP (US$ bn; market exchange rate) | 1,721.10 | Real GDP growth | 3.0 |
| GDP (US$ bn; purchasing power parity) | 2,200[b] | Real domestic demand growth | 3.5 |
| GDP per head (US$; market exchange rate) | 33,634 | Inflation | 1.3 |
| GDP per head (US$; purchasing power parity) | 43,001[b] | Current account balance (% of GDP) | 5.7 |
| Exchange rate (av) W : US$ | 1,100 | FDI inflows (% of GDP) | 0.7 |

*[a] Actual figures, [b] EIU estimates*

*Source: Country Report: India, The Economist Intelligence Unit (EIU)*

August 2019 results of South Korea's economy showed a dip in farm product prices; with consumer demand remaining weak, this has resulted in apprehension regarding deflation risk in the economy.[4] FDI inflows into the economy have also not been encouraging, as can be seen in Table 2.

For South Korea, trade tensions with Japan have happened at an inopportune time, after South Korean Supreme Court's 2018 ruling in compensation cases brought against some of the biggest companies — including Mitsubishi Heavy Industries Ltd. and Nippon Steel and Sumitomo Metal Corp. These cases date back to Japan's colonial rule over the Korean Peninsula more than seven decades ago. Both the countries have historically been at loggerheads over compensation for two groups of Koreans: (a) those conscripted (or used as slave labour) in factories and mines that supplied Japan's imperial war machine, and (b) those women who were forced to work in military brothels, euphemistically called 'comfort women'.

The historical discord evolved into a trade dispute in no time, after Japan unilaterally tightened restrictions on export of semiconductors and computer displays used in smartphones and chips to South Korea.[5] This has created serious disruption in global supply chain of some of South Korea's electronics companies, including Samsung.

However, this imbroglio has not yet reached a stage where de-escalation is not possible. Indeed, both sides have shown inclination to discuss and resolve.

There is still optimism that a resolution will be reached and global trading system will not be further jolted.

Therefore, the macroeconomic situation for South Korea is not encouraging in the present times. Both India and South Korea need to take out their respective economies from the risk of falling further down. Bilateral understanding within the framework of CEPA seems to be the best way forward for both the countries.

## UPDATING CEPA

In July 2018, India's Commerce and Industries Minister and ROK's Trade Minister signed agreements on trade and commerce, thereby updating the CEPA. Both countries have undertaken a reduction in duties on 11 tariff lines to expand bilateral trade.[6] The aim is to increase bilateral trade to US$ 50 billion by the year 2030.[7]

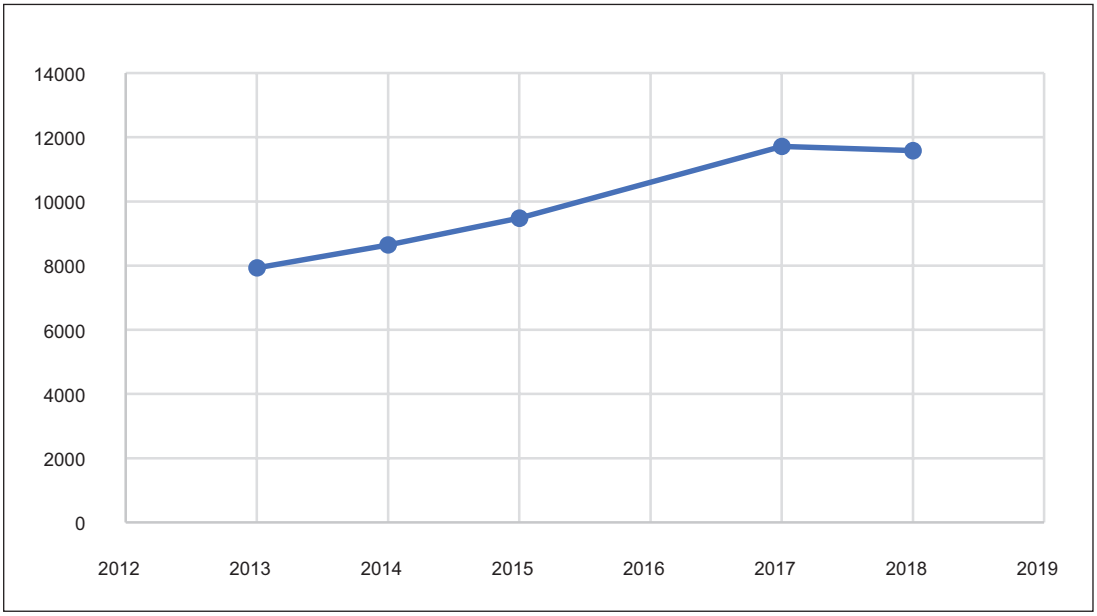
However, updating the CEPA has been done through difficult negotiations from both sides. India maintained its stand against giving South Korea tariff lines that directly impacted its manufacturing. The countries made early harvest offers[8] for 35 items each, including Yoga instructors and Taekwondo instructors in the list of professionals under Sporting and other Recreational Services category.[9]

