

ALLEN & OVERY



Delivering market-leading India expertise

Our driving ambition at Allen & Overy is to help the world's leading companies make sense of the commercial and legal complexities of globalisation. In a market as dynamic as modern India, that's an agenda that fits exactly with the needs of our clients.

We have taken a lead among international law firms in providing the right support for our clients, whether they are investing in India or looking to expand their operations in India to new markets across the world. We have done this by providing them with the right resources to complete complex cross-border transactions, often in multiple jurisdictions, and by giving them access to first-class legal support on the ground in India.

Our India Group is made up of over 100 partners and associates drawn from across our network of international offices. All of these professionals have deep specialist knowledge of the Indian market and

a long track record of working on India-related matters. But they also reflect the full range of practice areas in which A&O excels, including foreign direct investment, M&A, banking, capital markets, litigation, arbitration and employment, as well as the full range of business sectors, including energy, infrastructure, mining, financial institutions, private equity, insurance, telecoms, media and technology, real estate and life sciences.

As such, we are ideally placed to act as leading international counsel on the sort of transformational, cross-border deals that are burgeoning in India's fast-growing economy.

"The India group offers an impressive spread of legal services, from banking and finance and capital markets to international arbitration."

Chambers Asia Pacific
Awards for Excellence 2014



Manoj Ladwa is the Chief Executive of India Inc.

📧 @manojladwa

INDIA'S BIG DEFENCE JUGGLE: GREAT PROGRESS, MORE TO BE DONE

I recently met a well-known financier in London who has invested over \$500 million in India. When I met him last year, he was feeling apprehensive about his investments, feeling that his “Modi-bet” may not be coming off. His investments were stagnating, the bureaucracy was still finding its feet with the new political masters, and the outlook was patchy. This time, the mood had changed. He said he had just sold two companies in India, earning a staggering 55 per cent rate of return. Both companies had overflowing order books, especially for exports.

India was back in vogue.

The upbeat mood is being reflected across sectors of the Indian economy. Perhaps none more so than in the defence sector, where new rules to ease foreign direct investment (FDI) flows, including allowing 100 per cent foreign ownership on a case-by-case basis and other big policy initiatives are totally reshaping India's engagement and outlook for foreign investment.

Manohar Parrikar, India's highly regarded defence minister, has had to play a fine juggling act. He has had to deal with a series of legacy issues that had held up billions of dollars of weapons purchases, seriously affecting India's defence preparedness. Happily, Parrikar has resolved most of the issues he inherited, revamped India's outmoded and bureaucratic defence acquisition procedures, encouraged private sector participation and even drawn up plans for exports of offensive weapons by the private sector.

But disappointingly, despite several promises, the final policy on ‘blacklisting’ is yet to be announced. It is hoped the policy will codify and rationalise the hitherto arbitrary nature of blacklisting companies who fall foul of India's defence procurement laws.

That, however, is one of the few areas in which one can quibble with the government. Happily, Parrikar's initiatives are not ivory tower formulations, as many previous initiatives to build a private sector defence-industrial base were. As Baba Kalyani, chairman and managing director of Bharat Forge, which is hoping to emerge as one of India's major defence

contractors, tells ‘India Investment Journal’: “There are many foreign companies that are willing to/are in the process of establishing defence units in India... Two major foreign OEMs Elbit and Rafael have formed defence units (in the form of JVs) with the Kalyani Group... I am sure similar discussions are going on with many other companies in the country.”

But creating an integrated supply chain from the level of MSMEs all the way up to the final system integrators and the big boys who will design and build complete and complex

weapons systems such as fighter jets, warships, missile systems etc will take time.

The optimistic estimates are two decades. But the most important issue – and this is likely to be Parrikar's lasting

legacy – is that he has laid a solid foundation on which his successors can build a potent defence-industry edifice.

The states, too, have jumped onto the bandwagon. Gujarat, Tamil Nadu, Punjab, Maharashtra, Andhra Pradesh and Telangana are competing with each other to attract the big and small domestic and foreign defence sector companies to set up units in their states.

But that is not the only good news coming out of India. The long awaited goods and services tax (GST), which will replace a welter of central and state levies with one unified tax and integrate India's 29 states and seven Union Territories into a common market is now well on its way to reality.

I would also like to draw attention to our report on Invest India, India's new investment facilitation agency, which guides foreign investors in India from “conceptualisation to cash flow”. What makes it unique is the fact that it is manned by a group of young women and men, almost all of them from Ivy League schools or their equivalents, who voluntarily gave up six-figure dollar salaries in response to Prime Minister Narendra Modi's call to build a new and transformed India. I'm certain their passion, drive and can-do approach has played a role in the record FDI inflows in 2015-16 amid a gloomy global scenario.

Manohar Parrikar, India's highly regarded defence minister, has had to play a fine juggling act.



Digital India



Smart City Wi-Fi

**Remote Expert
Government Services**

Safe & Secured city

**Smart City
Unified Management**

Smart City Lighting

**Smart City
Traffic Management**

For more info. Please log on to www.cisco.in



BDO India LLP is the India member firm of BDO;

The world's 5th largest Tax, Accounting & Advisory network providing professional services in more than 150 countries, with over 64,000 people working out of more than 1,400 offices worldwide

Direct Tax | Indirect Tax | Transaction Advisory
Risk Advisory | Business Advisory | Outsourcing
Assurance

Mumbai | Pune | New Delhi | Gurgaon | Bengaluru | Hyderabad | Aurangabad
The Ruby, Level 9, North West Wing, Senapati Bapat Marg, Mumbai 400028, INDIA.
Tel : 022 2439 3600 | www.bdo.in

CONTENTS

COVER STORY

Lining up for a new start

'In the next two years, why not touch \$2 billion.'

Manohar Parrikar
Indian Defence Minister

10



FROM THE TOP



03 India's Big Defence Juggle: Great progress, more to be done
by Manoj Ladwa

EDITOR'S NOTE



06 Editor's Note
by Aditi Khanna

COVER FEATURE: DEFENCE

INTERVIEW

14



The key to absorbing foreign tech is not 'know how' but 'know why'

India Inc. Exclusive with Baba Kalyani, Chairman & Managing Director, Bharat Forge Ltd.

18 **Opinion** Man of integrity takes on India's defence

by Ashok Malik,
Senior Columnist

19 **Sector Focus** In defence of making the impossible, possible

by India Inc. staff



22 **Wide Angle** striking the right partnerships for India's defence

by Rakesh Sood,
Senior Indian diplomat

24 **Sector Focus** India reaffirms UN peacekeeping commitment

MAKE IN INDIA

27 **Interview**
Giving Make in India the currency to succeed
India Inc. Exclusive with Martin Sutherland, CEO, De La Rue



30 **Sector Focus** Bringing Russian intelligence to Make in India

by Timur Vekilov, CEO, Vocord



32 **Bird's Eye View** Now, for the next steps towards GST

by Arnab Mitra

35 **Analysis** GST looks set to be a game changer, but there are challenges ahead

by Kevin McCole & Simon Jones

FLAGSHIP SCHEMES



38 Digital India India on a click
by Amit Agarwal, VP & Country Head, Amazon India



42 Guest Column The future of logistics is paved with innovation
by Nishith Rastogi, Co-founder & CEO, Locus.sh



44 Special Report India leads the global coding race



52 Rahul Munjal Renewable energy crusader

54 Solar India Drivers behind Indian solar growth
by Joy Saxena
Executive Director- Finance, Vikram Solar



56 CSR Focus Working towards a sustainable value chain
by Sanjay Khajuria, Senior Vice-President -Corporate Affairs, Nestlé India.



58 Clean India Investing in toilets not such a waste

INVEST INDIA UPDATE

46 Green channel for investments



49 Employee of India
by Shankar Ranganathan, AVP, Invest India

50 First Person Investment enabler
by India Inc. staff

POLICY INDIA

59 Review The Dancing Elephant: India's reform-fuelled economic growth
by Richard Gubbins and Gopika Pant



65 Realty Corner The transition to formal funding
by Deepak Varghese, Founder-Director, Moon Beam Advisory

66 Tax Talk India, Cyprus overhaul their tax agreement

STATE FOCUS: PUNJAB



68 Why Punjab

FACE TO FACE

74 With Harsimrat Kaur Badal, Minister for Food Processing



76 Fact Sheet An Expat's guide to Amritsar

78 Final Word India's 4G revolution will help western SMEs make it big

India Investment Journal is published
by India Inc.

TEAM



Chief Executive

Manoj Ladwa

manoj.ladwa@indiaincorporated.com



Editor

Aditi Khanna

aditi.khanna@indiaincorporated.com



Consulting Editor

Arnab Mitra

arnab.mitra@indiaincorporated.com



VP Operations

Rajvi Singhi

rajvi.singhi@indiaincorporated.com



Special Projects Director

Nomita Shah

nomita.shah@indiaincorporated.com



Events Manager

Dina Ladwa

dina.ladwa@indiaincorporated.com

www.indiaincorporated.com

© India Inc. Limited, all rights reserved.
Reproduction in whole or in part without
our written permission is prohibited. Views
expressed by our contributors are their own
and do not necessarily represent the views,
policies of India Inc. While every effort is
made to achieve total accuracy India Inc
cannot be held responsible for any errors
or omissions.

Follow us:

@indiaincorp

/company/india-inc

/indiaincorporated

September Edition
Price £5

EDITOR'S NOTE

India has emerged as one of the strongest performers in terms of deals related to mergers and acquisitions (M&A) in recent months. According to data from Thomson-Reuters, total M&A deals involving Indian companies grew by 82 per cent to \$27 billion during January to June 2016, which is the highest in the first six months in any year since 2011.

These figures come at the back of some solid forecasts, with Fitch Ratings Agency predicting India's Gross Domestic Product (GDP) would grow by around 7.7 per cent in FY2016-17 and slowly accelerate to 8 per cent by FY2018-19.

The manufacturing sector in the country contributes around 15 per cent of GDP. The Indian government, under the Make in India initiative, is trying to give a boost to the contribution made by the sector to take it up to 25 per cent of GDP.

As Prime Minister Narendra Modi recently said: "With rapid and continued economic growth of over 8 per cent over the next 30 years, we can have whatever best we see in the world."

It is against that bold mission statement that 'India Investment Journal' decided to shine the spotlight on the defence sector. As we explore in our cover story 'Lining up for a new start', it is about time India lost the dubious tag of being the world's largest arms importer despite being the world's fastest growing economy. And, it is the Make in India programme that holds fresh promise for the country's goal of self-sufficiency in the field.

We also catch up with one of the leading Indian players in the sector, Baba Kalyani of Bharat Forge, to see why he believes the key lies in "know why" rather than know how. A senior former diplomat, Rakesh Sood, weighs up how the Indian government can create the right environment to help translate global interest in India's defence sector into collaborative ventures.

Besides some of these highlights around our defence sector cover package, IJ's latest edition comes packed with its usual range of interviews, special reports and guest columns. We come 'Face to Face' with India's food processing minister Harsimrat Kaur Badal to see what kind of foreign direct investment (FDI) she was able to lure back to India during a recent tour to the UK; a solar industry expert analyses India's renewables revolution; Nestle India gives its corporate social responsibility (CSR) perspective; and we take stock of the funds raised for Indian infrastructure through Masala Bond listings at the London Stock Exchange.

As part of some Digital India updates, we review a Barclay's report on India's coding success and Amazon's India head gives a presentation on how the company's technological solutions are transforming lives in the country.

Read on to delve into some of these exclusive features and more.

Aditi Khanna
Senior Editor of India Inc.

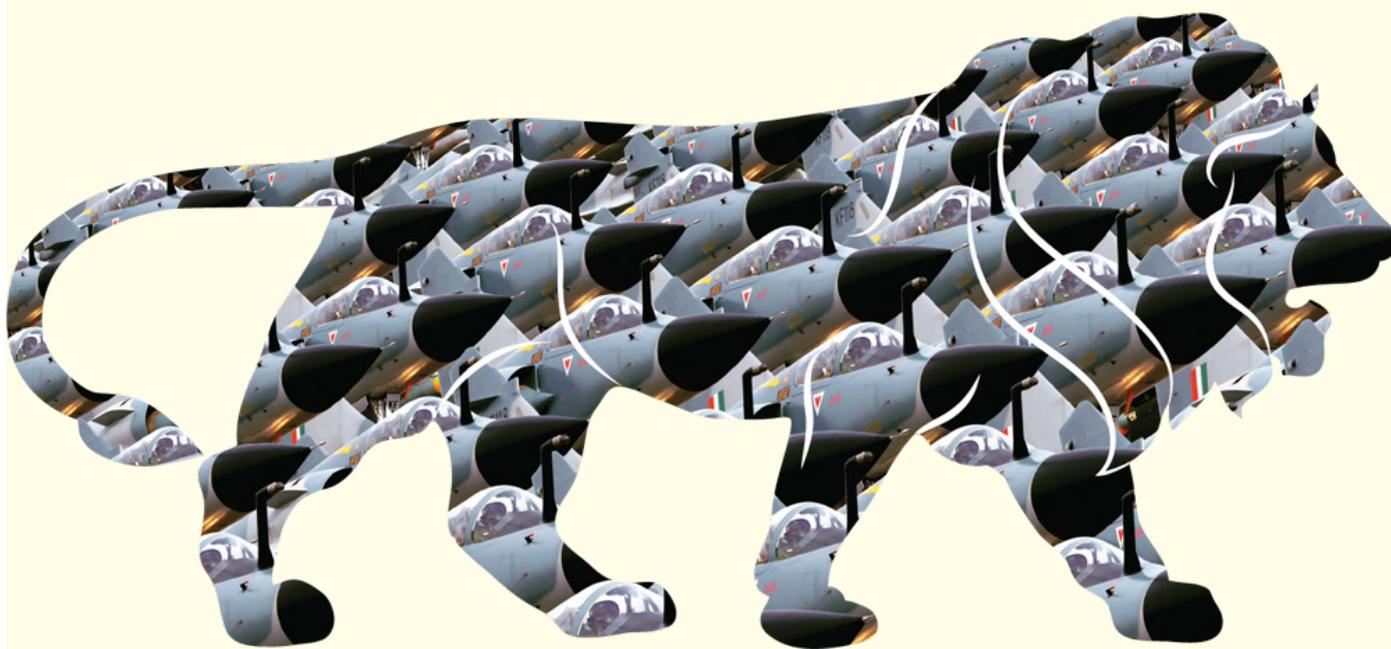
READY TO BOOM

India will spend between \$100 billion and \$150 billion over the next 10-15 years to upgrade its military hardware and weapons platforms. On its shopping list are warplanes, transport aircraft, heavy and light helicopters, tanks, howitzers, small arms, radars, submarines, aircraft carriers and ammunition of almost every description.

The Narendra Modi led government is planning to spend this humungous amount not only to bolster the country's military capability but also to develop an indigenous military-industrial base under its flagship Make in India initiative.

'India Investment Journal' analyses this ambitious defence programme.





LINING UP FOR A NEW START

by India Inc. staff

The Modi government's Make in India programme promises to revive India's stuttering domestic defence industry and make India self-sufficient over the next two decades.

It is one piece of statistics that no Indian is proud of. That India, the world's fastest growing country, the ninth largest economy and, by common agreement, the brightest economic spot in the world, is also the world's largest arms importer is a huge matter of concern for India's political leadership and strategic community.

India imports 70 per cent of its requirement of arms from foreign countries, mainly the US, Russia, Israel, France, UK and some other European and South American nations. Since Independence, successive governments have tried to build a defence industrial base in the public sector but the handful of government-owned companies that till recently had enjoyed a monopoly over defence production in the country have failed miserably to measure up to the country's needs.

Make in India program to speed up the indigenisation of weapons production. The goal is to reverse import-make in India ratio from 70:30 to 30: 70 within a reasonable period of time.

A number of measures have been announced, including allowing 49 per cent FDI through the automatic route. The new policy allows higher levels of foreign ownership on a case by case basis. Other onerous conditions, such as the requirement for foreign companies to bring in "state of the art" technologies have been replaced by the requirement for "modern" technologies. Then, defence procurement procedures have also been eased to facilitate the entry of private sector and foreign companies.

The government has also come out with a list of equipment requiring Industrial licences and eased regulations for the same. It has also come out with a security manual and completely revamped the offset policy, under which foreign defence vendors are obliged to source a portion of the deal amount from Indian suppliers.

In addition to simplifying previously convoluted and complex procedures, the government has made it easier for private sector Indian companies to export defence equipment and also entered into



/// There are many foreign companies that are willing to / are in the process of establishing defence units in India. ///

*Baba Kalyani,
Chairman - Kalyani Group*

The Make in India push

After coming to power in May 2014, the Narendra Modi government has launched a major initiative under its flagship

strategic partnerships with a number of nations, including the US, Russia and Vietnam for production and export of defence platforms.

For example, India recently provided four naval patrol boats to Vietnam under a \$100-million line of credit. It has extended another \$500-million credit line and is believed to be negotiating the sale of the supersonic BrahMos missile to the South East Asian country.

A \$100-150-billion opportunity

Over the next decade, India is scheduled to procure arms platforms worth at least \$100-150 billion. The government is attempting to use this eye-popping sum of money as a bait to encourage foreign armament vendors to tie up with Indian private sector companies such as the Tatas, Bharat Forge, Reliance, Mahindra & Mahindra, L&T and set up manufacturing bases in India.

It is early days yet but there are indications that the government's initiative is moving in the right direction. Already, two major US defence contractors, Boeing and Lockheed Martin, have shown interest in setting up assembly lines in India for iconic fighters like the F-16 and the F-18.

Sweden's SAAB, too, has offered to shift its production facilities for the Gripen fighter, with full technology transfer, if India agrees to buy the plane for its Air Force.

"There are many foreign companies that are willing to / are in the process of establishing defence units in India. Setting up base in the country is dependent on many complex issues – easing of licensing procedures, FDI norms, offsets rules, a general feeling of ease of doing business and other such actions taken by the government are poised to play a major role in the years to come. Two major foreign OEMs, Elbit and Rafael, have formed defence units (in the form of JVs) with the Kalyani Group. I am sure similar discussions are going on with many other companies in the country," said Baba Kalyani, Chairman & Managing Director, Bharat Forge Ltd, the world's largest forgings company and a big player in India's nascent defence sector.

For example, the Mahindra Group has an agreement with BAE to assemble the M777 lightweight howitzers that India plans to equip its new China-focused mountain corps with. The deal is worth about \$750 million after a recent change in the duty structure.

50 per cent equipment obsolete

The current situation, with arms procurement skewed massively in favour of imports is a huge impediment to India's big power ambitions. Then, it has been estimated that though India spends approximately 2 per cent of its GDP on defence – with 40 per cent of this amount being spent on capital requirements – only 15 per cent of equipment used by its armed forces is state of the art. Another 35 per cent has been classified as modern, while as much as 50 per cent is obsolete.

Chronic shortages

India is located at the centre of the Indian Ocean and shares its land borders with seven countries. Of these, at least two can be termed hostile to its interests. The worst nightmare for Indian strategic and defence planners is a two-front war simultaneously with Pakistan and China.

To counter this threat perception, the Indian Air Force needs 42 squadrons of warplanes. But obsolescence and crashes have reduced it to only 34 squadrons. The bulk of these are made up of the obsolete MiG-21 and MiG-27 platforms. Then, India's frontline Sukhoi 30 fighter faces a chronic shortage of spares, which reduces its operability to only 50 per cent. This means only 50 per cent of India's mainstay fighters are ready for war at any given time against the desired ratio of 75 per cent.

But the public sector HAL has been unable to deliver the indigenous light combat aircraft Tejas, which is decades behind schedule, on time, forcing the government to look for alternatives abroad.

Even foreign acquisitions, such as the French Rafael fighter, have been delayed for years. It was only after the Modi government took over that the efforts to buy the jet

After coming to power in May 2014, the Narendra Modi government has launched a major initiative under its flagship Make in India program to speed up the indigenisation of weapons production. The goal is to reverse import-make in India ratio from 70:30 to 30:70 within a reasonable period of time.

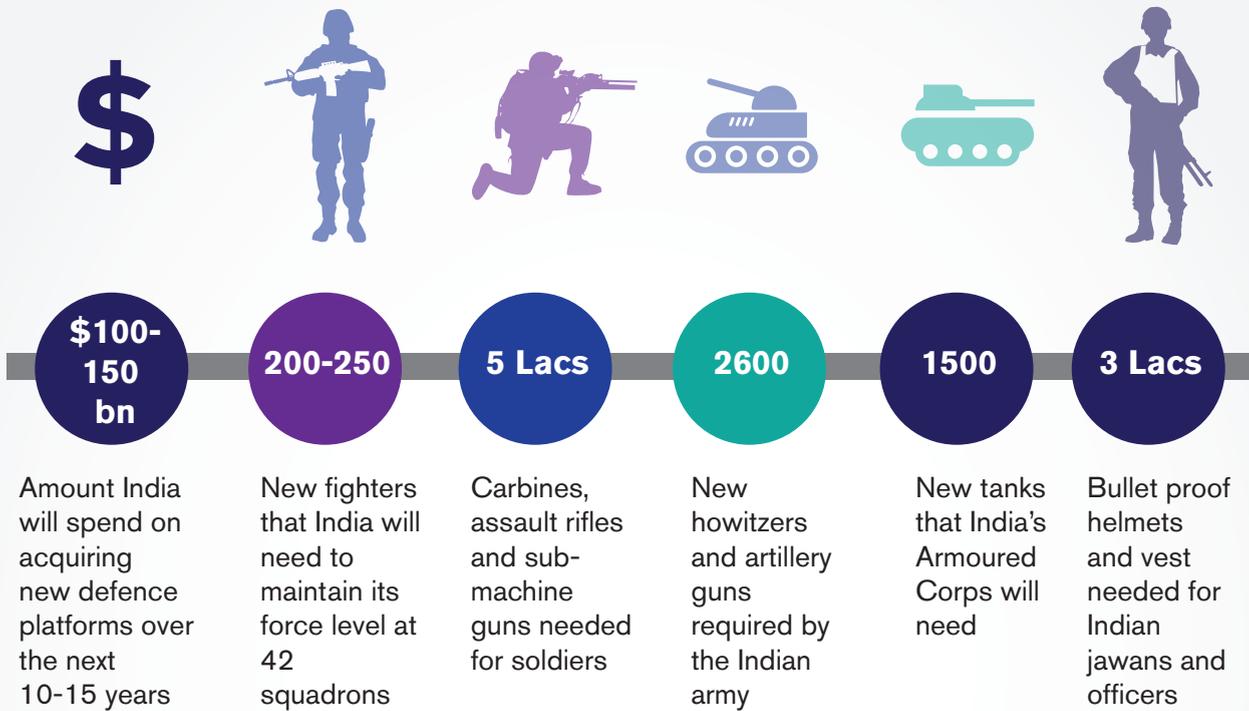


**The deadly
F-18
Hornet: Will
it be made in
India?**

Opportunities Galore

Over the next decade, India will spend billions of dollars to upgrade and acquire new defence equipment.

THE BIG NUMBER



EASIER POLICY

- 49%** FDI allowed through the automatic route.
- Higher levels of **FDI** allowed on case by case basis in cases involving modern technology.
- Easier norms for **export** of Made in India defence items.
- Small arms** manufacturing brought under the same norms as defence items.
- Offset policy revamped to make it more **investor-friendly**.



Source: MINISTRY OF DEFENCE

gathered some momentum. A final agreement to buy 36 planes off the shelf is likely to be signed shortly.

Similarly, India faces a debilitating shortage of tanks, howitzers and, scarily, even of rifles, carbines, light machine guns and ammunition.

A new beginning

The Indian Army has not inducted a single new howitzer since the Bofors scandal broke in the 1980s. Faced with a precipitous decline in its offensive capabilities, the government belatedly decided to use the old Bofors design to make a new gun called Dhanush. The 155 mm Indian howitzer, which is considered even better than Bofors, is being inducted into the Army after undergoing extensive field trials in different weather conditions, altitudes and terrains.

Bharat Forge, too, has designed and built four howitzers that are currently undergoing field trials. "Having proven our capabilities with these developments, we are now focusing on the requirements of the Indian defence forces and are confident of providing state-of-the-art indigenous artillery solutions for them," Kalyani told India Investment Journal.

Riding on India's strength in IT

"In the coming years, the role of IT and network centric warfare is going to be a game changer. As the Indian defence industry catches up with the international industry in terms of producing hardware, it could take a quantum leap in matters of information warfare. The recent push by the government to incentivise electronics manufacturing in the country will complement the existing expertise in services and software," Dhiraj Mathur, Leader, Aerospace and Defence, PwC, said in a recent report brought out by the Big 4 consultancy firm.

Creating an eco-system

India is now taking baby steps towards self-reliance in the defence sector. But before it gets there, it will have to create a network of vendors, suppliers, independent consultants and designers, especially in the micro, small and medium enterprises sector, who will, necessarily, have to form the backbone of the country's defence-industrial sector.

"We firmly believe that building a defence industrial base in India will require proactive government support to facilitate and encourage the private sector to invest in this capital- and technology-intensive high-risk industry. The support will need to include funding R&D, creating a low interest regime to bring down capital costs, addressing the disadvantages of exchange rate fluctuations, providing stability and assurance in policy and orders and encouraging exports to achieve economies of scale and become globally competitive," a KPMG report said.

In this context, many experts feel India can leverage its strengths as a major global auto components producer to develop a vendor base for the defence sector.

