

VOLUME 05 | ISSUE 01 |

# IndiaNow

## BUSINESS AND ECONOMY

JULY-AUGUST 2018

IBEF  
INDIA BRAND EQUITY FOUNDATION  
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# TOWARDS A HEALTHIER INDIA

Focus on accessibility, affordability, and quality

STATE FOCUS: Punjab

FORCE FOR GOOD: CMCA

INDIA MADE: TTK Prestige

Exclusive interview with



Dr Vinod K Paul,  
Member, NITI Aayog





## IN THE FAST LANE

India has emerged as a global automobile hub



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# CEO SPEAK

DEAR READERS,

India's promise is driven by fundamental growth drivers including a favourable demographic profile, a skilled workforce, an emerging middle class, a strong entrepreneurial culture, rising productivity, and a resilient private sector. The country's strong economic fundamentals, high rates of GDP growth, and long-term potential make it an attractive destination for business and investment across borders. With a growth rate of 7.7% in the fourth quarter of 2017-18 (Central Statistics Office), the Indian economy regained the tag of being the fastest growing economy globally.

Given the high levels of global interest in India and to promote a better understanding of the present progress and long-term potential of the country's economy, IBEF launched an exclusive India Study in April 2018 titled *India: Pushing the Right Levers*. It highlights some of the major game changers expected to transform the Indian economy in the coming decade. The themes cover a host of areas including developments in the agri-value chain, measures to boost manufacturing, smart urbanisation, increasing renewable energy capacity, evolving a startup ecosystem, e-governance, new phase of consumerism, and GST. The study is accessible on the link <https://www.ibef.org/research/india-study>. IBEF will be continuously tracking these themes and providing updates and new insights for the benefit of its online audiences.

IBEF was also involved in brand promotion of the Indian engineering sector at Automechanika Dubai during May 1 to 3, 2018. Automechanika Dubai is the largest international automotive aftermarket trade show in the Middle East and serves some of the largest automotive markets like Saudi Arabia and Iran. Over 100 Indian exhibitors participated at Automechanika Dubai 2018. Branding initiatives undertaken by IBEF included advertising at the venue and in print, PR and digital marketing. The branding effectively communicated the manner in which the industry is building on its strengths and expanding its reach in the global market.

India has emerged as a leading global automotive hub in recent years and exports to over 160 countries. Moreover, manufacturing costs in India are 10 to 25% lower, as compared to Europe and Latin America. India's geographical proximity to strategic automotive markets like the Middle East and Europe further strengthens its competitive advantage. The industry is highly focussed on quality as well, which was also a focus of IBEF's branding initiatives. The Automotive Mission Plan 2026, a combined vision of the Government and the industry, aims a total turnover of US\$ 200 billion (US\$ 43.5 billion in 2016-17) with exports at US\$ 70 to 80 billion (US\$ 11 billion in 2016-17) by 2026, thereby making India's auto component industry the world's third largest (ranked 4 presently).

**Ms Anu P Mathai**

CEO, India Brand Equity Foundation



# EDITORIAL

DEAR READERS,

The Indian healthcare system is quite unique—while the nation has invested in building a robust public healthcare infrastructure, it has also supported the evolution of world-class private sector facilities. However, with a population of almost 1.32 billion—with a majority living in the rural hinterlands—there is always scope to do more.

It is estimated that presently, almost 70% of the spending on health is paid for by the individual—a steep cost that pushes many families into debt. The recently announced Ayushman Bharat scheme, that would cover at least 40% of the population, envisages a holistic approach. It seeks to address the inherent problems of accessibility and affordability and provide a well-rounded solution. Reinforcing infrastructure to improve access, and provision of insurance to make healthcare cost-effective are part of its blueprint. Importantly, it draws upon the strengths of the public sector and private players to redefine the healthcare delivery system.

The nation's demographic dividend has been hailed as one of its biggest competitive advantages. But as Mr Arun Jaitley rightly said in his Budget speech, "Only Swasth (healthy) Bharat can be a Samridhha (prosperous) Bharat. India cannot realise its demographic dividend without its citizens being healthy." The shift in focus from curative to preventive and promotive is the first step towards a massive transformation in healthcare. By improving accessibility and health outcomes, Ayushman Bharat is all set to steer the country towards a 'New India' by 2022—one that accords topmost priority to 'health for all'.

*Maneck Davar*  
MANECK DAVAR

**IndiaNow**  
BUSINESS AND ECONOMY

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## A WELL ENGINEERED GROWTH STORY

India is a global pioneer in engineering research and development  
and design outsourcing



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# CONTENTS



## COVER STORY

# 16

### Healthcare—Reaching the Last Mile

India is strengthening its healthcare system by ushering in fundamental changes under Ayushman Bharat.

# 20

### A Vital Partnership

The private sector has been a strong pillar of support for the healthcare sector and will be crucial to the success of Government initiatives towards universal healthcare.

# 24

### 'Ayushman Bharat envisages a system-level change'

Ayushman Bharat - National Health Protection Mission is all set to transform the contours of the country's healthcare landscape, says Dr Vinod K Paul, Member, NITI Aayog, in an exclusive interview.

# 28

### Insuring Health and Wealth

India's health insurance sector is poised for tremendous growth, with the spurt in demand, high degree of private participation, and advancements in technology.



## REGULARS

**06** India in News **10** Tech Corner **12** Statistics **60** What's New @IBEF

## OTHER FEATURES



32

### STATE FOCUS

#### **Punjab - A Model for Transformation**

Punjab has long shed the tag of being just an agriculture-dependent economy, and is adopting industrialisation at a rapid pace.

38

### INDIA MADE

#### **Truly, a household name**

TTK Prestige is a brand that resonates in every household kitchen. Mr Chandru Kalro, Managing Director, describes the 60-year-plus journey of trust and innovation.

42

### FORCE FOR GOOD

#### **Voice of the Future**

Children's Movement for Civic Awareness has been empowering youth by lending a voice to their concerns and fostering societal harmony.

46

### STARTUP **Redefining HR**

Darwinbox is revolutionising the HR function, adapting it to an increasingly digital business landscape.



54

### WANDERLUST

#### **The Many Moods of Manali**

Manali, with its distinct charm and idyllic setting, makes for a perfect holiday destination.

50

### CULTURE

#### **Clothed with Divinity**

Pattachitra—an ancient form of painting from Orissa—is gaining popularity among connoisseurs of art.



# INDIA IN NEWS

## PM Modi visits Malaysia, Singapore, and Indonesia

Prime Minister Mr Narendra Modi visited Indonesia, Malaysia, and Singapore between May 29 to June 2, 2018. Elaborating on his vision for ties with these nations, he said, "I am confident that my visit to Indonesia, Malaysia, and Singapore will provide a further boost to our Act East Policy and enhance our relations and engagements with all the three countries." In his first visit to Indonesia as Prime Minister, Mr Modi engaged in discussions with President Mr Joko Widodo and also interacted with the India-Indonesia CEOs Forum. On his way to Singapore, he visited Malaysia for a brief meeting with the new Malaysian Prime Minister Mr Mahathir Mohamad. Mr Modi's Singapore visit focussed on enhancing India's ties in areas of fintech, skill development, urban planning, and artificial intelligence. He also delivered the keynote address on June 1 at the Shangri-La Dialogue, becoming the first Indian prime minister to do so in the Track I annual inter-governmental security forum. During the visit, he also engaged in delegation level talks and held meetings with CEOs and Indian communities.



Indian Prime Minister Mr Narendra Modi with Indonesian President Mr Joko Widodo



Indian Prime Minister Mr Narendra Modi with Malaysian Prime Minister Mr Mahathir Mohamad



## Digital platform launched for MSME exporters

On April 17, Mr Suresh Prabhu, Minister of Commerce and Industry launched the FIEO GlobalLinker—a platform for MSME exporters that will help digitise their businesses. Initiated by the Federation of Indian Export Organisations (FIEO), it will expand India's multi-focused export strategy and aims to make the growth of SMEs simpler and profitable. It comprises of over 140,000 SMEs seeking business collaboration and growth opportunities through digital profiles created on the platform. It also offers other services like application for new Registration Cum Membership Certificate, renewal, participation in FIEO's promotional programmes, and alerts. Using the FIEO GlobalLinker, exporters will be able to explore business opportunities by looking for clients, suppliers and advisors.





## India's indigenous gun finds way into the Army

Dhanush, India's first long-range artillery gun, passed the final test at Pokhran held between June 2 and 6. The Gun Carriage Factory (GCF) handed over three of these guns to the Indian Army. These 155 mm-howitzers are also nicknamed 'desi Bofors'. Jabalpur-based GCF got the Dhanush project in October 2011 and completed the first prototype in 2014. It has a strike range of 38 km and 81% of its components are sourced indigenously. In a report, GCF Senior General Manager Mr S K Singh stated that 12 guns will be supplied to the Army in the current fiscal while the total number for the initial phase is 114 guns. Each Dhanush is said to cost around ₹14 crores.



## WHO adopts digital health resolution

On May 29, Union Health and Family Welfare Minister Mr J P Nadda, said that the resolution on digital health brought out by India was adopted by the 71<sup>st</sup> World Health Assembly in Geneva. It will digitally empower member states, WHO, health providers, and patients. It will help mainstream digital interventions in health, including big data and its analytics, use of deep machine learning, artificial intelligence, IoT, and other emerging disciplines like genomics. WHO will also establish a strategy to identify priority areas to focus its efforts. Mr J P Nadda quoted, "Digital health technology has a huge potential for supporting Universal Health Coverage and improving accessibility, quality and affordability of health services."



## Wipro sets up industrial automation unit

Wipro Infrastructure Engineering (WIN), a subsidiary of Wipro, has set up an industrial automation unit in Bengaluru that will make industrial robots for manufacturing facilities in India, Asia, and Africa. WIN will focus on India and ASEAN countries as its two key markets. Mr Pratik Kumar, CEO, WIN stated that the company's objective is to see WIN Automation among the top three integrators in the manufacturing automation business. "The company expects more demand for sophistication and digitisation in the automotive sector with the implementation of BS-VI emission norms in India by 2020," said G Sundararaman, head-automation solutions at WIN.

"RIL expects the newly launched Reliance Composites Solutions (RCS) business to be the No 1 composites player in India. RCS will design and administer low-cost and high-volume products such as modular toilets and homes to support the Swachh Bharat Mission, disaster relief measures and Housing for All programmes initiated by the Indian Government."

- RELIANCE INDUSTRIES 2018 ANNUAL REPORT

"The [Indian] service economy returned to expansion territory in June. Encouragingly, the latest performance was the strongest seen in a year, against a backdrop of improving demand conditions, as evidenced by the fastest gain in new business since last June."

- AASHNA DODHIA,  
ECONOMIST, IHS MARKIT

# INDIA IN NEWS



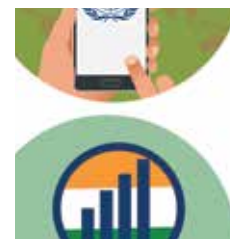
## India to begin lithium-ion battery production

On June 9, Dr Vijayamohan K Pillai, Director, Central Electro Chemical Research Institute (CECRI) and Mr C Narasimhan, Chairman-cum-Managing Director of RAASI Group signed a memorandum of agreement in Bengaluru for the transfer of technology for India's first lithium-ion battery project in the presence of Union Minister for Science and Technology Dr Harsh Vardhan. The indigenous technology of lithium-ion cells has been developed at CECRI under Council of Scientific & Industrial Research (CSIR). A demo facility has been set up by CSIR-CECRI in Chennai to manufacture prototype lithium-ion cells. India sources lithium-ion batteries from China, Japan, and South Korea. It imported nearly US\$ 150 million worth of Li-ion batteries in 2017.



## Corporates train students to create skill-ready workforce

To create awareness on artificial intelligence, promote interest in STEM, and develop market-relevant skills, IT companies such as Philips, IBM, Wipro, EXL Service, SAP Labs, and Infosys have launched initiatives to engage with students at school and college levels. Philips launched an AI lab—HealthSuite Insights Lab—at Manipal University in April this year. EXL trains students of classes 7 to 10 in STEM subjects, and also helps school and college students gain foundational skills in finance and accounting, analytics and more. Infosys has also been running programmes such as Catch Them Young and Rural Reach Program, which aim to create awareness on ICT.



## World Bank predicts India to be the fastest growing economy

In its June 2018 edition of the *Global Economic Prospect* report, the World Bank has forecast a growth rate of 7.3% for India this year and 7.5% for the next two years. The report described India's economy as robust, resilient, and having potential to deliver sustained growth. It also added that growth in South Asia is projected to be 7.1% in 2019. Mr Ayhan Kose, Director of the Development Prospects Group at the World Bank, said, "India is doing well. Growth is being robust. Investment growth remains high. Consumption remains strong. All in all these numbers are encouraging." The reports, however, predict that China will slow down slightly from 6.5% in 2018 to 6.3% in 2019, and 6.2% in 2020.

## Chandrayaan-2 to be launched this year



In a meeting held on April 18, ISRO Chairman Dr K Sivan and Union Minister of State for Development of North Eastern Region (DoNER), Dr Jitendra Singh discussed Chandrayaan-2, which is expected to be launched from Sriharikota around October-November 2018. Equipped with a lander and rover probe, it will observe the lunar surface and send data for analysis. The total cost of the mission is ₹800 crore, which includes ₹200 crore as the cost of launching and ₹600 crore for the satellite—almost half of the cost if the same mission would have to be launched from a foreign launching site. The cost-effective mission is completely indigenous in its expertise, manufacturing, and material.





# THE GIFT OF WELL BEING

Yoga is India's gift to the world



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# TECH CORNER

## Kia Motors to produce electric and hybrid vehicles in India

South Korean auto giant Kia Motors Corporation's Indian arm Kia Motors India plans to launch hybrid and electric vehicles through its plant in Anantpur, Andhra Pradesh by 2021. This project will see investments to the tune of US\$ 1.1 billion. "At the moment we are considering to produce electric vehicles and hybrids at our facility (at Anantpur)," Kookhyun Shim, CEO and Managing Director, Kia Motors India said in an interview.

When fully operational, the 23 million sq ft plan, will have a staff strength of around 3,000 with a total production capacity of 300,000 cars per year. The company also intends to establish a pan-India network in terms of sales and service support, and is already in the process of selecting the right dealer partners.



## Partnership for HIV/AIDS research

India, The Netherlands, and Sweden recently announced the launch of a collaborative research programme on HIV/AIDS. Speaking at its inauguration in The Netherlands, Dr Renu Swarup, Secretary, Department of Biotechnology, Government of India, said, "This partnership aligns with our mandate to elevate Indian bioscience on the global stage through innovative and cross-cutting partnerships. I am very certain that joint research by scientists on each side would support generation of new science and knowledge to reinforce the global fight against HIV/AIDS..." With an initial partnership period of five years, this unique programme is expected to strengthen and enhance disease research capabilities and enable technology transfer between the three countries.



## CA Technologies lauds India's innovation potential

US-based software multinational CA Technologies—that plans and develops a number of products at its centres in Hyderabad and Bengaluru—considers India a key development centre and hub for innovation. The company's President and Chief Product Officer Mr Ayman Sayed said, "We see an amazing venture talent and depth and breadth in India." He also noted that India produces almost one-third of the total number of software engineers. Chief Technology Officer Mr Otto Berkes said, "India is absolutely strategic for us and we make, and would continue to make, great investments in building that capability." The company also announced that their accelerator programme—an incubation programme for ideas which could be turned into startups—would likely come to India in the near future.



## Satellites to monitor air pollution

Central Pollution Control Board (CPCB) is planning to use satellite data for monitoring air pollution. This would help CPCB reach and track areas with no ground-base network. Mr S P Singh Parihar, Chairman, CPCB, said, "We are in touch with the Department of Space; we are exploring the possibility of using satellite-based observations with ground-based measurements to correlate the two." India has a network of 703 manual monitoring stations in 307 cities and towns and 100 continuous monitoring stations in 57 cities, but they are concentrated in urban areas. Professor S N Tripathi, IIT Kanpur, opines that with our own satellites tracking air pollution, we can choose a combination that has better resolution and better coverage.





## BSNL to start 5G services in India

Bharat Sanchar Nigam Limited (BSNL), the government-owned telecom service provider, will soon roll out high-speed 5G service in the country while simultaneously launching it globally. It is working in tandem with vendors such as Nokia, ZTE, and Coriant in this area and is aiming for a 2020 launch. Mr Anil Jain, Chief General Manager, BSNL, while speaking at a Mobile Device Summit 2018, said that they would not miss the 5G bus as it happened in the case of 3G and 4G technologies. BSNL signed an MoU with Japan's NTT Advance Technology Corporation and its India partner Virgo Corporation in February 2018 for creating a 5G test bed. Similar technology-sharing arrangements have been made by BSNL with Nokia and Coriant too.

# 120 million

Number of smartphones to be manufactured each year at Samsung Electronics manufacturing plant in Noida.



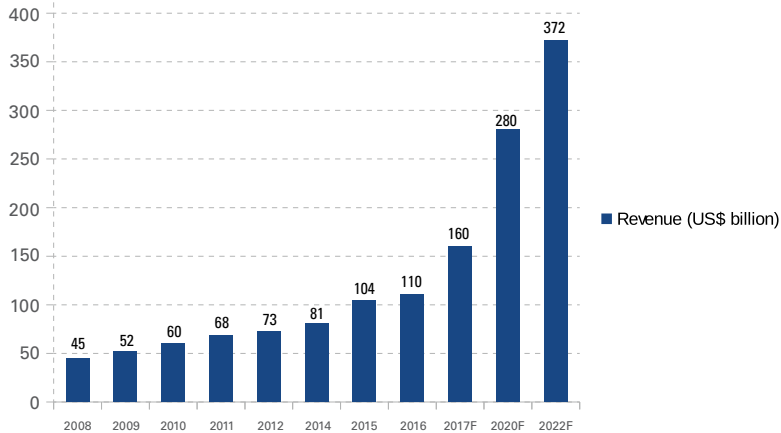
## Technology for waterways and ports being developed by IIT Madras

Ministry of Shipping's technological arm IIT Madras National Technology Centre for Ports, Waterways and Coasts (NTCPWC) is working on boosting the development of indigenous technology and expertise in the port and maritime sector. The key focus areas under this project will be autonomous platforms for navigational and water-quality monitoring, night-time navigation in inland waterways, indigenous dredging technologies for small ports and inland waterways, and new concepts in breakwaters among others. Presently, the Ministry appoints international consultants for such projects. However, they are being replaced with Indian professionals now. NTCPWC is also expected to play a significant role in human resources development by training manpower that can study the specific project and take appropriate decisions.