South Korea agreed, under these agreements, for zero duty Indian export of 15,000 tonnes of shrimps—India's biggest marine export to South Korea. Both sides agreed to grant multiple-entry visa to intra-corporate transferee with validity period of three years or the contract period, whichever is less. India agreed to provide phased duty reduction for three broad categories of Korean imports spreading over 10–15 years, including in base oil. Koreans, on the other hand, will reduce duties in 8–10 yearly instalments. For example, 30 percent duty on beer made from malt would be phased out in the eighth year. On castor oil and its fractions, 5 percent duty would become zero in 10 years. South Korea, however, did not agree to confer the status of 'native English-speaking nation' upon India though it has accorded the same to a few countries, including South Africa. This could have opened up possibilities of E2 teaching visa for Indians in South Korea.[10]

After implementing CEPA in 2010, the widening trade deficit of India with South Korea has remained an issue of concern. Overall deficit has gone over US$ 12 billion, of which trade deficit in goods constitutes the major part, as

shown in Figure 1. For an oil-importing economy like India, it has remained a problem. Balance of payments deficit, or the gap between exports and imports of goods and services, has always been a risk India tries to avoid. Therefore, a further updating of CEPA between South Korea and India needs to address this issue.

**Figure 1. India's Deficit in Goods Trade with Republic of Korea (in US$ million)**




*Source: UN COMTRADE Database*

Another area of concern for India is that almost nine years after the implementation of CEPA, the country's export basket to South Korea consists of mainly raw material and intermediate goods (Table 3). It is not that this composition is only prevalent with South Korea, this has been a universal problem for Indian exports to other countries as well. The speed with which the integration with global market has happened is much faster than the dynamism in Indian exporters, who were supposed to develop their export products at a faster pace but are in fact lagging behind.

If a comparison is made with South Korean exports to India (as shown in Table 4), the composition is much varied with more finished and advanced goods in the Korean export basket. Even in terms of value, Korean exports surpass Indian exports in most of these product groups. It is also noteworthy that while India tends to supply raw materials and intermediate goods in certain product groups, ROK exports finished goods in the same categories of products.

One way of tackling the problems of trade deficit and comparatively less advanced nature of export basket of India is to encourage South Korean investment in India. If South Korean companies start operating from India and export to other destinations, that could narrow the trade deficit of India and also improve the quality of the basket of Indian exports. In other words, the ROK companies can then contribute to the well-being of the Indian economy and also to their own profitability. The resultant employment generation should contribute positively to Indian economy. If properly implemented, it can be mutually beneficial for both countries.