"India is slowly emerging as a preferred investment destination for high-end manufacturing. The auto component industry in India successfully supplies components to all global major auto OEMs in India as well as abroad, meeting their stringent quality and delivery norms. The expertise developed by domestic component manufacturers in heavy engineering and precision manufacturing can be leveraged to supply to the fast-growing aerospace and defence sectors in India. This will help mitigate the risk of industry cyclicality within the automotive industry," Harish Lakshman, President, Automotive Component Manufacturers Association of India, has been quoted as saying in that report.

Long road ahead

"The defence sector has immense possibilities: for attracting investments, setting up manufacturing facilities, obtaining technologies and capabilities and generating high skilled employment. Though the sector was opened for private,

domestic and foreign investment more than 12 years ago, the level of domestic as well as foreign investment, has been way below its potential," said PwC's Mathur in the report quoted earlier.

Many experts have said it will take at least two decades for India to develop an indigenous defence-industrial base that can not only sustain India's arms requirements but also export Made in India weapons platforms to friendly nations.

They cite the example of the auto sector here as well. In the 1980s, when

India first allowed Indian companies to tie up with foreign two-wheeler companies, the market was flooded by cheap 100 cc Japanese motorcycles. But three decades later, an Indian company, Hero Motocorp, has emerged as the world's largest two-wheeler maker.

And in the domestic market, Bajaj Auto Ltd, which does not have a foreign collaboration, has emerged as a major force in the motorcycle market in which it did not have a presence when the sector was opened up.

"Development of a defence industrial base needs a self-reliant technology and manufacturing eco-system. Indian industry has taken rapid strides in the field of manufacturing and is competing with the best on the global platform. However, defence manufacturing in India is not aligned to the manufacturing capability existing in the country. Fortunately, the present government has realised this and its 'Make in India' campaign is expected to address this issue – to promote defence manufacturing in India and develop the country as a manufacturing hub," said Kalyani

India is now taking baby steps towards self-reliance in the defence sector. But before it gets there, it will have to create a network of vendors, suppliers, independent consultants and designers... to form the backbone of the country's defence-industrial sector.



A portrait of Baba Kalyani, an elderly man with grey hair and glasses, wearing a dark suit, white shirt, and patterned tie. He is seated and looking slightly to the right of the camera with a neutral expression. The background is a plain, light-colored wall.

THE KEY TO ABSORBING FOREIGN TECH IS NOT ‘KNOW HOW’ BUT ‘KNOW WHY’

Baba Kalyani, Chairman and Managing Director, Bharat Forge Ltd – one of the early movers in the defence manufacturing space among Indian private sectors – tells India Inc’s Consulting Editor Arnab Mitra about the opportunities, problems and future of the sector in this exclusive interview.

There's a perception that foreign investors aren't coming forward to establish defence units in India? What more should the government do?

I don't think that is completely true. There are many foreign companies that are willing to / are in the process of establishing defence units in India. Setting up base in the country is dependent on many complex issues – easing of licensing procedures, FDI norms, offsets rules, a general feeling of ease of doing business and other such actions taken by the government are poised to play a major role in the years to come. Companies which consider the Indian market an important long-term bet will look for a permanent foothold in the form of investments in the country.

To give you a perspective, two major foreign OEMs Elbit and Rafael have formed defence units (in the form of JVs) with the Kalyani Group. We also have some other foreign companies talking to us for the same. I am sure similar discussions are going on with many other companies in the country.

Manufacturing under transfer of technology (ToT) brings only build to print capability in the country and can at best bring knowhow. The key to progress on technologies received from the foreign vendor will require "Know Why".

India routinely develops technologies and platforms that are denied to it by technology control regimes but fails miserably on technologies that can be bought from foreign vendors. Why?

Manufacturing under transfer of technology (ToT) brings only build to print capability in the country and can at best bring knowhow. The key to progress on technologies received from the foreign vendor will require "Know Why". In my opinion, there are two major drivers for this. One, that the receiving company must have the culture of research and development, and secondly, that there should be a competitive environment. We, therefore, need to move away from the culture of nomination to giving ToT to the best suited entity in the country. For larger projects, we must have two lines of production, which will lead to healthy competition.

Many public sector defence units make weapons platforms under license in India. This has not led to much technology absorption by Indian industry. How will allowing private companies to make arms under license change the situation for the better?

As I said before, manufacturing under license only gives you build to print capability and not the technology knowhow and know why. We need to make optimal use of all available resources in the country, whether in the public sector or private sector to get maximum mileage out of TOT. I am sure competent private sector companies can develop the knowledge and can come out with upgrades and futuristic versions based on indigenous design and development capabilities. We have demonstrated this in the field of artillery systems.

How long will it take for India to develop its own defence industrial base?

Development of a defence industrial base needs a self-reliant technology and manufacturing eco system. Indian industry has taken rapid strides in the field of manufacturing and is competing with the best on the global platform. However, defence manufacturing in India is not aligned to the manufacturing capability existing in the country. Fortunately, the present government has realised this and its 'Make in India' campaign is expected to address this issue – to promote defence manufacturing in India and develop the country as a manufacturing hub.

The major concern for us should be a technology ecosystem. The meteoric rise of entrepreneurship, leading to innovation, in the other sectors in our country has not touched the defence industry even remotely. There are hardly any defence start-ups in the country today and the existing ones are struggling to survive. We need to overcome this challenge to develop our own defence industrial base. I believe the recently introduced IDDM category in DPP 2016 will help boost indigenous development and manufacture.

Bharat Forge has developed four towed, truck mounted and mobile artillery guns. Please talk us through this development. What is their current status?

Using the combined strength of various Kalyani Group companies, we have established modern and sophisticated infrastructure required for manufacturing of artillery guns. My group follows a product-driven strategy and believes in developing a product to demonstrate our capability.





We have designed, developed and manufactured 100 per cent indigenous systems like Bharat 52, Bharat 45, Garuda 105 and the latest ultra-light howitzer (ULH).

We are also partnering DRDO for ATAGS program. The ordnance including barrel and breech for ATAGS 155/52 cal gun has been successfully test fired at Central Proof Establishment, Itarsi, and at PXE, Balasore. Garuda-105, while awaiting trials by the Government of India, has also been successfully fired and tested in the US. We are now hopeful of test firing next month in India.

Having proven our capabilities with these developments, we are now focusing on the requirements of the Indian defence forces and are confident of providing state-of-the-art indigenous artillery solutions for them.

How do your artillery guns compare to the Bofors, Dhanush and M777 in terms of technology, performance and costs?

Our products can compete with the best in the world; in terms of technology. Our products are 100 per cent designed, developed and manufactured indigenously using the latest technology. To give you one example of our performance, we got our barrel and breech 'first time right' when it was proof fired by DRDO. The pressure achieved during the firing was the highest ever recorded by any artillery manufacturer anywhere in the world.

Isn't it ironic that India still can't manufacture a local pistol, assault rifle, carbine or light machine gun of international standards? Why isn't the private sector stepping in to fill this void?

That's because the private sector was not given the license to manufacture small arms until now. However, the Arms Rule 2016 released in Jul 2016 by MHA should change this scenario. The new arms rule is a welcome change and we are sure to see many reputed private companies, including our group, entering the small arms segment.

You are present in other spheres of the defence space as well. Can you elaborate on your plans, please?

Our main focus areas other than artillery are armoured vehicles, protected vehicles, ammunition and air defence. In armoured vehicles, Kalyani Group has been a long-time supplier at the sub-system level. We are now focusing on mobility and fire power solutions along with our global partners. In the protected vehicles segment, we have developed products like Light Strike Vehicle, Light Specialist Vehicle and Light Armored Vehicle and are participating in MoD tenders.

In ammunition, we are not looking at developing routine products, but are working towards developing niche products like BMCS, FSAPDS, etc. We are also partnering with foreign partners for fuzing technology. We have partnered with leading OEMs for anti-tank and AD programs in India.

**Reason says:
there are three
ways to go.**



**Instinct says:
only one leads
to growth.**



Grant Thornton
An instinct for growth™

Business decisions are rarely black and white. Dynamic organisations know they need to apply both reason and instinct to decision making. We are Grant Thornton and it's what we do for our clients every day. Contact us to help unlock your potential for growth.

grantthornton.co.uk

MAN OF INTEGRITY TAKES ON INDIA'S DEFENCE

by Ashok Malik



Ashok Malik,
Senior Columnist

As India's defence minister, Manohar Parrikar has a multiplicity of tasks before him, a menu more challenging than that on offer to many recent predecessors.

A BJP veteran and popular chief minister in the coastal state of Goa, Parrikar, 61 this year, was requested to move to Delhi in November 2014 when Prime Minister Narendra Modi's search for a defence minister yielded no suitable options in the capital. Between May and November 2014, in the early months of the BJP-led government, Arun Jaitley had doubled as finance and defence minister but that was not sustainable.

Modi had a tough mandate for his defence minister. First, clean up the procurement mess – confused, riddled with inconsistencies and bureaucracies, prone to corruption and tailor-made for delay. It would take a tough, decisive and honest defence minister to slice through the red tape and actually finalise transactions. It would also take a man of integrity to fight off pressure from defence agents, lobbyists and contractors who have had a happy home in Delhi for decades.

Second, give India's Defence ministry some strategic heft. Too often has the ministry been reduced to a department for military purchases, assessing quality benchmarks, finalising contracts and so on. It has rarely had time for strategic planning and thinking on India's defence future and the shape of its external engagement in the 21st century. This is particularly important as the Indian Ocean and the maritime domain in India's near-neighbourhood are among the most militarily important and contested regions in the international system.

Parrikar has gone about his task with gusto. He has pushed for contracts for domestic manufacturers,

keeping quality standards sacrosanct, which could of course entail collaborations with global companies. He has formalised the induction of the domestically-produced Tejas, the light combat aircraft in development for some three decades. Several

lobbies have argued the Tejas is not good enough and have sought to sabotage it. Parrikar contended that taxpayer money has been sunk into building the Tejas and it needed to be given a chance.

Parrikar is now moving towards finalising a modern and enlightened procurement policy and sensible, rather than knee-jerk, blacklisting and punitive norms. In all of this, he is a vast improvement on his predecessor, A.K. Antony of the Congress. Antony is a personally incorruptible and well-regarded politician, but was completely indecisive and a prisoner of immovable forces in the Defence ministry.

On strategy too, Parrikar is gradually changing the culture of the Defence ministry. He attended the Shangri-la Dialogue in Singapore this summer, a forum his predecessor had carefully avoided. Parrikar spoke on "Managing Military Competition in Asia", largely addressing the maritime domain. He is travelling to the United States in August, his second visit to the country, and is likely to oversee the closure of a logistics agreement between the two militaries. Many of these are steps delayed by years, the years when Parrikar was not defence minister.

A graduate from the Indian Institute of Technology, Mumbai, one of India's leading engineering schools, Parrikar is different from other career politicians in that he has a technocratic training. His conversations with boffins and defence scientists are said to be interrogative and genuinely curious, as opposed to just general.

No wonder he's both admired and feared in his office.

Parrikar has gone about his task with gusto. He has pushed for contracts for domestic manufacturers, keeping quality standards sacrosanct, which could of course entail collaborations with global companies



IN DEFENCE OF MAKING THE IMPOSSIBLE, POSSIBLE

by India Inc. staff

After Saudi Arabia, India is the largest importer of defence equipment in the world. In 2015, arms worth \$ 4.3 billion were shipped from various parts of the world into the country. In contrast, exports from India was worth a measly \$ 330 million—an over two-fold increase over the previous year but less than 1 per cent of the \$ 65 billion global defence trade during the year. The reasons for this imbalance are multifarious. Majority of defence production in India today is concentrated with state owned companies that lack global cutting edge production capabilities or research and development. At the same time, riddled with multiple bureaucratic procedures and secrecy, the sector has for long scared away private sector companies.

There are some signs of change. Soon after the BJP led Narendra Modi government was sworn-in two years ago, the administration has made concerted moves towards improving ease of doing business. Significant steps in the sector have been taken to simplify and streamline standard operating procedures for issuing no objection certificates (NOC) related to export of military stores by domestic companies. For example in March this year, Parrikar de-listed 66 per cent of items from export clearances. An even bigger reform was announced in June when 100 per cent foreign direct investment was allowed in the sector. Enhancing production

in the country is one thing and being able to export to other countries is quite another, yet Parrikar's target may not be that outrageous after all.

"I know it is not easy. Weapons and export of defence goods have double problems. One is whom you are exporting to and the second is one has to go on checking all international requirements," he says. "From a meagre \$ 140-150 million, this year, I think we have crossed \$330 odd million. We have doubled the export. I have set a target for myself. In the next two years, why not touch \$2 billion. It is not an impossible target."

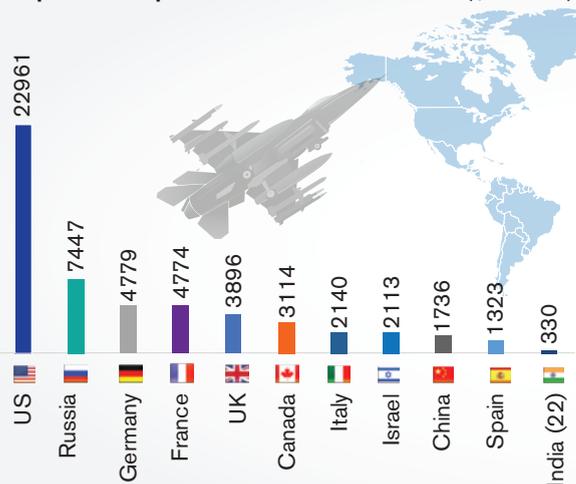
Not impossible, but it will take much more than just planning and strategy.

What India exports and to whom

Among developing economies, India has one of the largest defence industries in the world with 41 ordnance factories, nine defence public sector undertakings and an emerging private sector that includes the likes of Tata Motors, Ashok Leyland, Larsen & Toubro, Mahindra and Mahindra and Reliance Defence. Traditionally major items of export from India were restricted to old variants of aircrafts, ships, armored

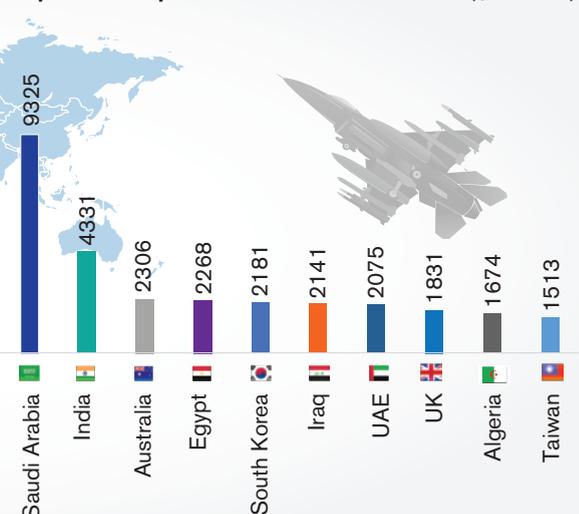
The Defence Balance Sheet

Top arms exporters in the world 2015 (\$ million)



Source: IHS Markit

Top arms importers in the world 2015 (\$ million)



vehicles and artillery. In the recent past, the basket has diversified to include light helicopters (Cheetal) to Afghanistan,

two OPVs for the Sri Lankan Navy, as well as eleven fast attack craft (FAC) and two fast patrol vessels for Mauritius.



// From a meagre \$140-150 million, this year, I think we have crossed \$330 odd million. We have doubled the export. I have set a target for myself. In the next two years, why not touch \$2 billion. It is not an impossible target. //

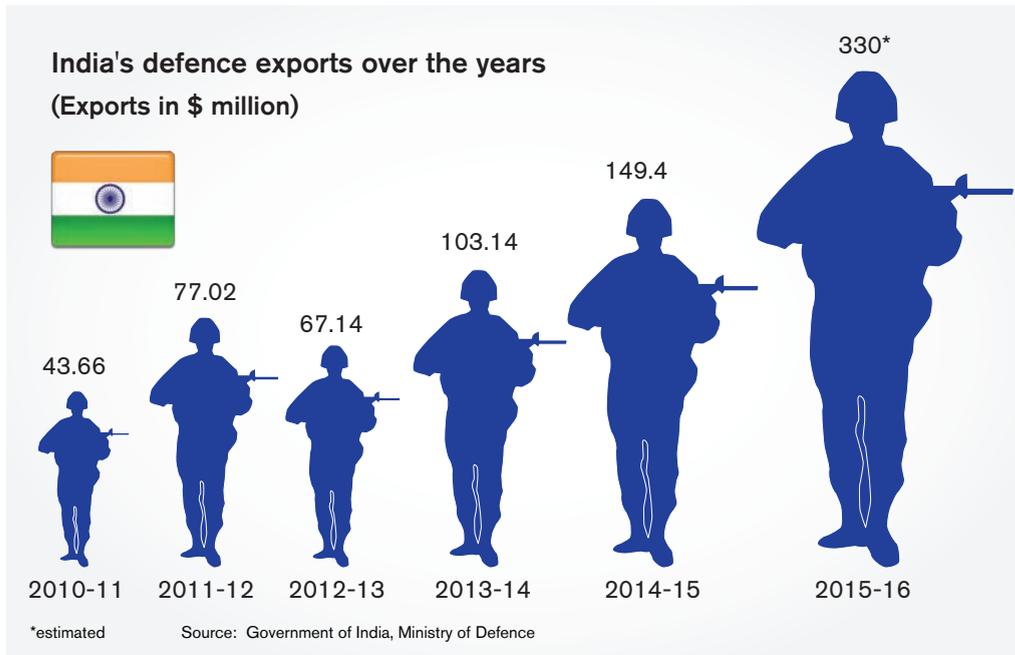
Manohar Parrikar, Indian Defence Minister

Nepal, and Namibia, DRDO developed HMS-X2 sonars to Myanmar and protective armor to NATO members like Turkey. A range of spares, mechanical components, and electronic assemblies are also being supplied to global majors as a result

players, discussions were held at Hanoi to sell the DRDO developed Varunastra 533 millimeter heavyweight torpedo that was recently inducted into the Indian Navy (IN). Capable of being fired from a domestically developed ship based launcher, Varunastra is being adapted for deployment from torpedo tubes in India's submarine fleet, including the Russian-origin Kilo class units. Once adapted, they could potentially be plonked onto Vietnam's own Kilo class boats.

At the same time, India may agree to transfer the BrahMos—world's fastest short range anti ship cruise missile—to Vietnam that would result in a spurt in exports from the country. The missile that is developed jointly by India's DRDO and Russia's NPO Mashinostroyeniya and derives its name from the initial letters of India's Brahmaputra and Russia's Moskva rivers, has been sought not only by Vietnam but more than a dozen other countries including Indonesia, UAE, Chile, Malaysia, Philippines, South Africa, Thailand and Brazil.

At the same time, India may agree to transfer the BrahMos—world's fastest short range anti ship cruise missile—to Vietnam that would result in a spurt in exports from the country. The missile that is developed jointly by India's DRDO and Russia's NPO Mashinostroyeniya and derives its name from the initial letters of India's Brahmaputra and Russia's Moskva rivers, has been sought not only by Vietnam but more than a dozen other countries including Indonesia, UAE, Chile, Malaysia, Philippines, South Africa, Thailand and Brazil.



of offset agreements. Exports also included Dhruv helicopters and bulletproof jackets to Nepal, Sukhoi 30 avionics and MIG spares to Malaysia, offshore patrol vessels (OPV) and ammunition to Mauritius and Jaguar aircraft spares and services to Oman.

Shipments are not restricted to developing countries alone. India exported forging equipment, electronic assemblies, flight control panels to the US, while transmitting tubes were sold to the UK and MIG and Sukhoi 30 aircraft spares and services to Russia.

The biggest milestone so far however, has to be the export of the 1,300-ton offshore patrol vessel MCGS Barracuda to Mauritius in December 2014. Built by DDP-controlled Garden Reach Shipbuilders & Engineers (GRSE) for \$50.8 million it is India's first ever export of a home built warship. The country has also supplied Sri Lanka and other Indian Ocean Region countries with refurbished boats in the past.

The potential for exports in future

As the overall quantum suggests, the potential for export of made in India equipment has only been exploited on the surface. While the Barracuda has been a high point, government owned Goa Shipyard Limited is currently building

Philippines, South Africa, Thailand and Brazil.

Private sector set to play ball

One of the 12 agreements signed between India and Vietnam during Prime Minister Narendra Modi's visit to the country on September 3, was with L&T to build 10 fast interceptor craft for a contract worth \$100 million of the \$ 500 million defence line of credit offered by India to Vietnam. This follows widespread modernization efforts in the Indian defence shipyards in the last 5 years that have enhanced their capacity and productivity. L&T's Kattupalli facility has a head start in this aspect. The September 3 agreement is the first time an Indian private entity would be exporting ships to South East Asia. It is also a breakthrough moment for the Chennai based firm. Albeit a bit late, the private sector is coming to the party. The level of optimism is infectious and Parrikar's seemingly audacious \$ 2 billion export target, pales in comparison.

"The export potential for Indian defence manufacturers in South East Asia alone is worth \$3 billion," said Jayant D. Patil, head of aerospace and defence at L&T.

Similarly, Tata Motors has supplied defence vehicles in markets including the ASEAN, SAARC and Africa and received an order from Myanmar for about 500 units last

year. It also completed deliveries for 520 defence vehicles to the United Nations Multidimensional Integrated Stabilisation Mission in Mali. Tata has collaborated with SUPACAT a UK-based high mobility vehicle specialist, for technical assistance for its Light Armoured Multi-role Vehicle (LAMV) project and also has a partnership with Malaysian-based DRB-HICOM for import, distribution and assembly of Tata Motors' commercial vehicles and defence range in the country. Over the last few years, it has developed the WHAP (Wheeled Armoured Amphibious Platform) besides the LAMV and its upgrade programmes include missiles carriers, mine protected vehicles, main battle tanks and infantry combat vehicles. The company says its defence arm could potentially contribute to as much as 15 per cent from the current 3 per cent of its overall revenues and is eyeing countries in Eastern Europe, Africa, Latin America and the Asean region.

"The potential is very large... 10 per cent (of total revenue) is not a good number, our defence business can be much bigger than 15 per cent in the future," said Ravindra Pisharody, executive director and head of commercial vehicle business at Tata Motors.

Then there are other smaller players like Delhi-based bullet-proof equipment manufacturer MKU that is incidentally the biggest domestic defence exporter with exports worth over Rs 400 crore last fiscal, and ARI that has made a name in the world in the field of naval simulation systems.

The roadblocks

There are, however, significant stumbling blocks that the Indian industry needs to clear before any dreams of breaking into the top 10 defence exporting countries list can be fulfilled. The domestic industry is not at the top of the game as far as complex and cutting edge technology for warships, missiles and aircrafts that forms the bulk of defence contracts around the world, is concerned. The government itself ever so keen to press ahead with its "Make in India" theme has had to realign its ambition with this reality.

In April, India scaled back a long-pending order for 126 Dassault Aviation SA Rafale warplanes, at least partly because of state run Hindustan Aeronautics Ltd was not fully equipped to make 108 of the complex jets. It forced Modi to opt for 36 Rafales from France in fly-away condition and resulted

in France's Safran SA to subsequently shelve plans to make engine parts for the aircraft in India. Similarly a four decade old effort to develop a battlefield tank has yet to produce anything that can be used by the armed forces. A majority of the Arjun tanks developed by DRDO that are proudly displayed at annual Republic Day Parades through the heart of the national capital, are grounded due to various technical glitches. The Army remains reliant on customized versions of T-90 Russian battle tanks imported in the last decade. At the same time a project to produce an anti-tank guided missile has seen repeated delays, forcing India to acquire them from Russia, France and Israel.

In view of such failures, the onus has quite rightly shifted to the private sector to step up and deliver. Measures to ease procedures and decision to open up the sector to 100 per cent FDI are steps to encourage companies to expand and diversify. There are other subtle steps being taken to enhance the exposure of private players to the demands of real time on the ground warfare. In July, a group of 200 representatives of defence companies -- big and small, local and foreign -- got access to India's military. At two events in Ahmednagar, the representatives got a first-hand exposure to tanks and a direct interface with troops on their equipment requirements and needs. While the more obvious intention was to educate companies on what is required by the Indian Army, hoping they would be able to supply the war heads directly and thereby reduce dependence on imports, the spin off on how it would also make them better equipped to cater to demand for arms around the world, is not lost on them.

"For long we have been too secretive about our arms and ammunition. It has only meant that none of our private companies can manufacture useable state of the art ammunition," a defence ministry official said. "We are trying to change that. It is high time private sector gets a chance considering there is so much our PSUs could not achieve for various reasons. If a Tata, Mahindra, L&T or Reliance can make weapons suitable for Indian Army, they will automatically have the capability to make weapons that can be exported around the world."

Whether that can happen in a span of two years to meet Parrikar's target, is tough to say. But at least a start has been made.



STRIKING THE RIGHT PARTNERSHIPS FOR INDIA'S DEFENCE

by Rakesh Sood

A foreign policy expert weighs up how the Indian government can create the right environment to help translate global interest in India's defence sector into collaborative ventures.

A major element in the Modi government's flagship Make in India programme is the development of the indigenous defence industry, particularly in the private sector. This is essential in view of the fact that India has emerged as the largest arms importer and import dependency for military hardware has gone up to nearly 70 per cent.

Growing Opportunities

India's current defence budget is approx \$40 billion and about a third of it is earmarked for capital acquisition for the Services and the Defence Research and Development Organisation (DRDO). The cumulative capital expenditures during the 15-year period of 2012-27 (covering 12th to 14th Five Year Plans) are projected to be above \$ 235 billion and 80 per cent of this will go for platform acquisitions. To meet a target of 70 per cent self-reliance implies building a defence industry worth \$100 billion.

