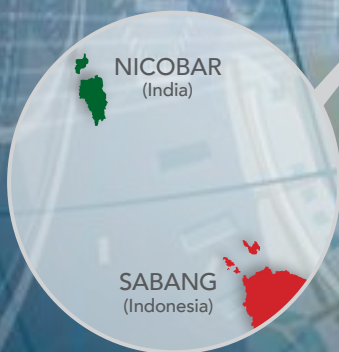


# KESAMAAAN

• INDIA - INDONESIA •

The Next Step



Embassy of India  
Jakarta, Indonesia



*Against the backdrop of their deep-rooted ties that span more than two millennia, India and Indonesia have journeyed together through the centuries to emerge as modern-day economic powerhouses. As trillion-dollar economies, the two countries are poised to lead the world with their consistently high and impressive growth, which is backed by the demographic dividend and driven by a large middle class with rising levels of disposable income that has considerably widened the consumption base.*

*Underlined by a bilateral relationship that is both comprehensive and strategic, the two countries have committed to take the two-way trade to US\$ 50 billion by 2025. Enhanced B2B engagements under the rubric of the India Indonesia CEO Forum, constituted by representation from the business sectors of both sides, have paved the way for scaling of already existing significant two-way investments with added focus on the pharmaceutical sector.*

*Such diversified and closer economic cooperation between the two large economies would increase the stability and robustness of global supply chains, which have otherwise experienced dislocation during calamitous situations, such as the ongoing pandemic.*

*Multi-faceted bilateral cooperation can help the two countries leverage their strengths and agility to take a quantum leap into the future, ensuring that economic, social and environmental sustainability are given utmost priority. India's Act East Policy and Indonesia's Global Maritime Fulcrum Policy would usher in enhanced security and growth for the region as well as the world as a whole.*

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# KESAMAAN

• INDIA - INDONESIA •

## The Next Step



Embassy of India  
Jakarta, Indonesia



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MINISTER OF EXTERNAL AFFAIRS  
INDIA

India and Indonesia, as maritime neighbours, are natural partners in peace and prosperity. We share deep historical and cultural linkages. In modern times, as large democracies, we share common values.

Indonesia is one of India's most valued partners in our Act East policy. There has been a new dynamism in our relationship after the visit of Prime Minister Narendra Modi in May 2018. The frequency of visits has increased significantly, reflecting our growing strategic and economic convergences.

While Indonesia is South East Asia's largest economy, India is one of the fastest growing large economies in the world. Our economic linkages are also deepening. Both countries have pledged to triple bilateral trade to US\$ 50 billion by 2025.

The next 25 years will present us an opportunity to work together by creating mutual economic value and empowering our citizens by providing an enabling and secure environment for growth.

The publication of **KESAMAAN: India - Indonesia – The Next Step**, is a timely endeavor, while commemorating the 75<sup>th</sup> year of India's Independence, it celebrates growing dynamism in our bilateral relationship. I would like to urge businesses from both countries, to work more closely in the fields such as pharmaceuticals, IT & software, skill development, agricultural products.

I extend my best wishes to the entire team involved in this publication. I am confident that it will widen horizons about the potential of our relationship and aid people in both countries to know each other better.

I wish the publication all success!

25 October 2021

Yours Sincerely,

(Dr. S Jaishankar)





**MINISTER FOR FOREIGN AFFAIRS  
REPUBLIC OF INDONESIA**

Indonesia and India are more than good neighbors and close friends. We are Strategic Comprehensive Partners with shared values and long-standing historical and cultural ties. Our relations have matured and translated into concrete cooperation that benefits not only our peoples, but also the world at large.

This pandemic is a test to our solidarity and friendship, and I am pleased to say we pass with flying colors. A friend in need is a friend indeed. Indonesia and India have been fighting shoulder to shoulder, and actively extending assistance to each other.

Going forward, our cooperation should be geared towards accelerating post-pandemic global economic recovery. As the world's largest economies, Indonesia and India bear immense responsibility to contribute to this endeavor. We must exert high-commitment and hard work to meet the bilateral trade target of US\$ 50 billion by 2025 set by our Leaders.

On that note, I wish to congratulate the Embassy of the Republic of India in Jakarta for its initiative to publish this book titled "KESAMAAN India-Indonesia – The Next Step" in commemoration of the 75<sup>th</sup> anniversary of the Independence Day of India.

It is indeed such an inspiring and resourceful piece of work. I certainly hope this publication would entice relevant stakeholders in Indonesia and India to take our bilateral relations to the next level, and help both countries fulfil their utmost potentials.

Jakarta, August 2021



Retno L.P. Marsudi



# Foreword

A few years ago, the Embassy had brought out a book titled “KESAMAAN: India - Indonesia – “Still in Step” which highlighted how India and Indonesia not only shared their past with each other, but also their independence as well as their journey to a free and democratic world.

The 21<sup>st</sup> century has seen new realities. The “Asian Century” highlights the role of countries like ours, India and Indonesia, with huge populations and high young human resources, in driving the world economy forward. Given our ancient civilizational ethos, economy is not our only priority. A comprehensive growth of humankind, where nature is very much at the center of our consideration is our motto. This planet requires us to take the lead in the coming years and decades.

These thoughts have driven us to bring out our new edition of “KESAMAAN” which highlights “the steps ahead” to “take it to the next level”. This edition highlights the practical aspects of our possible cooperation and collaboration in the coming days. Whether we take up trade or investment, finances or machine learning, food products or solar energy, pharmaceuticals or tourism, there are synergies to be explored. The benefits intended may look to be only for our two populations, but the underlying theme of our cooperation is aimed at providing a ray of hope to the larger world that democratic nations can come together to achieve rapid growth for their people.

We would like to dedicate this book to the thought of saving the only planet that we live on. If this planet is harmed, we are all doomed to complete annihilation. Therefore, cooperation between the 2<sup>nd</sup> most populous country in this world and the 4<sup>th</sup> most populous country (combined population of nearly 1.6 billion) is a goal that we need to work for with full vigor and dedication.

It is my wish that readers of this book get new ideas and new zeal to rise and take the first step towards building a new future not only for India and Indonesia but for the entire mankind.

I thank our sponsors Indorama Group, Minda ASEAN, TVS Motors, Allansons Group, Gandhi Memorial Intercontinental School, Asia Pacific Fibers, State Bank of India, Godrej Group, and Tata Group for making this project possible.

I also thank Mr. Sachin Gopalan and his team for their professional guidance and the enthusiasm they brought to the project.



**Manoj Kumar Bharti**  
Ambassador,  
Embassy of India, Jakarta

# Publisher's Note

When two of the most diverse nations in the world agree to collaborate closely and work together for the betterment of their respective nations, they inadvertently will end up making the world a better place. The intertwining of bilateral, economic, and social connects will have an impact on many other aspects, visible or invisible.

India is a land steeped in rich history with vibrant people and breathtaking landscapes. From its snow-capped mountains to its deserts, rivers, and beaches, India is truly incredible. One of the most religiously and ethnically diverse nations in the world, it is the birthplace of four major religions and has several others flourishing among its 1.4 billion people. It is the world's largest democracy and is administratively divided into 36 federal entities consisting of 28 states and 8 Union Territories, each with its own ethnic groups, languages, traditions, cuisine, clothing, music, and dance. There are 23 official languages and more than 447 languages and dialects that are spoken by more than 2,000 ethnic groups across the nation.

Indonesia is a land of vibrant culture, historical connections, and beautiful islands. From its mountains to its active volcanoes, tropical jungles, idyllic islands and beaches, Indonesia is truly wonderful. It is a religiously and ethnically diverse nation, with six official religions and many others flourishing among its 270 million people. It is the world's third-largest democracy and is administratively divided into 34 states, each with its own ethnic groups, languages, traditions, cuisine, clothing, music, and dance. The country has one official language and more than 710 languages and dialects that are spoken by more than 1,340 ethnic groups across the nation.

Sounds familiar? However, the diversity narrative goes well beyond human existence, as planet earth has given both nations a biodiversity connect that goes back in time. The celebration of such an expansive diversity connection is the main theme of the KESAMAAN series of books. KESAMAAN is a Sanskrit origin word that means SIMILARITY and TOGETHERNESS at the same time.

I am deeply thankful to Ambassador Manoj Kumar Bharti for this opportunity to work with him in putting together a narrative that helps chart the way forward, in line with his vision to take this bilateral relationship to the next level; The Next Step. This book is even more impactful with the collective wisdom of over 90 social, political, bureaucratic and business leaders who have enthusiastically shared their views, thoughts and ideas, creating an exciting narrative that the future generations can visualize, translate into action, and make into reality.

In the next 25 years, as India and Indonesia dance their way together into the top 5 economies of the world, it is our endeavor that this book will provide the much-needed choreography for synchronization and collaboration.



**Sachin Vijaya Gopalan**  
Publisher



सत्यमेव जयते

**Embassy of India**

Jakarta, Indonesia

Publisher

**Chairos**  
The Right Time is Now

## Presenting Sponsors



## Co-sponsors



Indorama was founded with a vision to help build industrial capabilities and develop a pool of human resources that would be amongst the best in the world. From our humble beginnings in 1975 with a cotton yarn spinning plant in Indonesia, we have been able to grow Indorama into a global giant that originated out of Indonesia.

Indorama today has 137 manufacturing sites in 37 countries, manufacturing a multitude of products, including polymers, fertilisers, chemicals, fibres, and medical gloves. Today we are market leaders in our fields, with a vibrant ecosystem that has developed around our activities, both upstream and downstream.

How did we achieve this? From deploying the latest technologies and equipment available in the world to hiring the best talent, our focus has also been to understand the requirements of the global market to create satisfied and loyal customers. To stay a step ahead of the competition has been an endeavour from the beginning, and this will not change as we pave the way for our participation in the industrial growth of Indonesia.

Another aspect of our philosophy has been to prioritize environmental issues, to ensure we are protecting the planet for our future generations. We pay attention to the safety of our products for the consumers, making sure that product innovations match these requirements. We also ensure the welfare of our 42,000+ employees so that they are committed to our vision and are inspired in their journey with us. We also conduct many CSR initiatives that include education, healthcare and skills building, all of which reinforce our corporate philosophy to create long-term sustainable businesses.

On this occasion of the 75<sup>th</sup> Independence Day of India and its long history of bilateral relations with Indonesia, I would like to extend my heartfelt congratulations to the people of both nations. We are pleased to participate in this program that celebrates the achievements of today which will be a foundation for the opportunities of tomorrow. Indorama stands behind all activities that will help nurture this relationship and take it forward in the next 25 and many more years to come. It is our youth who will carry forward the torch of what we have started. I hope they will continue to be inspired by the legacy we have set and cast a positive tone for a bright future ahead. Indorama remains committed towards working closely together for the betterment of both India and Indonesia.



**S. P. Lohia**  
Founder & Chairman  
Indorama



It is a matter of great pride and pleasure that our country, India, will be completing and celebrating 75 years of Independence. Independence Day is the celebration of the spirit of the freedom struggle and the reflection of the feeling of sacrifice. The ethos of our freedom struggle forms the foundation of modern India. Our visionary leaders brought together a diversity of world views to forge a common national spirit.

We have traversed a long way since independence. Over the last 75 years, India has grown significantly across all sectors. India's development has been remarkable and holds great promise for the future. From space and technology, to health and education, India's growth story has been impressive and innovative across all sectors.

India and Indonesia have shared two millennia of close cultural and commercial relations. The shared culture, colonial history, and post-independence goals of political sovereignty, economic self-sufficiency and independent foreign policy have had a unifying effect on bilateral relations. Unified by cultural ties and common goals, Indonesia has become a vital strategic partner of India.

Indonesia is also one of the largest trading partners of India in the ASEAN region and has the potential to double trade in the next five years. There is considerable potential for expanding trade between the two countries in the areas of pharmaceuticals, automotive components, automobiles, engineering products, IT, biotechnology and healthcare services. The two countries can also expand their cooperation in building critical infrastructure (airports, seaports, railways, and telecom).

Indonesia is the third-largest two-wheeler market in the world after India and China. In passenger vehicles as well, it is not only an export-oriented car production hub but also a major consumption centre for vehicles on the back of rising per capita GDP. While Japanese OEMs have considerable market share, Indian OEMs have been actively expanding in Indonesia with their new product ranges. As a consequence of the growing automotive industry, various automotive component manufacturers like us have also been flourishing.

The Indonesian automotive markets and our Indonesian operations remain strategic to the future growth plans of our Uno Minda Group. While our product portfolio comprises more than 20 products in India, we are largely catering to only two product segments in Indonesia. We intend to expand our product portfolio in Indonesia to at least 10 products with leading market share. We also plan to bring advanced lighting technology to Indonesia from our Indian and European operations to drive further growth.

Globally, the rise of electric vehicles (EVs) represents a massive disruption to the road transportation sector. While most of our products are engine agnostic and can be fitted into EVs, the rise of EVs creates an additional opportunity for us to grow. We are already supplying advanced sensors, LED lights, and switches to EV companies in India. We also have various products, which are under production or under development, specifically catering to EVs. We plan to offer these EV-specific products globally and to Indonesia as well.



**Nirmal Kumar Minda**  
Chairman, Minda ASEAN

Your Excellency Shri Manoj Kumar Bharti, please accept my heartiest congratulations on your initiative, the publication to commemorate the global celebrations of the 75<sup>th</sup> year of the Independence of the Republic of India. It is an occasion of pride and joy not only for Indians, but for Indonesians also, intertwined as the two countries are by age-old ties of culture and commerce.

At GMIS, we are committed to creating a holistic learning community (intellectual, physical, emotional, psychological, social and spiritual). We provide a balanced, well-rounded education within a challenging and nurturing environment for students and staff, while maintaining an authentic connection with parents and the broader community.

GMIS is building a bridge of goodwill between Indonesia and India by education and imparting Gandhian values etc. Our educational efforts are to create positive human connections and interactions that are aimed at making future minds of the world possible. Academic, social, communication and adaptability skills will ensure India-Indonesia ties become stronger and more optimistic.

At GMIS, we are proud to incorporate moral values into education to ensure that upon graduation, students not only have the knowledge and skills needed to work and succeed, but also the compassion and emotional wherewithal to be a part of a safe, peaceful, and cooperative society.

I take this opportunity to assure that GMIS will continue to foster goodwill between India and Indonesia through an education that embodies the Gandhian values.



**Suresh G. Vaswani**  
Chairman, GMIS



This is the 75<sup>th</sup> year of Independence of the Republic of India. Indonesia and India share a long history. They have always resonated with the common values of progress, peace and democracy and built a strong relationship based on these over the last many decades.

Indonesia is the second-largest trading partner of India in the ASEAN region. Bilateral trade has increased from US\$ 4 billion in 2005-06 to US\$ 23 billion now. Both countries at the highest levels have pledged to increase this to US\$ 50 billion. I am confident that this goal of our governments and our people will soon be met, and TVS Motor Company will continue to play its role in this journey. I am happy that as PT TVS Motor Company, we have a longstanding automotive manufacturing and design facility presence in Indonesia.

TVS Motor Company is among the top 5 global players in the two-wheeler space, serving customers in over 60 countries. As a company, we stand committed to quality, customer satisfaction and investments in future technology and digitalisation. We aim to nurture some of the best global talent in Advanced Engineering, Automotive Technology, Manufacturing, R&D and Future Mobility solutions. Our subsidiary, PT TVS Motor Company, reflects our commitment to and belief in the opportunities present in Indonesia, not only as a market but as a global design, manufacturing and logistics hub for two and three wheelers. We seek to continue serving the thriving market in Indonesia and to manufacture and export products to many African and Latin American countries, fostering trade between Indonesia and the world.

TVS Motor Company will continue to focus on bringing new and innovative products to Indonesian customers. Demand for future mobility solutions like electric vehicles (EVs) in Indonesia and India is growing. There is regulatory support being enhanced to expedite growth in EVs. There is impetus for establishing manufacturing facilities for EVs along the related supply chain systems and charging infrastructure. Indonesia, we believe, is very well poised in this emerging future with its young aspirational population, high two-wheeler penetration and some of the largest nickel reserves globally, making it an attractive destination for both EV and battery manufacturers.

I thank the Indonesian Government and our esteemed partners and suppliers for providing us with a favourable environment to succeed. We look forward to actively engaging on opportunities to transform the quality of life.



**Sudarshan Venu**  
Joint Managing Director,  
TVS Motor Company



The Allana Group established its operations in the year 1865 and today is recognized as India's leading manufacturer and exporter of high-quality processed food products. The Allana Group, which celebrated 150 years of excellence in 2015, pioneered the processing and export of frozen Halal Buffalo meat from India in the year 1969.

During the previous 52 years, India has built a solid reputation of being a reliable exporter of risk-free, nutritious and competitively priced frozen meat to over 70 countries. Allana accounts for over 40% market share of the export of Frozen Halal Buffalo Meat consistently.

India and Indonesia share a lot of similarities. Both the countries gained independence between the years 1945 and 1947. During the past 75 years of achieving independence, both the Republics have shared an excellent relationship. The historical friendship between the first Hon'ble President of Indonesia, Mr. Soekarno Hatta and first Hon'ble Prime Minister of India, Shri Pandit Jawaharlal Nehru is well acknowledged. As stated by the first Hon'ble President of Indonesia, Mr. Soekarno Hatta, India and Indonesia have shared cultural similarities and cordial relations for over a thousand years. Both India and Indonesia have a tremendous opportunity to increase bilateral trade between the two countries. Both countries are neighbours as India's Andaman and Nicobar Islands share their maritime border with Aceh, Sumatra, Indonesia.

There is great potential for increase in trade between the two friendly nations once the undue restrictions and unjustified trade barriers are lifted. The possibility of signing of an FTA between the two countries can greatly assist in facilitation and growth of trade. We are highly optimistic that the relations between India and Indonesia shall continue to flourish and reach new heights in the coming years.

Our Company is one of the largest importers of Palm Oil from Indonesia and with the ever growing demand in India, we are sure that this business shall grow exponentially in the coming years. Both the nations have a huge consumer base, considering the size of their population. India is one of the top Halal bovine meat exporters in the world. Indian buffalo meat is safe, risk free and most importantly, competitively priced, making high-quality products available to the Indonesian consumers at affordable prices. We foresee great potential for our product Frozen Halal Buffalo Meat (FHBM) in Indonesia due to a large consumer base of over 280 million which shall definitely grow further in the next 25 years.

Consumption of bovine meat as a source of protein is still very low in Indonesia in comparison to its neighbouring countries. Only an additional 1 Kg per capita per annum would be equivalent to 280 million Kg which is approximately 280,000 MTs. Hence, we are very excited about the prospect of exponential growth of our product in the Indonesian market. It is noted that the balance of trade is heavily in favor of Indonesia. We feel that this gap could be reduced by enhanced export of high-quality Indian Halal Buffalo meat to Indonesia.



**Afzal Aziz**  
President,  
Allanasons Pvt. Ltd.







# India-Indonesia Economic Cooperation and the Way Forward

By Ambassador Manoj Kumar Bharti

India and Indonesia have shared two millennia of close cultural and commercial contacts. The Hindu, Buddhist, and later Muslim faith travelled to Indonesia from the shores of India with stories from the great epics of Ramayana and Mahabharata forming a vital source of Indonesian folk art and dramas. The shared culture, colonial history, and post-independence goals of political sovereignty, economic self-sufficiency and independent foreign policy have had a unifying effect on the bilateral relations. It is widely believed that much of the cultural and religious influences in Indonesia were brought by the traders from India. Therefore, the impact of economic and commercial relationships forms a paramount bedrock of our bilateral relations. Sharing deep trade and cultural relations that date back several hundred years, the Middle Age kingdoms in southern India conducted sea trade with the Indonesian islands. Independent India carried forward the strong ties with Indonesia with Indonesian President Sukarno presiding over India's first Republic Day celebrations in 1950 as the Chief Guest.

## Making Economic Potential a Reality

Indonesia is the 4<sup>th</sup> most populous country, tenth largest economy by the Purchasing Power Parity (PPP) and a member of G20. Indonesia has charted impressive economic growth since demonstrating resilience during the 2008 global financial crisis. Its massive young population and large middle class with rising levels of disposable income provide a platform for the biggest consumption base in Southeast Asia, a major driver of historical economic growth. On the other hand, in India, the adoption of the New Economic Policy in 1991 saw a landmark shift in the Indian economy, as it ended the mixed economy model and License Raj system - and opened the Indian economy to the world. Today, India has emerged as the fastest growing major economy in the world, ranked seventh largest, and third largest in terms of Purchasing Power Parity. The Indian economy's GDP is pegged at US\$ 2.9 trillion and attained consistently high growth in GDP since the beginning of the century till the onset of the pandemic.

Both India and Indonesia aim to be among the top five economies of the world in the near future; it must be noted that both countries face similar conditions and challenges. Also, as the world's largest and third largest democracies, their path to development and urge to bring benefits to their vast population cannot but be similar. Both countries have missed a few steps in the Industrial Revolution of the 20<sup>th</sup> century. Their method of skipping the middle steps and jumping to the current 21<sup>st</sup> century Industrial Revolution has to be similar. All this means that there is a need to understand the synergy that exists between the two economies which must be exploited for better mutual growth. It will appear from the details given below that the education, IT, AI, machine learning, solar energy, and electric vehicle sectors are some of the areas where both countries need support from each other and space in each other's economies.

## Building a Robust Bilateral Engagement

Both countries enjoy a robust relationship marked by high-level visits paid by both sides from time to time where President Jokowi paid a State Visit in December 2016 and again in January 2018 for attending the ASEAN-India Commemorative Summit at New Delhi, while Prime Minister Shri Narendra Modi visited Jakarta in May 2018 when India and Indonesia set the tone for enhanced bilateral



**Manoj Kumar Bharti**  
Ambassador  
Embassy of India, Jakarta

cooperation by upgrading the cooperation to that of Comprehensive Strategic Partnership. During the latter visit, 15 agreements/MoUs were signed between the two countries including 9 G2G MoUs which inter alia included cooperation in the Railways sector, Health Cooperation, Pharmaceutical, Biological and Cosmetics Regulatory Functions. Prominent among B2B MoUs was the MoU between CII and Indonesia Chamber of Commerce and Industry (KADIN). Both Leaders acknowledged the 'Recommendations and Outcome Document' submitted by the members of India Indonesia CEO Forum. The Leaders further instructed the regular convening of the forum and expansion of business sectors as it could function as a constructive measure to tap more opportunities and potential in developing bilateral cooperation in trade and investment.

### **Growing Community Engagement**

In a year, close to half a million Indian tourists visit Indonesia, particularly Bali and to further increase this people-to-people exchange, the provinces of Uttarakhand and Bali have been twinned. Early establishment of direct flight connectivity between the two countries is bound to result in enhanced flow of two-way tourism and also foster closer business linkages. Further interactions in maritime cooperation between the two countries, starting with improving economic relations between Aceh province, Indonesia's westernmost province and India's southernmost Andaman and Nicobar Islands, is also a part of bringing the two countries close to each other. Whether it is commodity driven trade or investments through projects, the potential for growth is immense and there have been regular exchange of visits by trade delegations to intensify engagement between the two sides, by Chambers, Trade Promotion Councils and sector-wise promotional events. There is currently an appreciable level of presence of Indian companies in Indonesia and collectively these 55 companies have together made total investments of US\$ 5.7 billion so far in the infrastructure sector alone, creating direct employment for 27288 persons locally within Indonesia. In order to give a further fillip to this process, a Representative Office of the Confederation of Indian Industry, a leading trade body of India, was opened in September 2019 in Jakarta to act as a facilitator for promoting India's exports and investments, positively contributing to enhanced trade and investments between the two countries.

### **Converting Regional Alignment**

Since 2014, India has placed heavy emphasis on its 'Act East Policy' to play a proactive role in Southeast Asia and consistently advocated for a cooperative, secure, and stable Indo-Pacific to foster collective growth and prosperity in the region. India's vision is 'Security and Growth for all in the Region' (SAGAR) as a "creed" that it aims to follow to better connect with its "land and maritime partners to the east." Through SAGAR, which was announced in 2015, India aims to work towards cooperation, sustenance, and peaceful development in the region. On the other hand, as the world's largest archipelagic country and Southeast Asia's biggest economy, Indonesia has demonstrated an intent to play a leading role in the Indo-Pacific framework. India's Act East policy aligns well with President Joko Widodo's Global Maritime Fulcrum policy to ensure security and growth for the region. Evidently, there exists a robust convergence in Indian and Indonesian regional outlooks and strategies as was the case during the Non-Aligned Movement era. Both countries share a common objective of developing cooperative power structures and this convergence has led to the adoption of the "Shared Vision on Maritime Cooperation in the Indo-Pacific" by the two countries. Among other objectives, this "Shared Vision," envisions "strengthening their maritime cooperation for promotion of peace, stability, and bringing in robust economic growth and prosperity to the Indo-Pacific region." The congruity in their respective strategies for the Indo-Pacific seems to have strengthened the case for mutual reliability, as evidenced in the formulation of an India-Indonesia 'Comprehensive Strategic Partnership' and the bilateral arrangement pertaining to Indonesia's Sabang port – both of which were announced alongside the "Shared Vision".

**“As a country renowned for its talent and technology, India can play a significant role in the development of the global tourism sector. India's assistance in digitizing the tourism industry in Indonesia will benefit MSMEs in the tourism industry by improving their opportunities to grow and sustain their businesses.”**



**Sandiaga Salahuddin Uno**  
Minister for Tourism &  
Creative Economy  
Republic of Indonesia

With the guidepost of Joint Statement on Establishment of Comprehensive Partnership & Shared Vision on Maritime Cooperation in the Indo-Pacific issued during the visit of the Prime Minister of India to Jakarta in May 2018, a Joint Task Force was set up by India and Indonesia on development of connectivity between Aceh and Andaman & Nicobar Islands. Accordingly, a preliminary Joint Task Force Leader's meeting was held in Jakarta on 3<sup>rd</sup> September 2019, in which the terms of reference of the Joint Task Force meeting was discussed. The inaugural meeting of JTF was convened soon thereafter on 7<sup>th</sup> December 2019 in Banda Aceh, which focused on the following areas:

- Stepping up of trade and investment between the regions through export-import and exchange of information on projects available
- Establish direct air and sea connectivity between both regions, through regular commercial flights from Indonesia to Port Blair or via connecting flights in Singapore / Kuala Lumpur, or by charter flights
- Development of port-related infrastructure – seaports, airports, and hospitals through joint feasibility studies
- Sustainable development of marine resources and fisheries through JVs in the fish processing industry and knowledge sharing
- Step up two-way tourism through cruises, tourism events, and sea transportation in the form of RoRo vessels etc., and promote cultural exchanges
- Enhance cooperation in the education sector through MOUs between educational institutions and scholarship grants
- Encourage people-to-people contact through the establishment of sister province cooperation between Aceh and Andaman & Nicobar Islands

### Expanding Trade Partnerships

A key economic partner for India in Southeast Asia, bilateral trade with Indonesia was almost US\$ 20 billion in the financial year 2019-20, the second largest trading destination for India in the ASEAN region. The trade between the two countries has witnessed more than five-fold increase from US\$ 4.3 billion in 2005-06. India imported US\$ 15.06 billion worth goods from Indonesia and exported commodities valuing US\$ 4.12 billion in 2019-20. Thus, Indonesia enjoys a large trade surplus of over US\$ 10 billion with India due to import of huge volumes of coal and crude palm oil, which is among the largest for Indonesia. Mainly, India's imports were minerals, vegetable oils, ores, rubber, iron and steel and inorganic chemicals, while India's exports to Indonesia mainly consist of organic chemicals, iron and steel, sugar, bovine meat, commercial vehicles, electric machineries, cotton etc. There is considerable potential for expanding trade between the two countries in the areas of agro products, pharmaceuticals, automotive components, automobiles, engineering products, IT, bio-technology, and healthcare services. India perceives Indonesia not just as a trading partner but a long-term economic partner and the aim is to enhance bilateral trade to US\$ 50 billion by 2025.

### Long-term Partnering in Commodity Trade

Two commodities, coal and palm oil, constitute over 60% of imports by India from Indonesia. In coal, India is the second largest importer after China, importing 97.6 million tons in 2020, to a tune of US\$ 3.4 billion. On the other hand, India is the largest importer of crude palm oil from Indonesia in 2020, importing 4.56 million tons, valued at US\$ 2.98 billion. An MOU was signed on 16<sup>th</sup> July, 2018 between the Solvent Extractors' Association of India, Indonesian Palm Oil Board, and the Solidaridad Network Asia Limited to promote use of Indonesian palm oil in India and facilitate implementation of Indonesian Sustainable Palm Oil. In follow-up, two meetings of the Joint Working Group have taken place with the 2<sup>nd</sup> one held in Medan in March 2019 when, inter-alia, PR strategies on promotion of Indonesian palm oil in India were discussed. Hence, there is close cooperation between the agencies of the two countries in so far as import of CPO is concerned.

**“As Indonesia and India progress towards becoming the top 5 economies of the world, there is an opportunity to align with each other on specific sectors such as Education and Healthcare. Both nations face challenges of large populations that have low access to resources, hence the solutions and learnings will be quite similar. Working together will help bring down the cost of research and time of deployment. Additionally, India's software technology prowess and Indonesia's vast biodiversity resources are two areas that will contribute significantly to the betterment of mankind, hence investment and collaboration in these sectors should be structured and intensified.”**



**Gita Wirjawan**  
Founder & Chairman,  
Ancora Group



## Bringing G2G Closer

G2G mechanism in JWG on agriculture, coal, renewable energy, oil & gas, health etc. under the rubric of ministerial-level exchanges like the Biennial Trade Ministers' Forum and Energy Forum enables bottlenecks to be addressed at policy level. These mechanisms coupled with more frequent B2B contacts through exchange of visits by trade delegations by Chambers, Trade Promotion Councils and sector-wise trade promotion events would further boost bilateral trade and investment between the two countries. Currently, discussions are going on for finalizing a Preferential Trade Agreement which would optimize on potential areas of trade, in the process addressing the adverse balance of trade too, by making the prevailing skewed balance of bilateral trade with over US\$ 6.64 billion deficit during the calendar year 2020 (as per data of Indonesian Ministry of Trade) more balanced and enabling realization of the target of US\$ 50 billion set to be achieved by 2025. Working Groups on Trade and Investment and also Trade Facilitation and Resolution would act as further enablers in promoting trade and investment between the two countries.

## Growing Investments Strategically

Regarding investments, as per data sourced from the Department of Industrial Policy and Promotion (DIPP) India, Indonesia's investment in India was US\$ 638.57 million from 2000-2020. On the other hand, as per the Indonesian Investment Authority (BKPM) statistics, India has invested US\$ 1,111 million in 3574 projects during the same period, 2000-2020, while the figure could be more as many investments are coming through Singapore, Thailand and other gateways, which according to some estimates is to a tune of US\$ 15 billion. Looking at Indian investments in Indonesia, almost all the big names are present--Tata, Adani, GVK, GMR, Godrej, Kirloskar, TVS, Mahindra, Reliance etc.

Considering the disruptions in supply chains due to COVID 19, which has also affected Indonesia, the investments of India could be directed to fill these supply chains through production of intermediaries. For instance, the textile industry could look at making fabrics which are hitherto imported from China, like fabric for face masks with finishing to be done at the Indonesian end, cooperation in joint manufacture of APIs between pharma companies of both countries (where 60% is coming from China), intermediaries in the auto sector (especially in passenger vehicles, where India has prowess in the small vehicles segment), electric vehicles, where India could supply components for doing the assembling here etc.

## Structuring Policies & Reforms

There are high hopes that the reforms carried out under the framework of the Omnibus Law and Atmanirbhar Bharat by Indonesia and India respectively to improve the investment climate would act as a catalyst for enhancing two-way investments between the two countries. On the Indian side, the highlight of the flagship programme, Atmanirbhar Bharat was the launch of the Production Linked Incentive Scheme with a total outlay of Rs.1.97 lakh crores (US\$ 26.36 billion) for 13 key sectors for 5 years to enhance cost competitiveness, quality, efficiency, and technology. Structural reforms made in the Indian economy, including in the field of taxation laws like GST helped the Indian economy jump 65 ranks (in the last four years) in the World Bank's Ease of Doing Business Report. Such reforms were carried out even as India saw the highest ever inflow of FDI of US\$ 81.72 billion during the financial year 2020-21, in spite of being a pandemic year.

## Fostering Healthcare Partnerships

In the pharma sector, during the pandemic, there has been heightened cooperation through export of a range of Covid-19-related drugs, including Oseltamivir, Remdesivir, Chloroquine Phosphate, Lopinavir-Ritonavir and HCQ Sulfate. Hetero launched its Remdesivir brand, Covifor in Indonesia on 1<sup>st</sup> October 2020, used for mild to moderate Covid-19 infection. Indian pharma companies like Dr. Reddy's Laboratories, Cipla, Jubilant Life Sciences, Cadila etc., have also made headway in marketing their Covid-19 drugs in Indonesia through obtaining

**“As two of the top 10 emerging economies in the world with a combined GDP of US\$ 3.8 trillion, Indonesia and India surely have huge potential for increasing bilateral trade and capital investments in the future, primarily to grow together over the COVID-19 crisis. From agriculture to manufacturing, pharmaceutical, healthcare, information technology and professional services, businesses of our two countries have numerous options and opportunities for deepening the bilateral supply chain and economic integration.”**



**Shinta Widjaja Kamdani**  
CEO, Sintesa Group  
Vice Chairwoman, KADIN

Emergency Authorization Use. The last in this line of drugs to get access is Cipla's generic version of broad spectrum antiviral drug Remdesivir (branded Cipremi), to treat severe infection of Covid-19.

The Indonesian National Agency of Drug and Food Control (BPOM) approved Emergency Use Authorization for Cipremi on 11<sup>th</sup> October 2020. In early July 2021, PT Indofarma (Persero) imported 230 million doses or vials of Remdesivir from India. Informally, the Indonesian Ministry of Health has also evinced an interest in sourcing India's Bharat Biotech produced Covid vaccine, Covaxin and India is more than willing to support this proposal at a B2B level, including from the point of view of joint production.

Needless to say, such collaboration at the B2B level in tackling the pandemic Covid-19 reinforces existing cooperation between the two countries in the pharma sector while providing drugs for the timely treatment of Covid patients in Indonesia.

### **Partnering to Enable a Technology Revolution**

There is immense potential for enhancing mutually beneficial cooperation in the field of pharmaceuticals, infrastructure, IT etc., some of the aspects have already been explained before. I would like to dwell at some length on the IT sector, an important area for expanding cooperation and being also an area of immense strength for India.

The fourth Industrial Revolution, also known as Industry 4.0, is expected to make Indonesia one of the top 10 economies in the world in 2030 and to achieve the target, Indonesia has launched a roadmap called 'Making Indonesia 4.0', as part of its strategy. Industry 4.0 is supported by five key technological advances: Internet-of-Things, artificial intelligence, human-machine interface, robot and sensor technology, and 3D printing. In the "Making Indonesia 4.0" roadmap, five sectors are named priority sectors: food and drinks, automotive, textiles, electronics, and chemicals, to be read in the larger objective of achieving a target of 21-26% of GDP by 2030 through the manufacturing sector.

The design of the "Making Indonesia 4.0" roadmap involved stakeholders from various segments, including the government, industry players, industry associations, tech companies, as well as research and educational organizations. The fourth industrial revolution will revolutionize manufacturing and production industries by integrating Internet-of-Things, data integration, cloud computing, and other technological advancements into the heart of production and manufacturing systems.

The mission 'Making Indonesia 4.0' will thus revolve around building national, digital infrastructure which would provide ample opportunities for Indian IT-based companies to partner and grow in a mutually beneficial manner. Leading IT companies from India like TCS, Tech Mahindra, Infosys, Wipro etc., have a base in Indonesia and would be looking to build mutually beneficial partnerships in forging synergies with Indonesian companies to fast track goals set in Industry 4.0.

### **Reassessing Post Pandemic Opportunities**

As the pandemic has ravaged the economies of India and Indonesia in a similar fashion, it is to be realized that long forgotten trade linkages and trade routes between the two countries need to be revived. The exchange of goods and services and more so of ideas between India and the Indonesian archipelago is a fundamental feature of this region throughout history. Some experts feel that the 21<sup>st</sup> century will see this dynamism return. The business community as well as the government will do well to realize the need to bring that old dynamism back in areas that have been outlined above. From agriculture to manufacturing, pharmaceuticals to healthcare and traditional medicine, professional services to e-commerce – there are opportunities to grasp and exploit for the betterment of both economies and people in both countries.

**“Historically, India played a significant role in shaping up what Indonesia is today. Culturally, many of our traditions are derived from the same values. India lent tremendous support for our Independence and our diplomacy in the early days of our nation. We share the same values. Today, I am the witness of warm cooperation between the nations in sports. I can always rely on India's support for all our aspirations in sports, whenever we need it, and vice-versa. Moving forward, I am certain the historical relationship and the shared values that we have with India will persevere. In my current role as the President of National Olympic Committee Indonesia, I know India will support us in our bid to host the Olympics in the future and other cooperation in sports between the two countries, as India had been very supportive whilst I was the President of Indonesian Sports Cycling Federation.”**



**Raja Sapta Oktohari**  
President, National  
Olympic Committee  
Indonesia



## THE NEXT STEP

To conclude, Indonesia and India, being the fastest growing trillion-dollar economies, have great potential to lead the global economy in the coming years with India aiming to become a US\$ 5-trillion economy by 2025 and Indonesia a developed country by 2045. Their large young population and rich natural resources support these countries to maintain their economic growth in the midst of a global dynamic challenged by the pandemic. This has been backed by the Economist Intelligence Unit (EIU) Report which says that emerging markets like India and Indonesia are expected to grow faster than most developed economies, making it the 3<sup>rd</sup> and 4<sup>th</sup> largest economies in the world by 2030. India and Indonesia would thus be major propelling forces of the global economy in the 21<sup>st</sup> century that is destined to belong to Asia.



**Prof. Anil D. Sahasrabudhe**  
Chairman, All India  
Council for Technical  
Education (AICTE)

**“The ties between India and Indonesia date back to Ramayana days, be it commerce and trade, culture or values, there is both continuity and passion despite less travel modes that were possible. Today when the whole world is connected through several online platforms, we can together help humanity by educating our peoples through SWAYAM a MOOC platform, or online AI based learning tools under NEAT to faculty certification and ATAL academy, which India has developed and carefully nurtured and can take the friendship between the two nations to the next level.”**

**“Digital Technology provides an opportunity for exponential growth in speed, quality and cost reduction. We need to lower the technology barriers so that people are not afraid to learn about Technology and be able to participate in the Industry 4.0 world that is unveiling in front of us. This is where Indonesia and India can collaborate to work together and promote digital literacy at the grassroots level. I believe that by 2030, when the world looks for tech talents in AI and other Industry 4.0 technologies, Indonesia will also be able to contribute to the needs of the global industry.”**



**Dr. Ilham Akbar Habibie**  
Chief Executive  
National ICT Council  
Republic of Indonesia

# Tourism & Creative Economy Opportunities for Indonesia & India

By Sandiaga Salahuddin Uno

Indonesia has vibrant landscapes and ecosystems that contribute to the country's attraction as a tourism destination. Numerous visitors are drawn to the country's mixture of abundant natural resources and price competitiveness. According to the World Economic Forum's Travel and Tourism Competitiveness ranking, reinforced by natural resources and price competitiveness, Indonesia improved from 42<sup>nd</sup> place in 2017 to 40<sup>th</sup> place in 2019 (WEF, 2019). Indonesia is confident of achieving higher travel and tourism competitiveness in the future, particularly in the Asia Pacific region. The global crisis triggered by the COVID-19 pandemic has complicated Indonesia's efforts to accomplish its tourism development goals. Despite the numerous obstacles emerging from an increasingly uncertain environment, Indonesia has prepared a series of policies to stabilize and accelerate its change on all fronts. The Government has committed to make tourism a pillar of the country's economic strategy to achieve more rapid and inclusive growth. The tourism sector's revival may commence in villages through the village tourism initiative, allowing the economic impact of tourism to be absorbed directly by the community. However, the upcoming national tourism revival will rely heavily on domestic tourists as long as international travel remains low. Domestic tourism is recovering more swiftly than international tourism. The Ministry of Tourism and Creative Economy is promoting a domestic travel campaign with the hashtag #DiIndonesiaAja which means traveling only in Indonesia. This is one of the efforts to encourage the growth of domestic tourism. This campaign is expected to motivate people to feel good enough and proud to travel to tourist destinations in Indonesia in this challenging time with strict adherence to existing health protocols and paying attention to the policies that apply as preconditions for travel. The government & people of Indonesia in many regions have been making efforts to ensure the readiness of destinations to welcome visitors with the implementation of health protocols CHSE (cleanliness, health, safety & environmental sustainability) covering airports, hotels, restaurants, tourist attractions, souvenir shops, etc. We have also enabled the availability of health facilities, including hospitals & PCR/swab laboratories as well as increased the capacity of testing, tracing, and tracking. This would help in building and strengthening confidence in international tourists and encourage them to visit Indonesia when travel resumes.

Our vision for Indonesia's tourism development is characterized by four fundamental words: advancement, competitiveness, sustainability, and promotion of cultural identity. Our strategic objective for tourism development in 2020-2024 is to magnify tourism's contribution to the national economic resilience. To accomplish this goal and objective, the Ministry is transforming tourist destinations into environmentally sustainable attractions while supporting an inclusive tourism economy. In line with the Medium-Term National Development Plan 2020-2024, we have committed to furthering Indonesia's five "super-priority" international tourist destinations, which is projected to spur growth in other sectors, including infrastructure and connectivity. To spark Indonesia's tourism recovery during the uncertain pandemic era, we have advocated three fundamental strategic directions; innovation, adaptation, and collaboration to boost recovery strategies and to better rebuild. This direction has to be executed with strategic actions: Gercep (act fast), Geber



**Sandiaga Salahuddin Uno**  
Minister for Tourism &  
Creative Economy,  
Republic of Indonesia

(move collectively), and Gaspol (explore all potential to protect jobs in the sector), with the work ethics: work hard, smart, thoroughly, and sincerely. To retain Top-of-Mind in international markets, we run online digital promotions using the hashtag #InDonesiaCare #IDoCare and support these with online activities. We continue to establish good cooperation with our partners in the country of origin by conducting joint promotions. The main challenge in the new normal tourism would be to show how India and Indonesia handle the pandemic with regards to implementing health protocols at the tourism destinations. The reasons for travelling have been challenged considerably, and it is likely that travelers will consider coming in smaller groups only to destinations that offer multiple options, which is our opportunity to provide quality instead of quantity tourism.

### Current Tourist Destinations Overview

Indian tourists have a great affinity for Indonesian tourism destinations. This is shown by the increase in the number of visits from year to year. In 2018, the number of Indian tourists visiting Indonesia was 595,636 and this grew to 657,300 in 2019, a double digit increase of 10.4%. However, the pandemic certainly had a significant effect in 2020, decreasing the number of visits sharply in this period. A world-class tourist destination of Indonesia is Bali Island, the main entry point for foreign tourists. Bali had been Indonesia's biggest tourism foreign exchange earner prior to the pandemic. Despite being under significant pressure due to the pandemic, some tourist destinations on Java Island have recovered faster than Bali, such as Bandung, Yogyakarta, and Malang. Several tourist destinations in Java benefit from the proximity factor to domestic tourist originations and the presence of a Trans-Java toll road, which facilitates tourist movement by private vehicles. The emerging tourist attractions in Java in the midst of the pandemic are mainly nature-based tourism, such as hiking, rural tourism with local authenticity products, and staycation in aesthetic hotels and resorts.

### New Areas being Developed for Tourism

Tourism continues to expand and is one of Indonesia's primary foreign exchange generators. According to the Middle Term National Plan 2020-2024, the improvement in tourism value-added over the next five years will be focused on expanding visitor length of stay and expenditure due to improved accessibility, attractions, and amenities in 18 Priority Tourism Destinations (DPP). However, the current primary objective is to accelerate the five "super-priority" tourist destinations, including Labuan Bajo, Likupang, Lake Toba, Mandalika, and Borobudur.

Labuan Bajo, in the western part of East Nusa Tenggara, is known for its famous Komodo dragons on the Komodo Island and will be developed as a marine/nature based destination for ecotourism, cultural and adventure tourism. Likupang, which offers white sandy beaches with focus on marine and eco-culture tourism, is located in North Minahasa District in North Sulawesi. The majestic Lake Toba, in North Sumatra, will focus on geotourism, linking to geopark and eco-adventure tourism while the stunning Buddhist temple Borobudur in Magelang, Central Java, offers a rich cultural experience. The last destination is Mandalika, the only tourist destination in Indonesia with an international circuit; it has crystal clear beaches and mountainous backdrops. This area will be developed as an outdoor sports, eco-adventure destination. To accelerate and synergize tourism development in priority tourist destinations, the Government works with the World Bank to establish an integrated and sustainable tourism development program. The Integrated Tourism Master Plan (ITMP) will enable our local tourism industry to thrive and expand. We have the ability to redefine economic growth, create a bright future, and improve communities for visitors and locals through the plan. This investment in tourism will assist the sector in recovering and growing over the next five years and beyond. Apart from the development of new tourist destinations, tourism will be diversified to include the following: (1) nature tourism, including ecotourism, marine tourism,

**"India and Indonesia are natural partners, as the center of gravity shifts to Asia and Indo-Pacific. This unique partnership can create solutions to address common challenges of burgeoning demographics, inclusive growth, and climate change. Bilateral exchanges between entrepreneurs, professionals, and artists would be seminal in creating deeper linkages. This could ideally lead to reciprocal and joint consortia to work on projects in each other's countries; increase the number of visitors to each other's countries (direct flights would further help); and explore the untapped socio-economic potential in each other's markets- among the largest globally."**



**Bharat R. Joshi**  
CEO & Director  
J-Curve Ventures/ACTL



adventure tourism; (2) cultural tourism, such as heritage tourism, historical tourism, culinary tourism, city tourism focused on Urban Heritage Regeneration and village tourism; and (3) artificial tourism, such as meeting-incentive-convention-exhibition (MICE). The development of these three types of tourism also creates opportunities for tourists to engage in integrated knowledge creation, education, and volunteer activities. An MoU between the Republic of Indonesia and the Republic of India for Cooperation in the Field of Tourism was signed in New Delhi, on 8<sup>th</sup> February 2000. During the visit of Prime Minister Modi to Indonesia on 30<sup>th</sup> May 2018, India and Indonesia agreed to set up a special task force to enhance connectivity between the strategic Andaman and Nicobar Islands and provinces in Sumatra Island to promote trade, tourism, and people-to-people contacts. This has paved the way for Joint Tourism Promotion and the Development of Tourism Packages and Cultural Exchanges.