**Table 3. Top Indian Exports to ROK with Total Value Exceeding US$ 100 million in 2018**

| HS Code | Product group description | 2013 | 2014 | 2015 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| 27 | Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes | 1008.8 | 1655.8 | 546.2 | 779.4 | 992.8 |
| 76 | Aluminium and articles thereof | 395.4 | 505.2 | 516.6 | 754.7 | 514.7 |
| 72 | Iron and steel | 487.1 | 411.9 | 285.6 | 369.4 | 444.2 |
| 29 | Organic chemicals | 394.8 | 300.7 | 318.0 | 376.6 | 417.5 |
| 52 | Cotton | 247.3 | 219.9 | 212.8 | 184.8 | 255.7 |
| 78 | Lead and articles thereof | 92.9 | 71.4 | 48.9 | 81.6 | 166.8 |
| 84 | Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | 133.8 | 129.2 | 134.4 | 182.0 | 157.8 |
| 85 | Electrical machinery and equipment and parts thereof; sound recorders and reproducers; television image and sound recorders and reproducers, parts and accessories of such articles | 70.5 | 80.6 | 82.7 | 94.2 | 150.2 |
| 79 | Zinc and articles thereof | 62.2 | 53.5 | 116.5 | 141.2 | 149.1 |
| 23 | Food industries, residues and wastes thereof; prepared animal fodder | 301.1 | 220.8 | 164.4 | 87.2 | 144.9 |
| 74 | Copper and articles thereof | 12.0 | 2.7 | 7.6 | 156.7 | 138.4 |
| 26 | Ores, slag and ash | 75.7 | 68.0 | 15.4 | 105.2 | 119.1 |
| 32 | Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other colouring matter; paints, varnishes; putty, other mastics; inks | 64.6 | 74.9 | 73.0 | 72.8 | 101.5 |

*Source: UN COMTRADE Database*

South Korea has sizeable investments in India. Some of the prominent ROK companies include Hyundai Motors, Samsung Electronics, LG Electronics and Lotte Group. It is encouraging that most of these companies operate almost as Indian companies on Indian soil. These companies have substantially contributed to the industrial production and employment in Indian economy. More such investments can help resolve India's lower quality export composition in future.

Another emerging factor in Indo-ROK trade relationship is the impending formation of the Regional Comprehensive Economic Partnership (RCEP).

**Table 4. Top Indian Imports from ROK with Total Value Exceeding US$ 100 million in 2018**

| HS Code | Product group description | 2013 | 2014 | 2015 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| 85 | Electrical machinery and equipment and parts thereof; sound recorders and reproducers; television image and sound recorders and reproducers, parts and accessories of such articles | 1827.8 | 2381.0 | 2739.5 | 3256.2 | 2670.7 |
| 72 | Iron and steel | 1469.3 | 1691.9 | 1840.6 | 2076.3 | 2535.0 |
| 84 | Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof | 1737.2 | 1629.4 | 1722.2 | 1576.2 | 2449.7 |
| 39 | Plastics and articles thereof | 1201.5 | 1365.3 | 1284.5 | 1417.3 | 1804.7 |
| 29 | Organic chemicals | 1249.2 | 1080.9 | 629.5 | 944.3 | 1140.4 |
| 27 | Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes | 692.8 | 964.8 | 675.9 | 875.9 | 905.3 |
| 87 | Vehicles; other than railway or tramway rolling stock, and parts and accessories thereof | 697.9 | 643.5 | 628.6 | 725.5 | 711.2 |
| 79 | Zinc and articles thereof | 80.3 | 131.1 | 164.6 | 348.7 | 433.7 |
| 90 | Optical, photographic, cinematographic, measuring, checking, medical or surgical instruments and apparatus; parts and accessories | 287.4 | 309.4 | 350.3 | 351.8 | 422.6 |

| HS Code | Product group description | 2013 | 2014 | 2015 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| 89 | Ships, boats and floating structures | 520.1 | 265.3 | 199.3 | 614.1 | 380.0 |
| 40 | Rubber and articles thereof | 512.8 | 474.5 | 321.8 | 343.6 | 362.6 |
| 73 | Iron or steel articles | 254.2 | 268.1 | 288.9 | 292.0 | 339.7 |
| 48 | Paper and paperboard; articles of paper pulp, of paper or paperboard | 176.6 | 258.0 | 251.9 | 263.2 | 301.5 |
| 76 | Aluminium and articles thereof | 149.8 | 176.9 | 164.7 | 182.0 | 268.7 |
| 38 | Chemical products not elsewhere classified | 113.3 | 135.3 | 143.3 | 162.3 | 219.4 |
| 82 | Tools, implements, cutlery, spoons and forks, of base metal; parts thereof, of base metal | 141.0 | 156.2 | 174.0 | 150.9 | 191.0 |
| 78 | Lead and articles thereof | 69.0 | 102.6 | 98.1 | 159.4 | 183.9 |
| 28 | Inorganic chemicals; organic and inorganic compounds of precious metals; of rare earth metals, of radio-active elements and of isotopes | 122.1 | 146.5 | 127.3 | 113.5 | 169.4 |

*Source: UN COMTRADE Database*

## INDIA DECIDES TO KEEP OUT OF RCEP

In November 2019, India finally decided not to join RCEP. Officially, Indian Prime Minister Narendra Modi said, "The present form of the RCEP Agreement does not fully reflect the basic spirit and the agreed guiding principles of RCEP."[11] South Korea is still a part of this trade formation, and India's decision of not joining implies that any future development of Indo-Korean economic development now has to be pivoted around the CEPA framework.