# STATISTICS

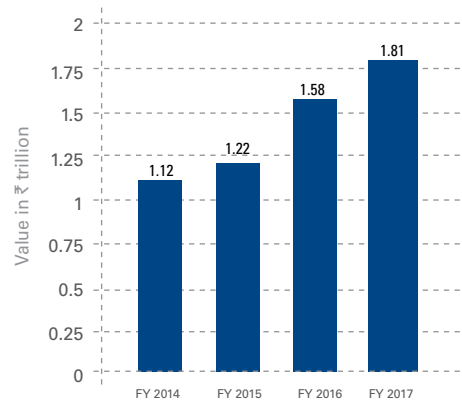
## STRENGTHENING THE 'HEALTH' ECOSYSTEM

### HEALTHCARE SECTOR GROWTH TRENDS



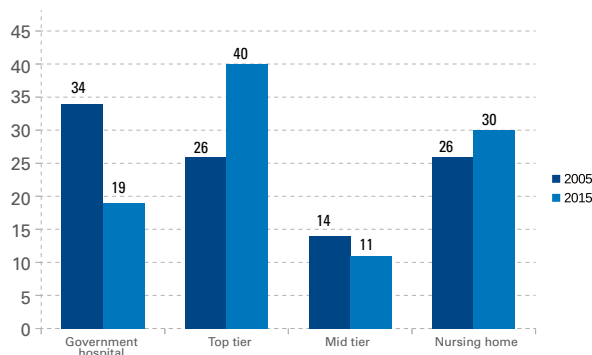
Source: <https://www.ibef.org/download/Healthcare-April-20181.pdf>

### VALUE OF PUBLIC HEALTH EXPENDITURE IN INDIA FROM FY 2014 TO FY 2017



Source: <https://www.statista.com/statistics/684924/india-public-health-expenditure/>

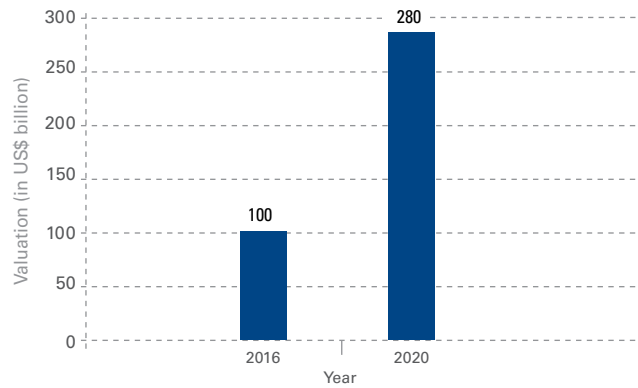
### SHARES IN HEALTHCARE SPENDING IN INDIA (IN %)



Source: <https://www.ibef.org/download/Healthcare-April-20181.pdf>

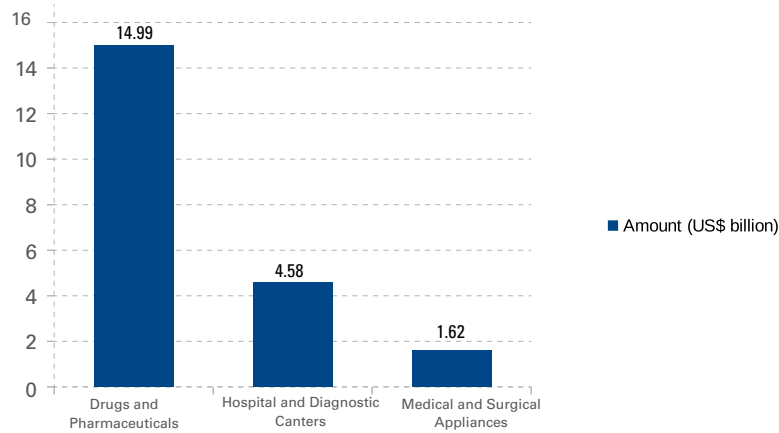


### MARKET VALUATION OF HEALTHCARE INDUSTRY IN INDIA



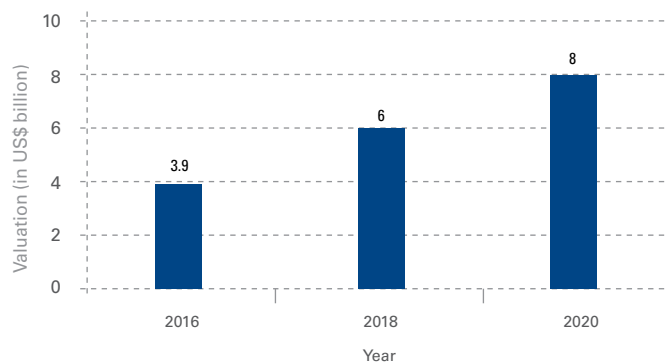
Source: <https://www.businesssex.com/industryreport/ongoing-trends-growth-drivers/14>

### CUMULATIVE FDI INFLOWS (FROM APRIL 2000 UP TO JUNE 2017) INTO THE HEALTHCARE SECTOR



Source: <https://www.ibef.org/uploads/industry/Infographics/large/Healthcare-Infographic-November-2017.pdf>

### MEDICAL TOURISM VALUATION



Source: <https://www.businesssex.com/industryreport/ongoing-trends-growth-drivers/14>



# Health Book

72 bpm



- Heart Rate
- Sleep
- Emergency
- Weight Loss
- Yoga
- Gym







# Healthcare for all

- **HEALTHCARE—REACHING THE LAST MILE**
- **A VITAL PARTNERSHIP**
- **'AYUSHMAN BHARAT ENVISAGES A SYSTEM-LEVEL CHANGE'**
- **INSURING HEALTH AND WEALTH**

# Healthcare— Reaching the Last Mile

*Ayushman Bharat is a game-changing initiative in ongoing efforts to ensure universal healthcare in the country. Focus on areas like strengthening healthcare infrastructure, holistic and preventive healthcare, digital outreach, and risk cover is critical in achieving this objective.*

ANITHA MOOSATH



Photo courtesy: Shutterstock



**O**n March 21, 2018, the Union Cabinet chaired by Prime Minister Mr Narendra Modi made an announcement that marked a milestone in India’s healthcare journey. It approved the launch of Ayushman Bharat - National Health Protection Mission (AB-NHPM), which was announced as part of Union Budget 2018-19.<sup>1</sup>

AB-NHPM will eventually become the world’s largest government-funded healthcare initiative, says Union Health Minister J P Nadda.<sup>2</sup> It is humongous in both scale and reach, taking several steps ahead the vision captured in the National Health Policy, 2017. One of its twin focus areas is providing healthcare to 100 million poor families, offering them up to ₹5 lakh (US\$ 7,723.2) per family per year for secondary and tertiary care hospitalisation. The other is improving accessibility—₹1,200 crore (US\$ 185.36 million) has been set aside for National Health Policy, 2017, under which 150,000 health and wellness centres will be created by transforming the existing sub-centres and primary healthcare centres by 2022.<sup>3</sup> WHO Director-General Tedros Adhanom’s remark reflects the robustness and inclusiveness that lie at its core—“The new National Health Protection Scheme has the potential not only to improve health, but to help lift people out of poverty... The reforms which India is embarking on are bold, and they must be.”<sup>4</sup>

Rooted in the concept of cooperative federalism, Ayushman Bharat takes into account the varied needs of the different states and offers them the freedom to choose the modalities for implementation and expansion. This vision was reflected in the Prime Minister’s words at the inauguration of the first healthcare and wellness centre under the scheme in Bijapur district (Chhattisgarh) on April 14, 2018, “The Ayushman Bharat scheme is not limited to simply providing a service, but also invokes public participation so that we can create a healthy, capable, and content New India.”<sup>5</sup> Mr Nadda adds that it is up to the states to decide whether they want to run it alongside their own insurance schemes or integrate it into existing ones.<sup>6</sup>

**BUILDING BLOCKS**

Primary healthcare took shape as a concept in the country in 1946, following the recommendations of the Bhole Committee.<sup>7</sup> Concerted efforts have since been made by successive governments towards expanding infrastructure.

The year 2005 saw the launch of the National Rural Health Mission (NRHM), a strategic plan to cater to the underserved in remote areas. In 2013, the National Urban Health Mission (NUHM) was approved as one of the sub-missions (NRHM being the other) of



Photo courtesy: Shutterstock

the National Health Mission (NHM).<sup>8</sup> The progress made under NHM, as of September 2017, included accelerated decline in maternal mortality rate (MMR), infant mortality rate (IMR), under-five mortality rate (U5MR), and total fertility rate (TFR). IMR declined from 39 in 2014 to 37 in 2015, MMR from 178 during 2010-12 to 167 during 2011-13; U5MR dropped from 59 in 2010 to 43 in 2015. The number of endemic blocks with prevalence of more than one case of Kala Azar per 10,000 population was brought down from 230 in 2010 to 94 in 2016. Malaria API declined from 1.10 in 2011 to 0.84 in 2016. The Millennium Development Goal 6 of halting and reversing the incidence of Malaria, TB, and HIV/AIDS was achieved.<sup>9</sup>

Recently, a proposal was cleared for continuation of NHM till March 31, 2020 with a budgetary support of ₹85,217 crore.<sup>10</sup> During this extended span of time, the government aims to improve neo-natal mortality rate (NMR), IMR, U5MR, and TFR. There will be much emphasis on wellness through integration of AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy) and reducing out-of-pocket expenditure, too.<sup>11</sup> In Union Budget 2018-19, an allocation of ₹9,752.82 crore (US\$ 1.51 billion) was made for NRHM, and ₹1,004.67 crore (US\$ 155.19 million) for the flexible pool for non-communicable diseases, injury, and trauma.<sup>12</sup>

**TECH EDGE**

Its sprawling geographical expanse leaves India facing a huge challenge vis-à-vis healthcare delivery—one reason why technology has been adopted on a large scale. The government has been increasingly focusing on digital health and employing ICT for improving efficiency. A National Telemedicine Network (NTN) has been set up, and telemedicine nodes have been established across the country. Further, there is a National Medical College Network that brings together 50 government medical colleges for e-education and e-healthcare delivery.<sup>13</sup>

India met the Millennium Development Goal target for maternal mortality rate of 139/lakh live births with MMR reaching 130/lakh live births by 2015.



## AYUSHMAN BHARAT

### National Health Protection Mission

**10 CRORE PLUS FAMILIES:**  
Target beneficiaries

**150,000**  
Number of health and wellness centres to be set up

**5 LAKH:**  
Health cover to be provided to a family per year

**₹1,200 CRORE**  
Budget allocation for developing these centres

Source: <https://www.pradhanmantriyojana.in/ayushman-bharat-yojana/>

### MAJOR DIGITAL INITIATIVES<sup>14</sup>

**National Health Portal (NHP):** Provides information to citizens and stakeholders in different languages.

**Online Registration System (ORS):** Facilitates online registration and appointment, payment of fees, viewing of diagnostic reports, and checking availability of blood in public hospitals.

**Central Drugs Standards Control Organisation, SUGAM:** Provides a single window for pharma industry, regulators, and citizens for online submission of applications, tracking, processing, etc.

**National Organ & Tissue Transplant Organisation (NOTTO):** Through a web portal, it facilitates online registration for organ/tissue transplantation or retrieval and online pledge registry for organ donation.

The government has also introduced mobile apps such as Indradhanush Immunization (helps track child's immunisation status) and Pradhan Mantri Surakshit Matritva Abhiyan Mobile App (for reporting pregnancy care-related information). Further, there are initiatives such as Kilkari (delivers free audio messages about pregnancy and child birth), Nikshay (TB patient monitoring system) and mDiabetes programme.



### ALTERNATIVE MEDICINE

The government is also harnessing the innate potential of India's traditional streams of medicine. The setting up of the Ministry of AYUSH is ample proof of this. As of March 8, 2016, as many as 3,598 hospitals and 25,723 dispensaries across the country offer alternative medicine treatment.<sup>15</sup> The All India Institute of Ayurveda was set up in 2017.<sup>16</sup> AYUSH information cells have also been set up in 29 countries, and an MoU has been signed with the National Health Organization of the US for development of ayurveda and yoga.<sup>17</sup> Yoga—the path to wellness, as the Prime Minister puts it—is being promoted in a big way, in perfect alignment with the government's holistic approach to health. June 21 is being celebrated as International Yoga Day since 2015. Dr K R Kohli, Director, AYUSH, says, "The two aspects that are better in allopathy compared to Ayurveda are emergency treatments and technology. But the incidence of non-communicable diseases has gone up now, for which we would not need either of these. What is required is good care, different kinds of massage, and other holistic treatments. AYUSH will dominate in terms of prevention and cure of non-communicable diseases."

'Holistic' is the essence of Ayushman Bharat too. And it is bound to have a sweeping impact across the spectrum, with its pronounced focus on preventive care and AYUSH, financial risk protection, and access to quality and affordable care which will also play a major role in poverty reduction in the country. The Centre and the states have joined hands for a strategic mission and, together, they are sure to add momentum to India's steps towards achieving universal health coverage—one of the SDGs (sustainable development goals) laid down by the UN.<sup>18</sup> ■



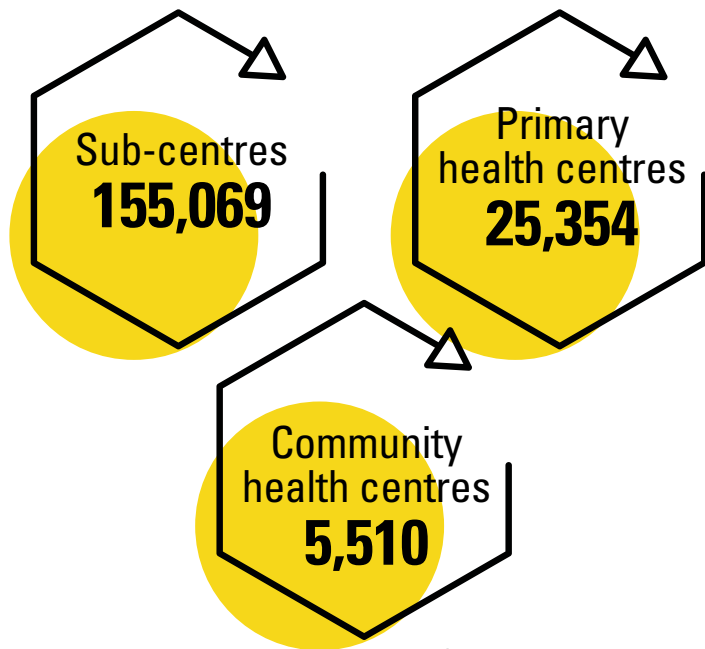
**Dr Usha Manjunath,**  
Director of IIHMR, Bengaluru

“The spirit of ‘Health for all’ has been at the core of designing India’s public health system. Over the past seven decades, the government has taken several steps to solidify the same. Introduction of schemes like Rashtriya Swasthya Bima Yojana (RSBY) and Vajpayee Arogyashree helped the country take baby steps towards a healthy nation.

The Ayushman Bharat Scheme announced in the 2018 budget is a transformational change. Part of National Health Protection Mission (NHPM), its vision is to upgrade 150,000 health centres pertaining to maternal and child health, elderly, mental health, hypertension, diabetes and cancer, by 2022. It also promises to provide insurance cover to 10 crore people poor and vulnerable families may seem overly ambitious to many but it gives hope.

The plan will boost upgrading of existing primary centres and provide a boost to manpower and provide primary and secondary care at the Government facilities.