The actual numbers may be higher because currently, the Services are complaining about the high rate of obsolescence in their inventory. In 2015, the Standing Committee of the Parliament had expressed concern that instead of the recommended ratio of 30:40:30 (between state of the art, current and obsolete equipment holdings), the position had deteriorated to 15:45:40! It also recommended that the defence budget should be approx 3 per cent of the GDP. Currently, the defence budget together with pensions, works out to 2.26 per cent only.

In addition, there will be additional investments via the Defence Offsets Policy. This policy was first announced in 2005 and requires the foreign vendor to invest 30 per cent of the indicative cost in the Request for Proposals (for contracts greater than Rs 300 crores earlier and now relaxed to Rs 2,000 crores) in defence, civil aviation, internal and coastal security sectors. The objective here is to improve the domestic

To meet a target of 70 per cent self-reliance implies building a defence industry worth \$100 billion.

signed; by 2027, the value of offsets is expected to cross \$ 20 billion.

New DPP Announced

Earlier this year, the Defence Ministry announced the new

R&D base and contribute to developing an internationally competitive defence industry integrated into global supply chains. Till 2012, offset contracts worth \$4.3 billion had been



Defence Procurement Procedure with specific provisions aimed at stimulating growth in the domestic defence industry. In addition to the categories of Buy (India) and Buy and Make (in India with transfer of technology), a new preferential category of Indian Designed Developed and Manufactured (IDDM) equipment has been created. It means that indigenously designed equipment with 40 per cent domestic content or externally designed but with 60 per cent indigenous content will be a preferred acquisition category.

FDI in defence sector has also been liberalised. Currently, foreign investment up to 49 per cent would be processed under the automatic route. Higher levels of investment will be dealt with on a case by case basis, depending on the technologies involved. Manufacturing of small arms and ammunition has been brought into the FDI regime. Equity inflow up to Rs 5000 crores no longer needs CCEA approval. Government has also put out a list of defence items that are covered under licensing; in other words, anything not mentioned (and this category covers a wide range of dual use items) can be manufactured without applying for a licence and will not be subjected to the 49 per cent FDI restriction.

Given the enormous potential, it is natural that the global defence industry is interested in the Indian market. The challenge for the Modi government is to create a policy environment which can help translate this interest into



Some JVs in the private sector have already been launched with positive results. Tatas have signed up agreements with Sikorsky, Lockheed and Airbus; Reliance has tied up with Dassault and Boeing; L & T has tie ups with Raytheon and Airbus for avionics and EW systems; Mahindra has inked agreements with Lockheed and BAe.

launching a number of collaborative ventures. Some JVs in the private sector have already been launched with positive results. Tatas have signed up agreements with Sikorsky, Lockheed and Airbus; Reliance has tied up with Dassault and Boeing; L & T has tie ups with Raytheon and Airbus for avionics and EW systems; Mahindra has inked agreements with Lockheed and BAe. In addition, a number of MSMEs have also been actively exploring cooperation opportunities.

Need for a Partnership Approach

The defence sector was opened up to the private sector only in 2001. Till then defence industry was dominated by the 41 Ordnance Factories, nine defence PSUs and the fifty plus DRDO laboratories. With about two lakh employees, the ordnance factories and the defence PSUs have a modest turnover of \$ 8 billion. Functioning in a protected environment meant that these organisations did not need to compete and the MoD too did not bring in adequate specialisation in terms of technology assessment, costing and acquisition management. Today, when the demand for state of the art weaponry requires a different level of systems integration, it is vital that these processes be revised if we have to bring in greater indigenisation. So far, FDI in the defence sector has been negligible – less than \$7 million.

A new kind of expertise needs to be brought in to speed up decision making procedures. Specialised audit teams

that can evaluate life cycle costs need to be built up. In addition, nurturing domestic industry also needs a degree of hand holding by suitably qualified teams consisting of representatives from the Services, technical experts and audit experts.

These teams have to work over a sustained time frame in order to build trust. For a number of years, there has been talk of developing Strategic Partnerships which requires working on a cost plus basis, an area where MoD has yet to build up expertise.

The challenge is there but then the opportunities are also enormous. What is needed is a spirit of partnership between the industry, the Services and the Defence Ministry and the creation of a level playing field which will also encourage transparency.

Rakesh Sood was a senior Indian diplomat who has served as Ambassador to France, Nepal, Afghanistan and to the Conference on Disarmament in Geneva. He was former PM's Special Envoy for Disarmament and Non-Proliferation issues. He served as then Prime Minister's Special Envoy for Disarmament and Non-Proliferation issues until 2014.

INDIA REAFFIRMS UN PEACEKEEPING COMMITMENT

India's minister of state for defence, Dr Subhash Ramrao Bhamre, reaffirmed the country's commitment to UN Peacekeeping Operations and confirmed that India will provide troops for UN Peacekeeping as pledged by Prime Minister Narendra Modi in New York last year.

Speaking at the UN Peacekeeping Defence Ministerial summit in London, the minister highlighted India's "consistent and substantive response" over the past seven decades of UN Peacekeeping Operations.

He said: "More than 230,000 Indian troops have participated in 50 of the 71 UN peacekeeping operations mandated by the UN Security Council so far. India has also aided in capacity building of many countries, training 114 prospective peacekeepers from 35 countries this year itself; with a special course each for African countries and for female peacekeepers."

The Indian minister highlighted the country's "tremendous experience" in such operations worldwide and assured further strengthening of global cooperation in the field.

Dr Bhamre drew attention to the challenges being faced by UN Peacekeeping, with armed groups and non-state actors playing "spoilers" to peace efforts. UN Peacekeeping Missions are no longer "benign and humanitarian tasks" but a major facet of current UN missions and called on the United Nations to work in sync with host governments to avoid "turbulence".

He also voiced the need to bring about qualitative improvements in the performance of UN contingents, UN staff and mission leadership.

The minister reiterated the issues raised by Modi last year during the Leaders' Summit on Peacekeeping, including the necessity to involve Troop Contributing Nations involved in mandate formulation, representation in key leadership positions in mission areas; and above all, the requirement of a more representative Security Council.

The London ministerial meeting, hosted by UK defence secretary Michael Fallon, was a follow-up to the Leaders' Summit in New York in 2015. Its agenda involved following up on the peacekeeping commitments made by countries during the US summit.

While in London, the Indian minister also held a bilateral meeting with his UK counterpart, Harriett Baldwin, minister for defence procurement in the UK ministry of defence.

He reiterated India's resolve to enhance its defence capability and improve its defence industrial base and invited greater British participation in the Narendra Modi led government's flagship Make in India programme.

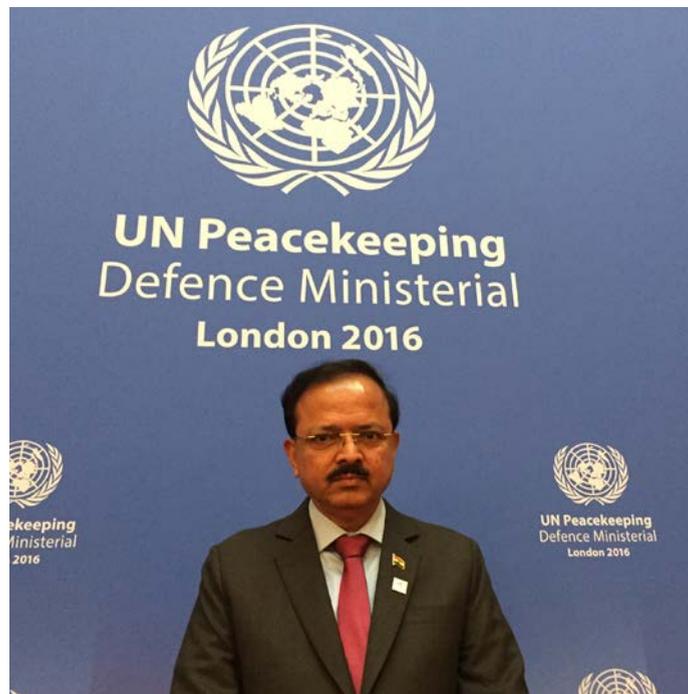
"The meeting was held in very cordial atmosphere. A wide range of issues covering the entire spectrum of defence cooperation between India and UK were discussed at the meeting, including Indo-UK collaboration in joint research, development and production which has tremendous potential for growth," an official statement said.

He also drew attention to the challenges being faced by both countries due to increased terrorist activities globally as well as cross-border terrorism being faced by India.

"He emphasised that terrorism is a global phenomenon and a clear message must

go to countries supporting terrorism. There could be no differentiation between good and bad terrorists. The UK minister acknowledged India's stand on terrorism and expressed UK's resolve to cooperate in the field of counter-terrorism," the statement noted.

During his visit, he also interacted with British Indian MP Alok Sharma, minister of state for Asia and the Pacific in UK Foreign and Commonwealth Office (FCO), and discussed a wide range of bilateral issues.



SHORT TAKES



Thales bets on India supply chain

French defence major Thales is eyeing partners for major joint ventures in India, besides the ones already in place with state-run BEL, Samtel and L&T.

The group is planning to expand its six-decade-old footprint in India and plans to make the country a part of its global supply chain in a much bigger way. India currently contributes less than 2.5 per cent to the company's €14 billion annual turnover.

Pascale Sourisse, senior executive vice-president (international development), Thales, said: "We have ambitious plans for the future... we believe that we can go much further. We see our activities in India not only as the right approach to get some business here but we also see our activities as a way to increase our footprint in other countries through export from India.

"We believe India will play a big role in the global strategy of Thales going forward. Our assessment is we need to do much more. Currently what we have done is to actually work on our purchasing policy to identify more Indian companies that can be suppliers."

In reference to the much anticipated Rafale fighter jet deal, she said she hopes the deal would be inked soon as Thales is a major part of the project.

Lockheed Martin to Make in India

American defence major Lockheed Martin has offered to move its lone production line of the latest version of fighter aircraft F-16 Block 70 to India from Texas.

The proposal is "conditional" to Indian Air Force (IAF) choosing the aircraft for its fleet.

Randall L. Howard, F-16 business development head at Lockheed Martin, said: "The offer we have given to the Indian government is unmatched and from our side unprecedented."

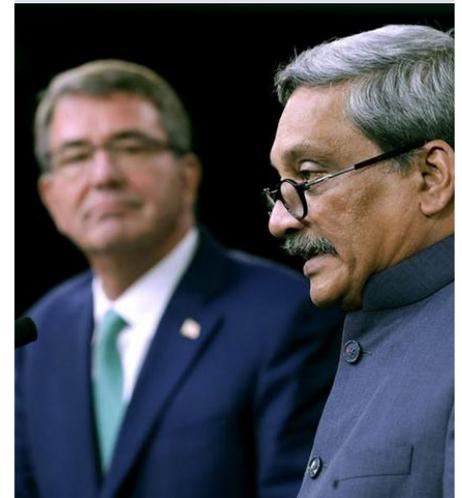
In a major boost to Prime Minister Narendra Modi's Make in India initiative, the company wants to make F 16-Block 70 "for India, from India and export to the world".

Indian defence minister Manohar Parrikar has said India will choose at least one more aircraft besides the indigenous Tejas for IAF through the 'Make in India' route.

Lockheed Martin, which has sold 4,588 F-16s in the world, faces competition from its American rival Boeing (F/A-18E), Dassault Aviation of France (Rafale), Swedish plane Gripen by Saab and the Eurofighter.



India-US clinch military pact



India and the US have clinched an important agreement to use each other's land, air and naval bases for repair and resupply.

"The US has agreed to elevate defence trade and technology sharing with India to a level commensurate with its closest allies and partners," said a joint statement after the pact was signed.

At a press conference with US defence secretary Ash Carter, Indian defence minister Manohar Parrikar said the agreement will allow the Indian and US navies to have an easier time supporting each other in joint operations and exercises and when providing humanitarian assistance.

The agreement is seen as a milestone in the India-US defence relationship but both leaders made it clear that the logistics agreement did not allow the basing of US troops in India.

Parrikar's visit to Washington this week marks his sixth interaction with Carter, who has made closer military ties with India a priority.

SHORT TAKES

Russia to make copters in India

Rostec, a Russian state corporation, will form a joint venture with Indian public sector unit Hindustan Aeronautics Ltd (HAL) for the manufacture of military helicopters in India named Kamov 226T.

The Russian Federation and the Republic of India had signed an agreement during Prime Minister Modi's visit to Russia on cooperation in the field of helicopter manufacturing. As per the agreement, Rostec will produce at least 200 units of the Russian Ka-226T and its modifications along with its maintenance, operation, repair and providing technical support.

Rostec State Corporation CEO Sergei Chemezov said: "The agreement with India is the result of long work with our Indian partners. This is the first Russian-Indian high-tech project, implemented by the Indian government within the framework of the Make in India programme.

"The organisation for the manufacture of helicopters is provided by the creation of a Russian-Indian joint venture in India, which includes holdings of Rostec - JSC 'Rosoboronexport' and 'Russian Helicopters', and on the India side - the corporation 'HAL'."

Kamov-226 is a tried and tested helicopter with the Russian armory since 2003 and will have an advanced French engine.

US drones fly into India

America's top manufacturers of armed drones plan to open an office in New Delhi by the year end.

"We are looking forward to continuing to enhance our cooperation with India by working with the US government to provide the Indian Navy with persistent, operationally proven maritime domain awareness," said Linden Blue, CEO, of General Atomics Aeronautical Systems (GA-ASI), a leading manufacturer of remotely piloted aircraft (RPA) systems, radars, and electro-optic and related mission systems solutions.

GA-ASI said in a statement that that it plans to expand its presence in India by opening an office in New Delhi.

The company plans to increase collaboration with India in the areas of maritime security and maritime domain awareness, which are key missions for the Indian Ministry of Defence and the Indian Navy.

India recently joined Missile Technology Control Regime (MTCR) and has sent a letter of request to the US Government for 22 Guardian Predator aircraft.

Armed drones have been used by Pakistan in combat.



L&T in Samsung tie-up on Howitzers

In the biggest-ever order for India's private sector, Larsen & Toubro (L&T) has won a \$700 million contract to produce 100 tracked 155mm howitzer guns at Indian facilities, jointly with South Korean major Samsung, for use by the Indian Army.

The contract is likely to be inked with L&T by September once all formalities are completed.

The L&T-Samsung team, offering the K-9 Vajra-T gun, beat an offering for the 2S19 MSTA weapon from Rosoboronexport of Russia. Samsung will supply the turret of the gun and the weapons will be produced at L&T's newly set up manufacturing facilities near Pune.

Besides the 100 guns to be produced, the company hopes to close additional deals.



GIVING MAKE IN INDIA THE CURRENCY TO SUCCEED

by Martin Sutherland

De La Rue is a UK-headquartered banknote manufacturer which has embraced the Indian government's Make in India clarion call. Here the CEO talks 'India Investment Journal' through the company's journey in India so far.



How would you trace De La Rue's history in India?

De La Rue Plc began life as a manufacturer of banknote paper in the UK 300 years ago. We now work with customers in 140 countries on their currency, identity and security products, including the UK, which is home to one of the world's most secure passports. De La Rue's brand and deep experience in design, research, and manufacture of both our core and a new generation of identity products is recognised the world over.

De La Rue's history in India is also long. It has traded with India since 1876 and supported the construction of India's banknote paper mill in Hoshangabad, Madhya Pradesh in 1962.

Today India is the fastest-growing large economy in the world, with an admired democratic culture and institutions. Prime Minister Narendra Modi's call for the indigenisation of the full range of materials required to produce India's banknotes is an exciting opportunity to participate in the country's further development. Recognising this, De La Rue is keen to support India in these efforts.

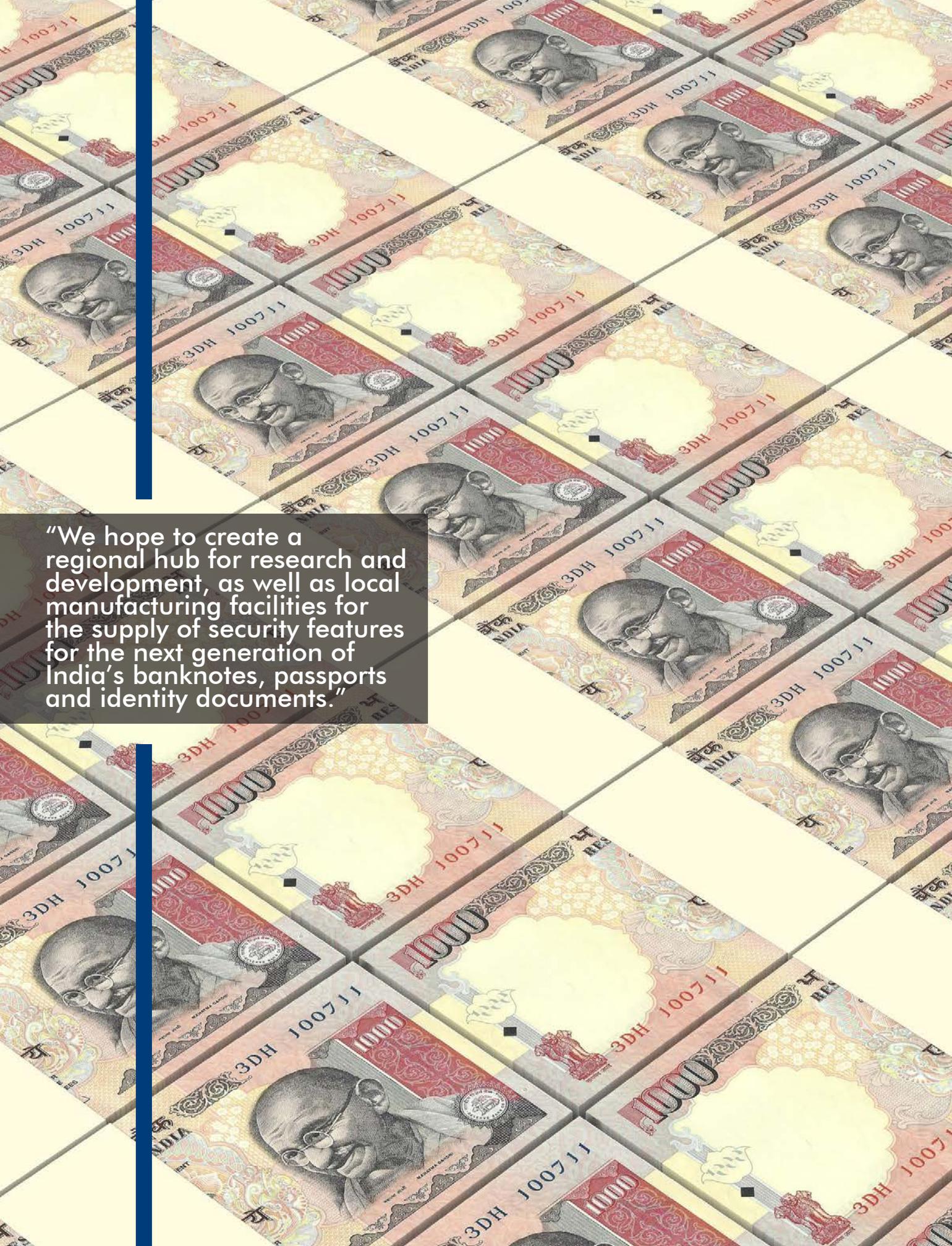
As a result, De La Rue recently established an office in Delhi, where a new senior management team has been working closely with the Department for Industrial Policy and Promotion (DIPP) to identify suitable sites to establish potential manufacturing operations in India.

De La Rue has had a couple of challenges in recent years, starting with issues around a currency paper you supplied in 2010 and, more recently, being named in the Panama Papers in relation to a representative you used in the local market. What's your position on these problems?

I think it's important to start by saying that these two issues are historic, unrelated and, importantly, no reflection of the De La Rue of 2016, which has undergone significant change in recent years.

Let me start with the paper quality issue. In 2010, De La Rue unilaterally and voluntarily informed the customer, upon detailed internal analysis, that the paper it was due to supply in a forthcoming consignment did not meet a small number of specific technical parameters required by the customer.

De La Rue used this experience as an opportunity to renew its approach to quality control, and has worked hard and invested significantly over the past six years to overhaul its manufacturing systems and processes. At the heart of our efforts to avoid any repeat of such an issue has been the introduction of independent quality testing and an Operational Excellence Programme, which takes a systematic approach to quality control at every single step of the manufacturing process.



"We hope to create a regional hub for research and development, as well as local manufacturing facilities for the supply of security features for the next generation of India's banknotes, passports and identity documents."

Separately, in April, press reports suggested that some years ago a former representative of De La Rue had received commission on certain sales into India. It was common practice at the time to pay commission to representatives, but De La Rue does not have such arrangements today. Indeed, driven by significant internal changes in recent years, De La Rue prides itself on its industry-leading ethical approach. As the only publicly-listed company in the industry, De La Rue leads the way in its transparency of reporting and in adopting and complying with best practice and the legal and regulatory frameworks in the countries in which we operate.

De La Rue was one of the founding members the Banknote Ethics Initiative (BnEI), an initiative established to ensure ethical business practice, with a focus on the prevention of corruption and on compliance with anti-trust law within the banknote industry. Maintaining the highest ethical standards across the banknote industry is essential to building and maintaining the trust and confidence of our customers and other stakeholders. We are confident that we are leading the way in this respect and we rely on a number of external audits and other sources of independent assurance to ensure that we continue to do so.

What are your plans to 'Make in India'?

India is a priority market for De La Rue and we are committed to re-entering the market. Last year, Prime Minister Modi urged the Reserve Bank of India to work towards the indigenous production of all elements of India's currency under his Make In India and Skill India initiatives. This presents an exciting opportunity for India to build a skills and knowledge base in highly specialised and technologically complex practices in a country that boasts an immense pool of talent: India has the second largest population of scientists and engineers in the world, with a balance of raw, inquiring intelligence and technological curiosity that also defines our business. We welcome the opportunity to build on this by drawing on India's exceptional talent pool.

So De La Rue is keen to contribute to the PM's initiative, by bringing investment, expertise, knowledge and best practice to currency production in India. Given the opportunity to partner with India, we hope to create a regional hub for research and development, as well as local manufacturing facilities for the supply of security features for the next generation of India's banknotes, passports and identity documents.

Counterfeit currency is a growing problem in India – how can De La Rue help? What additional layers of security does your technology offer to India that your competitors do not?

We understand a UK-India Defence & International Security Partnership Agreement was signed in November last year following PM Modi's visit to the UK; De La Rue is committed to supporting both governments on the subject of counterfeiting under this agreement.

A system comprising of banknotes that are durable, hard to counterfeit and overlaid with security features that are immediately recognisable to the public remains the ultimate goal for central banks across the world. The very essence of De La Rue's products - banknotes, identity systems and security products – puts us in the front line of protecting our customers' products and integrity.

In order to possess a high level of resistance to counterfeit,

new public security features need to achieve two primary goals: they must be easy for the general public to identify and they need to be difficult to counterfeit.

We have deep experience of partnering with central banks and global law enforcement agencies in the battle against counterfeiters. This is where we can work with India, and share our expertise in counterfeiting trends and anti-counterfeiting technology based on our world leading experience in this field. Our global R&D and anti-counterfeiting team is made up of over 100 experts who operate from a state-of-the-art facility to develop and design creative, novel and innovative features for use across the range of security products and services to address the threat of counterfeits. We also have counterfeit experts who assist customers with live cases and specialise in identifying materials and techniques potentially used by counterfeiters to replicate specific security features. They also coordinate the R&D counterfeit analysis of new security features during their development. All new security features adopted by De La Rue, whether they are developed internally or externally, are subject to detailed counterfeit analysis.

What do you see as the biggest challenges facing India in the coming years?

We recognise that India is in the midst of perhaps the largest transformation of a community in the free world driven by Prime Minister Modi's vision - to use technology, governance and opportunity to improve millions of lives. From a personal perspective that's an extraordinary opportunity, and I know my colleagues share the same sense of excitement and awe as we consider how we can lend value.

The areas where we can play a part sit at the heart of some of the most exciting activities currently under way. It seems to me that in the two years of this government, India has already made big strides in improving fundamental access to life-enhancing services: from bank accounts to medical insurance to home loans to skills training. For example, the government's Jan Dhan Yojana initiative has allowed enabled millions of previously unbanked citizens to access formal financial services and, critically, the formal economy. This links into another layer of the PM's digital vision, giving citizens a legal and secure identity in a digital world, which, in turn, opens the door to a slew of secure government services that are being brought online.

With Aadhaar, India already has the world's largest biometric ID platform, and its spin offs really can give the reality to a digital economy. Finally, defeating the economic, security and social risk posed by counterfeiters is a paramount objective for us, as well as the government. So whether it is by manipulating currency, identity or goods, the work of counterfeiters costs India billions of dollars each year. Though progress on all of these issues has so far been encouraging, more obviously needs to be done if India's 1.2 billion citizens are to participate securely and in ways that enhance their lives, in the world's fastest-growing major economy.

Martin Sutherland was appointed Chief Executive Officer at De La Rue in October 2014. He was previously Managing Director of BAE Systems Applied Intelligence (formerly Detica).

BRINGING RUSSIAN INTELLIGENCE TO MAKE IN INDIA

by Timur Vekilov



Timur Vekilov is CEO of Vocord company, a Russian engineering company.