RCEP has been trying to integrate ASEAN countries and the bloc's free trade agreement (FTA) partners—India, China, Japan, South Korea, Australia and New Zealand—in a free trade zone. Initially posed as an alternative to the Trans-Pacific Partnership (TPP), RCEP has gained a new dimension after the US pulled out of the TPP and subsequently initiated a trade war, largely against China.

China would be looking to compensate for the export loss in the US turf, and RCEP provides the country a viable platform for this purpose. Therefore, joining the pact would have been detrimental to India's interests. Even without an FTA with China, India's trade deficit with the country has risen 13 times in the past decade. According to a paper published by NITI Aayog,[12] China accounts for about 50 percent of India's trade deficit, which is widening every year. Joining RCEP would have been tantamount to *de facto* signing an FTA with China and giving the country market access to India.

The NITI Aayog paper also identified India's major imports from and exports to China. The list reveals the disturbing trend, mentioned earlier in this paper. While China exports finished manufactured goods like electrical machinery, telecom equipment, audio and video recorders, organic chemicals and plastic articles, Indian top exports to China predominantly consist of raw material like ores, copper, sulphur, salt, mineral fuels, oils and bituminous substances.

Those who were prompting India to join RCEP on grounds of integration with global value chain should take note of this trade composition. Global or local, production value chains are not a homogenous string of production processes; they are value chains driven by large multinational companies which produce finished goods and reap maximum benefit out of that chain. The composition of Indo-Chinese trade indicates that Chinese companies are those engines of value chain. India languishes at the bottom end of that chain as a raw material supplier. Another fallout could have been the decimation of Indian industries that would be in direct competition with these big Chinese companies.

Much has been showcased about Mode 4 in the 2018 ministerial meeting of RCEP. Despite resistance from countries like Singapore, Australia and New Zealand, it was claimed that progress has been made under RCEP negotiations to liberalise member countries' services markets and allow movement of skilled professionals. Though India's decision to opt out makes this debate redundant, there are other reasons for scepticism. Mode 4, till now, helped India in sending mainly IT professionals at cheaper wage rates to destinations where local labour is costlier. But with sources of such cheap labour abundant in other countries— Malaysia, Vietnam and the Philippines, for example—it is doubtful whether India would have any major advantage even if the services markets of Australia, New Zealand and Singapore were sufficiently opened.

Various estimates show that RCEP's share in the world GDP may touch 50 percent by 2050. The fear that India may be left out if it decides not to join

the group made Indian policymakers uneasy. But given the economic clout of China and other economies, India might have found it very difficult to grab a significant share of this RCEP cake. The country can, instead, do well to make realistic attempts to seize opportunities through bilateral trade negotiations and agreements—where Indian concerns can be presented and articulated clearly. The CEPA between South Korea and India provides one such platform.

## CONCLUSION

Developing a mutually beneficial trade and economic relationship between India and South Korea will undoubtedly help the economies, both of which are now in urgent need for a push. However, both the economies have their own problems to address—structural and developmental—some of which should be resolved internally.

In other words, a flourishing Indo-Korean trade and economic relationship will not be able to erase many economic bottlenecks existing in these economies. However, a bilateral platform can provide India and South Korea opportunities to articulate their concerns. CEPA provides that framework and therefore strengthening the agreement would be beneficial for both the countries.

With investment routes available, South Korea can play an exemplary role in developing Indian manufacturing in terms of technology, output enhancement and creation of employment opportunities. India, for its part, has the potential to augment some segments of Korean economy in a positive manner, particularly some services sector and the pool of skilled professionals.