Around 2005, the government opened health insurance to the private sector and further opened doors for FDI. The healthcare sector reaped benefits from the move and [there has been] drastic development across verticals in the healthcare sector. While the private sector came as a breath of fresh air, affordability was a big challenge. The Ayushman Bharat scheme welcomes private participation in a transparent manner. A vast country like India cannot deliver ‘universal health coverage’ through the public health system alone. Private hospitals, PPP models, NGOs, and CSR have a great role and responsibility towards accomplishing the vision. 🙏



(As of March 31, 2016)

Source: <https://mohfw.gov.in/documents/staistics>

#### References

- [1 http://pib.nic.in/newsite/PrintRelease.aspx?relid=177816](http://pib.nic.in/newsite/PrintRelease.aspx?relid=177816)
- [2 http://indianexpress.com/article/india/8-states-4-uts-sign-mous-with-health-ministry-to-implement-ayushman-bharat-mission-5210722/](http://indianexpress.com/article/india/8-states-4-uts-sign-mous-with-health-ministry-to-implement-ayushman-bharat-mission-5210722/)
- [3 https://www.ibef.org/download/Healthcare-April-20181.pdf](https://www.ibef.org/download/Healthcare-April-20181.pdf)
- [4 https://economictimes.indiatimes.com/industry/healthcare/biotech/healthcare/who-lauds-national-health-protection-scheme-ayushman-bharat/articleshow/63310006.cms](https://economictimes.indiatimes.com/industry/healthcare/biotech/healthcare/who-lauds-national-health-protection-scheme-ayushman-bharat/articleshow/63310006.cms)
- [5 https://timesofindia.indiatimes.com/india/pm-modi-rolls-out-ayushman-bharat-scheme-inaugurates-first-health-centre/articleshow/63760067.cms](https://timesofindia.indiatimes.com/india/pm-modi-rolls-out-ayushman-bharat-scheme-inaugurates-first-health-centre/articleshow/63760067.cms)
- [6 https://economictimes.indiatimes.com/news/politics-and-nation/more-states-to-sign-mous-for-ayushman-bharat-this-week-says-jp-nadda/articleshow/64551892.cms](https://economictimes.indiatimes.com/news/politics-and-nation/more-states-to-sign-mous-for-ayushman-bharat-this-week-says-jp-nadda/articleshow/64551892.cms)
- [7 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5290757/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5290757/)
- [8 http://pib.nic.in/newsite/PrintRelease.aspx?relid=170946](http://pib.nic.in/newsite/PrintRelease.aspx?relid=170946)
- [9 http://pib.nic.in/newsite/PrintRelease.aspx?relid=170946](http://pib.nic.in/newsite/PrintRelease.aspx?relid=170946)
- [10 http://www.pmindia.gov.in/en/news\\_updates/cabinet-approves-continuation-of-national-health-mission-nhm-from01-04-2017-to-31-03-2020/](http://www.pmindia.gov.in/en/news_updates/cabinet-approves-continuation-of-national-health-mission-nhm-from01-04-2017-to-31-03-2020/)
- [11 http://www.pmindia.gov.in/en/news\\_updates/cabinet-approves-continuation-of-national-health-mission-nhm-from01-04-2017-to-31-03-2020/](http://www.pmindia.gov.in/en/news_updates/cabinet-approves-continuation-of-national-health-mission-nhm-from01-04-2017-to-31-03-2020/)
- [12 https://www.ibef.org/download/Healthcare-April-20181.pdf](https://www.ibef.org/download/Healthcare-April-20181.pdf)
- [13 https://www.ibef.org/download/Healthcare-April-20181.pdf](https://www.ibef.org/download/Healthcare-April-20181.pdf)
- [14 https://mohfw.gov.in/about-us/departments/departments-health-and-family-welfare/e-Health%20%26%20Telemedicine](https://mohfw.gov.in/about-us/departments/departments-health-and-family-welfare/e-Health%20%26%20Telemedicine)
- [15 http://www.pib.nic.in/newsite/printrelease.aspx?relid=137509](http://www.pib.nic.in/newsite/printrelease.aspx?relid=137509)
- [16 https://www.ibef.org/download/Healthcare-April-20181.pdf](https://www.ibef.org/download/Healthcare-April-20181.pdf)
- [17 https://www.livemint.com/Politics/yLfzx7FKto14n0cmuqdljL/Narendra-Modi-says-govt-plans-to-set-up-Ayurveda-hospital-in.html](https://www.livemint.com/Politics/yLfzx7FKto14n0cmuqdljL/Narendra-Modi-says-govt-plans-to-set-up-Ayurveda-hospital-in.html)
- [18 http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-3-good-health-and-well-being/targets/](http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-3-good-health-and-well-being/targets/)

# A Vital Partnership

*The private healthcare sector and the government have always maintained a symbiotic relationship, supporting and drawing strength from each other. This has also had a salubrious impact on the system, helping fight rural-urban disparity and facilitating impressive strides in preventive and participatory healthcare.*

ANITHA MOOSATH

**T**he healthcare ecosystem in India comprises an expansive network, spread across the public and private sectors and resting on the strong foundation of quality, affordability, and accessibility. One of the fastest growing industries in the country, it is expected to touch US\$ 372 billion by 2022.<sup>1</sup>

Several factors have led to the rapid growth—rising incomes, better awareness about health, changing attitudes towards preventive healthcare, growing demand for treatment of lifestyle diseases, improving access to insurance, and so on. Undoubtedly, what has added momentum to this brisk pace is the active participation of private players. Accounting for nearly 80% of the total market and almost 74% of the country's total healthcare expenditure, they have been a seminal force in making healthcare a vibrant industry. With share in hospitals and hospital beds at an estimated 74% and 40% respectively; they operate a high number of secondary, tertiary, and quaternary healthcare institutions, especially in metros, tier 1, and tier 2 cities.<sup>2</sup>

Their thrust on cost-effectiveness, quality, and technology adoption has lent the country a distinctive advantage over emerging economies and enhanced its image as a global healthcare hub—the cost of surgery in India is nearly one-tenth of that in developed countries. Dr Devi Shetty, Founder and Chairman, Narayana Hrudayalaya, asserts, “At Narayana Health, we are convinced that ‘quality’ and ‘lowest cost’ are not mutually exclusive when it comes to healthcare delivery. In fact, we are well on our way to demonstrate that we are not running our institution as just another number-only business, but are attractively placed to create an affordable, globally-benchmarked quality-driven healthcare services model.”<sup>3</sup>

Technology has always been the strong point of private players, be it diagnostics, treatment procedures,

ACCOUNTING FOR NEARLY 80% of the total market and almost 74% of the country's total healthcare expenditure, the private sector has been a seminal force in making healthcare a vibrant industry.

or world-class hospital facilities. Mr Ayush Mishra, Co-Founder, Tattvan E-Clinic, says, “Technology helps in cutting costs by eliminating middlemen and putting care directly in the hands of patients. It also helps to maximise the efficiency of care through electronic management of records, prescription, and most importantly access.” With technology, people can access the care they could never think of otherwise from their home towns. This boosts the primary healthcare sector and reduces the divide between quality care cities and not-so-quality-care cities, he adds.

Telemedicine is a high-priority area for establishments such as Apollo Hospitals and Narayana Hrudayalaya. According to Dr Devi Shetty, “Seamless connect, the key essence of technology, will break the geographical barrier and will enable doctors to connect with patients sitting miles away. Only surgeries and procedures will demand patients' presence, rest all will be done on a shared digital platform.”<sup>4</sup>

IT systems come into play in areas other than purely healthcare, too, such as management information system (MIS), hospital information systems (HIS), and maintenance of electronic medical records (EMR). The advantage that technology offers is bolstered by adequate availability of funds. And, last but not the least is the availability of a talented, English-speaking pool of doctors and paramedics. Scores of patients from European countries and the Middle East visit



Photo courtesy: Dinodia



Cost-effectiveness without compromise on quality has been the private sector's biggest attraction.

India for surgeries and specialised treatments. The number of foreigners coming to India for medical purposes rose by almost 50% to 201,333 in 2016 from 134,344 in 2015.<sup>5</sup>

Private players are putting in place new business models too, which help them achieve the goals of sustainable growth and economies of scale, while providing quality treatment at a cheaper cost. Mr Ayush Mishra of Tattvan says, “The more money a Tattvan patient saves, the more money Tattvan earns. Kind of a win-win situation for both the parties. Our model depends on patients saving money and hassle of travel for medical needs and instead availing the same through telemedicine in their cities.”

Apollo Hospitals’ Reach programme, launched in 2008, is also a case in point. They have proved how cross-subsidisation can offer affordable services - the higher fees paid by more affluent patients make the hospitals profitable for the parent company.<sup>6</sup>

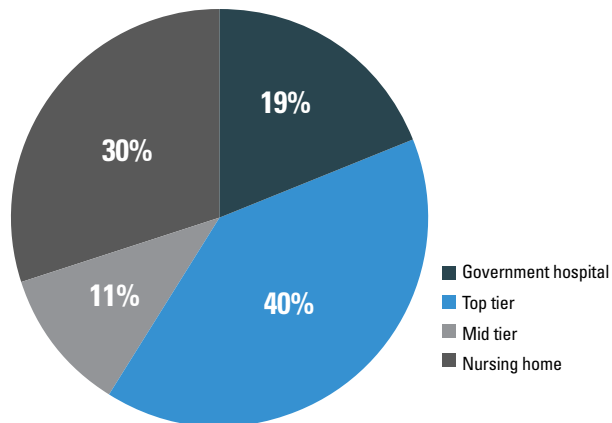
### MEANINGFUL PARTNERSHIPS

“To serve the masses, the governmental delivery systems should integrate with private healthcare to reach out to people who are cut off from the mainstream,” Mr J P Nadda, Union Minister of Health and Family Welfare, said at the 14<sup>th</sup> India Health Summit in New Delhi.<sup>7</sup>

The PPP model has been successfully operational across the country—in areas such as infrastructure development, management and operations, capacity

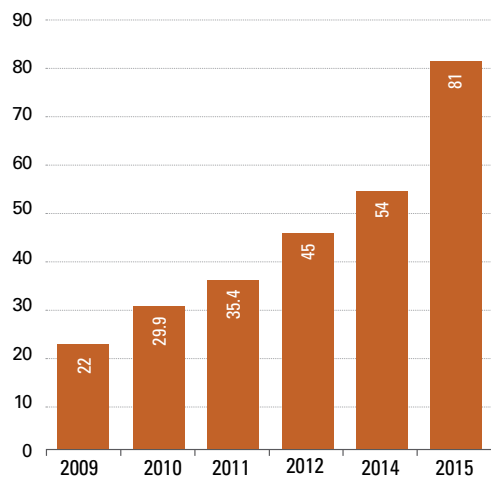
building and training, financing mechanism, IT infrastructure development for networking and data transfer, and materials management. Dr Venkat Raman, Professor, Faculty of Management Studies, says, “Besides improving the availability of health infrastructure including human resources, PPP, and other forms of engaging the private sector could improve the service delivery capabilities of the existing government health facilities by using management contracts. Use of strategic purchasing from the private sector could reduce household, out-of-pocket expenditure, which is one the highest in

### SHARES IN HEALTHCARE SPENDING IN INDIA, 2015



Source: <https://www.ibef.org/download/Healthcare-April-20181.pdf>

## MARKET SIZE OF PRIVATE HOSPITALS (US\$ BILLION)



Source: <https://www.ibef.org/download/Healthcare-April-20181.pdf>

the world. Health infrastructure PPPs are still at an early stage in India. But there are many examples of facility management contracts (from primary health centres to speciality hospitals); and outsourcing of clinical and non-clinical services (from radio diagnostics to housekeeping) across various states. Strategic purchasing through demand-side financing instruments (vouchers), and insurance schemes (e.g. social health insurance schemes in Andhra Pradesh, Tamil Nadu, Karnataka), and the national level health insurance schemes (e.g. RSBY and NHPS) are some of the examples where private sector engagement is inevitable.”

Several PPP models have led to significant improvement in health markers, in underserved areas across the country. A case in point is Mansi (Maternal and Newborn Survival Initiative), a five-year pilot project launched in 2009-10 under the PPP model in Seraikela, Jharkhand. It helped achieve reduction in neonatal mortality rate by 46%, infant mortality by 39%, and under-5 mortality by 44%.<sup>8</sup>

**21** Number of Joint Commission International (JCI) - accredited hospitals in India

**201,333** Number of foreign tourists who visited India for medical purposes in 2016, a 50% increase compared to 2015.

Source: <https://www.ibef.org/download/Healthcare-April-20181.pdf>

## AYUSH FOCUS

Private players offering alternative methods of treatment have been playing a crucial role vis-à-vis attracting medical tourists and bringing in revenue. They are now set to play an even more integral role with the government integrating AYUSH with the mainstream—steps such as recording the knowledge of vaidyas<sup>9</sup> (ayurveda practitioners) and certifying yoga institutes<sup>10</sup> will lend them more credibility. Ayurveda products companies too are cashing in on the renewed government thrust, and focusing on innovations, product diversification, and foray into foreign markets.

Anurag Sharma, Managing Director of Shree Baidyanath Ayurveda Bhawan, sees organic skincare as a space that can help globalise Ayurveda. According to him, “The globalisation of Yoga has eased the globalisation of Ayurveda as India is already developing an adherence across the world which states people believe in the Indian systems now.”<sup>11</sup> Dabur has established a call centre<sup>12</sup>—AskDabur—which serves as a platform where consumers can seek doctors’ advice, as well as LiveVeda, an e-store.<sup>13</sup> Global demand for herbal care products too is on the rise—the US, the UK, Germany, Italy, and the Middle East are among markets with the highest demand. While Patanjali exports to ten countries, Baidyanath products reach 35 foreign destinations.<sup>14</sup> The export of Ayurvedic products from India (through two HS codes—30039011 for medicants and 30049011 for medicaments) stood at US\$ 243 million for 2016-17 according to Directorate General of Commercial Intelligence & Statistics (DGCIS), Department of Commerce.

## MARKET DISRUPTORS

Further, a crop of startup entrepreneurs is leveraging technology to disrupt the healthcare landscape—in 2015, approximately 300 startups in the healthcare sector emerged in the country.<sup>15</sup> They are offering innovative delivery models and hospital management systems, as well as entering hitherto unexplored spaces such as doctor discovery, medicine delivery, and home services. Health Care at Home offers chemotherapy and ICU services at home, post-surgical care, and counselling, and Care24 helps individuals in the rehabilitation process; Niramai is an AI-led diagnostic platform for breast cancer, Lybrate facilitates online consultation, Practo helps locate doctors and get healthcare information, and Portea brings healthcare to your doorstep.

The government has been offering full-fledged support to these technology initiatives. In an earlier interaction with *India Now Business and Economy*, Ajit Narayanan, CEO of Avaz—India’s first augmentative

and alternative communication device, spoke about how the Ministry of Information Technology helped him secure funding. “Being in India has been critical for us in developing a product the whole world can benefit from,” he said.

## ROBUST FUTURE

With demand for additional bed capacity projected at more than 100,000 beds per year for the next 5 to 6

years until 2022<sup>16</sup>, private players are poised to play an even more critical role in terms of bridging the gap and making healthcare delivery more equitable. As Mr Mishra rightly points out, “Healthcare is one sector where you need the business acumen from the private sector and societal care from the public sector. It is a high-performing set-up for healthcare and that is also the way forward.” ■



**KRISHA MATHUR,  
HEALTH LEAD – INDIA,  
INSTITUTE FOR  
TRANSFORMATIVE  
TECHNOLOGIES**

### How would you assess the growth of healthcare infrastructure in India?

Healthcare infrastructure has grown tremendously in India. For example, the number of PHCs and SCs have increased by 10% and 7% respectively and, the number of ASHAs (Accredited Social Health Activists) and ANMs (Auxiliary Nurse Midwife) deployed on the field have increased by 568% and 66% respectively, between 2005 and 2017. In addition, there has been an explosion of technological innovations such as clinical software (EHRs, wearables, AI and decision support systems) and low-cost medical devices (point-care diagnostic and rapid testing). Recently, many state governments (Telangana, Andhra Pradesh, and Delhi among others) have made a determined push towards digitisation.

### How far can Ayushman Bharat help strengthen the healthcare system?

The scheme, with components of both insurance (financing for secondary and tertiary care) as well as improved care delivery at sub-centres (primary care) is extremely timely. However, these cannot only be

delivered by the government alone. Collaboration with private sector, both to improve care quality as well as reduce costs, is vital. Private sector participation, especially disruptive models, by social entrepreneurs may be a great way to achieve the goals of the scheme.

### The power and scope of PPP models...

Private sector partnership is extremely critical to deliver healthcare effectively. There is a huge opportunity at the bottom of the pyramid to provide low-cost, high-quality care, with the government playing the role of the payer (either through insurance or subsidies).

In Palghar (Maharashtra), we have worked closely with the District Health Administration to pilot a technology-enabled delivery model, where nurses (ANMs) are trained to provide basic healthcare—aided by technology and protocol-based training—in remote government clinics called sub-centres. In addition, patients are educated about basics of good health, to improve health-seeking behaviour, and generate demand. We have deployed a simple EMR application, with POC diagnostic devices to test for Hb, blood pressure, glucose, etc., which has resulted in faster diagnosis and better referrals to PHC and higher facilities, and reduced the distance patients have to travel for simple healthcare needs. The pro-active support of the district government as well as on-the-ground healthcare staff has led to great results.

#### References

- 1 <https://www.ibef.org/download/Healthcare-April-20181.pdf>
- 2 <https://www.ibef.org/download/Healthcare-April-20181.pdf>
- 3 <https://www.narayanahealth.org/about-us>
- 4 <https://www.narayanahealth.org/sites/default/files/download/annual-reports/NH-Annual-Report-2016-17.pdf> -- page 16
- 5 <https://www.ibef.org/download/Healthcare-April-20181.pdf>
- 6 <https://www.ifc.org/wps/wcm/connect/9336b7fb-3056-4db0-bf5b-df-83c627bce0/Apollo.pdf?MOD=AJPERES>
- 7 <http://www.cii.in/PressreleasesDetail.aspx?enc=oStzF/lvDgj9Wkf48HGEI-Wgyr2xxsgU8qGYUIWst1Sfln8OiGWq74aVffMLHMQocWb6g6cyZcPJ9P-8SITwtg==>
- 8 [https://economictimes.indiatimes.com/articleshow/62089571.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](https://economictimes.indiatimes.com/articleshow/62089571.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)
- 9 <http://www.freepressjournal.in/mumbai/ayush-begins-documentation-of-ayurveda-practitioners/1257965>
- 10 <https://www.thehindubusinessline.com/news/ayush-ministry-to-certify-yoga-institutes/article8775552.ece>
- 11 <https://www.entrepreneur.com/article/293412>
- 12 [https://economictimes.indiatimes.com/articleshow/58231272.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](https://economictimes.indiatimes.com/articleshow/58231272.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)
- 13 <https://economictimes.indiatimes.com/industry/cons-products/fmcg/dabur-sets-up-liveveda-store-on-snapdeal/articleshow/50902541.cms>
- 14 <http://www.pharmabiz.com/NewsDetails.aspx?aid=106411&sid=1>
- 15 <https://assets.kpmg.com/content/dam/kpmg/in/pdf/2016/09/FICCI-Heal.pdf>
- 16 <https://www.ibef.org/download/IBEF-Theme-1-15-updated-low.pdf>



# ‘Ayushman Bharat Envisages a System-level Change’

*Dr Vinod K Paul, Member, Niti Aayog, talks to Anitha Moosath about the basic premise of the Ayushman Bharat - National Health Protection Mission, and underlines how it is poised to redraw the country’s healthcare landscape.*

## **Ayushman Bharat lends a new direction to India’s healthcare journey. Could you explain what led to its conceptualisation and its likely impact on universal healthcare in India?**

The Ayushman Bharat - National Health Protection Mission (AB - NHPM) stems from India’s endeavour to provide financial protection for healthcare to its people. We are aware that each year, 6 to 7 crore Indians plunge into poverty due to healthcare-related expenditure—roughly one-third of that is related to hospitalisation expenses. The Union Government has been implementing the Rashtriya Swasthya Beema Yojana (RSBY) with a coverage of ₹30,000 per family per annum for the last few years. In addition, state governments have their own schemes for covering hospitalisation and secondary as well as tertiary care with varying caps. Further, the National Health Policy, 2017 has made a commitment to achieving universal health coverage in a systematic manner. In this context, it was felt that India must have an aspirational National Health Protection Scheme, which covers a significant portion of hospitalisation costs, and has the most needy and vulnerable families as its first priority.

The NHPM offers a benefit to the tune of ₹500,000 per family per annum for 40% of our citizens who represent the bottom rung of our population. This includes not just the poor, but also those above the poverty line who are deprived—thereby, in a way we are moving already into the lower rung of the middle class. There is no limit on the family size, no exclusion on the basis of any existing illness, and also the beneficiaries do not have to pay at all at the point of care. Another unique feature is that it envisages portability across the country.