### **Tourism Opportunities for India in Indonesia**

Digital technology, automation, and the adoption of artificial intelligence in economic activities would boost productivity and efficiency besides providing consumers with convenience. Additionally, digital technology aids are in the process of development in a variety of domains, including education via distance learning, the Government via e-governance, financial inclusion via fintech, and the development of MSMEs alongside the growth of e-commerce. As a country renowned for its talents and businesses in the areas of technology and telecommunications, India can play a significant role in the development of the tourism sector's digitalization. This digitalization can be achieved in several ways, and one of them is through the tourism village concept. While tourism is widely considered an industry dominated by micro and small to medium-sized enterprises (MSMEs), it is critical to consider the interactions between technology start-ups, larger commercial actors, and small businesses in order to level the playing field and increase opportunities for accessibility through collaboration. India's assistance in digitizing the tourism industry in Indonesia will benefit MSMEs in the tourism industry by improving their opportunities to grow and sustain their businesses.

### **Tourism Opportunities for Indonesia in India**

Ties between Indonesia and India have existed for approximately two thousand years. This connection has also been established since the ancient spice trade known as the Spice Route, which promoted the creation of a rich body of knowledge and culture that is not just a national treasure for Indonesia, but also a global treasure. At the moment, the Ministry of Tourism and Creative Economy is developing tour packages that incorporate the Spice Route's diverse cultural heritage strands. Back then, creative industries, such as crafts and fashion emerged, incorporating motifs and natural coloring elements derived from spices. Also, experience and knowledge can be delivered via Virtual Reality (VR), which displays 360-degree videos, providing 'vacationers' with an exceptional browsing experience. With the emergence of this Spice Route as a tourism product, Indonesia and India can collaborate and co-create tour packages that would enhance travellers' experiences and knowledge, which is envisaged to contribute to economic growth and social welfare.

### **The Creative Economy Industry**

In the last five years, the creative economy industry has made an increasing contribution to the national GDP. According to data from the Central Statistics Agency (BPS) in 2017, the contribution of Creative Economy to the economy was 7.24% and its growth rate of 5.06% was equivalent to national economic growth. In 2019, the creative economy's contribution to exports had reached US\$ 20 billion. In terms of job creation, the Creative Economy resulted in 18.1 million job

**“Indonesia is a Moslem majority country having a rich Hindu heritage, while India is a Hindu majority country having a great Islamic heritage. Mobility of scholars, assimilation of cultures, and trade of spices that date back to more than 2000 years are the cement of this timeless bond of the two countries. Stronger future strategic partnerships in education, culture and science are key building blocks to enhance the sustainability of mutual prosperity of both nations.”**



**Ananto K. Seta**  
National Coordinator  
Education for  
Sustainable Development,  
Indonesian National  
Commission for UNESCO

opportunities in the same year. This fact illustrates the strong creative potential for the national economy. Based on the projections made by Indonesian Creative Economy Agency (Bekraf) and Agency for the Assessment and Application of Technology (BPPT) at the end of 2019, it is hoped that the creative economy sector can absorb around 19.86 million workers throughout Indonesia and contribute IDR 1,274 trillion, or about 6.98% of the total national GDP in the years to come. According to BPS, the number of creative economy workers throughout 2020-21 experienced a significant decline due to the global pandemic. Though a decline is seen in the entertainment sub-sectors including music, film, performing arts, broadcasting and programming, there are five sub-sectors that have experienced an increase in the number of workers, namely telecommunications, information services, architectural services, and digital sectors, such as mobile applications and game development. The Ministry has a vision of developing a “Tourism and a Creative Economy of Indonesia that is advanced, competitive, sustainable and prioritizing local wisdom in realizing an advanced Indonesia that is sovereign, independent, personal, and also based on collaboration”. The Ministry also has a vision to make Indonesia a world-class tourism destination. The Ministry also strengthens the ability of the creative industry to compete with imported creative economy products, as well as promoting various types of Indonesian creative economy products, so as to encourage the growth of other creative economic actors who can support the regional and national economy. The Ministry has made policies to respond to the COVID-19 pandemic that include managing the crisis and mitigating the impact, accelerating and stimulating recovery, creating added future value, encouraging market expansion and promoting digitalization in the creative economy ecosystem. We have introduced key policies for the creative economy sector, such as Increased Access to Financing, Design Grants, Business Matchmaking, Culinary Outlet Grants, and the Proudly Made in Indonesia National Movement. Support is carried out through increasing the number of creative economy MSMEs onboarded in the digital marketplace and increasing people's purchasing power for creative economy MSME products.

Indonesia and India need to reactivate discussion on the MoU on the Creative Economy. In the past, India supported Indonesia on the 2018 WCCE (World Conference on Creative Economy). India supported Indonesia's proposal to declare 2021 as the International Year of Creative Economy for Sustainable Development at the 74<sup>th</sup> session of the UN General Assembly in 2019. The Indian cultural sector and creative industry (and allied sectors/ industries) combined is the second largest employer/ livelihood source for Indians after agriculture. Indonesia and India are countries that have diverse and unique cultures. Their cultural diversity makes Indonesia and India well known internationally. India is made up of multiple cultures and religious practices. Indonesia and India are bound by their art and culture, reflecting tolerance and pluralism. Bali resonates with India from a religious perspective of shared cultures and values. Bali offers an interesting experience for the Indian traveller. Indonesia and India have opportunities to work together in the creative economy sub-sectors, such as television and radio, film industry, application and game development. India is also one of the largest markets for companies operating in the global gaming industry. We can use digital technology for developing tourism and stimulating MSMEs in the creative economy sector. Digital technology in India is quite capable and can be adapted in Indonesia.

The Indian creative industry also includes high-growth sectors, such as design, gems and jewelry, textiles, apparel, and handicrafts with billion dollar revenues in the domestic and export markets. An estimate of approximately 200 million Indians work in the Indian creative industry. Currently, apart from tourism, the creative economy sector has become the mainstay for both Indonesia and India; therefore, this sector has tremendous potential to encourage cooperation for mutual interest between the two nation-states in the future.



**“India and Indonesia, both in many aspects (including Culture) are like two sides of a coin. Historically, a Knowledge Route existed between India and Indonesia (Nalanda & Sriwijaya University). Cultural linkages, especially Bollywood, have flourished and persisted in the world's largest archipelago but the Education link seems to have disappeared. As the saying goes, “Culture and Education go hand-in-hand”. India and Indonesia have immense opportunities to explore, share and learn as we move ahead which are mutually beneficial, thus reviving the Knowledge Route which existed in the past.”**



**Ravi Makhija**  
Director, TIE UPS  
International



# Indonesia & India's Cooperation in the 21<sup>st</sup> Century and Beyond

By Dr. Ilham Akbar Habibie

Colonization by the British and the Dutch had negative consequences on the long-established relations between the Indian and Indonesian kingdoms, especially in terms of the trade routes, textiles, spices, philosophies and so on. Post the independence of both countries, India and Indonesia started economic seclusion to overcome the impacts of colonialism. Also, both countries did not comply with the European concept of “ideal nation” that was based on the philosophy of single religion, language and ethnicity, which was presumed to lend political stability to the state (i.e., country in modern age connotation).

Nevertheless, as emerging nations in the global landscape and with precedence of historical ties prior to the colonial invasion, both Indonesia and India have had a united journey to restore the original cultural ties between both nations that go beyond value systems and political agendas. The strong cultural connection between both countries is evident across several spheres, for instance, the language Bahasa spoken in Indonesia derives its vocabulary from Arabic and Indian languages, such as Sanskrit, Tamil, and Urdu. There is also huge philosophical sync between the two countries, seen prominently in the Indonesian national slogan, “Bhineka Tunggal Ika” (meaning unity in diversity), which has similarities with the Indian motto that highlights the national identity amid communities with diverse ethnicity and religions. Both countries also suffer some common challenges, such as safeguarding minorities' rights, which has been a difficult task for both sides. India and Indonesia are also relentlessly working towards creating mass-scale employment opportunities by improving their industrial competitiveness, resolving trade issues amidst entrenched protectionist lobbies and dealing with corruption that comes along with governments struggling between the centre and the state. Also, both nations must attract foreign investment and uplift national infrastructure abilities for public safety and welfare.

There are some unique focus areas for India and Indonesia as well as some core areas of collaboration between both nations that are vital for shaping and building the future.

## Technology and Scientific Advancement in India

Technology is a key area of development for the Indian Government as it globally ranks third among the most attractive investment destinations for technological transactions and among the top five in space exploration, with the PSLV and other satellite launch collaborations. India sees this as one of the vital drivers of economic growth that can generate revenue by lending its space facilities to other countries. India is likely to take a leading role in launching satellites for the SAARC nations. In terms of market size, India presently stands at 48<sup>th</sup> rank in the Global Innovation Index (GII) which led the Indian Government to actively promote Technology Business Incubators and Research Parks for commercial ventures. India's gross expenditure in R&D is targeted to reach at least 2% of the country's GDP by 2022. Furthermore, NITI Aayog outlined a national strategy to tap the potential of Artificial Intelligence in different areas while strategy leader Accenture provided a framework for assessing the economic effect of AI for select G20 countries.

India's autonomy in development is evident from its ability to gradually become self-reliant in nuclear technology. Significant advancements in the nuclear energy and pharmaceutical sectors are anticipated while the agriculture sector is also



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likely to experience major transformation towards a technology-driven Green Revolution. Also, India has initiated a landmark policy called Science, Technology and Innovation Policy 2020 with the core vision of being decentralized, evidence-informed, bottom-up, experts-driven, and inclusive, targeting the implementation of a robust policy governance mechanism that involves feedback, policy evaluation, periodic review, and adaptation, and a timely exit strategy for the numerous policy instruments. India is working towards being among the world's top five scientific powers in the domain of space exploration by launching a human space mission by 2022.

### **Comparative Scenario: Infotech and E-Commerce Developments in Indonesia**

Indonesia has witnessed rapid development due to factors, such as mass consumption of products, urbanization, and mobile usage.

As a developing country like India, Indonesia records a positive impact on its economic growth that is fueled by diverse and abundant natural resources, low labour costs, a growing tourism industry, huge internal market, sovereign bonds and exchange rate flexibility. The country, however, falls behind in making research and development a top priority. While India invests 0.7% of its GDP of US\$ 2.869 trillion, Indonesia only allocates around 0.08% of its GDP (US\$ 1 trillion) for research and development. In terms of its market size, current projections in Indonesia showed a rise of IDR 151.4 trillion (US\$ 130 billion) by 2020, ranking third behind China and India. According to International Data Corporation, Indonesia has become Southeast Asia's top IT spender. The public and private sectors both invest substantially in updating internal infrastructure to improve customer service and acquire a competitive advantage in the marketplace. Internet usage in Indonesia had contributed 2.5% of the country's GDP in 2016 and has prompted more Indonesians to buy cell phones and make online transactions. These developments will be game changing for Indonesia's Information Technology sector in the future.

NetApp Indonesia has identified three IT trends that are on the rise in Indonesia, i.e., data as the new currency, new platform models, and cloud computing; these are becoming major factors in corporate growth. The tech company also finds that e-commerce and fintech are the two big and flourishing markets in Indonesia. In 2018, the Indonesian e-commerce market was worth IDR 81.8 trillion (US\$ 8,591 million). The convenience of accessing information from home and making simple electronic payments, which Indonesia's e-commerce industries rely on, are two of the primary reasons for the rapid rise of e-commerce. In 2017, Lazada and Tokopedia were the top searched sites with the most income. Fintech investments in Indonesia hit a record high in 2017 with more than IDR 5.85 trillion (US\$ 421 million). With more than 150 fintech startups in Indonesia currently, that is, 78% more than in 2015, Fintech promises to be the most alluring sector in the start-up ecosystem.

### **Growth of the Renewable Energy Sector in India and Indonesia**

The Indian renewable energy sector is the fourth most attractive renewable energy market in the world. With the increased support of the government and improved economics, this sector has become attractive for investors by posting a CAGR of 17.33% between FY 2016-2020. Power generation from renewable energy sources in India reached 127.01 billion units (BU) in FY 2020. Aiming to achieve 227 GW of renewable energy capacity by 2022 and 523 GW by 2030, India is increasing its capacity and is expected to meet its energy demand of 15,820 TWh by 2040. With a potential capacity of 363 GW and with policies focused on the renewable energy sector, Northern India is set to be the hub.

The Ministry of New and Renewable Energy also has an ambitious target to set up renewable energy capacities to the tune of 227 GW by 2022. By 2023, about 5,000 compressed biogas plants will be established across India. By 2040, around 49% of the total electricity is expected to be generated by renewable energy with the deployment of more efficient batteries to store electricity.

**“The only way Indonesia can be in control of its narrative with the evolving Industry 4.0 sector is if the nation comes together and invests in developing a skilled workforce with world class standards across all levels. The focus has to not only be on skilling up the youth, but also upskilling and reskilling of managers and leadership. To do this at a massive scale across the millions of workforce-ready citizens across 34 provinces and its 514 cities & regencies is an enormous challenge of epic proportions and there are only a handful of organizations that can collaborate and build bridges across all parts of the business, industry and education ecosystems.”**



**Sachin V. Gopalan**  
Co-Founder & President  
Director, Orbit Future  
Academy

The government is dedicated to increasing the use of clean energy sources, and it is already implementing a number of large-scale sustainable power projects and aggressively pushing green energy to develop a green city in every state of the country. Furthermore, renewable energy has the potential to provide a large number of jobs at all levels, particularly in rural regions.

Indonesia is the world's fourth-largest producer and leading exporter of coal, Southeast Asia's biggest gas supplier, and the largest producer of biofuels worldwide. Indonesia has slightly increased its reliance on conventional fuels, such as domestic coal and imported petroleum products, to satisfy its energy consumption needs. With the consistent addition of renewable energy sources to the country's overall energy mix, trends point to Indonesia's future shift to green energy. The demand for energy across the country is poised to increase by 80%, while demand for electricity is set to triple from 2015 to 2030.

Being one of the top five nations in the Asia-Pacific region with the greatest proportion of renewables in total final energy consumption, Indonesia intends to produce 23 per cent of its entire primary energy supply from cutting-edge renewable technology by 2025, and 31 per cent by 2050. For Indonesia to reach its targets, there is a need for investments in renewable energy to be increased rapidly. The fragmented structure of Indonesia's grid, operational difficulties inside off-grid regions, high costs, low awareness, poor design standards, and funding options for new projects are among the obstacles that require the country to establish an enhanced investment framework for renewables and reforms that attract higher private capital. Additionally, Indonesia will also need to address the existing critical challenge of relatively high average cost per megawatt of solar PV capacity that is 65% higher than in India and 10% higher than in Thailand, according to IRENA's report.

#### **Pharmaceutical Sector Expansion in India and Indonesia**

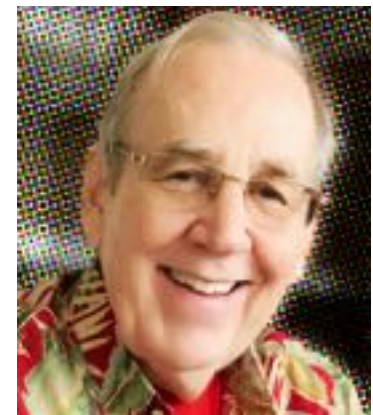
India is the world's leading supplier of generic pharmaceuticals, supplying more than half of worldwide demand for different vaccinations and ranking 3<sup>rd</sup> in terms of pharmaceutical production by volume and 14<sup>th</sup> by value. The domestic pharmaceutical sector in India comprises 3,000 pharmaceutical firms and around 10,500 production units. Over 80% of antiretroviral medicines used to fight AIDS are also supplied by India to the world.

While India's domestic pharmaceutical market is estimated at US\$ 41 billion in 2021 and is likely to reach US\$ 65 billion by 2024, the Indian Government has taken serious measures to reduce costs and bring down healthcare expenses. With a large pool of scientists and engineers with the potential to steer the industry ahead to greater heights, pharmaceutical businesses have put greater emphasis on rural health initiatives, lifesaving medicines, and preventative vaccinations aligning their medicines towards chronic therapies for cardiovascular diseases, diabetes, depressants, cancers and so on.

Indonesia launched its universal healthcare programme, the JKN, in 2014, which is overseen by the Social Security Administrator for Health (BPJS) agency and has since then expanded to become the world's biggest programme to encompass over 200 million people and resulting in improved healthcare access for them. By raising healthy generations of Indonesians, the prospects for the country to become a developed country over the coming decades are bright.

Indonesia's pharmaceutical industry has remained highly dependent on imports of raw materials and thus that factor puts a large burden on the country's trade and account balance, and currency exchange rate. As Indonesians are spending an increasing amount of disposable income on healthcare, the government wants to stimulate domestic production of raw materials for its pharmaceutical industry while simultaneously increasing imports.

**“As India and Indonesia continue to open their economies to international trade and investment and recover from the Covid pandemic, long dormant trade routes will steadily reassert themselves. The exchange of goods, services and ideas between India and the Indonesian archipelago is a fundamental feature of the region throughout history and the 21<sup>st</sup> century will see this dynamism return. Both countries are making their mark in the new digital economy and growing trade in goods and services as well as increased cooperation in regional security matters signal rich opportunities in both directions.”**



**James W. Castle**  
Founder & Chairman  
CastleAsia



## Indonesia's Aerospace and Defense Industry: Trends and Developments

Indonesia is the fastest-growing aviation industry in the world in terms of aircraft orders and business value and currently ranks second after China. With an archipelago of 17000 islands, the country depends heavily on air travel for the mobility of people and goods. Thus, the country constantly maintains and manages its infrastructure and human resources to keep up with the market demands and aviation developments. Over the past 15 years, Indonesia's middle-class population has grown from 7% to 20% but the COVID-19 pandemic has put a damper on domestic passenger travel demand. During the same time period, the number of foreign air passengers also fell by 74.54 per cent.

Currently, at the 10<sup>th</sup> position (as of 2019), Indonesia's air passenger market is also expected to scale up to the fourth-largest by 2039 according to The International Air Transport Association (IATA). As Indonesia's public infrastructure is underdeveloped and its airports are already heavily burdened, creating new airports closest to popular tourist destinations would present significant opportunities for Indonesia's aviation industry, making it a hotspot over conventional tourist destinations, such as Europe and North America.

### The Way Forward and Future Opportunities

Indonesia, as South-Asia's most populous nation, is strikingly similar to India in many aspects. Post the Covid-19 pandemic, the economic repercussions are an additional but important challenge to overcome that compels the government and the country's business sectors to revise their strategies and adapt to new changes, while simultaneously meeting the ever-growing demands of its citizens and tourists. A definite change for the better can be seen in the pharmaceutical arena where healthcare products and services will increase manifold. Similarly, both Indonesia and India have recorded steady growth in online sustenance that offers future growth prospects. From groceries, clothing, and education to banking, public and private forums are constantly building up multi-channel strategies and virtual mediums to provide services and ease of access to online modes, especially keeping up with COVID protocols.

The 2020 McKinsey reports turned their spotlight specifically to Indonesia and identified the sectors that will reopen the doors to their national growth. With resilient healthcare, digital advancement, greater ecological awareness, supply-chain reliability and responsible governance, the economy is bound to grow. Supplemental and conscious efforts of India and Indonesia towards multifold collaborations across several sectors will allow progressive growth for both nations alongside capacity and leadership enhancement that will impact the overall human capital index both qualitatively and quantitatively. Eventually, bilaterally concerted strategic moves would make the ambition of US\$ 50 Billion trade target between both countries a reality by 2025.

**“One of the pillars of economic strength is human resources. The nation's HR development strategy must comprehensively connect the education system with industries to create human resources with relevant competency towards the real needs of the present and the future. Competency covers technical skills and moreover soft skills. At minimum scheme, Link and Match covers the curriculum developed together with the industries and is regularly in sync with real conditions within the workplace as well as guest teachers from industries, internship programs for at least 1 semester, competency certification for graduates and teachers, and so on.”**



**Wikan Sakarinto**  
Director General of  
Vocational Education  
Ministry of Education,  
Culture, Research &  
Technology, Republic of  
Indonesia

# Opportunities for Indonesia in India

By Sidharto Suryodipuro and Annie Yulianti

India holds immense strategic importance for Indonesia. A major strategic partner in Asia, India is Indonesia's maritime neighbor with an economy growing at a fast pace. With a population of more than 1.3 billion, India is the world's second most populous country and, with an annual population growth rate of around 1.1%, it is estimated to become the most populous country by 2027. Needless to say, the resulting middle-class population and increasing spending power of India represents enormous business potential for Indonesia.

India was Indonesia's fifth largest trading partner in 2020 with two-way trade at US\$ 19.2 billion. Yet, for India and Indonesia's size and diversity, this figure has not reflected the full potential. Both countries need to have a more diversified basket of goods and services to take the economic partnership to a new level and reach US\$ 50 billion bilateral trade in 2025 as aspired by both leaders.

The prospects and potential are there and could present big opportunities for Indonesia in India in domains, such as healthcare and pharmaceuticals, creative industries, tourism, education, research and development, agriculture, and food products, furniture, energy, mining, infrastructure, greater connectivity, telecommunications, and of course digital technology.

The healthcare industry has always been an important element in Indonesia-India bilateral trade. Rising healthcare awareness as a result of the pandemic is a major driver of growth for this sector. India enjoys an important position in the global pharmaceuticals sector and Indonesia looks to India not only for cooperation in vaccines, but also active pharmaceutical ingredients (APIs), finished pharmaceutical products, telemedicine, and others.

Cooperation with Indian pharma companies could provide an opportunity for Indonesia to tap into India's knowledge and expertise to set up formulation plants and API manufacturing facilities. India is the largest provider of generic drugs globally; its pharmaceutical sector supplies over 50% of global demand for various vaccines and ranks 3<sup>rd</sup> in terms of pharmaceuticals production by volume. India's Hetero Pharma is among the first players to tap the Indonesian formulation market with a local partner.

Like Indonesia, India has a digitally connected growing middle class. Supported by their dynamic, vibrant, and young demography, India and Indonesia share the similarity of embracing digitalization, driven by an increase in the accessibility and affordability of smartphones and high-speed Internet connectivity. With Covid-19 bringing unprecedented challenges, it offered the space for both countries to reinvigorate untapped areas and enrich the ones that stand crucial to take the growth forward.

India ranks as the world's second largest market in terms of total Internet users, with the total number of Internet subscribers increasing to 757.61 million in January 2021. India is also the world's second largest telecommunications market with the total subscriber base at 1.18 billion as of January 2021. Over the next five years, the rise in mobile phone penetration and decline in data costs will add 500 million new Internet users in India, creating opportunities for new businesses. IT spending in India will grow at 6% to touch US\$ 81.9 billion in 2021 on account of growth in segments, such as IT services and enterprise software tools, among others. Covid-19 has accelerated the adoption of digital technologies across segments.



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Director-General for ASEAN  
Cooperation and Indonesia's  
Senior Official to ASEAN



**Annie Yulianti**  
Counsellor, Economic Affairs  
Embassy of Indonesia in  
India



Companies have started adopting technologies and improving their existing IT infrastructure not only for growth but also for their survival. Digital technologies have been the lifeblood of many businesses since the Covid-19 pandemic began in 2020, and India has much to offer in this sector. The growing synergy in the technology space between Indonesia and India can benefit Indonesia not only to capitalize on India's technology expertise at low cost but also in developing its human resources.

Indonesian decacorn Gojek, which recently merged with marketplace Tokopedia and formed GoTo Group, had acquired Indian start-ups a few years ago to tap into India's IT talent. Another Indonesian company, MNC Group, has announced its plan to build an artificial intelligence (AI) headquarters in New Delhi to support the company in becoming a global digital economy giant. Telkomsat, an Indonesian state-owned information and communication technology enterprise, is looking to partner with India to provide its telecommunication services in India.

The creative economy and digital economy are not the same as each other but together they are amongst the key drivers of innovation in the global economy and society. The Indonesian creative industries sector is widely recognized as offering significant potential for growth and high-quality job creation in the coming years. In Indonesia, it consisted of 16 sub-sectors ranging from architecture and interior design, advertising, crafts, photography, design and fashion to culinary, music, performing arts, cinema and film production.

Wood carving is one of Indonesia's notable creative industry subsectors, which has been practiced since ancient times. Many people, especially in Java and Bali are known for their wood carving skills. Indonesia undoubtedly has strong competitive advantages in this sector related to the availability of a wide range of natural raw materials, human capital, and good product designs. India presents a great market opportunity for Indonesian furniture products, as India imports between US\$ 600 million to US\$ 800 million worth of furniture every year.

Another noteworthy opportunity for Indonesia's creative industry in India is interior design, which has market potential estimated to be between US\$ 20 billion to US\$ 30 billion. The growth in interior design is attributed to the growing Indian real estate market, growing population, rising income levels, and urbanization. As commercial space demand surges, this sector is expected to further witness a tremendous opportunity to leverage in the coming years.

Enhanced cooperation with India will greatly benefit Indonesia's creative industries, as the similarities between the two countries can bring more collaborations, such as in crafts, films, arts, and culture. There are many dimensions in Indonesia that should be introduced to the world, and creative industries have great potential as a medium to connect Indonesia and India.

Tourism is another major area where Indonesia has much to offer to the ever growing number of Indian tourists. India is one of the biggest and fastest growing sources of foreign tourists coming to Indonesia. The number of annual tourist arrivals from India to Indonesia was 657,300 in 2019. This number is expected to grow after the ease in border restrictions due to the Covid-19 pandemic. Indonesia is also eyeing an increase in maritime cooperation with India including cruise ship tourism, coastal shipping, and air connectivity between the Andaman & Nicobar Islands and Aceh.

Another area of opportunity for Indonesian companies is in India's infrastructure sector which has grown significantly and been a focal point of the government's agenda of long-term economic development and attracting foreign investment. Several Indonesian companies have tapped into these opportunities and invested in India's infrastructure projects, including Sumber Mitra Jaya, which has undertaken four projects for the National Highways Authority of India and Bukaka Group, which is supplying aerobridges to the Airports Authority of India.

**“Both India and Indonesia are emerging countries and large economies. With big markets because of big populations, both countries will continue to grow fast. This book which is titled KESAMAAN: India - Indonesia – The Next Step is very helpful to explore and support the future potential of both countries’ relationship in business and economy, cooperation in technology and education, etc. The book also goes further and deeper in analyzing important areas of collaboration and synergy in the future.”**



**Prof. Dr. Didik J. Rachbini**  
Senior Economist, INDEF  
Rector, Universitas  
Paramadina

India's population growth and rapid urbanization are anticipated to increase demand for agricultural goods. The country faces an enormous task in feeding its population and establishing more sustainable agricultural practices, while relying on its quickly depleting resources. The increasing affluence of the Indian middle class is generating big changes in dietary habits which are adding pressure on the agriculture sector.

Demand is increasing not only for Indonesia's agricultural products, such as palm oil and spices, but also for Indonesian food and confectionary products. In addition, both countries with a large number of Muslims definitely show ample scope for the halal food industry. Between 2013 and 2019, India's food and grocery market doubled from US\$ 300 billion to US\$ 600 billion.

Indonesia's biggest investment in India's agriculture sector is being set up in Pune, Maharashtra by Japfa Comfeed, which has further expanded its presence in various states, such as West Bengal, Andhra Pradesh, Bihar, and Chhattisgarh. Japfa is a leading Indonesian agro industrial company with focus in India on poultry and packaged foods that nourish people across the entire value chain.

Whilst staples, such as dairy, baked goods, oils and fats account for the largest proportion of packaged food sales in India, the bulk of growth is set to come from impulse/indulgence products, like confectionery, ice cream, and sweet and savory snacks. These products are growing very fast in India, catering to the needs of both older and younger consumers.

Given the size of India's grocery market, few foreign investors will need a second invitation to enter, and several Indonesian companies, such as INBISCO India in Hyderabad, Garuda Polyflex Foods in Bangalore as well as Enerlife in Chennai are already doing so, tapping into India's growing market in this sector.

Opportunity remains for Indonesia in terms of India's energy sector. Whilst renewable energy capacity is dramatically increasing, coal still provides around 70% of India's electricity. It is true that over the next decade, coal is expected to decline from 70% to 50% as a percentage of India's total power production. However, in absolute terms, coal use is expected to increase as India's overall energy demand grows. It is now on the path to extract one billion tons of coal annually by 2023-24.

As the world's second largest coal producer and the 5<sup>th</sup> largest country in terms of coal deposits, India is yet to produce adequate quantities of high calorie/ low-ash content coal to meet the requirements of the domestic industry and development. This provides an advantage for Indonesian coal exports, given the proximity and the short voyage time compared to other competitors. Last but not the least, people-to-people exchanges and international transport linkages remain an area of concern for Indonesia and India. Therefore, a key area of opportunity is to increase collaborations in connectivity, physically, digitally, and people-to-people. It is important that with growing trade, both nations should provide easy access to their people and the business community at large.

Initiating direct flights from other cities like Hyderabad, Bangalore, and Port Blair along with the existing four metropolitan cities of India (New Delhi, Mumbai, Chennai, and Kolkata) would go a long way to increase accessibility, affordability, and sustenance of economic cooperation between the two countries. Encouraging student exchange programs, university-to-university ties and creating more familiarity among the diaspora of both countries would be beneficial in many ways.

India's higher education system is the third largest in the world and has expanded at a fast pace. As of 2020, India had over 1000 universities out of which 159 are institutes of national importance, including Indian Institutes of Technology (IITs), All India Institute of Medical Sciences (AIIMS), Indian Institutes of Management (IIMs), Indian Institute of Science Education and Research (IISERs) and National Institutes of Technology (NITs). Some institutions of India, such

**“With the US China trade wars and global tensions, the world is looking to two Asian giants, India and Indonesia, to rise up and lead the Asian charge and also to be the leaders of the modern non-aligned movement. Both are secular and stable democracies with shared culture and history, and there are huge opportunities for them to collaborate on technology, business and Human Resources.”**



**Sumit Dutta**  
Founder & CEO  
ASEAN Business Partners



**“Indonesia is the Mecca for pulp and paper in the Asian region . India should welcome, facilitate and collaborate with the Indonesian pulp and paper giants to invest in India and participate in the massive Indian consumption growth.”**



**Paul Sebastian**  
 Founder & CEO  
 Vacha International  
 Paper Traders &  
 Consultants

as IITs and NITs have been globally acclaimed for their standard of undergraduate education in engineering. Several other institutes of fundamental research, such as IISERs and Indian Institute of Science (IISc) are also acclaimed for their standard of research in basic sciences and mathematics.

That there is scope for a vibrant and dynamic two-way economic partnership between India and Indonesia which needs to be actively pursued is undeniable. There is much potential for stronger Indonesia-India ties, given the deep historical links and similarities, where the strengths of each other can complement their respective growth.





# Shaping the 2045 Golden Generation

By Primus Dorimulu

Soekarno's name is always remembered and mentioned every time Indonesia celebrates independence. The first Indonesian President stated that independence is a golden bridge and across that bridge, the Indonesian people can freely organize themselves to realize mutual prosperity. In an independent Indonesia, there should be no poverty. Every citizen feels secure in the lap of Mother Earth who provides them with enough food, clothing, shelter, and all the necessities of life.

This year, 2021, Indonesia commemorates the 76<sup>th</sup> Indonesian Independence Day. This nation has made a lot of progress. However, some ideals of the proclamation have not been realized. What is most prominent is that there are still many poor people. In September 2020, Indonesia's population in the absolute poor category reached 27.55 million or 10.19% of the total population. While those who are almost poor are around 60 million. This figure was confirmed by the data on the recipients of contribution assistance (PBI) for the Health Social Security Administering Body (BPJS) as of March 2021, which reached 96.8 million.

Indonesia's gross domestic product (GDP) per capita in December 2020 was IDR 56.9 million or US\$ 3,912 and with that level, Indonesia is in the category of a lower-middle income country. Having penetrated US\$ 4,000 per capita in 2018-2019, Indonesia's GDP per capita is again below the level of US\$ 4,000 due to the economic contraction during 2020 to the first quarter of 2021.

Although it is no longer the lowest-income country, the distribution of income in Indonesia is uneven. The economic gap is quite high as seen in the Gini ratio which reached 0.385 in September 2020. There is a tendency for the level of economic inequality to widen and this threatens the unity of the Indonesian nation. The expenditure of the top 20% of the population continues to grow, while the expenditure of the lowest 40% of the population tends to stagnate. This is a big challenge for the Indonesian Government. The founding fathers emphasized that Indonesia's independence was not for a few people, but for the entire Indonesian nation, from Sabang to Merauke. Social welfare must be felt by the whole community.

In 2045, when celebrating its 100<sup>th</sup> year of independence, Indonesia is expected to have a golden generation. The golden generation is a generation dominated by the productive age population, a generation that is healthy, intelligent, able to communicate and collaborate, innovative, and civilized. Entering the productive age category are those aged 15-64 years.

By 2045, it is hoped that there will be no more poor people, at least the number of poor people will be close to zero. The economic gap will no longer be glaring. Indonesia, which is currently still in the lower-middle-class group of countries with a GDP per capita of less than US\$ 4,000, will become a developed country with a GDP per capita of above US\$ 15,000.

Indonesia has now started to enjoy the demographic bonus. In 2021, Indonesia's population will be around 273 million and 186 million or 68% of them are people of productive age. The size of the productive age population is called the demographic bonus and will continue to grow and reach its peak in 2045. In that year, those who are now 1-39 years old will be 26-65 years old. The productive age population is estimated at around 223 million or 70% of the total population of Indonesia, which at that time will reach 319 million.



**Primus Dorimulu**  
Editor-in-Chief, Investor  
Daily and Beritasatu TV



Included in the age group that is expected to become the golden generation in 2045 are those who are not yet born. Those born in 2025 will be 20 years old when Indonesia celebrates the golden year of independence. In 2045, all people of productive age are expected to become the golden generation, namely the generation with the following qualifications.

First, they must have a strong national insight and understand and maintain the four pillars of the nation, namely Pancasila, the Constitution (UUD), Bhinneka Tunggal Ika, and the Unitary State of the Republic of Indonesia (NKRI). Globalization cannot erase nationalism. The existence of a sovereign state is still necessary. The values of nationalism and patriotism must be instilled in the younger generation.

Second, the generation must be healthy mentally, physically, and spiritually to become perfect humans. Only a nation that is physically and mentally healthy can be competitive. From now on, every couple who wants to get married must prepare themselves so that the child born is not stunted and is able to grow as an adult human being who is healthy mentally, physically, and spiritually. This will be a challenge as at the end of 2020, around 24% of Indonesian babies were born stunted.

Third, legal reforms should be carried out and overlapping legal issues must be corrected. The presence of Law Number 11 of 2020 concerning Job Creation is quite encouraging. Legal reform must go hand in hand with improving law enforcement. Carrying out reforms within the National Police, the Prosecutor's Office, and the courts is vital to eradicate the judicial mafia.

Fourth, the issue of narcotics use among the younger generation has to be addressed more systematically. We need a special penitentiary for narcotics victims. Narcotics victims must be rehabilitated and therefore it is necessary to expand rehabilitation institutions.

Like terrorism, efforts to prevent and eradicate narcotics require international cooperation to cut the chain of narcotics distribution. In addition, it is necessary to carry out monitoring and supervision at the local administrative (RT/RW) level to determine the movement of users and dealers. This is all for the sake of protecting generations so that later, in 2045, Indonesia will have a golden generation.

Fifth, efforts to prevent acts of terrorism must not be slack. Law enforcers need to continue the deradicalization program for those who have been terrorists because of radicalism based on religious ideology. Radicalism based on religious ideology dominates the seeds of terrorism in Indonesia.

To prevent this, Pancasila education and national values need to be taught since elementary school. The Unitary State of the Republic of Indonesia, Pancasila, and diversity are fixed prices. Certification of all those who become religious teachers is required. Law enforcers should not hesitate to take action against those who spread hatred and the spirit of division.

Law enforcement must go hand in hand with efforts to create equitable development and justice. However, spreading ideas that are contrary to Pancasila and the Constitution is far more dangerous. Many people who are prosperous are seen from an economic basis, but are then exposed to radicalism because of indoctrination. Religious radicalism will bring this nation state to disintegration.

We want to see Indonesia have a golden generation in 2045 when Indonesia commemorates 100 years of independence.

**“Many experts have estimated that by 2050, India and Indonesia will become the 2<sup>nd</sup> and 4<sup>th</sup> largest economies in the world. This transition is a long and intricate process, and will involve many bilateral cooperations between both Governments as well as collaborations by the private sector. I believe Indonesia and India have many opportunities to work closely together as their combined talent and energy will definitely help make a better world for our future generations.”**



**Ambassador  
Peter F. Gontha**  
Diplomat & Entrepreneur

# Sumatra: Opportunities for the Future

By Raghu Gururaj

As the 3<sup>rd</sup> largest island in Indonesia (after Papua and Kalimantan), Sumatra has less than a third of the total population of the country. Comprising ten resource rich provinces (North Sumatra, Riau, Riau Islands, – South Sumatra, West Sumatra, Jambi, Lampung, Aceh, Bangka-Belitung and Bengkulu), Sumatra is by far the leading producer of palm oil, natural rubber, coffee, cocoa, pepper, and sugarcane. In the last 5 years, it has contributed close to 25% of Indonesia's national GDP.

## Ancient India Connect

Sumatra's connection with India goes back three millennia, leading to deep and enduring cultural and trading linkages. Sumatra was the first to welcome Indians several centuries ago. It absorbed Hinduism and Buddhism from the ancient times and Islam from 12<sup>th</sup> century onwards, resulting in a lasting influence on Sumatran life. Several events, landmarks, milestones, rituals, and social mores of Sumatra, whether it is political philosophy, culture, cuisine, art forms, or language, provide comfort and familiarity to each other to this day.

## Strategic Location

Positioned strategically on the important sea trade route of Malacca Straits from South India to the Indonesian ports of Sumatra, Java, and Bali up to present day Malaysia, Sumatra has played a pivotal role since ancient times in integrating Indonesia's economy to world markets. Leveraging Sumatra's critical natural advantage and presence of several of its ports in major cities like Banda Aceh, Medan, Batam, Padang, and Palembang, the Indonesian economy has benefited immensely by the international linkages throughout its first and second waves (1830-1914 and 1945-until now) of regional development.

During the first wave of globalization, Sumatra became Indonesia's largest producer of agriculture & plant-based commodities and minerals. The second wave (after 1945) made Indonesia one of the primary exporters of agriculture and plant-based commodities and minerals to the world, thus firmly establishing the realignment of the Indonesian economy with world supply chains.

## Growing Economic Clout

Sumatra has 70% of Indonesia's palm plantations and has been playing a critical role in the supply of palm crude to world markets. Between 1970 and 2006, Sumatra began to attract foreign direct investment from Europe and USA for the first time in large plantations and mines. It also witnessed a spurt of infrastructural development through the development of Batam Island (close to Singapore and establishment of EPZs in Riau province. Sumatra soon became the fulcrum for Indonesia when the Singapore-Johor-Riau growth triangle, which was later broadened into Indonesia-Malaysia-Singapore Growth Triangle (IMS-GT) and the Indonesia-Malaysia-Thailand-GT, was established in the early 90s. The economic liberalization & integration into ASEAN and optimization of complementarities between these countries has catapulted Sumatra into a hub of economic activity in the region.

## Challenges

But several factors posed challenges to the growing trajectory of the economy of Sumatra Island as a whole. Firstly, Sumatra's over-reliance on agricultural commodity exports exposed it to the vagaries of volatile commodity markets, introducing an element of uncertainty in the flow of its export earnings. Secondly, the continued focus on export of extractive raw materials (for



**Raghu Gururaj**

Former Consul General  
of India to Sumatra and  
Ambassador of India to São  
Tomé and Príncipe

example, natural rubber), which have a low sensitivity to increased income compared to manufactured products, brought it in direct competition with similarly endowed ASEAN nations like Vietnam, Philippines, and Malaysia.

Another challenge faced by many companies in Batam (Riau province), which has been the manufacturing and heavy industries hub of the growth triangle, is high labour costs. Ironically, the concept of the growth triangles of IMT-GT and IMS-GT soon lost some relevance in recent years as companies in Batam began eyeing the rapidly expanding domestic market of Indonesia.

The rapid growth of Sumatra's population has created the need for diversification, infrastructure development, and new social and energy policies. Many of the provinces in Sumatra Island are trying to transform and are at various stages of remodelling themselves.

### **Recent Policy Initiatives**

Such challenges and the dynamics of the growth story of Sumatra region have resulted in critical policy changes aimed at sustained and equitable economic growth. The underpinnings of this new thrust are diversification, broad-based regional development, and a strong infrastructure push in areas like logistics, transportation, construction, etc. As the next largest economic player after Java in the Indonesian economy, Sumatra figures prominently in Indonesia's 5-year medium-term development plan (RPJMN), under which the Indonesian planning authority Bappenas has made substantial budgetary allocation for urban development and transportation projects in Sumatra. These are to be initiated and completed between 2021-2024.

### **Sumatra Economic Corridor**

Under Indonesia's Master Plan Acceleration and Expansion of Indonesia Economic Development 2011-2025, the Sumatra Economic Corridor has been conceptualized for development of six key sectors: palm oil, rubber, coal, shipping, steel, and Sunda Straits National Strategic Area. The corridor aims at optimization of Sumatra's assets and their conversion into economic drivers for the region. The emphasis is on connectivity infrastructure and development of downstream sectors of extractive commodities.

### **Opportunities for Indian Companies**

All these translate into opportunities for foreign investors/companies, many of which are relevant to India. Sumatra's colossal consumer base and rapidly growing middle class also spell opportunities for Indian companies in healthcare, education, capacity building, digitization, food processing, e-governance, processing, telecommunications, education etc.

### **North Sumatra (Medan city)**

While agro-commodities and extractive industries are driving North Sumatra's external trade, infrastructure and construction dominate its current policy curve and spending. There is an opportunity for Indian transport and automobile companies to participate in the expansion of local public transport systems in Medan (North Sumatra). Because North Sumatra serves as a gateway to Indonesia on the west side, there are moves to develop the Kuala Tanjung Port and the Kualanamu International airport at Medan. Indian expertise and track record in executing such port and airport projects should be optimized. With high penetration of mobile services and e-commerce, Indian IT companies should consider opportunities in data analytics, digital lending, and payment solutions.

Medan city is in need of investments in the service sector. Indian companies should consider establishing consultancy firms specializing in financial and insurance services as well as education and training services. In the agricultural sector, Indian companies can benefit by North Sumatra's push towards long-term development of downstream industries in the supply chain of palm oil projects, which may include palm oil distillation, oleochemicals, and biofuels.





### **South Sumatra (Palembang city)**

The natural rubber sector in South Sumatra offers attractive opportunities for Indian companies. Currently, about 20% of upstream production is consumed by the downstream industry. It has not been easy for the province to export the remaining 80% of natural rubber. The potential for the automobile tyre industry, shoe manufacturing, surgical and industrial gloves, latex production etc. is significant. Indian companies do have comparative advantages in these areas. The development of Special Economic Zones (SEZs) in Tanjung Api-Api and Tanjung Carat will benefit foreign investors.

### **Tapping into Riau Province (Batam)**

Batam city is one of the fastest growing cities in Sumatra. Leveraging its existing manufacturing strengths and its proximity to Singapore, it is endeavouring to rise to the next stage of development. Indian software companies will find opportunities to service local companies and also play a part in the digitization of Batam's shipbuilding and oil & gas sectors. As an innovation hub, Batam is a fertile ground for testing new ideas by Indian startup companies in many sectors. Batam also has high potential to become a hub for the film industry and can offer services ranging from shooting sites, animation, to film editing.

### **Pekanbaru-Visions of Smart City (Riau Islands)**

Pekanbaru, the provincial capital of Riau Islands, is one of the key cities included in the 100 Smart Cities Movement for development of pilot projects on mass public transportation, regional innovation, tourism, and social welfare. It also has one of the highest concentrations of banks, making it the largest financial hub after Jakarta and Surabaya. The city has been at the forefront in implementing the e-governance and smart city initiatives of the Indonesian Government that involve development and maximum utilization of technology.

But Pekanbaru is hindered by an acute lack of technological solutions and trained manpower in areas, such as ICT, smart cities, urbanization, irrigation, startups etc. Indian software firms, ICT vendors, and smart city developers & urban planning companies have good potential for business here. As Pekanbaru gears up to become a centre for higher education, Indian universities and vocational institutions will also find ample scope for collaboration.

### **Opportunities in Renewable Energy Sector**

As one of the largest emitters of greenhouse gases, Indonesia's commitment to the Paris climate accord to reduce emissions by 29% before 2030 requires a huge shift to renewables. Sumatra offers enormous possibilities for Indian companies in geothermal and biomass energy generation, areas in which India has comparative advantage. At present, Sumatra is underserved in electric power. With 40% of global geothermal potential and reserves, only 8% electricity is generated. Biomass energy potential is estimated at 60GW, but installed capacity is a mere 1900 MW. Sumatra offers a wide range of biomass, including palm, wood, corn cobs, corn stalks, coconut shells, fronds, sawdust, rice husk, coffee, and groundnut – all of which can be deployed for gasification.

### **Healthcare Sector**

In general, the cost of specialized healthcare, as provided by private hospitals and doctors, is beyond the reach of Sumatrans, except for the upper classes. Sumatra is faced with a shortage of medical and paramedical personnel, mainly nurses. There are very few super-specialty hospitals in Sumatra, forcing those who can afford, to travel to Penang for specialized medical treatment. Given India's obvious comparative advantage in this area, opportunities abound for establishing specialty hospitals for cardiology, cancer, orthopedics etc. It would encourage foreign companies, if Indonesia reviews its policy and permits foreign doctors and medical professionals to work in specialty hospitals for a certain period of time till local professionals are equipped enough to take over.

### **Business Incubators**

Universities in Sumatra are faced with the reality that there is a gap between academic research and technology, information and entrepreneurship, and knowledge and application. Local universities are unable to grapple with the





problem of how to serve their students and stay relevant in the business world. Beyond a point, most of them are not able to motivate students to utilize their knowledge and academic research and translate them into a tangible entrepreneurial activity. This has left several universities with a static mindset and lack of viability. Only a handful of universities are able to establish successful business incubators on their premises. India's growth in the startup sector in the last decade has been phenomenal and is well positioned today to offer expertise. There is a ready-made space for collaboration in transfer of knowledge and development of business incubators by Indian companies in local universities.

### **Maximizing Trade and Investments through Optimum Utilization of Sumatran Ports**

The east coast of Sumatra directly faces the Straits of Malacca through which around 350-400 ships pass on a daily basis. Though Sumatra is served by 16 trading ports from Aceh in the North to Bandar Lampung in the South, not all of them are being utilized for international trade as only a few of them can handle viable cargo volumes. All these ports are in close proximity to the ports of Southern India and it would be in the interest of Indian traders if India plays an active role in the development and infrastructure upgradation of some of these ports. The geographical proximity of Sabang with Port Blair has already seen a degree of maritime cooperation, which is a work in progress.