India still consists of a workforce that is comparatively cheaper than many other countries in Asia. Moreover, in the Ease of Doing Business index, India has made rapid strides in recent times. India also has a consumer market which can buy various goods. These are the pivotal reasons why South Korean companies may look at investing in India.

However, ROK companies often complain about delays and cancellation in granting different approvals for doing business in India. Some of these complaints are genuine and must be addressed. Small and medium enterprises in South Korea are particularly interested in investing in India mainly for the reasons mentioned earlier. However, many of them find the hurdles to start and operate business quite difficult. Easing these barriers can result in more Korean investment in Indian economy. Under the framework of CEPA,

India should address all these concerns to increase Indo-Korean trade and investment and take it to a new level. Both countries have expressed their desire to increase the volume of bilateral trade to US$50 billion by 2030, but commensurate bilateral investment escalation can take the economic relationship to a much stronger level.

Both South Korea and India have the potential to thrash out their differences and build a fruitful sustainable economic and trade partnership in the future. In the current turbulent global scenario, that will be the way to go for both these economies.

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# REINVIGORATING INDIA-SOUTH KOREA RELATIONS: CAN BUDDHISM, BOLLYWOOD, K-POP AND DEMOCRACY HELP?

**Niranjan Sahoo**

## INTRODUCTION

India-Republic of Korea (RoK) relations have made rapid strides in recent years. While it may have taken New Delhi and Seoul many decades to reinvigorate their relationship, the two are today in the midst of nurturing multidimensional and transformative ties, especially under the leadership of Prime Minister Narendra Modi and President Moon Jae-in.[1] Modi's Act East Policy (AEP) and Moon Jae-in's New Southern Policy (NSP)—which gives primacy to the acceleration of RoK's economic and strategic relations with India—have led to a convergence of interests and energies between the two countries. This has had a visible impact on the widening of bilateral trade and commerce, apart from the alignment of their strategic interests in the Northeast Asian region. Less attention, however, has been given to other developments with regard to political, cultural and people-to-people relations that have deepened over the last few years. Indeed, with no unpleasant historical memories between them nor geopolitical rivalries, there is immense potential in this relationship.

## POLITICAL AND DIPLOMATIC RELATIONS: AN OVERVIEW

It may be recalled that India played a crucial and positive role in Korean affairs soon after the latter's independence in 1945. India's K P S Menon served as Chairman of the nine-member United Nations (UN) Commission that was set up in 1947 to oversee elections in Korea. During the Korean War (1950-53), the warring sides accepted a UN resolution sponsored by India calling for a ceasefire; one was declared on 27 July 1953. The relationship, however, would remain dormant for many decades for various reasons, and it was only in 1962 that the two countries established consular relations. This was then upgraded to Ambassador-level in 1973. This development caused little impact on trade and commercial relations, let alone political and people-to-people relations. Even then Prime Minister P.V. Narasimha Rao's much talked about Look East Policy (LEP) in the 1990s failed to make any visible impact on India-RoK relations.

An important visit by then Indian President APJ Abdul Kalam to Seoul in February 2006 happened at a critical juncture and opened the door for a more vibrant phase in India-RoK relations. It resulted in the launching of a Joint Task Force to conclude a bilateral Comprehensive Economic Partnership Agreement (CEPA), which was operationalised on 1 January 2010. President Lee paid a landmark visit to India as Chief Guest at India's Republic Day celebrations on 26 January 2010. It was then that the bilateral ties were raised to the level of Strategic Partnership.[2] This was quickly followed by President Pratibha Patil's State Visit in July 2011 where both countries signed a Civil Nuclear Energy Cooperation Agreement. This received further boost during Prime Minister Manmohan Singh's official visit to Seoul in March 2012, not only for the Nuclear Security Summit but to discuss bilateral relations as well.

Further in January 2014, South Korean President Park Geun-hye conducted a state visit to India. The "Joint Statement for Expansion of Strategic Partnership" that was issued during this visit produced a blueprint for further expanding the two countries' relations in the political, security, defence, economic, scientific & technological, and IT domains. Equally important, the visit focused on cultural and people-to-people relations.