India, with one of the largest security forces in the world, the second largest population and ranking in the top 10 economies of the world, is at the forefront of technological upgrades and achieving economies of scale in the security sector. This is where a number of international organisations see a massive potential, undoubtedly spurred on by the “Make in India” efforts of the government of India.

Vocord is a Russian developer and manufacturer of professional video surveillance and audio registration, founded in 1999. The company's portfolio of solutions includes: systems of face detection, photo and video fixation of violations of traffic rules and traffic flow analytics, intelligent video surveillance and audio registration on the basis of which complex geographically distributed

Vocord's experience in mega, smart and emerging cities have been to closely work with the law enforcement and state run agencies in optimising their response time and capabilities.

projects are being successfully implemented. Vocord's systems have been implemented in more than 2,000 projects of commercial and government organisations in more than 70 projects of the “Safe city” class in Russia and abroad. The company is actively conducting new technology developments in the field of video analysis: machine vision, pattern recognition, video streaming analysis, situational video analytics and others.

As part of its India strategy, the firm has collaborated with TAL Secure Systems, an ICT & Security technology company, to cater to the country's defence and security industry.

Security is increasingly becoming part of our day-to-day life. Be it at home, on the street or at work, “security” will be present in each and every task we have as individuals in a society. As cities expand urban zones, they demand further investments in services and infrastructure, enforcement including security. Urban growth is not always planned;

therefore it can be a challenge for local and emergency authorities to create a sustainable setting that will cope with current and future needs. In ever-services in growing city, threats are becoming increasingly anonymous, and this demands further attention from municipalities to local authorities and law enforcement services.

Vocord's experience in mega, smart and emerging cities have been to closely work with the law enforcement and state run agencies in optimising their response time and capabilities. As we can see today, city authorities are under enormous pressure to cope with the common, expected security threats but also unexpected ones, including terrorism, floods, earthquakes and other environmental issues. This is already a reality for many municipalities in the country. This role of minimising and managing unexpected security and safety threats is gradually making local authorities important players in promoting national security, a role that historically has been limited to the central government.

India is a country of a billion opportunities; an opportunity and interest to grow together for the safety and security of the nation and her people. We will be catering for city surveillance and traffic management, mass-transit, public safety, critical infrastructure sites and medium-sized



businesses in India.

Against this backdrop, TAL Secure aims to provide services to SMEs on a SaaS model (Software as a Service). As a case study, TAL Secure implemented the Vocord FaceControl system of remote biometric identification at an Indian company for automatic accounting of staff work time for the first time.

The company equipped with the Vocord FaceControl system is specialised in logistics, with the number of permanent employees of around 600. The company operates on an around-the-clock basis and practices a “floating” work schedule. Accordingly, the use of other technologies, such as a fingerprint scanning, would be substantially time consuming

only a full credible accounting of the staff working time, but has also become a reliable tool for preventive security of the site. The customer has received the required basic functionality with the additional access control system.

The implementation of the project in India proves not only the demand for our technology, but also the appropriateness of the selected model of reaching the market of a particular country by the company.

Today, we show the first results of the work, which we have been doing for several years. Purposefully for the Indian market, we have segmented our product line and developed



and would cause some problems in the continuous around-the-clock movement of personnel.

Launching the remote biometric identification, Vocord FaceControl system in the office building has provided not

the product and a plan of working with potential customers. In the future, we are planning to expand the range of the Vocord intelligent solutions in the field of effective security in the region.

NOW, FOR THE NEXT STEPS TOWARDS GST

by Arnab Mitra

On September 1, 2016 Odisha became the 16th state to ratify the Constitutional Amendment Bill that will pave the way for the passage of the Goods and Service Tax (GST) Bill, thus, fulfilling the constitutional requirement of at least half of India's 29 states approving the bill. The President has, since, signed the 122nd Constitutional Amendment Bill into law soon.

This has allowed the government to proceed with the formation of the GST Council, which will decide on contentious issues like the GST rates, the mechanism to settle disputes and also come up with a draft GST legislation. Thereafter, the central and state governments will have to pass the central and state GST legislations and announce the date from which it will be implemented.

How GST will help

India is one country but, actually, it is 29 different markets, with the Centre and each state levying a bewildering number levies. This results in cascading taxes, massive complexities, higher prices for consumers, difficulties in administering the indirect tax regime and largescale corruption.

GST will replace central and state taxes such as Central Excise (Cenvat) duty, service tax, central sales tax, entertainment tax, octroi and entry tax, etc. with one tax and bring uniformity in India's taxation structure and lead to cheaper goods and services. (See: GST decoded).

Easier and cheaper logistics

A common complaint that most businessmen have against India is that it is easier, cheaper and it takes less time to ship goods from Europe to Mumbai than to transport the same goods from India's financial capital to Delhi.

The culprit? The entry taxes charged by various states as well as the plethora of state-level levies that have to be calculated before trucks can cross state borders. It is a common sight to see miles-long lines of trucks parked at state borders while petty officials go about their task of calculating taxes.

GST will subsume all these state-level taxes and so considerably reduce the need for this elaborate and corrupt network of infrastructure and officials at state borders. Transport times will improve dramatically, corruption will be reduced and inventory management costs will fall once these unnecessary network of check posts is dismantled.

CRISIL Research report estimates that "the rollout of GST will bring down the logistics costs of companies engaged in the production of non-bulk goods by as much as 20 per cent.

Savings will accrue as a result of gradual phasing out of the central sales tax, consolidation of warehouse space, faster transit of goods since local taxes will be subsumed into the GST and as state level check posts will be dismantled."

The same report adds: "Indian corporate spend an average of 6-8 per cent of sales towards logistics. GST is expected to lead to a costs savings of 1.0-1.5 per cent of sales over a 3-4 year period. Eliminating delays at check posts will yield additional savings of 0.4-0.8 per cent of sales, which will take the overall logistics costs savings to up to 1.5-2.0 per cent of sales for companies. These cost savings are, however, more likely to be gradual and back ended as corporates will have to realign their supply chain while ensuring minimum business disruption."

Improved ease of doing business

At present, the same item often costs different amounts in different states because of local levies. Alternatively, companies that want to sell its products at a uniform price across the country – for example, a small bottle of Coca Cola at Rs 5 – have to tweak prices for each state so that the final post-tax selling price remain the same.

This increases the complexities of calculating taxes and naturally increases the scope for both disputes and corruption. GST will ensure simplicity and easier administration.

Then, companies with operations in multiple states will find it easier to manage their inventory more efficiently. This will reduce transaction costs and improve efficiency levels across India

The Centre and the states must now agree on which items to exempt and which to bring under the GST net. This will be a tricky issue.



Inc.

Fewer exemptions likely

India's indirect tax regime is incredibly complex and riddled with dozens of exemptions, making calculations difficult. According to a Crisil report, about 300 items are exempted from central excise duty and a further 90 don't come under value added taxes.

The Centre and the states must now agree on which items to exempt and which to bring under the GST net. This will be a tricky issue. Bringing hitherto exempted items under the tax net will increase their prices and, potentially, fuel inflation. At the same time, it is essential to keep exemptions at the minimum possible level in order to keep the overall GST rate low.

Low GST rate the key

The Chief Economic Advisor has proposed a low standard rate of GST (at which the majority of items will be taxed) of

GST DECODED



The following taxes will be subsumed into Central GST

- ✎ Central Excise (Cenvat)
- ✎ Additional Excise Duties
- ✎ Service Tax
- ✎ Countervailing Duty (CVD)
- ✎ Special Additional Customs Duty (SAD)
- ✎ Central Surcharges and Cesses
- ✎ Central Sales Tax



The following taxes will be subsumed into State GST

- ✎ Sales Tax
- ✎ Entertainment Tax levied by states
- ✎ Luxury Tax
- ✎ Taxes on lottery, betting, gambling
- ✎ Octroi and Entry Tax
- ✎ State Cesses & Surcharges
- ✎ Purchase tax



The following taxes will be left out of GST (ie, they will remain even after GST is implemented)

- ✎ Basic Customs Duty
- ✎ Export Duty
- ✎ Road and Passenger Tax
- ✎ Toll Tax
- ✎ Property Tax
- ✎ Stamp Duty
- ✎ Electricity Duty
- ✎ Entertainment tax levied by local bodies

16.9 per cent to 17.7 per cent as the revenue neutral rate, ie, the rate at which the public exchequer is expected to be fully compensated for the changeover to the new system of tax.

He has also proposed a low rate of 12 per cent for essential goods and high rate of 40 per cent for demerit goods such as luxury cars, cigarettes, alcohol, etc.

This has received broad support from industry and sections of political parties. Leading chamber, the Federation of Indian Chambers of Commerce and Industry said in a statement: "As per current indications and reports, goods will be categorised as being subject to merit rates (12 per cent), standard rates (18 per cent) and de-merit rates (40 per cent)."

It added that to keep inflation in check and to cap the tendency to evade taxes, "the merit rate should be lower and the standard rate should be reasonable".

However, some state governments are battling for higher rates fearing a loss of revenues. It will all of Finance Minister Arun Jaitley's famous persuasive skills to guide every state and political party to a broad consensus on this issue.

Inbuilt mechanism against evasion

GST, which taxes only the portion of value added at each stage of the supply chain, works on a system of tax credits, ie, a downstream member of the supply chain pays tax only on that portion of the value that he adds and receives a credit for taxes paid by his upstream channel.

This will necessitate a paper trail from the beginning of the supply chain to the end. As a corollary, it follows that any member of the supply chain who evades taxes will be found out by the IT backend as his downstream partners claim their credits.

This will ensure that millions of untaxed and unreported transactions will now come under the tax net, leading to improved collections and higher revenues for the government.

On the flip side, this will mean that many items will cost more, thus, increasing the possibility of an overall rise in inflation at least in the short to medium term.

IMPACT ON INDUSTRIES

GST will benefit some sectors and hit others

POSITIVE IMPACT

Taxes will fall from about **30%** to the standard GST rate of **18-19%**

-  Cement
-  Media
-  Entertainment
-  Automobiles
-  Auto components
-  Retail
-  Consumer Durables
-  Fast Moving Consumer Goods



NEUTRAL IMPACT

Various exemptions currently enjoyed by these items means there will be **little change** in the tax rate

-  E-commerce
-  Steel
-  Pharmaceuticals
-  Oil and Gas
-  Tea
-  Sugar
-  Cotton
-  Coal
-  Power



NEGATIVE IMPACT

Services, which are currently taxed at **14%**, and some exempted items will be taxed at a higher rate

-  Hotels and restaurants
-  Textiles
-  Telecom
-  IT Services
-  Renewable Energy



Under the Indian Constitution, both the Centre and the states are allowed to levy taxes on goods and services sold within its territory. The GST structure to be adopted respects this by allowing the Centre to levy the Central GST and individual states the State GST within their designated territories.

Structure of GST

Under the Indian Constitution, both the Centre and the states are allowed to levy taxes on goods and services sold within its territory. The GST structure to be adopted respects this by allowing the Centre to levy the Central GST and individual states the State GST within their designated territories.

This dual structure means that the central GST rate can be altered only by Parliament while states will be allowed to fix their GST rates above a floor rate but within a narrow band.

According to the consensus reached between the Centre and the states, alcohol, which is a massive revenue earner for many states, will remain outside the purview of GST. The present system of imposing existing central and state taxes on petroleum and petroleum products is expected to continue.

Impact of GST

Prices of most goods to decline: Currently, a majority of goods are taxed at 12.5 per cent excise duty, 12.5-15 per cent VAT plus entry taxes, CST and various cesses, taking

the total incidence of taxes to about 30 per cent. Following the imposition of GST, this will fall to the standard rate that is expected to be in the range of 18-21 per cent. Thus, prices of a large number of goods are expected to fall. However, many goods that are currently exempted from taxes or are taxed at concessional rates will have to pay bear the full GST rate as the list of exempted goods is expected to be small. The prices of these goods will rise.

Services to become dearer: Services are currently taxed at 14 per cent. After GST is imposed, this will rise to the standard rate of 18-21 per cent. Thus, services will become more expensive.

Exports to become more competitive: GST will enable Indian exporters to live out the maxim: export goods, not taxes. GST is a consumption tax, ie, it is levied at the point of final consumption with all taxes paid at upstream points being given credits. Thus, exporters will get full credit for excise customs duties paid as well as state taxes such as octroi, sales tax, etc. At present, they get offsets for only some of the central levies.



GST LOOKS SET TO BE A GAME CHANGER, BUT THERE ARE CHALLENGES AHEAD

by Kevin McCole & Simon Jones

On 8 August 2016, Prime Minister Narendra Modi's flagship economic policy – the Constitution Amendment Bill for Goods and Services Tax (GST) – passed through the Lok Sabha. UK India Business Council experts look at what GST will mean for businesses and the challenges it faces, both on its path to formal ratification, and in the short-term aftermath as its practical implications begin to unfold.

The introduction of GST will be a game changer for India, its economy, and for Mr Modi himself.

When surveyed last October, 50 per cent of UK India Business Council members cited GST as the single most important reform they wanted the Modi Government to enact. The mood, now, is naturally positive.

Perhaps some of that positivity is because not everyone expected it to happen. For years, political debate around GST in India has been, to say the least, fractious. BJP PM, Atal Bihari Vajpayee, started the ball rolling in 2000 when he set-up an empowered committee to develop a model for GST. The Congress-led governments advanced the agenda between 2004 and 2014, and actually set a target date of April 2010

for the GST's introduction. It proved impossible, though, to get political consensus.

Now, 16 years on, an agreement has been reached. Credit for this has to be spread widely. Mr Modi and finance minister Jaitley have been determined, patient and, latterly, effective in building consensus. Other political leaders have played their part too, both within Congress and across the regional parties that dominate in many states. Political leaders have set aside opposition for the sake of opposition, and taken a big decision that will improve India's business environment and therefore lead to higher growth and faster job creation.

With 1 million people joining the workforce every month, India needs this growth.

So why is GST such a game changer?

The GST is, according to JP Morgan's Sajjid Chonoy, a 'Free Trade Agreement between India and itself'. It will remove the current web of taxes and tariffs between states, making it much easier to do business across the whole country. India will become a single market for almost all goods and services.

Now, 16 years on, an agreement has been reached. Credit for this has to be spread widely. Mr Modi and finance minister Jaitley have been determined, patient and, latterly, effective in building consensus

Virtuous Cycle

It is estimated that the Indian economy will gain \$15 billion a year as a result of GST. It will make manufacturing more competitive, which will increase investment, grow exports, and create jobs. More people entering the workforce will drive up consumption, which will increase production and so on. This virtuous cycle should also be strengthened with lower prices.

As the UK India Business Council's recently published 'Modi Government Progress Report' [<https://www.ukibc.com/reports/modi-government-progress-report-2016/>] stated, GST will improve the ease of doing business in India in a number of ways, including:

- Harmonisation – GST will untangle the fragmented nature of the market, where exporting goods from one state to another is currently riddled with multiple checks and taxes.
- Increased simplicity and transparency in India's tax system.
- The deflationary effect, and the virtuous cycle that creates.

However, the GST is not perfect.

The Bill excludes alcohol and does not yet apply to key petroleum products, which will continue with their existing tax arrangements. This is a contradiction of sorts, as the purpose of the GST is to create a single market applying to all goods and services. But, at the same time, it is important to note that the EU Single Market doesn't include all services.

Another criticism is that GST could be a zero sum game, with gains to manufacturers being provided by losses to the services sector, which is expected to pay higher taxes.

While the UK India Business Council would like to see alcohol and petroleum products included in the near future, India's GST is a significant step in the right direction.

What happens next?

The government of India has set a deadline to begin the rollout across the country in April 2017.

Before then, a number legislative and practical steps need to be taken.

On the legislative front, a majority – 15 – of the State Assemblies have to ratify the Bill before the President can sign it. Bihar was quick out of the blocks, ratifying on 16 August. Nagaland followed on 26 August. We are confident that there is widespread consensus, and enough of the other states will follow.

The actual GST rate and other modalities will be set by a GST Council, which will contain representatives from the

Centre and States. As the Government's Chief Economic Adviser, Arvind Subramanian stated, "This [GST] is a remarkable experiment in cooperative federalism that we have embarked upon. States and Centre are pooling their sovereignty to create [in the GST Council] a new decision making structure. There will be a little bit of trail and error."

Clearly, then, this composition and terms of reference of this body will be critical. It needs to set a tax rate and make decisions in a way that balances the needs of all stakeholders – central government, state governments, consumers, and producers.

As we've mentioned, GST has the potential to reduce inflation. But if the tax rate is set too high – at 18 per cent – HSBC believe that consumer price inflation could rise by 0.2 percentage points, although this rise would probably only be transitory. Another concern is that if the rate is too high it will discourage compliance. The GST Council is therefore going to come under pressure to fix a rate of 16-17 per cent.

But there is also a pull in the other direction – if the rate is too low it will fail to bring the desired increase in tax receipts – another key goal of the GST.

Clearly, governments across India have much to do, and as the stakes are so high they will be under huge scrutiny.

Businesses need to prepare too. PwC is advising businesses, especially those with large operations, to leave "considerable time to prepare for GST". SKP also advise businesses to take precautionary measures, as the GST will "change many earlier assumptions regarding business".

Improved perceptions

As our report highlighted, there have been many improvements in the business environment since Mr Modi came to power in May 2014. He won with a strong mandate to reform the economy and create opportunities for the hundreds of millions of aspirational young people all across India. But, until the GST Bill passed, there had been no 'Big Bang' reform of the sort that showed that Mr Modi could use his majority in the Lower House to transform India.

So, as well as being a game changer for the Indian economy, GST could also be a game changer for Mr Modi himself.



Kevin McCole is chief operating officer (COO) of UK India Business Council [UKIBC.com] and Simon Jones is a member of UKIBC's Comms Team.

Ashurst has a long association with India, and was one of the first international law firms to open an office there in 1994.



Our India group has developed invaluable experience over the past 20 years in working with government and regulatory agencies, and liaising with local lawyers and other parties in India. We maintain an India desk in each of our offices across Europe, the Middle East, Asia and Australia and our co-ordinated India practice comprises over 60 English, US, Australian and Indian qualified lawyers. We have a non-exclusive “best friend” relationship with Indian Law Partners as well as maintaining strong links with local law firms, enabling a seamlessly integrated and efficient service to clients. Our India CV demonstrates our strong record of overseeing projects in India to successful closure.

Richard Gubbins
Head of India Practice, London
T: +44 (0)20 7859 1252
E: richard.gubbins@ashurst.com

Gopika Pant
Senior Partner,
Indian Law Partners
T: + 91 (11) 2415 4000
E: gopika.pant@ilps.in

ashurst

INDIA ON A CLICK

by Amit Agarwal

Amazon's India chief explains how the global e-commerce giant is using technology to evolve and transform lives.

As a rule, Nadeem would come across as a predictable face in a 'National Geographic' documentary on Mumbai's humming Dharavi. His job in a small leather workshop earned him just enough to meet household expenses. However, the changing growth dynamics brought him to his destiny; an opportunity to do business on his own through the e-commerce platform of Amazon's Global Selling Program. Nadeem promptly registered on the platform and took off, listing original leather jackets at attractive prices. Today, Nadeem does business worth over \$8,000 each month on Amazon.in and intends to focus more on expanding his online business.

Nadeem is among thousands of ambitious youth, eager to exploit the tremendous customer base offered by the e-commerce platform. India is home to the world's fastest growing Internet user base. Thanks to a great telecom penetration in rural areas, the number of web users in India may touch 730 million by 2020 as against 350 million in 2015. A report, compiled by Nasscom and Akamai Technologies India, says 75 per cent of new Internet users will come from rural India, leaving the US far behind, but placing it only next to China.

Rightly so, Amazon has stepped on the gas in India. For one, it has launched some India-specific services like Easy

Ship, Fulfillment By Amazon, Amazon Now, I have Space programme to facilitate small businesses across the country. The immense infrastructure investment by Amazon is a significant way for these small and medium sized companies to leverage the online platform without worrying about distribution and logistics, while nonetheless getting access to a pan-India and even global customers, allowing them to scale up their business.

In a way, Amazon India that began operations in 2013 and is already among the top three e-commerce platforms in the country, is bringing the best of global technology to change not just the Indian e-commerce landscape, but create opportunities on the go for sellers across the country to transform the way they sell and how consumers buy.

As a corollary, Amazon.in this year outlined an additional investment of \$3 billion (taking it to \$5 billion) which is equal to its global marketing costs in 2015, but marginally higher than its total capital expenditure last year (\$4.5 billion). A significant part of this additional fund will be to ensure the Indian customers continue to enjoy a vast selection on its platform, including with innovative programs for the local sellers, while at the same time adding to its infrastructural strength for the right logistics support. This clearly validates



its commitment to the country especially leveraging its 7.5 per cent economic growth – a bright spot in the low global growth numbers – as well as the opportunity presented by the young demographic of the country.

Fashion to fibre: When sellers find more buyers

Naturally, the youth is bustling among the Amazon seller base. Take Sujan Basha (30), fashioning to be the modern face of the handloom industry for nearly two years now. He runs his own company Sabita Handloom in Nadia, West Bengal and travels to Kolkata and Delhi to sell his offerings. Now, Sujan says online selling is far more profitable as it enables a seller to reach a larger customer base (even globally) with a wider repertoire of products. Says he: “I was not getting the right value for my products through offline selling as my reach was limited to local areas. I am glad to be a part of Amazon; I am learning new weaving techniques besides understanding the importance of branding for effective marketing. Today, I can confidently cater to customer demands.”

It's not just fashion being impacted by prospects galore: even your local kirana wallas are happy to get more business. In fact, while opening up the retail business to large players, the Government had concerns regarding the smaller kirana wallas but the technology seems to have provided an even, level playing field. The Amazon Now program has helped local kiranas and offline players to grow exponentially. Using Amazon Now, customers can now shop for over 6000 everyday essentials from local kirana stores as well as bigger chains, and get them delivered to their doorstep within two hours.

I Have Space: Know Your Customer

But given India's unique heterogeneous geography as well as vastness, Amazon has launched some distinctive programs for India such as the IHS (I Have Space) programme. With this, Amazon joins hands with local store owners to provide pick-up and delivery to its online customers. Under IHS, the local kirana walla can act as the nearest 'pick-up point' for customers or can deliver products directly to customers. The programme multiplies his prospective customer base, business income and expansion opportunities. Amazon has 12,000 IHS points across the country.

Neha who owns a small kiosk of cosmetic goods, “Maharani Shringar” in Patna City is a classic success case of IHS. She has been associated with IHS since last few months, attracted by the viability of the concept. Currently, she delivers 35-50 packages on a daily basis, earning an extra income of INR 18000-20000 per month over and above her regular income of Rs 12000-15000 from the kiosk. She has employed a local boy for delivery, enabling him to meet his educational expenses with this part time job. “Amazon has given me an identity in my locality which has increased my sales. I want to give a better future for my daughter with this additional

income. I am also trying to get more women to be associated with this programme. It would make them independent as there are fewer opportunities for women in Patna," says Neha.

Easy Ship: Sellers leveraging Amazon logistics

There are those who began to leverage the power of technology early. Vinayak Gautam who owns Todu Price, a small enterprise run by 4 friends, began selling on Amazon.in when he was just 21 years old. Though it all started to make some pocket money, he had soon built a fledgling business that turned into a fulfilling career. Into his fifth year in the e-commerce arena, Vinayak generates a turnover in seven digits, thanks largely to Amazon India's innovative Easy Ship – wherein sellers can leverage Amazon's investments in logistics to have their orders shipped straight from their own warehouses across India. In other words, all the small local sellers, with very specific kinds of products, such as kitchen ware, gardening products, etc, can unshackle their potential and improve their customer experience with the Amazon Easy Ship to make the delivery simpler and more reliable.

FBA – fulfilling the customer trust

Trust is another word that Rakesh Ramrakhani – owner of 'Lali Prints' in Jaipur - adds to the Amazon-customer association. Ramrakhani who runs his family textile business was slow to realise the potential of e-commerce, but joined Amazon in time to reach out to customers beyond the Pink City. He joined Fulfilment By Amazon (FBA) - a pay-as-you-go fulfilment service wherein Amazon keeps sellers products in its warehouse, packs and ships them to customers, manages returns and services customer on their behalf. "The best thing about Amazon is the customer's trust," says Ramrakhani whose sales have gone up over ten times in no time. In fact, Amazon has been acting as an enabler for India's vast small and medium businesses at every stage of their business lifecycle.

Seller programmes to hone basic skills

With its commitment to Indian consumers to get a vast product portfolio and to the sellers to ensure they are easily able to reach larger customer audiences, there are various seller programmes - an example is the Seller University for educating and onboarding sellers – under which current

and new sellers are assisted to enroll, manage and grow their business profitably. Another pioneering innovation for sellers is Seller Flex, which allows sellers to list their entire products on Amazon.in but push them using the FBA service without moving them out of their own warehouse. This cuts the cost of transporting goods to Amazon storage and back. For customers, this means a greater selection at no or very

low incremental fixed cost. At present, Amazon has 100 Seller Flex sites.

Amazon Seller App is another innovation that enables buyer-seller communication, order notification, order detailing, shipment confirmation and order fulfilment notification through mobile devices. The App that enables a seamless management on the go has been downloaded by over 73,500 sellers. Much in line with the Indian tradition, Amazon has launched Amazon Tatkal, partly to debunk the myth that selling online is tough and a time consuming process. Here, SMEs can get on to Amazon.in, fill up and sell within just sixty minutes.

In line with the Government vision to empower women, Amazon has launched a first-of-its-kind women-only delivery stations in March this year; the first two centres came up at Thiruvananthapuram, Kerala and Chennai in Tamil Nadu. Through this initiative, Amazon has taken the lead to engage women, create unique job opportunities and enable them to be achievers in this field.