### **Twinning of Cities to Spur Trade and Investments**

At the governmental level, it would be beneficial to forge sister city or province to province arrangements between India and Sumatra. Not only will it serve to reinforce our ancient connect, it will further deepen cultural bonds and people-to-people contacts, which would greatly facilitate deepening of trading and investment ties between the two regions.



# Future Growth Sectors of Indonesia

By Shoeb Kagda

In the mid-1970s, two young men travelled from their homes in India to seek new opportunities in the Indonesian archipelago. They arrived on Java island equipped only with courage, passion, and an entrepreneurial spirit. From those humble beginnings the two men – Lakshmi Mittal and Sri Prakash Lohia – built global business empires and are today amongst the richest individuals on the planet. Mittal is Chairman and CEO of Arcelor Mittal, the world's largest steel producer.

His friend and brother-in-law Lohia is Chairman and CEO of Indorama Corporation, a diversified petrochemicals and textiles company. Indorama's first textile factory in Purwakarta still runs, and the company added a 9<sup>th</sup> manufacturing plant in the area in 2016.

Mittal and Lohia were early trailblazers for Indian entrepreneurs wanting to make their mark not just in Indonesia but also on the global stage. They used Indonesia as their launchpad for their global expansion and the country did not let them down.

Many Indian entrepreneurs and professionals followed the two men over the past decades. They came to Indonesia to set up businesses or work in the media and advertising sector, finance, and most recently in the tech sector, which in recent years, has emerged as one of the fastest growing segments of the economy.

According to Indonesia's Trade Minister, Muhammad Lutfi, the country's digital sector is forecast to multiply eight-fold by 2030 from IDR 632 trillion (US\$ 45 billion) to IDR 4,531 trillion (US\$ 323 billion). E-commerce will play a crucial role with 34% growth followed by B2B, healthtech, edtech, and agritech.

This rapid pace of growth has attracted entrepreneurs, such as Krishnan Menon who bought a flight ticket to Jakarta after graduating from BITS Pilani. In an interview with Moneycontrol, the young tech entrepreneur noted that he decided to settle down in Indonesia to fuel his start-up dreams, establishing Fabelio, an online furniture retailing startup before starting Bukukas, a one-stop online shop.

Beyond the tech sector, Indonesia offers Indian businessmen and entrepreneurs huge opportunities for growth as its economy continues to expand. As Southeast Asia's largest economy with a fast-expanding middle class, Indonesia is one of the few countries in the world that has opened its doors to international investors.

President Joko Widodo's administration recently introduced the landmark Omnibus Law on Job Creation to boost foreign direct investments, cut red tape, and ease restrictive labour laws. Recognising the need for wholesale reforms instead of incremental changes, the government pushed the Omnibus Law as a game changer to help position Indonesia to benefit from the shifts in global supply chains and attract new manufacturing investments to the country.

One of the most far-reaching reforms within the new law is reducing the onerous severance allowances for workers and employees introduced in the early 2000s. While workers will still qualify for generous payouts if laid off, employers will no longer be held hostage by staff who underperform or engage in illegal activities.



**Shoeb Kagda**  
Founder & CEO,  
Indonesia Economic Forum

The Omnibus Law sent a strong signal to the international business community that the Indonesian Government is focused on long-term economic growth and remains open to welcoming foreign investors to its shores. President Jokowi and his ministers have unveiled a host of projects, especially in the infrastructure space, which are open to foreign investors. Many of these projects are located in islands outside Java. At the last Indonesia-India Infrastructure Forum, Deputy Chairman of the Indonesia Investment Coordinating Board (BKPM) Ikmal Lukman urged Indian investors to invest outside of Java, where the potential is higher.

Indonesia is on the cusp of strong sustainable growth for the next three decades. The nation of 260 million is politically stable, open to foreign investors, and has one of the fastest growing middle classes in the world. Per capita income is expected to double over the next two decades, creating a significant consumer class, which will further fuel new business opportunities. Indian entrepreneurs and business leaders must take advantage of these opportunities before the window closes. Investors from many nations, including China, Singapore, Russia, Europe, Japan, South Korea, and the Middle East are actively seeking partners and projects in Indonesia.

The race is on.

## TOP SECTORS FOR INDIAN INVESTORS

### Manufacturing

The Indonesian Government has made the manufacturing sector a top priority, given its huge multiplier effect and ability to create jobs. As a result, new free-trade zones have been established to boost manufacturing investments. A joint report by the Asian Development Bank and the Ministry of National Development estimated that Indonesia will see an average growth rate of 6.21% between 2020 and 2024, fuelled by growth in the manufacturing sector.

### Digital Economy

Indonesia's digital economy has experienced exponential growth over the past decade and is expected to be valued at US\$ 124 billion by 2025. While dominated by e-commerce and ride-hailing companies, the sector is ripe for growth in areas, such as digital wallets, cloud kitchen services, online education and consultation, and digital marketplaces. Many tech giants are now eyeing the acquisition of local low capital banks to form a digital bank.

### Infrastructure

Infrastructure development has been one of President Joko Widodo's top priorities since taking office. He has pushed infrastructure projects across the country, completing the trans-Java highway and launching the trans-Sumatra highway. He has also called for the building of airports, seaports, power stations, and railway lines. Infrastructure is key to Indonesia's continued GDP growth and improving the lives of its citizens. In the 2020 state budget, the government allocated US\$ 27.64 billion for infrastructure development. Many of the larger projects will be financed under the PPP (Public-Private Partnerships) model.

### Fast Moving Consumer Goods

With a fast-growing middle-class, Indonesia's retail sector is expected to grow by US\$ 37.2 billion in the period 2021-2025 according to market research conducted by Technavio.


In 2019, the Global Retail Development Index ranked Indonesia's retail market as the fifth most attractive for investors. The fastest growing segments included cosmetics, food and beverages, stationery, and handicrafts. The sector has seen an average of 8.8% growth, higher than the national GDP growth rate of 5% over the past few years and even the Covid-19 pandemic did not dampen consumer spending.

**“India and Indonesia are trillion dollar economies having a robust relationship that is both comprehensive and strategic. They are poised to become the 2<sup>nd</sup> and 4<sup>th</sup> largest economies in the world by 2030. Bilateral trade quadrupled to US\$ 20 billion in 7 years, paving the way for an ambitious target of US\$ 50 billion by 2025. Given this impressive growth trajectory of the two countries, the initiative of capturing the futuristic potential of India-Indonesia relationship through this publication is timely. I wish the publication all success.”**



**Venkateswaran Narayanan**  
Counsellor & Commercial  
Representative,  
Embassy of India,  
Jakarta





# 1

# Agritech



# Technology-driven Transformation of Agriculture & Fisheries

Digital transformation is impacting agriculture and fisheries in a big way by creating niches, transforming the industry supply chain, attracting start-ups and investors.

The contribution of agriculture to GDP for India and Indonesia currently is nearly the same at 16% and 13% respectively in comparison to both countries' GDP contribution of agriculture during independence that was over 50%. In the past three decades, the percentage contribution has halved in both countries. Aspects like urbanization and related livelihood opportunities can challenge the availability of farm labour in the future. 48% of India's 1.37 billion population and 29% of Indonesia's 270 million population are still pursuing agriculture for their livelihood. Any change in labour force dynamics of the sector can considerably challenge the food production and security of the nation unless farming and farm-based businesses gain momentum and promise a bright future for the next generation.

Success stories around farming innovation, whether it is increased interest in organic farming or irrigation mechanisms or end-to-end solutions for bringing quality food to consumers, have been remarkable despite the multiple challenges in the sector. These successes contributed substantially to the economies of both countries as they continue to emerge as leading economies of the world. India is among the largest food producers in the world; however, farm productivity in the country is far lower than its peer nations. In Indonesia, fewer young people are pursuing farming as a profession compared to previous generations, i.e., only 23% of the country's 14.2 million people aged between 15 and 24 years worked in the agriculture, forestry, and fisheries sectors as of 2019. Most of the growth in the sector is seen in the food processing arena rather than food production. Lack of infrastructure facilities and support has given rise to problems like increased production costs, climate change impacts, and higher damages related to pest attacks which are pushing farmers to change professions. Landowners are either converting land for other uses or selling it, which will eventually make lesser land available for agricultural production in the coming times. The Governments have taken note of this growing issue that is not just economical in nature but capable of leading to widespread social problems, including food security.

## INDIA

Agriculture is the mainstay occupation of the majority of people in India. Progressive industries, such as consumer goods, retail, chemicals, and e-commerce are heavily dependent on the output produced through agriculture, which further enhances the secondary impact of agriculture on the country's economy. The Indian agricultural sector also predominantly consists of small and marginal farmers who almost form 86% of India's farm holdings. Thereby, policies, strategies, and solutions for the sector have to be inclusive. In 2013, there were 43 startups in India's agritech sector; in 2020, the figure had grown to more than 1000 startups. Startups in the supply chain and output linkage segment including Samunnati Agro, Ninjacart and WayCool dominated the industry on the basis of revenue in FY2020. India's agritech market is expected to boom by the rise in the rural Internet penetration, rapid digital transformation due to Covid-19 coupled with rising investor interest.

India's Agritech market is estimated to reach US\$ 24.1Bn by 2025. Among all the sub-sectors in Agritech, market linkage has the highest potential to reach US\$ 12 Bn by 2025. Some of the major startups in this category are WayCool, Origo Commodities, Ninjacart, and Crofarm. The market for financial services is set to

**“The commercial and cultural relationships between India and Indonesia have only scratched the surface with much more potential remaining unexplored. Instead of focusing on too many sectors, the two countries should explore deeper collaborations within the education, healthcare, software technologies, and food/agriculture sectors. India's strengths in these sectors can benefit both nations, creating economic value for players in both countries, and becoming a model for economic interdependence among emerging nations.”**



**Radju G. Munusamy**  
Partner, Deals Strategy  
PwC Indonesia Advisory

reach US\$ 4.1 billion. These two sectors provide space for startup players to grow and at the same time contribute to national agriculture. Startups operating in the Farming-as-a-Service (FaaS) sub-segment include EM3 Agri Services, BigHaat and Krishify, which have been addressing the inefficiencies across the supply chain, including lack of farm mechanisation, crop advisories, and access to markets. FaaS has been a boon to farmers and farmland owners who are looking to establish fixed costs and goals upfront and save on equipment and other allied costs.

## INDONESIA

Young Indonesian startup founders are enthusiastic about improving processes in the agriculture and fisheries industries using fresh ideas, but only a few companies are able to find sustainable business models. Transforming the agriculture and fisheries sector digitally requires highly physical operations and entails high servicing costs.

Unlike in e-commerce or fintech, there is no giant player in Indonesia's agritech business, so there is no precedence or learnings on how an ideal agritech company could profit. Therefore, startups need to experiment to find a suitable way of doing business, and they need to collaborate with many institutions, including the government, corporations, and other peers in startups. Technology can be more effective with the availability of Big Data which is missing in the Indonesian scenario. Qualitative Big Data is crucial to employ more efficient farming strategies that have a direct impact on production cost and profitability, such as accurate field size information, farmers' personal data, as well as regular pest and disease reports.

Indonesia is successfully adopting and transforming the development of its digital economy with the creation of solutions based on needs and issues in various sectors. Some examples that are noteworthy are the launch of large-scale online motorcycle taxis, food delivery merchants, and the transformation of stalls to digital mode. Leading startups in the space are trying to transform the agritech industry with their own solutions, such as TaniHub, SayurBox, KedaiSayur, iGrow, Crowde, Etanee, EdenFarm, and Freshbox. The two major problems that technology startups are solving in the Agritech sector are supply chains or distribution and farmer capital loans.

Crowde, a peer-to-peer (P2P) farmer-friendly funding ecosystem, has seen growth even with the ongoing pandemic despite having to adjust the system so that capital would still have relevant risk mitigation during the pandemic. Crowde's performance, despite the pandemic, was quite promising with a distribution of more than IDR 60 billion. This figure is higher than normal conditions, considering that the peak planting period is from September to October each year. The funds were channelled to more than 18,000 farmers and more than 300 small and micro businesses in the agricultural sector.

Another success story is the Tani Group, a tech startup engaged in two main enterprises, TaniHub and TaniFund that aim to simplify the farmers' supply chain and provide access to markets and finance. The TaniHub e-commerce platform connects farmers and buyers, while the crowdfunding platform TaniFund provides loans for members of TaniHub, which helps to improve production. TaniGroup is one of the handful of Agritech startups that continue to grow. It has a B2B business at its core, where it sells large quantities of produce to major corporates, but with "fairer trading terms". A similar path for growth also worked for Aruna, a fisheries e-commerce platform. The fisheries industry in Indonesia has huge potential; its economic value could reach US\$ 1.3 trillion per year with a production potential of around 60 million tons per year, as per government sources. Aruna focuses on simplifying the long supply chain in small-scale fisheries trading, providing information, and market prices, as well as improving fishermen's commodities.



The key to success lies in collaborations. Venture capital firms, traditionally more experienced in finding and funding high-growth, consumer-focused tech companies, are starting to take investment opportunities in Agritech more seriously though it may still be out of their comfort zone. Indonesia having the largest arable land in Southeast Asia, makes agriculture and fishing the nation's backbone industries. The VC firm East Ventures has added several agritech companies to its portfolio, including iGrow, LimaKilo, and Eragano.

Collaboration with a bigger company or even consolidation through a merger would provide a solution for niche Agritech startups aiming to get to the next level and also those that are finding it difficult to survive alone. A case in point is LimaKilo, a platform that connects farmers directly to food stalls and food vendors. Not long ago, the startup was acquired by Warung Pintar, a growing new retail tech company. The government also sees the potential of upgrading its traditional industries with the help of startups. The IT Ministry is currently running a "Farmers and Fishermen Go Online" campaign to encourage a million farmers to cooperate with digital agritech platforms.

From an investor's perspective, Indonesian agritech still has a long way to go as there hasn't yet been a big agritech startup success story in Asia, leaving room for a lot of experimentation and exploration. In addition to social impact, startups need to find a clear business model and prove that they have commercial value so more investors become interested in this industry.

The past decade has seen the rising popularity of urban farming, hyper local farming, and aquaculture fuelled by technology. India is among the top countries adopting precision farming at a massive rate. One reason for rapid change is the proliferation of smartphones. It allowed the precision farming concept to become ubiquitous in agriculture and helped support farmers with speedy communications, quick data collection and analysis, and real-time decision-making. These are the benefits attracting start-up founders and investors alike. Indonesia has had a late start in tapping into the potential of Agritech but is catching up fast. India can collaborate with Indonesia around knowledge transfer and prototyping models at work that are ready to scale in India, such as aquaponics and AI-based production plans.

## THE NEXT STEP

In the future, technology integration in the sector can play a vital role in a progressive paradigm shift. Large-scale adoption of technology through digital platforms, analytics, artificial intelligence (AI), machine learning (ML) and the Internet-of-Things (IoT) will eventually transform India's agriculture sector. Agritech startups in India are exploring solutions around robotics, Big Data, smart equipment, IoT sensors, and farm management software, as well as new-age agricultural practices like indoor or controlled-environment farming. All of this is pinned on agricultural data and farm analytics, which is a rising field in India. With urban farms and hydroponic farms, food is now being grown close to where the demand is, and the traditional farmlands can be reutilised for other demands to balance the pressure on farmers. This is another emerging trend within agritech and one to watch out for in the future as VC investments continue to grow.

Specifically, India and Indonesia have various bilateral agreements for cooperation in agriculture and fisheries. Agritech startups from India and Indonesia have begun to collaborate and explore each other's markets. Considering the commonality of the problems that are being solved, it will only be a matter of time before such partnerships become the norm rather than the exception.





# 2

## Automotive





# Transforming the World of Transportation

The accelerated rise of new technologies, automation and business models will create a massive change in the automotive sector.

The automotive industry comprises a wide range of companies and organizations involved in the conceptualization, design, development, manufacturing, marketing, and selling of motor vehicles. As a sector, it is one of the world's largest industries by revenue. Today, over 48 countries have a local automotive industry with China, the US, Japan, Germany, South Korea, and India in the forefront. The global automotive industry is going through massive transformation by breakthrough digital technologies and business models disruption. Increasing customer demand for high-tech connected, autonomous, and electric vehicles along with smart mobility services is driving this transformation.

## INDIA

The automotive industry in India started in the 1950s with three leading manufacturers – Hindustan Motors, Premier Automobiles, and Standard Motors, making approximately 40,000 cars every year. By 2021, India became the sixth largest automotive industry in the world. It is also the fourth-largest auto market, selling more than 3.5 million units of passenger and commercial vehicles. The Indian market continues to be dominated by the two-wheeler segment (80%) due to a growing middle class and a young population looking for trendy and affordable transportation solutions. Reaching these products to the rural markets has significantly added to the growth of the sector. Passenger car sales have a 13% share and are dominated by small-and mid-sized cars.

India has today become a prominent auto exporter with high export growth potential in the next 25 years. The Government of India has introduced several initiatives that major automobile players in the Indian market can capitalize on to make India a global leader in the two-wheeler and four-wheeler market. Electric Vehicles (EVs) in India are witnessing a 20% growth largely driven by two wheelers. Both the EV finance industry and the EV battery market are expected to grow more than 30% every year. An investment of US\$ 180 billion in vehicle production and charging infrastructure is anticipated until 2030 to meet India's electric vehicle (EV) ambitions. Several trends in investments and developments in the automobile sector in India will give an idea of how the country is gearing up for the next couple of decades. The Delhi government started the process of setting up 100 vehicle battery charging points across the state to push adoption of electric vehicles. International groups such as Fiat Chrysler, Lamborghini, Tesla, Mercedes Benz, Hyundai and Mahindra & Mahindra have made large investments in India to gear up for the future demand. In April 2020, TVS Motor Company bought UK's iconic sporting motorcycle brand, Norton, making its entry into the top end (above 850cc) segment of the superbike market. Uno Minda has announced an investment of Rs250 crore (US\$ 35 million) in its four wheel lighting and alloy wheel business to meet the increased demand as its existing units are operating at near capacity. This move is to capitalize on the automotive lighting industry's gradual shift in technology into more LED-based lighting products.

The Government of India is open to foreign investment in the automobile sector and has allowed 100% foreign direct investment (FDI) under the automatic route. Some of the recent initiatives taken by the Government of India include introducing the voluntary vehicle scrappage policy, making India a global manufacturing center

**“Indonesia is the second-largest trading partner of India in the ASEAN region. Bilateral trade has increased from US\$ 4 billion in 2005-06 to US\$ 23 billion now. Both countries at the highest levels have pledged to increase this to US\$ 50 billion. I am confident that this goal of our governments and our people will soon be met, and TVS Motor Company will continue to play its role in this journey. I am happy that as PT TVS Motor Company, we have a longstanding automotive manufacturing and design facility presence in Indonesia.”**



**Sudarshan Venu**  
Joint Managing Director  
TVS Motor Company

and a Research and Development (R&D) hub, and introducing EVs in 11 cities in the country in their public transport systems. The government is also setting up a business incubation center for start-ups working in the EV space.

## INDONESIA

With the local production of automobiles in 1964, originally with SKD assembly of imported cars and commercial vehicles, the Indonesian automotive industry has become a significant sector, contributing over 10% of the GDP. As the 17<sup>th</sup> largest passenger vehicle producer in the world, Indonesia produces around a million vehicles a year. A large part of the industry comprises foreign brands produced through joint ventures or fully owned factories. The Government's goal is to have full manufacturing facilities with a high percentage of local components, though CKD assembly and CBU imports of new cars is also prevalent. The Indonesian Government has set an ambitious 2030 target of 3 million units of passenger vehicles in annual production which is almost 3 times the current volumes. The Indonesian market is dominated by mini or compact MPVs which are 52% of the total production, in addition to SUVs and light pickup trucks. Around 26% of production is exported to nearby countries. Traditionally a stronghold of Japanese cars like most of the Southeast Asian countries, Indonesia is fast evolving as a center-stage for the automotive industry in the region.

TVS Motor Company aims to grow business significantly in the ASEAN region, with presence in all the countries. Its focus is on integrating innovation across safety, comfort and convenience in both the two-wheeler and three-wheeler segments in Indonesia. They are bringing innovation in the three-wheeler Kargo variant to meet the requirements of the Government. TVS also foresees that connected vehicles and telematics will play a significant role in the two-wheeler landscape. TVS Motor Company has significant investments in Indonesia, including a manufacturing facility and product development center. The Indonesian operation was one of their first forays into manufacturing in the overseas markets and is the only 100% subsidiary outside India. Products manufactured in Indonesia, such as Bebecks and Matics, are designed exclusively to meet the requirements of Indonesian customers and export markets in ASEAN and Africa.

Uno Minda operates around 62 plants in India at various locations but has a single facility in Indonesia that has all manufacturing facilities for different products housed under one roof. The company sees immense potential for its auto component business to grow significantly. It plans to bring to Indonesia a maximum variety of products from its portfolio along with the newer products that are conceived in India to cater to its ever-growing market. The company is providing solutions not only for regular vehicles but also preparing well in advance to cater to the upcoming electric vehicles market. Uno Minda plans to work on both exports from India to Indonesia as well as enhanced local manufacturing to cater to growing demand in Indonesia. Considering the strategic location, availability of manpower and government impetus, it plans to create a manufacturing hub in Indonesia to cater to neighboring countries. Indian companies, such as TVS Motors, Uno Minda, and Tata Motors have paved the way by investing heavily into this market with large-scale manufacturing facilities that serve not only the domestic market but also exports into the region.

The Indonesian Government has a clear vision to turn Indonesia into a global production base for car manufacturing that delivers completely built unit (CBU) vehicles, where all components are locally manufactured. It aims to allow all major car producers to establish factories in Indonesia so that it can overtake Thailand as the largest car production hub in Southeast Asia and the ASEAN region. Indonesia is seen to be very business-friendly with its regulatory approvals and licenses, making product acceptance and market access easy. This presents huge potential for companies to invest in the Indonesian automotive industry.

**“Eco friendly electric vehicles will play a critical role in the coming years in short and medium distance intra-city passenger mobility and for cargo transportation, especially for last mile delivery.**

**Indonesian ecommerce netted 60%+ growth in 2020 to become an estimated US\$ 37 billion market. We are likely to see excellent growth in modern fleet management business opportunities deploying technology for improved services. The two countries could see mutual combined growth in this sector combining manufacture with services including tech-oriented services.”**



**Thekepat Gopal Sridhar**  
Founder & Managing  
Director, Gama Sakti  
Indonesia and Mobe Auto  
Indonesia

## THE NEXT STEP

### Disruptive Technologies

Several disruptive technology-driven trends in the automotive sector will dominate the next 25 years. Concepts, such as diverse mobility, autonomous driving, electrification and connectivity will influence consumer demand and transform the industry. The global rise of Electric Vehicles (EVs), especially two-wheelers, is a massive disruption to the road transportation sector. In the near future, both India and Indonesia are likely to witness high sales, which are expected to cross 50% of new vehicle sales by 2035. A study by CEEW Centre for Energy Finance recognized a US\$ 206 billion opportunity for electric vehicles in India by 2030. In Indonesia, the EV sector is sized at US\$ 28-35 billion by 2030 strongly supported by a localized manufacturing and supply chain. Over the next two decades, the market will witness exponential growth in electric vehicles as battery technology will mature and become more affordable.

### Government Policy Support

Both the Indian and Indonesian auto industries are expected to record strong growth post recovery from the effects of the COVID-19 pandemic. The automobile industry will continue to be supported by important factors, such as availability of skilled labor at low cost, high-tech R&D centers, and low-cost steel production. The supply of battery-grade nickel will play an influencing role in the development of the EV market. Almost a quarter of the world's nickel reserves originate in Indonesia. The Indonesian Government has banned nickel-ore exports to encourage investments into local processing plants. The presence of a large domestic market will further help justify large investments and partnerships made in this sector with global producers.

### Rise of the Domestic Market

The domestic market has started shifting from first-time buyers to repeat customers. Automotive manufacturers will need to develop attractive new strategies to encourage resale of existing vehicles, an area being focused on by several e-commerce start-ups. Ideas of alternate ownership options, leasing, and rent-share models will have to meet the mobility needs of millennials. Several new concepts in direct-to-customer channels are being explored with the help of best-in-class digital platforms, supported by data analytics to help differentiate from the competition. Product innovation is also an open field for the future. Globally, several OEMs have ventured into these downstream-value-chain elements, such as finance and insurance services, vehicle-data value chain and providing one-stop solutions for customer needs, including scheduled services, breakdown services, resale, and purchase of personalized accessories. Such comprehensive solutions require digitalization to create a best-in-class ownership experience.

### Expanding International Markets

International markets are rapidly expanding, giving export potential a new meaning. Africa is experiencing a rise in per-capita GDP and reaching threshold levels for significant growth. Companies that have already navigated this transition in their domestic markets can use their experience to succeed in international markets, to not only increase growth and sales volumes but also diversify risks and reduce cyclical demand. The global pandemic has forced existing companies to rebalance their supply chains and look for sourcing hubs outside China. Many Indian companies have already done so successfully. Expanding into the downstream value chain is another area for additional growth for Indian automotive companies.

**“Indonesia today is a young, dynamic and demanding nation marked by great opportunities. The people here aspire for a better lifestyle and convenience. Today, innovation in the automotive sectors are emanating through Electric Vehicle and connected vehicle technology to meet these needs. This will also serve to drive export opportunities for Indonesia and would further boost industry growth and create new employment opportunities. This will make Indonesia an innovation hub for the automotive industry.”**



**J. Thangarajan**  
President Director  
TVS Motor Company





PT TVS Motor Company Indonesia (“PT TVS”) is a 100% foreign owned company engaged in the manufacture of two-wheeler and three-wheeler vehicles under the TVS brand. The company was incorporated in 2005 and it is a wholly owned subsidiary of TVS Motor Company Limited India, one of the largest automotive manufacturers in the world. TVS Motor Company is part of the well-known TVS Group which is more than 100 years old with a turnover of around US\$ 8.5 billion and employing around 45,000 employees globally.

PT TVS Motor Company was established as a greenfield project. The manufacturing facility is an integrated state-of-the-art facility at Suryacipta Industrial Estate, in Karawang, West Java which was inaugurated by the then President of the Republic of Indonesia. We commenced our commercial production in 2007 with our initial investment, which was around US\$ 50 million and over a period of the last 15 years, our investment has reached a level of around US\$ 175 million by way of investment in new products, establishing networks and a robust supplier base. Our local content now has reached a level of around 55% and we employ 500 workmen directly and more than 3000 persons indirectly through our distributors, suppliers, contractors, and service providers in Indonesia. As part of continuous improvement, a few of our Indonesian engineers were also sent to India to undergo training in various manufacturing processes and practices at our plant in India. As of now, there are more than 101,000 satisfied Indonesian customers who are riding our TVS vehicles on the roads in Indonesia and they stand as testimony to the quality and reliability of our vehicles.

One of our objectives which we had indicated to the Government of Indonesia when we set up our project was to use our manufacturing facility at Karawang as a manufacturing hub for exports to the entire ASEAN region. We are very glad that we are able to fulfil our commitment. We started exporting in a small way in 2011 with 4,000 units per annum.

Year after year, we continued to focus on increasing our exports through consolidation of existing markets and penetration into new markets. From a level of 4,000 units in 2011, we reached a level of close to 53,000 units in the financial year 2019-20. During the current financial year (April 2020 to March 2021), we achieved around 58,000 nos. despite the impact of the Covid-19 pandemic. Currently, we export our two wheelers to ASEAN countries - Philippines, Myanmar, Cambodia, and Laos. We also export to the African market, especially West Africa and to Latin American countries, the Middle East and to countries in Asia.

The value of exports also grew significantly from a level of around US\$ 4 million in 2011 to around US\$ 46 million in 2021 (current financial year), bringing precious foreign exchange into the country. During the year 2016, we also commenced the local production of three-wheeler passenger and three-wheeler Kargo vehicles.

Three-wheeler cargo vehicles are an innovative product, fully developed in Indonesia aimed to serve first and last mile delivery for logistics and e-commerce companies. Moreover, our three-wheeler Kargo vehicles are registered with LKPP (Government Procurement Board) to serve government projects all over Indonesia.







We also participated in various CSR initiatives of local provincial governments like providing our three-wheeler kargo sampah vehicles to local government agencies in DKI Jakarta, West Java, South Sumatra, Bali, NTB and Central Java. During the year 2018, we commenced our exports of three wheelers also to the ASEAN countries. During the financial year 2019-20, we exported around 8,000 three wheelers. Over the years, we have been growing year after year, expanding our footprint in various overseas markets with a wide range of products in both two and three wheelers. This was possible due to the business-friendly environment in Indonesia and our products, which are designed to meet and exceed customers' expectations.













UNO MINDA is a leading Tier 1 supplier of Proprietary Automotive Solutions to Original Equipment Manufacturers (OEMs) in the automobile sector. With its conception back in 1958 with a meagre start-up capital and now notching up a group turnover beyond US\$ 1 Billion, speaks volumes of the conglomerate that it is today.

For more than six decades, UNO MINDA has made significant contributions to the automotive industry supply chain with innovative products for two-wheelers, four-wheelers and off-road vehicles, designed and engineered for efficiency with an emphasis on enhanced comfort levels and fine-tuned response. The Group has switching systems, lighting systems, acoustic systems, light metal technology, after-market division and other product segments under its umbrella.

UNO MINDA has 71 manufacturing plants in India, Indonesia, Vietnam, Spain, Morocco, Mexico, Colombia, Germany design centers in Taiwan, Japan & Spain, sales offices in North America, Europe and ASEAN countries. With the human edge of a highly motivated workforce of over 23000 team members, the Group is headquartered in Manesar, Haryana, India. We have more than 15 engineering, research and development centers globally.

The UNO MINDA strategic alignment ensures the maintenance of leadership in providing the ideal product support for their customers. Drawing on the benefits of this long-term customer support relations, UNO MINDA forges ahead as a Tier-1 supplier.

We manufacture Alternate Fuel Systems; Air Filtration Systems; Canisters; Brake Hoses & Fuel Hoses; Combined Braking System (CBS); Noise Suppressor Caps; PDC Parts; Alloy Wheels; Seat Belts; Cameras; EA Pad; Steering Wheels with Airbags; Air Brakes; Fuel Caps; Lighting; Air Ducts & Washer Bottles; Spoilers; Body Sealing; 2W Switches & Handle Bar Assembly, 4W Switches & HVAC; Cigar Lighters; Wheel Covers; Shifters; Infotainment Systems (CD Tuners, Display Audio & Audio Video Navigations); Speakers; RPAS & ADAS; Sensors; Actuators; Controllers; Relay; End to End Telematics & Connected Car Solutions; Horns; Seating Systems.

The UNO MINDA strategic alignment ensures the maintenance of leadership in providing the ideal product support for their customers. Drawing on the benefits of this long-term customer support relation, UNO MINDA forges ahead as a Tier-1 supplier. We have developed strategic alliances with technically competent companies. We are leveraging the synergies that result from partnering with them. We are a technically oriented, innovative organization and are receptive to discussions with any company that may have complementary technical skills, goals and business interests.

As a technically inclined organization, UNO MINDA is poised for exponential growth in the future. This has been possible owing to advanced development tools, support systems, stringent testing, system-driven processes and dynamic R&D. The group wisely adopted the proven principles of QC, Kaizen and 5S to catalyze the design and development verticals. Predominantly a technical organization, UNO MINDA is poised for exponential growth. Acknowledged as a leading associate of auto majors

**“Since Uno Minda set up its facility in Karawang Indonesia and started operations, we have come a long way in establishing our products and services for the Indonesian Automotive Market. All this has been possible by successfully integrating the ethos and work culture of our parent organization in India into an Indonesian entity, largely managed by a committed and spirited Indonesian team. Despite the uncertainties of the pandemic and the disruption it has caused, we are at the cusp of a new revolution in mobility, poised to take off in the coming decade and Uno Minda is gearing up fully to ride this journey with an array of new generation products & services.”**



**Murali Menon**  
President Director  
PT Minda Asean  
Automotive





around the globe, the Group elicits confidence and professional accountability from its business associates and technology partners. An all-encompassing mantra of a reliable, safe, pioneering, efficient, and environmentally sustainable product line ensures UNO MINDA enjoys an edge in the manufacturing dynamics present in the sector. Technology and innovation are two key pillars of UNO MINDA's philosophy. Our underlying vision is to create a culture that fosters great ideas that can be the basis for planning ingenious products, successfully manufactured to deliver value to our customers.











PT Tata Motors Distribution Indonesia is part of Tata Motors Limited (BSE: TATAMOTORS), a US\$ 45 billion organization, which is a leading global automotive manufacturer of cars, utility vehicles, buses, trucks and defense vehicles. As part of the US\$ 100 billion Tata Group, Tata Motors is India's largest and only OEM offering a wide range of integrated, intelligent and e-mobility solutions.

Tata Motors operates in the UK, South Korea, Thailand, South Africa and Indonesia through a strong global network of 109 subsidiaries and associated companies, including Jaguar Land Rover in the UK and Tata Daewoo in South Korea. Internationally, Tata commercial and passenger vehicles are marketed in countries spread across Europe, Africa, the Middle East, South Asia, Southeast Asia, South America, Australia, CIS, and Russia.

In Indonesia, Tata Motors Distribution Indonesia (TMDI) has been operating for more than 8 years. Close to 7000 units on the road, including pickups and trucks have been used and have added value to the Indonesian business community.

Tata Motors has supported many business sectors starting from Mining with various products such as **PRIMA** 3338, **PRIMA** 2528, LPT 913 which are well known for being strong, as well as unique products in the logistics industry such as **ULTRA** 1014, and Super Ace in the field of port transportation. Plantations, even MSMEs and FMCG distribution are not left behind by introducing Super Ace.

All Tata Motors' products are supported by TMDI's unique after sales program, Peace of Mind. Tata Motors has more than 300 Touch Points consisting of 3S (Sales, Service, Spare parts) facilities, 1S (Sales) outlets and 2S (Service, Spare parts).









# 3

## **Banking & Finance**



# Post Pandemic Resurgence of Banking & Finance

Adaptive strategies to emerge from the crisis are opening up new opportunities that may redefine this sector.

India and Indonesia are the largest economies in their respective regions, so both nations have enhanced scope and mutual interest to make a real contribution to creating a peaceful, stable, and prosperous Indo-Pacific region, especially as a tool to cope with the economic damages of the pandemic. In both India and Indonesia much of the Covid-19 pandemic devastation has been experienced by the poorest households and has been an eye-opener about the huge gaps in the public healthcare system alongside the minuscule financial resources allocated by the state towards any revamp or advancement that is needed for public health safety. The economic resurgence of both countries is the prime concern of the hour, which requires adaptive strategies to cope with the losses and emerge from the crisis with sustainability. The very nature of financial markets makes them insular and confined to their own countries. Additionally, the low financial literacy of a large population (both in Indonesia and India) makes regulators more accountable for safety against potential fraudulence. Also, the availability of domestic captive populations allows companies to concentrate more in-country for growth than exploring outward avenues.

## Fiscal Overview of India & Indonesia

India has a large economy with a GDP of US\$ 2.7 trillion while Indonesia stands at a GDP of US\$ 1.06 trillion. Also, India is the world's second-most populous country, whose economic reforms are much delayed in comparison to other Asian countries. Consequently, India's nominal per-capita GDP (US\$ 1,982 in 2020) is significantly lower than Indonesia's (US\$ 3,922). Both countries have young consumptive domestically driven economies with independent investment cycles and unsatiated aspirational consumption demand. India is better endowed with human capital than Indonesia, especially in information technology, managerial talent, and entrepreneurship. However, Indonesia has a definitive edge over India in low-end manufacturing, ease of doing business, and social and health indicators. Also, both countries continue their focus on infrastructure development and poverty eradication as important goals, while they constantly suffer delays and implementation challenges due to a variety of factors. Moving on the same lines, another interesting comparison is that Indonesia has an open capital account whereas India is taking incremental steps slowly in easing restrictions to ensure the economic safety of the country. Indonesia is more sensitive to swings in global risk appetite and capital flows but fiscally, Indonesia scores higher than India as per the International Monetary Fund (IMF) with Indonesia's general government debt being at 29.6% of GDP, while India's was significantly higher at nearly 69% of GDP in 2018. Also, India has a much higher general government fiscal deficit shown by IMF that estimates it at 6.5% of GDP for India in comparison to 2.5% of GDP for Indonesia. The pandemic has significantly changed these statistics for both countries.

## Banking Systems for the two Countries' Financial Performance

India has a deeper and wider banking system than Indonesia. The Central Banks of both countries have generally been conservative which has protected the respective economies from global currency shocks across the past two decades. The Indonesian Central bank has been more proactive with policies on crowdfunding for equity, crypto exchanges etc. Due to digitization of the financial sector, especially

**"Indonesia is at a take off stage to become a significant economic power in the coming years. Indonesia and India have shared a close bond historically. It is the time to take this association forward in mutual interest. PT SBI Indonesia would be more than eager to be a partner in this collaboration by providing banking services. PT SBI Indonesia, a subsidiary of State Bank of India, offers the most preferred banking solutions for Indo-Indonesian trade and business. Competitive Pricing & Service Quality in trade finance, corporate loan products & remittance services makes the Bank stand out. We wish the very best for success of the Indonesia-India partnership."**



**Pranab Ranjan Das**  
President Director  
State Bank of India  
Indonesia

banking, both countries are witnessing healthy and fast-growing Fintech players in the private space. India's technology capabilities give it a distinctive edge with matured products and services that allow the government to roll out large-scale digital infrastructure and platforms to make operations and businesses conducive and cost effective. One such example is the Unified Payments Interface.

India's largest national bank, State Bank of India, has forayed into Indonesia, setting up Bank SBI Indonesia. Nevertheless, the presence of Indonesian banks in India is an area of future exploration. Currently, only PT Bank Maybank Indonesia TBK has a branch in Mumbai. Building local financial space understanding for both countries could be an interesting way of sharing business collaborations in the coming time. Other than systemic robustness and competency edges, regulations and policies have an important role in keeping the financial performance of the national economy. In recent years, the Reserve Bank of India set up Public Credit Registry (PCR) which is an extensive database of credit information accessible to all stakeholders. Similarly, the Insolvency and Bankruptcy Code (Amendment) Ordinance, 2017, is expected to strengthen the Indian banking sector against credit frauds. These regulations will imply stronger fiscal safety for the country.

The Pradhan Mantri Jan Dhan Yojana (PMJDY) has resulted in a huge number of bank accounts being opened, especially by the underserved people including in rural areas, paving the way for diverse growth opportunities. The digital payments revolution has already triggered massive changes in transactions and how credit is being disbursed in India. Also, Indians prefer debit cards as the mode of payment to credit cards especially after the demonetisation which also indicates acceptance of the digital economy for the country.

In Indonesia, banking institutions are classified either as Commercial Banks, either non-Sharia or Sharia-based or Rural Banks that have restricted operational areas and are not directly involved in payment systems. There are more than 120 commercial banks in Indonesia, of which four are state banks and the rest are either private banks or foreign joint ventures and foreign bank branches. Digital banking is where the central bank of Indonesia formulates rules which could be a gamechanger for the country in the future.

The pandemic has had a debilitating impact on traditional banking but has seen an upsurge in digital adoption among consumers which has accelerated the growth of both digital payments and e-commerce platforms. In early 2021, in a significant move, Indonesia's Bank Jago and Gojek formed the first fully digital bank in the country. This is a first as Indonesia has been the only country in ASEAN that does not grant licenses for digital banks.

According to the World Bank, an estimated 95 million Indonesians or one-third of the country's population, do not possess bank accounts due to geographical and infrastructural barriers; however, 60 million own a mobile phone. Digitizing payments in the private sector alone could increase bank account ownership by 29%, according to reports. Digital banking would enable easier payments and give rural Indonesians access to more financial services and ownership over their finances. There are two types of digital banks in Indonesia, the first are Digital Banks that are introduced by commercial banks, such as Jenius and Digibank and the second type are comprehensive digital financial institutions established by companies after the acquisition of local lenders or commercial banks.

These online banks, also known as Neobanks, are expected to provide financial services and channel access to credit within the retail as well as the micro, small, and medium enterprise (MSME) segments. Neobanks have low operational expenses and they can reach out to a wider range of potential customers and debtors. They offer more comprehensive services compared to fintech operators as they are already integrated with commercial banks.



## Other Economic Drivers: Micro Finance, Insurance & Capital Markets

In Indonesia, microfinance is one of the potential strategies for poverty reduction, enabling underprivileged people to increase their income and assets. In 2015, new Branchless Banking rules and the Microfinance Law were implemented by the Government in Indonesia in recognition of the need to reach and better regulate smaller MFIs and increase the attractiveness of microfinance programs for commercial banks. Islamic microfinance or Sharia-compliant microfinance plays an important role in Indonesia as the largest Muslim majority market in the world.

The non-banking arm of the Financial Services Authority (OJK) regulates the insurance sector. The majority of life insurance policies issued in Indonesia are single-premium, unit-linked products tied to investments in government bonds, mutual funds, and equities and present a vast potential for growth in Southeast Asia's largest economy. Insurance is indeed developing into a highly competitive market in Indonesia's urban centres, but tapping rural demography is still a challenge. At the moment, the development of insurance in Indonesia lags behind as tech platforms for insurance haven't blossomed in the same way as lenders, perhaps because many Indonesians have a different perception and attitude towards insurance. Thereby, one major trend observed in Indonesia is the integration of insurance products with digital platforms like Gojek, Grab, Traveloka, Tokopedia, and Bukalapak, which already have a massive user base so that visibility of the offerings and benefits could be created.

Despite being Southeast Asia's largest economy, Indonesia's capital markets are smaller and less liquid compared to other ASEAN countries and emerging markets. This is due to the low capital market utilization of finance investments and limited intermediation by non-bank financial institutions (modest hedging and insurance facilities). Securities and equity markets are relatively underdeveloped and the market capitalization of Indonesia's listed companies is lower than that of its regional peers.

In India, the overall market size of the insurance sector was around US\$ 280 billion in 2020. The scope of IoT in the Indian insurance market continues to go beyond telematics and customer risk assessment. Currently, there are 110+ InsurTech start-ups operating in India. Demographic factors, such as a growing middle class, young insurable population and growing awareness of the need for protection and retirement planning will support the growth of Indian life insurance. The Indian Microfinance Market is anticipated to grow at a brisk CAGR of more than 40% through 2025, predominantly on account of the increasing demand for microfinance loans from the MSME sector. The main objective of microfinance organizations is to give a chance to low-salary borrowers to become self-sufficient. This sector plays an important role in promoting inclusive growth by providing credit to borrowers who fall under the BPL (Below Poverty Line) category. This industry is also helping women from rural areas to get small loans at affordable rates to earn their livelihood.

### THE NEXT STEP

India's start-up revolution, technology integration with business services like FinTech and policy relaxation or conduciveness could contribute to major economic resurgence as the country emerges out of the pandemic. Currently, a limited association between India and Indonesia around collaborations on financial instruments can expect a rise in the future as more intersections on various aspects come up such as FinTech and technology in general. Indonesia is the second-largest trading partner of India in the ASEAN region and thereby financial alliances between the two countries can promise smoother economic contributions in the long run. This is also the need of the hour as both countries commit and actively adopt new strategies towards reaching the US\$ 50 billion bilateral trade target by 2025.







Role of SBI Indonesia & future potential: Bank SBI Indonesia is evolving as the first bank of choice for any Indo Indonesian banking transaction. Our services encompass providing fund as well as non-fund based facilities for the Indonesian businesses, especially for those involved in India-centric business/trade activities. The Bank has evolved to be the preferred channel for business and remittances between the two countries. As a subsidiary of State Bank of India, the largest Indian bank, we are most likely to provide a seamless banking experience for the Indonesian customers for any India-centric transactions. To add to our strength, we are in a position to use the global presence of our parent bank for trade transactions between Indonesia with third countries. The Singapore & Hong Kong operations of SBI in the immediate neighbourhood and the vast SBI network in Middle East, UK, Europe, USA & Canada places us in a very advantageous position to cater to any overseas banking requirements for corporates in Indonesia.

SBI Indonesia, at present is serving its customers through 7 branches and 3 sub-branches. We are spread out across 5 major cities of Indonesia i.e., Jakarta, Bandung, Surabaya, Semarang & Medan. In addition, we also have a Cash Point at Indian Embassy, Jakarta. So we are never far from Indonesian and Indian businesses or individuals, irrespective of their location in Indonesia.

SBI is the preferred banker for almost all major Indian corporates. Pushing ahead the long-standing business relationships, subsidiaries of a large number of Indian corporates have availed their funding requirements from SBI Indonesia, both in IDR as well as USD. Our funding solution is also preferred by some of the large State-Owned Enterprises of Indonesia, both in the space of bilateral finance as well as the syndicated loan process.

The larger operations of SBI in the nearer geographies, such as Singapore and Hong Kong provides us the opportunity of offer club deals in case the corporate loan requirement is higher. SBI Indonesia aspire to offer the best-in-class funding solutions to corporates in bilateral, syndication as well as club loan deals.

A large number of Indonesian corporates with regular business relationships with Indian clients in coal, power, steel and many other sectors prefer to have their trade financed through SBI Indonesia. This Bank, taking advantage of the vast network of SBI and also the financial strength offers the best, both in terms of timely delivery as well as pricing. We also arrange for the issuance of Bank Guarantee from SBI, which is generally required for supplies to Indian Public Sector Enterprises/ other Corporates. We foresee a greater business collaboration with a larger number of businesses in Indonesia for trade finance and other non-fund based requirements.

For transactional banking for the corporates, SBI Indonesia offers Current Accounts as well as the facilities for term deposits at very attractive rates both in IDR as well as USD. The warmth in service as well as the proactive customer-centric focus of operation have made SBI Indonesia a bank of first recall. SBI Indonesia has a wide range of products to cater to the needs of individuals, both locals and expats. The trust associated with SBI brand is a big draw for the customers. The Bank also offers remittance facilities with the best rates and same day credit to Indian beneficiary accounts.





In technology, we are working on introducing State Bank group's integrated digital banking platform YONO, which will provide the next generation banking solution. It has over 20 million users in India and other countries including, UK, Canada, Mauritius, Sri Lanka, Nepal & Bangladesh among others. This will greatly add to the present facilities of Internet banking and ATM offerings.

SBI Indonesia aspires to be the major highway through which ever growing mutual trade between the maritime neighbours, Indonesia & India will flourish in the coming days. Indo-Indonesian trade relations go back to the 1<sup>st</sup> century, making it a 2000 year relationship which has endured the highs and lows to become stronger over time. The relationship bonding grew over shared languages, customs and culture.