The watershed in the bilateral relations came during the tenure of both countries' current leaders, Indian Prime Minister Narendra Modi and South Korean President Moon Jae-in. Soon after assuming the mantle in 2014, Prime Minister Modi unveiled a new policy called 'Act East'[3] signaling the government's commitment to deepen relations with countries in the Indo-Pacific region such as Japan and RoK. As a followup, Prime Minister Modi went on a state visit to South Korea within the first year of his government, in May 2015. During this eventful state visit, India-RoK bilateral relations was upgraded to 'special strategic partnership'. In the 'Joint Statement for Special Strategic Partnership', the two leaders agreed to establish a 2+2 consultation mechanism at the level of the Secretary/Vice Minister of Foreign Office and Defense Ministry.

In 2017, President Moon took over the South Korean presidency, and the country's relationship with India soon witnessed much greater traction. President Moon immediately made his pro-India stance clear by sending Chung Dongchea, former culture minister, as his special envoy to India; it was the first such instance in the bilateral relationship. He later took the crucial decision of upgrading the relationship equivalent to four traditional partners under the "New Asia Community Plus" framework.[4]

In parallel, India's then Finance and Defense Minister Arun Jaitely (now deceased) visited South Korea in June 2017 during which the two countries concluded talks on the Economic Development Cooperation Fund (EDCF), signed an MoU between their EXIM banks, and reviewed ongoing defence relationship. This was followed by a bilateral meeting between Prime Minister Modi and President Moon Jae-in on the sidelines of G-20 Summit in Hamburg in early July 2017.

Giving a further fillip to the relationship, President Moon made a four-day state visit to India in July 2018. It was key to providing a new impetus to India-South Korea relations. This was Moon's first official visit to India and he took this visit in pursuance of his new southward strategy that sought to follow a balanced diplomacy by strengthening RoK's relations with ASEAN countries, as well as India.

In other words, President Moon's visit came at a critical juncture in which India-South Korea relations have already matured. Some 46 years since the two countries established diplomatic relations, their ties especially in the last decade or so have grown robust and multi-dimensional, encompassing a wide range of interests including nuclear disarmament, maritime security, regional economic cooperation, counterterrorism, and energy cooperation.[5]

## CULTURAL RELATIONS: BUILDING ON CIVILISATIONAL LINKS

One of the critical but largely unseen developments in the recent decades is the gradual recognition of deeper historical and civilisational bonds between the two friendly nations. Indeed, India and RoK relations have a deep civilisational link dating back to several centuries. The spread of Buddhism from India to East Asia in the 4$^{th}$ century formed a direct connection between India and South Korea, and since then has continued to remain a critical reference point. What many may not be aware of is that there is a much deeper cultural bond between the two nations: A significant Korean consciousness relates to the legend of the marriage of the Korean King Suro with Suriratna, a princess from Ayodhya, the sacred birthplace of Hindu God Lord Rama.[6]

With these critical openings, a huge surge has begun in the last few decades in terms of expanding and cementing cultural ties between these two ancient civilisations. The cultural ties have been institutionalised via the establishment of an Indian Cultural Centre (ICC) in Seoul in April 2011. Another culture centre was established in Busan in December 2013 through

the public-private-partnership mode. Earlier, in May 2011, a bust of Nobel Laureate and famous Indian poet Rabindranath Tagore was unveiled in Seoul.

Even further, both countries have taken a series of important decisions to boost people-to-people relations in terms of improving travel between the two countries. For instance, India extended a visa-on-arrival (VoA) facility for South Korean tourists beginning 15 April 2014. As a gesture of friendship and goodwill to the South Korean people, the Prime Minister of India gifted South Korea a sapling of the sacred Bodhi tree under which the Lord Buddha had attained enlightenment. Similarly, a bust of Mahatma Gandhi, presented by ICCR, was unveiled at the Hongbeop-sa temple in Busan on 21 July 2014. Further, ICC in Seoul and Busan offers regular classes on yoga and dance, both contemporary and classical for promotion of Indian culture. Classes on the Hindi language, the percussion instrument tabla, and cooking have also been started with local teachers as part of outreach activities. Lectures, exhibitions and performances are arranged periodically by ICC. An annual festival of India in South Korea titled SARANG was initiated in 2015 and held in 2016, showcasing the diversity of Indian culture and art forms in various parts of South Korea.[7]