Amazon India's growth stems largely from its enabling role; that of a strong e-commerce platform that manages concerns of both sellers and buyers. Its steady investments in logistics and enabling services are boosting the confidence of Indian businessmen while the fulfilment services are cementing trust factor among customers. For millions of Indians, this could be the ultimate freedom to chart their own course of life.

India is home to the world's fastest growing Internet user base. Thanks to a great telecom penetration in rural areas, the number of web users in India may touch 730 million by 2020 as against 350 million in 2015



Amit Agarwal is vice-president and country head at Amazon India, responsible for Amazon's consumer and seller businesses in India. He joined Amazon.com in 1999, and has led several new initiatives in the formative stages of Amazon's seller, web-services and external payments businesses. He has served in a variety of leadership positions, including Global Technical Advisor to Jeff Bezos and vice-president, international expansion.

SHORT TAKES

CISCO plans India plant

Global technology major Cisco has revealed it is working on a plan to establish a manufacturing facility in India.

Cisco CEO Chuck Robbins said



the company is “very actively involved in India across the board” and working on a broader base from digitisation to smart cities in the country.

He said: “Prime Minister Narendra Modi is very committed to manufacturing. We worked through a business case and... presented to him that... That was fantastic and we have been moving forward.”

Cisco is engaged in over 15 smart cities projects in the country. The company is also working with the Andhra Pradesh government for rolling out Bharat Net.

India, which the company views as among its “best bases”, is already home to its second-largest site with around 11,000 employees.

Silicon Valley headquartered Cisco has also said it will work alongside competitors in order to ensure that it has the best security offering for customers around the world.



German bank to fund Solar India

Germany’s KfW Development Bank has agreed to build at least 40MW of floating photovoltaic (PV) arrays in two Indian states of Maharashtra and Kerala.

India’s Ministry of New and Renewable Energy (MNRE) has initiated a study to assess the potential of floating parks in the country as a means to reflect the technical practicality of large-scale solar parks.

The first floating parks will be a showcase project that would demonstrate the technical viability of large solar projects.

S.P. Gon Chaudhuri, chairman of the Kolkata-based Renewable Energy College, said: “Initial estimates suggest that the country could generate at least 310GW of green power from such floating solar parks.”

The floating arrays will be realised on bodies of water in the two states, with an estimated investment of Rs 300 crore (\$44 million). The study, set up by MNRE, will be undertaken by the National Institute of Solar Energy and the Renewable Energy College, to try and assess what the potential is for floating solar parks within India.

This project is part of a large-scale solar German-Indian solar partnership that was announced by the German Federal Ministry for Economic Cooperation and Development (BMZ) last year. Within the partnership, KfW will issue low-interest loans with a total volume of about €1 billion.

Holland eyes Start-up India

Holland has joined a long list of countries looking to attract investments from India’s start-up ecosystem.

Stans Kleijnen, executive director, Netherlands Foreign Investment Agency (NFIA), said: “We are watching the ecommerce sector in India very closely and building relationships with the companies. If at all these companies think about investing abroad, Holland should be among the top priority destinations for them.

“Currently, we have three trade offices, one each in Chennai, Hyderabad and Ahmedabad. We are moving our trade office from Chennai to Bengaluru, as we see huge opportunities for trade from the city due to the IT hub and many other industrial activities in the city.”

The country is looking at a 10-20 per cent increase in investments from small & medium enterprises in India this year. India created 3,000 jobs in 2015 and has already invested €250 million in the region.

A total of 180 Indian companies are present in the Netherlands, including Tata Consultancy Services, Tata Steel, UPL, Apollo Tyres, Infosys and Wipro.



THE FUTURE OF LOGISTICS IS PAVED WITH INNOVATION

by Nishith Rastogi



Nishith Rastogi is co-founder and CEO of Locus.sh, a Bengaluru-headquartered logistics automation platform for enterprises to manage intra-city logistics. He is also founder of PinChat, a location based comment and conversation platform.

The logistics industry is going through a time of rapid change. It was not long ago that ideas like the Internet of Things (IoT), 3D printing and drone delivery, were things of science fiction. In less than half a decade, industries across sectors are deploying these futuristic technologies on the ground to provide faster, cheaper and more reliable delivery experience for end customers.

At present, India's logistics industry is worth \$300 billion, also, the logistics industry aims to grow at a CAGR of 13-15 per cent by 2020 while the Indian markets would grow at an average of 10 per cent year on year. The Indian logistics market currently accounts for around 14 to 15 per cent of India's GDP on various cost incurred in logistics and transportation operations. This cost incurred, is substantially higher when compared to other developing nations, which is around 8 per cent to 10 per cent of their GDP and developed nations which is around 7 per cent to 8 per cent.

Logistics and technology go hand in hand. With the emergence of e-commerce industry in India, the need for logistics infrastructures has grown to a very great extent. Companies realise the importance of last mile logistics and retailers want to have control over this portion of their supply chain. Strong relationships between retailers and logistics providers have never been more important in ensuring positive experiences for end consumers.

This huge demand for hassle free supply chain

With the emergence of e-commerce industry in India, the need for logistics infrastructures has grown to a very great extent. Companies realise the importance of last mile logistics and retailers want to have control over this portion of their supply chain.

management can be met by introducing the advanced technology, to make their day-to-day operations cost-effective, efficient and easy. All this automation in any enterprise, basically corresponds to lesser errors in the system. The logistics firms are hence moving from a traditional setup to integrating their systems with technology for their operations. The industry as a whole has moved from being just a service provider to a position where they provide end to end supply chain solutions to their customers.

Smart technology comes into play through predictive analytics which helps optimizing operations. Technology has allowed the industry players to come up with products which could help the logistics markets to cater to the various operations ranging from first mile to last mile. For example, the operations manager helps to schedule the deliveries keeping in mind the time slots, the pickup address, the drop address, and the products to be delivered. It powers entities to focus on their core business while the rest is being taken care of through automation. This in-turn helps operators with more data collection to improve the route planning, the dispatches and especially the accuracy of the ETA prediction. For the entity, it corresponds to increase in market size, as their ability on reach becomes wider.

Enterprises and start-ups are developing more and more interesting features and solving problems, making the future of the sector look promising.

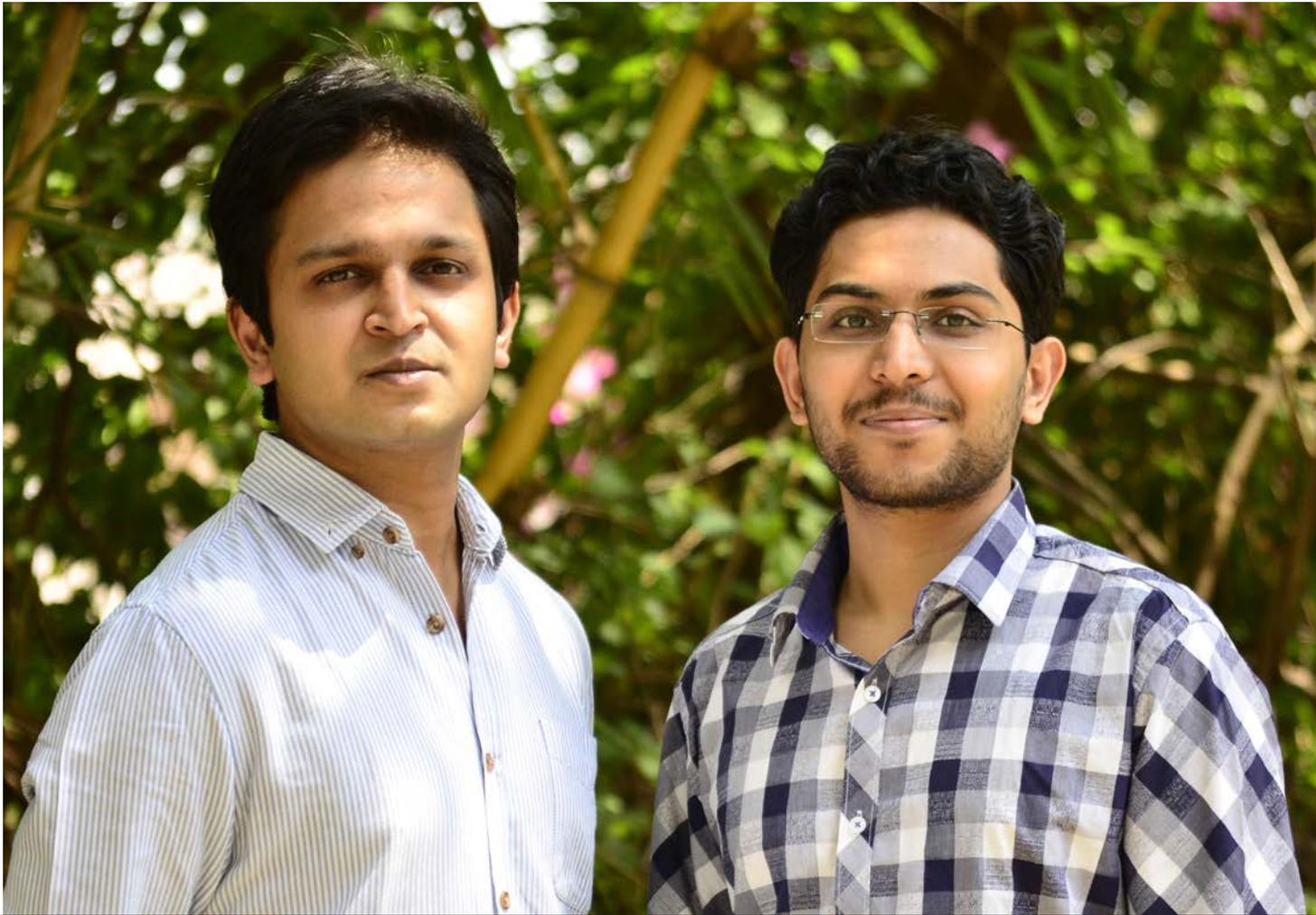
Growth and Locus

There are essentially four critical enablers of growth for any tech company:

- The need of a solution for the logistics industry was very evident. When Locus started off, my team visited various warehouses to understand their current systems. There we saw the operators and planners worked merely on intuition and guesswork. They had no idea of



LOCUS.SH



Locus.sh co-founders Nishith Rastogi (left) and Geet Garg

- where their riders were, what the situation of live traffic was, etc. Everything was dependent on manual sense. This sort of approach was not scalable, as it was highly inefficient and inconsistent. Route planning is more suited for computational algorithms when compared to manual planning.
 - Validating the Product-Market Fit becomes important to achieve a reasonable number of users. This is possible by developing a repeatable, scalable and most importantly sustainable model which converts to active customers. Locus has been successful in creating proprietary algorithms, solving Knapsacking, Traveling Salesman Problem, Bin Packing separately and together, to achieve the best possible solution among millions of contenders.
 - The Adoption of a new technology can be realized only when it is widely diffused and used. It is this diffusion that determines the pace of growth for the product. Also, change is difficult for people, no matter how well you manage it. That's why investing in planning, communicating, and training is key for successful adoption. Locus, has been adopted by leading enterprises in India, like Urban Ladder, FreshMenu, Delhivery, Lenskart and more, for who we have started automating their intracity logistics.
 - Creating a Value proposition will lead to more number of consistent users. Our Clients have seen substantial improvements in terms of their deliveries. We have managed to increase efficiency for companies using Locus by 25 per cent within 3 months, a 100 per cent Jump in number of orders and a 15 per cent reduction in logistics cost.
- Our resources, human and financial, are being used to strengthen our technology that we offer in order to solve hard problems in the logistics industry. Locus has been fortunate to be at the right spot at the right time, to make a change in the industry.
- Through this, Locus is rewriting the Infrastructure for Logistics ground up.

INDIA LEADS THE GLOBAL CODING RACE



A new Barclays report finds India racing ahead in the digital coding race.

India has emerged on top of a new global digital ranking by Barclays bank in the field of digital creation and coding.

While the country lagged behind considerably on broadband access and policy, it made a solid mark in fields such as “protecting data and devices” and “communication and collaborating”, according to the Barclays Digital Development Index commissioned by Ashok Vaswani, the CEO of Barclays UK.

The index benchmarks 10 countries worldwide on their readiness to compete in the digital economy and was aimed at tackling areas in which the UK is lagging behind other countries.

India is placed 7th overall; bottom of the league on broadband access and policy but top on digital creation and coding.

“This [coding] is a key indicator of the ability to be a ‘digital creator’ rather than just a ‘digital consumer’. India leads, producing the most school pupils with coding skills – almost 10 times as many as the US,” according to the index.

“When it comes to individuals’ assessment of their own

digital skills and confidence, the UK trails major economic rivals India, China and the US,” the report found.

The UK-headquartered bank had surveyed 10,000 workers in 10 countries to create its ranking – Estonia (1), South Korea (2), Sweden (3), UK (4), China (5), US (6), India (7), Germany (8), Brazil (9) and South Africa (10).

The country-based survey measured the level of “Individual Digital Empowerment” among workers by assessing their digital skills in six categories ranging from basic to more advanced: researching and evaluating information; communicating and collaborating; protecting data and devices; content creation and coding; solving problems; and knowledge and attitude.

The scores for Individual Digital Empowerment were then combined with analysis of policy frameworks and support for the development of digital skills in each country to create the overall ranking.

Individual empowerment index

= before the rank indicates a tie in rank with another geography

Overall Score			Content creation and coding		
01		5.9	01		6.2
02		5.8	02		6.1
03		5.7	03		5.9
04		5.4	04		5.1
05		5.2	05		4.7
06		4.9	06		4.4
07		4.8	07		4.2
08		4.6	08		3.6
= 09		4.4	= 09		3.0
= 09		4.4	= 09		3.0

Key

-  Brazil
-  China
-  Estonia
-  Germany
-  India
-  South Africa
-  South Korea
-  Sweden
-  UK
-  USA

Source: Barclays Digital Development Index

The country-based survey measured the level of “Individual Digital Empowerment” among workers by assessing their digital skills in six categories ranging from basic to more advanced: researching and evaluating information; communicating and collaborating; protecting data and devices; content creation and coding; solving problems; and knowledge and attitude. The scores for Individual Digital Empowerment were then combined with analysis of policy frameworks and support for the development of digital skills in each country to create the overall ranking.

“We want the UK to be the most digitally savvy nation on earth,” said Vaswani.

“This research shows Britons need to equip themselves with digital skills whether to futureproof their career, or keep personal data and devices safe,” he noted.

Only 16 per cent of workers in the UK would be comfortable building a website, compared with 39 per cent in Brazil and 37 per cent in India, according to the report. Password-generating software that creates secure logins is used by just 13 per cent of Britons, compared with 32 per

cent of people in India and China.

Among other emerging countries, Estonia and South Korea lead the way in providing people with vocational skills in the digital space.

Overall emerging market workforces were found to be at considerable ease with technology. If their policy and infrastructure environments improve, workforces in India, China and other emerging markets will compete increasingly strongly with their developed-world rivals in the digital economy.



GREEN CHANNEL FOR INVESTMENTS

Invest India, the country's new investment promotion agency, is making life easier for both foreign and domestic investors by cutting through the red tape. Want to know how? Read on

//

The country can progress only if we end red-tapism. No red tape, only red carpet, is my policy towards investors. //

*Narendra Modi,
Prime Minister of India*

Nikunj Parashar and his wife Shilpa were worried. They had quit lucrative jobs abroad, he as General Manager of Maersk Group and she at Credit Suisse, to return home to India to set up their own business.

He had developed the technology for radio-controlled high speed target boats required for the Indian Navy and was confident that his boat could compete with the Israeli, US and French boats the navy currently used. What's more, his boats would cost only Rs 6 crore compared to Rs 25 crore per imported boat.

But developing a great product was one thing; getting the powers that be to look at it and consider it for acquisition was

// India was already famous the world over for frugal engineering. We wanted to adapt that same philosophy to India Invest. Our goal was clear: we wanted to be the world's No. 1 IPA at the least possible budget. //

Deepak Bagla, CEO, Invest India

quite another. After repeated failures to get through to the authorities, he Parashar gloomily told his wife: "Perhaps we didn't do the right thing by returning home."

Purely by chance, a few days later, he heard Prime Minister Narendra Modi announce the launch of his ambitious flagship scheme, Make in India, to encourage Indian and foreign industry to manufacture hitherto imported items in this country for both the domestic as well as the international markets.

The husband and wife duo wrote an email to the Make in India program without really expecting an answer. The very next morning, they received a reply: "How can we help you?"

That email changed their lives. Not only did the Make in India program handhold them through the selection process of their technology but also helped them set up Sagar Defence Engineering Pvt Ltd in Mumbai to supply state of the art boats to the navy. Besides the defence sector, these boats also have applications in flood relief operations, river monitoring and cleaning and in oceanography.

This is just one of dozens of examples of both foreign and domestic investors being surprised by the highly professional and very efficient services provided to enable them to bring their proposals to fruition.

"Till recently, all the arms of the government were involved in investment promotion. But no one was doing investment facilitation. That's where we came in," said Deepak Bagla, CEO of India Invest, India's new but surprisingly low profile investment promotion agency (IPA).

The Chinese boom, fuelled mainly by FDI, was engineered largely its investment promotion agency. Singapore's IPA, too, is famous for aggressively facilitating investments in the city state. But India had no established mechanism to hand hold foreign and domestic investors and guide them from conceptualisation to cash flow.

In 2009, therefore, a Cabinet note mooted the idea of an

IPA. The government created Indian Brand Equity Foundation as a trust to promote and create international awareness of the Made in India label and to disseminate knowledge of Indian products and services abroad.

But this, too, fell short of an IPA. Then Narendra Modi stormed to power in 2014 and launched his ambitious Make in India program, leading to a flood of queries about opportunities in this country.

That was when the DIPP and the Federation of Indian Chambers of Commerce and Industry got together to set up India Invest.

To start with, India Invest studied the investment promotion

model of Gujarat, which had been very successful in attracting investments under Modi.

The plan for the IPA was radical by the standards of the tradition-bound world of Indian bureaucracy, It was to be an organisation completely funded by the government; yet it would have to stay at an arm's length from the



government. Then, it had to be created and run in the manner of a private sector firm. And finally, it had to be designed to keep the private sector investor – both foreign and domestic – at the centre of its existence instead of the government. So, it had to be the independent voice of the investor within the system.

The challenge was to get everyone to accept the idea. It wasn't always easy. But the Prime Minister's vision was crystal clear: "The country can progress only if we end red-tapism. No red tape, only red carpet, is my policy towards investors," Modi had said on more than once occasion.

CEO Deepak Bagla was drafted in from the private sector in March 2015. Between then and September, Bagla and a small team focused on creating an organisational template that was extremely nimble and flexible.

"India was already famous the world over for frugal engineering. We wanted to adapt that same philosophy to India Invest. Our goal was clear: we wanted to be the world's No. 1 IPA at the least possible budget," said Bagla.

That goal was achieved this year in Nairobi, where Unctad rated it the No. 1 IPA in the world for its Best Practices.

Bagla generously gives all the credit for Invest India's success to his young team. "These youngsters are full of passion. Why else would they have given up often eye-popping dollar salaries at bluest of blue chip global investment banks and consultancies to work in a government-run body at a fraction of what they were earning?" he asks.

Being young and passionate, Bagla's team has developed expertise at taking care of investor grievances. Their domain knowledge and problem solving skills have also earned them the respect of both foreign investors as well as the babus with whom they interact on a daily basis.

"Some bureaucrats are more open than others to the idea

of us youngsters pestering them cut through the red tape, but everyone cooperates because they know the Prime Minister is backing this venture,” said a young India Invest executive.

Initially, India Invest looked for recruits at other trade organisations and embassies but finally decided to give the mandate for recruitment to head hunting firm ABC Consultants.

Early on, India Invest got a batch of interns from an Ivy League university. One of them decided to stay back. It was a leap of faith. India Invest was an unknown organisation, it had little money and some people doubted its longevity.

But heeding the Prime Minister’s call to help rebuild the nation, more and more qualified youth took the leap of faith. ABC Consultants reported that suddenly, people were willing to take pay cuts and give up blossoming careers to heed the Prime Minister’s appeal.

To be entirely honest, not everyone has jumped into the fray out of altruism. “India Invest gives young people exposure and the opportunity to build relationships and networks that only people at very senior levels get. Where else could a twenty-something be able to walk into the room of a secretary in the Government of India or have a state chief minister return his/her phone call?” said a partner at a large head hunting firm on condition of anonymity.

Also, where else would people in their late twenties and early thirties get to interact with global CXOs and handle investment proposals worth thousands of crores? These kids will carry these experiences and relationships with them when they move on. In their cases, three four years at India Invest will be the equivalent of 10-12 years at the firms from which they came,” he added.

Bagla created a matrix organisation where everyone would handle one industry as his/her primary responsibility and another one as his/her secondary focus. Then, that person would also specialise in handling investors from one country and investments into one state.

This helped create a flat organisation structure in which roles could be swapped, thus, creating a system where

institutional knowledge would be retained by the organisation even if someone moved on.

The enthusiasm of his young team is visible and infectious. Within minutes of stepping into Bagla’s office, it becomes evident that these youngsters don’t stand for protocol. They stream in and out of their CEO’s cabin without even knocking to discuss some problem or breakthrough with him.

It is this can-do spirit that enables this young team to cut through the red tape that has defeated even seasoned warriors.

“I often have to tell these kids to wind down and chill. I remember once, when I was abroad, I had sent an email to a young colleague asking for some information and presto, it was there in my inbox within the hour. I realised it was 4 am in Delhi. When I returned I told him this wasn’t on and that he would burn out if he didn’t learn to temper this enthusiasm,” a half-bemused Bagla recalled.

India Invest’s efforts are also helping reduce corruption in the system. For one, its services are completely free. So, there is no reason for any investor to seek the assistance of any private sector facilitator or consultant or break any law when all his grievances can be addressed legally and at no cost.

Then, being a government organisation, foreign investors can rest assured that any advice they receive will be above board and in keeping with the law of the land.

The results are already showing. Foreign direct inflows touched an all-time high of \$55.46 billion in 2015-16, up 23 per cent compared to \$45.15 billion in the previous year, according to provisional figures put out by the Department for Industrial Policy & Promotion.

Though it is still too early to credit this entirely to the efforts of India Invest, even its most trenchant critic – though there aren’t too many – will accept that it has begun to make a difference.

These are early days yet. As the economy improves and growth rates rise, India Invest and its young team will doubtless find their hands more full. And that can only be good for India.



Invest India:
The road to
prosperity

EMPLOYEE OF INDIA

by Shankar Ranganathan



Shankar Ranganathan sacrificed millions of dollars in lost bonuses at the world's top consultancy firms to heed Prime Minister Narendra Modi's call to help rebuild India. He works at Invest India, India's investment promotion agency.

Today I work for India. My client is not an MNC in South-east Asia or Australia or the Middle East. At Invest India, our mission is to bring out a step-change in how and how much FDI comes into India. Our team of young professionals at Invest India are working to create immediate and tangible results on the ground. Every investor is special and they deserve and get the same quality of support which I would have otherwise provided as a consultant working for a global premium management consulting firm.

As a kid, I grew up in the Bastar district of the then Madhya Pradesh. My dad used to work at the Bailadila Iron Ore Mines. I remember the gaunt faces of the native inhabitants and often wonder what will bring a change in their lives. Recently, I visited the place after more than 20 years. We definitely see development - more cell phones, better roads, better facilities and an overall jump in the quality of life. Of course, there is still a long way to go.

I consider myself lucky. Perhaps, I am among the top one-tenth of the top 1 per cent of fortunate Indians. I got the best possible schooling across India for just Rs 15 per quarter in fees in the primary school; it increased to a little over hundred by the time I finished. Later, while working in the US, I wanted to move out of engineering. India welcomed me again with a coveted seat at the IIM Calcutta where I got to learn with the best brains in India at a fraction of what I would otherwise pay for an international business school of comparable repute. After my MBA, I worked with management consulting firms - Bain & co and AT Kearney for close to ten years in India and across the world - Middle East, United States, ASEAN and Australia. Having lived in 4 countries, worked in more than 15 and helping clients as diverse as sovereign wealth funds of Middle East to telecom firms in APAC, I developed expertise in problem-solving - business problems as well as organizational and people issues.

All along, I always remembered a mantra - which one of the client CEOs gave me - 'maximise ROTI - Return on Time Invested'. I was definitely generating good returns for myself as well as my clients, however, I always wondered if these were the right candidates for whom I should generate returns with my time. During my time with these large management consulting firms, I got the chance to visit many tier 2 and tier 3 cities of China such as Xian, Chengdu, Qingdao, Hohhot. One thing that really struck me, was, that not only did they have world-class physical infrastructure, but they also aimed to provide a superior quality of life to their residents. It was common to see a restaurant waiter, a senior official, a tour guide or a businessman to have access to the same kind of opportunities. What has made the difference is obvious: Massive investments - both domestic and foreign, with a focus on exports and on being part of the global supply chain.

Since 2013, I was exploring options to put the skills I picked as a strategy consultant to use for the public sector. However, in the aftermath of the global financial crisis and the general mood of pessimism prevailing in India, I was carrying an unfashionable emotion and aspiration on my sleeve: unqualified love for my country and to make a difference to where I truly belong - India. Things changed in 2014. The new India had arrived, with its eyes set on goals that would transform the nation's development. I knew this was the right time to return to India and join the public sector.