SBI Indonesia will mix the best of both worlds to offer the best services to all its valued patrons. It will be a privilege for the Bank to play an active role in the development of the India-Indonesia partnership. Let Ethics, Innovation and Service Quality of SBI Indonesia be a pillar of the financial highway which is shaping up between the maritime neighbours.





The background of the page is a photograph of several long, narrow pieces of intricately patterned textiles, likely traditional Peruvian or Andean, hanging vertically in an outdoor setting. The textiles feature vibrant colors including red, blue, orange, and yellow, with complex geometric and floral designs. A single, light-colored wooden stick is positioned vertically, leaning against one of the textiles. The lighting is bright, suggesting a sunny day, and the overall composition is vertical.

# 4

## **Creative Industry**



# Creative Manufacturing Industry in the Next 25 Years

By Neelam Chibber

India's history and culture are dynamic, spanning back to the beginning of human civilization and have been one of the great civilizing and humanizing factors evolved by man. For centuries together, the general spiritual life of the larger part of the Asian meant responding to the call of the eternal ideas discovered, systematized, and humanized by the sages of ancient India. In other words, cultures in Asia have been a complex fabric of life woven by several different strands, and co-influence occupies a prominent position in the region from the beginning of the first millennium B.C.E down to the closing centuries of the first millennium "Common Era". It was during this long period that there was the cultural unification of India, and it went on simultaneously with cultural expansion across overseas countries towards the East that included present-day Sri Lanka, Nepal, Tibet, Myanmar, Thailand, Vietnam, Malaysia, Indonesia as well as the countries in the North-West direction that are now known as Afghanistan, Pakistan, and Turkey in Central Asia. Co-influence spread as far as China, Korea, and Japan via spiritual forces emanating from the Indian subcontinent. Such relations also brought intellectual awakening, social consciousness, and material prosperity. In many Asian regions, the sense of social order and organization, arts, and crafts seems to have been influenced by the advent of merchants and the Brahman and Buddhist missionaries from India. It not only brought the materials to uplift their people but their dormant intellectual and other powers and talents were quickened to life, and they were able to attain the fulfilment of those powers without any difficulty or hindrance. Indian culture thus helped other people to make their own contributions to world civilization, while it absorbed them and participated in a deeper and wider life.

## Present-day Potential of the Creative Manufacturing Sector

The UNESCO 2005 Convention on the Protection and Promotion of the Diversity of Cultural Expressions predicted that cultural and creative industries will represent around 10% of global GDP in the years to come. It claimed that the creative economy generated annual revenues of US\$ 2,250 billion and global exports of over US\$ 250 billion. The Creative Economy Reports released by various UN agencies between 2008 and 2015 identified these industries as "the true wealth of nations in the 21<sup>st</sup> century" and linked culture and creative industries to each of the 17 Sustainable Development Goals with examples drawn from around the world. The global market for creative goods was reported to have expanded from US\$ 208 billion in 2002 to US\$ 509 billion in 2015, with an average growth rate exceeding 7%.

These statistics suggest immense potential and opportunities for the creative manufacturing industries and are supported by the global upward trend towards responsible consumption. Nevertheless, to achieve impact at scale, the conventional and continued gaps in the policies and systems framework have to be addressed globally. Also, the onset of 2020 and the pandemic has changed the way the world will look at the future of businesses. So, to tap into the potential of the creative industries, some additional realignment on business processes, delivering capacities, and market linkages has to be adopted.

"When written in Chinese, the word 'crisis' is composed of two characters. One represents danger and the other represents opportunity."  
—John F. Kennedy, 35<sup>th</sup> U.S. President

**"India and Indonesia are both rich in handicrafts, but unfortunately have suffered from a top-down approach due to a different mindset to education as a result of colonization. The families engaged in crafts need high quality education to make a mark. If both the countries work together for the development of Craft and Design education, it will benefit the traditional crafts and revive them to fulfil the needs of sustainability and a circular economy."**



**Dr. Toolika Gupta**  
Director, Indian  
Institute of Crafts &  
Design

Drawing from the quote, it can be assumed that while various stakeholders so far made their efforts to resolve the challenges of the creative manufacturing spaces at their ends, it is now the time for convergence of everything to redefine solutions that can resolve past issues and help to cope with emerging challenges. While most organizations and companies of mainstream businesses are busy rethinking their operational transformations for sustainability, artisans and creative manufacturing enterprises are struggling to maintain their business threshold. The craft sector and artisans are grossly unprepared to embrace fast and continuous adaptations necessary for the future under a new normal scenario, be it digitization, e-commerce integration or adopting AI-based supply chain practices.

### **Responsible Production and Consumption: Scope for India**

Picture India and its creative industries in the backdrop of this pandemic. India harbours the handloom and handicrafts sector as the second-largest source of income for the majority of its population. Government records show 40 million people engaged in the sector while informal but conservative academic research statistics indicate roughly 200 million people being part of the industry, with its total volume of transactions at a whopping US\$ 2–3.5 billion as estimated. Inducing any change or catalysing shift at such a magnanimous scale isn't possible without co-creation, both systemically and in business. Public-private partnerships with deep engagement models would have the ability to push the sector towards a positive transformative journey. The vision that must drive this journey is reclaiming the wealth and prosperity opportunities by the communities at the heart of heritage India by virtue of their skills and products. Replicating the best practices and lessons from the start-up revolution in India could make headway in boosting innovation, instating multi-stage large-scale incubation and acceleration of the creative industries. But to nurture the budding success models into new-age unicorns competent in mainstream business integration will require multi-fold funding. Routing venture philanthropy to create sustainable producer-owned enterprises and establishing innovative debt financing instruments and performance bonds for equity investments will play a huge role in the long-term and medium-term impact. Surprisingly, there hasn't been the precedence of nurturing the creative manufacturing sector, but the current health crisis directs the world economy towards regenerative options that fit the creative industries space to emerge as a game changer.

If India wants to take leadership from Global South towards contributing to SDG 12: Responsible Production & Consumption, its next 10 years development framework must be based on strong co-creation strategies for capacity building of regenerative livelihood channels, leading to the establishment of sustainable producer-owned entities. The growth of the creative manufacturing industry can drive reverse migration of labour back to their roots, with a wide scope of opportunities within their accessible span. The year 2030 will have drastically different realities globally, where the world will no longer be just divided by prosperous and backward economies. Rather, consumption trends will be led by Asia and Sub-Saharan Africa and the global economy will be driven by non-west consumers. There will be wider gender diversity in the ownership of assets and wealth and subsequent decision making to do business. These changes have begun in silos around the world but will converge at a tipping point that will be evident in the future, giving rise to a gigantic shift. If the task forces and think tanks of creative industries quickly think laterally and adaptively, they can assume a pivotal position during the emergence of the new world. India can lead by examples and models at practice due to the presence of strong local institutions, precedence of successful examples from national movements in the country (like the revolution and emergence of Amul as a cooperative platform for dairy farmers) and steady innovation in small financing and technology interventions. Here is an illustrative example of a producer aggregation model at work pan India that can be further refined and scaled through stakeholder collaborations. Scroll back to the Indian craft sector and handmade production represented by khadi is known to have powerfully catalyzed the country's freedom

**“The concept of creative manufacturing as an alternate economic model will grow as the society searches for balance and as the climate crisis forces us to change our production and consumption trajectories. The regenerative economies of both India and Indonesia have rich artisanal traditions as a major contributor and hence future bilateral trade ties that stood at US\$ 20 billion with a focus on natural resources, pharmaceutical, technology etc, could have a new additive i.e. craft-based green businesses.”**



**Meera Goradia**  
Domain Expert & Lead  
Creative Dignity



movement and gained attention to be considered at the heart of its centralized planning by the government post Indian independence. Also, the craft sector was the biggest hope for people's economic resettlement after India's partition based on which the Government of India even established the Khadi and Village Industries Commission in 1957 as a statutory body under the Act of Parliament. Somehow, this fact is now forgotten and the agenda of advancing India's creative economy has lost its place in national priority. But with the global health crisis and the current Government of India's attention to "Atmanirbhar Bharat" as a cause campaign, it is an opportunity for all the stakeholders to drive the universal goal of restoration of the historic glory and full economic potential of the creative manufacturing sector. Future forward in emerging from the pandemic will pose additional challenges for populous countries like India as disaster control strategies and efforts run the risk of pushing more people into poverty (almost to the tune of a billion with the current COVID 19 situation). The Creative Manufacturing Industry is a sector that can never be out of employment or demand. The entire Artisanal field, whether it is pottery, weaving, metalwork or woodwork requires skill, ability, creativity and an eye for detail that can never be substituted by machines or humanoids no matter how smart the technology becomes in the next 25 years or so. Nevertheless, what is constantly required is the amalgamation of technology and manual labour for continuing creative inventions and innovations. Creative industries have been based on a strong foundation of skills and traditions but haven't grown due to weak pillars of reliable data to drive large-scale policies and the non-existence of any modern R&D methodologies for product development and market influence. India is abundantly rich in traditional skills like weaving and craft and blessed with natural resources due to geographic diversity. These factors already give the country an edge to make its space in the global sphere to lead by example. So, change making from roots to epitome in addressing gaps and capitalizing on the existing edges will be a noteworthy journey for India to live and experience. India is known for fine craftsmanship and holds the stories of legacy that are long-lived.

"The notion of education through handicrafts rises from the contemplation of truth and love permeating life's activities." —Mahatma Gandhi

### **Can Creative Industries Find Space in India-Indonesia Trade Ties over the Next 25 Years?**

India-Indonesia bilateral trade ties stood at US\$ 20 billion during the year 2020 and Indonesia aims to drive double of this size trade ties by 2025. Indonesia is keen on enhancing trade and investment ties with India around information technology (IT),



health and pharmaceuticals, agro products, automotive components, and tourism. Another potential contributor to the trade ties could be the dominance of green business, especially around natural fibres. Both countries share similar craft skills, availability of labour as well as climatic situations for the production of similar natural fibres. Creative manufacturing takes into account the entire non-farm sector and not just handicrafts. In the case of both countries, the availability of the grassroots basic skills exists that can be upskilled through design intervention. Green ties between India and Indonesia will provide both countries better scope to showcase innovative business models as well as scale production capacities that can cater to more progressive global markets.

## THE NEXT STEP

The pandemic has pushed the limits for everyone to reimagine the future for everything. The world has shrunk into digital spaces to continue its existence. The use of technology is no longer a privilege but a necessity. Technology advancement will lead to the prosperity of most businesses. Creative manufacturing enterprises so far largely operated on stereotypical setups will dynamically change in the coming time. Professional engagements will surge and producers will increasingly build awareness of modern methods.

Future drivers for artisans could be strongly laid on the four levers given below:

**Leadership for Entrepreneurial Opportunities:** India and Indonesia have similar constraints for rural and remote communities. They face gaps in access to relevant information on businesses and markets; finances are a perennial challenge, and technology is not a priority. Grassroots leadership development is an important facet of creating a sustainable producer-owned business in a regenerative economy. While both countries have their in-country instruments and agents who are facilitating the building of community leadership, artisanal exchanges and digital learning interfaces between India and Indonesia could be a good move towards boosting peer learning. Rural and remote communities have currently adapted to smartphone usage, and better Internet connectivity could be the first binder in moving towards this direction. India's ASEAN connections through grassroots entrepreneurial connections and exchange of opportunities could leverage stronger bonds among people that could lay the foundation for co-creation of best practices as well as form spaces for better experiments and innovations.

**Artisans & Jobs – Role of Skilling:** India has an age-old artisanal legacy with millions of people working in its creative manufacturing sector. Inter-generational skill transfer is a natural process that is mostly polished with practice. On the other hand, we have millions of youth entering the workforce every year, and probably for the next decade, this will continue. The current business world inclination is towards manufacturing automation that would not generate employment. Also, the Government of India's campaign to "Make in India," leans heavily towards technology and automation-led industries which also do not increase the rate of employment significantly. In this scenario, the regenerative economy and green businesses will have the space and capacity to absorb new skills, professional proficiencies, and design innovations to make lifestyle products to be driven by creative manufacturing. Artisans will be job creators through their producer-owned enterprises for rural economies. Skill enhancement, design research, and responsible production and consumption will reframe consumerism.

**Future Marketplaces:** E-commerce in India is leapfrogging with an upsurge in the use of smartphones and more options are continuously available for pushing content through mobile applications. Such a platform for the creative manufacturing sector is compulsory so that producers have access to new-age customers and start building their understanding on their choices and preferences. It is also necessary for consumers to be sensitive to vulnerable underserved artisan





communities. Leading by example, Industree is working towards a platform that will create an interface between artisans and consumers to showcase products on a global scale. Such digital interfaces will reduce the involvement of middlemen and eventually improve the income of the producers. E-commerce is not the only future of marketplaces. Digital showcase and marketing, online stores, social media advertising, and direct media like WhatsApp will play a huge role in customer interfacing for producers. Most producers and artisans have limited knowledge of sales and have simple calculations for their product price. These parameters will enable a paradigm shift to new age methods of consumption. India and Indonesia are on this journey organically, and thereby exchanging best practices, marketplace collaborations, and co-creation of products could be great areas of trade exchanges and engagements.

**Technology Integration for Business Efficiency:** Technologies for creative manufacturing outfits have to be judicious to ensure that business proficiency is enhanced by not promoting automation as artisans are handwork specialists and that is how regenerative economies thrive. The grassroots start-up ecosystem must be nurtured to bring learning that could have large-scale implications. India and Indonesia could unitedly lead knowledge and learning exercises for artisanal communities that could set benchmarks for other country collaborations around the green and regenerative businesses. Also, a focus on domestic markets is necessary to save artisans as in-country lifestyle alliances are better than pitching at global clusters of niche consumers. As India and Indonesia are both dealing with unemployment and poverty issues, both countries could collaborate on unique technologies that could facilitate the modernization of producer outfits without promoting automation.

While the future holds possibilities and uncertainties, building learning and knowledge, nurturing co-creation and collaboration, and using technology as an enabler could bring brighter tomorrows. There will be exercises and projects that will succeed or several can fail. But every journey is a learning of how to make a new beginning and keep moving. A concluding quote could rightly reflect the value of experience and learning on which creative manufacturing could leap into the future—

“I have not failed. I have just found 10,000 ways that won’t work.”  
—Thomas Alva Edison



**“India and Indonesia have a connect going back to a thousand years with a two way flow of culture, craft and the performance arts. Regenerative cultural creative industries are the next frontier of collaboration. Native and traditional wisdom enrich contemporary expression in new nature-based materials. Natural fibres that substitute synthetic, bio derived materials that replace fossil fuel plastics are but just some of the many new areas for collaborative exchange and co-creation.”**



**Jacob Mathew**  
Co-Founder, Industree

# Tracing Footprints

By Archana Shastri

Finds from Mohenjo Daro testify to the fact that the art and craft of harvesting, spinning, weaving and patterning cotton was known to India more than three thousand years ago. References to trading in cotton textiles from the Coromandel coast and Barygaza in the Gulf of Cambay were found as early as the first century AD in the 'The Periplus of the Erythraean Sea'. By the second century, the maritime route between India and China cut through Southeast Asia, paving the path for a shared and a deep-rooted socio-cultural and religious synergy. These included myths, legends, and folklore; ritualistic beliefs and practices; social and political symbols of magic, power and hierarchy; and material and cultural objects of ritual narration, arts, and performance.

Indian settlements grew across Southeast Asia, in the wake of flourishing trade in Indian textiles. Historical and peaceful migration of merchants, princes, and brahmins in the early centuries of the Christian era are on record. Carried with them were the prevailing precepts of Hinduism and Buddhism as rooted in India. Recorded in the chronicles of Java is the presence of a Gujarati prince in AD 75. Yet another legend has it that the King of Gujarat sent his son with 5000 subjects, followed by the King of Kalinga sending twenty thousand families in AD 1000 to settle in Java (Deware:2015, p.17). The process of Indianization pervaded deep enough, with early inscriptions in Sanskrit and Brahmi commemorating King Moolvarman in East Kalimantan in the 4<sup>th</sup> century AD.

Indianized empires thrived until the 13<sup>th</sup>-14<sup>th</sup> centuries, all across Southeast Asia: Srivijaya in Sumatra, Kedah in Malay Peninsula, Angkor in Cambodia, Champa in Vietnam and Majapahit in Central and East Java. Needless to say, Indian ideas pervaded every aspect of cultural practices, be it related to beliefs, rituals, arts, performing arts and above all courtly paraphernalia. Even though the Islamic Sultanate made its appearance in the 12<sup>th</sup> century, it was again flavored by its Indian counterpart.

However, the key currency of this rootedness and connectivity was the trade in cloth. The cultivation of cotton spread from India to Southeast Asia. The terms used for cotton had direct reference to the Sanskrit term karpasa as - kapa in Philippines, kapek in Eastern Indonesia, kapas in Bali, ambas in Khmer. The various techniques of embellishments, the symbolic associations with various motifs and colors and the hierarchical clothing styles, inherent to the traded textiles were thereby directly transported and internalised by the local population initially. Their demand as well as their ritualistic and ceremonial display elevated them to the status of heirlooms, with the royalty enforcing their prerogative in the exclusive use of some of the patterns. There grew a distinctive regional market that dominated the local demand for certain kinds of patterns which were then emulated through local production.

Thus, the Gujarati terms like sarsa or saudagiri for painted and printed cloth became synonymous with sembagi of the Malay world; patola with cindai and pelangi with Tie and Dye in Southeast Asia. While the Ikats in the region were warp oriented, the Indian orientation introduced the weft orientation, especially in the Indianized regions along with extra supplementary weft patterns (songket) in gold and silver yarns. Scenes from Indian epics, myths, and figurative elements adorning the Indian temples had been the earliest and immediate vehicles of narratives with their extended use in varied rituals particularly associated with rites of passage.

**“India and Indonesia, both being melting pots of diverse cultures, have a history of engagement and people-to-people contact spanning over several centuries. Interwoven in the cultural fabric of the two countries are the binding sutras of-myths and legends, beliefs and practices, arts and artifacts- that celebrate unity in diversity. Of common concerns and challenges are the continuity and sustainability of widespread cultural industries.”**



**Archana Shastri**  
Independent Researcher &  
Founder Member  
Textile & Clothing  
Research Center







The growing affluence of the Mughal empire in India and the entrenched Islamic presence in Southeast Asia in the fourteenth century ushered in an unparalleled sumptuousness in the courts and lives of the elites in the region. In consonance with the Indian belief in the sacredness of gold and its supplementary weft insertion of gold or silver thread, both Indonesia and Malaysia were to adopt a technique of highlighting motifs with surface applications in gold, the technique being referred to as *prada* and *telepuk*. Under the Islamic veneer, geometricised patterns took precedence over the figurative ones, the inherent Hindu and Buddhist elements continued to persist as in the recurring presence of the *wayang* or puppet forms in the Malay and Borneo region.

It is in the performing arts that the seminal traces and processes of Indianization continue to be observed. The *Ramayana*, for instance, is ingrained within the memory of the Indian diaspora that for a variety of reasons saw themselves as distanced or exiled from their homeland. The story, so to say, rehearses the interactions of the migrants with the local population, and really speaking, is a commentary on the race and class relationship, both diffused as well as preserved across generations and through overlapping historical facts. As a distinct cultural object, the Indian epic from different parts of Southeast Asia is reflective of local dynamics in its reorientation and assimilation. The way the story is interpreted through a *mélange* of social, cultural, and religious enactments is as varied as the region-specific communities and at times even divorced from its initial form. Indonesia is a conglomerate of almost 6000 inhabited islands with over 300 languages and different ecological zones requiring interdependent economies of sea-faring, trading communities and relatively self-contained inland mountain tribes.

It was the Western part of Indonesia with closer connections with mainland Southeast Asia that was to develop refined courtly culture with Indian influences. With India and China dominating the trade, most ports were multi-ethnic community settlements. The embedded sacredness with reference to cotton and silk fabric, their motifs and usage were an inevitable expression of social structure, status, exchange and ritual display; as much as they served the purpose of political contracts, empowerment, and diplomatic protocol in trade economy.

Very much like the Indian clothing, most garments remained unstitched during the pre-colonial existence of the Indonesian islands. Most early sculptures, the iconography of which was a direct extension of Indian iconography, reveals the commoners wearing a lower drape, both skirt-like and forked for active wear like the *lungi* or *dhoti*, with the later addition of an elaborately pleated or draped *patka* or sash and an upper drape which often mimicked the *sari*-like drape of Indian origin with one shoulder draped and the other left bare. Headgears ranged from early adaptations from horned headgears of tribal origin to draped and structured shapes. Islamic presence influenced a combination of traditional and draped textiles with stitched garments as in India. Retained in the performing arts of Indonesia are body paintings, masks and other accessories that enhanced the transition into mythical and larger-than-life characters.

Observed in one of the *Ramayana* performances was the Hindu and Buddhist cosmology of the three-realms (*Trai Phum*) of water, earth and sky represented by the females as a watery element, the heroes as bracing the earth element, and the supra-human characters as representing the sky realm. Interesting was the adapted narration of the epic; aesthetics of the garments as well as the body movements which were, however, seminal to India. While the feminine element displayed the s-curve in body movement, gliding as it were on water with a swirling central drape between the legs emulating the wavy movement of the water; the heroes stood erect and moved agile on earth. The supra-humans were represented with a large voluminous build-up of drapes and accessories around the shoulders which in





effect created a top-heavy, towering body that was further highlighted by scrawny limpness of limbs that appeared suspended from the skies. The textiles used also resonated the Indian connect with its hierarchical identification characterised by distinct patterns and materials.

Submerged in the aftermath of the subsequent European contact and colonisation, the shared pre-colonial and pre-modern multiculturalism in the histories of the two nations calls for a cultural dialogue and interaction towards harnessing and sharing of indigenous knowledge repositories, skill-sets and sustainable practices in material culture and their performative expression.



**Neelam Chhiber**  
Co-Founder, Industree

**“India and Indonesia share aboriginal connections. Also, both countries share close roots of their culture that is most evident in their crafts be it in wooden, stone, fabric or paper. As the world hails out of the pandemic and economic reconstructions gear up, India and Indonesia must converge their collaborations around creative manufacturing that has the potential of impact at multiple levels - such as restoration of livelihood and instating regenerative economy for people at their origins as well as facilitating cultural exchanges for skill enhancement where core knowledge of art already exists (say in case of Batik and Ikat).**

**The next 25 years of creative manufacturing will see a complete transformation of business through technology integration for business process management. Both countries have the opportunity to work together on sustainable & green business models to create a benchmark scale and ascend domain leadership on creative manufacturing from ASEAN.”**





5

# Digital Economy

# Digital Economy Accelerates Transformation across Sectors

India and Indonesia share a long cultural and political history that is thousands of years old. The two countries have many common growth indicators in new-age industries like e-commerce.

Both countries are witnessing a massive surge in digitalization as well as urbanization and have a burgeoning middle class. India with its 1.3 billion population is clearly a huge market for e-commerce. Indonesia, with a population of 270 million and 200 million Internet users is also among the top e-commerce and digital economies of Southeast Asia. There are many similarities and common factors in the trajectories of the sector that are paving the way for collaboration between the two countries. This article aims to highlight a few of these areas that can spur cooperation between the two countries in the turbocharged digital economy.

The Republic of Indonesia is a rapidly digitizing country. The online commerce diffusion is expected to be 83% of Internet penetration by 2022. At the same time, Indonesia has a growing digital ecosystem that includes online commerce, ride-sharing services, media distribution, and financial services. In addition to creating significant business opportunities, digitalization in Indonesia is having a significant impact on Indonesian citizens, enabling new job creation, access to services, and greater connectivity with the global society.

The Indonesian e-commerce market reached US\$ 30 billion in FY 2020. The e-commerce market leapfrogged over the development path and it has grown at a CAGR of over 20% over the last 5 years. Indonesia is the largest e-commerce market in Southeast Asia with a consumer base that is estimated to surpass US\$ 55-65 billion by 2022. (McKinsey Global Institute)

Indonesians have turned directly to mobile devices, and 70 to 80 percent of Internet traffic is mobile data. Data cost is affordable in comparison to other Southeast Asian countries. The country has a large mobile subscriber base of about 180 million people, with nearly 106 million (40 percent of the population) owning smartphones. Smartphone penetration will continue to rise as more users are connected with formal banking. Social media use in Indonesia is widespread and among the highest in the world. Indonesians have taken to digital technology with passion and are among the world's most prolific users of social media platforms, such as Facebook, Instagram, Twitter, and YouTube. There are 122 million Facebook users, the fourth-largest audience in the world for the platform. Indonesians are also the largest Instagram story producers in the world. One third of the Indonesian population is in the 16-35 age group and is digitally savvy, driving social media usage in the country.

The Covid pandemic has accelerated the development and acceptance of e-commerce in Indonesia as in the rest of the world. Because of high mobile usage, e-commerce is largely driven by mobile super apps. The local giant marketplaces, such as Tokopedia and Shoppe have a huge market share. Tokopedia's merger with Gojek has created one of the biggest behemoths in the e-commerce sector in Indonesia. The Indonesian Government has supported the development of the digital economy through implementation of various programs and regulations, that is, National Broadband Development (Palapa Ring) and relaxation of FDI norms, attracting a host of investors from across the globe. Online commerce has empowered women and enlarged financial inclusion. The boom in e-commerce in an economy will have favourable implications for MSMEs, and promote new job creation, boost consumption, and exports. The spike in online jewelry sales is an example of the beneficial impact of e-commerce. Local artisans and craftsmen have used online sales to reach new customers and broaden their markets.

**“Digital transformation momentum in Indonesia is leading to rapid growth in Automation, Artificial Intelligence (AI), Cloud Computing, Machine Learning, Internet-of-Things (IoT), and Big Data Analytics. Given similar demographics, social and economic challenges, this provides many opportunities to collaborate and learn from India’s successful, innovative and scalable technology solutions. A key area of collaboration is healthcare where technology solutions from India could go a long way to address emerging challenges in Indonesia’s digital health ecosystem.”**



**Poonam Sagar**  
Director,  
Infotech Solutions



## Key Success Factors

Successful digitization is expected to be one of the main elements powering the Indonesian economy. It is incumbent upon the private and public sectors to collaborate and ensure that the fundamental issues surrounding talent, logistics, and mid-sized companies are resolved to take true advantage of this opportunity.

### Talent

There exists a yawning talent gap in the digital workforce in Indonesia. The country will need 17 million people with digital capacity in its workforce by 2030: one million digital professionals, including software engineers, computer scientists, and advanced analytics and a big data analysts; three million digital facilitators who could introduce digital practices to people with limited digital experience; and 13 million digitally proficient leaders who could champion the use of digital tools to improve decision making. (Source: MGI)

The public and private sector would need to prioritize filling the talent gap to ensure that the true potential of the ecommerce sector can be realized. One of the immediate interventions would be to work with India to recruit niche Indian professionals who have domain knowledge and expertise. They could in turn mentor and develop local talent over time. Many Indonesian tech companies have a shortage of engineers. They have looked towards India to fill this crucial talent gap. For example, Indonesia's Gojek acquired a mobile app development company in India and set up its engineering hub in Bangalore. Indonesian companies, such as Shoppe acquired companies in India to help with their tech skill shortage. Deeper collaboration with India, its engineering institutes, and tech companies can help Indonesian companies to scale faster and optimize their prospects.

### Logistics

A better developed logistics infrastructure is the need of the hour for Indonesian online commerce. Currently 40% of the business comes from the island of Java; the serviceability of the rest of the regions of the archipelago is challenged by geography, infrastructure, and high fulfillment costs. It may be hard to achieve a vibrant, fast-growing online commerce sector without efficient and cost-effective logistics that cover the entire country.

### Financial Inclusion

Cashless payment systems and secure transactions are the gateway to any thriving ecommerce ecosystem. Private and public sectors have an equal role to play in building this in Indonesia as cash transactions are still popular. The national payment gateway, or Gerbang Pembayaran Nasional, which requires existing payment instruments to work together, is a good example. This initiative has made transactions secure, cheaper, and faster. Finally, focusing on customer experience and payment safety would serve the industry well in times to come.

### Indian E-Commerce Industry

The ecommerce industry in India has been on a continuous upward trajectory and is expected to surpass the US to become the second largest ecommerce market in the world by 2034. The ecommerce market is expected to reach US\$ 200 billion by 2026. Internet users in India are expected to reach 835 million by 2023. Each month, India is adding approximately 10 million daily active Internet users to the Internet community. By 2023, smartphone users in India are expected to be between 650 million and 700 million, the highest rate in the world. Online shoppers in India are expected to reach 220 million by 2025. Through its 'Digital India' campaign, the Government of India is aiming to create a trillion-dollar online economy by 2025.

Fuelled by the quantum of Internet penetration, the Indian ecommerce market is expected to touch US\$ 200 billion by 2027. Ecommerce is increasingly attracting customers from tier II and tier III cities, where people have limited access to brands but have high aspirations. There is still more headroom for advancements. Despite

**“India and Indonesia share similarities in their challenge for mass education, small business empowerment, and public health, in which digital technology is the game changer. We should work closely together in these fields, which I believe will benefit both countries. Khan Academy is one of the examples of what Indonesia can learn from India. Tokopedia is one of the examples of what India can learn from Indonesia.”**



**Dr. Bayu Prawira Hie**  
Executive Director  
Intellectual Business  
Community



the staggering numbers, just over 40 percent of the population has an Internet subscription. At the same time, 1.2 billion Indians have been enrolled in the digital identity program Aadhaar and 10 million businesses in a common GST platform. This will further spur Internet usage and ecommerce growth. Indian mobile data operators provide the world's most competitive data rates, ensuring that Internet usage and ecommerce will continue to burgeon.

The Indian ecommerce industry is now a major destination for global players, such as Amazon and Walmart. Indian conglomerates, for instance, Reliance and Tata and homegrown unicorns like Udaan compete in this space. Paytm, an Indian payment solution company is expected to be a large player in the Indian market. A number of logistics providers, including Delhivery and Blue Dart have scaled up and invested in transforming the logistics infrastructure.

Amazon, Flipkart, and others, which have grown rapidly, have invested heavily in tech capability and logistics, especially in smaller towns. India like Indonesia poses logistics challenges and the experience of India and Indian logistics companies in solving logistics issues could help in finding solutions for Indonesia as well.

### The Next Step

The ecommerce industry has been directly impacting micro, small & medium enterprises (MSMEs) in India by providing finance, technology, and training. This has a cascading effect on other industries. Technology-enabled innovations like digital payments, hyper-local logistics, analytics-driven customer engagement and digital advertisements will likely support advancement of the sector. A thriving ecommerce sector will also boost employment and increase revenues from exports. This is one of the most important factors that will help move India ahead at full throttle.

### Intersections and Collaborations

The Indian and Indonesian markets have more similarities than differences. Both are traditionally rooted heterogenous societies with strong local and regional tastes, preferences, and cultural traditions. Both have a strong, rising middle class that

**“Indonesia and India’s e-commerce industry has an uncanny similarity. The fundamentals are alike in the two geographies that have large consumerist populations that are taking a fancy to digital commerce. Even though large proportions of both societies cannot fully enjoy these innovations, both countries are learning from each other’s innovations to find ways to help improve people’s ability to use technology in rural areas through upgrading basic infrastructure and various digital literacy activities.”**



**Shalini Gopalan Menon**  
CEO,  
LoyaltyHub



aspires for a better life. In India and Indonesia alike, youth skilled in IT are driving the future and are the key shapers of the consumption story.

India and Indonesia are in some sense competing for investments in the digital economy from global marquee investors who have identified the two countries as major investment destinations. To support the attractiveness of their countries as an investment destination, the respective governments of each nation have shown great commitment in creating a conducive climate through regulation adjustments, infrastructure spends, and financial inclusion by creating as many banked consumers as possible.

While the two countries compete as investment destinations, there exists huge scope for collaboration. India can play an active role in filling the technical talent gap in Indonesia, and Indian logistics companies can jointly collaborate on strategic partnerships. Indian companies can build technology teams in Indonesia and access this fast-growing market.

In India and Indonesia, there are millions of skilled artisans and craftsmen that can access both markets. There is a huge opportunity for selling Indonesian products in India and vice versa. Customs duties can be relaxed for these traditional product exports in bilateral trade agreements. This will prove beneficial. As the relationship between the two countries stretches back two millennia, it can certainly deepen the opportunities presented in the context of the new-age digital economy.

**“Being such a young country given the large youth population, e-commerce will stir the entrepreneurial spirit for a whole new generation of business and creativity through the adoption of technology and innovation combined with the exponential reach. All this while creating future ready systems and applications in sustainable manner.”**



Narendra Kumar Ahmed  
Creative Director &  
Designer, Amazon India



T. Koshy  
Digital Transformation  
Leader, Partner, EY

**“Building on more than two millennia of cultural and commercial linkages, India and Indonesia can collaborate in diverse areas ranging from defence to the service industry. The size of population in both countries offers opportunities to build on the market power of each other. Indonesia can adopt and adapt the population scale digital solutions evolved in India as force multiplier for the economy, thus build a stronger bridge between South and South east Asia.”**

PT Tata Consultancy Services is a global IT services, consulting and business solutions organization that has been partnering with many of the world's largest businesses in their transformation journeys for over 50 years. TCS offers a consulting-led, cognitive-powered, integrated portfolio of business, technology and engineering services and solutions.

Established in 2006, PT Tata Consultancy Services Indonesia has been serving various customers within Indonesia in various industries across Banking & Financial Services, Insurance, Telecommunications, Airlines, Energy and many more.

A part of the Tata Group, India's largest multinational business group, TCS has over 488,000 of the world's best-trained consultants in 46 countries. The company generated consolidated revenues of US\$ 22.2 billion in the fiscal year ended March 31, 2021, and is listed on the BSE (formerly Bombay Stock Exchange) and the NSE (National Stock Exchange) in India.

TCS' proactive stance on climate change and award-winning work with communities across the world have earned it a place in leading sustainability indices, such as the MSCI Global Sustainability Index and the FTSE4Good Emerging Index.

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A hand is shown pointing upwards with the index finger. A pen is visible in the background, held in the same hand. A vertical halftone pattern, consisting of a grid of small dots in various colors, is overlaid on the hand and the background. The background is a blurred mix of colors, including blue, green, and yellow. The overall composition is modern and educational.

# 6

# Education

# Ready for Collaboration and Investment

Education could be the next frontier for investment to match India's experience with Indonesia's opportunity.

India and Indonesia are transforming their respective education sectors with several innovative and vibrant EdTech companies focused on improving student learning for all, boosting connectivity, and providing access to these services. Due to similarities in the two markets, there are strong opportunities for alignment of methodologies and technologies to address the challenges and problems faced and drive forward momentum in this field.

During the past few years, global private investments in EdTech companies have witnessed a growth spurt. The three countries that received major investment inflows are the United States, China, and India. As far as categories are concerned, investment flows were concentrated on consumer-facing and corporate-facing EdTech companies, which directly deal with individual consumers (for instance, self-paced e-learning products) as well as those directly targeting corporate customers (for instance, EdTech products tailored for internal employee training).

Trends indicate that spending on EdTech in India and Indonesia is poised to see a dramatic upsurge in tandem with the development of the sector in other countries. Growth in this space will largely depend on aspects, such as consumer demand and preferences, apart from government actions and the private sector. The choices made in the future will determine whether the two countries will enable an EdTech sector that places high emphasis on enhancing student learning for all or only for those with connectivity and financial means.

## INDIA

With one of the largest networks of higher education institutions in the world, India occupies a prominent place in the global education industry. Yet, there are huge prospects for further advancement in the education system. Statistics reveal that India has the world's largest population of about 500 million in the 5-24 year age group, which ramps up opportunities for the education sector. In FY19, the education sector in India stood at around US\$ 101.1 billion. There were 39,931 colleges in India in FY19 and 967 universities in FY21 (until December 2020). About 37.4 million students enlisted for higher education in FY19 and the Gross Enrolment Ratio in higher education was 26.3% in FY19. Between 2020 and 2021, the total number of AICTE approved institutes grew to 9,700. Among these, there were 4,100 undergraduate, 4,951 postgraduate, and 4,514 diploma courses in AICTE approved institutes. In the e-learning segment, India has become the second largest market after the US. The sector is poised to reach US\$ 1.96 billion by 2021 with the user base reaching 9.5 million. The online education market in India is anticipated to reach US\$ 11.6 billion by 2026.

The government has launched various initiatives to propel the growth of the distance education market and the spotlight is on new education techniques, such as e-learning and m-learning. The slew of reforms in the education sector and improved financial outlays in recent times can help the country emerge as a knowledge haven. In the current decade, higher emphasis will be placed on improvement of the education infrastructure as human resources gain increasing significance in the overall development of the country. The Government of India has undertaken several measures, including starting IITs and IIMs in new locations as well as

**“The shift we are trying to see in the undergraduate or the higher education experience with Kampus Merdeka is real-world experience and project-based learning that train students to work in groups instead of just as individuals, which does not exist in the real world.”**



**Nadiem Makarim**  
Minister, Ministry of  
Education, Culture,  
Research & Technology  
Republic of Indonesia



allocating educational grants for research scholars in most government institutions. Moreover, with the adoption of the online mode of education by several educational organizations, the higher education sector in India is poised to witness exponential change and development in the years to come.

## INDONESIA

With 52 million students, 5 million teachers, and over 560 thousand schools, the Indonesian education sector is the fourth largest in the world. In 2019, the market size of the EdTech industry in Indonesia stood at US\$ 112 million and is projected to grow at over 25% annually. Education in Indonesia falls under the jurisdiction of the Ministry of Education, Culture, Research and Technology (Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi or Kemendikbudristek) and the Ministry of Religious Affairs (Kementerian Agama or Kemenag).

All Indonesian citizens are required to undergo twelve years of compulsory education, which involves six years at elementary level and three each at middle and high school levels. Islamic schools are under the purview of the Ministry of Religious Affairs. In Indonesia, schools are managed either by the government (Negeri) or the private sector (Swasta). There are private schools called “National Plus” schools, which adopt a curriculum that exceeds the set of requirements put forth by the Ministry of Education, particularly with the use of English as the medium of instruction or having an international curriculum rather than the national one. While 84% of these schools come under the Ministry of Education and Culture, the remaining 16% fall under the Ministry of Religious Affairs.

In terms of higher education in Indonesia, there are 4,593 higher education institutions that include 667 Universities, 271 Institutes, 2,465 School of Higher Learning, 830 Academies, 38 Community colleges and 322 Polytechnics. These institutions have 312,890 lecturers and offer 29,413 study programs to 8,483,213 students. Higher education in Indonesia offers academic degrees, vocational degrees, and professional degrees. The educational institutions are of four types: academies, polytechnics, colleges, institutes, and universities. Indonesia’s state run Universitas Terbuka (Open University) deploys the open and distance learning (ODL) system to provide greater access to higher education for all Indonesian citizens, including those who live in the far-flung islands of the country as well as in various parts of the world.

Public higher education institutions in Indonesia are funded by the government, while governed as self-managed institutions. The private universities are owned, funded, and managed by private organizations, including those associated with Islamic (Muhammadiyah), Catholic or Christian socio-religious organizations. Due to the challenges surrounding infrastructure and the shortage of certified educators, a spike in demand for education among adults and students will open up a window of opportunity for education technology players to flourish in Indonesia. The strong increase in per capita income provides families with more disposable income that can be utilized for their children’s education. Moreover, the Indonesian Government has been spearheading various initiatives to ensure that education is made accessible and affordable.

## THE NEXT STEP

### MERDEKA BELAJAR KAMPUS MERDEKA/ EMANCIPATED LEARNING

The Ministry is currently focused on transforming the higher education system through Merdeka Belajar Kampus Merdeka, or emancipated learning policies. It summarizes the attempt to encourage adaptability and flexibility of higher education to the dynamics of global trends. Indonesian undergraduate students are given the choice to conduct off-campus Kampus Merdeka programs. It includes micro credentials, international and national student exchange programs, Kampus Mengajar (Teaching

**“The Indonesian Government has changed the way we look at our engagement with Industry. We are now building our capacity and capability to build long-term partnerships for mutual benefit.”**



**Prof. Nizam**  
Director General of  
Higher Education  
Ministry of Education,  
Culture, Research &  
Technology  
Republic of Indonesia

**“I am a son of a doorman who witnessed the stark contrast in the Indonesian education sector during my work in the mining sector. Quality education cannot be in the hands of one group of society. Hence my journey to establish quality schools at affordable prices, to equalize some odds and this can be made available to the largest number of people in the best possible way.”**



**Jaspal Sidhu**  
Founder & Chairman  
SIS & Inspirasi Group of  
Schools



Campus), and research, entrepreneurship, humanity, and village development projects. These programs are designed to ensure that undergraduate students are not just being taught in the academic swimming pool. They will learn the experience of swimming in the open ocean as a preparation for their future careers.

#### **KEDAIREKA: MATCHING ACADEMIA AND INDUSTRY**

Synergizing higher education's contributions to industry's commercialization efforts for the advancement of Indonesia is the idea behind the promotion of matching academia and industry. In December 2020, the Ministry launched Kedaireka, an online platform designed to facilitate the synergy between Higher Education and Industry. Kedaireka also offers the Matching Fund Program as an incentive to encourage and initiate more synergies. The Matching Fund Program provides concrete and tangible support from The Ministry of Education and Culture of the Republic of Indonesia to encourage more collaborations and strategic synergies initiated between Higher Education institutions and the industries. With an allocated total funding of Rp250 billion, the Matching Fund program acts as an incentive to the collaboration formed between the two parties through the Kedaireka platform.

#### **TVET REVITALIZATION**

The focus of the Indonesian Government is the development of quality human resources through vocational development. In this regard, optimizing the involvement of the business world and industries in the implementation of vocational education is the key to the realization of links and matches. "Link and match 8+i" is the new collaboration scheme that ensures the holistic involvement of industries in vocational education, starting from developing industry-based curriculums and teaching factories, to job recruitment. The new scheme is also designed to improve the distribution and commercialization of products and services offered by vocational schools.

#### **EDTECH SERVICES**

The Indonesian EdTech sector has followed a path similar to that of the global EdTech investment domain. Most of the EdTech firms were founded since 2015, coinciding with the steep trajectory in the rate of Internet penetration in Indonesia. EdTech firms in Indonesia offer a broad spectrum of products and services aimed at different users, including parents, educators, students, managements of educational institutions, and corporations. Indonesian EdTech products mostly assist students with learning and upskilling, educators with student management, communication and teaching, and educational institutions with the task of administration. Game-based and blended learning experiences, including interactive storybooks and educational mobile apps aim to boost the efficacy of early childhood educators. The target audience of EdTech products and services comprises junior high schools, senior high schools, higher education institutions and professionals in technical/ vocational education.



**“Despite many challenges and obstacles, COVID-19 has pushed schools and educators to adopt a new mindset: to be comfortable with the uncomfortable. In fact, living in a world of fast-paced change and uncertainties requires adaptability and agility. The new normal era has called for quick thinking and being comfortable with the ambiguity. The pandemic has given us a greater sense of urgency to explore a lot of new possible solutions, to cultivate new ideas and innovations in the effort to reimagine the world, to transform education, and to redesign learning. And to do that we need to reclaim the idea of community. We all need one another. The spirit of learning, giving, and collaboration among communities all over the world has been growing fast during the pandemic. And we need that to continue.”**



**Dr. Iwan Syahril, Ph.D**  
Director General of  
Teacher and Educational  
Personnel, Ministry of  
Education and Culture,  
Republic of Indonesia



The Gandhi Memorial International School is an organization dedicated to improving the quality of and access to education in Indonesia. Since 1950, the GMIS has formulated several programs to improve the quality of education. That includes IB, IGCSE, BSEISI, and the purpose of upgrading the quality of high schools in Indonesia and producing global citizens. The GMIS is functioning under the umbrella of Gandhi Seva Loka (GSL), which is a pioneer providing education in Indonesia.

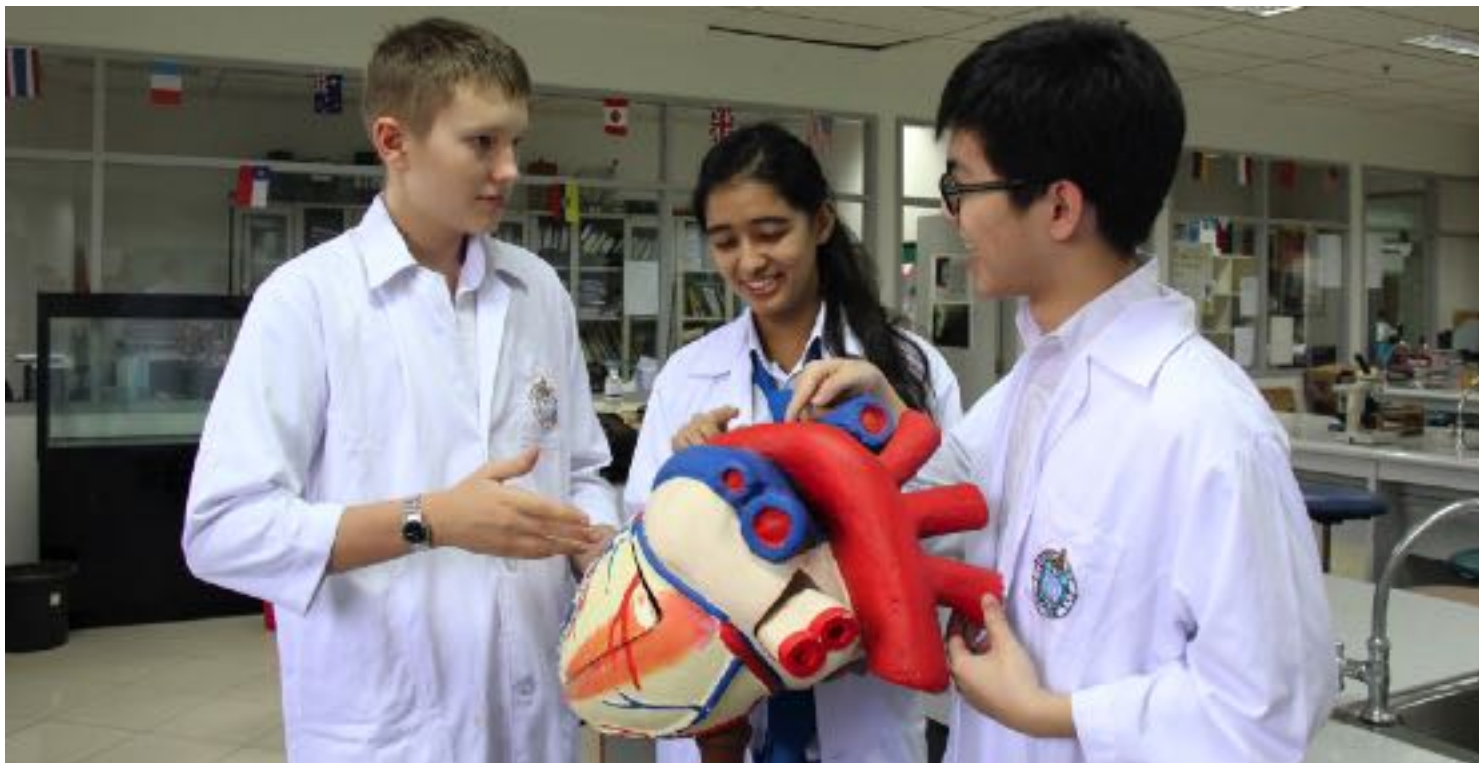
Gandhi Seva Loka was founded in the year 1950 with the primary aim of fostering the spirit of love, understanding and brotherhood. It aims at providing the best possible education to the children. A consistent effort is made to raise the standard of education in our schools where about 6000 (six thousand) students receive quality education. Gandhi Memorial International School (GMIS) was founded in 1950, and it is one of the top international schools in Jakarta, Indonesia.