### *Institutional Cooperation*

In the last few years a number of institutional arrangements and agreements have been signed between organisations and academic entities to further people-to-people exchanges. This included an MoU between India's Foreign Services Insitute (FSI) and the Korea National Diplomatic Academy (KNDA) signed in March 2012, and India's Jawaharlal Nehru University's (JNU) various MoUs with Yonsei University, Korea University, Hankuk University of Foreign Studies (HUFS) and Busan University of Foreign Studies. The Delhi University (DU) has also signed an MoU with Korea University. In addition, HUFS in Seoul, and Busan University of Foreign Studies have created their respective Indian Studies departments; for their part, JNU and DU offer programmes in Korea Studies and Korean Language courses, respectively. Madras University has also opened a Department of Korean Studies encouraged by the sizeable presence of Koreans in Tamil Nadu, including employees of Hyundai Motors and their families. Recently as well, the Central University of Jharkhand (CUJ) started offering five-year integrated postgraduate degrees in Korean language. Manipur University and Madras Christian College are offering Diploma courses in Korean Language.[8]

Similarly, in 2012 Seoul National University established a New Department of Asian Languages and 4 Civilizations which offers a degree in Indian Studies.

Various other universities in South Korea are offering degree courses in Indian Philosophy, Yoga and Ayurveda. The Seoul Forum for International Affairs and the Indian Council for Research on International Economic Relations have been jointly organising the India-Korea Dialogue that makes recommendations on policies and practical measures to strengthen bilateral relations between the countries. Twenty rounds of dialogue have been held so far, with the last one in November 2016 in Seoul. The Ananta Aspen Centre coordinated the 16th round of dialogue from the Indian side, held in November 2017. The Institute for Indian Studies Korea (IISK) was established at Korea International Trade Association (KITA) on 3 December 2013, bringing together a large number of Korean academics, economists and business representatives. 'India Fortune' has been organising 'India Advanced Management Programme' for MPs, senior South Korean officials, and CEOs covering Indian economy, corporate environment and Indian culture. The participants are taken to India on a familiarisation tour.

Indeed, a good beginning has been made in the past few years to foster and promote people-to-people exchanges and deepen awareness amongst various sections of both countries.

### *Improving Connectivity*

A critical development in recent years is improved air connectivity between the two countries. With Air India, Asiana Airlines and Korean Air operating direct flights at regular intervals, air travel has become more accessible to a bigger number of people. The bilateral civil aviation agreement of 1994 was revised in November 2015, increasing weekly flights between the two countries to 19; this resulted in new operations by Korean Airlines which started direct flights to Delhi. The number of visas issued by South Korea to Indian tourists have gone up dramatically, too.

Yet, there remains scope for improvement in connectivity between the two countries. Testimony to this is the low number of Indians living in South Korea, estimated at 12,000, 120 of them PIOs. Nearly 1,000 Indian students are pursuing postgraduate and doctoral programmes, mostly in natural sciences in South Korea. However, this is minuscule compared to the number of Indian students who go to Australia and Singapore for higher studies.

## NEW AREAS OF COOPERATION

As discussed earlier, despite the many positive stories and the massive turn-around in ties, there remains immense potential in India-RoK relations particularly in the realms of cultural and institutional exchanges.

### *Swacch Bharat and New Village Movement*

India under PM Modi has launched an ambitious initiative on sanitation called *Swachh Bharat Abhiyan* or Clean India campaign. Launched with much fanfare in 2014, this campaign that aims to stop open defecation and draw basic attention to sanitation and public health for development has caught global attention. For instance, the Bill and Melinda Gates Foundation has awarded Prime Minister Modi their highest award for *swachh bharat*. Although the initiative has emerged as a national awareness movement, it continues to struggle with lack of resources. It is in this regard that the country can learn from the experience of South Korea, especially its *Saemaul Undong* or New Village Movement.

Highlighting the possibility of experience sharing, a Korean scholar Soyen Park[9] has drawn the attention of Indian policymakers to study the evolution and positive lessons of the New Village Movement that was initiated by then President Park Chung-hee in 1970. The New Village Movement encourages self-help and voluntarism for households and schools to clean up their neighbourhoods. The movement has had a huge impact in improving several sectors of economy apart from rural health and livelihoods. While the Korean experiment was undertaken in different socio-economic contexts and may not exactly suit India's conditions, Indian leadership and civil society can engage with academics and governmental institutions in Korea to learn from this initiative.