Beneficiaries will be decided on the basis of the socio-economic caste census, which uses criteria



**Dr Vinod K Paul, Member,  
NITI Aayog**

such as family structure, assets, and so on. The state governments can enlarge the scope of the beneficiaries, provided they meet the budgetary needs from their own resources.

## **What is the proposed execution roadmap for this initiative?**

At the central government level, much of the preparatory work has been completed, guidelines have been prepared, and the strategy for identifying the beneficiaries has been streamlined. We have

**“IT IS BASICALLY ABOUT building a healthy and productive next generation—one that leads a healthy lifestyle, believes in wellness, and makes the best use of the principles of AYUSH as well.”**

held Ayushman Bharat Gram Sabhas, and Ayushman Diwas was celebrated on April 30. We have reached out to a large number of villages and panchayats across the country. Now, the action has truly moved to the states—25 states have signed the MoU so far, and others are coming on board.

The states have to set up their own health agencies and start rolling out preparatory work, which includes hospital empanelment. Also, they have the choice to opt for either the trust model or the insurance model. Once the states complete their work, NHPM will be ready for launch.

#### **How does the government ensure adequate availability of funds?**

This is a centrally-sponsored scheme and, at the same time, a federal mission. So the total spending will be shared between the Centre and the states—60% of the budget will be met by the Union Government and 40% by the states; the north-eastern states and hill states need to contribute only 10%.

Adequate funds will be available for executing the programme. In the Budget speech, an announcement was made regarding raising the existing 3% education cess on personal income tax and corporation tax with a 4% ‘health and education cess’. This will generate an additional ₹11,000 crore. This is a new resource, in addition to the general increase in budget allocation. The state governments will also enhance their health budgets.

#### **As many as 1.5 lakh health and wellness centres are to be set up by transforming the existing sub-centres and primary healthcare centres, by 2022. How will this improve the outcomes in terms of disease prevention and cure?**

So far, our primary healthcare system has encompassed primary health centres and sub-centres, and has largely laid focus on maternal and child health and certain communicable diseases. But this typically takes care of only 15% of the conditions that are required to be addressed at that level. Now, we are enlarging the scope of primary healthcare to include non-communicable

diseases—specifically hypertension, diabetes, and three types of cancer (cervical cancer, breast cancer, and oral cancer)—as the first priority. Those above the age of 30 will be screened and then provided appropriate care.

There is a whole set of additional healthcare needs that have to be addressed by PHCs—geriatric health, eye care, ENT care, care of those with inborn diseases, and so on. There is also a huge agenda for wellness, disease prevention, and public health action—to ensure that our citizens stay healthy and are well nourished; they exercise well and are not obese, they shun tobacco and alcohol and do yoga, and have access to a clean environment. The focus is on preventive and promotive healthcare, and a critical part of the vision is to upgrade and strengthen the sub-centres so that they can deliver the additional aspects of care.

This will also bring basic healthcare closer to people—like ambulatory care, wherein common illnesses can be taken care of. For instance, blood pressure can be checked, and blood tests for diabetes can be done. Basically, it prevents the occurrence of diseases—people would not fall sick if their lifestyles are healthy—and ensures early detection. For instance, if hypertension is picked up at 33 to 34 years of age and the right treatment provided, it will not lead to complications like kidney failure that necessitate a higher level of care, which is more expensive.

So, it is basically about building a healthy and productive next generation—one that leads a healthy lifestyle, believes in wellness, and makes the best use of the principles of AYUSH as well.

Medicines and diagnostics comprise the major part of out-of-pocket expenses. This can be reduced by making PHCs the vehicle for making available important medicines for common health problems and conditions. The health and wellness centres will be supported by additional health workers. They will have the medicines for important diseases and also basic diagnostics facilities. There is this vision for a family health card too, eventually electronic records, which also will be a vehicle for tele-consultations—wherein a mid-level provider can talk to the right people and advise patients accordingly. It will be a strong IT-enabled system.

#### **How will the expertise of private hospitals be leveraged to bolster the scheme?**

A strong primary healthcare foundation is fundamental to any nation’s health system. And this is always the responsibility of the state or the public sector—the national health policy says about 65% of our budget is to be spent on primary healthcare. We have a strong public sector presence in this area.

India has always had a strong primary healthcare system. Upgrading of primary healthcare centres into wellness centres, as part of Ayushman Bharat, will lead to better health outcomes in terms of disease prevention and cure.



Photo courtesy: Dimodia

As for secondary care, there are medical colleges, district hospitals, etc, and public-private sector presence is shared. As far as tertiary care is concerned, the private sector has a bigger presence although there are government hospitals like AIIMS.

The national health protection scheme entails hospitalisation and in-patient care, at both the secondary and tertiary care levels. In order to deliver that, we will use the public health system but also engage with the private sector. The private sector is also a part of the nation's assets; it employs people, it is an investment. The poor and the vulnerable are to be connected to both the public and the private healthcare system with the protection mission bridge.

Private hospitals will be engaged through an empanelment procedure. Their payments will be made on the basis of package rates, which will make sure that the prices are fair and that it is cost-effective care that is being purchased from them.

#### **How would you assess the potential of Ayushman Bharat as a driver of growth and development in the healthcare and ancillary sectors?**

Demand has been created among a large segment of the population, which was otherwise not accessing healthcare. This will become a driver for further development—there will be new hospitals and new services. We are looking forward to expansion, particularly in the underserved areas. A few state governments are already considering setting up a large number of hospitals in the PPP mode. They are also planning to strengthen their public health systems to

cater to the evolving needs.

So, Ayushman Bharat will definitely be a driver for growth and technology expansion, and can generate job opportunities. A lot of jobs will go to women because the health sector has a predominant women presence—physiotherapists, nurses, doctors and mid-level providers. There will be a push for the concept of wellness too, with the health and wellness centres spreading awareness.

#### **Can the National Health Mission (NHM) be considered as a precursor to NHPM?**

NHM has been addressing high-priority healthcare needs, and has made significant improvement over a period of time, across the country—at the primary as well as secondary healthcare levels.

Ayushman Bharat addresses expansion, depth, scope, and the very structure of the primary healthcare foundation in a never-before manner. Strengthening of the primary healthcare system and facilitating access to secondary and tertiary care—as embedded in its vision—is in a way agnostic to narrow priorities. Therefore, Ayushman Bharat should be seen as a system-level change, impinging on the entire health sector. And that is how it is a step beyond the NHM paradigm.

Right now, both these are aligned and they complement each other. Ayushman Bharat is a pathbreaking and ambitious initiative for a 'New India'. It will promote wellness, prevent health loss, increase access to quality care for the most needy as never before, reduce poverty, and help realise the demographic dividend of India. ■





## A SHADE BETTER

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# Insuring Health and Wealth

*The future of the Indian health insurance industry looks promising. Favourable demographics and increasing awareness of the need for preventive healthcare are significant growth drivers for the sector.*

SURYA KANNOTH

**W**hile India has made substantial progress in reducing infant mortality and improving life expectancy, there has been a rise in lifestyle-driven diseases and health risks. And as medical costs spiral in a country with a population of around 1.32 billion, the challenge, and therefore the opportunity for health insurance companies is immense. Considering the sheer scale of the uninsured, the sector has a significant growth potential in the coming years.

Health insurance in India has come a long way—from the old days of general insurers to the post-liberalisation period, which witnessed the entry of several private players. Today, private healthcare insurers play a key role in the shaping goals of access, cost, and quality. This, along with leveraging modern technology will play a disruptive role in the healthcare transformation ahead.

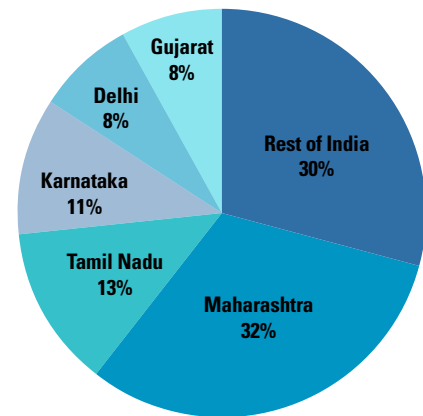
## TOTAL SPENDING ON HEALTHCARE

According to data released by Insurance Regulatory and Development Authority of India (IRDAI), during 2016-17, general and health insurance companies collected ₹30,392 crore as health insurance premium, registering a growth of 24.3% over the previous year, which is the highest ever registered in the preceding five years period.

In terms of market share of health insurance premium, the four public sector general insurers continue to hold larger market share at 63% during FY 2016-17. On the other hand, the share of private sector general insurers in health insurance premium stood at 19% during FY 2016-17 and that of standalone insurers in health insurance premium went up from 11% to 18% over the last five years.<sup>1</sup>

By 2021, Oxford Economics projects revenue from health insurance premiums to reach US\$ 3.5 billion,

## HEALTH INSURANCE PREMIUM - SHARE OF STATES (2016-17)



representing growth of more than 12% annually since 2006. Growth averaged just over 11% from 2006 to 2014. Private health insurance spending has been growing rapidly in the past couple of decades, with a sharp rise to almost US\$ 2.5 billion in 2010 (the swine flu epidemic could have attributed to the spike).<sup>2</sup> According to the Oxford Economics forecast, based on their view of macroeconomic drivers and the increase in government and out-of-pocket spending, resumption of fast growth in the industry is expected from 2017 onwards, rising to US\$ 3.7 billion by 2021.<sup>3</sup>

According to research by Fintelekt, the size of the health insurance market will increase from ₹5,859.7 crore in FY16-17 to ₹21,904 crore by FY 2021-22.<sup>4</sup> This translates to a CAGR of 30% for the next five years.

The combined premium of five standalone health insurers grew by 44% at ₹654 crore in May 2018, compared to ₹455 crore in May 2017, according to data released by IRDAI.



### NEW APPROACHES AND INNOVATIVE STRATEGIES

In order to enhance the scope of health insurance, insurers and the regulator are looking at new approaches and innovative ways to improve access and affordability.

Health plus life combi-products are now allowed to be offered by integrating any life insurance cover offered by any life insurance company and health insurance cover offered by any general or health insurance company. This helps policyholders to buy and continue both life and health insurance policies as a combi-policy instead of taking and maintaining two separate ones. This also helps life and general/health insurers to leverage the strengths of each other to improve the penetration.

Apart from hospitalisation costs, insurers have now begun covering outpatient costs and medical checkups, including expenses incurred due to domiciliary treatment. Some insurers have rolled out healthcare management programmes along with health insurance. For instance, Apollo Munich Health Insurance Company Limited offers its customers renewal premium discounts for walking more. The aim of such measures is to make people more health-conscious and convert the health insurance policy into a wholesome healthcare tool.

Apollo Munich introduced ‘restore’ and ‘multiplier’ features in its Optima Restore Plan.

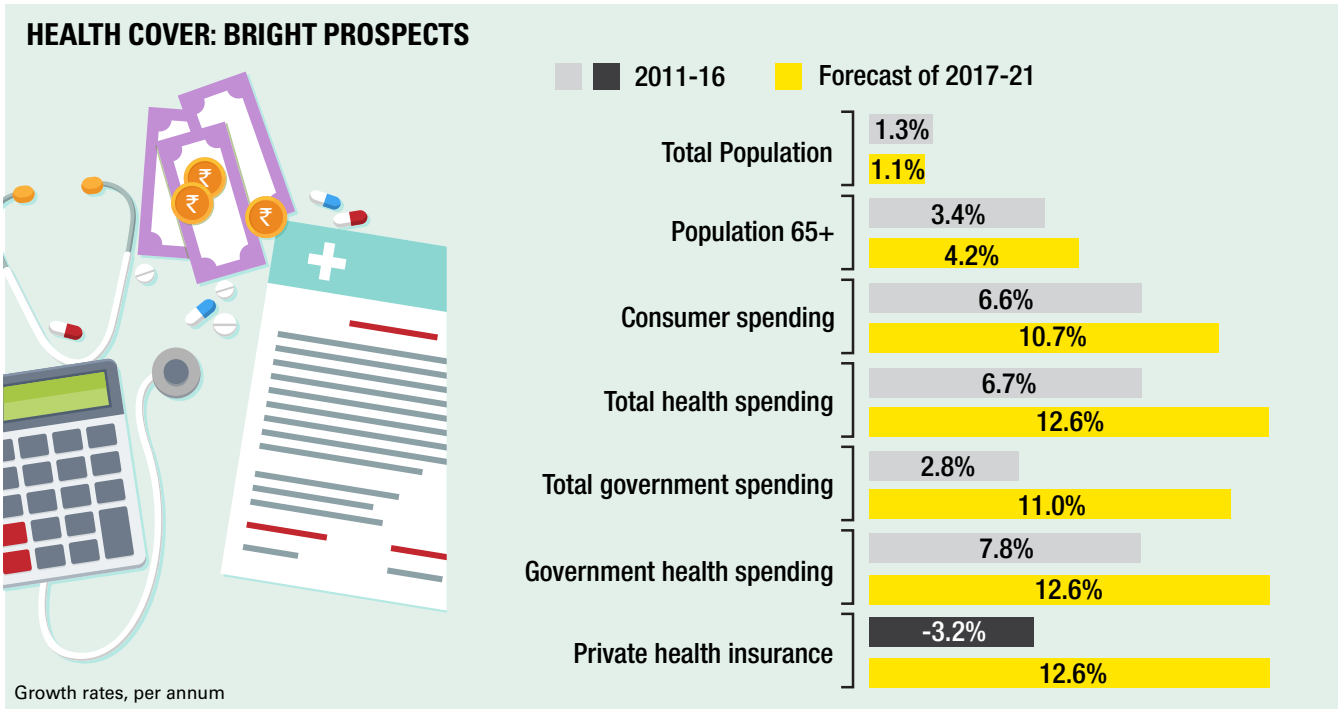
### STANDALONE HEALTH INSURERS

are also designing products specific to certain illnesses which are usually excluded or subject to long waiting period.

The plan became popular with consumers and has now become a standard for other standalone health insurers; in fact, it is now slowly being adopted by general insurers as well.

Max Bupa’s GoActive product does not just cover hospitalisation expenses but aims to support the insured through the year. That apart, they have introduced AdvantAGE, which offers 10% discount on base premium for first purchase, and on all future renewals, provided the age of the eldest enrolled person falls below 35 years.

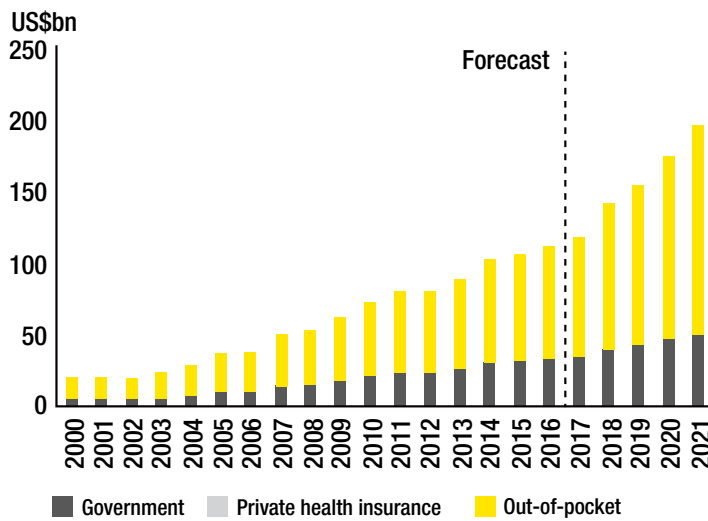
Standalone health insurers are also designing products specific to certain illnesses which are usually excluded or subject to long waiting period. For instance, Religare’s Joy provides for a reduced waiting period of 24 months for maternity-related claims, which is much lesser than usual. Apollo Munich has launched a specific product to cover dengue. Similarly, Apollo and Star have diabetes-specific products Energy & Diabetes Safe in their portfolio which promise a zero-day waiting period for



Source: [https://www.ey.com/Publication/vwLUAssets/EY-global-analysis-of-health-insurance-in-india/\\$File/ey-global-analysis-of-health-insurance-in-india.pdf](https://www.ey.com/Publication/vwLUAssets/EY-global-analysis-of-health-insurance-in-india/$File/ey-global-analysis-of-health-insurance-in-india.pdf)



## INDIA: COMPOSITION OF TOTAL HEALTH SPENDING



Source: [https://www.ey.com/Publication/vwLUAssets/EY-global-analysis-of-health-insurance-in-india/\\$File/ey-global-analysis-of-health-insurance-in-india.pdf](https://www.ey.com/Publication/vwLUAssets/EY-global-analysis-of-health-insurance-in-india/$File/ey-global-analysis-of-health-insurance-in-india.pdf)

this condition while Cigna TTK's Prohealth Preferred offers reimbursement of Outpatient Department (OPD) expenses.

Similar innovations have also been made for personal accident products under which temporary total disability, fractures, transportation of mortal remains, cost of imported medicine, and purchase of blood are covered.

Meanwhile, Bajaj Finance, the lending arm of Bajaj Finserv, is offering no-cost EMIs for health insurance products from various leading providers. Customers buying health insurance under categories such as individual health insurance, family health insurance, maternity health insurance, personal accidental cover, critical illness plan, or health insurance top-up can pay the premium through six easy EMIs.

For this, Bajaj Finance has tied up with leading insurers like Bajaj Allianz Life Insurance, HDFC Life Insurance, Future Generali Life Insurance, Bajaj Allianz General Insurance Company, Tata AIG General Insurance and Max Bupa Health Insurance. The offering will help tackle the problem of underinsurance in India, where customers either do not buy insurance or opt for inadequate coverage due to high premiums.

What is more, with the pervasiveness of the internet and smartphones, access to health insurance has become easier and there is a deluge of IT-related investments and startups focused on digitising health insurance. Meanwhile, IRDAI has formed a working group to study the scope of wearable or portable devices to measure personal fitness of policyholders.<sup>5</sup>

Furthermore, web aggregators such as Policybazaar, MyInsuranceClub, Policy Mantra, PoilcyPlanner, and BankBazaar Insurance have emerged as new channels of distribution and now play a critical role in boosting online sales of healthcare insurance products. Offering a comparative analysis of various policies, these aggregators provide unbiased information that helps investors make informed decisions.