GMIS moved to a new modern campus in 2004 located in Kemayoran, while the old campus is used for the Pre-School. This school offers their students qualified learning options from Nursery, PYP, MYP, IGCSE, O Level Science and Commerce, the International Baccalaureate (IB) Diploma (IBDP and the International Baccalaureate Career Related Programme (IBCP) The GMIS is affiliated and accredited by The International Baccalaureate Diploma, University of Cambridge Local Examinations Syndicate (IGCSE, O Level & A Level Examinations) and the Board of Secondary Education. GMIS has been authorized to offer the IB Diploma Programme since May 1996, the IB Middle Years Programme since April 2004, the IB Primary Years Programme since June 2005 and the International Baccalaureate Career Related Programme (IBCP) in 2015. GMIS Jakarta is the first Cambridge Examination Center and first complete IB School in Indonesia.

The GMIS along with GSL has been providing help to many needy organizations such as Yayasan Nurul Falah and responding to its social responsibility, especially related to the conservation and protection of environment. So far, the GMIS has sent its scholars to Harvard University, University of California, Berkeley, University







of Pennsylvania, Singapore National University, London Business School and other universities across the world. With these students of GMIS joining the top colleges and universities around the world, including the U.S.A., U.K., India, Indonesia, Singapore, Australia, Philippines, Canada, Switzerland, Korea, Sri Lanka, etc. GMIS has been graced and honoured by the visits of some highly acclaimed dignitaries who have motivated and inspired it to pursue its dream of excellence.

### School Operations

We offer an international standard school education system by following the curriculum of International General Certificate of Secondary Education, IGCSE (UK), the International Baccalaureate, Geneva, Switzerland-IB and the Central Board of Secondary Education, CBSE (India). The hierarchy:

- Nursery, KG, Preparatory (ages 3-5 years) (IB Early Childhood)
- International Baccalaureate Primary Year Program & IGCSE Check Point (Grades 1-5)
- International Baccalaureate Middle Year Program and IGCSE Check Point (Grades 6-10)
- International General Certificate of Secondary Education, University of Cambridge, UK, International Baccalaureate Middle Year & Board of Secondary Education India (Grades 9-10)
- International Baccalaureate Diploma. IB Career Related program and Central Board of Higher Secondary (BSEISI) (Grades 11-12)

### Vision

The Gandhi Memorial International School, a dynamic learning community, propagates lifelong learning and responsible citizenship through a challenging, multidisciplinary, internationally transferable curriculum fulfilling the diverse needs of students. The school provides an atmosphere where diversity is considered a strength and where differences are seen as assets. We believe that students must value and respect the culture and traditions of the host country, Indonesia.







**“The Gandhi Memorial Intercontinental School (GMIS) Jakarta, will always be actively involved in strengthening goodwill between India and The Republic of Indonesia through an education that is founded on international mindedness, an idea that is at the heart of India’s philosophy of ‘Vasudhaiva Kutumbakam’ (the world is one family), and Indonesia’s motto of ‘Bhinneka Tunggal Ika’ (Unity in Diversity). We also abide by timeless Gandhian values of peace, truth, and humility.”**

The school aims to develop self-confidence in each student; to teach adaptability and problem solving skills; to face changes which are vital elements of emerging globalism and to develop good personal traits which include a strong work ethic, self-discipline, sportsmanship and self-esteem.

We are a truly multicultural international school. We have chosen to become an IB World School and have been authorized since 1996 to offer the IB Diploma Programme. We are also authorized to offer the IB Primary Years Programme (PYP) and IB Middle Years Programme (MYP). Along with this, we follow various programs of IGCSE and Board of Secondary Education Indian Schools Indonesia. We are committed to educating students from diverse backgrounds and cultures, assuring equal educational opportunities to every individual. We want our pupils to become critical and compassionate thinkers, lifelong learners and well-informed world citizens.

We are committed to serve quality international education for children of the diplomatic fraternity, high officials, business people and expats working in Indonesia and thus save and serve the countries revenue and identities. There is an emphasis on high academic standards. Although English is the principal medium of instruction, Bahasa Indonesia, Mandarin, Hindi, or French studies are essential elements within the curriculum and the social context of the school. The School encourages students to learn their mother tongue along with English. The school teachers through various programmes strive to develop respect and empathy for fellow human beings and their rights regardless of race, creed and gender and thus promote Indonesian value systems and culture. Character building and value systems are the core of our educational practices so we place emphasis on Gandhian values, Pancasila & Morals and religious understanding and thus promote Indonesian value systems and culture.

### **Mission**

- Improve availability of educational services to the people of Indonesia, diplomatic fraternity and foreigners working in Indonesia.
- Improve affordability of education services with quality international education standards.



**A. P. Singh**  
Principal GMIS



- Improve the quality and relevance of educational services so that our students can join the best firms around the world and in Indonesia to serve mankind.
- Improve equality in obtaining educational services by providing unique educational services, guidance and equal opportunity to all.
- To be friendly, courteous and respectful to all in and out of school and to observe good manners and display sportsmanship at all times.
- Improve assurance/ guarantee in obtaining quality educational services.
- To promote Indonesian and Gandhian values to avoid vulgarity in talk or behavior and to spread peace around the world.

### Objectives

- Ensure that enhanced learning outcomes are achieved through the effective use of and reliable access to learning, trainings and technologies in schools.
- Free up teachers for teaching for providing quality education, rather than maintaining other maintenance and associated infrastructure.
- Make school a learning community based on open standards, suggestions and improvements by stakeholders and affiliated organizations for giving quality global education.
- Help develop a solid base for skilled technology support throughout the GMIS for teaching delivery.
- Assist local schools networks with their present global educational support and responsibilities through the provision of support and sharing to meet the more complex educational needs.
- Promoting Indonesian culture and value systems by following counties' laws and regulations with our unique educational identity.







# RAMA GLOBAL SCHOOL

IN PURSUIT OF EXCELLENCE



Rama Global School (“RGS”) is a day-cum-residential school located on the shores of Lake Jatiluhur in Purwakarta, about 100 km from Jakarta ([www.ramaglobalschool.sch.id](http://www.ramaglobalschool.sch.id)). RGS has been developed along the lines of the best schools and is committed to providing an all-round education of the highest standards. RGS was set up in 1994 by the Rama International School Foundation through the initiative taken by Indorama.

RGS is an asset for expatriate children living in Purwakarta and other cities, imparting education from kindergarten to 12<sup>th</sup> grade with excellent boarding facilities on campus and providing the perfect ambience for scholarly pursuits. All classrooms are air-conditioned, a multi-purpose hall, basketball court, football court, play area for kindergarten, laboratories, library, audio-visual room, school transport, medical care, swimming pool and hostel are some of the facilities RGS provides. Along with reaching the pinnacle of academic excellence, we at RGS aim for our students to fill their lives with positivity, hope, and happiness. We motivate them to acquire values and skills that they can rely upon in leading their lives purposefully as individuals and global citizens. In turn, we promise to provide an enabling environment and careful nurturing and honing of their talents through academic and co-curricular exposure

RGS aims at the holistic development of a student with great emphasis on spiritual, emotional, intellectual and physical integrity so that the student can face this challenging world without fear. At RGS, this holistic development of an individual is attained through academic excellence, professional competence, personal, interpersonal and societal skills. RGS is affiliated to the Council for the Indian School Certificate Examinations (CISCE), New Delhi. RGS is registered with Cambridge International Examinations too. University of Cambridge International Examinations is the world’s largest provider of international education programs and qualifications for 5 to 19-year-olds.







Politeknik Enjinering Indorama (PEI) is a world-class polytechnic focused on providing high-quality and industry-relevant education at an affordable cost in Purwakarta, West Java, Indonesia ([www.pei.ac.id](http://www.pei.ac.id)). PEI was established by Yayasan Pendidikan Indorama, a foundation incorporated by Indorama as a part of its long-term commitment to the growth, development and prosperity of Purwakarta and Indonesia. Today, it is recognized as a leading industry linked institute of vocational training and technical skills development in the country. PEI was established in 2013 as an eco-campus and is built on a green area of 6 hectares with a strategic location close to the large manufacturing facility of Indorama.

PEI aims to provide quality education and practical experience in industry to produce job-ready graduates. Its mission is to organize vocational education to produce good quality, excellent and independent human resources, supported by the developed curriculum, laboratories & learning tools and qualified faculty. PEI also has its charter to conduct research to develop science and technology to improve people's welfare. It also organizes community service and dissemination of technology and research results to solve problems that exist in society. PEI offers 3-year diploma courses in Mechanical, Electrical, Mechatronic Engineering, and 4-year diploma in Software Engineering. State-of-the-art IT equipment and content including Oracle specialization is provided.

One of the unique aspects of Politeknik Enjinering Indorama is the Vocational Training Center which houses a mini-Draw Texturizing Polyester Yarn plant. Raw material is supplied to this plant by Indorama which takes back the final product after being processed by PEI with the job charges supporting PEI's budget. This ensures that students experience first-hand critical industrial practices related to product and process quality, delivery, and safety. Students also benefit from exposure to the company's modern facilities that are accessible at the adjacent sprawling manufacturing site. The Ministry of Research and Higher Education awarded PEI as one of the three polytechnics appointed to spearhead retooling programs of vocational education in Indonesia.







# 7

# Fashion

# India & Indonesia: Cauldrons for Fashion

Fashion has proven to be an integral part of both India's and Indonesia's rich culture. Given India's geographical and cultural diversity, you can expect to find different clothing in different parts of the country. Sarees, women's sherwanis, lanchas, anarkali suits, etc., are a few examples. While India's fashion industry is in its infancy, it has massive potential, thanks to its traditions that date back thousands of years. In ancient times, fashion was used as a display of status and wealth. During the Indus Valley Civilization, people wore simple clothing and used jewelry to demonstrate their status in society. The Indian 'Dhoti' and the turban that Punjabis wear are still an integral part of Indian fashion and culture. During the Mughal period, women wore churidhars, salwars, farshi ghararas, and dhilja, while men wore 'Jama,' an overlapping coat, with a 'Patka' sash. They also wore a 'Pagri,' or turban. Mughal elements are still highly prominent in today's fashion in India. Today, Indian women wear salwar kameez, sarees, and a variety of other traditional wear along with western wear. Indian men commonly wear shirts, T-shirts, jeans, and kurta & pajamas. India's fashion went through an overhaul following its independence in 1947. It witnessed a massive change in the way people dressed due to the effects of globalisation, and one could find a mix of Indian and western fashion styles. India also began to export garments to the West, spawning a multitude of homegrown brands in the process. Arvind Limited (formerly Arvind Mills) is a popular example. This company planted its roots way back in 1931, in response to Mahatma Gandhi's call for Swadeshi. After decades of success in the textile industry, it proceeded to create the future, launching India's first denim apparel brand - Flying Machine. Today, Arvind Limited owns Newport, Quads, Arvind RWT, among many others and licenses Arrow, Gap Inc., Tommy Hilfiger, and so on. Reliance Industries is another huge player, having set up shop in 1973. Reliance Trends, which deals with clothing and apparel, is a subsidiary of Reliance Retail. eCommerce is all the rage today, and has been for the last 5-7 years. Popular international brands like Nike, Adidas, Zara, H&M, etc., have been able to reach many countries across the globe, including India and Indonesia, thanks to eCommerce behemoths like Amazon and Alibaba.

In 1986, the Government of India started the National Institute of Fashion Technology (NIFT) in collaboration with FIT to strengthen the garment industry. Headquartered in Delhi, NIFT now has branches in multiple cities across India. Other noteworthy fashion institutes are Pearl Academy and National Institute of Design (which has a fashion department). The Fashion Design Council of India (FDCI), a not-for-profit organization, was established in 1988 by independent designers to catalyze the growth of fashion in India and ensure its sustainability. The council works with India's handloom and craft industry, which happens to be the largest in the world. FDCI also sponsors events like the India Fashion Week, India Men's Week, and India Couture Week. It has over 400 members who represent the best of Indian fashion, including fashion designers, educational institutes, accessory designers, etc. Rohit Bal, Sabyasachi Mukherji, Abraham & Thakore are a few prominent members. The fashion industry is alive and well in Indonesia, standing tall as the second highest contributor to Indonesia's creative economy at 18.01%. Indonesia is known to sport national costumes, including Batik (primarily for men), Kebaya (for women), and Peci, a cap worn traditionally by male Muslims in the Indonesian archipelago. However, Indonesia has also been buying into western fashion in a big way. Indonesian women are increasingly keeping up with fashion trends, owing to greater exposure to international culture. Indonesia Fashion Week (IFW) and

**“Cooperation in the creative field through the fashion world between Indonesia and India begins with cultural diplomacy. This is because the strength of sustainable fashion between the two countries is sourced from the culture of indigenous peoples which is still preserved, from the past until now.”**



**Merdi Sihombing**  
Celebrity Fashion  
Designer & Entrepreneur  
CEO, Eco Fashion,  
Indonesia



Jakarta Fashion Week (JFW) are two of Indonesia's many high-profile fashion events, the latter of which is considered to be the largest fashion event in Southeast Asia. Just like India, Indonesia has its fair share of reputed fashion institutes and hosts high-level fashion events. LPTB Susan Budihardjo is an institute founded by Susan Budihardjo in 1980. Presently, it has branches in Jakarta, Surabaya, Bali, and Semarang. Fast fashion was introduced in the early 2000s, which was when brands prioritized sales and profits over quality. Consumers would quickly move from product to product, resulting in a substantially short fashion cycle. However, it was reported that the global fast fashion industry creates an estimated 92 million tonnes of textile waste every year.

## THE NEXT STEP

Consumers worldwide are becoming increasingly aware of the adverse effects of fast fashion, giving rise to sustainable fashion. Both India and Indonesia have caught wind of this. Indonesia has a variety of sustainable fashion brands including Pijak Bumi, Sukkha Citta, IMAJI Studio, etc. Some of India's sustainable fashion brands include Fabindia, Raw Mango, and Jaypore. Fabindia is known to be India's largest private platform for products that are crafted from traditional skills and techniques, and hand-based processes. It links over 55,000 craft-based rural producers to urban markets, thus ensuring sustainable rural employment. Fabindia believes in supporting its artisans, designers, farmers, etc., bringing their customers quality products, whilst simultaneously protecting the environment. Jaypore operates similarly, prioritizing unique, quality products made by artisans and designers from all over the country. Sanjay Garg's 'Raw Mango' began its relationship with the handloom in 2008 and has since gone on to push the envelope in the Indian fashion industry. Today, it is one of the best-known brands in the industry, grabbing the attention of some of Bollywood's most popular celebrities. The next steps for both countries include sustainable fashion and a collaboration of fashion events, where both countries can send talented designers to either country and share pieces of their respective heritage. India and Indonesia share similar sensibilities in terms of climatic conditions (a tropical climate), shared values of respective crafts, textile traditions, and the recognition to promote them. Trends in both countries point to an emerging self confidence in their own ethic as a synergistic blend of traditional styles with modern fashion is evident. In the larger context, the ultimate aim is to achieve a circular economy and enable zero textile waste. The fashion industry offers huge scope for building textile and fashion retail exchanges between the two countries while aligning sustainability and business interests with the new textiles economy.



**Sanjay Garg**  
Founder & Textile  
Designer, Raw Mango

**“Indonesia and India have more in common than one would imagine, the influence of Buddhism & Hinduism on the culture, the languages like Sanskrit, Tamil and Urdu having a strong connection with Bahasa Indonesia, our political systems, and even our individual country’s freedom from imperialism. The Indonesian national motto “Bhineka Tinggal Ika” (multiple but one), is in essence identical to the Indian “unity in diversity”. The Indian Epics — the Ramayana and the Mahabharata — play an important role in Indonesian culture and history, and are popular amongst Indonesians to this day. In the open theatres of the Prambanan in Java, Javanese Muslims perform the Ramayana dance during full moon nights. An example of deep Hindu-Buddhist influence in Indonesian history is 9<sup>th</sup> century Borobudur and Prambanan temples. As a design house, we can draw from the experiences and techniques of Indonesian textiles. I have a particular affinity for the connection between Indian ‘Batik’ and the Indonesian ‘Ikat’.”**



# Harnessing the Past to Create a Future

By David Abraham

Clothing has always been an important signifier of identity. One can observe the unfolding of civilisations' diverse narratives by looking at the clothing practices of different cultures over the ages. Clothing is one of the most powerful forms of non-verbal communication. It plays a role in reinforcing the bonds within social and religious communities and serves as a marker of status. At the material level, textiles and clothing are a celebration of human skills, representing some of man's finest achievements in the fields of craft and design.

Clothing and textiles are closely intertwined. In every culture, a wide array of textiles in a multitude of materials and techniques have been developed to meet the requirements of attire. Specialised fabrics have been developed to dress each section of society, from the elite to the common man, resulting in a diverse design vocabulary. Both India and Indonesia have ancient textile traditions that span centuries. Both cultures developed highly sophisticated textiles that demonstrated very high levels of craftsmanship. These complex fabrics were produced by communities of skilled craftspeople who passed their skills down from generation to generation, creating legacies that have left a powerful impact on the culture of both nations.

Textile trade existed between Indonesia and India for centuries. Documentation shows that textiles were being exported from the Western regions of India as well as the Coromandel coast to Java and Sumatra. These links resulted in a valuable exchange of ideas that enriched the craft and textile traditions of both cultures. As a result, there are some textile traditions that are common to both India and Indonesia. Amongst the most celebrated is the technique of Ikat weaving, a complex technique of resist patterning that requires mathematical precision in the formation of patterns and motifs. This is still practised today in Indonesia and India. Ikat textiles were highly valued in both cultures and documentation shows strong trade links between the Patola weavers of Gujarat and the markets of Java and Sumatra in the 14<sup>th</sup> century.

Textile manufacture plays an important role in the development of the fashion industry. With a handloom and handicraft sector that is the largest in the world, India's diverse textile heritage has helped it create a vibrant fashion industry. India's manufacturing sector has grown from the early days of garment exports to the explosion of domestic consumption today. It now ranges from state-of-the-art mechanized factories to small-scale units that manufacture clothing by hand. Fashion clothing is produced in both these sectors to meet the requirements of different consumer segments.

Contemporary fashion in India was given an important boost when the Government of India set up the National Institute of Fashion Technology in 1986. Recognising the potential of the fashion industry, professional education programmes in design, marketing, and manufacture laid the framework for the Indian fashion industry. As both exports and the markets grew, the industry was strengthened by the addition of trained professionals. Soon more institutes specialising in fashion education were established around the country. This gave an impetus to the creative industry and young designers began to establish independent brands, bringing a new voice to the industry. Many of these designers successfully engaged with the traditional

**“Textiles and clothing are closely interwoven. Both India and Indonesia share a rich tradition in hand made textiles. Trade links in textiles between the two countries have been documented as early as the 14<sup>th</sup> century. This historic exchange between people and ideas enriched the craft traditions of both cultures. Today this dialogue must continue to allow the exchange of ideas, skills and shared experiences which will benefit the fashion and textile industries of both countries.”**



**David Abraham**  
Creative Director  
Abraham & Thakore





crafts sector, bringing a contemporary voice to traditional designs, developing products for both the domestic and overseas markets. The emergence of a large rapidly growing market for readymade clothing led the McKinsey report to project that the Indian clothing market would grow to US\$ 53.7 billion in 2020, making it the sixth largest market globally.

The growth of a modern clothing culture has resulted in the development of a uniquely Indian fashion sensibility. While consumers acknowledge international trends, they simultaneously maintain a strong sense of traditional identity. Western attire in the form of tee shirts, jeans, and dresses are juxtaposed with saris, the salwar kameez and the dhoti, producing a vibrant fashion language that defines contemporary India today.

The language of fashion is enriched by the interrelationship between modernity and tradition. The interplay between these powerful influences is responsible for a vocabulary which has to constantly evolve in response to social change. As the great cultures of Asia move into the future, it becomes clear that in a world that is increasingly linked by technology, clothing culture must fashion a language that expresses people's aspirations and connects them with other cultures, just as the ancient textile trade between Indonesia and India brought people and ideas together.



# A Relationship that Spans Two Millennia

By Poppy Dharsono

Since ancient times, India and Indonesia have had deep-rooted historical and cultural ties that have continued to grow stronger with the passage of time. The beauty of this interconnection between the two countries is that the Indian influence in Indonesia was spread through the exchange of ideas, religions, and textiles and not by subjugation or colonization. As trade flourished between the two countries, not only were goods traded by these sea-faring merchants, political and cultural traditions were also exchanged in tandem.

This influence, among other fields, can be found in the old Javanese language, “Bahasa Jawa Kuno”. In the 9<sup>th</sup> century, during the Hindu and Buddhist kingdoms, Sanskrit words were integrated into Bahasa, creating the so called “bahasa kawi”. This language had been in use until the Majapahit Hindu Buddhist kingdom declined.

The magnificent Hindu temple Prambanan and the Buddhist temple Borobudur were both built around the ninth century in Central Java. In both temples, a mix of the influence of Gupta and post-Gupta art and Indonesian traditional art is seen.

In modern times, fashion diplomacy is being used more and more in the diplomatic space as a soft power to create strong friendships between nations. And this evolved from the old times when the cultural ties were established and secured through the exchange of Indian textiles, which were highly valued as prestigious commodities by the Indonesian people. Indian fabrics, such as silk, cotton, muslin and gold-brocaded textiles were in high demand in Indonesia. The magnificent Patola from Gujarat, with its most intricate and exquisite designs, has close similarities with textiles from Palembang and Solo.

The tie dye batik of Indonesia comprises various techniques and characteristics according to each region. In Java, it is called jumputan and in Palembang it is known as cinde. Palembang is renowned for its unique sarongs woven from silk incorporated with glittering silver and gold threads.

As Founder and President of the Indonesian Entrepreneurs Fashion Designers Association, which created Indonesia Fashion Week, the biggest Indonesian platform for national and international designers and small and medium enterprises from the creative industry, I have always aimed at using fashion as a soft power to create deep and sustainable connections between cultures and nations.

I am grateful that the Indian Embassy has always supported this event and established the channel of connectivity that Indonesia Fashion Week provides by bringing designers from India on our stage. In the booths set up at our events in the Jakarta Convention Center lobbies, we witnessed the beauty of the Indian creative industry through the intricate jewelry, gorgeous saris, pashmina silks, the softest cottons, and colorful embroidery.

The global pandemic of 2020-2021 is strongly affecting the entire world but specifically the exporters of textiles and textile products in the developing countries. Now is the time for us all to act as a global community, supporting

**“Society from around the globe is surrounded by cultural diversity. Through values, traditions, beliefs, rituals, clothes, jewellery, textiles and fashion are reflecting their own identity and acculturation often happened between countries. India and Indonesia are already having such acculturation since the first Millennial era. With the IT revolution, relationships between the two countries are easy to maintain and strengthen. Fashion diplomacy is one of the powerful tools that can implement these goals.”**



**Poppy Dharsono**  
Founder & President  
APPMI and IFW  
Former Parliamentarian



each other and finding ways to aid the Global Creative Industry. Customs and traditions might undergo modernization processes, but the core values should never be lost.

Together with the UN and entities from India, we are exploring the possibilities for collaboration to bring more awareness on the Creative Industry and ensure greater outreach to the wider public to spread the message on the need for the implementation of sustainable fashion. Going forward, steps must be taken in the right direction towards the realization of the UN Sustainable Development Goals. I hope that in 2021, the year that celebrates the 10<sup>th</sup> anniversary of our event, we will again see Indian culture present.

Fashion is a reflection of who we are and what we believe in; using it as a soft power can be a driving force for promoting positive change. Once the global pandemic ends, I keep the faith that the demand for new fashion will rise together with the expansion of the hybrid sales channels and that the strong interconnection between India and Indonesia will grow even deeper.





# A New Road to the Future

By Sonam Dubal

Fashion comes from a cultural context in any part of the world. Textiles they say are the markers of genius in any civilization and both India and Indonesia have a shared history in the language of design from crafts, textiles and culture. Along with this history of culture there also has been this incredible story of migration, of exploration and language and religions that has enabled people to travel between the two countries from the very beginning.

Coming from a mixed cultural background, I was deeply drawn to these linkages of history and cultural ethos that recreated itself through trade routes and travel as I researched my own personal history into the old Silk Route. Today at another time where life has become instantaneous and so available at so many levels, uniformity has descended on us but also forced us to connect with the world digitally seeking the creative spirit through communication. In this space one sees there is a wider interest in indigenous cultures from the world than ever before.

Interestingly, in the field of artistic endeavor from film to fashion, there is a movement from the West to the East as markets are slowly developing specially in Asia, not just for production and competitive business but also as creative stories that are individual and authentic to where they come from. This seems to be the natural turning in the wheel of change.

Recently shown at the Oscar wins by both, the director of “NOMADSLAND” by Asian American, Beijing born film maker Chloe Zhao and Best supporting actress Yuh Jung Youn in “MINARI” that won, (which had an exceptional story of a Korean family living in America) brought out this actual diversity, a change that one is witnessing in an otherwise quite predictable world.

The truth is through the past centuries, there has also been a cultural afforestation which is a whole new chapter amongst many, who are now living in the West for social, economic reasons and are now looking to the east for their roots again. It is in this context both India and Indonesia are both becoming important countries with living traditions in textiles, culture, craft and fashion that can connect, collaborate and communicate their own stories, creating a whole new platform for opportunities and challenges.

Today, in a bid for collaboration and communication, maybe it's time for both countries to assimilate and sensitively create a collective body of artisans, designers from both countries with the support of important voices in social media to advocate slow fashion with originality and relevance to the needs of today. A new form of collective success as a vision for the future. In a way of exchange of ideas, a lot can be shared and understood between both countries in further developing textiles, fashion and crafts. For example, the high quality of Indonesian craftsmanship should be studied in our artisanal market. A need to keep to its original authentic voice and find relevance is the challenge in research and development finding markets that will also create direct links between the Artisan and the consumer in a natural progression.

Globalization has brought in a lot of good in connecting the world together but has also increased greed and competitiveness and displaced generations socially and



**Sonam Dubal**  
Revivalist Designer  
Sanskar



**India and Indonesia both gained their Independence in the late 1940s and then followed a period of economic isolation that characterized decolonization in both countries and cemented the colonial disconnect. Yet, the cultural ties between the two countries have been real and one finds it linked through their value systems, languages, religions and culture. Today, at another time, the strength is to unify this familiarity and find strength in our traditions and spearhead this moment through the new spectrum of fashion coming from Asia which is a portal that aligns our world together. In exchanging design ideas through a cultural collective, working in cognizance with both our governments, we can create partnerships, that will not only bring competitiveness for the west to participate but with like mindedness also set trends in creating inroads to a more sustainable way of life which further evolves a completely different lifestyle through slow fashion which is the only way into the future.**

created isolation in many ways. Hence fashion based on culture is the need of the day as slow fashion has become an important trend for the future and is the only sustainable way for making a mark in the global platform and recreating history and saving our planet.

Diversity and thinking of ideas out of the box is the need of the moment and will become mainstay in time when differences will become the new permanence and appreciated as natural woven textiles, handcrafted products with an innate language of design turns back into the currency of this shifting world.





# 8

## Film Industry



# Pivoting to Digital Opportunities

Cultural similarities and a growing digital market pave the way for collaboration and investment in each other's ecosystems.

India has enjoyed close cultural ties with Indonesia, starting from the introduction of Bollywood films to the country at the end of World War II in 1945. Though in the 1980s the popularity of these films began to gradually decline, an Indonesian revival of Indian films took place in 2001 with the release of Shah Rukh Khan's Kuch Kuch Hota Hai, which quickly overtook Hollywood's Titanic as a much bigger box-office success. Fueled by rapid digitalization of the film production sector, we have the foundation of a sunrise phase in the future together of the film industry in India and Indonesia.

Indian cinema is popular in Southeast Asia, particularly in Indonesia, because it is considered more suitable to the culture and identity of Asians, in comparison to Western cinema. The main reason for the popularity of film narratives in Indian and Indonesian cinema is the strong influence of the ancient epics Mahabharata and Ramayana that include techniques, such as a side story, back-story, and story within a story. These popular films often have plots with sub-plots, making it family fare viewing and therefore engaging a wide cross-section of society in both nations.

Bollywood has long been considered one of the significant forms of India's soft power, helping not only to increase its influence but also to change perceptions about India and its stereotype image. Generations of Indonesians have grown up watching the movies of Bollywood stars, such as Amitabh Bachchan, Mithun Chakraborty, Hema Malini, Rani Mukherjee and the three Khans and they are instantly recognizable by the common man.

The popular business model of the Indian and Indonesian film industry has been significantly disrupted with the onset of digitalization and high Internet penetration and digital streaming platforms have started to compete with theatres, bringing in a completely revamped business model. Taking a cue from the Indian counterparts, the Indonesian film industry has seen significant growth in investments, with larger budgets for more sophisticated movies, better coordinated movie premieres, and a strong digital presence.

## INDIA

Indian cinema is a multi-billion dollar-industry and consists of films produced in multiple languages across various states of the nation. It has become the world's largest by number of feature films produced. More than 2,000 films are produced on an annual basis, across the cities of Mumbai, Chennai, Kolkata, Hyderabad, Kochi, Bangalore, Bhubaneswar-Cuttack and Guwahati, which today have become major centers of film production eco-systems.

With the industry segmented by language rather than location, Hindi language films have the lion's share of over 40% of the box office followed by Tamil and Telugu languages with a combined equal share, with the rest distributed across other languages, such as Malayalam, Kannada, Bengali, Marathi, and Punjabi.

Indian cinema is today a global enterprise with a following across more than 90 countries in Asia, North America, Europe, the Middle East, Eastern Africa, and China. The Indian cinema industry is flush with investments from global enterprises,

**“Movies act as windows to a world besides our own. Here, at MD Pictures, we don't simply create quality movies, but are also responsible for setting trends, broadening perspective, and shaping societies in their entirety. As the most prominent digital mass media content creator in Indonesia, we are constantly looking for collaborative opportunities to open windows for our viewers and fellow Indonesians.”**



**Manoj Punjabi**  
CEO & Founder  
MD Pictures

such as Universal Pictures, 20<sup>th</sup> Century Fox, Sony Pictures, Walt Disney Pictures, and Warner Bros. More than 30 film production companies had been listed in the National Stock Exchange of India (NSE).

One of the attractions in Bollywood films is shooting scenes in overseas locations. Indian film crews like to film in Australia, Canada, New Zealand, the United Kingdom, the United States, Europe and elsewhere. Popular cities like Switzerland, London, Paris, New York, Mexico, Brazil, and Singapore are used for Indian themed scenes, with minimal reference to local people and culture. This serves to promote tourism to these cities and are hence a financially supported promotion by the Tourism Boards of these countries.

## INDONESIA

Indonesia also has one of the largest film markets in the world. Being the world's fourth most populous country with 54% of its 270 million citizens in the middle-income bracket, there has been an opportunity to build a robust ecosystem within the creative industry. Indonesia has even been rated as a country with the most potential for producing films in the Asia Pacific region. The Indonesian film industry releases more than 100 titles every year. There are about 3,000 screens in Indonesia reaching more than 60 cities in the interior parts of the country. Theater chains, such as 21 Cineplex, CGV Cinemas, and Cinépolis currently dominate the movie theatre industry in Indonesia.

The film industry is currently the fastest-growing sub-sector of Indonesia's creative economy. Barring the Covid-19 pandemic effect, the Indonesian film industry has generally been showing signs of rapid growth. More and more talented youths are entering this field to create new movies for the global market, which has been opened up due to the rise of digital streaming services, making it much easier to reach international audiences.

The Indonesian film industry has been dominated by several large production houses that have emulated American and Indian genre films. In the 1990s, the focus had been on producing serial electronic cinema (sinetron). One of the largest companies in this is Multivision Plus under Raam Punjabi, which for many years had dominated the sinetron market, giving him the popular title of the King of Sinetron. More recently, the younger generation led by visionary and energetic filmmakers have set up film companies, such as MD Entertainment by Manoj Punjabi, Rapi Films by Gope Samtani, Falcon Pictures by HB Naveen, Soraya Intercine Films by Raam Soraya. They have dramatically changed the direction of film making in the country.

This new breed of film companies is often vying for the market leader position for films and television series with the market opening up for screen, television, and digital OTT platforms.

## THE NEXT STEP

Due to government support, Indonesia is turning into a film-making hub for the region. With a view to grow Indonesia's film industry, President Joko Widodo's Government has relaxed restrictions on international investment in cinemas and in local films. In 2015, Indonesian President Joko Widodo introduced several measures to improve Indonesia's Creative Economy and encourage foreign investments in local film production.

### Investing in a Film City

A Film City is an integrated film studio complex with recording rooms, gardens, lakes, theatres and grounds that serve as the venue for film shootings. Film Cities

**“Our two cultures have immense similarities. It would be most unfortunate if we do not take the advantage of such closeness to express it artistically. Both countries have highly creative film makers, actors and ecosystems. It is time that we come together and explore possibilities to create some magic. The opportunities are endless, given the enormous reservoirs of stories that both countries have. The partnership probably would be one of the most fruitful as well as magical and enable a natural progression in our growing friendship. I am looking forward to see both countries making films of the highest standards.”**



**Adil Husain**  
Actor

can span across several hundreds of acres of land and are usually in the suburbs of major cities. Extending to not just films, but also television programs and TV series, a good quality film city attracts visits by politicians, bureaucrats, and celebrities, serving as a center of attraction for VIP visits. Indonesia has a few film studio locations owned by large film production companies, but lacks a large-scale facility and ecosystem that is available to the industry, especially for the newly emerging talent. Infinite Studios founded in 1997 by Mike Wiluan, located at the Nongsa Digital Park in Batam Island, has international recognition.

### Locational Film Shooting

Indonesia with its 17,504 islands offers a variety of stunning landscapes from mythical rainforests, tropical islands, and beaches to the buzzing cities. Such an incredible diversity of landscapes offers ancient temples, volcanoes, stunningly beautiful rice terraces, historical colonial buildings, white, black and even pink beaches. The Indonesian Ministry of Tourism and Creative Economy has identified several opportunities to collaborate with India on locational film shooting. Bali is the ever-popular global destination with a very unique cultural footprint. Borobudur in Yogyakarta provides the world's largest Buddhist temple as a setting for films. Many iconic island locations, such as Raja Ampat offer very cost-effective shooting locations compared to Maldives or Mauritius.

The Indian Tourism authority has identified many locations that can serve budget film makers as a cost-effective option to Europe. Indonesian film makers can consider locations, such as the snow-capped Himalayan cities of Manali and Shimla in Himachal Pradesh, skiing resorts in Srinagar in Jammu and Kashmir; the moonscapes of Ladakh; the hillside beauty of Darjeeling in West Bengal, the royal palaces of Jaipur in Rajasthan; the Mughal monuments near Delhi and the tropical backwaters of Kerala.

### Joint Film Productions

Influenced by the opportunities created by digital disruption, the current stakeholders are looking at rebuilding the industry with a view to scale up human resources and capacity building to be able to continuously and consistently produce high-quality movies at affordable budgets. Through the transfer of knowledge and joint productions, the goal is to create a pool of skilled crew members who have the potential to be recognized overseas. One way to trigger this is by holding the International Indian Film Academy Awards (IIFA) in Bali or any suitable location.

### Digital Streaming Industry

Accelerated by the Covid-19 pandemic, digital platforms or streaming services have become a major source of income for filmmakers. The presence of streaming platforms has presented a tremendous opportunity for Indonesian filmmakers that can be capitalized through collaborative efforts. Companies, such as Netflix, Disney+, and Viu have invested heavily to develop local filmmaking talents and ramp up the local production ecosystem. To attract more international productions in Indonesia, there is a need for more screen stories that resonate with the online audiences and are a crossover between the uniqueness of Indonesia and universal values. This can be boosted further by bringing in advanced film production techniques that are of international standards. More investment and collaboration here is a long-term opportunity.



**“Indonesia has, in its own culture and traditions, a deep connection to the spiritual and cultural heritage of India. I would love to see a future where our two countries work together to produce films that enchant the world, with narratives that are so special to our shared heritage, drawing from the epics, from the beauty of our lands and from the inclusiveness of our cultures.”**



**Kaarthikeyan  
Kirubakaran**  
Producer & Director  
Kaavadi



# 9

## FMCG

# Digital Reinvents the Consumer Sector

Digitization points the way forward for the FMCG sectors in India and Indonesia.

Fast Moving Consumer Goods (FMCG), also known as Consumer Packaged Goods (CPG), is one of those terms that seems foreign to many. FMCG refers to just about everything one shops for, including packed foods and beverages, household items, toiletries, cosmetics, over-the-counter drugs, and so on.

The FMCG industry is the fourth largest sector in the Indian economy, with household and personal care products accounting for about 50% of the industry's sales, healthcare accounting for 31-32%, and food & beverages accounting for 18-19%.

While the FMCG industry has always been huge in urban India, it has been growing at exceptional rates in rural areas over the last few years, with FMCG products accounting for 50% of the total expenditure in rural areas.

Kiranas, a term used to describe family-owned small businesses, have a 96% share of the food and grocery market in India. According to a report by Accenture and the Trust for Retailers and Retail Associates of India (TRRAIN), the modernization of 10% of kiranas can create 3.2 million jobs in India.

FMCG is also a major industry in Indonesia and is one of the very few industries that seems to have been consistently going strong over the years. This proved to be true especially during the Covid-19 pandemic. While many industries crumbled after the onset of the deadly virus, the FMCG industry managed to keep itself afloat.

According to Statista, "Indonesia recorded a positive overall year-on-year change in the FMCG market value of 8.8 percent in the third quarter of 2020." Just like India, Indonesia has its share of small family-owned businesses called Warungs, which account for 70% of the retail transactions according to a report by CLSA, an investment group based in Hong Kong.

## FMCG in India

According to Satish Meena, a senior forecast analyst at Forrester, "Almost 60-65% of our household expenses (in India) go into food and grocery items. This is the market everyone wants to capture. The way kirana shops are located benefits everyone for people's daily purchases. And this phenomenon is true for other developing markets like Indonesia as well."

Unlike most other industries in India, the FMCG industry continued to weather the Covid-19 storm, recording a 9.4% growth in the first quarter of 2021. Rural markets have been on an upward trajectory, growing at 14.6% in the March quarter of 2021.

The FMCG sector in India consists of a few big players, including Hindustan Unilever Ltd., ITC Ltd., Godrej (which has a market in Indonesia), Britannia Industries Ltd., Nestle India Ltd., among many others. Godrej has established itself in Indonesia, adopting a multi-local model for its operations that is a combination of multinational and local business models. This has facilitated quick decision making, accelerated the time-to-market, and speeded up the availability of quality products for Indonesian consumers. The company recently launched a revolutionary product – Saniter, an environment-friendly powder-to-liquid handwash.

**"I believe the cultural and historical roots between India and Indonesia have helped us to have a deeper and more intimate understanding of consumer behavior, which in turn has resulted in doing things that are not just good for business but also good for people and society. This kind of empathy is very unique and not easy to find in a fast developing world that is competing to keep pace with global trends and practices. India and Indonesia have a great opportunity ahead to build on this common ground and work even more closely together for the next 25 years."**



**Ranjana Singh**  
Chairperson, WPP  
(Indonesia & Vietnam)



ITC, a company that was initially known for its tobacco business, proceeded to venture into FMCG, hotels, packaging, and many other sectors. Firmly believing that acquisitions are the way to go, ITC has acquired a multitude of brands, including Savlon and Nimble. Last year, it announced its decision to acquire spice manufacturer Sunrise Foods Pvt. Ltd. (Sunrise), in an attempt to solidify its position in India's highly competitive FMCG market.

One of the main reasons for the growth of the FMCG industry in India is the spread of eCommerce. The FMCG sector continues to witness growth even during the pandemic because many businesses in urban and rural India have managed to make excellent use of eCommerce to further their products. For instance, Bangalore-based startup 'Jumbotail' helps kirana owners purchase products from manufacturers without having to leave their stores. This was not the case earlier, when they had to shut their shops and head to the wholesale market every now and then. With an app like this, kirana owners can manage their inventory without hassles, while at the same time, discover and pick up new products.

### FMCG in Indonesia

"Increased connectivity between islands is helping regional centres narrow the development gap with the capital. While logistics in Indonesia remains one of the main challenges for consumer goods makers, urbanisation is making the distribution of goods more cost effective." —Global Business Guide, Indonesia

Indonesia is seeing more sales in the FMCG industry primarily due to urbanization and rising personal incomes. Millions of Indonesians are lifting themselves into the middle class every year, which is why groceries, toiletries, household items, etc., sell in enormous amounts at a faster pace than other products. Furthermore, the lifestyle that comes with rapid urbanization has compelled Indonesian consumers to purchase products they may have previously deemed unnecessary. While major retailers like Unilever Indonesia, one of the FMCG giants in Indonesia, Indofood Sukses Makmur, etc. have done very well over the years, Indonesia's small but resilient warungs seem to be contributing the lion's share of the revenue in the FMCG sector. According to a report by Nielsen in 2018, Indonesia's FMCG retail sales reached IDR 700 trillion (US\$ 47.5 billion), with warungs facilitating 72% of the transactions.

Founded in 2010, Indonesian eCommerce company 'Bukalapak,' an online marketplace meant to take small-and medium-sized businesses online, is now helping warungs do consistent business. While many stores were initially reluctant to join Bukalapak due to their lack of familiarity with online business, they eventually got onboard, with the number of registrants in July 2020 tripling compared to the previous months. According to Howard Gani, Bukalapak's Senior Vice President, warung partners use their app 'Mitra Bukalapak,' to purchase wholesale products and sell virtual products to buyers who do not have Internet experience. Moreover, this startup has empowered warungs to act as 'banking agents' for customers by providing additional services like fund transfer, small loans, gold savings, etc. Warungs and kiranas are known to maintain a close relationship with their customers, which is why lending credit is a common practice.

### The Future of FMCG

2021 is an interesting time for digitization and technology in general. eCommerce is growing in leaps and bounds, bringing out the entrepreneur in people from every corner of both countries. While technology had been steadily securing its foothold in Indonesia and India, the pandemic has managed to catalyze this process. In addition to the surge in online stores, significant changes in customer behaviour can be seen. According to Forrester Research, Indian e-commerce sales went up by approximately 7-8% in 2020. The Indian online grocery market is expected to reach US\$ 18.2 billion in 2024 from US\$ 1.9 billion in 2019.

**Indonesia is the 4<sup>th</sup> largest country in the world by population. Given the current growth trajectory, Indonesia in the next 25 years will be, like India, one of the global superpowers with a very strong economy. Both India and Indonesia have phenomenal potential for massive development and growth. In this space, Godrej Indonesia will continue its innovation journey in developing our homegrown products to serve Indonesian consumers.**



**Akhil Chandra**  
President Director  
Godrej Indonesia





**V. P. Sharma**  
Founder & Group CEO  
Mitra Adi Perkasa (MAP)

**“India and Indonesia both have a very large retail sector dominated not only by large global brands but also vibrant local brands. Indonesia’s retail sector and modern shopping centers on the other hand are highly developed and advanced, making it one of the most attractive retail markets in the world. The success of leading brands from around the world have helped develop the local manufacturing prowess of Indonesia, making it a leading exporter of garments, footwear and other products in the world. Global brands and creative trends have helped inspire the creation of Indonesian brands and celebrate the local aesthetic and talent with Alun Alun being an example. Indian Retail has tremendous potential to leverage its local talent and art as Alun Alun has done in Indonesia. MAP has been at the center of this transformation and our learning from both global and local retail has been an important part of our journey of becoming the No#1 Lifestyle retailer in Indonesia. India and Indonesia have significant synergistic values and common culture to develop successful retail partnerships.”**

### **The Future of FMCG: India**

eCommerce has cemented its place in India’s future, considering how businesses in virtually every domain need to have a store and an online presence to up their sales and thrive. This is particularly true of the FMCG sector. Hyperlocal businesses are currently the rage owing to the pandemic. As people are forced to stay at home, numerous startups have forayed into this niche, delivering groceries, medicines, household items, etc., from offline stores straight to people’s doorsteps. The best-known hyperlocal delivery services include Swiggy, Grofers, 1MG, BigBasket, etc.

While businesses have recognized the need for an eCommerce store to list and sell their products, many of them, particularly in rural areas, do not have the finances or the technical know-how to run a full-fledged eCommerce store. Bangalore-based startup Dukaan has managed to remedy this issue for lakhs of businesses across the country since its inception in mid-2020. Firmly believing in nurturing entrepreneurs, Dukaan is making it easy for businesses of all shapes and sizes to set up a store and run it with ease. Indian businesses seem to be in safe hands, thanks to Dukaan’s ease of use, cutting-edge features, and affordability.

### **The Future of FMCG: Indonesia**

Considering the continual rise of digital literacy in Indonesia, it is not surprising that the Indonesian market is buying into eCommerce in a big way. Indonesia’s main challenges include setting up infrastructure to compile customer data to maximize sales and gather the finances and skilled human resources to make the switch to digital sales channels.

eCommerce seems to be the way to go due to convenience and reliability. However, people still prefer general trade (standalone stores and warungs) over modern trade (which refers to franchised supermarkets). This is primarily because standalone retailers have a strong relationship with local customers, and the government supports general trade through its infrastructure. That said, the momentum is with the supermarkets who have taken their market share from 40% to 46% between 2015 and 2020, at a Compound Annual Growth Rate (CAGR) of 10%. Convenience chains and marts are becoming rampant thanks to organized supply chains that are optimized for cost efficiency, speed, and reliability. One can expect modern trade to become an integral part of Indonesia’s FMCG sector in the years to come.