I recall the day, when I spoke to Mr. Bagla. I found a man with a passion for India similar to mine and had the right vision for India's development. His vision and commitment drew me to Invest India. I didn't waste any time to pursue and convert this opportunity that had presented itself. Today, I feel blessed to have returned to India at this right time. Being a cog in this wheel of transforming India, I couldn't be more satisfied.

INVESTMENT ENABLER

by India Inc. staff



Shruti Chandra gave up a promising career at a global Big 4 consultancy to help build India into the world's top investment destination. Her job: hand hold foreign investors from conceptualisation to cash flow.

It was a mini-crisis. One of the world's largest retail chains had been served notice to shut shop at duty free areas of Delhi and Mumbai airports. Reason: its security clearance had expired.

The chain was staring at losses of Rs 1 crore a week but more than that shutting down two outlets of a world famous brand would hurt India's image as an investment-friendly destination at a time when the flow of foreign investment dollars was rising and the country was slowly but steadily crawling out of a half-a-decade long slowdown.

Enter Shruti Chandra, a young employee of India Invest, who had quit a job at global Big 4 consultant PricewaterhouseCoopers (PwC) to follow her passion – the kick of being able to contribute to the rebuilding of India's economy and pushing it up the ranks of leading states in the comity of nations.

It was a weekend. But that didn't deter Chandra. She coaxed, pleaded and bullied her way to a short-notice appointment with the Secretary, Civil Aviation, pleaded her case and convinced him to put in abeyance the earlier order shutting down the retail chain's operations.

The matter is now in process and a committee hearing to sort out the issue will take place shortly.

On another occasion, a major global clothing chain was faced with an awkward issue on the day it was scheduled to open its first store in Mumbai. The multinational was keen on keeping its store open for longer than usual but the law in Mumbai didn't allow women workers to stay beyond

certain time.

Chandra, who was dealing with the matter on behalf of India's investment promotion agency, flew down to Mumbai and arranged a meeting with Apurv Chandra, Principal Secretary, Industry, Government of Maharashtra, and convinced him to grant an extension.

How does it feel to be rubbing shoulders with top corporate executives as well as decision makers in the senior-most echelons of the central and state governments? Chandra smiles. "It's all about relationship building. Initially, I was apprehensive about how such senior bureaucrats and politicians would react to being approached by a youngster like me. But, I realised soon – and they did, too – that we're part of the same team and that we have a common goal of facilitating investments in India. No doubt the Prime Minister's unambiguous message on attracting FDI helped," she said. Chandra, who holds a Bachelor of Commerce degree from the University of Melbourne and a double masters – in business management and in international management – from the University of Sydney and CEMS, is a world removed from where she had imagined herself at this stage of her career, having joined Mastercard after completing her bachelors degree.

She joined Invest India last December after dabbling for a while with a boutique consultancy in the IT and start-up space. In her current job, which pays her a fraction of what she was getting earlier, she deals with the retail sector as her primary responsibility and the textiles industry as her secondary area of focus. She also has "state responsibility" for Delhi and "country responsibility" for the UK.

This means any foreign investor who needs some guidance in the above spaces will have to deal with Chandra, who works a normal 9.30 am to 6.00 pm every day. She also often works on weekends drafting briefing documents and presentations for clients or the government.

Chandra, who likes to read Harry Potter, swim, cook Italian and Thai meals and listen to music in her spare time, admits that a three-year stint at India Invest – guiding foreign investors through the labyrinthine processes of the bureaucracy – is the equivalent of 10 years in any other job.

But for now, she's not looking that far ahead. In her crosshairs is the next foreign investor who needs help to invest in India.



An invitation to become a CommonwealthFirst Export Champion

Do you want access to 1/3 of the world's population?

Is your business growing fast with high export potential?

Do you have ambitious plans to grow internationally?

Do you have what it takes to become a Commonwealth Export Champion?

CommonwealthFirst is a major new initiative to help **SMEs trade and invest** across the Commonwealth.

A free association of 53 diverse **English-speaking** countries with similar legal systems, business practices and values, the Commonwealth provides the perfect **launching pad** to grow your business **internationally**.

Over the next three years, **100 leading UK SMEs** will be selected to become CommonwealthFirst Export Champions. Export Champions will be provided with unique access and support in their quest to **win new business** in the fast growing Commonwealth markets. Their success will be **showcased** as an encouragement to the wider UK business community.

Export Champions are selected on their potential for **innovation, level of impact and ambition**. Whether early stage or long established, CommonwealthFirst Export Champions will be **ready to excel** in Commonwealth markets.

As an Export Champion you will be a part of an intensive world-class **3-year programme** with **international support**, which includes.

- **Tailored trade missions:** to fast growing Commonwealth markets such as Australia, Canada, India, Malaysia, Nigeria and South Africa
- **Access to high level networks and introductions:** to ensure you are dealing with the right people in country
- **Training and mentoring:** support from leading UK exporters, country and technical experts
- **Unrivalled profiling and branding opportunities**
- Assistance from **UK Government, Trade Associations, Chambers of Commerce** and a **network of Suppliers**
- **Wider web platform** providing advice and support to SMEs looking to **expand into Commonwealth markets**

The CommonwealthFirst programme has been developed in partnership between the Commonwealth Enterprise and Investment Council, i-genius and Royal Mail.



CommonwealthFirst
EXPORT
CHAMPION

HOW TO APPLY

APPLY NOW to become a
CommonwealthFirst Export Champion

Application deadline for first Cohort:
Monday 20th June 2016

For more information and to start the online application process please visit:
www.commonwealthfirst.org
or email:
info@commonwealthfirst.org

COMMONWEALTH

Enterprise and Investment Council



Implementation Partner

i-genius

RAHUL MUNJAL: RENEWABLE ENERGY CRUSADER

Though cut from the same cloth, the eldest in the next generation of the Munjal family has taken a divergent route from his predecessors. A staunch advocate of reversing the ill effects of climate change, Rahul Munjal is quickly gaining prominence in the green economy and already has India's largest rooftop solar installation and first certified commercial green bond to his name. Inspired by his father who founded what was to become world's largest two wheeler maker--Hero MotoCorp, the junior Munjal is hoping his venture would be as successful in its own way.



On October 23, 2014, Pawan Munjal, the chairman and CEO of Hero MotoCorp the world's largest two wheeler manufacturer was busy showcasing the company's new factory in Neemrana to a select group of media persons. The facility with a capacity to make 7.5 lakh units every year was Hero's fourth in the country and one of the most modern and sophisticated two wheeler manufacturing facilities. Due to be inaugurated the following day, Munjal was at pains to explain how this factory was unlike any other. Before the journalists could be taken to the shop floor—the heart of any automotive facility where the assembly of vehicles takes place—Munjal escorted all of them to the roof of the building.

Unlike any other factory in India, the roof of the Neemrana facility is almost entirely covered by solar panels. The factory building is oriented diagonally based on the sun path so that the 1.5 megawatt solar photovoltaic modules get maximum

exposure to the sun. It is one of the biggest solar rooftop installations in the country with a capacity to produce 5.5 Megawatt of direct current electricity to the air conditioning system. To get this job done, Munjal did not have to look very far. The entire installation was done by his nephew Rahul Munjal—son of the late Raman Munjal, the eldest son of patriarch Brij Mohan Lal Munjal. His father had founded the company in 1981 in the first place.

For somebody who belongs to what is referred as the first family of the domestic automobile industry, Rahul Munjal's interest in the renewable energy is led by his concern of the ill effects of climate change on the environment at large. In a span of just 4 years, his company--Hero Future Energies, is already among the top 10 independent power producers in the country.

"I have always been fond of nature and respect it deeply.

But the more I read and the more I know about climate change- it disturbs me greatly," he says. "I consider myself extremely fortunate to be in a position where I can follow my passion and create a viable business and have a positive impact on our planet. As the Indian economy continues its growth trajectory, we are poised to provide clean power to industries, businesses, educational institutes, non-profits and governmental organizations at competitive rates. We will assist our clientele in fulfilling their Renewable Purchase Obligations (RPOs) by reducing their dependence on power generated by fossil fuels like coal, oil and natural gas."

Spurred by Modi's government's robust thrust on renewable energy with a target of achieving 175 gigawatt power by 2022—100 GW of solar, 60 GW wind and 15 GW biomass, Munjal who has a degree in Economics from University of Rochester, has been doubling his own capacity every year. Its operating capacity today is at 360 Megawatt with an additional 620 megawatt under construction in fiscal 2017. By the turn of this decade, he hopes his capacity will rise over 8 fold to nearly 3 gigawatt.

"As a group we will be investing progressively in Wind, Solar and Hydro sectors over the next few years," he says. "Renewable energy is serious business and a gradual transformation to green energy is non-negotiable in order to avert an environmental catastrophe. India's leadership in establishing the International Solar Alliance (ISA) which was launched at the UN Climate Change Conference in Paris (COP 21), is a part of the government's big bet on solar. The government's commitment to the growth of renewable and its efforts have fructified, by attracting an 80% rise in solar power financing that now stands at \$5.6 billion. India's target of 175 GW of renewable energy generation by 2022, got off to a good start with nearly 12 GW likely to be installed by 2017. At the beginning of this year, the government asserted sanctioning of 30% capital subsidy for rooftop solar installations to residential, government, social and institutional segments, which is expected to support total rooftop capacity of 4,200 MW till this budget is exhausted."

The rapid expansion at Hero Future Energies would suggest everything has been a smooth sailing for the young entrepreneur. But his first tryst in a new venture was at best a moderate success. Prior to turning his focus towards the energy space, Munjal tried his hand at a unified retail payment venture—EasyBill way back in 2003. Targeted at consumers in the smaller towns of the country who did not enjoy the technology benefits of their counterparts in big cities, EasyBill offered flexibility for payments like utility bills, mobile phone recharges, air, railway, bus ticket bookings or even money transfer. The relatively quick adoption of mobile wallets like Paytm however, somewhat stunted EasyBill's prospects and it could not fulfill its initial promise. Munjal has not given up on the venture yet and will launch his own mobile services soon but it will nevertheless, be a belated entry.

"Through Easy Bill(my first venture) I had delivered the benefits of technology to my countrymen. It pioneered in providing a retail channel to Indian consumers for payments at

a time when these transactions were extremely inconvenient and time consuming. This mode and channel of payment was unheard of in India and educating people and developing the market for payments through retail outlets has been a very challenging but satisfying journey," he says.

"We developed the technology backbone and strong relationships with utilities and other billers for providing these services. With over 20,000 payment outlets all over India we are still leaders as far as cash and cheque payment is concerned. Easy Bill is not that impacted by mobile payments as our target customers (especially in Tier 2 and Tier 3 cities) still prefer cash payment over mobile/internet payments all though we are in the process of launching our mobile services soon."

As an early mover in the wind and solar energy sector, Munjal is in a more secure territory with HFE. At present, renewable energy accounts for around 15 percent of India's total installed power generation capacity of 288 GW. Developed countries like Germany have a far higher share of 33 per cent or more.

The gap provides ample scope for capacity addition and makes an attractive destination for investment. In May earlier this year, Munjal himself raised Rs 300 crore for expanding its wind energy capacity by issuing the country's first certified climate bond. A recent Renewable Energy Country Attractiveness Index released by consultancy firm EY put India in the third position behind only US and China.

His stints in manufacturing, sales and marketing roles with Honda Motorcycles in US and Hindustan Unilever has made Munjal into somebody who thrives on program implementation and strategic planning. These qualities are coming in handy at HFE where everything is being built from scratch. His association with Hero Group has also given him experience on how to tackle the tenuous and at times uncertain regulatory landscape in India.

"These are early days yet for the renewable energy sector, but industry's confidence to achieve the targets that have been laid out has grown stronger with the expectation of necessary action plans by government agencies," he adds. "The push for decentralized renewable solutions like mini grid, in addition to solar, is expected to generate 500 MW of power to supply energy to the farthest corner. However, the ultimate success of India's big bet on solar will require focus on research, affordable project financing, and viable solar projects that will pass on the benefit to end consumers. Both solar and wind integration into the grid faces resistance from grid operators. However as our economy grows, grid size increases and new technologies related to scheduling and forecasting are in place, integration issues are likely to be resolved. Initiatives by the current ministry, like green corridor and emphasizing on improving the overall infrastructure is likely to smoothen the last tumbling block."

Should Munjal achieve what he has set out to do, he would at least partly mitigate the contribution of his father's company to climate change by the millions of two wheelers that hit the roads every year. Even that, is no small matter.

The target of electrifying 18,452 un-electrified villages in the country initiated massive on and off-grid installations, attracting foreign investment. International Solar Alliance (ISA) has supported rapid solar growth, and gave Indian solar sector exposure, making it incredibly lucrative for investment..



A leading solar sector expert analyses the factors behind India's renewables revolution for 'India Investment Journal'.

DRIVERS BEHIND INDIAN SOLAR GROWTH

by Joy Saxena

From a miniscule 10MW energy generation capacity in 2010 to 8GW in 2016, is a giant leap that the Indian solar sector has successfully made. Reduction in costs and increased global demand for solar installation have played a major role in giving India a prominent place in global solar sector, but there are a few more components that have contributed to such revolutionary success.

Below are some highlights of these growth drivers.

Policies

India receives nearly 3,000 hours of sunshine every year, which is equivalent to 5,000 trillion kWh of energy. To harness this energy, the Indian government seeks unison with private companies. To encourage them, it has issued various schemes, policies, and subsidies that are expected to enhance the growth of the Indian solar sector.

The Beginning

Energy development in India started with The Electricity Act, in 2003. It was the major policy document that drew focus on renewable energy development. It was supported by Jawaharlal Nehru National Solar Mission (JNNSM), which was launched in 2010. And it added specific targets to the solar development progress, offering a better understanding of investment requirement in the mix. The flurry of policies and support for solar industry quadrupled when Prime Minister Narendra Modi increased the previous 20GW by 2022 target of JNNSM to 100GW and raised Rs 150 billion capital

The target of electrifying 18,452 un-electrified villages in the country initiated massive on and off-grid installations, attracting foreign investment. International Solar Alliance (ISA) has supported rapid solar growth, and gave Indian solar sector exposure, making it incredibly lucrative for investment..

subsidy as preliminary support.

Initiatives That Paved the Path

The government presented policies to allow 100 per cent foreign direct investment under the automatic route and 74 per cent foreign equity participation in a joint venture, without any approval from the government of India. With these favourable policy framework utility companies calculated 13-15 per cent return on equity invested in Indian solar sector. The target of electrifying 18,452 un-electrified villages in the country initiated massive on and off-grid installations, attracting foreign investment. International Solar Alliance (ISA) has supported rapid solar growth, and gave Indian solar sector exposure, making it incredibly lucrative for investment.

Viability gap funding policy for rooftop projects, supported these initiatives and established Indian solar sector as a lucrative market for investment in different branches. The Indian government also came into agreement with UK to commence and combine research on solar industry development. This

venture is expected to yield high quality and high impact research outputs in Indian solar sector.

Changes in Motion

MNRE and Power Trading Corporation of India (PTC) are preparing to present policies to help states buy, sell, or trade renewable based power. Creating an environment for green energy demand and lead investors in. The Union Cabinet has also greenlit new power tariff policy under the Electricity Act, which will simplify and promote clean energy, help in setting rates, and ensure uninterrupted supply by FY 2021-22.

Recent Initiatives That Enhanced Growth

Mandating solar installation in government buildings, raising tax-free solar bonds, offering long tenure loans, and 'Solar Park' development for large scale solar implementation has increased India's solar generation capacity.

Plus, the government is aggressively looking into green energy corridor development for easy power transmission, domestic manufacturing enhancement by establishing DCR quota for projects, and Net-metering to harness the true potential of solar industry.

India's increasing growth rate (from 7.2 in 2014 to 7.5 in 2015) reaffirms the nation's potential for growth, even surpassing China in a few years. So, policies are clearly there, but to introduce nationwide socio-economic growth, India needs to gain self-reliance in the solar sector. In order to do so, more focus on domestic manufacturing is required. Seriously considering anti-dumping duties on solar modules and bringing back DCR would be helpful in strengthening domestic manufacturing.

Investment

Southern states like Rajasthan, Gujarat and Karnataka are taking the lead in solar development. They even have designed separate solar policies to maximise results. However, is it just the policies that are helping India to ramp up solar power generation to 100 GW by 2022 and initiating nation-wide solar deployment? No, investment plays a major role in this growth too – 25GW of projects are under different stages of development and 35 new tenders with a cumulative capacity of 15.5GW have already been announced.

In order to back this rapid growth, India needs a steady stream of investment. India's potential of generating solar energy has attracted \$100 billion investment. Investors have already announced to invest (approx.) \$37 billion for setting up solar plants in country. India's location near the equator, continuously increasing solar acceptance in the country to bridge the gap of energy deficit (suspected to grow more



than 5.2 per cent at an average during next 10 years), feasible solar panel prices, low solar park construction costs, and lower financing costs has made the sector increasingly attractive to investors.

The targeted 100GW capacity installation will require \$100 billion investment (\$1 billion per GW estimated). In this situation, exposure of foreign banks will help India greatly. The World Bank has already approved a \$625 million loan for India's Grid Connected Rooftop Solar program. The International Finance Corporation (IFC) which is World Bank's corporate arm has helped India in developing 750-MW project in Rewa, Madhya Pradesh.

Although, India is forging alliances to encourage foreign investment in the solar sector, plunging costs of solar energy in recent times is suspected to scare the investor's away. Industry leaders are saying

that low solar energy pricing is bringing forth the question of ROI, and confusions about debt financing. Plus, there are few other issues including land availability, inexperienced promoters, power evacuation challenges, lack of efficient and established O&M etc. that needs to be addressed to protect investor's interest. There is also the need of a more aggressive plan to electrify rural areas of the country. Presently, all the developments are targeted towards major cities in India. Although, that is a wise move to gain investment and raise awareness, the country also needs an efficient plan in place to electrify India's unlit 18,452 villages (as of 1 April, 2015).

The Right Time for Growth

Solar energy can successfully bridge India's energy demand-supply gap in the future. But, there are a few challenges that need to be addresses to see the golden dawn. More support to the domestic manufacturer, creating industrial eco-space to lower the cost of production, developing an efficient financing infrastructure, investing in R&D and consumer awareness can overcome challenges in the solar sector and encourage mass adaptation of technology. In light of incoming investment, increasing fossil fuel prices, and decreasing module prices, India is standing at the most opportune moment that can lead its growth to great heights.

The only thing the government needs to do is to make right choices.

Joy Saxena is Executive Director – Finance for Vikram Solar, a Kolkata-headquartered solar energy company.

WORKING TOWARDS A SUSTAINABLE VALUE CHAIN

by Sanjay Khajuria

One of the world's most well-known brands, Nestlé, delves into its work in the field of nutrition, water and rural development as part of its corporate social responsibility (CSR) agenda in India.



Sanjay Khajuria is Senior Vice-President – Corporate Affairs at Nestlé India.

Nestlé India strongly believes that in order to continue to prosper over the long-term, the community and society at large must also prosper. As a leading Nutrition, Health and Wellness Company we have been committed to improving the quality of life in communities for many years.

Having analysed our value chain we have determined the areas of greatest potential for joint value optimisation with society as Nutrition, Water and Rural Development. These activities are core to our business strategy and vital to the welfare of the people in the communities where we operate. Nestlé India actively seeks engagement and partnerships with stakeholders to optimise positive impact in these focus areas, while managing our commitments to environmental and social sustainability, necessary for the sustainable growth and development of the communities where we operate.

In compliance with our CSR Policy, we have focused on activities on creating nutrition and

breastfeeding awareness, providing access to drinking water and sanitation, supporting sustainable development of farmers while helping them reduce water use. These initiatives are built upon the strong base of performance in environmental sustainability, applicable laws, international standards and Nestlé Corporate Business Principles

We continue to engage with stakeholders including farmers, experts, NGOs and the Government and would take up such other CSR activities in line with government's intent and which are important for society. Given below are details of our initiatives aimed at providing clean drinking water and access to sanitation facilities.

Clean Drinking Water Projects

To help improve access to safe drinking water, Nestlé India began constructing clean drinking water facilities in schools around all its factories in 1999. Till date, we have constructed over 255 water tanks





across six states in India benefitting more than 109,000 students. Prior to constructing a drinking water facility in a particular school, we assess the number of students, population of the surrounding community, their proximity to a water source, and the school/community's financial capabilities.

This assessment is done in order to ensure that the project benefits a sizeable number of people who do not have access to alternate drinking water sources and who cannot afford to construct such facilities themselves. Based on the assessment, we help drill water wells and construct storage tanks, enabling access to clean drinking water for children in village schools around our factories. The water tanks source water from deep below ground level and the sourced water is stored in hygienic tanks enclosed in a specially designed facilities to preserve the quality of the water.

We also conduct periodic water quality checks to ensure safe drinking water, while involving the school and surrounding community through joint ownership of the water tanks, which helps to establish better upkeep and maintenance of the tanks.

Having analysed our value chain we have determined the areas of greatest potential for joint value optimisation with society as Nutrition, Water and Rural Development.

We have also partnered with Piramal Water (Enable Health Society) for drinking water treatment in locations where groundwater quality does not meet its quality standards. Enable Health Society's top of the line technology with cloud-based remote monitoring systems combined with best-in-class reverse osmosis and filtration units provide real-time data on water quality to ensure delivery of safe water.

Sanitation Facilities

In order to ensure availability of basic sanitation facilities, Nestlé India has been sponsoring the construction of sanitation facilities (toilets) for girl students in village schools across all its factory locations. Through this initiative, we endeavour to eliminate what is considered the major cause of dropouts among girl students in village schools.

In 2015, we set up sanitation facilities in government schools in Mumbai and Chennai, in addition to factory locations. Till date we have set up over 234 facilities benefitting more than 80,000 girl students.

INVESTING IN TOILETS NOT SUCH A WASTE

The founder of a leading social movement in India believes Global Indians can offer the perfect solution to India's shortage of toilets.

The founder of Sulabh International, Bindeshwar Pathak, has called on Global Indians to invest in the Swachh Bharat mission to make India open defecation free by 2019.

Dr Pathak, who was recently in London to attend a conference on Smart Cities, said non-resident Indians (NRIs) in the UK and around the world can play a vital role to help India build nearly 12 crore toilets by 2019 to realise Prime Minister Narendra Modi's Clean India vision. He said: "This is a big task, but together we can do it and non-resident Indians can play a pivotal role in this. This is a unique opportunity for the NRIs to show their love for the country."

Breaking down the figures, he said the 2019 target could be met with ease if the nearly 2 million NRIs each contributed to building six toilets over a span of three years. An individual toilet costs approximately \$500, which means six toilets would cost a total of \$3,000 (Rs 2 lakhs), a cost that could be spread over a period of three years.

"If all the NRIs come forward and contribute to make India clean and a better place, this beautiful dream will become a reality," he said.

Apart from the construction of toilets, Dr Pathak has been leading a movement since 1970 with Sulabh to provide sanitation solutions to the poor. Under corporate social responsibility, Sulabh is collaborating with a number of public sector undertakings (PSUs) in the country and corporate houses to build public and individual toilets across the country.

Sulabh claims to engage over 50,000 people and has so far constructed nearly 1.3 million household toilets and 8,500 public toilets.

In India, an estimated 600 million people, or 120 million households, lack access to a clean toilet, with the government on a major drive to build more under the Swachh Bharat Abhiyan.

Getting sanitation to billions of under-served is particularly challenging because it is not just a question of building these toilets. According to local research, people often need to be encouraged to use new facilities and cultural factors can prove a deterrent.

India's struggle with public sanitation is different from the experience of urbanisation in Europe and North America in the 19th and 20th centuries as there is the sheer volume of waste and scarcity of space to contend with it.

However, Swachh Bharat has the benefit of prime ministerial backing in a way that no Indian clean-up campaign has had before.



“If all the NRIs come forward and contribute to make India clean and a better place, this beautiful dream will become a reality.”

*Dr. Bindeshwar Pathak,
Sociologist, social activist, and Founder of
Sulabh Sanitation*



The Indian economy, often referred to as an elephant, is in dancing mode as reforms and ease of doing business measures start showing results on the ground.

THE DANCING ELEPHANT: INDIA'S REFORM-FUELLED ECONOMIC GROWTH

by Richard Gubbins and Gopika Pant

The Indian economy continues to be one of the fastest growing economies in the world.

Analysts attribute this growth to reforms initiated by Prime Minister Narendra Modi's government, including e-governance to remove the physical interface between citizens and bureaucrats, inclusive growth by connecting 180 million new bank account holders mostly from rural India to the commercial banking system, freeing up more sectors for foreign direct investment (FDI), the Make In India initiative push to the manufacturing sector, and increasing government spending on key areas like infrastructure.

Moody's Investors Service has predicted that the economy in this South Asian giant is set to grow at a steady rate of 7.5 per cent in 2016 and 2017.

The World Bank's 'Doing Business' Report 2016 hailed the regulatory reforms adopted by the Indian government and

the various state governments, more specifically the single-window system for processing building permit applications in Mumbai. In the past year, India jumped four spots and now ranks 130 out of 189 countries that the report studied in terms of ease of doing business. The biggest improvement for India was jumping 29 spots to rank 70 in the list of countries

with ease to access of electricity. India's FDI inflow for the financial year 2015-2016 was \$55.46 billion as compared to \$36.04 billion for 2013-2014.

The Indian government recently also did a major

overhaul of India's bankruptcy laws, which were more than a century old, with the Indian Parliament passing the Insolvency and Bankruptcy Code 2015. According to Mr Jayant Sinha, India's minister of state for finance, the country is currently drafting a new legislation to help in the quick winding up of stressed banks, Non-Banking Financial Companies and microfinancing institutions, which all point toward allowing quick and clean exits to investors, should they require it.