The infusion of government-sponsored schemes has also offered an impetus to the health insurance industry. The Ayushman Bharat - National Health Protection Mission (AB-NHPM) looks to provide free essential drugs and diagnostic services for ailments that do not necessitate hospitalisation (outpatient care) through 150,000 health and wellness centres. This is in addition to the insurance cover of upto ₹500,000 per year per beneficiary family for hospitalisation (inpatient care), for both secondary and tertiary care.<sup>6</sup>

The government's Rashtriya Swasthya Bima Yojana aimed at covering those below the poverty line has also helped insurance companies to create awareness programmes to educate the underprivileged about the importance of health insurance. Close to 130 million people are insured under this scheme and nearly 36 million families have received smart cards for free medical treatment. Also, April 19 has been declared as Insurance Awareness Day by IRDA to penetrate deeper into the masses for insurance awareness. Under the awareness campaign named Bima Bemisaal, IRDA is working towards providing consumer education.

With insurers embracing new technologies and designing more customised policies, disease-specific products, micro-insurance policies, and smartphone-based apps to engage and monitor patient behaviours, the dynamics of the industry have begun to change.

All these indicate that the Indian health insurance market is now replete with new ideas and opportunities, ready to leapfrog ahead and create innovative health insurance programmes and initiatives. ■

### References

- [https://www.ey.com/Publication/vwLUAssets/EY-global-analysis-of-health-insurance-in-india/\\$File/ey-global-analysis-of-health-insurance-in-india.pdf](https://www.ey.com/Publication/vwLUAssets/EY-global-analysis-of-health-insurance-in-india/$File/ey-global-analysis-of-health-insurance-in-india.pdf)
- [https://www.ey.com/Publication/vwLUAssets/EY-global-analysis-of-health-insurance-in-india/\\$File/ey-global-analysis-of-health-insurance-in-india.pdf](https://www.ey.com/Publication/vwLUAssets/EY-global-analysis-of-health-insurance-in-india/$File/ey-global-analysis-of-health-insurance-in-india.pdf)
- [https://www.ey.com/Publication/vwLUAssets/EY-global-analysis-of-health-insurance-in-india/\\$File/ey-global-analysis-of-health-insurance-in-india.pdf](https://www.ey.com/Publication/vwLUAssets/EY-global-analysis-of-health-insurance-in-india/$File/ey-global-analysis-of-health-insurance-in-india.pdf)
- <https://www.moneycontrol.com/news/business/economy/size-of-standalone-health-insurance-market-to-touch-rs-21904-crore-by-2022-report-2356543.html>
- <https://economictimes.indiatimes.com/news/irda-sets-up-committee-to-study-innovations-in-insurance/articleshow/61965921.cms>
- <https://www.india.gov.in/spotlight/ayushman-bharat-national-health-protection-mission>



# RESPONSIBLE HEALTHCARE

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# Punjab - A Model for Transformation

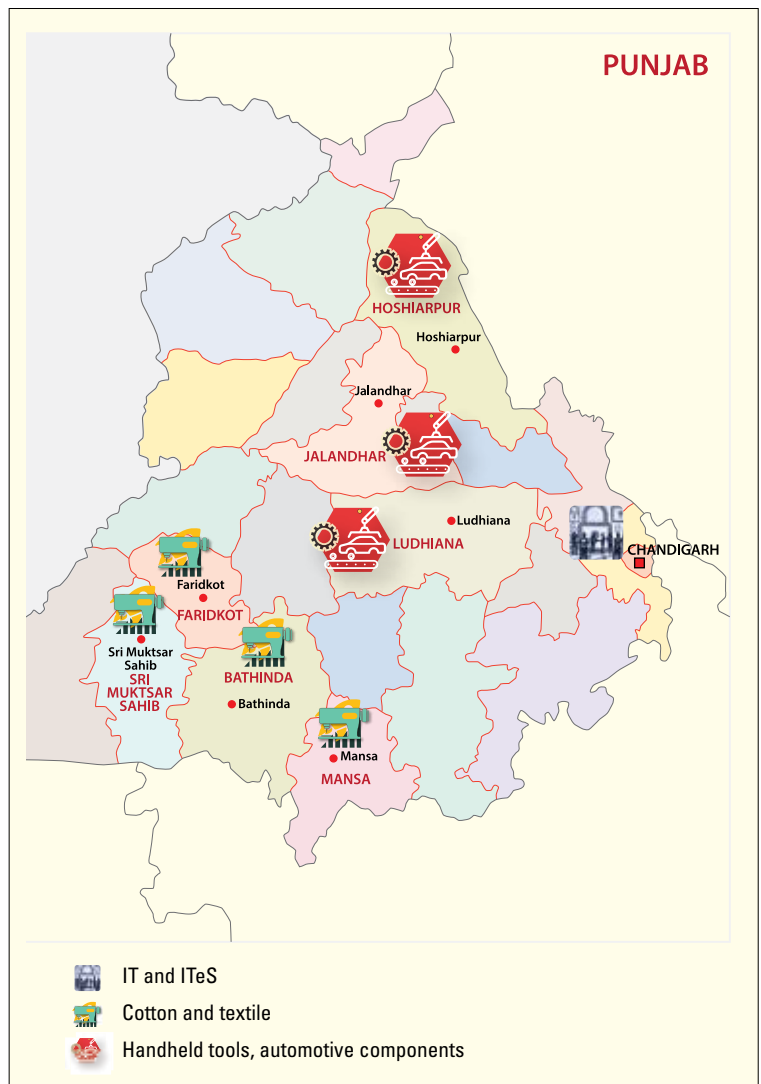
*Punjab, labelled the 'Bread basket of India'<sup>1</sup>, has for long been chiefly an agrarian state. However, in recent years, it has made great strides in the fields of food processing, textiles, IT & ITeS, automotive and auto component production, sports goods, and light engineering goods, and has also been focusing on improving infrastructure and renewable energy.<sup>2</sup>*

ASHUTOSH GOTAD

**P**unjab, throughout history, has most closely been associated with agriculture and as a potpourri of cultures. However, today, the state is equally well-known for rapid industrialisation and human resources development that has attracted investments in many of its extant and also emerging sectors. During FY 2017-18, it reported a GSDP growth rate of 10.11%, which is comparatively higher than the average of all states at 9.80%. The per capita GSDP stood at US\$ 2,451.22. The total exports from the state stood at ₹27,747 crore in FY 2016-17, of which readymade garments, hosiery, yarn, and textiles constituted majority of the share. The state received 34 investment intentions worth ₹1,807 crore in FY 2017-18 along with US\$ 108 million worth of FDI inflows during April 2017–December 2017.<sup>3</sup> Such growth has been possible mainly due to the government's efforts towards improving infrastructure and policy initiatives that are conducive to business.

## ADVANCED INFRASTRUCTURE FACILITATING BUSINESS

Punjab, with its extensive road, rail, and aerial network is well-connected to other states of the country and also many international locations. It has a total road network of 72,212 km, which is trifurcated into 3,309 km of national highways, 1,503 km of state highways, and 58,688 km of rural roads. State Budget 2018-19 has allocated ₹1,067 crore for construction and maintenance of new roads, bridges, and buildings. It has also allocated ₹235 crore for rural roads under Pradhan Mantri Gram Sadak Yojana and ₹300 crore for the Central Road Funds scheme.





Photos courtesy: Shutterstock.com



Punjab produces roughly 12% of the total cereals, and has been a major contributor of many other crops, produced in India.

Railways, in Punjab, serve as the lifeline of many industries irrespective of their scale—connecting industrial units of sectors such as cement, thermal power, oil refining, fertiliser, and manufacturing to their markets and distributors. The state has an impressive rail network of over 2,829.898 km (as of March 2017), which is estimated to be more than two times that of Indian's average rail density. The state government has approved the development of seven railway projects, at an estimated cost of US\$ 305.48 million. In December 2017, a new suburban rail plan has been announced to connect the state capital Chandigarh to other towns; this involves an investment of ₹1,000 crore.

There are three domestic airports, one each at Chandigarh, Ludhiana, and Pathankot, and two

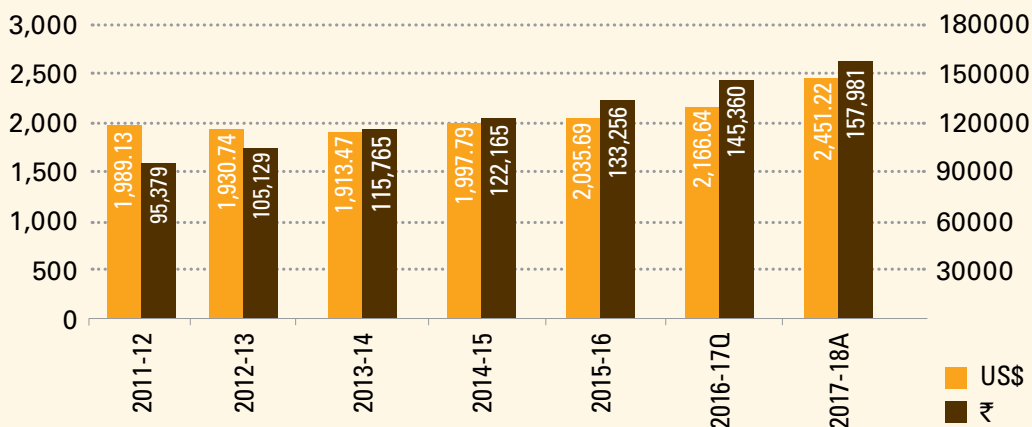
international ones at Amritsar and SAS Nagar, Mohali. The state is also set to get a Greenfield international airport at Machhiwara, clearance for which was given by Ministry of Civil Aviation in March last year.<sup>4</sup>

## POWER GENERATION AND RENEWABLE ENERGY

With total installed power generation capacity of 14,264.97 MW (as of March 2018)—5,468.03 MW under state utilities, 2,238.82 MW under central utilities, and 6,558.12 MW under the utilisation of the private sector—Punjab is a power surplus state and generates substantial revenue from this sector.

Thermal power contributes 9,004.09 MW, hydropower 3,781.65 MW, renewable power 1,282.42 MW, and nuclear power 196.81 MW to the

### PER CAPITA GSDP OF PUNJAB AT CURRENT PRICES

Source: <https://www.ibef.org/states/punjab.aspx>

## THE TEXTILE INDUSTRY

accounts for 19% of the total industrial production and about 38% of the total exports from the state.

total capacity. The state government has laid a lot of emphasis on the usage of renewable sources of energy, the contribution of which increased from 503.42 MW in October 2015 to 1,282.42 MW in March 2018. An investment potential of US\$ 6 billion is projected for a targetted renewable energy generation capacity of 5,400 MW by 2022.

Solar energy being one of the most promising among renewable energy sources, the state government is targeting to achieve 4,200 MW capacity additions in solar energy by 2022. Some of the solar projects to be undertaken include plans to manufacture 20 MW grid connected plants on canal tops, setting up of rooftop solar projects, and a 100 MW solar plant in Bathinda district by Adani Group, that was started in November 2016 at an estimated cost of US\$ 97.75 million. Hindustan Power too commissioned a solar power plant of 50MW capacity at an investment of US\$ 48.34 million.

The government has also proposed plans to achieve 300 MW of power generation using biomass by 2022, and has planned to set up biogas CNG projects in all districts. State run power equipment maker Bharat Heavy Electricals Limited commissioned an 18 MW hydro-electric project in Hoshiarpur district. A new scheme offering tube well connections to small and medium farmers that have land holdings below 2.5 acre is also being initiated by the government.<sup>5</sup>

## EXPORT POTENTIAL

Total exports from the state stood at ₹27,747 crore in 2016-17. Textiles (including readymade garments, hosiery, and yarn) contributed the most, and rice and sports goods too constituted a significant portion of exports. Total agricultural exports during 2016-17 were recorded to be US\$ 293.26 million, and increased to US\$ 394.93 million during the period April 2017 to January 2018.<sup>6</sup>

## MOHALI: PUNJAB'S IT CITY

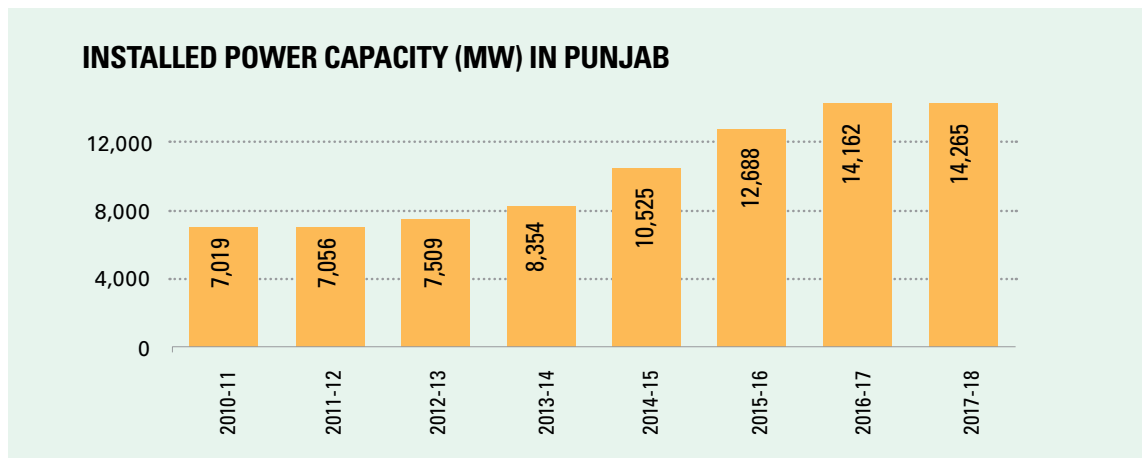
Software Technology Parks of India (STPI), an autonomous body set up by the Ministry of Electronics and Information Technology (MeitY), Government of India, through its Mohali unit, managed exports to the tune of ₹3,876 crore in the last fiscal. The government has earmarked an area of 1,700 acres only for IT and ITeS in the city. Under STPI, there are 125 units registered in Mohali, employing around 30,000 professionals. The Mohali-Chandigarh region registered a cumulative growth of almost 14% in IT/ITeS exports over a period of five years.

In addition, to this there are many more independent units not registered under STPI, which are contributing to the growth of this sector. The state government is providing plots of land, facilitating 23 types of regulatory clearances online, and has several incentives adding up to ₹1 crore per year for new incubators.<sup>7</sup>

## INDUSTRY PROFILE

### AGRICULTURE AND RELATED INDUSTRIES

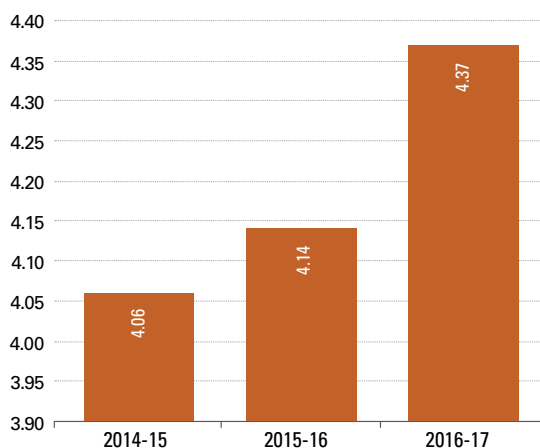
Throughout history, the land of Punjab has been known for being highly fertile and apt for agriculture. Much credit for this goes to the confluence of the five rivers,



Source: <https://www.ibef.org/states/punjab.aspx>

MAJOR ONGOING TEXTILE PROJECTS <sup>15</sup>			
Name of textile park	Location	Area	Key activity
Ludhiana Integrated Textile Park	Ludhiana	60	Circular knitting, flat knitting- manual and computerised garmenting
Rhythm Textile & Apparel Park	Shaheed Bhagat Singh Nagar	20	Garmenting and knitting
Lotus Integrated Textile Park	Barnala	100	Production of towels, melange yarn, bathrobes and training center
Punjab Apparel Park	Ludhiana	85	Production of readymade garments

### EXPORTS FROM PUNJAB (US\$ BILLION)



Source: <https://www.ibef.org/states/punjab.aspx>

from which the geographic region (and the state) gets its name. With approximately 82% of its land under cultivation, Punjab fares higher than the national average, which is approximately 40%.<sup>8</sup>

Wheat and rice are two of the most produced crops, followed by cotton, sugarcane, maize, oilseeds, rapeseeds and mustard, barley, pulses, and sunflower. A variety of other crops along with fruits such as kinnow, guava, mango, pear, peach, and lychee are grown abundantly in Punjab.<sup>9</sup> Agriculture and allied fields like dairy, fisheries, and animal husbandry contributed 29.26% to the state's GDSP in 2016-17, thereby playing an important role in its economy. Of these, the contribution of agriculture alone is 17.23%.<sup>10</sup>

Cooperatives, such as sugar, are also among the major contributors to the economy. The state government, in 2016-17 Budget, announced plans to allocate US\$ 5.04 million for the promotion of horticulture in the state. During 2015-16, two major programmes—Cotton Mechanisation Program and Centre of Excellence on Cotton—were initiated by

Department of Agriculture for the development of the cotton industry.<sup>11</sup>

### PRINCIPAL CROPS PRODUCED IN PUNJAB<sup>12</sup>

Crop	Production 2017-18 E ('000 metric tonnes)
Rice	13,311
Wheat	17,613
Other Cereals	440
Pulses	14
Oilseeds	58
Sugarcane	789

### TEXTILE

The textile industry—riding on the back of abundant raw material, skilled labour, infrastructure and cluster development, and an established industrial ecosystem—is booming in Punjab. It accounts for 19% of the total industrial production and about 38% of the total exports from the state. The south-western region—comprising Mansa, Muktsar, Bathinda, and Faridkot—is the main cotton producing area; Punjab accounts for 14% of all cotton yarn produced in the country. It also has a large base of apparels and design professionals due to the presence of leading design institutes such as the Northern India Institute of Fashion Technology (NIIFT), Mohali.<sup>15</sup>

Punjab is among the largest cotton and blended yarn producers in India with production in 2017-18 estimated to be around 1.267 million bales. Spun yarn production during 2015-16 (as of September 2015), was 431.9 million kg. The state's textile policy provides incentives such as development of clusters, benefits under the central government's Technology Upgradation Fund Scheme (TUFS), electricity at reduced rates, and government support in the acquisition of land for textile mills.<sup>14</sup>



Punjab is a power surplus state and generates substantial revenue from this sector. Guru Nanak Dev Thermal Plant is one of the three thermal power stations in Punjab.