Godrej Indonesia is a subsidiary of Godrej Consumer Products Limited (GCPL), headquartered in India. Today, we are a leading household and personal care company in Indonesia, well known for our flagship brands:

- HIT, the undisputed leader in the IDR 5 trillion household insecticides category, offers peace of mind to health-conscious Indonesian mothers through effective and innovative solutions to insect problems.
- Saniter's innovative range of products, from personal care to home care, protect Indonesians at home, work, and while travelling.
- Stella, a market share leader in the IDR 2.5 trillion air fresheners category, spreads happiness in Indonesian homes with long-lasting, memorable fragrances and irresistible formats.
- Mitu, the number one player in baby wipes, brings joy to motherhood with its innovative, yet simple and practical solutions.
- NYU empowers Indonesian women with the freedom to transform without fear through accessible products with tangible results.
- Other brand portfolios, including household and personal care favorites like Proclin, Biosol, Klinpak, Polytex, Carrera, Cap Gajah, Shock, and Wonderfuel, can be found in most Indonesian households.

Our products are homegrown in Indonesia, developed and created for consumers in Indonesia. Therefore, we are very much closer to our Indonesian consumers. This is made possible through our multi-local model, a combination of multinational and local business model that enables quick decision making and speed in developing quality products for our local consumers. It is estimated that close to 16 million households in Indonesia use at least one of our brands on a daily basis.

Godrej Indonesia has tripled its business since it was first acquired back in 2010. Currently, the Indonesia business contributes to approximately 30 percent of GCPL's international business and is amongst GCPL's largest international business units. Building on this momentum, we will continue to focus sharply on category development with breakthrough innovations and strong brand building and driving balanced growth across our portfolios. On top of that, we also have a vibrant export business to markets in Africa and Southeast Asia.

We are super proud of our new initiative #ProtectingIndonesia or #IndonesiaTerlindungi where our hygiene brand Saniter partnered with both private and public parties among others Kereta Commuter Indonesia (KCI) – a state-owned commuter line in Indonesia, Gojek, Castrol, and Ashley Hotel. As part of this initiative, Saniter also extended 60,000 product donations to Covid-19 Emergency Hospital Wisma Atlet Kemayoran and the Ministry of Health of the Republic of Indonesia at the BBPK Hang Jebat Covid-19 Vaccination Center.

We have also actively championed social responsibility, encouraging our Godrejites to volunteer and invest their time in various social initiatives. We have







an annual calendar of volunteering in schools as well as other social initiatives, involving over 500 of our team members across locations. We also donated our essential products; Proclin (a bleach that doubles up as a disinfectant), Wetties (wet wipes) and Saniter (hand sanitizers) to 74 hospitals across locations in Jabodetabek, Cikarang, and Serang.

We also supported healthcare providers close to our work locations in Gunung Putri, West Java and Pasuruan, East Java by donating face masks to better enable them care for their patients.

In addition, we partnered with the Indonesian Red Cross Society (PMI) to distribute staple food packages to impacted communities and nursing and disability homes in Jakarta.

Meanwhile, in Surabaya, we donated staple food items and cloth masks to communities affected by the pandemic along with Hazmat clothes to PMI Surabaya personnel. We are fully committed to do everything we can to help and support the communities we serve. Together, we focus on making Godrej Indonesia a truly inspiring place to work.







# 10

## Food Industry



# Food Security Enhanced through Cooperation

New opportunities are always opening up for trade and investment in food processing at the next level of collaborations.

For governments worldwide, food security has been an issue of key importance. The Covid-19 pandemic has in fact exposed vulnerabilities in global supply chains which could have a lasting impact on providing sustainable and adequate food supply. In this regard, both India and Indonesia, with their large populations face challenges in guaranteeing food security for their citizens. By collaborating on a range of areas, such as trade in agriculture, investing in food processing, and adopting technologies, Indonesia and India can go a long way towards eradicating hunger and providing sufficient nutrition to their peoples.

For Indonesia, despite strong economic growth and poverty reduction, the levels of food insecurity and poor nutrition remain high, according to Future Directions International, a think tank based in Australia. Agriculture is an important pillar of the economy and employs nearly one third of the workforce, but farmers struggle with poor infrastructure and low incomes. Moreover, climate change is projected to lower agricultural productivity. Malnutrition also remains a challenge as diets based on rice and low in fruits and protein have led to widespread stunting. The country's main crops include palm oil, rubber, cocoa, coffee, tea, tobacco, rice, sugarcane, maize, and cassava. Poultry and seafood are also produced domestically.

Indonesia is the world's third largest producer of rice and is a net importer of grains and horticultural products. The country's total support for agriculture is proportionally the highest and fastest growing amongst middle-income countries with much of the spending going towards subsidies. India is self-sufficient in a number of food crops, including rice and wheat, which are among the national staples. But nutrition is a challenge as hundreds of millions of Indians do not consume sufficient calories. Poor water management and subsidies that promote wasteful production are also serious threats to food security.

Indonesia is an important partner for India in various sectors, including agribusiness and the food industry. Therefore, the two countries will continue to encourage increased investment from India to Indonesia, and vice-versa in the food industry sector. The Head of the Industrial Research and Development Agency (BPPI) of the Ministry of Industry, Ngakan Timur Antara, said that Indonesia and India have a demographic bonus. With their very large populations, the agricultural sector and the food industry are very strategic.

The cooperation between India and Indonesia in the agricultural sector and food processing industry is based on efforts to strengthen the economy, making it modern, competitive, and robust while still prioritizing the principle of mutual benefit. General Chairperson of the Indonesian Food and Beverage Entrepreneurs Association (Gapmmi) Adhi S. Lukman said foreign direct investment in the food and beverage sector rose 14% after President Joko Widodo signed the Job Creation Act in November 2020.

Several Indonesian food manufacturers have entered the international markets, including India. In fact, Garuda Food and Mayora already have factories in India. On the other hand, there are several food and beverage manufacturers from India that are operating in Indonesia, such as Sudevam Group and Ultratec. In trade between India and Indonesia, agricultural commodities and food products are the most

**“Culture marked the historically long-term relationship between Indonesia and India. But it is the food industry and technology that truly embodies the modern relationship between the two countries. How do we feed our large population of people? What can the two nations do to share and support each other in achieving the United Nations Sustainable Development Goal #2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture. Food and agriculture are the essence of civilization and prosperity.”**



**Desra Ghazfan**  
Entrepreneur





traded items. Indonesia exports a wide range of agricultural commodities, such as palm oil, cocoa, cashew nuts, and processed foods, such as wafers, chocolates, and sauces. Meanwhile, India exports sugar, rice and salt to Indonesia. In an effort to increase the volume and value of trade between Indonesia and India, an agreement has been made regarding import tariffs for palm oil from Indonesia. Likewise, rice and sugar from India get the same treatment.

## THE NEXT STEP

For nations, such as India and Indonesia, achieving food security is extremely vital. Climate change and growing populations will impose enormous pressure on food production. Indonesia is already a major importer of wheat and rice to meet domestic demand. The government has over the years pushed to improve yields and open new land to farming. The answer, however, lies in adopting new technologies and farming methods to meet the ever growing need for food.

Agritech apps are already connecting farmers to markets, providing real-time information on prices. Indian and Indonesian startups and tech companies can collaborate to design applications to collect and share data and agricultural information.

With land becoming scarce, urban farming will take on greater importance, especially given the trend of rising urbanization. Vertical farms have a huge potential in Indonesia's teeming cities, especially in Jakarta. Hydroponics farming, for example, provides bigger yields as compared to regular farming, as planting indoors prevents the growth of weeds and soil-based diseases. Many varieties of hydroponic systems are available and can be installed, depending on scale and amount of attention needed.

Will urban farming work? Technology is the game changer as lightweight beds, efficient LED lights and aeroponics, by which plants grow without soil, could tip the balance and ensure greater food security over the coming decades.



**“Food brings India and Indonesia closer as it is intrinsic to our historical and cultural similarities. Consumption of animal proteins like Poultry, Aqua and Dairy help provide good nutrition to both its citizens. India and Indonesia are continuously learning and collaborating with each other while playing an active part in helping achieve the sustainability goal of Zero Hunger in Emerging Asia.”**



**Prasad Chittaranjan Wagh**  
Managing Director  
Japfa Comfeed



The Allana Group established its operations in the year 1865 and today is recognized as India's leading manufacturer and exporter of high quality processed food products. The Allana Group which celebrated 150 years of excellence in 2015, pioneered the processing and export of frozen Halal Buffalo meat from India in the year 1969.

During the previous 52 years, India has built a solid reputation of being a reliable exporter of risk-free, nutritious and competitively priced frozen meat to over 70 countries. Allana accounts for over 40% market share consistently.

The main markets for frozen Buffalo meat are South East Asia (including Philippines, Malaysia and Indonesia), East Asia (including Vietnam, Cambodia and Hong Kong), the Middle East (GCC countries, Iran, Lebanon, Jordan), North Africa (Egypt, Tunisia, Algeria), West Africa (Senegal, Ivory Coast) and CIS countries (Armenia, Georgia, Azerbaijan) besides countries like Mauritius, Seychelles and Comoros.

Exports of Indian meat has been rapidly growing; the meat is lean, nutritious and competitively priced. Besides Buffalo meat has been tested by USDA to contain 40% less cholesterol (v/s. beef), 55% less calories, 10% more proteins, minerals and more vitamins than beef. In many countries, including Egypt, Jordan, Philippines and some CIS countries, Indian Buffalo meat is reckoned to ideally suit and hence preferred over all other meats for the manufacture of value added, meat based processed products like hamburgers, sausages and a range of canned meat.

India, having the second largest Muslim population in the world and 46 years experience in supply of Halal meat, is the leading supplier of Halal meat to Islamic countries. 100% of the meat exported from India is prepared strictly in compliance with Islamic requirements and is genuinely Halal. Internationally reputed and accredited, independent bodies monitor the abattoir operations and certify the Halal status of Indian meat. Production of deboned, deglanded frozen Buffalo meat for export from India is a very regulated industry under the compulsory licensing of Agricultural & Processed Food Products Export Development Authority (APEDA), Ministry of Commerce (MoC), Government of India (GOI) that sets strict standards besides using its organizational infrastructure to ensure compliance of prescribed standards. APEDA constitutes a multi disciplinary expert panel for annual inspection of each export oriented abattoir.

World class, State-of-the-art, integrated establishments incorporating mechanized abattoirs, which have been constructed are operated in accordance with the Codex Alimentarius Standards/OIE Zoo Sanitary Code directions, besides having HACCP and ISO accreditations. The plants operate in an environment-friendly manner since they are equipped with automatic by-product rendering plants and effluent treatment plants. Hides for the leather industry are major co-product. India is blessed with the world's largest bovine population, which includes 108 million buffaloes. The pursuance of sound Veterinary and Animal Husbandry practices has contributed to India having the world's largest population of bovine animals. All livestock are reared naturally in small manageable herds and exclusively fed on natural pastures and agricultural crop residues.

**“There is a great potential for increase in trade between the two friendly nations once the undue restrictions and unjustified trade barriers are lifted. The possibility of signing of an FTA between the two countries can greatly assist in facilitation and growth of trade. We are highly optimistic that the relations between India and Indonesia shall continue to flourish and reach new heights in the coming years.”**



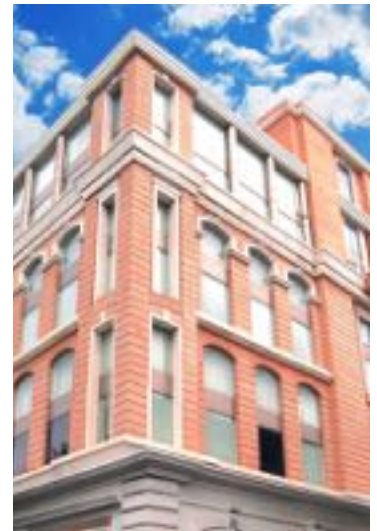
**Afzal Aziz**  
President,  
Allanasons Pvt. Ltd.





There is no practice of administering hormones or growth promoters to livestock in India. India is free from the dreaded Mad Cow Disease (BSE) and also from various livestock related diseases like Rinderpest, Contagious Bovine Pleuro Pneumonia (CBPP) since long.

Allanasons has set up a number of processing lines to process and export a range of frozen/aseptic tropical fruit puree/concentrate, including mango and guava. It also processes a range of frozen vegetable products. These facilities in North, South and West India, utilize the fresh, regional raw material cultivated in close coordination with the farmers, to ensure the right farm and product practices are consistently maintained and traceability is ensured. Allanasons remains the largest exporter of coffee from India and has its curing/manufacturing facilities right within the coffee cultivation region in South India. It focuses on exports primarily to Italy and France amongst several countries.



The Allana Group are the country's leading manufacturers, processors and distributors of branded and value added edible oil products, including hydrogenated vegetable fat (ghee), shortening, margarine and variety of refined cooking oils. The Group has received numerous awards including the Government of India's coveted APEDA Diamond Trophy for highest Export Performance for the last 25 years and for its Excellent Performance in Export Promotion, Product Development, Market Development, R&D and Quality. Allanasons in its role as a responsible Corporate citizen, actively addresses a range of social causes, including basic education, higher education and public health.













# 11

## Healthcare & Pharma





# Exponential Growth of Healthcare

The time is ripe for collaborations between India and Indonesia in the healthcare segment.

India and Indonesia are working towards improving their respective GDPs as they propel themselves forward through a tough scenario with rapidly changing dynamics in the wake of the pandemic. India hopes to attain an economy of US\$ 5 trillion in the not-so-distant future. Blessed by the demographic dividend of their youthful populations, the governments realize that this can only be achieved if the workforce remains healthy. In Indonesia, estimates reveal that productivity loss to disease is close to 30 percent of GDP annually. More than US\$ 201 billion worth of economic output, nearly 19 percent of GDP, is lost annually owing to low productivity levels that have resulted from non-communicable diseases, such as heart failure, respiratory problems, and cancer. In India, eight percent of output is lost to non-communicable diseases. Both countries lose over 25 percent more than the OECD mean.

India and Indonesia are focussed on ramping up government spending on healthcare. In India, the per capita spend on healthcare has doubled in the past five years to nearly US\$ 28. In comparison with other countries worldwide, India has the lowest public healthcare budget, with the public healthcare system in the country getting a mere 1.26% of the total GDP. Indonesia has made a conscious effort to increase its per capita spend to nearly US\$ 120 in the past few years and its percentage spend to GDP is at nearly 3%.

## Current Status

India and Indonesia are nearly on par in almost all known rankings and indices on healthcare. Both countries faring somewhere in the middle of the list of all countries that were ranked. At first glance, the healthcare system in India and Indonesia will appear quite similarly placed. A slightly deeper dive reveals differences that both countries can use to learn from each other's experiences. India's investment in technical training has placed it on the world map when it comes to the number and quality of its physicians and made it a hub for medical tourism. During the pandemic, the fact that fifteen of the top twenty epidemiologists in the world were of Indian origin was a telling reflection of this prowess.

Other obvious differences are in the state of the medical tourism industry and the pharma sector. In Indonesia, patients prefer to travel overseas for treatment. The direct cost of such medical tourism has grown at an annual rate of over 10 percent since 2006 and is now nearly US\$ 1.9 billion a year. When indirect spending is included, the annual cost is nearly US\$ 4 billion. There is a shortage of health infrastructure, both physical infrastructure and medical talent. Indonesia still has a severe talent shortage: it needs 15 times its current number of doctors to meet OECD standards. The gap between supply and demand is estimated to be equivalent to an annual \$68 billion of unaddressed healthcare needs. There is also a shortage of physical healthcare centres despite a recent increase in hospital building. In contrast, medical tourism is a growing sector in India. In mid-2020, India's medical tourism sector was estimated to be worth US\$ 5-6 billion. In 2019, around 700,000 patients visited India to seek medical care.

The challenges in India are no less acute. A serious drawback of India's health services is the neglect of the rural masses. It is largely a service based on urban hospitals. Although there are a large number of Primary Health Centres and rural hospitals, the urban bias is visible. According to health information, 31.5% of hospitals and 16% hospital beds are situated in rural areas where 75% of total

**"India and Indonesia are trying to solve very similar problems of being able to provide effective public health solutions to very large populations that are spread out widely across urban and rural areas. There are many learnings from the way healthcare is being delivered in both countries, especially about what works and what doesn't. We at Siloam Hospitals have also benefited from interactions with hospital groups in India and nearby countries. I believe that with collaborations and sharing of best practices, the healthcare industry in both nations will be able to accelerate its response to the challenging healthcare paradigm that we will continue to face over the next few decades."**



**James T. Riady**  
Deputy Chairman  
Lippo Group

population resides. Moreover, the doctors are unwilling to serve in rural areas. Instead of evolving a health system dependent on paramedical (like bare-foot doctors in China) to strengthen the periphery, India has evolved one dependent on doctors giving it a top-heavy character.

Indonesia has had much better success in providing Universal Healthcare to all under its ambitious BPJS (Badan Pelaksana Jaminan Sosial - Social Security Agency) program. Nearly 80% of the Indonesian population of 260 million are now covered, up from around half when the program was launched in 2014. The program provides free healthcare to all for a range of services.

### **Alternative Medicine**

India is a hub for alternative medicine systems like Ayurveda, Yoga, Naturopathy, Unani, Siddha, and Homeopathy (AYUSH). The main reason for the surge in demand for AYUSH and alternative medicine in India is the rising consumer awareness about the long- and short-term side effects of using chemical products. AYUSH and alternative medicine products are natural and comparatively safe. They also cost less than synthetic products. India has a vast reservoir of natural flora and fauna, along with ancient texts and knowledge, which have made it an authority in the field of AYUSH. Today, India is one of the world's top exporters of alternative medicines to United States and European countries, like Germany and France. The Government of India has a dedicated ministry for AYUSH and has used it as a prominent strategy in the fight against the pandemic. While the quality of modern medicine in Indonesia has improved drastically over the years, a major challenge in the healthcare domain in the country today is accessing low-cost medicines. A majority of locals are still heavily dependent and keen on using traditional or unconventional healing methods in conjunction with Western medicine to recover from illnesses. Handed down through generations, some of these methods are believed to significantly improve health conditions and treat a variety of illnesses, from the simple common cold to more complicated ones, such as high blood pressure.

In Indonesia, the popular alternatives are Jamu, Kerok, Urut, Dukun, and Tolak Angin among others. Like other regional countries, Indonesia possesses its own tradition of indigenous medicine, commonly known as Jamu, involving the use of herbal medicines. According to the National Socioeconomic Survey (SUSENAS), more than a third of those who opted for self-medication use traditional or alternative medicines, such as Jamu. The MoH recognizes the roles of traditional and alternative medicine, and in order to protect consumers and improve the quality of services, it requires traditional/alternative practitioners to register with health authorities. Registration is provided on the basis of an official assessment, which emphasizes the protection of patients' health. An exception applies for acupuncture, which requires a certification of competency from its professional association. The MoH had registered more than 280,000 traditional or alternative medicine practitioners by 2013 alone.

### **Pharmaceuticals**

A couple of years ago, in partnership with Pharmaceuticals Export Promotion Council of India (Pharmexcil) & Indonesian Chamber of Commerce & Industry (KADIN), the 1st India Indonesia Pharmaceutical and Health Industry Forum was hosted by the Embassy of India at Hotel Westin. A 19-member business delegation from Pharmexcil representing various streams of drugs and pharmaceuticals, including Homeopathy, Ayurveda and herbal medicines participated in the 1st IIPHIF.

The pharmaceutical sector has been identified as an important area of bilateral economic cooperation. An MOU on Health Cooperation was finalized between the two countries during the visit of the Prime Minister of India to Jakarta in May 2018 and was aimed at strengthening collaboration in Research and Development,

**With its relative affinity to Ayurveda in some ways, Jamu traditions in Indonesia can lean on the more established science and pharmacopia of Ayurveda for a regular and sustained engagement so that the two rich traditions can identify common areas of convergences, adopt best practices and intensify common research. As the world gropes in darkness amid pandemic and epidemic times, their collaborative engagement assumes immediate criticality. It is time that both these alternative systems step up their research activities and come up with solutions and in the process enrich their respective traditions.**



**Raghu Gururaj**  
Ambassador of India to  
São Tomé and Príncipe

Active Pharmaceutical Ingredients (APIs), and IT-based medical equipment. Both countries also signed another MoU between the Central Drugs Standard Control Organization and BPOM, which aims to boost cooperation in regulatory functions related to pharmaceuticals, biological products, and cosmetics; this is expected to further augment trade in these areas.

In Indonesia's US\$ 5 billion pharmaceutical market, 178 domestic companies dominate the scenario, four are state-owned and 24 are multinational players. India's Hetero Pharma was one of the earliest players to enter the Indonesian formulation market along with a local partner. With the biopharmaceuticals industry in Indonesia still in a nascent stage and trade in high-tech and biotech products related to serious diseases, such as cancer, blood-related disorders and others, APIs have the potential to enhance India's trade with Indonesia. The government's measures have attracted the attention of Indian companies; this was evident from a few healthcare conferences held recently. The fillip provided by the government could prove to be game changing. Overall investments from India in Indonesia are also on the rise. According to the Indian Government, there are about 30 Indian investment or joint venture projects in Indonesia.

Indian pharmaceutical companies have invested US\$ 135 million for medicinal raw materials production in Indonesia. The agreement was inked after President Joko Widodo met 20 chief executives of Indian pharmaceutical companies.

In Indonesia, more than 90 percent of drug ingredients are imported, mainly from India and China, which makes local producers vulnerable to risks, such as foreign exchange fluctuations. The local demand for medicines, on the other hand, has seen an upsurge due to the government's health insurance program, which has significantly broadened access to healthcare.

Collaboration in the pharmaceutical sector has been on an upswing. The Indian company Macleods has set up a HIV drugs manufacturing facility in Semarang in a JV with an Indonesian company, PT Sampharindo, with a total investment of US\$ 3.4 million. In healthcare, NephroPlus, an Indian company, has tied up with Hermina Group of Hospitals, for setting up dialysis centres in 80 hospitals. These are encouraging signs, and the future is bright with both governments focussing on the ease of doing business. The common healthcare challenges, similar demographics, and push towards greater liberalization provide the ideal environment for the two countries to collaborate in this sector.

## THE NEXT STEP

The Indonesian Government is enabling more flexibility in healthcare rules by relaxing norms. This has removed the barriers to entry for companies, including from India, paving the way for their entry into the country's pharmaceutical market. The registration process for medicines marketed in Indonesia has been made easier, and Indonesia offers greater flexibility for foreign players looking to invest in the API sector and is also planning to allow 100 percent foreign direct investment (FDI) for foreign firms to set up formulation plants in the country with local partners. Indian pharma companies can seize this opportunity with their technology, knowledge, and expertise to establish formulation plants and APIs manufacturing facilities to minimize Indonesia's dependence on imported APIs.

The domain of alternative medicine also holds huge promise in the future. This is an area where the two countries can actively partner as they need to supplement their efforts on healthcare and focus on preventive healthcare. Alternatives within their rich traditional medicine heritage based on herbs and other products could be possible solutions for various diseases or conditions.

**“The healthcare sector in Indonesia as a whole can learn and leverage ‘service funding and delivery models’ to create affordable and accessible services from the many successful, efficient and effective models, both in the public and private sector in India.”**



**Dr. Gershu Paul**  
Healthcare Leader & CEO  
Pun Hliang Hospitals







# 12

## Infrastructure



# Springboarding Infrastructure Growth

As new concepts in infrastructure emerge, experience, innovation and cost efficiency become the deciding factors for partnerships.

Prime Minister Narendra Modi and President Joko Widodo are visionary leaders who have outlined broad and ambitious infrastructure development plans for their respective nations. Both leaders have the same vision, to ensure their economies run at full throttle over the next three decades and find a place amongst the top 10 economies in the world and to bring economic progress to the most under-developed regions of their countries. To accomplish their visions, both leaders understand that developing new infrastructure holds the key to success and development. India and Indonesia are huge countries with extensive territories. In order to create a nationally integrated transportation network, the two countries have boosted spend on infrastructure projects in their budgets. The challenges facing them are, however, different given that India is a large continuous landmass but Indonesia is comprised of 17,000 islands.

## INDIA

The infrastructure sector is vital for boosting India's economic growth. The infrastructure sector has become the biggest and main focus for India. The Government of India plans to spend US\$ 1.4 trillion on infrastructure development for the period 2019 - 2023. The Government had allocated a budget of Rs 5,000,000 crore (US\$ 750 billion) for railways infrastructure from 2018-2030.

In the National Budget 2021, the government has apportioned Rs 233,083 crore (US\$ 32.02 billion) to speed up transport infrastructure development. India had declared the 'National Infrastructure Pipeline (NIP)' for 7,400 projects. By 2020, 217 projects (worth US\$ 15.09 billion) were completed. Land transportation (railways and highways) was given the largest chunk among infrastructure projects, around 60%. In 2021, Indian railways received Rs 1,10,055 crore (US\$ 15.09 billion), of which Rs 1,07,100 crore (US\$ 14.69 billion) is for capital expenditure. And Rs 1,18,101 crore (US\$ 16.20 billion) has been allocated to the road transport and highways sector.



**“Indonesia’s rich natural resources combined with investment friendly regulations has set the stage for a new era of dynamic growth opportunities and mutually beneficial relationship between India and Indonesia in Minerals, Energy and Infrastructure. The unique landscape of the archipelago combined with its vast potential gives ample opportunities for the development of Ports, Railways & Airports, which will help unlock the interiors and propel growth. This will also bring about a surge in the power requirement and the energy sector.”**



**Uday Kumar**  
President Director  
PT Adani Global



## INDONESIA

Indonesia's infrastructure is still far from world-class levels. Ideally, infrastructure stocks should be in the range of 70% of the Gross Domestic Product (GDP). Infrastructure stock is infrastructure that has been built and is in operation. Indonesia's infrastructure stock is only 43% of Gross Domestic Product. Meanwhile, China and India have infrastructure stocks of 76% and 57% of GDP, respectively. Therefore, President Joko Widodo still prioritizes infrastructure development in the second term of his administration. During his second term, President Joko Widodo aims to increase the stock of infrastructure in Indonesia to 50%.

Data from Bappenas reveals that funding for national infrastructure development for the next five years will be IDR 6.445 trillion. Sources of funds from the private sector amounted to IDR 2.707 trillion or 42%. Meanwhile, the source of funding from the central and regional governments is around IDR 2.385 trillion or around 37% and the source of funds from state-owned enterprises is only 21% or IDR 1.353 trillion. The government is committed to involving the private sector in infrastructure development for the 2020-2024 period. During the 2015-2019 period, infrastructure funding was IDR 4,796 trillion with the largest source of funding coming from the government. In the coming years, the government will focus more on basic service infrastructure. Public private partnerships (PPPs) which entail government cooperation with business entities drives the economy. The government will provide facilities for the private sector to invest in infrastructure development. To achieve the 50% infrastructure stock target, the government has five priority development programs for the 2020-2024 period, namely the development of basic services infrastructure, strengthening connectivity, urban infrastructure development, energy and electricity, and digital transformation.

## THE NEXT STEP

In March 2018, both nations formed the Indonesia-India Infrastructure Forum as a platform to uncover investment opportunities in the infrastructure sector. The Forum is held each year and attended by senior government officials, CEOs of construction companies, both private and state-owned as well as industry players.

Indonesian companies, such as state-owned energy company Pertamina, airport operator Angkasa Pura, construction company Adhi Karya and Jasa Marga are all actively involved in bidding for infrastructure projects in India. From the Indian side, companies, such as GMR, GVK, BHEL, Adani, Larsen & Toubro, Tata Power, Tech Mahindra, and WAPCOS are keen to participate in Indonesia's massive infrastructure program. At the 2019 IIIF, a number of collaborative infrastructure projects were offered to Indian companies, including the construction of a transit port in Sabang, Aceh. As both nations continue to invest heavily in infrastructure projects, such as toll roads, power plants, ports, and airports, opportunities for collaboration will abound. Beyond just individual projects, both sides are well placed to rethink how their economies are intergrated, especially in the post-Covid-19 landscape. As global supply chains are disrupted, infrastructure supply chains are evolving which will impact manufacturing networks as well as trade networks.

Digital infrastructure is another area where there is currently very little exchange of ideas between Indonesia and India. Developing high-speed 5G networks will be crucial for economic competitiveness in the future as technologies, such as Big Data, Internet-of-Things and Artificial Intelligence will require data centers and connectivity.

Both Jakarta and Delhi have announced their ambitious plans to develop smart cities with hyper-connected infrastructure. Rather than import the technology, there is a huge opportunity to collaborate on developing digital infratsructure that meets the particular needs of both nations.



Indicators	India	Indonesia	Cooperation in Infrastructure Projects
Area	3.287 million km <sup>2</sup>	1.905 million km <sup>2</sup>	PT Adhi Karya Tbk. is working on a 100 kilometer double-lane rail project owned by Rail Vikas Nigam Limited in Orissa, India.
Population	1.399 million	275 million	
GDP	US\$ 2.7 trillion	US\$ 1.1 trillion	Indra Karya and WAPCOS Limited are working on a construction project - the Wadaslintang irrigation system in Kebumen, Central Java.
Per Capita Income	US\$ 2,100	US\$ 4,145	
Growth 2017	7.04%	5.07%	Indra Karya and WAPCOS worked on projects in Bangladesh, Ghana, Nepal, and Papua New Guinea.
Growth 2018	6.12%	5.17%	
Growth 2019	4.18%	5.02%	Feedback Infra and GVK Services, two PMA companies from India are engaged in the infrastructure sector in Indonesia.



**S. D. Darmono**  
Founder & Chairman  
Jababeka Group

**“India has actually got advanced technology, but not many people in Indonesia or the rest of the world know about this. It is a fact that the largest and the most beautiful Buddhist and Hindu temples are not in India but in Java, in the cities of Yogyakarta and Magelang. The Borobudur temple and Prambanan temple were made possible due to the involvement of India during that period of time and the architecture and construction technology made it a very good showcase of how good Indian technology was back then. So, with the same token I believe that if Jababeka Group is to proceed with the vision of developing 100 cities, at least 1 city can be in collaboration with high-tech Indian companies. This will showcase to the world the fact that India continues to be very advanced in technology. People will visit Indonesia because of its beauty and very friendly environment. It is the best place to actually demonstrate India’s advanced technology and I believe this will be a very strong collaboration between India and Indonesia.”**



**Raj Kannan**  
Partner  
Deloitte Consulting SEA

**“India and Indonesia – the future is digitisation and innovation, especially for smart cities. India has been a pioneer for smart cities development with its program for 100 smart cities. The New Town in Kolkata is an impressive paradigm for smart cities and Deloitte Consulting is drawing on the Indian Smart Cities expertise to support the growing demand for building smart cities in Indonesia, anchored around the Trans Sumatra Highway and the planned new capital city in East Kalimantan. The growing collaboration between the Indian Smart Cities experts, working closely with our Indonesian Smart Cities experts is an excellent way to manifest the mutually beneficial collaborations of Indonesia and India on a common theme, geared to improving the standard of living of both citizens of these great Nations.”**





# 13

## Music Industry

# An Opportunity to Align Culture and Technology

Heavy digitalization of this sector opens up completely new opportunities in composing, collaborating, distributing and monetizing.

With its timeless appeal across all generations, the music industry has seen disruptive changes in technology, opening up new prospects for collaboration. The combination of Indonesia's widespread musical talent and India's global position as an advanced software technology developer will unleash economic opportunities to transform this sector in both nations.

India and Indonesia have had vibrant music scenes from time immemorial. Both nations have served as crucibles for a variety of traditional and contemporary genres and music festivals for decades at the very least. While India and Indonesia are known for their own unique styles of traditional music, contemporary genres like Bollywood music (which has Indian pop as its parent genre), jazz, hard rock, heavy metal, and a variety of other rock subgenres seem to have secured a firm foothold in both countries. Since the Internet kicked into gear, the music industry all over the world has learnt that sharing a common belief in adapting to the changes in culture, technology, and the market is the way to stay relevant today. With the entertainment industry in general affected by the pandemic, live music and touring have been put on hold. Musicians are now relying on digital alternatives to reach their audiences.

## INDIA

When people think of Indian music, they first think of Bollywood—the glamour, dances, and the movies, which span over three hours. Besides A.R. Rahman, Bollywood also witnessed the rise of artists and singers like Shankar Mahadevan and his group Shankar-Ehsaan-Loy, Pritam, Arijit Singh, Sonu Nigam, Shreya Ghoshal, and a multitude of others. India has large recording label companies, such as Saregama India Ltd. (HMV), Universal Music (India), Tips Industries Limited, Sony Music Entertainment (India), Virgin Records, Magnasound, Aditya Music, Times Music, Zee Music Company, and T-Series, which represent 75% of legal sales. The Indian music industry is largely dominated by Indian film soundtracks, which account for nearly 80% of the country's music revenue, followed by Indi-pop.

More than 300 million Indians use music streaming services, such as YouTube, Hungama, Gaana, and Saavn. T-Series is the world's most subscribed (182M users) and most-viewed YouTube channel (153,865,019,564 views). Social media has given rise to a generation of Internet music stars, particularly on YouTube. Thanks to the Internet, bands can now target audiences from different countries, not restricting themselves to the Indian market. Several bands have managed to secure deals with record labels, promoters, and touring agents, thus making their dream of touring internationally a reality. Agam (Carnatic progressive rock), Kryptos (heavy metal), and Skyharbor, (Indian/American progressive metal band) are three of the many Indian acts that have set foot abroad. India holds festivals that cater to all kinds of music lovers. Some of its most well-known music festivals include NH7 Weekender (held in Pune, Bangalore, Kolkata, Hyderabad, Shillong, and Delhi), Control ALT Delete (Mumbai), Bangalore Open Air, and Hornbill Festival (Kohima and Dimapur). In 2012, Amores, a group comprising four Indonesian musicians, performed in Kochi, India. Hailing from North Sumatra and settled in Jakarta, these Batak singers have travelled extensively, covering countries, such as Malaysia, Singapore, Australia, Africa, and Germany for performances, and their repertoire has a curious mix of

**“When I was in Indonesia, I got a chance to check out the music scene there. There is so much talent in Jazz and contemporary music there alongside the highly acclaimed classical/gamelan traditions for which Indonesia is so well known. Having a yearly India-Indonesia music festival will really help to build bridges and create a fine musical dialog.”**



**Prasanna**  
Guitarist, Composer &  
Educator



Indonesian, Latin, Spanish, Chinese, French, English, Dutch, Korean, and now, Hindi songs. Another Indonesian group from Jakarta, L'Alphalpha, a band that incorporates a combination of indie rock, indie pop, and post rock among other styles into their sound, made an appearance at the Asian Music Festival in Delhi in 2017.

## INDONESIA

The music industry in Indonesia is fairly advanced, both for recorded as well as live performances. It is among the fastest growing of the 16 creative economy sectors in Indonesia and employs around 56,000 workers. More than 50% of workers in the music industry in Indonesia use the Internet, particularly e-commerce, as instruments to scale up their production and expand their market presence. The size of the market has made Indonesia popular among digital platforms, such as Spotify, which are trying to gain market share and capitalize on the growth of streaming.

Asosiasi Industri Rekaman Indonesia (ASIRI) is a trust that represents the recording industry's interests in Indonesia. It has 84 member labels, which distribute around 95% of the music sold in Indonesia. Music labels, such as Sony BMG, Musica, and Warner, have promoted musicians of all genres. In an out-of-the-box approach, a major franchise chain has launched a music label that sells CDs at the checkout counter of KFC outlets. Jakarta is the live music capital of ASEAN with over 400 live venues in the city and an estimated 5,000 across the nation, providing income for amateur and professional musicians.

Jakarta International Java Jazz Festival, one of the largest jazz festivals on the planet, has hosted 125 groups and 1405 artists since its inception in 2005. In 2009, an independent collaboration with the festival, named "Sounds of India" featured many famous bands and musicians, such as Dhruv Ghanekar, Prasanna, Adrian D'Souza, Ranjit Barot, Karl Peters, Karthik Mani, Mili Nair, Prakash Sontakke, Bruce Lee Mani of Thermal and a Quarter (TAAQ), and youth band Something Relevant. In 2020, famed Indian bass guitarist Mohini Dey performed live at the festival. Indonesia also has a thriving rock and metal scene and has hosted legendary acts like Metallica and Megadeth. The Java Rockin' Land Festival in 2009 featured Motherjane from Kerala, India. India Club over the years has featured several Indian musicians, such as the classical greats Hariprasad Chaurasia, Ustad Amjad Ali Khan, Shivkumar Sharma, Zakir Hussain, Ronu Majumdar, as well as the pop sensations Shankar Mahadevan, Sonu Nigam, Hariharan, Kavita Krishnamurthy, Bombay Jayashree, Harshdeep Kaur, Usha Uthup, Kailash Kher, and the group Indian Ocean.

The very popular Indonesian Dangdut music is heavily influenced by Indian music and is immensely popular for dancing and incorporates elements of Indian and Malaysian film music. Gilang Ramadhan, a celebrity musician hailing from Bandung, West Java, is one of the best-known international musicians from Indonesia. Primarily a jazz musician, Gilang describes his drumming style with a term he coined called 'Rhythm Sawah,' where Sawah refers to rice fields. His style is influenced by that of all 34 provinces in Indonesia. Inspired by Indian percussionist Trilok Gurtu, he aims to take Indonesian music to the world and make it mainstream. To promote Indian culture in Indonesia, the Jawaharlal Nehru Indian Cultural Centre was established in Jakarta in 1989, featuring a library and providing lessons on Indian culture, as well as promoting arts, such as Indian music, yoga, and dance.

## THE NEXT STEP

### Music Publishing Collaborations

Music is essentially born of culture. Within India and Indonesia, two large countries that have a rich heritage of culture and tradition, lies a wealth of opportunity to compose modern music that will appeal to the young generations to come. Curating music has always been a difficult task, but this is what many new platforms are exploring, such as Coke Studio and Music Mojo. Film music and folk music have

**"With India's software capabilities, there are huge opportunities to work together to build digital platforms that are unique to Indonesia's music industry. Revenue opportunities are the need of the hour, with the ongoing disruption of the live music industry."**



**Gumilang Ramadhan**  
Managing Director  
Musica Studios

**"The digital age offers a ton of advantages including the ease of learning, composing, producing and promoting music from your bedroom. The idea is to use this infinite access, staying truly honest and being prolific as an artist endlessly."**



**Bann Chakraborty**  
Music Composer &  
Producer

now embraced technology and collaborations in newer ways. Technology has irreversibly democratized the industry and speeded up the way people view and consume content.

Thanks to technology, budding musicians and artists from across the globe can create, record, produce, and release music from their bedrooms, a luxury that artists did not have back in the day. Besides the ability to create and release music on the fly, bands and artists no longer have to deal with gatekeepers like record labels as they make inroads into the global market.

### Music Festivals & Tours

With the impact of Covid-19, bands are increasingly gravitating towards new digital options. They are focusing on making music that they like, and do it consistently until they get a chance to go live and tour at some point in the future. Famous musicians in India undertake tours all over the world but rarely include Indonesia as a concert tour destination. Java Jazz Festival, We The Fest, and Djakarta Warehouse Project are three large festivals that can offer opportunities to bring the two nations together. In India too, there are many opportunities to feature Indonesian bands and musicians, many of whom are global celebrities in their own right. Small-and medium-scale live tours are also becoming opportunities for connecting to curated audiences that are connected closely with music schools and musician communities.

### Music Technology

India has become the world's back office for software and digital technology development. Due to the intensified startup eco-system, many young inventors and entrepreneurs have started to focus on development of digital marketplaces and platforms. Access to low cost and highly scalable technology will allow Indonesian startups and entrepreneurs to come up with sustainable and localized business models. For emerging talent, working with the established music industry could become easier with new technology platforms. The monetization challenges are continuously being addressed by the combined brain power of the those who have been in this industry for decades and the young inventors who are seeking new ways to disrupt a well-entrenched market that many have felt has been unfairly tilted towards established musicians and corporate players.

### Music Education

The music education business has provided alternative employment to both semi-professional and professional musicians. The global pandemic has opened up opportunities to provide digital training across borders. In India, the rock band TAAQ has a well-established music academy that has proven to be a continuous source of revenue for the band and all the instructors they work with. Prasanna, a legendary Indian guitarist who lectures at Berklee College of Music and Harvard University set up the Swarnabhoomi Academy of Music (SAM) in Chennai, India. It is the first recognized music college in India and opens up opportunities to train musicians with new skills that are needed with the fast-developing digital revolution.

In Indonesia, Gilang Ramadhan's GR Drum School teaches more than twenty thousand students in over twenty drum schools across the country. He is exploring ways to integrate them into the upcoming music industry. Farabi Music Education Center was founded in 2001 by Indonesian musician and cultural icon Dwiki Dharmawan and has evolved to reflect the state-of-the-art of music and the music business. With more than a dozen performances and nonperformance majors, a diverse and talented student body representing all of Indonesia's 34 provinces, they are preparing to be Indonesia's premier learning lab for the music of today and tomorrow.

**“Running a music school business over the years has helped to make it ready for digital delivery. This has helped give us and all our musician instructors a steady source of income, and that has given us the freedom to focus on making only the kind of music that we like. Thankfully, TAAQ has not had to stray from our chosen genre and values.”**



**Bruce Lee Mani**  
Guitarist & Educator



# 14

## Renewable Energy



# Growing Together in Renewable Energy

Indonesia and India rev up renewable energy initiatives to ensure a greener future.

It is widely believed that renewable energy could power the world by the year 2050. In the next 30 years, there is a strong chance to make a transition into a fully sustainable global energy eco-system.

In the wake of depleting fossil fuel reserves and rising greenhouse gas (GHG) emissions, there is a pressing need to transition to renewable energy sources and engender a cleaner energy mix. This would also help mitigate climate change, create a sustainable energy system, and eventually pave the way to a cleaner economy. Both India and Indonesia are reinvigorating their renewable energy programmes and deploying low-carbon, energy-efficient technologies to leapfrog their way to a sustainable, greener world for future generations. The depletion of resources and biodiversity loss are long-brewing issues faced by both countries. India is poised to attain its target of reducing 35% emissions intensity of its GDP well before 2030. Indonesia is aiming to attain 23% of renewables share in the primary energy mix by 2025 and 31% by 2050.

The engine of economic growth in the industrial sector is driven by electricity. Thus, any economic growth will be preceded by a growing demand for electricity. Currently, most of the power plants in various countries in the world still use fossil fuels, such as oil, gas, or coal, which are a source of CO<sub>2</sub> gas emissions. At the same time, the world is faced with the phenomena of climate change and global warming due to the destruction of the ozone layer. The ozone depletion is triggered by massive CO<sub>2</sub> emissions; this has led to a collective agreement to reduce CO<sub>2</sub> emissions. The most significant implementation is to generate electricity not with fossil fuels, but with renewable energy. In Asia, one of the countries that is quite aggressive in developing renewable energy plants is India. Renewable forms of energy (especially solar and wind) could enhance India's energy security and represent a bright spot in its economic and environmental future. If India switched from coal, oil, natural gas, and nuclear power plants, it is possible that 70 percent of the electricity and 35 percent of its total energy could be derived from renewable resources by 2030.

## INDIA

India is moving towards 100% Renewable Energy by 2050. The Indian subcontinent is blessed with abundant renewable energy resources. Even if a tenth of its potential was utilized, it could mark the end of India's power problems. Using the country's deserts and farm land, India could easily install around 1,000 GW of solar capacity, which is equivalent to around four times the current peak power demand (India's present generation capacity is about 210 GW). As for wind, according to the environmental group, World Wide Fund for Nature (WWF), while India has no estimates of its offshore wind potential, up to 170 GW could be installed by 2050 along the 7,500 km of coastline. Hydropower could generate an estimated 148 GW, geothermal power around 10.7 GW, and tidal power about 15 GW. If these abundantly available resources were properly developed and utilized, all of India's new energy production could be derived from renewable energy sources by 2030. In addition, all existing generation could be converted to renewable energy by 2050 while maintaining a reliable power supply in the interim. Barriers to implementing the renewable energy plan are seen to be primarily social and political, not technological or economic.





## INDONESIA

As of September 2020, the total electricity supply capacity had reached 63.3 Gigawatts (GW). With an average annual growth in electricity demand of 6%, there has been a mix of increasing supply capacity per year. On November 2, 2015 in Jakarta, Indian Vice President Mohammad Hamid Ansari and Vice President Jusuf Kalla signed a document on cooperation between India and Indonesia in the field of new and renewable energy. The goal is to reduce carbon emissions by 35% in India and 29% in Indonesia by 2030. In this collaboration, Indonesian human resources will learn a lot from India, which has more experience. Today, the Directorate General of EBTKE (Renewable Energy), Center for ESDM Data and Information and the Secretary General of the National Energy Council published, in 2020, the share of the renewable energy mix reached 11.51% of the target of 13.4%. Although not in line with the target, this shows a positive increase in the achievement of the renewable energy portion, compared to 2019 figures, which was 9.2%. Annual achievements increase for the renewable energy sub-sector in the mixed portion is 2.36%. This figure is still good enough to reach 23% by 2030. The capacity of renewable energy power plants in 2020 was expected to reach 10,467 MW from the 2019 figure of 10,291 MW. Additional NRE power plants include 66 MW PLTA (Water) Poso, 3.5 MW PLTBm (Biomass) Merauke, 12.1 MW PLTMG (Micro hydro) Sion, and 13.4 MW Rooftop PLTS (Solar).

The prognosis for the realization of investment in the renewable energy sub-sector in 2020 was recorded at US\$ 1.36 billion, most of which is contributed by investments in the geothermal and hydropower fields. The addition of renewable energy power plants in Indonesia has reduced CO<sub>2</sub> emissions by 64.4 million tons, from the target of 58.0 million tons. The reduction in CO<sub>2</sub> emissions was achieved through the use of renewable energy of 53%, the application of energy efficiency of 20%, the use of low-carbon fossil fuels of 13%, the use of 9% of clean generation technology and 4% of post-mining reclamation activities.

### THE NEXT STEP

The two cleanest sources of energy production in the world will be solar power and wind energy. Indonesia is blessed with both due to its tropical location, enjoying 2,975 hours of sunlight in a year, with a daily average of 8:08 hours. Of this, 67.9% are sunny daylight hours, remaining 32.1% is likely cloudy or with shade, haze or low sun intensity. Indonesia enjoys moderate winds that are usually predictable. Monsoons usually blow in from the south and east from June through September and from the Northwest from December through March. There are low occurrences of typhoons and large-scale storms across both land and sea.

### Rooftop Solar Going Retail

India's headstart in developing solar energy provides an enormous opportunity for Indian energy companies to invest in Indonesia. For example, rooftop solar panels for industrial and residential buildings provide short-term targets while longer term objectives could include developing floating solar panels.

