



September 2022

EMPOWERING TIMES



THINKING ALOUD

They also serve...

Jay

PODIUM

Ashish Gharpure
Managing Director,
Genstru Consultants



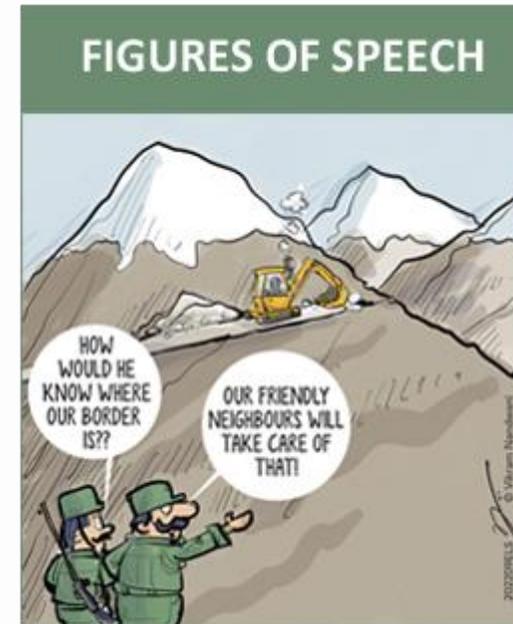
WE RECOMMEND

God's Own Entrepreneurs
R. Roshan

Dear Reader,

Infrastructure development serves as the sine qua non of economic growth. According to the IMF, the country is close to realising its dream to become a US\$ 4.6 trillion economy by 2025 with the secret sauce being infrastructure development.

Earlier in the year, the Union Budget presented an outlay for capex on key connectivity projects that aims to lead India towards a sustainable and resilient future. The Border Infrastructure and Management scheme is expected to strengthen border infrastructure and improve border management. Despite these bright spots, infrastructure development has suffered from plan implementation or operational failures. Poor infrastructure has also been responsible as being one of the biggest hurdles facing ambitious programs such as the Make in India initiative.



In addition to the big push for infrastructure investments, there is an urgent need to enable efficient coordination among different departments of the central and state governments. The redeeming factor also includes the coordinated efforts of private players to help support quality infrastructure development.

This month, **ET** looks at *'Tackling the Impossible: Building Infrastructure at the Borders.'*

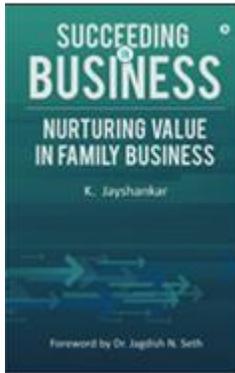
In the **Thinking Aloud** segment, **Jay** throws some light on India's growth story from an infrastructure development perspective. On the **Podium**, **Ashish Gharpure**, - Managing Director, Genstru Consultants tells us about the key challenges of infrastructure development at the borders in India and how technology has aided in the developmental process. In the **We Recommend** section, we review R. Roshan's book -'**God's Own Entrepreneurs**'- which is an account of 21 entrepreneurs from Kerala who have built large global brands and family businesses empowered by a vision.

In **Figures of Speech**, **Vikram's** toons view on building roads & relationships!

Please also [Click Here](#) to check out our Special issue of ET, which is a collation of selected themes that were featured over the years highlighting the changing landscape of the business world. This special edition has been

well received and can be [Downloaded Here](#) for easy reading and is a collector's item.

As always, we value your opinion, so do let us know how you liked this issue. To read our previous issues, do visit the Resources section on the website or simply [Click Here](#). You can also follow us on [Facebook](#), [Twitter](#) & [LinkedIn](#) - where you can join our community to continue the dialogue with us!



Out Now!

Succeeding in Business: Nurturing Value in Family Business

What makes some family businesses grow from strength to strength? How do you ensure that value is created and not destroyed when a business passes hands from one generation to the next in the Indian context? How can old families incorporate new ideas to revitalize themselves? Is there a role for professional management in Indian family business?

*This book offers answers to the vexatious issues that families face in their growth journey. The pointers provided can be used as a guide for nurturing the business and to leverage the traditional strengths that family businesses possess. As a counsellor and trusted advisor, the author, **K. Jayshankar (Jay)**, has had a ring-side view of how family businesses have functioned. The practical insights drawn from his experience of four decades has been combined with conceptual elements to become a valuable primer for a family that wishes to succeed in the competitive marketplace that is India.*

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THINKING ALOUD

They also serve...

Jay

A tribute to the lesser-known builders of modern India

On September 2nd, the Indian defence forces got a major upgrade with the Indian Navy welcoming INS Vikrant into its fleet. While Vikrant (the brave and victorious, as the name signifies), version 2, is the culmination of a project begun over two decades ago, the added pride in its prowess is the fact that 76% of its components are indigenously sourced and supplied. Thus, military prowess aside, it is a declaration of domestic capabilities, as contributions have come from various firms, both public and private sector, to make this vital aircraft carrier to bolster our naval might.

While we can continue to carp on the negatives of this project - and undoubtedly there are many issues that still need addressing - there is a renewed thrust on building hard infrastructure across India. The call for action is drawn from both developmental and strategic needs. While we celebrate the 75th year of independence, and we take pride in becoming the fifth largest economy (overtaking the not-so-Great Britain), there are challenges galore before us, not the least of which is that on a per capita basis we languish far behind in the league tables. One of those mountains that we need to climb still is the infrastructure mountain, both soft and hard.