#### SCHEMES/PROJECTS OUTLAY UNDER STATE BUDGET 2018-19

Sector	Proposed budget (in US\$ million)
Agriculture & Allied Activities	860.79
Rural Development	103.58
Irrigation and Flood Control	116.87
Energy	8.24
Industry and Minerals	21.32
Transport	165.72
Science, Technology & Environment	16.86
General Economic	96.29
Social Services	1,795.69
General Services	20.42

Source: <https://www.ibef.org/states/punjab.aspx>

#### LIGHT ENGINEERING GOODS

Punjab has rapidly increasing number of engineering companies manufacturing goods such as bicycle and bicycle parts, machine tools/hand tools, sports goods, and engineering goods and auto spares. This industry contributed 17.9% of the state's manufacturing share in 2014-15 and 22.8% share in industrial employment.

Ludhiana and Jalandhar are known for manufacturing of handheld tools such as wrenches, drills, pullers, vices, hammers, screwdrivers, pliers, spanners, and sewing machines. Ludhiana, along with Batala, is also known for machine tools such as lathes, shapers, milling machines, drilling machines, and special purpose machines for different industries.

The bicycle manufacturing industry is flourishing in Punjab. The state accounted for around 17.3% of the bicycle production and 76.9% of

**PUNJAB IS AMONG THE largest cotton and blended yarn producers in India with production in 2017-18 estimated to be around 1.267 million bales.**

bicycle parts production in India in 2014-15. The industry is primarily located in Ludhiana.<sup>16</sup>

#### IT AND ELECTRONICS

The Indian IT and ITeS market is estimated to expand at a CAGR of 9.5% to ₹2,000,000 crore by 2020. The Government of Punjab has drafted IT policies with an aim to promote the state as an attractive destination for investment in the sector and offers considerable incentives too. The city of Mohali has been developed as an IT and ITeS hub in the state. The administration has established Rajiv Gandhi Chandigarh Technology Park, Chandigarh which has brought in projects and investments from various multinational companies in the country and across the globe. Software exports from the park stood at US\$ 346.8 million in 2014-15.

Foreseeing the potential the state held for this sector, Infosys Limited, which recorded a consolidated revenue of US\$ 2.69 billion in the third of quarter of FY18, established a development centre—one of the thirty two across the country—in Mohali back in 2001.<sup>17</sup>

#### AUTOMOTIVE AND AUTO COMPONENTS

The automotive sector in Punjab mainly comprises

light commercial vehicles and farm equipment manufacturers, dominated by companies such as International Tractors, Punjab Tractors, and Swaraj Mazda. The auto components industry—producing everything from nuts and bolts to shafts, radiators, axels—has mostly SSI units, a majority of which are located in Ludhiana, Jalandhar, Hoshiarpur, and Phagwara. Punjab ranks high in tractor production and use, with a density of 85 units per 1,000 hectares of land compared to the world average of 19.4.18

#### PETROCHEMICALS AND FERTILISERS

This is a promising sector and is poised for tremendous growth in Punjab. Industrial activity includes refining of petrochemicals, chemicals, fertilisers and other related products and their distribution. The state consumed nearly 1.92 million tonnes in chemical fertilizer nutrients in 2016-17. Various initiatives have been undertaken by the government under the Soil Health Management (SHM) programme, one of which is the strengthening of the existing quality control procedures for fertilisers in laboratories.<sup>19</sup>

#### THE WAY FORWARD

Punjab Vision 2022 is aimed at involving society and the leadership to work in a cohesive manner by integrating strengths and competencies in key areas. Under this, the administration aims to improve and strengthen these areas by providing quality education to all people, including those in rural areas, by building one school every 2 km and imparting practical knowledge by using a combination of workshops and industrial training; encouraging SMEs through financial and policy initiatives; establishing at least one captive nuclear power plant and adopting a mix of energy sources for power generation; diversifying the range of crops subject to demand in the global market and modernising agriculture techniques; promoting investment from agro-based services industries and adopting e-governance to enhance ease of doing business; establishing primary healthcare units covering wider areas; and connecting major towns through four- and six-lane highways and establishing Bus Rapid Transport Systems in all major cities.<sup>20, 21</sup>

The recently announced State Budget has many major initiatives lined up. These include allocation of ₹4,250 crore in debt relief to farmers and an additional ₹6,256 crore worth of free power. The government

## PUNJAB VISION 2022 IS AIMED at involving society and the leadership to work in a cohesive manner by integrating strengths and competencies in key areas.

has also sanctioned the development of a dedicated marble market, transport hub, and an automobile market. Grant for universities will receive a hike of 6% and an allocation of US\$ 15.75 million has been made for upgradation of infrastructure in government medical colleges. Further, a commitment of making all municipal areas defecation-free under Swachh Bharat has been made with the allocation of ₹100 crore.<sup>22</sup>

Punjab has been a star performer during the glory days of the Green Revolution and continues to be so even today. It has demonstrated equal enthusiasm and capabilities for industrialisation and digitisation too. This, combined with the development schemes rolled out by the government and the active participation of the private sector, make Punjab a major contributor to the country's economy. ■

#### References

- 1 <https://www.reuters.com/article/us-india-election-punjab/punjab-bread-basket-of-india-hungers-for-change-idUSTRE80T00U20120130>
- 2 <https://www.ibef.org/states/punjab.aspx>
- 3 <https://www.ibef.org/states/punjab.aspx>
- 4 <https://www.ibef.org/states/punjab.aspx>
- 5 <https://www.ibef.org/states/punjab.aspx>
- 6 <https://www.ibef.org/states/punjab.aspx>
- 7 <https://timesofindia.indiatimes.com/city/chandigarh/in-it-exports-mohali-beats-rest-of-punjab/articleshow/62600202.cms>
- 8 <https://www.ibef.org/states/punjab.aspx>
- 9 <http://www.punjabdata.com/Agriculture-In-Punjab.aspx>
- 10 <http://www.punjabdata.com/Agriculture-In-Punjab.aspx>
- 11 <https://www.ibef.org/states/punjab.aspx>
- 12 <https://www.ibef.org/states/punjab.aspx>
- 13 <http://www.investpunjab.gov.in/Static/Textiles>
- 14 <https://www.ibef.org/states/punjab.aspx>
- 15 <https://www.ibef.org/states/punjab.aspx>
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# Truly, a household name

*When the TTK Group, inspired by Denis Papin's innovation, brought the pressure cooker to the country in 1949, they ushered in a paradigm shift in the concept of cooking—making it easier, safer, and smarter. Since then, they have always been tempering their growth strategy with a dash of innovation—30 product categories developed in a span of almost seven decades, a significant presence in every continent, and a turnover that crosses ₹30 billion speak volumes about it—and blending it with the right proportions of quality and affordability. Mr Chandru Kalro, Managing Director of TTK Prestige, flagship company of the group, talks to India Now Business and Economy about the company's growth journey, inflection points, and what makes the brand the first choice in millions of homes.*

TTK Prestige launched their flagship retail chain in 2003 called Prestige Smart Kitchen (now known as Prestige Xclusive) to sell their products exclusively.

## Could you tell us about TTK Prestige's inception and growth in India?

TTK Prestige was incorporated in 1955. We pioneered the concept of pressure cooking in India since we believed it was the most appropriate for an energy-starved country like us. We started by importing pressure cookers from England and then started manufacture. We were the first to manufacture pressure cookers, therefore.

The journey was arduous and involved door-to-door, town-by-town demonstrations, and today, it is almost the first appliance that comes into the kitchen. We were in the pressure cooker [business] until 1993, after which we launched non-stick cookware.

In 2000, the company went through an exercise of transformation and we decided to leverage the brand beyond pots and pans, and got into appliances. From here began the journey of providing complete solutions

Photo courtesy: TTK Prestige





**Mr Chandru Kalro, Managing Director, TTK Prestige**



for the Indian kitchen. We were on a high growth path. This journey has today made us by far the largest player in India for kitchen appliances.

**In an interview based on his book *Disrupt and Conquer*, Mr TT Jagannathan, Chairman, TTK Group, stated that one of the key innovations that saved the company during a rough patch was the gasket release system. Could you tell us more about it?**

Pressure cookers are all about safety. But while the engineering and design of the pot are critical, the safety system parts are also critical. We found that there were a lot of duplicate spare parts in the market which compromised the safety of the product. Mr

Jagannathan then thought of a solution that would make the cooker completely safe in spite of the spurious safety plugs. The innovation then spurred the market into a growth phase from a stagnant phase. The company has grown at a CAGR of 27%, from 2003 to 2013.

**How do you assess TTK's global opportunity after the acquisition of UK's Horwood Homeware?**

The brand Prestige belongs to us only for India. Therefore, we wanted to establish a global presence with brands that were credible. We bought Horwood Homewares, which is a well-respected company in the UK with four brands namely Horwood, Stellar, Judge and Kaufmann. We are aggressively exploring

opportunities to expand the footprint of Horwood in the developed markets. It is a long-term investment, and so far there has been reasonable progress.

**From the iconic prestige cooker, TTK has extended its brand across categories, such as stoves, electric and non-electric kitchen appliances, and home cleaning. How has product and design innovation helped the company?**

At the heart of this success story is 'innovation'. We have launched 75 to 100 new products year after year, for the last 15 years. All these products are offered as solutions after careful mining of consumer insights and understanding pain points. We do not offer gimmicks; we try and offer solutions that will enhance the experience, and are in line with today's lifestyles.

**What has been Prestige's differentiated strategy to capture and sustain market share? What would the company be focussing more on—offline channels or online platforms—now that consumers are going digital for their shopping needs?**

Innovation leads to differentiation and thought leadership. Hence, in a crowded market, we are sustaining leadership in our core categories and establishing leadership in all categories we operate in. When we launch a product, the point of differentiation must add value to the product and the customer. Hence, a position value equation works for us and enhances equity with the customer.

Prestige Smart Kitchens was a marketing innovation that we did. When we were launching products that we were not known for, it was difficult to get distribution. Hence, we came up with this idea of an exclusive store that would lead the existing stores in the market for customer browsing and buying experience.

The initiative gave us direct contact with the customer, which helped get

## KEY INFLECTION POINTS

**1982**

Gasket release system innovation



**1984**

Pressure pan innovation



**2001**

Launch of appliances



**2003**

Prestige Smart Kitchens (TTK Prestige's own franchised exclusive outlets)



**2005**

Inner lid pressure cookers



**2006**

Small appliances



**2007**

Launch of induction cooktops and the entire solution for cookware

new insights for more new products. The success here helped in driving distribution for our new products, and therefore established the large footprint that we have today across all channels, old and new.

We are today present in all formats, large and small, unorganised and organised, direct to customer and B2B, and now also dominate online channels. The Prestige Smart Kitchen, therefore, has been instrumental in making the brand what it is today.

**What is your perspective on growth in India's manufacturing sector in the next few years? How will Make in India provide a boost?**

We believe that the Indian manufacturing sector is at an important inflection point. We are today, however, not as competitive in many areas as we should be, but we are developing faster than most people give India credit for. For this to happen, there is a lot that has to change—mindsets, eye for international quality products and service, India's infrastructure etc. A lot has been happening recently. Brand India has been enhanced. Administrative and tax bottlenecks are being removed. What we need from here is a quick build-up of scale and quality, which I think is happening.

**Future plans, in terms of manufacturing plants, new products, and exports...**

We are entering the next phase of expansion of capacities and also adopting new technologies in our plants. Our product pipeline is constantly being filled with innovative products. We believe that we will only hasten the pace of the launch of new products in all our categories. We are actively looking at developing strong partnerships in developed countries and have made good headway. The results will be seen from this fiscal year onwards.

*(As told to Melissa Fernandes)*



## ON THE RIGHT TRACK

India's electronic products industry is expected to reach US\$ 75 billion by 2017



For updated information on Indian business and economy, log on to [www.ibef.org](http://www.ibef.org)





# Voice of the Future

*The voice of citizens—in policymaking, governance, sustainability practices, and so on—is an integral part of any democracy. Equally important is the voice of children, its future inheritors. Launched as a joint venture by two NGOs Public Affairs Centre and Swabhimana, Children’s Movement for Civic Awareness (CMCA) has been transforming thousands of youth each year into thinking and active citizens—thereby shaping an inclusive and sustainable society.*

MELISSA FERNANDES AND ASHUTOSH GOTAD



**Priya Krishnamurthy, Managing Trustee, CMCA**

“We have made a beginning in longitudinal tracking and the first reports confirm our belief that the seeds we sow do continue to bear fruit over time. CMCA acknowledges the power of a few committed people to change their communities or of one student to influence a whole family. Such efforts are captured in discussions and reports filed by students and in focus-group discussions.”

**I**n the mid and late '90s, during the IT and biotech boom, Bengaluru faced many environmental and infrastructural challenges. The city was growing as one of the fastest in Asia, but the pace seemed more chaotic than streamlined as tree-lined roads and gardens gave way to industries. Although several NGOs articulated the woes of the citizens, there was no particular organisation voicing the concerns of children—the future residents of the city.

To address this need gap, two prominent organisations in the city, Public Affairs Center and Swabhimana, started CMCA as a joint initiative in 2000 with the launch of a cycle rally, which saw the participation of over 3,000 schoolchildren. This movement evolved into summer camps and then into CMCA Clubs. The CMCA Club gained popularity and its impressive growth propelled the two parent organisations to launch CMCA as an autonomous body, registering it as a public charitable trust in the year 2009. Today, the organisation is functional in many regions, with the largest presence in urban and rural Karnataka and Maharashtra.

## AN AMBITIOUS VISION

CMCA believes in empowering young people to live by the values of democracy, in harmony with nature, and engaged in collective action for equitable development. They do this by engaging with people at the grass-roots level in educational institutions and communities through experiential programs that impart citizenship values and life skills. Simultaneously, they also work towards integrating citizenship education into educational policies and practices.

## OVERCOMING CHALLENGES

CMCA's first challenge was to convince people that citizenship education was important. Alongside, they had to also convince companies, school managements, and parents that it is inseparable from academic, vocational, and even life-skills education. One has to look beyond traditional education—which promises

**“CMCA BELIEVES IN EMPOWERING young people to live by the values of democracy, in harmony with nature, engaged in collective action for equitable development.”**

employability—and invest time and money in nurturing a free-thinking, law-abiding, secular, and democratic society, which is the basis for personal and collective well-being.

Further, they also had to work towards spreading awareness about democratic values, and inspiring action among citizens and students. As per an IMRB International report, parenting and tutoring were not being done right, often struggling to achieving a balance between being ‘too strict’ and ‘too lenient.’ “It took us some time, training, and effort to enable CMCA educators to un-learn the way they were taught, and also to make students adapt to our way of teaching and learning,” says Priya Krishnamurthy, Managing Trustee, CMCA.

## EDUCATING, THE CMCA WAY

With over 300 volunteers, 32 full-time staff, and 11 consultants, CMCA has been able to run several key experiential intervention programmes such as:

**CMCA Club:** A CMCA Club comprises a group of students of the 8th grade. In most schools, the entire grade is part of CMCA and there are four to five clubs. A teacher-coordinator is assigned by the school to each club and a weekly class is assigned to CMCA.

**CMCA Magic Cap:** Magic Cap is a storybook that instils critical thinking, empathy, and citizenship skills and values. It needs less classroom time, and each story is a standalone module, allowing for flexibility. This makes it suitable for partners to use it in their own school-based programmes and learning centres.

**CMCA Plus:** CMCA Plus is an outreach initiative that meets the needs of any school or individual or





“WITH OVER 300 VOLUNTEERS, 32 full-time staff, and 11 consultants, CMCA has been able to run several key experiential intervention programmes.”

organisation involved with children and interested in inculcating vital and hands-on citizenship skills as part of their overall program. Under this, they conduct training programmes for teachers, educators, and volunteers along with course material, which includes visual teaching aids and a guide for facilitators.

**Campus Yuva:** This is a 12-hour semester course in colleges designed to help them meaningfully comply with the Supreme Court order for conducting fundamental duties courses as a compulsory credit course.

**Community Yuva:** This five-year strategic intervention energises youth club leaders of a district to transform their youth clubs vis-a-vis the areas of governance and chosen activities/programmes/interventions so as to impact local communities and villages.

While CMCA continues to focus on civic and environmental issues and empowering students to engage with the government, they have broadened their scope and thinking by adopting a rights-based approach in school programmes with initiatives like RTE. CMCA classrooms provide students an opportunity to examine their beliefs and prejudices and offer them opportunities to understand the complexities of caste, class and gender discrimination, and the perspective

of development.

In May 2017, CMCA completed the impact assessment exercise for 2016-17. A similar exercise will be conducted for 2017-18 at the end of the academic calendar. On the whole, there has been a significant positive change from baseline (20%) to post intervention (48%).

### THE CMCA IMPACT

CMCA’s initiatives have given voice and encouragement to children who have brought about a change in faulty practices at the administrative level.

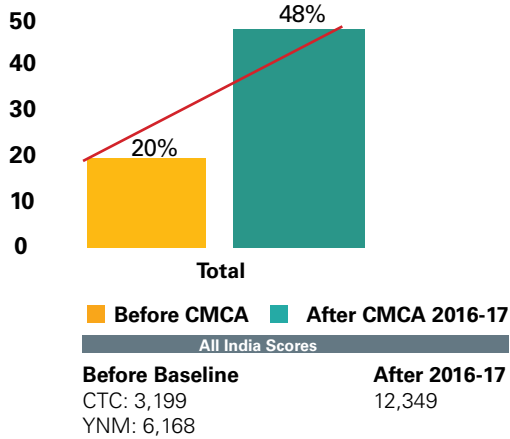
Himanshu Thiske, a 15-year-old student of Bharti Krishna Vidhya Vihar School, Nagpur, Maharashtra noticed that a faulty traffic light at a junction near his neighbourhood was the cause of major traffic jams and affected daily commute, inconveniencing citizens. He called up the traffic police helpline, filed a complaint, and pursued the matter till it was resolved.

Upon noticing the unclean condition of streets in her neighbourhood, Srividhya, a student of Maharishi Vidya Mandhir Sr Sec School, Hosur, Karnataka contacted the municipal authorities and got garbage collection regularised.