The World Bank's 'Doing Business' Report 2016 hailed the regulatory reforms adopted by the Indian government and the various state governments, more specifically the single-window system for processing building permit applications in Mumbai.



The Indian government has also passed an enabling law to effect the enforcement of contracts and improve efficiency in commercial transactions by enacting the Commercial Courts, Commercial Division and Commercial Appellate Division of High Courts Act 2015, which now enables setting up a Commercial Court at the District Level and a Commercial Division in a relevant High Court.

The Arbitration and Conciliation Act 1996 has also been amended and now features a 12-month fast track arbitration procedure to further support ease of enforcement of contracts.

A National Company Law Tribunal has been constituted to replace the earlier Company Law Board and cases involving corporate entities have been transferred to the newly formulated Tribunal.

Labour reforms, though, continue to be a distant dream. While states like Rajasthan and Madhya Pradesh have led the pack in regional labour reforms by allowing industries that employ less than 300 persons to wind-up without central government approval, most Indian states still keep this number at a meagre 100. The government would attract more investment in the manufacturing sector if the number was increased to at least 1,000 across the board.

Corruption in the lower bureaucracy has also been a plague India is trying to root-out. While the higher bureaucracy is considered to be considerably 'clean', it is the lower bureaucracy that takes most decisions at the ground level. A major overhaul is also required for the banking sector in India

with both interest rates and the number of non-performing assets remaining high.

The ongoing reforms, however, all point to a major overhaul in the way commercial disputes will be dealt with in India, and have been implemented by the Narendra Modi led government to welcome investors to India with a long-term vision. The Indian elephant, as the Indian economy is oft referred, is dancing, and how!



Richard Gubbins is the Senior Corporate Partner and Head of the India Business Group at Ashurst.

Gopika Pant is the Senior Partner of Indian Law Partners, who have a non-exclusive best friend referral arrangement with Ashurst.



GETTING THE MASALA RIGHT FOR AN INDIA-UK BOND

London is now home to as many as 12 Masala Bonds, designed to raise funds for India's infrastructure needs. Here we highlight some of the key players behind this new fundraising drive within the India-UK space.

The UK government recently welcomed the world's first ever "Masala" or rupee-denominated bond issued outside India by an Indian corporate being listed on the London Stock Exchange.

UK Chancellor Philip Hammond described the "landmark" listing by the Housing Development Finance Corporation (HDFC) as a "major vote of confidence" in London.

HDFC became the first company to issue a bond of this type, which raised around \$450 million (Rs 3,000 crores). It has a maturity of three years and an annual yield of 8.33 per cent and was more than four times oversubscribed.

Hammond said: "It represents a major vote of confidence in London as the leading global financial centre and is further

proof that Britain is a great place to do business.

"This deal signifies a strengthening of the already close economic ties between the UK and India and paves the way for further masala bonds to be listed in the UK. It is a taste of things to come. Britain is open for business and one of the

most attractive places in the world for foreign investment." Masala Bonds are rupee-denominated bonds issued to overseas buyers. As many as 30 off-shore Indian rupee bonds have listed in total on London Stock Exchange (LSE), raising an equivalent of approximately \$3.5 billion,

according to one of the world's leading stock exchanges.

Britain's minister for Asia, Alok Sharma, described the HDFC launch as a reaffirmation that the UK is a "natural partner" for India.

Masala Bonds are rupee-denominated bonds issued to overseas buyers. As many as 30 off-shore Indian rupee bonds have listed in total on London Stock Exchange (LSE), raising an equivalent of approximately \$3.5 billion, according to one of the world's leading stock exchanges.

He said: "The tremendous investor demand demonstrates the UK's pivotal role in financing India's growth and further strengthens the close economic ties between the UK and India. I am confident that this will pave the way for many more Indian companies to raise capital in London to support India's ambitious infrastructure plans."

London Stock Exchange last year saw the listing of the world's first-ever green Masala bond on its markets and there have been two further listings in 2016, raising around \$104 million (Rs 700 crores).

The latest bond will help HDFC diversify its borrowing profile and access global investors.



// We've got 'James Bond, Brooke Bond and now Masala Bonds! //

*Narendra Modi,
Prime Minister of India*

HDFC chairman Deepak Parekh said the listing of India's largest private sector mortgage lender's bond on London Stock Exchange was the result of "unshakable trust from international investors" in the exchange.

Parekh said: "While we did explore other markets for listing, the responsiveness and efficiency with which the officials at the UKLA [UK securities regulator] and London Stock Exchange responded to our urgent requirements was remarkable. Considering that this was the first issue of its kind in a global financial centre by an Indian company, the authorities were forthcoming and supportive.

"UK is the global hub for financial services and the Reserve Bank of India's guidelines permitting overseas rupee-denominated bonds, will open up a new source of funding for us."

The listing follows Prime Minister Narendra Modi's announcement of \$1 billion equivalent of Masala Bond issuance in the UK, made during his visit to London in 2015. He had also indicated plans for a railway rupee bond to be issued in London to finance the upgrading of India's

railway network.

"We will increasingly raise funds in London's financial market. I am pleased that we will issue a railways rupee bond in London stock market... for this is where the journey of Indian Railways had begun," he said, famously adding: "We've got 'James Bond, Brooke Bond and now Masala Bonds!'"

Nikhil Rathi, London Stock Exchange CEO, said: "Taking advantage of the efficient listing process and tapping the global markets in London, global issuers can access a new vital channel of international finance and investors around the world without foreign exchange risk.

"These rupee-denominated bonds are hugely significant to the India-UK financial partnership. It is the most credible and transparent channel of finance that offers international investment for Indian infrastructure.

"As India goes global, it can benefit hugely from this hook into global finance."

Previously, London Stock Exchange has played host to the world's first Green Masala Bond in partnership with IFC and YES BANK and the world's longest-dated Masala Bond, a 15-year issuance by IFC. Rana Kapoor, founder, managing director & CEO of Yes Bank, said: "Yes Bank will strive to improve the access to long term overseas funds for corporations in India, through capital markets in the UK, particularly towards Green Infrastructure Financing, which is high on India's agenda. We also look forward to working with LSE in establishing London as the leading instrument for raising rupee denominated offshore capital via 'Masala bonds.'"

This was followed up more recently by India's state-owned energy major, NTPC, raising \$300 million (Rs 2,000 crores) with a 7.48 per cent annual yield with the launch of its "Green Masala Bond" at London Stock Exchange.

NTPC's bond issue was described as the "first-ever Indian quasi-sovereign to issue a Masala Bond", the proceeds from which will be invested in the renewable energy market as it seeks to add more wind and solar power projects to its portfolio.

Masala Background

Borrowing by Indian companies from the overseas market or External Commercial Borrowings (ECBs), is regulated by the Reserve Bank of India (RBI) and is governed by the various rules specified by the RBI. Until recently, the ability of Indian companies to borrow from the overseas markets was predominantly limited to foreign currencies.

In September 2015, the RBI allowed Indian companies to raise funding through the issuance of rupee-denominated debt instruments – which are now widely referred to as 'Masala Bonds'.

The Rupee Bond Guidelines have increased the ability of Indian issuers to access the international debt capital markets and thereby have potentially opened up another avenue for Indian issuers to seek competitively priced funding from the international markets.

Similarly, the Rupee Bonds Guidelines have allowed foreign fixed income investors with the first real opportunity to have exposure to the Indian Rupee, which has been enjoying a lower volatility lately compared to other Asian currencies.



Active Masala Bonds

Issuer Name	Issue Date	Maturity Date
Housing Development Finance Corporation Ltd	21/07/2016	21/08/2019
International Finance Corp	21/03/2016	21/03/2031
European Bank for Reconstruction & Development	04/03/2016	04/03/2019
International Finance Corp	10/08/2015	10/08/2020
International Finance Corp	30/04/2015	30/10/2018
European Bank for Reconstruction & Development	02/02/2015	02/02/2017
International Finance Corp	17/11/2014	25/11/2024
European Bank for Reconstruction & Development	28/10/2014	15/03/2017
European Bank for Reconstruction & Development	19/09/2014	19/03/2018
Inter-American Development Bank	05/09/2014	05/09/2017
Inter-American Development Bank	02/09/2014	02/09/2016
Inter-American Development Bank	15/05/2007	15/05/2017

Data as at July 2016

London Stock Exchange: The Home for Offshore Indian Rupee Bonds



// NTPC's landmark independently certified Green Masala bond listing, the first Masala bond by an Indian quasi-sovereign issuer, represents another historic event for Indian finance. //

*Nikhil Rathi,
CEO, London Stock Exchange Plc*

Rathi explained: "NTPC's landmark independently certified Green Masala bond listing, the first Masala bond by an Indian quasi-sovereign issuer, represents another historic event for Indian finance. We are honoured to have been chosen to support NTPC access rupee-based financing in London's international capital markets, reinforcing India's ambitions to generate 175GW of renewable energy by 2022.

"This cements London's position as the listing venue of choice for a variety of Asian issuers, from quasi-sovereign to supranational institutions, municipals and private companies. We are excited about continuing to build this market with Indian partners and authorities over the long-term, underlying the success of the India-UK Financial Partnership."

The listing followed the visit of Piyush Goyal, Indian minister

of state for power, coal, new & renewable energy, to the UK earlier this year to strengthen UK-India collaboration on power and renewable energy.

He tweeted: "Congrats to NTPC for issuing first Green Masala Bonds at 20 bps lower than domestic AAA benchmark."

A recent report by Fitch Ratings says the development of a masala bond market would be positive for Indian firms, "opening potentially significant new sources of funding". However, it does highlight that the market's development beyond a select group of large, higher-quality issuers could take time and would depend on global liquidity, domestic macro-economic variables and foreign investor sentiment.

Key Masala Milestones

Nov 2014

First INR denominated bond listed by IFC in London to support infrastructure development in India. The 10-year Masala bond is the longest-dated paper in the offshore rupee markets.

Apr 2015

IFC issues a three-and-a-half year, 6.45 per cent bond– the largest ever rupee denominated bond issued outside India.

Apr 2015

Reserve Bank of India (RBI) revises the External Commercial Borrowing framework.

Aug 2015

IFC issues in London the first INR Green Bond globally.

July 2016

HDFC lists world's first offshore Masala bond by Indian corporate on London Stock Exchange.

THE TRANSITION TO FORMAL FUNDING

by Deepak Varghese



Indian property expert explains why there is some optimism within the country's real estate segment.

As always, come August and it denotes the start of the festive season which translates into four months of consumerism.

While the past two seasons were quite lean, this year - on the back of rising optimism in the stock markets led by a seemingly average monsoon, a positive sentiment seems to be rubbing off on the real estate market.

This August has seen better than average residential sales across the markets led by the sub \$110,000 segment. This segment has been widely expected to perform this year, given that summer has been reasonably good for the commercial real estate market and it has been seen earlier that when commercial realty performs, residential too shows a pickup, one or two quarters in lag.

Given anticipated growth in consumption, the warehouse sector is seeing a lot of interest especially in Bengaluru, Chennai, Hyderabad, outskirts of Mumbai and greater National Capital Region (NCR). If this interest turns into reality, we do expect the wave to spread to the Tier 2 cities by early 2017. That said, the hospitality sector is yet to feel the positive sentiment.

While all of the above seems to be positive overall, the underlying concerns of liquidity remain. Lending to the residential segment in the past six months has been over 60 per cent to existing developer loans being taken over with additional moratorium period and a top up. While one might want to believe that the current buying season will tide this over, the larger concern is the near absence of retail investor funds which seems to indicate returns in this sector will par or go under bank deposit rates, in the near term. The prices are already reflecting the correction but the larger trend to be

A positive sentiment seems to be rubbing off on the real estate market. This August has seen better than average residential sales across the markets led by the sub \$110,000 segment.

observed is that the market is expecting prices to be stagnant.

The dearth of investor monies seems to be attributable to the crack down on black money by the government. Indeed, a good step but it seems to have had an inadvertent side effect on the real estate market - a traditional bastion for black money investment.

Going forward, the market also seems to be factoring that the nationwide implementation of GST from early next year will have a further negative impact on black money pools. The real estate market will have to learn how to live without cash investors.

This year looks like the year of transition of real estate into the realm of formal funding and a regulatory framework.

Deepak Sam Varghese is founder-director of Moonbeam Advisory

INDIA, CYPRUS OVERHAUL THEIR TAX AGREEMENT

India recently clinched a revised double taxation treaty with Cyprus as a further crackdown against tax avoidance in the country.

The Indian Cabinet recently approved a revised Double Tax Avoidance Agreement (DTAA) with Cyprus, marking the culmination of its tax talks with the country as part of a wider drive to plug loopholes used by investors to avoid paying taxes in India.

Cyprus is a major source of foreign fund flows into the country. From April 2000 until March 2016, India received Foreign Direct Investment (FDI) worth over \$6 billion (Rs 42,680.76 crores) from the Mediterranean island nation.

The new agreement will enable Indian authorities to tax capital gains on investments routed through Cyprus. It also means Cyprus will now be removed from an Indian government blacklist of “Notified Jurisdictional Areas” or countries blocking financial information sought by India.

“India will have the right to tax capital gains arising in India.

The provisions in the earlier treaty for residence-based taxation were leading to distortion of financial and real investment flows by artificial diversion of various investments from their true countries of origin, for the sake of avoiding tax,” an Indian finance ministry statement explained.

“The agreement reached provides for source-based taxation for gains from the alienation of shares; investments undertaken prior to April 1, 2017 are grandfathered with the view that taxation of disposal of such shares at any future date remains with the contracting state of residence of the seller,” a Cyprus Finance Ministry statement confirmed.

“Upgrading and expanding the network of Double Tax Conventions, is of high economic and political importance and aims to further strengthen and attract foreign investment

in Cyprus as its standing an international business centre is elevated,” it added.

A grandfathering clause provides for an old rule to apply to existing cases and a new rule to future ones.

The existing treaty provided for capital gains tax exemption and a low withholding tax rate of 10 per cent on interest payments made to entities based in Cyprus.

The Cyprus DTAA also includes a provision for assistance in collection of taxes. It also has a revised provision for the exchange of information that would enable the use of information exchanged for other purposes.

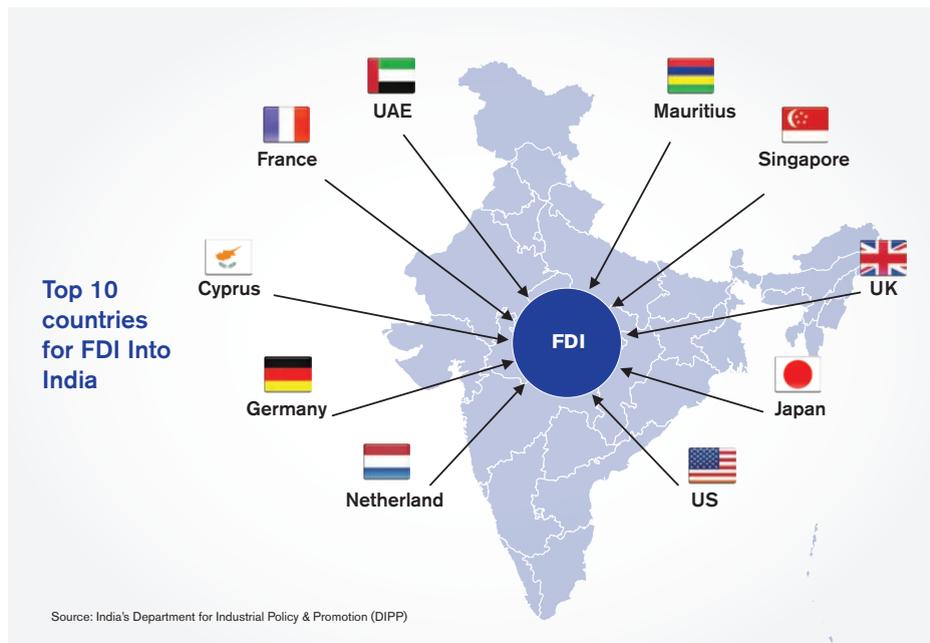
Cyprus was one of the key destinations through which companies based in Europe and the US invested in India, benefiting from the treaty between both countries. In 2015-

16, Cyprus ranked eighth in terms of FDI into India at \$3.3 billion. The completion of tax treaty negotiations with both Mauritius and Cyprus, on which talks have been under way for years, will be considered a victory by the Indian government in its fight against black money.

Although it will increase the tax outgo for investors, it will also end uncertainty for investors routing

their investments from these countries.

The renegotiated tax treaty is part of an effort by the Narendra Modi led government to curb treaty abuse, tax evasion and round-tripping of funds — the practice of money stashed overseas by Indians returning home through tax havens. A similar treaty has already been clinched with Mauritius and one with Singapore and the Netherlands is in the works.

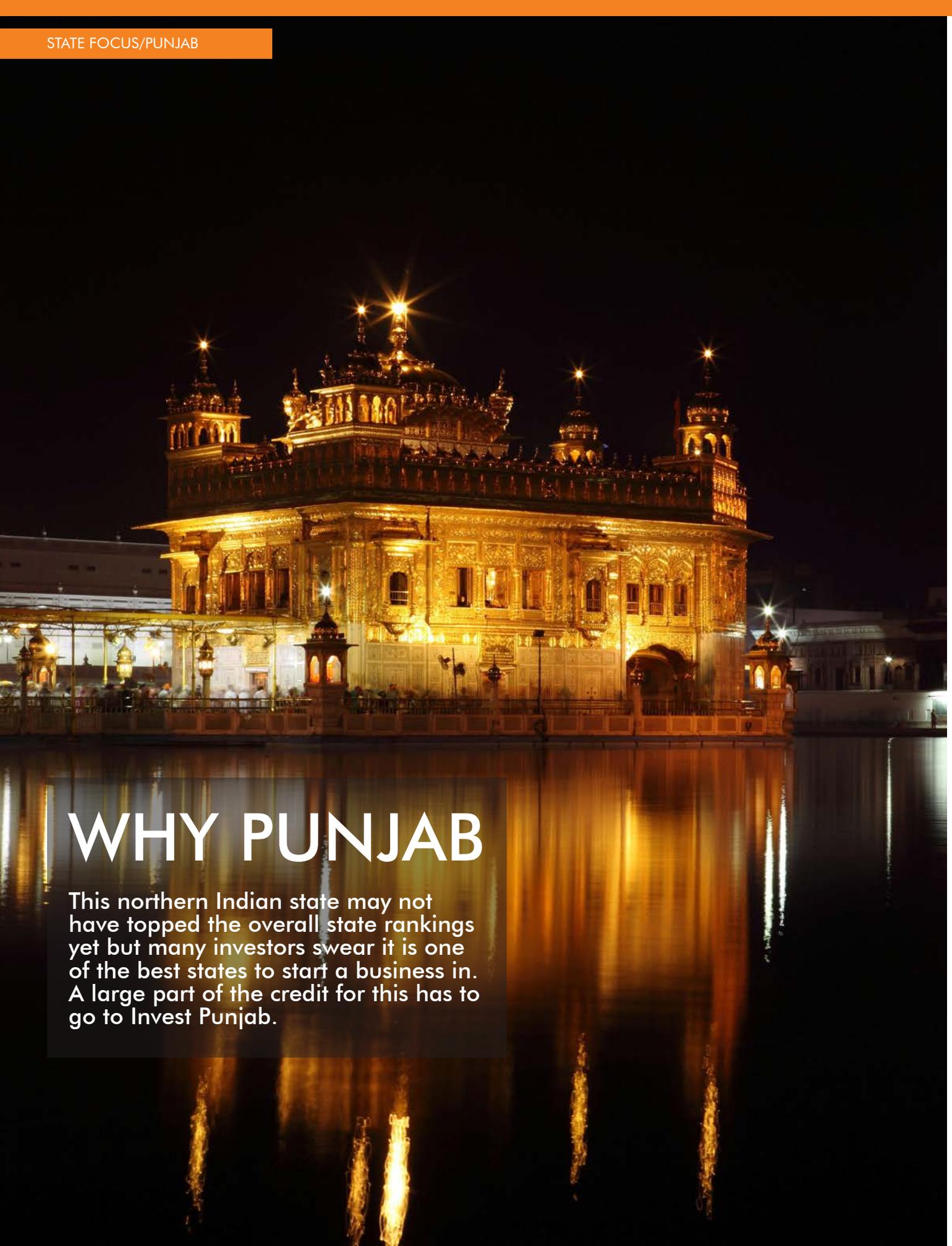




Sign up

A tracker offering insights for the public affairs community
as well keen India watchers from a policy perspective.

www.indiaincorporated.com/policy-india



WHY PUNJAB

This northern Indian state may not have topped the overall state rankings yet but many investors swear it is one of the best states to start a business in. A large part of the credit for this has to go to Invest Punjab.

The Department of Industrial Policy and Promotion (DIPP) has recently begun ranking the Ease of Doing Business in states on a real time basis. Depending on data flow and its capture by the system, various states have jumped to the top of the ladder for a few hours or a day or two only to lose that coveted spot to some other state.

Punjab hasn't yet topped the overall state rankings but many investors swear that it is one of the best states to start a business in. A large part of the credit for this has to go to Invest Punjab initiative of the government of Punjab.

The Punjab Bureau of Investment Promotion, as the single point contact for regulatory clearances, fiscal incentives and approvals to facilitate investors who are looking to set up businesses in Punjab, has been rated as among the most invest-friendly bodies in the country.

In India, most states have concentrated their efforts at investment promotion. Only a handful – following the example of Gujarat – has focused on investment facilitation, and this is where Punjab scores over its higher ranked peers.

“Remarkably, Punjab is the only state in which the single window system allows application for all of the licenses studied in this assessment,” the World Bank said in its Assessment of State Implementation of Business Reforms Report released in September 2015

Consider these numbers: Punjab is among the few states that grant preliminary approvals for investment proposals within 24 hours. On average it takes only 100 days from submission of proposal to the start of business in the state, making it hugely attractive for investors. What's more, one can set up the business in less than a month, said a recent report of the World Bank, which ranked it No 1 among Indian states in ease of setting up a business.

The state also enjoys huge man-made and natural advantages. Being close to Delhi, it enjoys excellent air, road and rail connectivity with the rest of the country. It has five existing and/or upcoming airports at Mohali, Ludhiana,

Amritsar, Bathinda and Pathankot, among the highest road densities amongst Indian states at 133 km per 100 sq. km and 64,000 km of well maintained metalled roads. It also has more than 2,000 km of railway lines. Then, the state also has the fourth-highest tele-density in India and the highest rural tele-density.

The government of Punjab has leveraged the advantage of a highly educated workforce, more than 300 days of bright sunlight, five large rivers and fertile soil to nurture knowledge industries like IT and healthcare, renewable energy, tourism, manufacturing, aerospace and life sciences.

Punjab is known as the granary of India. Little wonder that the state government has focused

special attention on the development and growth of the food processing industry. It has been estimated that almost 40 per cent India's food and vegetable production perish before they reach the market because the country lacks adequate facilities for air-conditioned storage and for processing the raw material into processed goods.

Food processing will, thus, play an important role in Prime Minister Narendra Modi's vision of doubling farmers' incomes in six years.

Tourism, which holds tremendous employment potential, is another sector that has bright prospects in Punjab, which is blessed with many centres of cultural and historical importance and natural beauty.

But most important from the view of investors is the package of attractive benefits prepared by the state government on VAT, CST, stamp duty, electricity duty, property tax and some other levies. Once GST is implemented, the state will cede its powers to provide incentives on VAT and CST but

investors will continue to enjoy the other benefits, which, being local levies will remain outside the purview of GST.

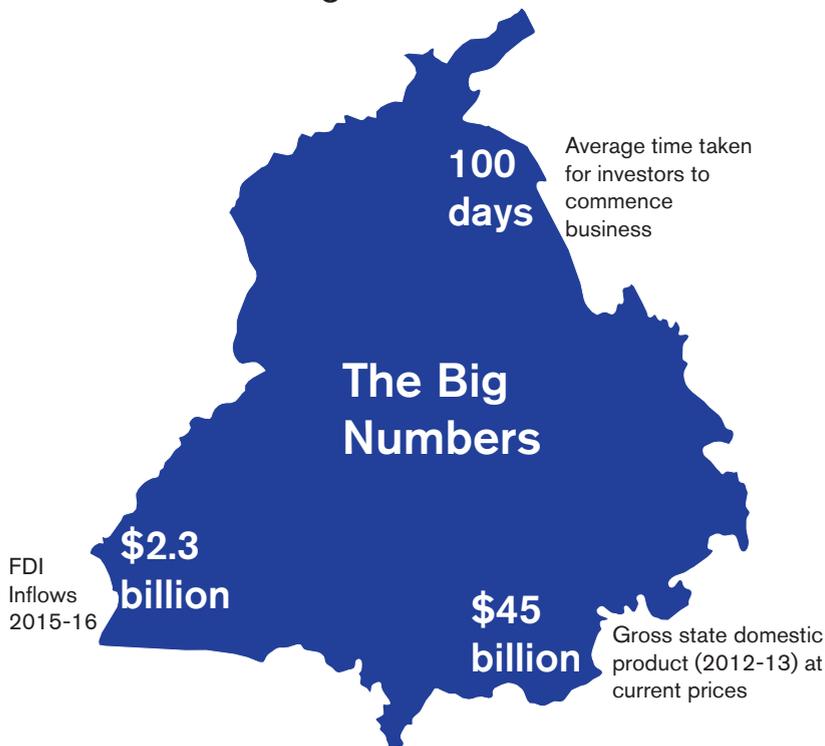
Then, the state government has taken the important step of exempting some industries from regulatory checks, thus, freeing them from the clutches of the notorious Inspector Raj.