According to a recent report by McKinsey & Co, Indonesia has only tapped about 2% of the combined potential in renewable energy sources and only 12% of its electricity from renewables. Given the upsurge in demand for electricity by a rapidly growing middle class, the future for renewables, especially solar power is bright. It is estimated that by 2050, solar power can meet 80% of the energy demand with the help of cost-efficient advanced battery technology and other new storage technologies, which will be required to overcome the intermittent nature of solar and wind availability.





### **Renewables Super Grid**

The idea of building a renewables super grid connecting different regions of Indonesia may seem to be a utopian concept; however, the feasibility of this is becoming more realistic by the day. By dividing the regions into finite interconnected sub-regions, based on population, energy demand, area and electricity grid structure, there is an opportunity to significantly optimize storage requirements and the overall cost of the energy system. It is possible to replace fossil fuels with wind and solar power in the next 10 to 15 years if there is full support from the government, policymakers, investors, and stakeholders of the industry.

### **Green Hydrogen Opportunity**

Green hydrogen fuel is produced through electrolysis of water using renewable energy resources, like solar power or wind power, instead of fossil fuels. Hydrogen is a very versatile material, as it can be used in liquid or gas form, and it provides clean electricity or fuel for many industries. The industries for production of ammonia, chemicals, fertilizers, food processing, oil refining, metallurgy, steel manufacturing, and transportation have a large opportunity to switch to using green hydrogen.

Since Hydrogen is virtually inexhaustible, with almost 90% of all atoms being hydrogen atoms, it is a fact that there's more hydrogen than anything else in the universe. With the only byproduct being oxygen, this fuel is completely pollutant-free. Green hydrogen will play a key role, reducing global carbon dioxide emissions, but the challenge so far has been the cost factor. This sector is interconnected with the development of renewable energy sources, which can play a role in making it increasingly affordable.





### Geothermal Energy Innovations

Due to the unreliability of solar and wind energy sources, mainly due to weather conditions, one of the most reliable renewable energy sources will be geothermal power. The answer lies two meters below the surface of the earth, where the temperature is constantly around 52 degrees Fahrenheit, regardless of the weather conditions on the surface of the planet, where underground reservoirs of hot water and steam can help produce electricity, heating or cooling for buildings. Several geothermal innovations today are able to harness this technology that has been around for billions of years and it is expected that this will be one of the most affordable and cost-effective solutions in the future.





Tata Power has been in business for over 100 years and is India's largest integrated private power company with presence across a network of high value sectors: fuels, logistics, power generation, transmission, distribution, electricity trading, solar PV manufacturing, electric vehicle charging, micro grids and home automation. This company has a capacity of 12700 MW of which about 4000 MW comprises of Solar, Wind, Hydro and Waste heat recovery power plants. Tata Power has a significant footprint internationally, including in Indonesia.

The company has a long-standing relationship with Indonesia both as an oil and coal importer as an end-user since 1999 and as an important investor since 2007 when it invested US\$ 1.2 billion to acquire a 30% stake in PT. Kaltim Prima Coal and PT Arutmin Indonesia, after which Tata Power made several investments, including in mining company PT Baramulti Suksessarana Tbk, coal infra business PT Nusa Tambang Pratama and power project PT Citra Kusuma Perdana. Tata Power's investments are one of the largest from an Indian business. The journey in Indonesia has been eventful and from time to time, Tata Power has rationalized the investments in Indonesia. Outside India, Tata Power's largest investments are currently in Indonesia.

On the journey of being the utility of the future, Tata Power is putting a great amount of work into renewable energy, electric vehicle charging, micro grids and home automation.





A close-up photograph of a woman wearing a yellow sari, holding a white smartphone to her eye. She is wearing a large, ornate gold earring and a ring. A vertical band of colorful dots runs down the center of the image. The number '15' is overlaid in large white font at the top left.

# 15

## Smart Villages

# Making Villages Smart and Savvy

As more rural areas become urban, the improving availability of impactful and affordable technology will tilt the socio-demographic balance and open up new opportunities for local and global business interests.

India has the world's largest number of villages with 664,369 villages spread across 36 federal states and union territories. Indonesia has 81,626 villages spread across 34 provinces that are further divided into 98 cities and 416 regencies. While developing nations like India and Indonesia are inching closer to a fully tech-driven future with every day that passes, their hearts lie in the rural areas. Over more than half of the population and 70% of the workforce reside in the rural areas. These areas are known to have a severe lack of access to infrastructure, water, education, and limited exposure to technology, the latter of which is practically a necessity in this day and age. The smart village concept is focused on rural areas and communities by building on current strengths and assets and developing new opportunities. In the concept of smart villages, traditional networks are enhanced through better digital technology, telecommunications, innovation and use of knowledge, for the benefit of rural communities and businesses. Digital technology and innovation can support quality of life, higher standards of living, public services for citizens, better use of resources, create less environmental impact, and offer new opportunities for rural value chains in terms of better products. Many of the challenges can be solved by Public Private Partnership approaches. The severe lack of Internet connectivity in villages can be overcome if governments collaborate with private sector companies and investors to offer connectivity, e-commerce, fintech, and e-learning programs to villages.

## INDIA

Mahatma Gandhi once said, "The future of India lies in its villages". India has made significant progress in rural development over the years. Many villages have become 'smart' while sticking to their roots and traditions, which is inspiring to say the least. Dozens of articles about smart villages all over the country seem to surface every now and then. Several blueprints have been devised for Indian smart villages which are quite similar to smart cities. The common agenda is how to use technology to better the lives of people who live in a community, large or small. However, the solutions to stress points for a city are very different from those of a village. While India has managed to make many villages 'smart,' a few of them stand out. The framework for Smart Village models includes Smart Energy, Smart Healthcare, Smart Connectivity, Smart Education, Smart Infrastructure, and Smart Environment.

Chhotkei in Odisha is a small remote village situated in the scenic terrain of Satkosia Tiger Reserve, and became India's first smart village in 2016. Chhotkei housed approximately 600 villagers, living in 140 households who continued to live without electricity, until SunMoksha, a Bangalore-based electric utility company introduced Smart Nanogrid™ which has enough capacity to meet the energy demands of all the households, a temple, three community centers, and 20 street lights. The village saves some energy to power their irrigation pumps and a variety of enterprises, including refrigerators, cold rooms, provision stores, rice-puff machines, and so on. Students are now studying in the evening, families have access to entertainment, and the youth have access to more opportunities than ever before. Mori in Andhra Pradesh is the first smart village in the state. Also known as a 'Super Smart Village,' it is fully digital. All 1,189 households enjoy cable TV with 250 channels, excellent WiFi connectivity, with the Internet at 15Mbps. Cashless transactions take place





seamlessly, through e-banking, RuPay Cards, AP Purse, and SBI Buddy. Grocery shops have electronic point-of-sale (E-PoS) machines. Besides the introduction and implementation of digital facilities, Mori saw many people impart training to the villagers to help them make the best of this new infrastructure.

## INDONESIA

For long, it was believed that Indonesia's three core economic sectors of agriculture, fisheries, and tourism can lead the way for triggering development in villages. However, the upcoming skills revolution offered by Industry 4.0 has changed that narrative. Rural e-commerce, logistics, healthcare, fintech, and education have brought a new dimension to the idea of Smart Villages. In Indonesia, although there are still many interpretations of the smart village concept, it does not propose a one-size-fits-all solution. Smart villages are implemented according to regional sensitivity based on the needs and potential of each region and the strategy is supported by new or existing territorial strategies. A smart village concept should not only able to apply the use of information technology, but also be able to develop village potential, improve the economy, and create a quality community life with the use of information technology.

Several villages in Indonesia have implemented smart villages, including Pondok Ranji smart village in South Tangerang which was declared the first smart village in Indonesia by the Ministry of Villages due to its success in developing non-formal education. Cibuntu Village, Cirebon City, was designated a smart village because it succeeded in encouraging the manufacture of bowls to strengthen cellular signals so that Internet access became easy. Geluran Taman Village, Sidoarjo Regency, was termed a smart village due to efforts to encourage the informal use of English for the community. Pacing Village, Klaten Regency, was declared a smart village because it succeeded in building a mosque with the eco-architecture concept. These villages are evidence of efforts to develop village potential based on their respective abilities.

The Government of Indonesia has declared that building digital villages is the government's national priority program and is supporting PT Telkom's Smart Village Nusantara program. This is designed to not only open a window to the world but also facilitate government administration and improve the village economy. Kemuning Village in Central Java (Central Java) and Pangandaran Village in West Java, became pilot villages for the development of Smart Village Nusantara. Through Smart Village Nusantara, a whole digital-based system is being developed and implemented for village digitization. In preparation for the era of the Industrial Revolution 4.0, the program focuses on infrastructure support, access networks, as well as various solutions and applications, such as Village Service Management Information System (Simpeldesa), User Central Management (UCM), Village Dashboard, and Electronic Monitoring and Evaluation (E-Monev). There is also e-Puskesmas, e-Posyandu, Digital Library (PaDi), Village Cinema, Digital Cashiers (iKas and Bonum), e-Loket/Electronic Point of Sales (E-POS), and cashless payments via QRen and LinkAja!

## THE NEXT STEP

The six main pillars of a smart village are Smart Governance, Smart Community, Smart Economy, Smart Living, Smart Mobility, and Smart Environment. The smart village concept is a new representation for the community to synergize between local wisdom and information technology systems, so that it changes the social behavior of rural communities, their community interactions and activities. In the post Covid-19 era, setting up smart villages will become a very attractive proposition for businesses and startups. The complete digitization of villages is imperative, along with proper sanitation, energy, education, and overall advancement, enabling India and Indonesia to harness the potential of the vast majority of its citizens.



Here is a list of opportunities for India and Indonesia to explore over the next 25 years:

**Smart Energy:** Clean and sustainable energy facilitates the advancement of just about every facet of the rural scenario, including healthcare, education, agriculture, Internet connectivity, and so on. Today, we have a wide variety of energy technologies at its fingertips, including solar, wind, biogas, biomass, etc. at competitive costs. When it comes to rural energy supply, ‘smart’ refers to establishing and managing micro and nano grids within a village or a group of villages. Setting up these grids is particularly essential for rural areas that do not have reliable connectivity.

**Smart Healthcare:** Smart health encompasses the provision of potable water and nutritious food, reduced cost of cooking food and boiling water, less wastage, and increased agricultural productivity. ICT initiatives that do not require high medical skills can facilitate diagnostics and allow access to healthcare services. In the Smart Health concept, Information and Communication Technology (ICT) is employed to raise the bar on the quality of healthcare. Electronic health (e-Health) and mobile health (m-Health) solutions which involve the use of better diagnostic tools, telemedicine services, mobile patient-monitoring devices, electronic health records etc. are deployed to boost healthcare standards. Gathering epidemiological data can help address issues like viral pandemics, malnourishment and many others.

**Smart Connectivity:** There are two parts to smart connectivity, namely ICT solutions and high-quality broadband and voice communications. ICT solutions, applications, and services play a vital role in just about every other ‘smart’ domain there is, including smart agriculture, education, healthcare, etc. Rural communities are generally miles behind urban areas due to a severe lack of connectivity. Smart connectivity can not only help inhabitants of rural areas communicate more effectively, but also help them become increasingly aware of the economic, social, and political events and updates that occur, thus increasing their involvement in governance processes at all levels.

**Smart Education:** It is no secret that rural areas are severely disadvantaged when it comes to education. This is particularly true in the Covid era, where going to school or college is not an option at the moment. Given the severity of the pandemic and how it has changed things for good, e-learning seems to be the key. ICT solutions can enable consistent Internet access, which means rural communities can get their hands on the latest information and courses available. This will translate to adaptive and long-distance learning, thus eliminating the need to travel or move to urban areas to advance one’s education.

**Smart Infrastructure:** A rural village can hardly be called ‘smart’ if it doesn’t have basic infrastructure in place. A smart village must have well-laid roads, hospitals and hospital equipment, telephone towers, weather station equipment, institution buildings, etc. The inhabitants of rural areas can take care of this themselves with external guidance and funds.

**Smart Agriculture:** Smart agriculture is intrinsic to the sustainability of virtually any village in India. The farming practices that communities adopt determine their agricultural efficiency and productivity. Precision Agriculture (PA), driven by Internet-of-Things (IoT), Big Data and Advanced Analytics (BDAA), and a slew of other technologies, is a farm management method that involves observing, evaluating, and responding to inter and intra-field variability in crops to optimize returns on inputs while preserving resources as much as possible. PA involves the use of soil sensors and aerial images that allow farmers to manage their crop growth, analyze environmental conditions and seed genetics, and much more.





# 16

## Space Industry

# Space: A New Frontier

By Indrani Sharma

As we push the frontiers of space exploration and communications technologies, India offers partnerships based on innovation and value for money.

Most developed nations and their space research organizations are working towards the unique goal of physical exploration by humans beyond the Moon and the scope of permanent human settlements. For example, NASA's Artemis program is aimed at another lunar mission by 2024, which will land a man and the first woman on the moon, eventually paving the way for future sustainable space travel by 2028. The Artemis program is NASA's stepping stone to its ultimate goal of landing astronauts on Mars. On the other hand, Russia's Roscosmos space agency's agreement with international partners will end in 2024, post which Russia expects to build its own orbital service station.

If this looks like an affair of scientists that do not impact citizens at large, then the next 50 years of human space exploration postulations are a must-read. As Russia celebrates 60 years of cosmonaut Yuri Gagarin's space mission in 1961, marking the first manned spaceflight, it is believed that by 2060, millions of people would have gone to space and several thousands would be living there. Developed nations are already working on permanently manned outposts on the moon to enable sustained explorations to Mars. Furthermore, all these are not an agenda of the government alone for the progress of mankind. Some business-focused transformative missions that are backed by private companies are ramping up their spaceflight capabilities so that they can instate ways to enable commercial space travel in Earth orbit and beyond.

## ISRO-LAPAN Merits and Scope of Collaborations

Broadly, the future of space exploration involves telescopic explorations and physical ventures by human or robotic spacecraft. These are targeted to serve the dual objectives of enhancing communication systems, enabling satellite-based predictions for Earth's conditions as well as planning transformative changes for future readiness to respond to the dynamics of the global space business. Indian Space Research Organization (ISRO) has already been joining hands with Western nations to launch foreign satellites on a commercial basis. With its diligent efforts, ISRO has firmly established its technological supremacy with cost competitiveness. In-country, ISRO is also geared up to execute crucial missions like increasing its satellite fleet in space, scheduling human-led space explorations, developing a semi-cryogenic engine, dispatching more unmanned missions to the Moon, Mars, Venus, and the Sun and sending more space telescopes into Earth's orbit to study cosmic phenomena and activities in interstellar space. In the future, ISRO plans to develop heavy and super-heavy launch vehicles and reusable launchers. It aims to set up a space station and send exploratory missions to Jupiter, Uranus, Neptune and to asteroids apart from manned missions to the Moon and the planets that are nearer to Earth.

ISRO's programs play a significant role in the socio-economic development of India with a positive impact on both civilian and military domains in aspects, such as disaster management, telemedicine, navigation, and reconnaissance missions. ISRO's spin-off technologies have been the basis for several crucial innovations in India's engineering and medical industries.

Similarly, Lembaga Penerbangan dan Antariksa Nasional (LAPAN), which is the Indonesian Government space agency, is responsible for long-term civilian and military aerospace research and over the last two decades, has done research on rockets, remote sensing, satellites, and space sciences. Indonesia is well known for its extensively diverse geographical conditions and problems such as volcanic

**“It will be wonderful to see Indonesian government agencies, non-profits and companies collaborate with India's NewSpace start-ups, especially those that are leveraging satellite imagery and data analytics to provide actionable intelligence for social, economic and environmental impact. Earth observation analytics combined with good governance can be a very powerful cocktail that can transform lives and livelihoods of people in cities, towns and rural hamlets. It can also empower Indonesia to take a climate-smart approach for a sustainable future.”**



**Dr. Susmita Mohanty**  
CEO & Founder  
Earth2Orbit



activities, deep-sea tectonic movements with threats of tsunamis and other disasters due to climatic circumstances. LAPAN has been utilizing satellites for Indonesia to find solutions to these problems, for instance, disaster management support. Despite the critical requirements and utilization of satellite technology in Indonesia since the 1970s, Indonesian satellite communication systems are still purchased from other countries. Heavy and long-term dependency on foreign satellite services, systems, and technology is economically detrimental to any country with additional vulnerability to political pressure from technology supplier countries.

International cooperations are strategic in nature and are influenced by factors, such as political equation, existing relationships, economic, cultural and human personality aspects. For collaborations that are as crucial as space programmes, the magnitude of these factors is amplified. It is a globally recognized fact that for India, space research has dimensions beyond national considerations, and international partnerships are high priority.

ISRO is matured in experience and has technology capabilities that offer multifaceted scope for international cooperation in areas, such as exploratory space missions beyond earth as well as other themes like the impact of climate change on earth, which have global ramifications. ISRO's bilateral and multilateral relations and partnerships with space agencies and space-related bodies are targeted at taking up new scientific and technological challenges, refining space policies, defining international frameworks for exploitation, utilizing outer space for peaceful purposes, and strengthening cross-country ties for collaborative research. In recent times, India is also viewed by space-faring nations as an emerging space power with cost and time-efficiency competitiveness.

India's portfolio of existing formal cooperative arrangements includes a wide range of nations across all continents alongside holding formal cooperative instruments with international multilateral bodies like the European Centre for Medium-Range Weather Forecasts (ECMWF), European Commission, European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), European Space Agency (ESA) and South Asian Association for Regional Cooperation (SAARC). Indonesia and India can come together to plan LAPAN's growth and expansion roadmap and strengthen space collaboration efforts. Such mega action ventures are suggested in the wake of India and Indonesia's existing cooperation since 1997 wherein ISRO and LAPAN worked together for the establishment of a Telemetry, Tracking and Command (TTC) station in Biak, Indonesia for supporting ISRO's missions. Since then, Indonesia has provided valuable support to Indian remote sensing satellite missions and space launches (such as India's GSLV in 2001) that includes the provision of land, logistics, and manpower for the operations of the TTC station.

On the same lines, many Indonesian space scientists have been trained in India under the UN-sponsored Centre for Space Science and Technology Education for Asia and the Pacific (UN-CSSTE-AP) located in Dehradun and Ahmedabad in India. The courses that were the most undertaken by the Indonesian Scientists were in the area of satellite remote sensing, geographical information systems, satellite communication, meteorology, and space sciences.

#### **India-Indonesia Lucrative Ventures over the Next 25 Years**

Both countries have a number of similarities in terms of their civil and defence objectives that can lay solid grounds for undertaking joint missions in new satellite technology and communication systems where costs and impact could be shared. For example, breakthrough development of micro-satellites offers an opportunity for LAPAN in developing its homegrown satellite program with limited budgets and facilities, in comparison to other bigger satellite programs. ISRO could be an inherent partner for such ventures, lending leadership capacities and technological know-how.

Also, the 21<sup>st</sup> century is considered the NewSpace Era and it offers further scope for India and Indonesia to establish long-term collaborations on space research and commercial ventures on the foundation of existing bilateral arrangements that are in place. The NewSpace arena welcomes the role of private participants





in space activities on a larger scale unlike in the past where space missions were government-owned and were more a demonstration of power over technology due to exclusive application in defence and intelligence systems.

Currently, the upsurge in mobile technology, satellite communications, and AI-based data ventures has encouraged these private actors to add to the dynamism in the space sector and ensure more sophisticated capabilities. NewSpace has provided a leg up for this sector by bringing in technology resources as well as human resources and expanding the scope of funding for the advancement of technologies. A major concern with private actors and their ventures is the exploitation of space resources as the goals of commercial outfits are tied to profits, unlike traditional space missions that were focused on scientific research without expectations of returns on economic capital invested. NewSpace has been encouraging more utilization of existing resources in space. Until now, activities were restricted to putting satellites into orbits, sending humans to international space stations, and launching vehicles for deep space missions.

NewSpace is slowly becoming the gateway to sustainability for countries as it offers low-cost options and other economically viable advantages, such as exploring space mining for mineral resources. Countries like the United States, Luxembourg, and the United Arab Emirates are in favor of actualization of profits by enacting national policies and regulations that will allow private entities to mine space mineral resources. Such steps taken by these countries as well as a study by the International Institute of Space Law has resulted in the issue being placed on the Space Resources agenda in the Legal Subcommittee-United Nations Committee on The Peaceful Uses of Outer Space (LSC-UNCOPUOS).

Space resources are both materials in nature, such as minerals or non-materials like orbital slots. The Outer Space Treaty of 1967 stipulates that space and its contents are part of the common heritage of mankind and specifies its use for the benefit of all mankind, regardless of whether they are developed or developing countries. With India's emerging leadership in space research and activities, a strong partnership with Indonesia could emphasize both countries' interest in space resources, especially non-material ones (like orbital slots) which will provide aegis to Indonesia to quantify its contribution on an international level. Furthermore, India and Indonesia can jointly establish base stations to provide assistance in measuring falling objects and related research.

These research-based ventures will be equally competent in creating economic advantages on par with the NewSpace ventures of developed and wealthy nations that are working towards space mining and space tourism. India and Indonesia will build a strong foundation in international politics with their focused multi-



decade plan and implementation around managing the earth-based functions of space missions while also providing investments from deep-pocketed investors in the space economy. These could supplement government budgets for domestic space explorations to stay safe and upgraded to combat space security threats in the form of kinetic physical, non-physical and electronic/cyber attacks as well as security breaches in the form of data leakage, causing risk of network jamming and communication disruption. Joint collaborations will also allow India and Indonesia to raise their voices together on important issues of space economy setbacks and space security threats to tighten the global framework on space and cyber regulations. Both countries must actively ensure that non-material space resources and principle common heritage of mankind remains as equitable access for all nations, including regulating private entities.

Last but not the least, India currently houses several dozens of startups in the NewSpace sphere which are all set to add new dimensions to India's experience portfolio in incubating private and commercial actors. These private ventures bring wide areas of alliances that both countries could foster and encourage to boost STEM-based employment as well as learning about outcomes to manage the globally responsible ecosystem of harnessing space capacities for the larger good. This quote by Henry Ford can perfectly lend visualization of India and Indonesia's space collaboration "Coming together is a beginning, staying together is progress, and working together is success."



# Future Collaborations between Indonesian and Indian Space Start-ups

By Dr. Susmita Mohanty

The NewSpace community in India comprises of nearly four dozen space start-ups doing a wide range of things – from model rocketry for students to making the world's finest single walled carbon nanotubes, even offering green propulsion alternatives to satellite makers. To celebrate the friendship, shared heritage, history and maritime culture of our two nations – India and Indonesia, I therefore chose to invite two Indian space entrepreneurs – Devleena Bhattacharjee and Sanjay Nekkanti - for a virtual conversation about space cooperation between our nations and ideas for leveraging space assets to improve life on Earth. Devleena Bhattacharjee resides in the coastal metropolis of Mumbai and is the Founder-CEO of Numer8, an Earth Observation (EO) Analytics company. Sanjay Nekkanti is based in the southern city of Hyderabad and is the Founder-CEO of Dhruva Space. Before we dive into our conversation, I'd like to acknowledge and applaud the ongoing cooperation between the Indian Space Research Organisation's (ISRO) and the Indonesian National Institute of Aeronautics and Space (LAPAN). LAPAN has launched three satellites onboard ISRO's PSLV rocket. ISRO's Telemetry Tracking and Command Network (ISTRAC) is used for operating satellite missions and facilitating communication with ISRO launch vehicles and satellites; it has ground stations in other countries, including a down range station in Biak, Indonesia. The Biak ground station was set up in 1998. It helps meet the telemetry requirements of east-bound PSLV and GSLV rocket launches. The Biak station has some exclusive passes that are not visible to Indian stations, and is therefore a great addition to the ISTRAC network.

Here are excerpts from my conversation with Devleena and Sanjay. I hope this conversation will inspire Indonesia to expand its cooperation with India beyond ISRO and expand its space applications portfolio in partnership with India's NewSpace start-ups.

**Susmita Mohanty (SM):** Sanjay, how can India and Indonesia expand their cooperation in the space sector?

**Sanjay Nekkanti (SN):** Our ongoing maritime cooperation includes the India-Indonesia Coordinated Patrol (CORPAT). CORPAT helps foster understanding and interoperability between our Navies and facilitates measures to prevent and suppress Illegal Unreported Unregulated (IUU) fishing, drug trafficking, maritime terrorism, armed robbery and piracy. Going forward, we should consider expanding our bilateral cooperation beyond CORPAT to include among others, cartography, urban planning, forestry, resource management, oil and mineral exploration, agriculture, fisheries, disaster management, development of port and shipping infrastructure.

**SM:** What does Dhruva Space specialise in?

**SN:** Dhruva Space designs and builds application-agnostic small satellite platforms. We also offer Telemetry, Tracking, and Communications (TTC) support services as well as Payload Data Acquisition by building and facilitating a network of Ground Stations across the world with remote operations capabilities. If clients want, we can also help procure suitable launch options for their satellites.





Dhruva Space provides end-to-end Space Engineering solutions to help organizations to own, launch and operate their space assets. This is enabled by the wide array of technologies, services and expertise that Dhruva Space has been building over the last decade.

**SM:** How can a start-up like Dhruva Space collaborate with the Indonesian government, the private sector and academia?

**SN:** Dhruva Space is working with ISRO and India's Defence Research and Development Organisation (DRDO). We have also collaborated with private companies and Indian universities in the area of technology development. Dhruva Space specialises in technologies related to small satellites and related ground infrastructure. Small satellite constellations in Low Earth Orbit (LEO) could help Indonesia address problems specific to their country through remote sensing and communication applications. Being self-reliant as a nation in space-based solutions is a worthy goal for any country. That combined with good governance is a powerful cocktail. We will be happy to work with LAPAN on satellite platforms that can support missions up to 300 kg class of satellites. These satellites can be used for remote sensing and communications in Low Earth Orbit (LEO). We are also open to partnering with Indonesian companies and universities to build capacity and co-develop solutions specific to Indonesia.

**SM:** Devleena, tell us a bit about your start-up Numer8.

**Devleena Bhattacharjee (DB):** Numer8 started off with developing a product for natural disaster risk modelling before shifting focus to marine fishing communities and the seafood industry.

**SM:** It is heartening to see your company working to help fisherfolk, who in my view, are among those whose lives and livelihoods are directly impacted by anthropogenic 'climate change'.

**DB:** Absolutely. Nearly 800 million fishermen and women are impacted by rising ocean temperatures. Climate models help us assess the environmental and human impact. Using these models, we can figure out where to focus our efforts. Another environmental issue that is in our cross-hair is 'plastic pollution'. Between 1.5 to 2.5 million tons of plastic enter the oceans each year. Cumulatively, if you had to visualize the great Pacific garbage bag, it is nearly 3 times the size of France. We can monitor plastic waste and devise ways to reduce its mass. Further, there's the problem of 'ghost fishing'. Ghost fishing means old lost or discarded fishing gears entangle or harm innocent marine lives. For monitoring ghost fishing, there is a need to monitor the oceans better than what we do now and improve our image processing of ocean observation data on a semi real-time basis.

**SM:** Indeed. I was aware of how problematic climate change and plastic pollution can be for our fishing communities, but ghost fishing is something new that I learnt from you today. What about the problem of overfishing?

**DB:** Overfishing is a big problem too, for many years now. It happens when we catch fish faster than they can reproduce, creating a large gap in the food chain and disbalancing the already delicately hanging marine ecosystem. We need to monitor vessel activity in the ocean and correlate that with catch data so we can raise red flags where overfishing is detected.

While we are talking about overfishing, it would be appropriate to also understand the problem of 'bycatch'. Bycatch is the act of accidentally catching unintended marine species in the fishing nets. The global statistics on bycatch is alarming. Every year fishing bycatch kills 250,000 loggerhead and leatherback turtles, 100 million sharks, 300,000 small whales and dolphins. Bycatch also makes its way



into inland farms. This threatens both the seafood industry and the environment. We need to monitor fish landing centres across large geographies to significantly increase the tracking of bycatch and thus reduce the volumes.

**SM:** What other problems do we need to keep in mind in the context of the seafood industry and our fishing communities?

**DB:** Profitability is vital for the seafood industry. However, we are looking at a loss of \$80 billion dollars as a result of climate change.

Yet another issue is that of navigation, communication and safety. 98% of fisherfolk globally do not have proper communication equipment that works ubiquitously across regions, bad weather and networks. This leads to preventable deaths due to extreme weather events at sea.

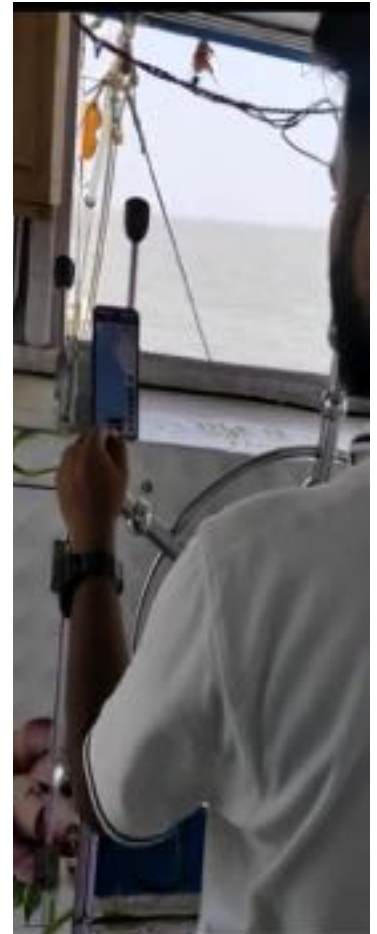
**SM:** So, how can we leverage satellite imagery in concert with other technologies to help the seafood industry and fisherfolk?

**DB:** By combining earth observation (EO) data from satellites, transactional data, Machine Learning (ML), Internet-of-Things (IoT), we can analyse many things — vessels out in the sea, their fishing patterns, carbon emissions, and any illegal activity or trespassing into border areas by fisherfolk; Marine environments for studying various ocean parameters on biomass, algal blooms, potential fishing zones, dead zones, minerals, wave vectors, ocean acidification, etc.; Harbour activities, boat landings, supply chain and logistics; Sustainability and traceability through source identification of every fish traded; Livelihood impact study of fishing economies, studying multi-criteria on how environmental factors impact activities of ports of harbours; Best sites for inland fishing and marine culture from aspects of fishing ground, soil and water quality, market connectivity etc.; Weather patterns and predicting weather-based losses that can hamper livelihood and trade; Ocean bathymetry and terrain for studying mid-water columns and demersal fishing habitats; Polar melts and fishing activity in the Arctic largely from the perspective of monitoring and controlling them; Real-time navigation for fisherfolk and providing pocket friendly methods of communication at sea.

EO data is currently helping us analyse various different parameters on ocean health and biomass monitoring. In addition to EO data analytics, satellite communication can help in building a robust marine communication system that is available even during extreme weather events to facilitate search and rescue operations.

**SM:** What are the offerings from Numer8 for a country like Indonesia?

**DB:** Indonesia is the world's second largest producer of seafood with around 4 million marine fisherfolk. Unlike India, which has a large mainland, Indonesia's coastline runs across 17,000 islands, making everything more complex. Fisherfolk across both the countries suffer from high vulnerability to climate change, low access to markets and absence of financial inclusion. The seafood industry, given the large coastline, suffers from vessel connectivity and monitoring. We believe Numer8's product OFish can help in all of the above.





A man with glasses and a beard is pointing upwards with his right hand. He is wearing a blue long-sleeved shirt. The background is blurred, showing red and yellow shapes. A halftone pattern is overlaid on the right side of his face and the word 'Startups'.

# 17

## Startups

# Start-up Ecosystem: Intertwined in Unmistakeable Patterns

The start-up ecosystems of India and Indonesia are among the most vibrant in the world today.

The start-up ecosystems of India and Indonesia are working in tandem and are intertwined in far deeper and wider levels than anyone acknowledged. India and Indonesia are no strangers when it comes to doing business. The ties are historic but largely limited to commodities. The start-up phenomenon is opening new vistas and engaging job creators at a different level altogether.

## Current State of the Ecosystems

The two have disparate and relatively nascent ecosystems as compared to Europe or the USA. India boasts of the world's third-largest start-up ecosystem with more than 50,000 startups, a quarter of them tech, 40+ unicorns, 5700+ active investors and a vibrant startup culture across its wide university network. While Bengaluru has consistently ranked among the top 20 start-up cities of the world, other centres like the National Capital Region, Mumbai, Pune, and Chandigarh are not far behind. Since 2014, startups have been receiving funding to the tune of over \$63 billion. Almost every state has specific policies for startups and in less than fifteen years, in a nation obsessed with engineers and doctors, being an entrepreneur has become cool and socially acceptable. The government has been at the forefront of the change with its Startup India program. The program has had a visible and positive impact on forging a vibrant start-up culture.

Indonesia initially lagged behind in the development of its ecosystem but is catching up at a dramatically faster pace. Its startups are largely concentrated in and around Jakarta with smaller centres in Bandung and Bali. Indonesia, one of the largest economies of Southeast Asia over the last two decades, has seen rapid growth in its startup ecosystem. Support from the government and special encouragement to tech-related startups has accelerated Indonesia's advancement into the digital economy. Despite the outbreak of the coronavirus pandemic in 2020, Indonesia's start-up ecosystem in the first quarter of 2020 raised one of the highest amounts of venture capital, second only to Singapore.

Dedicated support from the Indonesian Government and enabling regulations for startups that have innovative business models and are inclined to further digitization and automation have given a boost to Indonesia's start-up ecosystem. This has helped Indonesia to retain its position as a top destination for startups in the ASEAN region.

With over 5000 startups, Indonesia is the undisputed leader in ASEAN and among the top five in the world. According to the 2020 Global Startup Ecosystem Report (GSER), Indonesia's startup ecosystem occupies the second place among 100 countries, indicating that the country is one of the attractive destinations for investors looking to invest in local startups. In 2020, Jakarta ranked as #2 on Startup Genome's study of "Emerging Ecosystems"—the next 100 ecosystems after the top ones. Indonesia's capital ranked ahead of hotspots, such as Barcelona, Dubai, and Zurich. The two major factors responsible for Jakarta's high ranking are the value of its ecosystem which is estimated to be \$26.3B, enabling the city to be positioned as the world's most valuable emerging ecosystem. Further, in the total early-stage funding category, Jakarta has attracted the most capital, US\$ 845.9M, compared to other emerging ecosystems.

**“Entrepreneurship solves two major global problems: unemployment and poverty. However, entrepreneurship is not merely about business creation. It is a mind-set transformation when one habitually creates and innovates. It is not a job but a lifestyle where success depends solely on the persistence and perseverance on the execution of the ideas rather than the creation of the ideas itself.”**



**Ivan A. Sandjaja**  
Managing Director  
Global Entrepreneurship  
Network Indonesia





The Indonesian Government's initiatives are less centralized than India's Startup India program. However, more than half a dozen ministries have specific programs and initiatives for startups. While a lot of the spotlight is on tech startups and the half a dozen unicorns, there is a balanced focus on the creative economy as well.

### The Cross Engagement

The example of Gojek's presence in India through its acquired subsidiaries is not an isolated one. Scores of Indonesian startups have set up operations in India to tap into the engineering and software talent.

Similarly, tech startups from India continue to expand into the Southeast Asian market, including Indonesia. Startups, such as OYO, Ola, Meesho, Livspace, and Pine Labs are targeting markets that are considered to have similar culture and demographics as the country of Bollywood.

The similarity in culture and demographics between India and Indonesia is expected to make the business models in both countries easy to implement. "This makes Indonesia's market share attractive for startups from India to expand," said Indonesian Venture Capital Association (Amvesindo) Treasurer Edward Ismawan Chamdani.

Indian startups entering the Indonesian market will find the process of adaptation also easy. Only a little customization or personalization of their business models will be required in Indonesia. According to DataLabs, in the past year, 35 major Indian startups had big plans to expand their operations to Southeast Asian markets, such as Indonesia, Singapore, the Philippines, Thailand, and Vietnam.

Some of these startups have operated in Indonesia, for instance, the OYO hotel chain, which entered the fray in Indonesia in 2018. At the beginning of its appearance, OYO even budgeted US\$ 100 million or around IDR 1.5 trillion to expand to 35 cities in Indonesia. "Entering Indonesia is a relevant step to lead the market," said the founder and CEO of OYO Hotels Ritesh Agarwal at the launch of OYO in Indonesia. In early 2020, the Meesho social commerce platform supported by Sequoia Capital India also set foot in the Indonesian market, aiming to target a million resellers in Indonesia.

Car retail platform, CarDekho entered into a joint venture with local media conglomerate Emtek Group to expand into Indonesia in 2016. The home interior

**"Campuses are the heartland of new and unbiased ideas, and if students are not nurtured and supported at this stage, this can be a big loss to the innovation process that is so essential to building a startup culture that can result in inspired entrepreneurship."**



**Nalin Kumar Singh**  
Startup Guru & CEO  
Orbit Future Academy

and renovation platform Livspace has also announced plans to pursue further expansion into Indonesia and Malaysia. Livspace is headquartered in Singapore.

Venture Capital Association for Startup Indonesia (Amvesindo) said that the startup investment climate between India and Indonesia is interconnected. Amvesindo has undertaken collaborations numerous times with funding platforms from India, such as the 'India Fund Fest', and then conducted similar events in Jakarta under the umbrella of 'Indonesia Fund Fest'. At the Indonesia Fund Fest, investors from India, Singapore, and Indonesia have competed for the top deals over the past three editions since 2018.

Many of these engagements are driven by investors who have an interest across geographical borders. Venture capitalists, such as Sequoia Capital India and Singapore-based Jungle Ventures are investing actively in Indian and Southeast Asian startups, including Indonesia. In 2019, Sequoia Capital India, for example, invested US\$ 20 million (around IDR 288 billion) in the Kopi Kenangan startup.

In January 2021, mutual fund investment startup Bibit received funds amounting to US\$ 30 million from Sequoia Capital India. Several startups, such as Meesho, Pine Labs, and CarDekho are being funded by Sequoia Capital India.

Livspace is supported by Jungle Ventures. One of the primary reasons why Indonesian startups are looking towards India is the similarity in culture. In 2019, Decacorn Tanah Air Gojek provided funds amounting to US\$ 5 million or around IDR 70 billion for an Indian startup in the field of specialty restaurant delivery-Rebel Foods.

A stall digitalization startup in India, m.Paani received investments from high-ranking Gojek officials, namely Co-CEO Kevin Aluwi and Head of Merchant Ryu Suliawan. "So, in terms of investment climate and cooperation, there have been quite a lot of things that have been done between the two countries," said Edward Ismawan Chamdani.

## THE NEXT STEP

Like India, Indonesia has an equally dense population composition. The two countries are also building their digital economy. Indonesia is considered to have the potential for a large digital economy market in Southeast Asia. The e-Conomy SEA 2020 report from Google, Temasek, and Bain & Company forecasted that the value of Indonesia's digital economy will reach US\$ 44 billion by 2020. By 2025, the economic value is estimated to reach US\$ 124 billion or around IDR 1,744 trillion. India's digital economy will be valued at over a trillion dollars by 2025.

The sheer scale of digitization and growth of the Internet coupled with communication and other technologies provides an immensely fertile ground for startups. The young demography in both countries with somewhat similar culture, aspirations and social issues makes understanding each other that much easier. Challenges remain in both countries. From a regulatory perspective, it is tough to conduct business in both India and Indonesia. However, both countries have made giant strides in the ease of doing business rankings.

Indonesia is the second most attractive market for foreign businesses in Southeast Asia after Singapore. The main reasons are its size, growth opportunities, and vibrant startup ecosystem. If that comes as a surprise, one must consider a report by the IMF and the World Bank which predicts that Indonesia will become the 5<sup>th</sup> largest economy by 2024. India will be the third largest economy at that time, and it is for the benefit of both that these young vibrant populations collaborate to create a new breed of entrepreneurs across nations.

**"The demography of India and Indonesia is similar but not the same. In terms of percentage of elders to the population, both are almost the same (10-11%). While Indonesia would move from an ageing society now to an aged society in the 2030s and to super-aged society in 2040s, India has a young population which will be over 60% by 2040 and a senior population of about 18%. Nuclearization of families is changing the tradition for caring of elders at home. In India, the senior living and care model is accepted already, more so after the current pandemic. Given the similarity in traditions, culture and family values, India can offer its evolved model for senior care with certain changes for Indonesia to adopt. There are also opportunities to jointly develop start-ups that can bring in technologies for senior care and develop products needed by the elders."**



**Col. A. Sridharan, VSM**  
Founder & MD,  
CovaiCare



# People Have a Choice, Governments Do Not

By Nalin Kumar Singh

India needs to scale up its startup ecosystem just as Indonesia needs to ignite the imagination of its youth to take up entrepreneurship by choice.

Virtually no large-scale social change is possible without a mass movement and shift in mindset among other enabling ingredients like timing. Not so long ago, entrepreneurship was taboo for the Indian middle class. They were encouraged to seek financial freedom through education and a subsequent job in a corporate or the government. Economic liberalization brought in a new breed of entrepreneurs who challenged the status quo and set up successful companies in hitherto unknown sectors, mainly in technology services. There were a lot of environmental factors like the large pool of technical talent, training companies in the Information Technology sector, and the Y2K challenge that accelerated the success of these companies. The accompanying stock market boom in their shares unlocked wealth like never before. This process took almost three decades to the point where India is among the top three startup ecosystems in the world with 50+ Unicorns.

Every startup ecosystem has its own unique reason for success though some common factors are present in each one of them. A historic city like London reinvented itself after the 2008 financial market crash. It now boasts of a startup ecosystem that brings together talent, capital, innovation, and an openness to do business that few other cities in the world can match. Credit must go to the politicians of the time who aggressively pursued and nurtured creative industries and set up supporting legislation.

What are the lessons that countries, such as India and Indonesia can imbibe to accelerate the growth of their startup ecosystems? On the surface, India has a larger ecosystem that has more depth and is spread across the country compared to Indonesia. But both ecosystems require structural changes. The areas of change and the actual severity are different in each country. Here are a few that stand out in today's context.

**Enabling Regulations:** Both countries have concentrated on improving their rankings in the "Ease of Doing Business Index" with some success. This is a narrow target and one that does not go beyond the optics. The laws are archaic and discourage innovation, investment, and wealth creation by young entrepreneurs. The regulatory framework around the startup ecosystems has been slow to evolve to meet modern-day challenges. Both countries face issues on taxation of angel investments and easing of the regulatory burden on startups. India has a head start and a mature set of regulations, but it still lags behind competing ecosystems, such as Singapore. One of the challenges the governments face is in engaging the bureaucracy across the board and getting buy-in to formulate changes within the enormous set of existing laws. Both countries have a scenario where investors prefer to hold their investments overseas rather than in local entities.

**Role of Universities:** Be it the large ecosystem of Silicon Valley or the competing high-tech ecosystems of Israel and many Eastern and Central European nations, at the heart of the program were universities. The initial support came from innovation labs within the campus, industry partnerships and alumni associations. While India is ahead with a more vibrant campus startup ecosystem, it is in danger of making a generation of students compulsive entrepreneurs without the skills they need to succeed. The focus on non tech, life skills and other skills needs to be brought back to the fore. Indonesia, on the other hand, has an almost non-existent

**"Our research has identified a vibrant community of EdTech innovators and entrepreneurs in Indonesia. Working in partnership with the government, we hope that these products can be adapted and used to increase learning among the poorest children and those with hearing and visual impairments."**



**Noah Bunce Yarrow**  
Senior Education  
Specialist, World Bank

university start-up ecosystem. The few universities that do have incubators have no “tenants”, as their administrators call them, instead of incubatees. Without any incentives, even like the limited ones from India, the inadequately trained administrators moan the loss of running these white elephants.

**Cultural Aspect:** For the Indian scenario, a more entrepreneurial outlook must be nurtured through education. There is a need to foster entrepreneurship among the youth, encourage innovation, and promote a culture of enterprise. Establishing a full range of support services can help build a powerful ecosystem to propel the growth of startups. Both countries are including entrepreneurship courses into the formal curriculum with additional emphasis on technical skills. Indonesia in this regard is where India was a few decades ago. The added problem is that of lower levels of technically educated people. The best infrastructure and curriculum are worthless if the population does not see the direct correlation between startups and their financial independence. The country has half a dozen Unicorns with a former Unicorn founder as their Minister of Education. Reform is happening but it needs a spark to ignite the mind of society at large.

**Quantity versus Quality:** A common refrain in the early stages of the Indian startup ecosystems’ growth was the lack of product companies. Almost all the success stories including the tech giants were service companies working off labour arbitrage. This situation has rapidly changed, and more and more Indian product-related companies have begun to make a mark locally and globally. This is a problem Indonesia faces currently but is able to partially leap over it with focus on technologies in Fintech and Artificial Intelligence that do not necessarily need the classic army of coders. Anyway, coding having got productized has helped Indonesia narrow the gap rapidly and move towards product-oriented companies much faster than India did. The quality of Indian products has also begun to meet international standards. In part due to a more customer-oriented approach and partly due to the customers being exposed to international quality levels and expecting the same if not better. The shift from just the number of startups to the quality of startups has begun. The understanding that the countries don’t need just startups but scale ups is also well accepted. The respective governments act as market makers for startups. India has an enabling policy for a certain percentage of the government buying to be from startups as well as treating them differentially for payments. Indonesia has brought in a spate of reformatory legislation that enables startups to access markets more easily.

The demands of democracy mean that often, elected representatives have to focus on the number of startups rather than their quality. Most of the startups in these countries lack global exposure. The mature ecosystem governments like those of the USA, Britain, Israel or those with smaller captive markets, provide opportunities to their startups to engage and showcase their products globally. Indian and Indonesian startups do get sporadic support for participating in global events but not to the level that is required. Both countries have focussed on hosting global startup events in their own countries but that again gets dominated by better funded companies from overseas. These companies end up getting local partners and market access without adequate reciprocity. None of the above changes are particularly difficult to implement. India has a hugely successful centralized policy under the “Startup India” initiative that needs to move to the next level. Indonesia can learn from that to avoid the pitfalls faced by India and set up a centralized policy of its own. According to the Minister of Education, Nadiem Makarim (Co-Founder of Indonesia’s first Unicorn, Gojek), there is a need to include computational thinking and entrepreneurial mindset into curriculums and also instil values, such as compassion, grace, and mindfulness among students and not just produce coders.

It takes time, application, and sheer will, but government drive must be at the heart of any big leap India and Indonesia take in becoming a global innovation hub after they have matured their startup ecosystems.