### YUVA NAGARIK METER SURVEY

The Yuva Nagarik Meter (YNM) is CMCA’s pioneering national benchmark study to establish a baseline of democratic citizenship values of youth in urban India. A survey under YNM, for the first time, helped the country gather reliable data on the levels of knowledge, comprehension, attitudes, and values of young Indians pertaining to this area. It offered insights





▲ On the whole, there is a significant positive change from baseline (20%) to post intervention (48%)

The percentages given are based on a series of responses to questions and situations that indicate one's dispositions towards democratic citizenship. Here are few examples of the responses:

▲ It is alright to violate rules because one can easily escape by bribing officials



▲ Women have no choice but to accept a certain degree of violence



into young India's views on issues such as rights and responsibilities, democratic governance, adherence to civic rules, gender equality, diversity and social justice, and environmental conservation.

### TOWARDS A SUSTAINABLE FUTURE

CMCA is committed to its 'theory of change' and aims at reaching a million children over the next five years. Forging partnerships with entities that work with the youth, the organisation will be focusing on providing powerful plug-in citizenship components, which will add tremendous value to their programmes and interventions.

With initiatives such as alternate syllabi and pedagogy—their 12-hour semester course in colleges is an example—CMCA has emerged as a resource and training centre to both government and non-governmental organisations and individuals working in this space. Their ultimate goal is to make the citizens active participants in the country's growth journey and secure a just and humane society for all. ■



Photos courtesy: CMCA

Reference  
\*YuvaNagarik Meter 2015, Children's Movement for Civic Awareness (CMCA). Field research conducted by Social Research Institute IMRB International

Darwinbox founders Rohit Chennamaneni (left), Chaitanya Peddi (centre), and Jayant Paleti.



# Redefining HR

*Making HR a strategic function rather than a tactical one was the premise on which Darwinbox was founded. An HR tech platform, it gives an employer a 360-degree view of an employee—performance trajectory, salary, promotions—thus easing the decision-making process. India Now Business and Economy speaks to its founders Jayant Paleti, Rohit Chennamaneni, and Chaitanya Peddi—to discover the influence of digital innovation in a significant function such as human resources.*

## **How did the concept of Darwinbox take shape?**

In November 2014, when working for a corporate consulting firm, Jayant realised that the companies he was advising could have better understood the HR functions of the company they were merging with. In addition to that, the founders had no idea about attrition in their own company and believed that it was less than what it actually was.

We casually discussed our experiences with difficult-

to-use HR software. We set out to study the HR tech market in India and looked at the various products available. We discovered that most focussed on only one or two aspects of the HR's role.

The need of the hour was a comprehensive, integrated product that could provide a one-stop solution to all the technical aspects of the HR department. There was a huge gap in terms of the demand and supply of quality in end-to-end HR technology for enterprises.

**How did you bridge this gap?**

So we decided to build a platform that can make the HR department intelligent. Darwinbox takes care of all HR needs across the employee life cycle—from recruitment, onboarding, employee management, payroll, leave, transfer, and performance management to exit management.

We want to engage and empower employees while automating and simplifying all HR processes. Our foundation is built on ensuring that the product is intuitive (higher usage and lesser learning time) and integrated across all facets. Our solution not only caters to operational/tactical workflows for HRs, it also helps companies engage their employees over multiple channels.

We follow the SaaS model (software as a service), so there will be no large upfront costs/ licence fees, or the need to invest in costly IT infrastructure. We charge a subscription fee per employee per month; this pay-as-you-go pricing model gives our clients the flexibility to grow without having to worry about licence restrictions and IT infrastructure limitations.

**What is the profile of your clientele?**

Darwinbox was built to solve the complexity in HR, and to make the end user’s life much simpler with the most intuitive interface possible. At present, we serve more than 100 enterprises with a total of 250,000 plus employees. Our marquee clients include Dr Reddy’s, Paytm, Nivea, Myntra, GVK Bio, Delhivery, Ekart, Swiggy, and more.

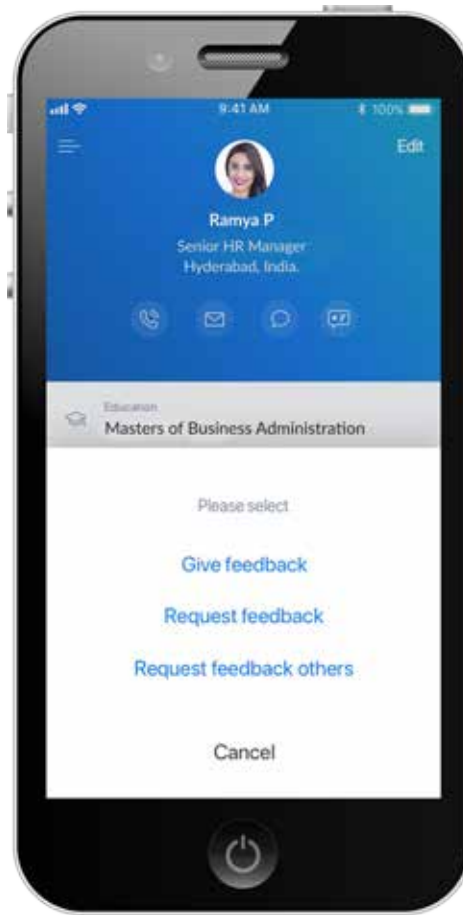
Being a pure-bred product company, our primary offering to our clients is our HCM product (serviced in a SaaS model - pay per employee). While a majority of our clients subscribe to the entire suite of HCM modules available, we also provide them with the flexibility to choose specific modules as per their requirement. The solution can function modularly to serve only the talent management or workforce management needs of an enterprise.

**To start operations with a modest capital meant that investments needed to be made carefully. Could you give us insights into your investment journey?**

We always knew that product superiority and market-fit will drive success in the long run, be it in terms of customer acquisition or to raise funds. Even in our early days, when the operations were funded by self-investments, we prioritised design and tech talent expenses over every other aspect.

While capital was critical for us to grow, we sought investments that can be strategic in terms of the

“DARWINBOX WAS BUILT TO solve the complexity in HR, and to make the end user’s life much simpler with the most intuitive interface possible.”



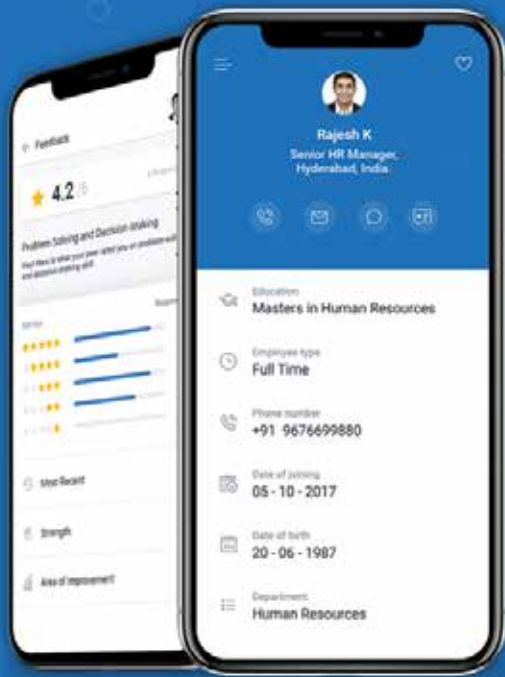
Darwinbox provides HRs with a 360-degree view of an employee or team.

support system they offer. When we raised our seed round of funding, the market sentiment around startup investments was not the best and it was difficult for us to find venture capitalists who understood enterprise tech, which is quite unlike the consumer tech that is prevalent.

We are glad we raised funds from Endiya Partners, 3one4 Capital, and Lightspeed India Partners who came with extremely deep-rooted experience in building enterprise tech companies.

The latest round of investment was for US\$ 4 million in July 2016 from Lightspeed India Partners along with our seed investors. Presently, we operate in the Indian





## A NEW-AGE, INTUITIVE HCM PLATFORM BUILT FOR ADOPTION AND SCALABILITY



Photos courtesy: Darwinbox

Automating HR processes, Darwinbox provides six comprehensive features set across employee life cycle.

geography while we are expanding to international markets, beginning with Southeast Asia. We have been growing at three times year-on-year and have gained a critical mass of clients and annual revenues nearing US\$ 2 million.

### How has the Digital India initiative helped businesses such as Darwinbox?

As our end users are employees constituting the organised workforce of India, we primarily consume information through this initiative, concerning employee identity and taxation. From Aadhaar verification for employee background checks as a part of hiring to e-taxation solutions, we integrate with digital solutions that are directly or indirectly an outcome of Digital India.

The Startup India initiative too has positively impacted the sentiment of the entire startup ecosystem, helping us thrive and receive all the support we required.

### There are many HR tech startups in India—some established and some relatively new. What is your differential strategy in such a competitive market?

The HCM market today is populated by either traditional ERP solutions that have not been received well by the end users (employees), or by individual solutions that only cater to one of the many HR aspects.

“AT DARWINBOX, FROM THE first point of contact to the last, it is one organisation and ideology that touches the clients.”

There are HR tech providers like SAP SuccessFactors, Oracle Fusion HCM, Ramco HCM, Adrenalin, and Cornerstone On Demand, which like us offer services for mid- and large-sized firms. In such a scenario, Darwinbox differentiates itself in five major ways:

- Intuitive user experience: Enterprise tools lag far behind today’s consumer apps (for example, Uber, Facebook) with respect to quality of technology, usability, and scalability. At Darwinbox, we aim to bridge this new ‘digital divide’ and build products that are as effective as your daily use products. Our HRMS platform is built with a clear focus on intuitiveness and scalability, with standards of best-in-class consumer apps.
- Integrated platform: We take care of all employee needs with one login ensuring seamless information flow between multiple modules with no loss in data/errors due to manual intervention.
- Intelligent: Analytical frameworks to not just report from available data but focus on decision-making frameworks, which are data-driven. For example, succession planning, interviewer effectiveness,



- attrition prediction, and promotion effectiveness.
- **Open platform:** Darwinbox is built in an open API framework, which allows it to easily integrate with any system in the future which again will improve the experience of both the employees and administrators alike.
- **Faster time to value:** At Darwinbox, from the first point of contact to the last, it is one organisation and ideology that touches the clients. Insights gained during the sales process are carried forward to the implementation stage by the same team to drive results five times faster than the alternatives available in the market. It also ensures that what is promised is ultimately delivered.

### How does Darwinbox act as a talent management system?

Primarily focussed on driving culture-impacting and talent-critical strategic HR initiatives through technology, our platform facilitates engagement across multiple stages of the life cycle. Pulse surveys and organisation-wide social network keep the engagement levels consistent and also provide the managers with a way to identify disengagement.

The talent management suite in Darwinbox is designed to be continuous and collaborative. It encourages regular feedback and captures more than just a single-dimension view of the manager by gathering inputs from multiple stakeholders. Thus, it

reduces the probability of biased judgements. Also, our career development feature allows employees and employers to align mutual aspirations.

Above all, our technology strives to deliver insights to management and decision-makers from all the interactions and data captured. AI-driven analytics highlights the risk of attrition based on multiple indicators like attendance patterns, manager changes, transfers, performance ratings, and rewards, helping organisations to arrest attrition at an early stage.

### What is the way forward for the organisation from your perspective?

Darwinbox now consists of six modules; we plan to build more modules and integrate with other enterprise apps to complete the HR ecosystem. With an aim to deliver the most intuitive and insightful enterprise HR technology solution, our development efforts are channelled towards innovations like voicebot, which we have launched, and will continue to invest in similar deep-tech solutions. The other major focus would be on accelerating our marketing and sales efforts to expand the product across the country as well as to plan global expansion. We have built our product to global standards and intend to take it to other geographies.

*(As told to Melissa Fernandes)*

Darwinbox founders, two IIT-IIM alumni and an XLRI alumnus, started the company with an investment of less than ₹30 lakh in 2014.



# Clothed with Divinity

*With its bright colours, intricate lines, and mythological themes, pattachitra exudes a subdued charm. In its journey down the centuries, this traditional art of Odisha has assumed a tone of contemporariness too.*

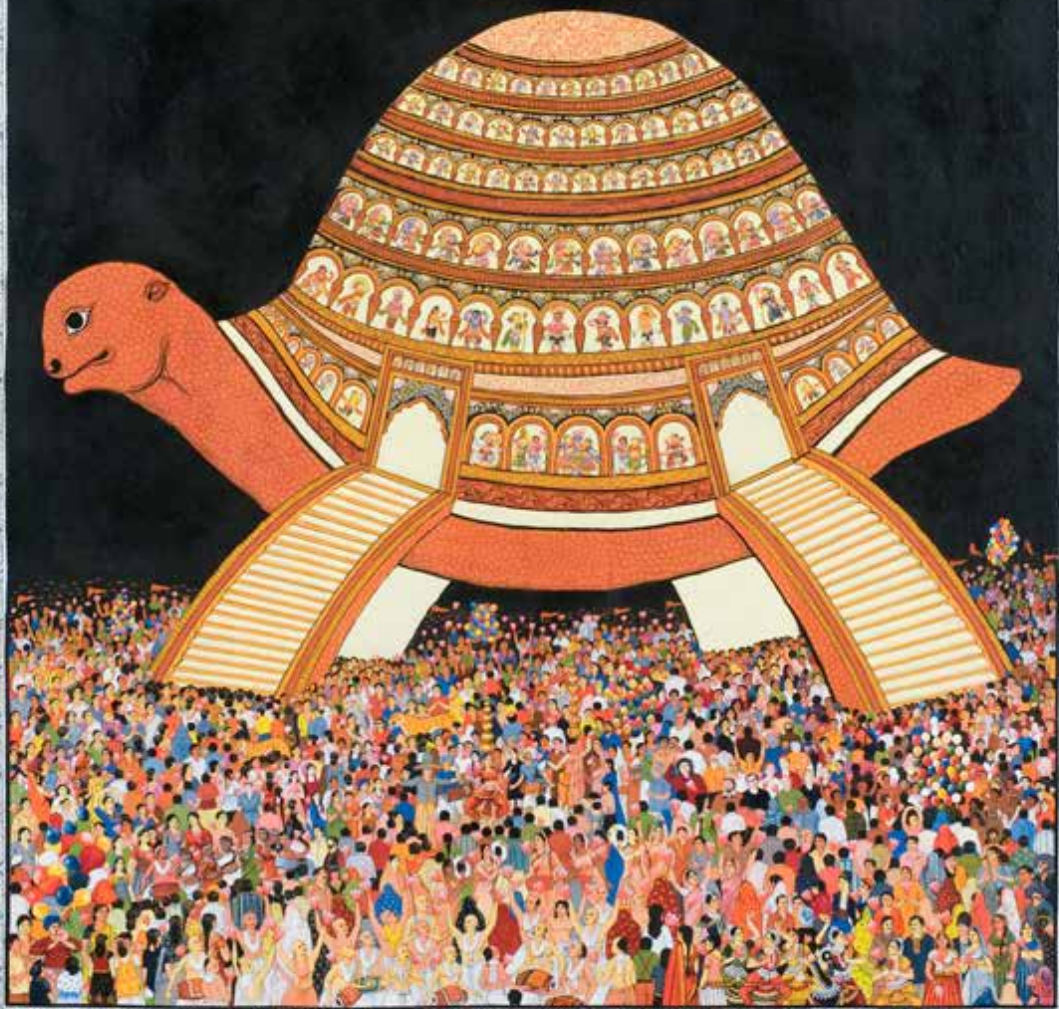


Photo courtesy: Tarshito Nicola Strippoli

This turtle carrying a temple is inspired by the mythological kurma avatar, one of the ten incarnations of Lord Vishnu.



TEXT: CHITRA BALASUBRAMANIAM

**A** lady playing an instrument, her eyes, fingers, and expressions capturing the mood to perfection; *raas leela* of Lord Krishna with his beloved consort; images of Lord Jagannath, Balabhadra, and Subhadra; a scene or story from Ragachitras (giving form to melodious ragas); Ganjifas; scenes from the Ramayana; folk stories, and more—these make up the fascinating world of pattachitra.

The style and drawing are extremely fine, stylish yet rooted in folk art. The subtlety of the natural colours stand out. Unlike the usual folk paintings, it is highly sophisticated and well-composed. The painting derives its name from the material used to make it—*patta* means cloth in Sanskrit and *chitra* means painting. These paintings on cloth, native to Odisha, are drawn by artists known as *chitrakaars*.

There are many facets to pattachitra—from religious, ritualistic, folk, and mythological to touristy and contemporary. Today, it straddles the spectrum of diverse themes comfortably; on one hand, it pays homage to Lord Jagannath of Puri while on the other, it adorns galleries in its modernistic avatar. In many contemporary paintings, the drawing style follows the pattachitra tradition while the theme changes as per the artist's perspective.

It is a remarkable form of painting which has evolved over centuries, embracing in its wake the changes of time; yet it has remained true to its execution and making. It continues to be made in the same painstaking manner as it was done years ago. The painting is linked to the Lord of Puri, and is irrevocably a part of the ritual and grandeur of the

deity. These exceptional paintings have also received the GI (Geographical Indication) tag—miniatures as well as paintings spanning several feet are equally breathtaking.

Historically, several researchers trace the beginnings of pattachitra to the 5th century BC. The GI indicator application though traces it to the 12th century when the Jagannath temple was built, where the primitive style of these paintings have been referred to. During Jyestha Purnima, the wooden idols of Lord Jagannath, Balabhadra, and Subhadra are taken out for a ritualistic bath. They are then sent for repainting which takes about 15 days. During this period, it is the pattachitras of these three idols that are worshipped. This shows how it is a temple art too.

The original centre for making pattachitra is Raghurajpur in Puri district. It is said that the followers of Lord Jagannath used the patta paintings to spread the faith within Odisha and to other states. As the cult gained prominence, awareness about these paintings too spread to other parts, and they flourished in the 15th and 16th century.