The whole focus of the government is towards benefiting our farmers, ensuring better prices to our consumers and promoting the food processing industry. So retail is just a part of the picture that we are trying to cover in the entire agriculture landscape.



ADVANTAGE PUNJAB

Punjab has emerged as one of the most attractive states to invest in India and has been attracting billions of dollars of foreign investments

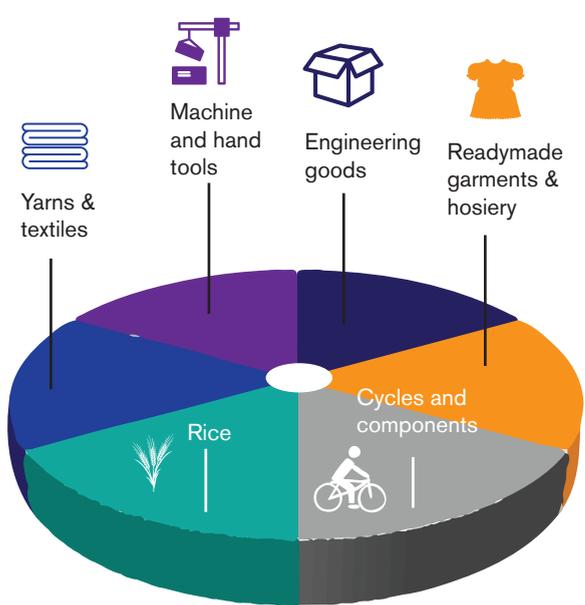


MAIN ATTRACTIONS

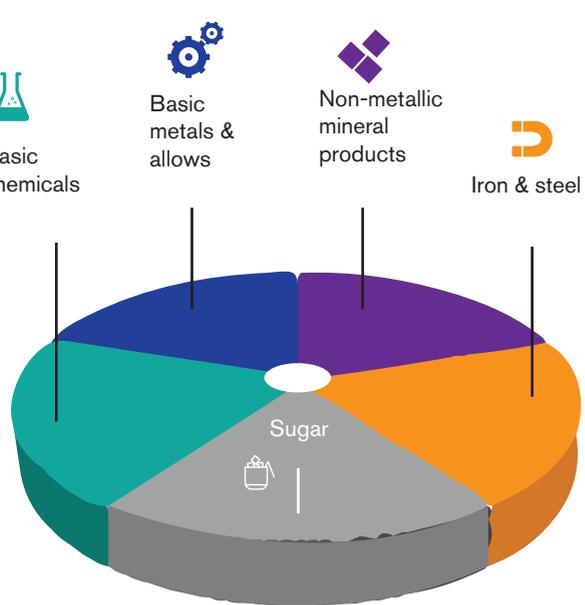


- Self certification
- Abundant quality power
- World class logistics & connectivity
- High quality social infrastructure
- End to end communications network
- Availability of skilled manpower

MAJOR EXPORTS



MAJOR IMPORTS



Source: Invest Punjab

SINGLE WINDOW CLEARANCE

The Punjab Bureau of Investment Promotion has been set up by the Government of Punjab as the single point of contact for regulatory clearances, fiscal incentives and approvals to facilitate investors who are looking to set up businesses in Punjab.

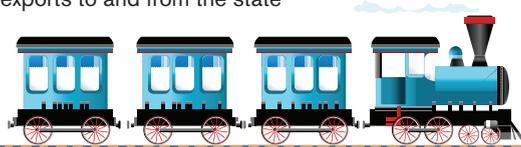


As the nodal agency, the bureau has been entrusted the responsibility to ensure a smooth transition of the project from the proposal stage up to the implementation stage.

UNIQUE SELLING PROPOSITIONS

EXCELLENT ROAD, RAIL AND AIR CONNECTIVITY

- Punjab has one of the best rail (2,100 km), road (64,000 km) and air transportation networks in India
- The state has five upcoming and operational airports at Mohali, Ludhiana, Amritsar, Bathinda and Pathankot
- It has one of the highest road densities amongst Indian states at **133 km per 100 sq. km**
- Ludhiana, Jalandhar, Amritsar, Dera Bassi and Bathinda have dry ports that facilitate imports and exports to and from the state



SUPERIOR COMMUNICATIONS NETWORKS

- Punjab has the fourth highest tele-density of 103% (2013) in India and second highest rural tele-density in India
- The state plans to provide all major services to its citizens through online portals with connectivity across all major cities, towns and villages

ATTRACTIVE INCENTIVES PACKAGE

The Government of Punjab has introduced a package of attractive benefits on VAT, CST, Stamp Duty, Electricity Duty and Property Tax amongst other benefits

The state has taken a landmark step by permitting retention of VAT and CST by industries

The package also provides exemptions from regulatory checks to certain classes of industries

SKILLED MANPOWER

- Punjab has 101 engineering colleges, 181 polytechnics and 378 ITIs.



**3 state
Universities**

**7 Private
Universities**

**Over 500
Colleges**

- Facilities for on-demand industry-specific training.
- Four multi skill development centers to be established at Amritsar, Ludhiana, Bathinda and Hoshiarpur with capacity of 15,000 trainees per centre per year.

- Private training providers expected to train 10,000 people annually with assured placement of 70%.
- Vocational Training Providers (VTPs) to providing more 1,500 courses for industry.
- Community colleges with skill-oriented courses designed in consultation with the industry and ensure 100% employment.
- 250 Skill Development Centers.
- 34 Centers of Excellence, under the ITI scheme, established in different sectors of technology where the industry may decide the course content according to their requirement.



**2000-
3000
trainees/year**

Skill Training Academy being established in Ropar with Tata Group with a capacity

**1640
students**

Hospitality: Capacity to train different hospitality courses in ITI's.

Remarkably, Punjab is the only state in which the single window system allows application for all of the licenses studied in this assessment.

Extract from the World Bank's Assessment of State Implementation of Business Reforms Report September 2015

THE ATTRACTIVE SECTORS

AGRIBUSINESS

Punjab is the food bowl of the country

Contributes more than



40%
of the central
pool of wheat

26%
of Rice

Agriculture contributes about **21%** of State Domestic Product against the all-India figure of **14%**

The state enjoys high yields in wheat, cotton, paddy, citrus fruits, etc

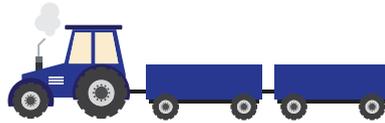
The state has the highest productivity for lychee, guava and mandarin orange in India

The state has a robust infrastructure in place for agri and food processing sector

INVESTMENT OPPORTUNITIES

- Integrated logistics hubs
- Milk processing and value addition
- Agribiotech and micro irrigation techniques
- Warehouses and silos
- Commercial hi-tech dairy farms
- Food processing
- Cold storage infrastructure
- Food processing

40% share of the total warehousing & storage capacity in India



MANUFACTURING

Punjab has a large manufacturing base; sector accounts for

20% of SDP
(2013-14)

State is a national pioneer in light engineering with **80%**

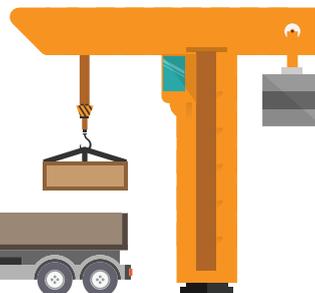
share in bicycle and **85%** share in sewing machine production

State is India's **second largest** producer of cotton and blended yarn

Among India's leading exporters of yarn, hosiery and readymade garments

INVESTMENT OPPORTUNITIES

- Manufacturing of technical textiles – for sports, automotive, agro, defence sectors
- Integrated textile units (Spinning, Knitting, Dyeing)
- Machine Tools
- Material handling equipment
- Textile machine manufacturing
- Auto components



INFORMATION TECHNOLOGY

4G

First state in the country to have connectivity in all villages

Fourth-highest tele-density in India

Incubation centres with plug-n-play infrastructure to support young entrepreneurs and start-ups

Cost of IT service delivery is

20-30% lesser in Punjab

as compared to peer states

INVESTMENT OPPORTUNITIES

- Software Development Centre
- Website and applications development
- BPOs
- Data centres
- Electronic chip manufacturing
- Cloud hosting
- R&D Labs



HEALTH

The All India Institute of Medical Sciences (AIIMS) coming up in Punjab

All the leading hospital chains like Max, Apollo and Fortis present in the state

Several reputed medical colleges in state provide steady pipeline of trained manpower



INVESTMENT OPPORTUNITIES

- Medical equipment
- Medical tourism
- Diagnostic labs
- Super-speciality hospitals
- Medical colleges



Source: Invest Punjab

RENEWABLE ENERGY

Ranked No 1 by World Bank (2015) among Indian states for progress in solar energy

Among fastest growing states in renewable energy sector

State gets 300 days-plus of sunshine

Net Metering Policy launched in 2014

**5,400
MW**

Punjab has set a target of generating renewable energy by 2022; so massive growth prospects

TOURISM

Punjab, the land of five rivers, is crisscrossed by the Sutlej, Beas, Ravi, Chenab and Jhelum

It is among the most beautiful states in India

Punjab is the second most preferred state in north India for holidays, leisure and recreation



Besides natural beauty, Punjab also has important historical sights

The state has a strong infrastructure for tourism, having international airports and one of the best rail and road connectivity in the country

INVESTMENT OPPORTUNITIES

Theme parks, eco-tourism parks and amusement parks

Reuse of heritage properties as hotels, museums etc

Establishment of hotels and tourism facilities

Development, upgrades and operation of tourism properties on PPP mode

INVESTMENT OPPORTUNITIES

Solar photovoltaic-based technologies, solar thermal systems, solar passive architecture

Projects under farmers solar power generation scheme

Potential for generating power from **1.5 mtr to 1mtr** low heads on canal falls in the state through low head hydro power technology and velocity head turbines

Biomass/agro residue based power projects

Biogas CNG, bio refinery (biofuel) projects

Small/mini hydel projects



AEROSPACE SECTOR

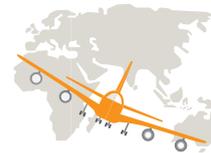
\$150-billion of arms acquisitions likely over the next decade

With an annual growth rate of

10% in passenger traffic

Well-established manufacturing ecosystem for light engineering, machine tools, automotive components etc. make local manufacturers well poised to become the vendors of the large aerospace and defence manufacturers

Strong R&D support for advanced manufacturing in the form of a central tool room in Ludhiana with technology support from Germany



New international airport at Mohali set to further increase the passenger movement in the State

INVESTMENT OPPORTUNITIES

MRO hub at Mohali

Integrated aerospace and defence park

LIFE SCIENCES

The state is home to a number of leading academic and research institutes such as National Institute of Pharmaceutical Education and Research, Mohali, National Agri-Food Biotechnology Institute, Mohali, Indian Institute of Science Education & Research, Mohali, Indian Institute of Technology, Ropar, Punjab University, Chandigarh, Post Graduate Institute of Medical Education & Research, Chandigarh, etc

The state already hosts leading companies like Sun Pharma, Panacea Biotech, Neclife, DSM and GSK

INVESTMENT OPPORTUNITIES

Vaccines

Recombinant therapeutics

Stem cell research

Nano medicines

Bioinformatics

Bio chips

Contract research



80-acre biotechnology park

Punjab is developing in Knowledge City, Mohali



'The western market is plateauing and we are a growing economy'

ON ROAD TO MAKING INDIA THE FOOD FACTORY OF THE WORLD

Harsimrat Kaur Badal is the Cabinet minister for food processing industries in the Narendra Modi led NDA government. 'India Investment Journal' caught up with the Shiromani Akali Dal MP from Bathinda in Punjab during a recent visit to London to promote not only India, but her own state as the ideal investment destination.

What brings you to the UK?

This is basically to promote the latest policy that our government announced in the Budget of 2016, which was to allow FDI (foreign direct investment) in multi-brand retail of food grown and manufactured in India. For the first time we are opening up our retail market for the world giants to come in and organise our retail sector, which is only organised to the extent of 2 per cent and the bulk of it remains unorganised.

There has been a lot of global interest by many companies. As far as processing is concerned, we are at a very nascent stage where we process only 10 per cent of our food but we are one of the largest producers of food items in the world – No. 1 in milk production, No. 2 in fruits, vegetable and cereal production, No. 3 in marine production.

We have a very large raw material base but we are very small as far as processing that food is concerned, which in turn leads to very high wastage of food in India. This results in low remuneration

for the farmers and high prices for the consumers. So one of the focus areas of this government in the last two years is to create infrastructure for processing so that the demand for processing goes up and the demand for the farmers' products will go up and they will get better remuneration. It will help bring down wastage and give consumers better rates and thereby control inflation.

What are some of the key steps taken in the field of food processing?

We have been giving a number of incentives for this ever since the government came in, including cheaper credit through NABARD [National Bank for Agriculture and Rural Development], priority sector lending, various tax incentives and many schemes for processing. There is a realisation that only once the retail sector is tied up that there will be a push for the manufacturing sector, which will benefit farmers and generate employment.

That is what brings me to the UK – to speak to all the big retail giants to come and Make in India, not just for India but we are looking at making India the food factory of the world because that is the kind of raw material base that we have.

Our retail sector in India is currently around \$600 billion, which is expected to hit almost \$1.3 trillion by 2020. We are clearly growing at a very fast pace. For all the exports that we have, food retail accounts for about 12 per cent of those.

What was the response from the UK?

We met all the top chains here including Sainsbury's, Marks & Spencer, Tesco, Partridges, Waitrose, Holland & Barrett, Harrods. Everyone has shown a lot of interest in either in coming to India or tying up with local people and even sourcing from India.

We are hoping to hold a World Food Summit alongside the Vibrant Gujarat Summit in Ahmedabad in January where we have invited all these representatives to come and make a common platform of stakeholders of the processing industry, farmers, retail, state governments, nutraceuticals, the entire gamut of the food industry and encourage B2B meetings so that it can attract FDI. India is not just the fastest growing economy in the world but also the top destination for FDI.

We have got the maximum amount of FDI into India in the last six-eight months. The government has taken a lot of policy initiatives to Make in India, which is attracting a lot of interest worldwide.

Were there issues that these companies flagged up in terms of investing in India?

This multi-brand FDI is very specifically for food manufactured in India. So it works for Simply Food of M&S, which does only food, but Tesco does various other things. But we were clear on our policy that they are most welcome to start with food because it is growing really fast. We have this huge population of under 25 year olds living largely in the urban areas looking for ready to eat, ready to cook products from big retail outlets where they can have the entire variety and choice.

E-commerce in food retail is growing way faster than they can even cope. There is a lot of potential in a lot of these areas. It doesn't necessarily have to be a model that has already been used in a different part of the world. This can be a different model – an India-specific model. The mind-set of an average Indian is different – we look for cooking fresh every day; we don't tend to store for the entire week or month in huge freezers or cook once a week and re-heat. That's not the culture in India.

The western market is plateauing and we are a growing economy and growing middle class.

Is there a generally positive outlook towards Make in India?

They were all familiar with the market and they all see the scope and potential in India. A lot of them were keen on coming into India to see what they could source from India for their stores in the UK and other countries.

There were some questions regarding regulations, especially with FSSAI [Food Safety & Standards Authority of India], which we have worked very hard to overhaul entirely. It was good for me to get to know the issues that they may be facing or may think there might be in India but most of them were very interested in tying up with local people before they launch on their own. That is a good thing for us, because we are also looking at Make in India. And if you Make in India, with the Indians there's nothing like it.

The whole focus of the government is towards benefiting our farmers, ensuring better prices to our consumers and promoting the food processing industry. So retail is just a part of the picture

that we are trying to cover in the entire agriculture landscape. Looking at the future, they were all planning for Brexit and India is part of those plans for all of them.

What sets your own state of Punjab apart in terms of FDI?

The World Bank has ranked Punjab as best destination in ease of starting up a new business. One of the main reasons for that is that our government has started an Invest Punjab board, which has one CEO and representatives of every department required for clearances, all under one roof.

There is a single window, a single CEO with a single email ID and phone number and all clearances are given within 30 days of your application. The government has also given a lot of incentives to attract industry – food processing is free of all

taxes, any new industry can keep its VAT for next 10 years, power tariffs are cheapest in the country and for a new business for the next 12 years, we guarantee no increase in power tariffs.

A lot of states are competing with each other and giving investors an environment which is very lucrative to invest. The government of India is doing its bit by repealing old and obsolete laws – as many as 1,174 repealed, paperwork has been reduced, transparency is the thumb rule, no retrospective and regressive taxes. Every state government is doing its bit in attracting investments.

Punjab is getting set for elections early next year; what is your outlook/message?

The SAD-BJP government in Punjab created history by bringing in a government a second time, where a sitting government had never been voted back into power. Not only were we voted back but we were voted back with a bigger majority than what we had come in with the first, which made history.

The reason for that was that we have been very clear about our agenda from the day that we asked people for their votes – which was development, development and yet more development. In the last 10 years, there is not a single Punjabi in any city or any village who would say that development has not happened.

To put things simply, in a state where most of the cities had no drinking water, sewer system, each and every city – big or small, tier 1 or tier 2 – every city has a water system in place or in the process of completion. We were a power deficit state, we are a power surplus state; the revenues of the state have gone up three times; we have three international and five domestic airports; the entire infrastructure has been upgraded. Take any sector, in education – we were 14th when we took over, today we are 2nd in the country.

Alongside, we have ensured welfare schemes for the poorer segments of society. Punjab is the only state where water and electricity for farming is given totally free of cost, which is a huge support to farmers. These kind of concessions have only been given in Punjab whenever an Akali Dal government comes in.

For the future and progress of Punjab, this government has worked very hard. A lot has been done, there is always a lot more that needs to be done. I am very confident that we will do a hat-trick and for the third time, the government will come back yet again.

FACT SHEET

An Expat's Guide to Amritsar



POPULAR RESTAURANTS

Guru-Ka-Langar

Charming Chicken

Kesar da Dhaba

Brother's Amritsari Dhaba

Kulcha Land



TOP ATTRACTIONS

Golden Temple

Also known as Sri Harmandir Sahib and Sri Darbar Sahib, this shrine famously has volunteers (kar-sevaks) work round the clock in shifts to keep the golden dome perpetually shining.

Akal Takht

Literally translating as "Eternal Throne", this structure is housed within the Golden Temple Complex as the official Sikh headquarters.

Jallianwala Bagh

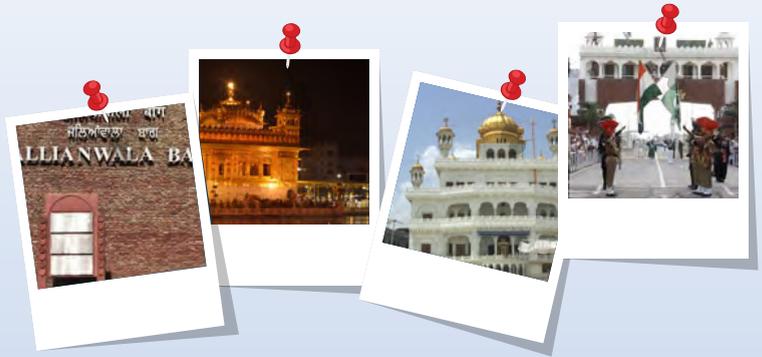
General Dyer's use of artillery against anti-British protesters gathered in this public garden in April 1919 lends a sombre air to this famous attraction.

Wagah Border

A change of guard ceremony at this border between India and Pakistan is a moving experience for anyone.

Amritsar Town Hall

This iconic colonial building dating back to the late 19th century will soon be home to a permanent museum dedicated to the Partition of India in 1947.



POPULAR LOCAL DISHES

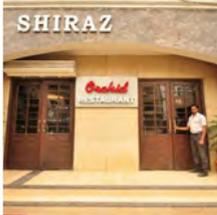
Butter Chicken | Sarson Ka Saag with Makki Ki Roti | Chole Bhature | Dal Makhani

Rajma Chawal | Paranthas | Paneer Tikka



Amritsar, or as the locals pronounce it “Ambarsar”, is arguably Punjab’s most well-known cities. Its fame is largely the result of the Golden Temple, considered the holiest shrine for Sikhs around the world. However, the city has much more to offer beyond its famous golden-domed spiritual heart. Its colonial past sits comfortably with its economically vibrant present, with old Victorian buildings jostling for space alongside massive malls.

TOP HOTELS



Hotel Shiraz Regency
3, Queen's Road, Amritsar, Punjab
143001, India
+91 183 506 3331
www.hotelshirazregency.in



Hotel Hong Kong Inn
Queens Road, Crystal Chowk,
Maharaja Ranjit Singh Nagar,
Company Bagh, Amritsar, Punjab
143001, India
+91 183 509 9905
www.hotelhongkonginn.com



Radisson Blu Amritsar
Ajnala Road, State Highway 25,
Opposite International Airport,
Amritsar, Punjab 143001, India
+91 183 661 1111
www.radissonblu.com/en/hotel-amritsar



Golden Tulip Amritsar
8 G.T. Road, Model Town, Amritsar,
Punjab 143001, India
+91 183 506 9991
www.goldentulipamritsar.com/en



Holiday Inn Amritsar Ranjit Avenue
Aneja Tower, B - Block, Green Avenue,
Amritsar, Punjab 143001, India
+91 183 508 8888
www.ihg.com

POPULAR FESTIVALS

Vaisakhi | Diwali | Lohri
Basant Kite Festival | Holi



ACCESSIBILITY

448.2 km from Indian capital
New Delhi

One International Airport

Two railway lines dividing old
and new parts of the city

Cycle-rickshaws are a common feature

Taxis are easily available



INDIA'S 4G REVOLUTION WILL HELP WESTERN SMEs MAKE IT BIG

The term game changer is bandied about rather loosely these days. So, 'India Investment Journal' decided to tread with caution before agreeing with the media chorus that the launch of Reliance Jio's 4G service across India would be a "game changer" for the country's telecom sector.

First, let's take a close look at what it will offer that's different from its rivals. Reliance Jio plans to cover 90 per cent of India by March 2017, up from the 18,000 cities and 200,000 villages where its services are now available. That means, 90 per cent of India's mobile population will be able to buy a Samsung, LG, Micromax or Lyf smart phone that will come as part of a bundled package with a Jio SIM card and avail of free voice calling for life and access the internet at Rs 50 per GB (less than \$1), the cheapest data plan in the world.

Morgan Stanley estimates that India's internet penetration, currently at 26 per cent, will rise to more than 50 per cent over the next two years. That will mean 325 million additional internet users. And a vast majority of these will access the net via 4G handsets, which have now been brought within the budgets of even the most humble Indian thanks to Jio's ultra-

cheap bundled plans.

Reliance Industries chairman and managing director Mukesh Ambani's ambitious gambit dovetails perfectly with the Narendra Modi government's equally ambitious Digital India programme that envisages using the internet to deliver governance, education, healthcare and other benefits to every Indian regardless of location.

The Digital India programme has set as its goal as inclusive growth in areas of electronic services, products, manufacturing and job opportunities.

It's highlights are:

Digital infrastructure as a utility to every citizen
Governance and services on demand
Digital empowerment of citizens

The combined muscle of the two programs can truly be a force multiplier and empower not only the common Indian but also small and medium enterprises in India and the rest of the world.

Consider this: a vocational training institute in Birmingham or Wisconsin or Hamburg that has attained regional or national recognition in its home market can now piggy back on Jio's 4G backbone to offer its courses to willing Indians. If (the admittedly exaggerated) fears of the complexities of entering the Indian market are a hindrance to greater engagement and commerce with this country, then Jio's presence will empower them to overcome the perceived hurdles.

Not just this. The domino effect of Jio's aggressive pricing strategy on its rivals and the expected me-too plans will bring India's already low telecom tariffs down further and fuel a rush for 4G handsets and services among subscribers.

Small town and rural India, which accounts for more than 40 per cent of India's GDP, has thus far remained beyond the pale for more small and medium service providers in the West. The 4G revolution ushered in by Reliance Jio and its rivals will prise open this \$900-billion market and throw up opportunities beyond anyone's imagination.

Just rewind 14 years. Ambani, then leading Reliance Infocomm (now Reliance Communications, run by his brother Anil), had launched the "Monsoon Hungama" plan, offering the till then expensive mobile telephony experience at Rs 501 (\$7.50) per month, inclusive of the handset.

That set the stage for India's mobile revolution and took India's mobile subscriber base from less than 50 million to 1 billion. And this, in turn, set the stage for the Amazons and Flipkarts and Alibabas of this world to enter the scene.

Reliance Jio's launch promises to throw open India to foreign and Indian SMEs. And that alone could generate business worth several billion dollars.



India's Foremost Outbound Investment Magazine

India Global Business (IGB) is the flagship outbound publication of India Inc. The magazine published every other month focuses on India's outward contribution to and engagement with the world.



Sign up



www.indiaglobalbusiness.indiaincorporated.com

WE ENGAGE LEADERS BY PUBLISHING
INCISIVE CONTENT AND PRODUCING IMPACTFUL EVENTS



Published by



INDIA GLOBAL
BUSINESS

India
Investment
Journal
indiaincorporated.com

www.indiaincorporated.com

Subscribe to our high powered briefings, delivered straight into your mail box!

Visit: www.indiaincorporated.com

Join the conversation  @IndiaIncorp  /indiaincorporated  /company/india-inc