**“Indonesia has been a second home for over 17 years and was my station for initiating Leadership Education and Development across Asia. A growing democracy that needs world class education, must strategically tap into the education prowess and mastery of India in the formal and informal education sector. The fellow democracies can be strategic partners in serving that need for Indonesia’s future populace, in building its people and serving the shared vision to develop their interests. Especially now that there is a possibility of technological advancement, the outreach of knowledge is so possible and the strategic engagement at the policy level may as well serve as an economic opportunity.”**



**Abha Maryada Bhatt**  
Founder & Chief  
Strategist  
Success India & Asia  
Leaders Consortium





# 18

## Textiles

# Taking Indonesia Global

By Roopak Malik

An opportunity to use Industry 4.0 Technology combined with continued investment in skills education, software and manufacturing automation.

Indonesia's textiles have been deeply influenced by India for two millennia. The kings of the Srivijaya Empire (7<sup>th</sup>-11<sup>th</sup> century) and those of the Majapahit Empire (13<sup>th</sup>-16<sup>th</sup> century) adorned themselves with the textiles that came from India, which were brought there by waves of traders and immigrants from the Kalinga and Tamil areas of coastal India. Paintings from the archives of the VOC (Dutch East India Company) in the 18<sup>th</sup> century show the local Sumatran and Javanese Rajas in resplendent textiles, matching the finery of those worn by their Indian counterparts. Indonesian batik predates written records. G. P. Rouffaer argues that the technique might have been introduced during the 6<sup>th</sup> or 7<sup>th</sup> century from India. On the other hand, India profited with the Mengikat fabrics of the archipelago, which became fine Ikats so valued that they were used as currency in the Silk Route.

## INDIA

The textile industry is the second-largest employment generating sector in India, hiring over 35 million skilled and unskilled labor. The share of textiles in total exports is over 11%. India has over 2,500 textile weaving factories and more than 4,000 textile finishing factories. India is ranked among the Top 5 markets for apparel retail business. India is first in global jute production and shares over 60% of the global textile and garment market. India is second in global textile manufacturing and also second in silk and cotton production. 60% of the Indian textile industry is cotton based. The strong domestic demand and the revival of the economic markets by 2009 has led to huge growth in the Indian textiles industry. The Government of India passed the National Textile Policy in 2000, empowering the Ministry of Textiles to formulate policies and coordinate the man-made fiber, cotton, jute, silk, and wool industries. It is also responsible for decentralization of the power loom sector, promotion of exports, planning and economic analysis, finance, and promotion of the use of information technology. India allows 100% FDI in the textile sector. Several foreign textile companies have made large-scale investments in India, such as Rieter, Monti, Marks & Spencer, Zara, Benetton, and Levi's.

## INDONESIA

The native Indian population in Sumatra and Java has traditionally been in the textiles business. Indians have been living in Indonesia for centuries, from the time of the Srivijaya and Majapahit empires, both of which were Hindu and heavily influenced by the subcontinent. Indians were later brought to Indonesia by the Dutch in the 19<sup>th</sup> century as indentured labourers to work on plantations located around Medan in Sumatra. While the majority of them came from South India, a significant number also came from the North. The Medan Indians included Hindus, Muslims, and Sikhs. They have now been in Indonesia for over four generations. The vast majority are now completely assimilated into Indonesian society though some Tamil, Sikh, and Bihari communities still maintain their cultural traditions. The Indian diaspora also includes several thousand Sindhi families who constitute the second wave of Indian immigrants who made Indonesia their home in the first half of the 20<sup>th</sup> century. The Sindhi community is mainly engaged in trade and commerce. They are the pioneers of modern textiles and garment factories in Java. The first group comprises Indian origin Indonesians, who first ventured into the textile industry many decades ago, such as the Lohias, who own Indorama Group, which today generates annual turnover of US\$ 2 billion from its Indonesian manufacturing operations, directly employing over 10,000 people. Busana Apparel Group, set up by the Marimutu brothers, is the largest woven garment manufacturer in Indonesia with a turnover of US\$ 500 million and 28,000

**“The textile industry is going through a big change not only with digital transformation but also in terms of environment friendliness, with a focus on continuous innovation, collaboration, and sustainability. Our vision is to build an ecosystem that can provide end-to-end solutions, from design to product development, with best-in-class manufacturing facilities and quality, through an agile, diversified, responsive, and competitive supply chain network. At the same time, “people first” remains our key focus area with an objective to enhance and upgrade skill sets, scale up local talent, and provide a safe working environment for all.”**



**Maniwanen Marimutu**  
Chairman, CEO  
Busana Apparel Group



employees. The company plans to grow vertically by global acquisitions and joint ventures. Other prominent companies run by Indians are Mitra Adi Perkasa (MAP), the largest retail group in the Indonesian market, Busana Remaja Agracipta, one of the largest lingerie manufacturers and exporters in Indonesia, and Sainath Group which has a large manufacturing/export setup in Central Java. Another successful group is Kewalram Indonesia, which is active in spinning, textiles, embroidery and garments. Members of the Indian diaspora also occupy top leadership positions in global companies such as Asia Pacific Fibers. The entrepreneurial growth continued with the establishment of Asmara International Ltd., a leading garment buying house that operates across 14 countries. Asmara Indonesia places about US\$ 50 million worth of business in the Indonesian market. The company also has two manufacturing facilities in Central Java, exporting a similar amount of US\$ 45 million to US\$ 50 million per year.

In the second group are the Indian origin expat professional managers, who have a lot of experience in large Indian textile groups and a good textile engineering background or professional apparel education background. They were hired in large numbers by the Indian origin owned textile/apparel groups in Indonesia during the 80s and 90s, triggering a steady flow of Indian management talent into the Indonesian textile and apparel industry. Many of these managers eventually set up their own businesses which turned out to be quite successful. Indian expats are continuing to foray into the Indonesian textiles and garments manufacturing field and into associated industries, such as design and production technology, engineering machinery, advertising, education, dyeing, printing, and washing.

## THE NEXT STEP

The local textile market is dominated by synthetic textiles, mainly rayon and polyester. There is some cotton textiles production as well. Textiles for the domestic market as well as for re-export of garments are dominated by China, South Korea, Taiwan, and Japan. The textiles from India as yet do not play a significant role in the Indonesian market and is an area with huge potential for the Indian textiles industry to increase its market.

## Textile Education

The biggest synergy that can be seen is in the area of professional education in the field of textiles and apparel. That's where India can potentially contribute to help build educational institutes in textile engineering, apparel design, marketing and merchandising, production, graphic design, software for automation and advertising.

## Investment & Technology Upgrades

The second high-opportunity area is investments in yarns, textiles, and finishing. These are the areas where further investment is needed to take the industry forward. The third promising area is Indian IT technology, where the use of software can enable high efficiency in pattern making and manufacturing automation; deploying technologies, such as Artificial Intelligence can help achieve cost reduction.

## Setting up Manufacturing Bases

The population size of Indonesia provides the country advantages both for the domestic market and for apparel and textile exports as it can serve as a significant manufacturing base. The labour is well disciplined, hardworking, and quite suitable for labour-intensive industries. A combination of good educational/training institutes in the field, investments in downstream industries, and suitable labour policies can help in growing the industry substantially here.

**“Post pandemic, fashion players need to retain the flexibility to cater to local needs. That may mean being prepared to take tough decisions on where they are most likely to find traction and establishing a tailored strategy for each country. Downstream textile finishing and dyeing processes are being integrated into textile weaving factories and further integrated with clothing manufacture and distribution networks. Shopping habits will change. With less disposable income, consumers will be more conscious of what they buy, treating luxury items as investment pieces that will serve them for years or at least hold their resale value.”**



**Chandrasekaran Rajalingam**  
Founder & CEO  
Spark Digital Fashion







Indorama manufacturing complex in Purwakarta, West Java, Indonesia



1975 saw the birth of Indorama (coined from “Indo” for Indonesia and “Rama” for the Indian god) in Indonesia with the incorporation of PT. Indo-Rama Synthetics Tbk (“IRS”) to set up a cotton yarn spinning plant in Jatiluhur, Purwakarta, West Java, Indonesia. ([www.indorama.co.id](http://www.indorama.co.id))

IRS is listed on the Indonesia Stock Exchange (having gone public in 1990) and is a subsidiary of Indorama Corporation, one of Asia’s leading chemical holding companies based in Singapore (IRC) ([www.indorama.com](http://www.indorama.com)).

IRC has now over 20 manufacturing sites in 8 countries manufacturing a multitude of products, including nitrogen fertilizers, phosphate fertilizers, polyethylene, polypropylene, polyester, textiles, cotton fibre, and medical gloves. It is the largest producer of urea and phosphate fertilizers in Sub-Saharan Africa, the largest producer of polyolefins in West Africa, and the third largest producer of synthetic gloves in the world. IRC is also an integrated producer of cotton and synthetic spun yarns. IRC employs over 18,000 people worldwide.

IRC’s associate, Indorama Ventures Public Company Limited (“IVL”), is the largest producer of PET Resins/Polyesters in the world and also one of the biggest producers of polyester feedstocks. ([www.indoramaventures.com](http://www.indoramaventures.com)).

IRC and IVL (collectively referred to as “Indorama”) have invested over US\$ 2 billion in Indonesia over these years, directly employing over 10,000 people.

Since its inception in 1975, IRS steadily grew its Spun yarn business and expanded upstream into the manufacture of Polyesters (yarns, fibre, chips, fabrics and PET

**“Indonesia is a competitive location for the Group and we continue to bring in modern technologies and develop human capital to strengthen this competitive edge.”**



**Vishnu Baldwa**  
Managing Director &  
Group CFO  
Indorama Corporation



State of the art technology used in Indorama polyester plants

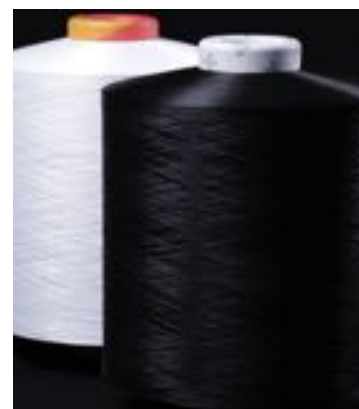
resins) with its plants located in Jatiluhur and Campaka (Purwakarta) and Bandung with current production capacities of 94 KTA of Spun yarns and 338 KTA of Polyester products in West Java, Indonesia. Its subsidiaries have production capacities of 48 KTA of Spun yarns in Uzbekistan and Turkey.

Medisafe Technologies (a wholly owned subsidiary of IRC) is Indonesia's leading producer of single-use medical gloves with current production capacity of 2.4 billion medical gloves per annum in Tanjung Morawa, near Medan in North Sumatra. The first plant was set up in 1990 ([www.medisafe-tech.com](http://www.medisafe-tech.com)).

IVL started in Indonesia in 2011 with the acquisition of a polyester fiber and PET resin manufacturing business in Tangerang (Banten) and set up Indonesia's largest and most modern polyester fiber and yarn manufacturing plant which started operations in 2013 in Purwakarta. An idled PTA (the key raw material for producing Polyesters) plant in Cilegon (Banten) was acquired in 2011 and was extensively revamped and modernized to primarily meet Indorama's captive requirements. Another PET resin plant in Cilegon (Banten) was acquired in 2012.

IVL's current production capacities in Indonesia are 600 KTA of Polyesters and 480 KTA of PTA. IVL is presently setting up the Group's first plant in Karawang (West Jawa) to recycle 2 billion per annum of PET bottles for recycled resin suitable for food contact use.

Indorama deploys the latest technologies and equipment from world class manufacturers based in USA, Germany, Switzerland, Japan, amongst others. Indorama's businesses are all about top quality, consistency, and reliability - with a committed ability to deliver the right quality, every time. Together with the benefits of a competitive cost base in Indonesia, Indorama provides an optimum solution - premium quality at competitive prices, which is further reinforced by continuous full capacity utilisations of all its facilities.



Polyester Filament Yarns



Polyester Staple Fibre

Indorama's Key Products in Indonesia





**Indorama state of the art Spun Yarn plants**

Indorama has positioned its products to meet the requirements of high-end global markets, leading to consistent demand for its high-quality products and creating a loyal customer base. Indorama is Indonesia's single largest exporter of Spun yarns & Polyester products, with direct exports of over 50% of Total Sales to over 70 countries around the world. The Government of Indonesia has awarded Indorama the Primaniyarta Award (the highest level of recognition in Indonesia) multiple times for its excellence in exports.

Indorama deeply cares about environmental protection, the safety of its employees and products, which are reflected in its individual companies being certified under ISO 9001, 14001, 22000 and 50001 standards as well as OSHAS 18001 standard along with other accreditations. Indorama uses state-of-the-art equipment for effluent treatment to meet World Bank and Government of Indonesia environment standards.

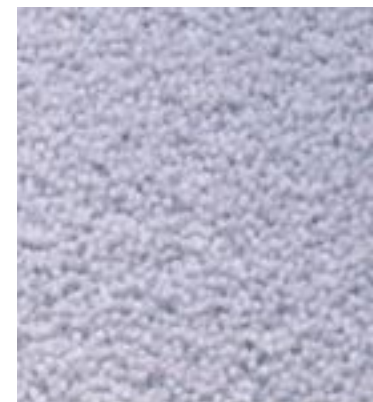
IRS is a member of the Better Cotton Initiative ("BCI"). BCI, a not-for-profit organization, is the world's largest cotton sustainability programme and a member of ISEAL Alliance, the global membership association for sustainability standards. BCI is a product, a philosophy, and a movement, achieving sustainability through continuous improvement to make global cotton production better for the people who produce it, better for the environment it grows in and better for the sector's future. BCI works with a diverse range of stakeholders to promote measurable and continuing improvements for the environment, farming, communities, and the economies of cotton-producing areas. BCI aims to transform cotton production worldwide by developing better cotton as a sustainable mainstream commodity.

Social responsibility, service, and safety are an integral part of Indorama's purpose. The company is committed to the development and integration of their sites with local communities by actively engaging in community development and prioritizing education, health, and safety initiatives.

Indorama set up Yayasan Pendidikan Indorama, a foundation in Purwakarta, which established Politeknik Engineering Indorama ([www.pei.ac.id](http://www.pei.ac.id)), a world class



**Spun Yarns**



**PET Resin**

**Indorama's Key Products  
in Indonesia**

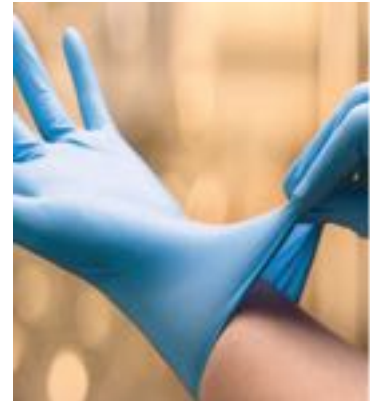




Indorama manufacturing complex in Cilegon, Banten, Indonesia

engineering polytechnic that is focused on providing high-quality education relevant to the industry at subsidized cost for Indonesian students. It enables hands-on training at their facilities for the students.

Indorama also sponsored Rama Global School Foundation, Purwakarta, which has set up Rama Global School ([www.ramaglobalschool.sch.id](http://www.ramaglobalschool.sch.id)), which is accredited with Cambridge International Examinations and the Indian Certificate for Secondary Education. It provides the best international education standards for the children of employees of Indorama and other neighboring companies.



Medical Gloves



Indorama Centre For Learning in Purwakarta



PTA-key raw material for Polyesters

Indorama's Key Products in Indonesia





We, Asia Pacific Fibers, are a leading integrated global polyester player. Being at the forefront of the polyester industry, we are propelled by vertical integration, professional management, state-of-the-art machinery and consistent quality in manufacturing. We started spinning tales of progress along with our partners and customers more than 4 decades ago. We are primarily engaged in the manufacturing and marketing of Chips, Fibers, Filament Yarns and Performance Fabrics. Over the years, we have added capacities, applied technologies, innovated processes and products and have serviced markets across the globe. It is this experience of collaborating with our customers and providing solutions that help us to face the future with confidence in our abilities and in our relationships.

Headquartered in Jakarta, Asia Pacific Fibers operates two world class manufacturing facilities in two locations at Karawang, West Java and Kaliwungu, Central Java, employing more than 4,000 people. The facilities and operations of APF are fully integrated and remain a one-of-a-kind in Indonesia.

#### KARAWANG

The Company operates the PTA plant (Purified Terephthalic Acid) with an annual capacity of 340,000 MT, feeding both the batch and continuous poly-condensation plants. The continuous poly- condensation plant has a capacity of 300,000 MT annually and feeds directly to a staple fiber plant, which has an annual installed capacity of 198,000 MT.

#### KALIWUNGU

APF operates the filament yarn facility in Kaliwungu, Central Java. This plant has an annual capacity of 153,000 MT and is capable of producing a variety of specialty products with distinctive features.

#### Performance Fabrics Division (PFD)

Operating as an independent division, PFD positions itself as the leading innovator in Polar Fleece and Performance Fabrics. With its 20% domestic market share in polyester staple fiber and filament yarns, APF has been playing a pivotal role in driving the sustenance and growth of the Indonesian downstream Textile sector by providing essential raw materials to over 250 medium and small enterprises engaged in spinning, weaving and knitting activities.

#### Sustainability Initiatives

The future of Textile manufacturing is at an inflection point. The Global PET production has dramatically increased over the past two decades and led to the generation of high amounts of plastic waste. In order to ensure sustainability and reduce the environmental impacts, utilizing a sustainable and circular economy model is of prime importance. APF, through its sustainability initiatives has launched core products which will go a long way in protecting the environment; be it air, water and/or landfills. For us, at Asia Pacific Fibers, committing to your business before ours implies going beyond just selling and negotiating. It is trying

**“The Indonesian TPT industry is an integrated sector and has developed over 4 decades and it is of strategic importance to Indonesia in terms of its contribution to the national economy. The TPT sector in Indonesia is a major foreign exchange earner and the second biggest net exporter. It is one of the significant contributors to GDP and also the largest employer of over 2.60 million workers. The Indonesian TPT sector, with its strength and synergies of integration from upstream to downstream and abundant raw material sources (Polyester and Rayon), has a great opportunity to regain its dominant position in the global textile arena.”**



**V. Ravishankar**  
President Director  
Asia Pacific Fibres

to win together, with the customer. It focuses on co-created innovation despite being a polyester supplier in super-commoditized and competitive markets!

It is our commitment to create and deliver value not only to our immediate customer in the value chain, but to enhance consumer utility value as well. We want to re-affirm and accelerate our journey towards being a really agile and innovative polyester player situated in emerging markets, catering to global needs. Being a leading market player, we have all the hardware. Yet, what we value the most is the software of relationships. We'd love to learn, collaborate and win together with you in this journey. If you're a customer, we would work with you to grow your business. If you're an investor, our current facility and technology up-gradation could offer you a great opportunity to earn class leading returns together. If you're a prospective or current employee, we would work together to enrich and prosper together as a high performing team. After all, as a consequence of a strong commitment towards new opportunities, Asia Pacific Fibers has evolved into Indonesia's most progressive, flexible and fully integrated polyester producer, ranking amongst some of the best in the world.





# 19

## Tourism

# Taking Tourism to its Natural Next Level

The pandemic has revealed new sub-sectors in tourism that can become opportunities for collaboration and growth.

Both India and Indonesia are immensely popular tourist and travel destinations. Every year, thousands of people flock from different countries to marvel at the numerous world heritage sites that these two nations have to offer.

One can find hundreds of exchange students, business people, volunteers, teachers, digital nomads, and vacationers from various countries at world renowned tourist attractions like the Taj Mahal, Qutub Minar, Agra Fort, etc., which are three of the 38 world heritage sites in India, making India the country with the sixth largest number of world heritage sites.

When people think of Indonesia, they primarily think of a luxurious holiday in Bali. However, Indonesia has 9 world heritage sites catering to various types of travelers that ought to be explored thoroughly. These world heritage sites are Ujung Kulon National Park, Tropical Rainforest Heritage of Sumatra, Sangiran Early Man Site, Ombilin Coal Mining Heritage of Sawahlunto, Prambanan Temple Compounds, Lorentz National Park, Komodo National Park, Borobudur Temple Compounds, and the Cultural Landscape of Bali.

With ancient and diverse cultures, India and Indonesia serve as hotspots for cultural tourism, ecotourism, destination weddings, and film shoots. Their wellness centers and pilgrimage sites draw tourists in large numbers.

## Travel in India

India is awash with all types of tourist attractions steeped in ancient history and culture that one could visit for several reasons. Some of these places are known for their scenic beauty, and hence serve as stellar locations for filming. For instance, parts of Bollywood movies ‘3 Idiots’ and ‘Jab Tak Hai Jaan’ were shot at Pangong Lake in Ladakh, a previously overlooked part of the country that now receives almost four times more visitors than it did before 3 Idiots was released. Rohtang Pass in Himachal Pradesh is another stunning location for film shooting. Movies like Jab We Met and Yeh Jawaani Hai Deewani were shot there.

Hordes of people travel within these countries for weddings, pilgrimages, adventure sports, and wellness. Destination weddings, a trend that became popular in the US in 2009, has managed to make headway in India, Indonesia, and many other countries. Idyllic places like Udaipur, Jaipur, Goa, Andaman and Nicobar Islands, and Mussoorie are some of the favored destinations for Indian weddings, which have always been lavish and larger than life.

The world knows India to be home to many pilgrimage spots and holy festivals, the best known of which is the Kumbh Mela, one of the holiest festivals in the country held four times every twelve years across the cities of Prayagraj, Haridwar, Nashik, and Ujjain. 2021’s Kumbh Mela festival hosted 9.1 million pilgrims. Other noteworthy pilgrimage sites include Tirupati, Shirdi, Varanasi, Rishikesh, and Somnath.

South India plays host to some of the finest temples ever constructed, including Meenakshi temple (Madurai), Brihadeshwara temple (Thanjavur), Virupaksha & Vitthala temples (Hampi) and so on.

**“The paddy fields, the earthy and elegant architecture of the countryside of Indonesia inspire my work in the Valley of Kishkinda. There is so much India and Bali could share and learn from each other, mostly about preservation and presentation of their living culture. A Balinese philosophy that resounds strongly with me is ‘Tri Hita Karana’ the three causes of wellbeing – which are harmony with the divine, the land and humans.”**



**Shama Pawar**  
Founder Trustee  
The Kishkinda Trust



Besides its temples of timeless beauty, South India is also known for its ecotourism spots. Karnataka's Nagarhole National Park, Bandipur National Park, Kabini backwaters, and Kerala's Chimmony Wildlife Sanctuary, Aralam Wildlife Sanctuary, and Neyyar are some of them.

Very few things trump trekking in the forests of Karnataka. Siddarabetta, Avalabetta, Makalidurga, Skandagiri, Devarayanadurga, Savandurga, and Bidarakatte make Karnataka a hiker's paradise. Owing to India's geographical diversity, one can expect to find just about every adventure sport there is, including white water river rafting in Zaskar River (Ladakh) and Rishikesh, scuba diving in Cinque Island (Port Blair), parasailing in Goa, rock climbing at Sar Pass, situated in the Kullu District of Himachal Pradesh, etc.

States like Karnataka, Kerala, Uttarakhand, and Gujarat have many wellness and holistic health centres that those seeking spiritual rejuvenation and serenity can frequent. For instance, SwaSwara in Gokarna, Karnataka, offers a variety of programs that last between five days and three weeks. Guests are encouraged to practice yoga and meditation, and take part in activities like hiking, kayaking, and go on cultural tours. Situated in Tamil Nadu and partially located in Puducherry, Auroville is an experimental township that houses over 3000 people. Visitors from various countries come to experience Auroville's resorts and wellness centers. One of the more popular wellness centers is Arka, which offers a variety of treatments like ayurvedic massage, yogic healing massage, acupuncture, Thai yoga massage, etc.

### Travel in Indonesia

Situated over 4000km south-east of India, lies a country that travellers from all over the world frequent for a plethora of purposes. While Bali comes to mind as one of the world's favourite vacation Islands, Indonesia has much more to offer.

Indonesia and India have had cultural links for millennia. Indian traders first set foot in Indonesia, bringing Hinduism and Buddhism along with them. Bollywood, the largest producer of commercial films in the world, has managed to carve a niche for itself, and it has fans even in places where Hindi is not spoken, like Indonesia. The movie 'Bheja Fry 2' was shot in Bintan Island, which is a part of the Riau Islands province. Indonesia is also a preferred spot for destination weddings. Bali, known for its breathtaking scenery, warm breeze, and blue skies, has become a popular destination wedding spot, especially for Indians, who are increasingly breaking out of their hometowns to experience something entirely new.

There are several other stunning locations for destination weddings, including Pine Forest Camp (Bandung) and Batavia Marina (Jakarta), among many others. Bali also has a bunch of luxury wellness retreats that cater to eco-conscious wellness warriors. One of the better-known wellness retreats, Fivelements, is an award-winning eco-conscious resort offering programs in the greatest of Balinese traditions. One can choose from three highly personalized wellness retreats to experience a unique healing journey inspired by the culture in Bali.

Indonesia's stunning variety of ecotourism locations is another compelling reason for people to visit the country. In 2019, ecotourism contributed about 35% of Indonesia's income from tourism, which is a testament to the importance of ecotourism in Indonesia. Indonesia offers some of the most enriching ecotourism experiences on the planet. One of the more famous ecotourism spots is the Komodo National Park, a fascinating world heritage site that serves as the habitat of the endangered species - the Komodo Dragon. Bunaken National Park is another ecotourism spot that fits the label. Located near the centre of the Coral Triangle, Bunaken National Park is home to 390 species of corals. Bunaken offers incredible snorkeling, surfing, and diving experiences. Besides this, one can enjoy trekking, spotting wildlife, and visits to the local villages.

**"I believe in Tourism and Creative Economy for economy rebound after the Covid-19 Pandemic. Sustainable Tourism and Inclusive Creative Economy will play significant and important roles. As Indonesia and India have so many KESAMAAN or similarity in many aspects of Cultural and Socio Culture, Heritage and History since hundred years ago, I believe we can do many things in terms of innovation and collaboration. An idea of JALUR REMPAH or SPICE ROAD will bring Indonesia and India in the same vision. Let's Spice up the World!"**



**Fadjar Hutomo**  
Deputy for Minister  
Ministry of Tourism &  
Creative Economy,  
Republic of Indonesia

Having stood the test of time since it was built in the 8<sup>th</sup> and 9<sup>th</sup> centuries AD during the reign of the Shailendra Dynasty, the Borobudur Temple Compounds is one of the greatest Buddhist monuments to ever grace the planet. It hosts around 5 million tourists every year and upto 300,000 per day during the holidays. It is located in the Kedu Valley, in the southern part of Central Java. It serves as a Buddhist pilgrimage site, but its integrity is compromised to an extent due to a lack of control of commercial activities.

## THE NEXT STEP

The pandemic has brought the entire world to an indefinite standstill, resulting in most industries taking massive revenue cuts. This is especially true of industries like travel & tourism, entertainment, and so on. While many places in the world are opening up, India and Indonesia do not seem to be in the clear just yet. According to Brian Chesky, CEO, Airbnb, “Business travel won't ever go back to what it was pre-pandemic”. He opines that people now have a lot of work and living flexibility, which is something they have never had. As a result, people are becoming more choosy about where they want to live and for how long. Believing that flexibility is the key to the future of travel, Airbnb has introduced over a hundred changes and upgrades. Airbnb also reported that approximately 25% of bookings in early 2021 were for longer-term stays of 28 days or more.

## Cultural Tourism

States like Jammu & Kashmir and Goa that are known to generate revenue from tourism have been adversely affected by the second wave. While Goa was able to keep itself afloat after the first wave, hosting hordes of visitors from all over the country, the second wave proved to be too much. The authorities hope to revive Goa's tourist industry by November 2021. Indonesia is in the midst of turning Mandalika, a beautiful coastal stretch on the island of Lombok, east of Bali, into a luxury travel destination that the government considers to be the next Bali.

## Wedding Destinations

The wedding industry has witnessed a downslide since the onset of the pandemic, with tons of people holding private weddings with only a few family members present. However, with the second wave coming to a close, many couples are beginning to schedule weddings at exotic wedding destinations. According to a report by The Jakarta Post, 2000 hotels and 8000 restaurants were shut down during the first three months of the pandemic, with the occasional wedding keeping hotels afloat.

## MICE

The Meetings, Incentives, Conferences & Exhibitions (MICE) tourism industry has been severely affected by Covid-19 just like virtually every other industry. There are no events or exhibitions currently, and companies and stakeholders are being forced to run virtual meetings and conferences instead. However, it will take time for the industry to recover, considering it earns its money from accommodation and sales at exhibitions and other events. That said, physical events are relevant and always will be since one cannot do without face-to-face interactions in sectors like food, leisure, and so on. The industry will be revived in due time after mass vaccination and the implementation of vaccination passports. For MICE to recover and thrive in the future, the industry will have to invest in technologies and services to maintain health and hygiene.

## Medical Tourism

Medical tourism is one of the many sectors in India that has been rapidly growing over the last few years. It was estimated to be worth US\$ 5-6 billion in mid-2020.

**“India and Indonesia share a rich and vibrant relationship. Their culture & economic relations span over centuries. Underpinned by an already strong partnership, I believe the world's two largest democracies can collaborate even further to fuel joint opportunities in tourism, agriculture, manufacturing and harnessing human capital for the services sector, such as in the case of the nationally vital cash management services to increase financial inclusion.”**



**Anuj Zinzuwadia**  
President Director  
Prosegur Cash Indonesia





**“One can hardly communicate the intangible nature of what makes Bali so magical – a cultural heritage connecting India and Indonesia beyond borders. A paradisiacal charm & spirit where art & craft intermingle, where heavenly & earthly energies most perfectly synergize and form an intriguing amalgamation that feels so much more connected to the local culture than in resort enclaves elsewhere in the world - should give a traveler a good idea of reasons to just go!”**

According to an article by Financial Express, approximately 697,453 foreign tourists came for medical treatment to India in 2019.

The fact that India manufactured its own vaccines to battle the Covid-19 pandemic is a testament to the country’s advancement in this sector. While the number of medical tourists temporarily dipped with the imposition of lockdowns, the inflows will pick up pace when normalcy returns.

Traditional medicines like Ayurveda are gaining popularity in recent times. “There is a certain amount of interest among people regarding the traditional medicines of India, including Ayurveda, immunity-boosting natural products, and yoga. People have an interest in naturopathic treatment. We should highlight the fact that these are helpful in treating people suffering from chronic illnesses,” opined Prof. Ravi Mehrotra, Chief Executive Officer, ICMR-India Cancer Research Consortium.

Prof. Ravi Mehrotra believes that India can be the number one medical tourism destination on the planet in the near future thanks to the complex transplant surgeries that are performed at affordable prices and a traditional ayurvedic system that is said to be effective against various chronic diseases.

In Indonesia, the government plans to turn the Sanur region in Bali into a special economic zone that focuses on health, primarily to attract aged visitors. A popular resort in Bali, Sanur has 41 hectares of land ready for development, with 21.2 hectares allotted to create a health tourism hub. This hub will have a variety of facilities, including an international hospital, hotel, ecopark, hospitality school, and so on.

Ultimately, the Indonesian Government plans to promote the development of health and medical tourism and improve health facilities by getting foreign investors to open international hospitals. This is to establish Bali as a preferred destination for medical tourists and reduce the number of Indonesians heading overseas for medical treatment.



**Monica Mohindra**  
Entrepreneur  
Think Bali Holidays,  
Weddings & Events

# Indian Tourism Trails for Indonesians

By Raghu Gururaj

A novel approach to promoting India's potential as a tourist destination for Indonesians

India and Indonesia are two large countries with sizable Muslim populations. Just consider these statistics. At around 200 million (2019 estimate), Indian Muslims constituted just over 15% of India's population. India has the world's third-largest Muslim population (after Indonesia and Pakistan) and the largest Muslim minority population. Also, India is home to 11% of all the world's Muslim population. On the other hand, with 226 million Muslims (87% of its total population), Indonesia ranks as the largest Muslim nation in the world. It is home to 12.8% of world's Muslim population. Roughly 4% of its population are Hindus and Buddhists.

The age-old cultural connect between India and Indonesia is already well documented. India brought Hinduism and Buddhism into Indonesia through its traders and scholars between 1<sup>st</sup> and 4<sup>th</sup> century AD. Gujarati traders introduced Sufi Islam in Indonesia in 11<sup>th</sup> century. With such staggering statistics and historical cultural and religious linkages, one would imagine that both these giant nations have a close people-to-people and touristic connect. Unfortunately, such close linkages, affinities, and geographic proximity have somehow failed to translate into robust tourist inflows and outflows between these two countries.

India is an important market for Indonesia with the number of arrivals from India increasing year after year. As many as 5,95,060 Indians visited Indonesia in 2018 and over 650,000 in 2019. Bali continues to be a popular destination for Indians, who constitute the third largest group among foreign tourists visiting the destination. On the other hand, India has received less than 50,000 Indonesians annually in last five years.

While India has no lack of attractive destinations, its merits are often eclipsed by perceived images of primarily its environmental issues. One of the main reasons why India is not an attractive destination for Muslim travelers is the same reason why it isn't for travelers in general: safety concerns, poor tourist infrastructure, non-availability of faith-based needs like halal food eateries, accessibility to prayer rooms etc. India ranks 40<sup>th</sup> on the list of 100 preferred holiday destinations for Muslim tourists in the world. This is despite the fact that the country is home to the world's second largest Muslim population and has some of the world's most popular tourist destinations with a distinct Islamic heritage.

## A New Approach for the Indonesian Tourist

Until now, a conventional approach has been adopted to promote India to foreigners, where India is being showcased as an attractive destination which includes promotion of its natural assets and beauty, architectural marvels, spiritual appeal, Yoga, Ayurveda, cultural diversity, cuisine, customs etc. While this approach may have worked for other audiences to an extent, the average Indonesian tourist who is looking for tourism per se and leisure, he already has several options in the region itself, apart from Australia and New Zealand. To introduce the Indonesian tourist into the Indian tourist space, a different approach may be required. As a start, it may be more appropriate to leverage the existing cultural, religious and historical affinities between India and Indonesia and focus promotion efforts through Islamic tourism, Buddhist Trail, and Hinduism linkages.





## Islamic Tourism

There are gaps in awareness about India as a destination for Islamic tourism. Promotional efforts to raise awareness about Indian Islamic heritage sites and history should be the first step. Indian architecture is an incredibly eclectic mix of Islamic, Persian, Turkish, Arabic, Central Asian, and native traditions. India also has several marvelous Islamic World Heritage UNESCO listed tourism sites that are historical, cultural, and spiritual in nature.

North and Western India are replete with prominent Islamic spiritual sites like the 14<sup>th</sup> century Hazrat Nizamuddin Dargah, Delhi. The Jama Masjid in Delhi, built by Mughal Emperor Shah Jahan in 1650, is believed to be the largest mosque in India. The Hazratbal Mosque, Srinagar, Jammu and Kashmir, is a highly revered site. Dating back to the 17<sup>th</sup> century, this mosque is believed to house Moi-e-Muqqadas, the sacred hair of Prophet Muhammad's beard. The Khwaja Moinuddin Chishti Dargah, Ajmer, Rajasthan is one of the most sanctified Sufi shrines in India. The tomb of Salim Chishti, Fatehpur Sikri, Uttar Pradesh is another supreme example of Mughal architecture. Dewa Sharif, Barabanki in Uttar Pradesh is a famous pilgrimage town that houses the tomb of Sufi Saint Haji Waris Ali Shah, who was considered an exponent of universal brotherhood and believed to have commanded mystical powers. The Haji Ali Mosque in Mumbai is one of the more popular attractions of Mumbai, attracting devotees from across Asia.

South India houses some of the oldest mosques in India. The Cheraman Juma Masjid, the Malik Dinar Mosque, the Mishkal Mosque in Kerala, the Nagore Dargah in Tamil Nadu, and the Mecca Masjid, in Hyderabad, are not only some of the largest mosques in India, but also almost as old as Islam in India.

All these revered Islamic sites of India have the potential to not only attract Muslim pilgrims in large numbers from Indonesia, but will also contribute in promoting peace, mutual social harmony, and universal spiritual understanding between the people of India and Indonesia.

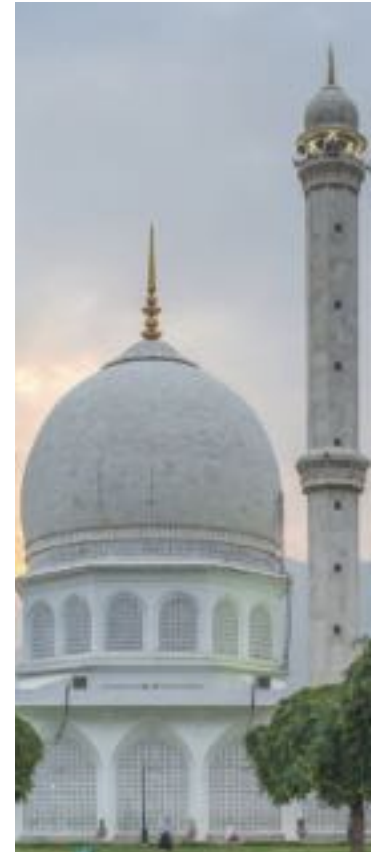
## The Buddhist Trail

Though Indonesia has less than 3% professing Buddhism, it still translates to 8 million people. In India, the Buddhist trail is already relatively well established and attracting Buddhists from across the world, especially from ASEAN. But the number of Buddhist travelers to Gaya and other sacred Buddhist sites from Indonesia is a mere trickle. This aspect requires a careful and an aggressive push in the form of customized tourist packages to the sacred sites, advertising, roadshows etc. The Indian tourism office in Singapore, which covers Indonesia as well, is well positioned to initiate such a promotion.

## Hinduism and Indian Temples in Sumatra

Through the centuries, India has been a source of inspiration for art and architecture in Sumatra as it has been to the entire present day ASEAN region. Today, a myriad of cultural vestiges of the Indian connect in the form of landmarks, milestones, rituals, and social mores, such as use of Indianized names of people, influence of Indian languages (Sanskrit in particular) on Indonesia Bahasa, serve as a constant reminder of India's age-old cultural influence in this part of the world. Due to such linkages with Indian civilization, the ancient Hindu epics of Ramayana and Mahabharata are already deeply embedded in the cultural matrix of Indonesia and other parts of Southeast Asia.

For the devout and pious Indian (or Indian Indonesian), the provinces of Sumatra and Bali are like comfort food. Replete with Indian temples of bewildering variety and preferences, both these regions offer spiritual solace to seekers on a daily basis



and draw them on festive occasions. There are more than 70 Indian temples of varying sizes and importance in Sumatra. In North Sumatra alone, there are 40 of them. Given the size of the Indian origin population in Sumatra, estimated between 100,000-125,000, it may not be incorrect to say that there are more Indian temples in North Sumatra per person than in India itself. Bali too has a substantial number of Hindu temples.

The tradition of Indian temple building in Sumatra and Bali took a firm foothold around the 8<sup>th</sup> century when the first Shiva Hindu priests arrived in Bali after traveling through Myanmar, Cambodia, Sumatra, and Java in their search for a place similar to their homeland of Mahabalipuram. The temples of Indonesia have drawn inspiration from Indian temple architecture since the 4<sup>th</sup> century AD. The lesser-known Hinduism trail between India and Indonesia needs to be promoted as a tourism circuit which will appeal to devotees from both countries.

As tourism cannot be separated from socio-cultural factors in a society, promotion of Islamic tourism, Buddhist trail in India and the presence of Hindu temples and Gurudwaras in Indonesia would lead to a harmonization of culture, politics, religion, and economy. Such increased two-way inflows into both these countries would in the long run enable a better appreciation of India, leading to broad-based tourist footfall in India from Indonesia.







# 20

## Future Forward

# Future Forward

By Pavan Arora

In preparing for tomorrow, India and Indonesia need strategies, tactics and the will to collaborate.

Industries have been undergoing massive shifts even before the pandemic disrupted the world. Primarily, trends indicated a focus on consumer behaviour and technology, artificial intelligence, on-demand economy, 5G networks, and omni-channel retail. However, with the coronavirus, some trends were accelerated, and others were obliterated. For example, contactless retail and virtual medicine burgeoned, while investments in modern conference centers and tourism technology were halted. But if new trends emerged from the New Normal, what are the trends for the Next Normal?

Markets are volatile, and future industries are shaped not just by global events, but also by changing consumer preferences. If nations prepare for today's trends, they risk being too late to market. Instead, they can prepare for tomorrow by focusing on their differentiated resources, partnering with other nations with complementary resources, and planning for an ever-changing world.

## Change

"The pace of change has never been this fast, yet it will never be this slow again."  
—Justin Trudeau, February 5, 2018 @ World Economic Forum, Davos

No one has a crystal ball. We cannot know which trend will disrupt which industry tomorrow. But we do know that change itself is accelerating. So, the question we must answer is how should nations prepare, align, and work together to be best positioned for a world of fast-paced change? How can we prepare for that which we cannot see?

Even without visibility, nations can prepare for tomorrow, recognizing that rapid change is itself a fundamental trend. Building a foundational platform that allows citizens and companies to lead in an increasingly dynamic market landscape requires domestic policies that remove bureaucratic barriers and enable investments in infrastructure that would be in tune with tomorrow's trends.

However, perhaps the most overlooked foundational feature a nation must adopt to prepare for tomorrow is not domestic, but bilateral or multilateral agreements with other nations. Among the most impactful lessons that the globalization of trade has taught industries is that no single nation has the optimal resources (e.g., skills, raw materials, labor, and infrastructure) for the most efficient end-to-end delivery of a product or service. The optimal value chain requires the cooperation of two or more nations.

## Coopetition

"In Asia, in particular, governments are grappling with the twin tensions of rapidly digitizing and globalizing economies and the desire to have proprietary national digital infrastructures."

—Gautam Aggarwal, The Financial Times

In today's world, nations must foster bilateral cooperation in some industries to compete globally, but must also compete with each other in other industries. This

**"Indian and Indonesian cross border investment has been an unfulfilled dream despite the size and scale of the two economies and strong cultural and bilateral ties. As both countries lower restrictions and improve the ease of doing business, I am hopeful that the next 25 years will mark a new chapter that is underscored by the two countries making great strides in leveraging their relative strengths and substantially increasing the investment flows between them."**



**Anand Kumar**  
Co-Founder  
Gateway Partners



dynamic is complex and often leads to behaviors that limit or sacrifice the growth of the cooperating industry for the sake of the competitive industry. A growth strategy that is often glossed over is coopetition. It is a potent mix of cooperation and competition and they are not considered fundamentally different elements. A prominent aspect of the concept of coopetition is that competitors can derive benefits from cooperating strategically. In terms of market verticals, coopetition sees that competitors can be suppliers as well. With regard to market horizontals, coopetition sees that a company may achieve high market penetration in one region, but not in others. In the corporate world, particularly with technology companies, coopetition has proven to push growth frontiers in an ever-changing dynamic.

India and Indonesia have complementary resources and complementary large markets. These features represent an opportunity for the nations to become a global force together in the industries of tomorrow if they are encouraged to cooperate. However, preparing for such a paradigm requires both governments and the complementary industries to also allow for competition.

### Rules of Engagement

“The best for the group comes when everyone in the group does what's best for himself AND the group.”

—John Nash, 1994 Nobel Prize Winner in Economic Sciences

If India and Indonesia are competing in Industry A, those outcomes and tactics must be siloed from the Industry B in which they cooperate. Cooperation includes dependency between two actors. Such dependency is in jeopardy, as will be the future value of that joint effort if it is allowed to be bartered away for the sake of unrelated competition. The opportunities that lie before the nations are to prepare for tomorrow.

### Hope for Tomorrow

“By building alliances with local and international stakeholders, innovation and profitability can occur more rapidly. This is especially important in emerging markets because these stakeholders play a key role in overall development and have resources that can be harnessed to embrace innovative approaches.”

—Mark McCord, Tearing Up the Box

The hope for India and Indonesia is to become global leaders in new industries yet to be mature, or even developed. Opportunities abound, given that the resources of each nation hardly overlap, for example India's skilled technical labor force and Indonesia's advances in aviation and travel.

In a world that is changing by leaps and bounds, laying a foundation that prepares for coopetition can lead to bilateral dominance in the industries of tomorrow. Ironically, nations often referred to as ‘emerging markets’ are potentially the very players best suited to materialize new markets if they take the very best facets of cooperation and competition.



**“The most valuable asset of a democratic nation is its pluralism. Both India and Indonesia embody this in our national mottos Aneka Mein Ekta and Bhinneka Tunggal Ika. If we pride ourselves as being the first and third largest democracies in the world, we should truly respect and glorify our pluralist principles as being sacrosanct and not allow it to be eroded and abused due to sectarian political interests.”**



**Julia Indiaty  
Suryakusuma**  
Columnist & Author

**“Unity in Diversity is the common refrain between these two fast developing and regionally influential democratic nations, India and Indonesia, and which are on the cusp of extricating themselves from the conferred “third world” title. World financial institutions recognize the likelihood of these two being among the top 5 economic powers in the next 25 years and as a result presenting themselves as strategic and economically influential global partners. Besides socially and culturally, historic cross pollination has resulted in present day congeniality and mutual respect between the two. So, there is no reason not to encourage further co-operation in every sphere where growth is possible and to depend on the specific resources and skill sets each country has grown to possess to help and promote each other.”**



**Tiku Menon**  
CEO & Chairman  
Grama Bazita Group

**“The Indonesia India economy dates back since the 1970s (ASEAN INDIA economic relations started in 1992), the two countries share not just cultural similarities, but also similar growth patterns since a decade ago. The most prominent developments that we have witnessed are in the areas of the engagement in the free movement of goods and services. While India left the RCEP train, we continue to see promising dialogues and bilateral engagements. We at S. ASEAN International Advocacy & Consultancy hope that the ties between India & Indonesia will strengthen amidst a robust and aggressive advance made by China in the region.”**



**Shaanti Shamdassani**  
President & Managing  
Partner  
S. ASEAN International  
Advocacy & Consultancy

**“Indonesia is one of the largest education systems in the world with an exceptional technology adoption rate. It is an interesting market to us. Having catered to students, teachers, and schools for more than a decade in a similar environment in India, we have no doubt that Kelas Pintar by Extramarks will be able to play a large role in bringing innovation to the education domain in Indonesia and make learning effective and fun.”**



**Atul Kulshrestha**  
Director  
Extramarks

**“Having lived and worked in Indonesia for the last 30 years, we have seen significant economic reforms announced by the Government. Indonesia offers plenty of exciting opportunities for Indian corporates, with the recently announced deregulation package permitting foreign ownership in several sectors. As a boutique investment bank, we continuously see exciting projects across diverse sectors, and look forward to collaborating with Indian investors in the coming years as we have been doing all these years.”**



**Kilpady Pradeep Kumar**  
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