The process of creating these paintings is unique. The first step is to prepare the cloth—the canvas is handmade using old cloth coated with tamarind seed paste. Several layers of cloth are finished with chalk and rubbed with stone on both sides to make it fit for

**THERE ARE MANY FACETS TO pattachitra—from religious, ritualistic, folk, and mythological to touristy and contemporary.**

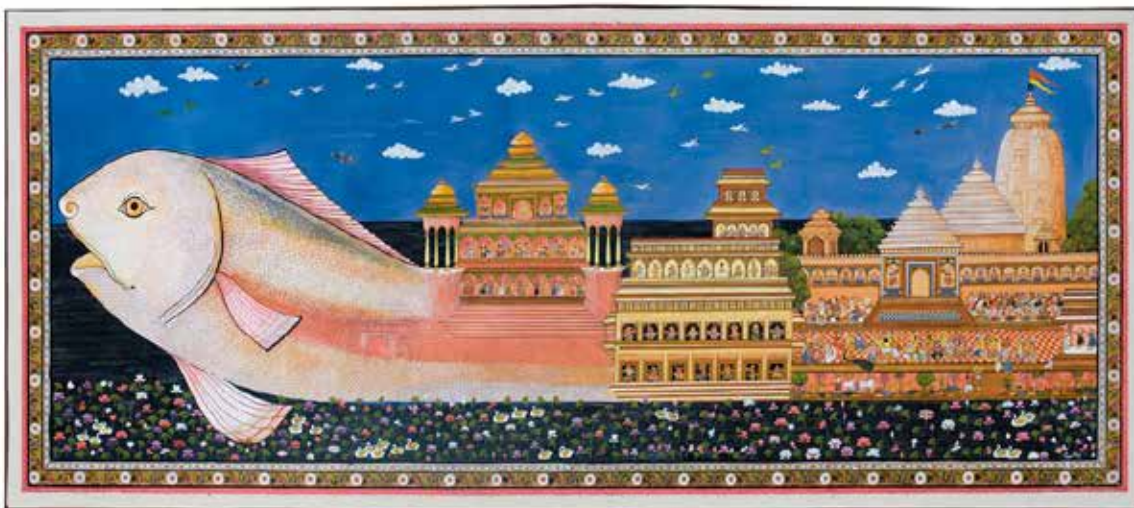


Photo courtesy: Tarshito Nicola Strippoli

A fish, symbol of peace, harmony, and fertility, is portrayed as carrying a temple on its back.



Photo courtesy: Chitra Balasubramaniam



Photo courtesy: Chitra Balasubramaniam

Left: A set of Ganjifa cards with mythological figures as icons. These are more of souvenir or collectible cards as opposed to those used for playing.

Below: The cover of box used to keep sets of Ganjifa playing cards.

**THE PAINTING IS LINKED TO THE Lord of Puri, and is irrevocably a part of the ritual and grandeur of the deity.**

painting. It might sound simplistic but it is a tedious process. The outstanding aspect of this art is that it uses stone colours, which are handmade. Various techniques are used to obtain the colours. White is the predominant shade and it is obtained from conch shells. These are powdered and soaked in water, and the clear, white liquid which it releases is collected and dried in the sun. Lamp black is used for black colour—a *diya* is placed inside a tin, and the soot which gathers on the lid is collected. This process takes about six days. Red is obtained from *geru* and blue from indigo. The themes pertain to mythology, life of Lord Krishna, scenes from the Ramayana and the Mahabharata, Jayadev's Gita Govind, and Ragachitras.

Another genre of paintings made are palm leaf paintings or tala patrachitra (paintings done on palm leaf). The technique involves drawing on dried palm leaf with an iron stylus. The etchings are rubbed using lamp black or burnt coconut, which gives it black colour. The colour seeps into the etchings, giving the drawings a beautiful black outline which stands out against the palm leaf's natural colour.

Ganjifa or Ganjappa are also made using the pattachitra tradition. Gangifas are circular cards, predecessors to today's playing cards. These are made in the same way as patta paintings. The cards vary in shape and diameter from 32 mm to 120 mm. The number of cards in a pack varies—the *Dasavatara* (10 incarnations of Lord Vishnu) has a total of 120 cards, which is 10 series of 12 cards each. The Ramayana series has 144 cards. The back of all the cards is painted with same colour. The face of the cards has the numbering 1 to 10, depicting mythological characters.



Photo courtesy: Chitra Balasubramaniam

This card game requires a specific set of skills, and is no longer popular. However, some connoisseurs are trying to keep it alive.

### CONTEMPORARY SHADE

Pattachitra has today evolved into a fine wall art with several collaborations taking place. The works of master artists are sold at galleries. Tarshito Nicola Strippoli, an Italian-born architect/designer/artist who has worked extensively with Indian craftsmen, has collaborated with Puspanjali Pradhan, a local *patta chitrakar*, to create some stunning works. She is now working on a series on rivers, her thoughts of the river, and its influence on mankind. A traditional artist, Pushpajali still makes mythological and other religious paintings. She says, "I am still a pattachitra artist. But with Tarshito, it is an innovation which I experimented with and it has worked well."



**PATTACHITRA HAS TODAY EVOLVED** into a fine wall art with several collaborations taking place. The works of master artists are sold at galleries.

There are several others who have displayed their creations and work at galleries. Pattachitra paintings adorn the walls of homes too. Another innovation that has caught the fancy of many is pattachitra on sarees. The *pallav* is where an entire scene, be it the chariot scene from the Mahabharata or some other episode, is drawn. It looks stunning and is quite in vogue. Purists may scoff but it just adds another dimension to this exquisite art. ■

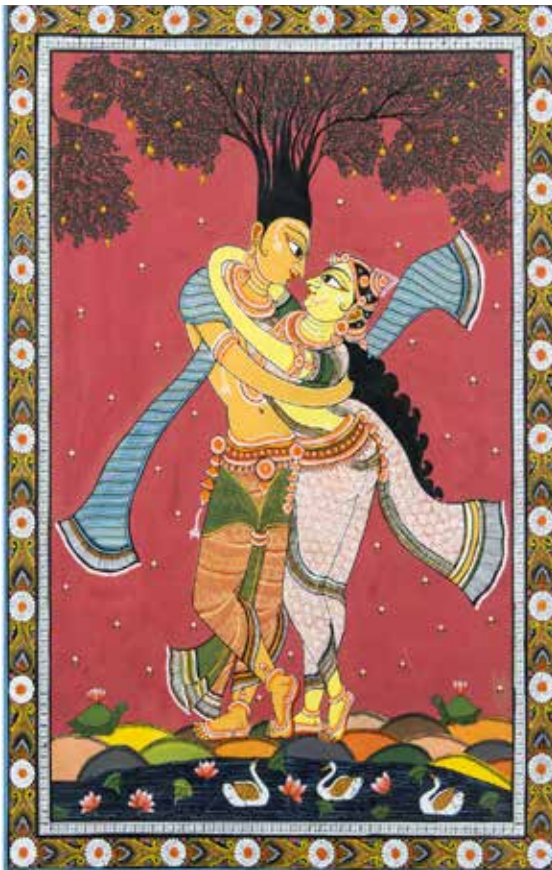


Photo courtesy: Tarshito Nicola Strippoli

Above: Warriors of love who fight for love and not for hatred—a way of engulfing the entire world in peace and love.

Top right: An idyllic setting—the classic scene of a woman's life in the forest is drawn in pattachitra style on a sari *pallu*.

Below: Shaped like a chariot, this exquisite piece of art signifies the spirit of unity.

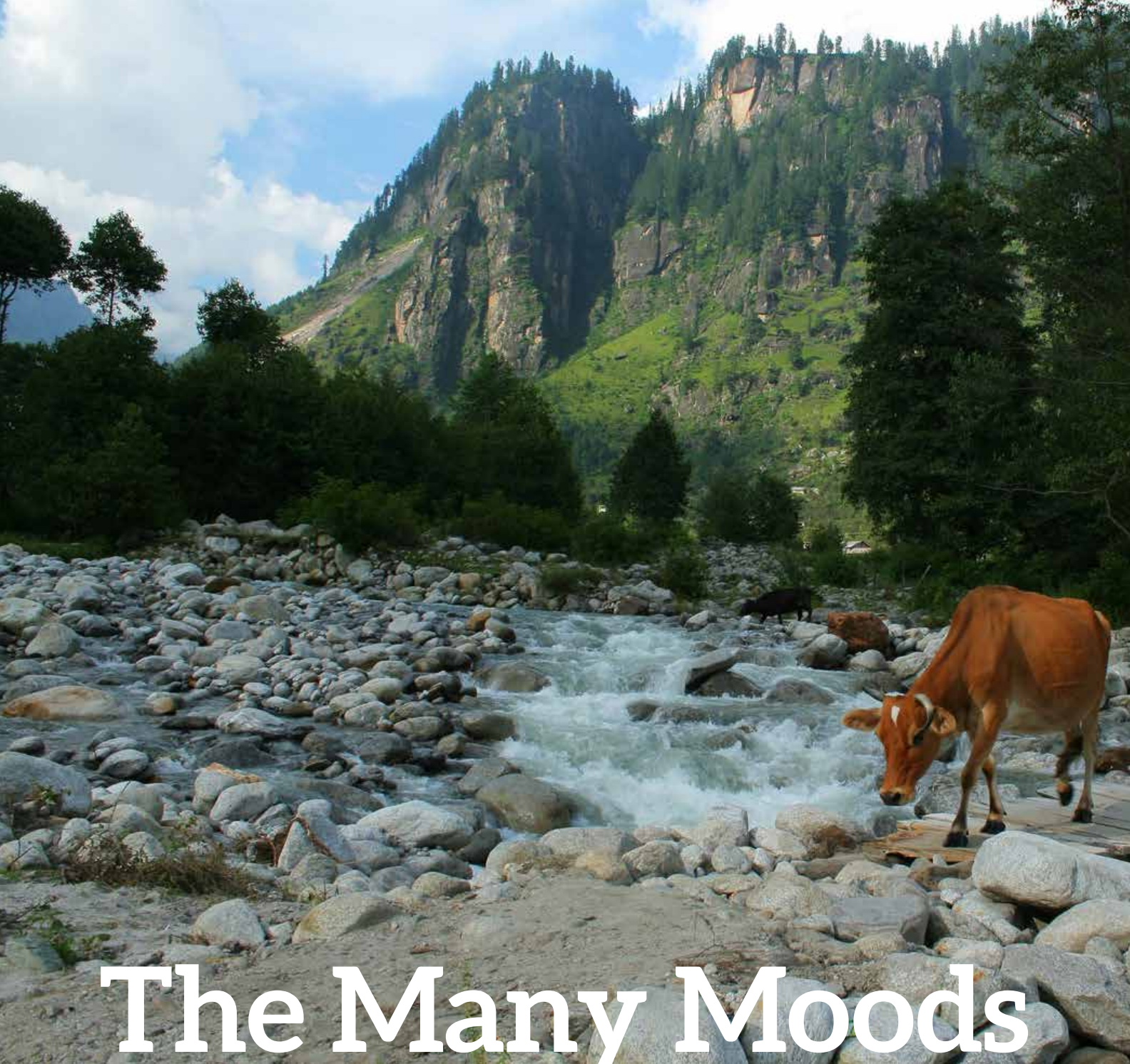


Photo courtesy: Puspanjali Pradhan



Photo courtesy: Tarshito Nicola Strippoli





# The Many Moods of Manali

*Manali promises convenient beauty, whether as a final destination to escape for a quick weekend, or as a stopover to acclimatise for the higher Himalayas beyond. The key to its charm though, is which Manali you come seeking.*

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An agrarian lifestyle still dominates the lives of Manali's locals. A man drives his cows home across a wooden makeshift bridge over the Beas river near Shanag.

**I**t is a classic. The mountain town of Manali in Kullu Valley of Himachal Pradesh is often counted amongst the where's where of Himalayan holiday destinations. But, even if you were to compare notes, there is one thing that distinguishes it from Shimla, Nainital, and Srinagar: the absence of a colonial hangover. The people of Manali have always preferred their own culture over anything brought by visitors. In fact, if you were to make a Bollywood star stand in the middle of Mall Road that forms the epicentre of town, chances are that the celebrity will have to go nudge the Kullu

*topi*-clad locals for a moment of attention. Hrithik Roshan can go rafting in the Beas, Sunny Deol can buy groceries in Shanag, Jackie Shroff can chill in Old Manali, Deepika Padukone can sip chai in Barua, and directors can continue pretending that Rohtang Pass is Kashmir—Manali is not bothered.

What brings the residents of this town onto the streets, instead, are the *melas*—those colourful fairs that offer everything from Ferris wheel rides to clothes on sale—and the festivals where local deities congregate and mobilise processions. The best-known of these deities include Hadimba Devi, who was an intimidating figure in the Mahabharata as Bhima's wife and has a 16th-century temple dedicated to her here, and Manu Rishi, Manali's own Noah who built an ark and saved humanity. He also gave the town his name; up in Old Manali, there is a temple that enshrines the spot where he meditated. Both temples are built in the traditional stone-and-wood architectural style and, were you to go there outside peak tourist season, you would be in the safe company of old deodar trees and the mellow sounds of temple bells.

Seasons define the kind of experience you can expect from Manali. After the snow has melted, each month of the warm season has its own flavour. In April, you would see slopes coloured with spring blossoms on apple, peach, and plum trees. In May, you will, well, mostly be in traffic jams surrounded by honeymooning couples. June is the only month when the locals are down to t-shirts and can call it a summer, the season of international tourists setting base here before exploring higher valleys beyond. By July, the town is a lime green beauty painted by monsoon,

Guesthouses and homes of Old Manali. The quiet village of Old Manali is the 'real' Manali, which first attracted backpackers in the late '60s.







Above: Spectacular vistas and the flowing Manalsu stream are a treat to the eyes, best seen when you follow narrow, winding trails away from regular tourist hotspots.

Above right: Manali has been a favourite among Indian honeymooning couples since the '80s. A muleteer guides a lady on the 13,050 ft high Rohtang La.

and come August, it is dotted with red apples—Kullu Valley's most famous export that can be seen spilling out of orchards or stacked in makeshift sheds along the roads. They are the coveted remnants of a fleeting British presence, along with, deliciously enough, trout fish—worth trying in any of the recipes devised by the cafes and restaurants here.

Like any other village that has received an urban upgrade a bit too fast, Manali too is divided into the old and the new. For a long time, the two parts of the town jostled with two distinct clichés—that of a New Manali swarming with honeymooners and an Old Manali which attracted backpackers like moths to a flame.

The famous cafes of Old Manali are still serving banana milkshakes, impromptu jam sessions still do take place against vivid backdrops, but there are also enough high-end guesthouses tucked away amidst



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orchards for those who care for quieter retreats. New Manali, in its defence, has sprouted a culture that could be termed 'cosmopolitan' by mountain standards. If you are patient enough to look beyond the clutter of pseudo-Punjabi restaurants on Mall Road, you would find many meandering gullies where Nepali eateries serve spicy mutton curries, Mandiyali dhabas fry parathas that complete the hill-town experience with generous dollops of butter, Tibetans make authentic butter tea, and Bengalis cook chhole bhature right there on pushcarts.

Between the new and the old is the obvious, yet mostly (and thankfully) ignored Van Vihar—a protected forest land where 500-year-old deodar trees form a dark canopy with dappled sunlight that would brighten up any nature lover's day. A path runs through these woods along the Beas river all the way from New Manali to Old Manali. For those who respect the fragile mountain ecosystem and do not wish to spend three hours stuck in the incessant honking and fumes of traffic, Van Vihar cuts the commute down to a 20-minute walk. Most importantly, it offers a quiet way back into the Manali as it must have been in the days when Nehru holidayed here and famous Russian painter Roerich found inspiration. ■





Above left: Manali's Mall Road is the hill station's shopping and commercial center. A variety of bags on display at a streetside shop.

Above right: Tibetan Buddhism merges seamlessly with Himachal Pradesh's

*devta* culture in Manali. A striking Buddhist mural depicted on a rock on the way to Hadimba Temple.

Below: An Israeli backpacker learns to play the djembe at a music shop in Old Manali.

**AROUND MANALI**

**Vashisht**

This village across the Beas river, about 3 km from Manali, has woven its own magic spell on travellers for years. The gullies and temples here attract pilgrims, while the hot springs and cafes make it a warmer alternative to Manali.

**Solang**

For those unable to get the coveted permit to Rohtang, Solang Valley is a good option for a day trip at a 14-km drive from Manali. A ropeway lets tourists hold the same sweeping vistas, and if you come in winter there are ski instructors ready to teach the art of gliding on ice.

**Manikaran**

80 km away from Manali is the temple town of Manikaran, held unique and sacred for its Sikh Gurdwara as well as

the Shiva Temple. It is also known for its hot springs and lovely little walking paths all around.

**(DE)TOUR IN STYLE**

**GO OFF-ROAD TO BIJLI MAHADEV**

About 50 km from Manali, the hilltop temple of Bijli Mahadev is a source of divine mystery. Every few years, during monsoon, lightning strikes completely decimate the *shivling* here, which is then carefully plastered back into shape by the temple priests. These days, the bumpy road leading here from Naggar is beckoning more adventurous folks. The full-day jeep excursions take travellers through thick conifer and oak forests and the immaculate wilderness of Kais Sanctuary in a comfortable 4x4 SUV. A stopover at the heritage village of Jana for traditional Himachali lunch under a sparkling waterfall is also one of the trip's highlights.



### FACT FILE

**Getting there:** The closest airport is in Bhuntar, near Kullu, 50 km away from Manali. Air India operates daily flights here from Delhi and Chandigarh. You could also drive up. Usually, a Volvo bus ride is considered the most convenient option.

**Accommodation:** There is a hotel literally in every direction you turn in Manali. The best ones, especially with parking space, are all outside New Manali. Take your pick from Old Manali, Vashisht, Prini, or any of the other neighbourhoods which have pretty cottages as well as resorts.

### IMPORTANT TIPS FOR SUSTAINABLE TRAVEL

- Regardless of what your tour package or hotel promises, please be mindful of the resources you consume and the waste you leave behind.
- Walk. The world is a better place on foot. What is more, it would not leave you disappointed with an experience that reminds of the same clogged pollution of our cities.
- Rohtang Pass, for which thousands of tourists queue up every year to see snow, has become a costly novelty since the National Green Tribunal put a cap on the number of vehicles going up. The truth is that every peak in the vicinity offers the same stunning views. All you need to do is sign up for an easy to medium level trek at a fraction of the taxi cost, and take a few steps closer to understanding the kind of mountains that are worth travelling this far for.

Left: The stone and wood architecture of Manu Temple is a classic example of Himachali architecture. Manali derives its name from Manu, the first man on earth according to Hindu scriptures.

Below: Further up from Old Manali village, winding trails lead to Goshal's lush apple orchards which burst into shades of red every August.

Established in 1917, Johnson's Hotel and Lodge is a landmark in Manali.

Every summer, in June, cars, tempos, motorcycles, buses and mules congregate at Rohtang La, Manali's prime tourist destination, causing heavy traffic jams on the mountain pass.







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