### *Bollywood, K-pop and Korean Cuisine*

For years, Korean cuisine and TV serials have emerged as a key point of consumption among several states in India, especially in the northeast. The popularity of Korean TV shows—and K-pop in particular—have grown in the last decade, albeit under curious circumstances. In the early 2000s, several insurgent groups in Nagaland and Manipur banned Hindi channels and Bollywood movies in the region. This gave the local people little choice but to turn to other viewing fare for entertainment, and Korean soap operas became an attractive choice.[10]

Beyond the Northeast, Bollywood filmmakers themselves have grown increasingly fond of South Korean films. Popular movies produced in South Korea have been adapted and reproduced in Hindi cinemas and many of them became blockbusters and have won awards and international recognition. For instance, Salman Khan-starrer, *Bharat,* was adapted from the 2014 Korean hit film, *Ode to my Father*.[11] Similarly, Korean hit, *A Hard Day* was made as *OMG or Oh My God* by director Umesh Shukla, which won many accolades. In 2015 alone, as many as nine Korean films were adapted in Hindi, some of them becoming big grossers at the box office. Of course, this is not say the Bollywood films have no impact in Korean civic space. In fact, some movies like *3 Idiots* and *My Name is Khan* earned excellent reviews in Korea. Indian movies *Stanley's Tiffin Box*, *God's Own Child* and *The Robot* also earned critical acclaims in recent film festivals in Seoul.

Indeed, films, music, and cuisines, among other cultural affinities have a huge potential to drive and deepen people-to-people relations and can act as a bridge between India and South Korea. These need more institutionalised attention.

## SHARED VALUES OF DEMOCRACY

One of the most unexplored areas of cooperation to strengthen the relationship between India and South Korea is their common commitment to democracy.[12] As middle-power democracies in Asia where there is growing and common threat from authoritarian non-democratic power, democracy building and cooperation can be a critical platform. The region, which is already experiencing the evolution of a democracy bloc in the name of Indo-Pacific quadrilateral involving India, Japan, Australia and the US, need the support of other middle powers such as Korea and Indonesia.

A key shortcoming of democracy in Asia is the lack of government-to-government cooperation on democracy building, governance cooperation, moreso at the level of civil society. This is something that needs serious deliberation among the various stakeholders representing South Korea and India. There is a growing chorus for the middle-power democracies in Asia to play a larger role in strengthening and promoting liberal democratic values and a rules-based order.[13] South Korea has numerous think tanks and endowments specialising on democracy promotion and promoting liberal order in Indo-Pacific to steer this space. While India lacks institutional capacity and resources on this, it can take cues from RoK.

A steady decline of liberal democracies, the rapid rise of authoritarian regimes particularly China and the growing uncertainty over the continued support of advanced democracies especially the US, and a host of other factors have contributed to the rising relevance of non-western democracies or middle powers. India and South Korea, as well as possibly Japan, can fill this space. To defend the region from threats to liberal democracies, India and South Korea, along with other middle powers, can think of expanding cooperation in the following areas:

- Country-to-country engagement (party to party level cooperation/ institutionalising democratic assistance)
- Cooperation with like-minded countries in Asia to build capacities, technical/financial support on promoting and strengthening democratic governance
- Cooperation on fighting global issues/challenges: climate change, freedom of navigation, internet governance, and outer space
- Economic order: Sustainable development goals (SDGs), trade agreements, and connectivity norms
- Creation of a Security Order (i.e., Quad) to secure a rules-based order in the Indo-Pacific
- Aid: line of credit
- More openness to think tanks/NGOs/networks of scholars/activists to create a critical mass
- Cooperation at the level of NGOs and think tanks – to build networks of think tanks and research organisations

There is massive scope to expand ties between India and South Korea and make it a special relationship in Asia. What is needed is political will and new imagination in diverse areas such as cultural relations, building on people-to-people contacts, harnessing democracy and liberal values, and cementing civilisational connections. These, in turn, will depend on the strength of their economic and political relations.

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