The rise of our software prowess, and the general acclaim around it, masks the dirty secret that we have rotten 'hard' infrastructure: be it roads, bridges, water pipelines, sanitation, hospitals, etc. Reportedly, we produce over fifteen lakh engineers every year and over a lakh doctors (allopathy and others), while we continue to see a wild rush of students going overseas for technical education in these fields. Engineering graduates moving to software firms is but natural when the returns that it offers is not just higher but faster. But the task of building hard infrastructure is an unsung story.

It is time to shine the light on this relatively hidden aspect of India's growth. Few realize that India has the second largest network of roads in the world, but the quality is largely poor, to put it mildly. With the pandemic

and monsoon affecting road work, the daily average construction of roads for last year was 28.86 kms/day, lower than the target set by the ambitious Mr. Gadkari, at 60 kms/day. More significant is that the Border Roads Organisation (BRO) has built over 3,595 kms of all-weather roads in the last 5 years as a strategic measure to counter the challenges from across the borders. Importantly, the engagement of private players in building over these difficult terrains, shows the seriousness of these ventures, as many projects in the past have been behind schedule.

On similar lines are rail projects in extreme areas. For instance, the Udhampur-Srinagar-Baramulla rail link national project (USBRL) is admittedly the most difficult new railway line project ever undertaken in India. Security considerations aside, the challenge of building tunnels, bridges and all-weather rail lines in the Himalayan landscape is a feat of unparalleled engineering. On August 13, 2022, the highest rail bridge in the world (35 metres taller than the Eiffel tower), the Chenab bridge, 359 metres above the river, with a span of 1,263 meters, saw an important milestone when the golden joint connecting the two ends was placed. Expected to be operational in December 2022, such a rare feat of architectural and engineering excellence deserves to be lauded. Yet, this is just one more feather in the cap of those who rarely come into the public eye. Caught in a swirl of lousy political stories, laced with gossip about the page three world of scamsters, little attention is given to those who are really building our nation, many from the public sector, and now with the active participation of the private sector.

Whether it is bridges over swollen monsoon rivers, impossible roads on hostile borders, home grown scientists launching satellites on rockets built indigenously, or medical wizards creating vaccines relevant to our society, and many more such little-known feats of marvel, there is so much good news that needs to be presented to the public who are floating in a sea of ennui and despair.

The perceptive commentator, Ruchir Sharma, noted that the V shaped development path of India has led us 'no richer relative to the rest of the world than it was at independence, but very much on the upswing. 'Predicting that India will be a 'break-out star in a slowing world', he believes that the country is 'well on the way of becoming the third largest economy by 2032.'

Yes, we are far from being a developed nation... but the task is being addressed away from the headlines. A salute to these warriors as we continue to celebrate Azadi Ka Amrit Mahotsav, our 75th year of independence.

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Podium

Ashish Gharpure

Managing Director, Genstru Consultants



Ashish Gharpure has an M. Tech Degree in Civil Engineering (Geotech Major) from Indian Institute of Technology, Kanpur (IIT-Kanpur), and MBA (Post Graduate Program in Management) from Indian School of Business, Hyderabad (ISB - Hyderabad). He is a licensed Professional Engineer (PE) registered with the state of California and Maryland USA, Engineering Council of India, and Mumbai Municipal Corporation, with diversified experience in various Civil Engineering fields and has been associated with a number of prestigious projects in India and abroad.

He has worked in various technical and top management roles in different companies namely Trafalgar House Constructions, STUP Consultants, Maccaferri (India and USA), Z-Tech India, Inaces Geotech Solutions, and presently Genstru Consultants Pvt Ltd. He has actively been involved in providing innovative and state-of-the art solutions to many challenging and prestigious projects in hilly terrains.

Ashish Gharpure is the recipient of Supreme "Best Engineer" award in 2012. He has contributed to many IRC codes and is the co-author of State of The Art - Design and Construction of Rockfall Mitigation Systems, Special Report 23 by IRC Highway Research Board. He has published a number of technical papers in Geotechnical and Hydraulics Engineering in national and international publications.

ET: In recent times, the government has made a major push to develop infrastructure across the country. In your opinion, what are the major projects that have been undertaken so far or are underway at present?

AG: The Government is really gung-ho about infrastructure projects especially in the transportation sector, be it roads, railways/metros, or ports/inland navigation. The renewable energy sector has also seen a lot of thrust with solar power at the helm. Development of hilly areas has seen some major thrust. Northeast Frontier Railways trying to connect all seven -sisters states and Sikkim as well. NHIDCL has taken up the construction of hill roads and to improve the connectivity to the border roads of India. Northern Railways push to connect to J&K

amidst difficult geology and weather condition is an admirable job with the longest tunnel(s) (e.g., Atal Tunnel), the highest bridge (Chinab bridge), etc. Some admirable transportation infrastructure projects in India are:

- a. Chardham Pariyojana, which seeks to develop approximately 889 kms of road in the Himalayan region. It aims to improve connectivity between four famous pilgrimage sites - Kedarnath, Badrinath, Yamunothri, and Gangotri in the state of Uttarakhand.
- b. Banihal-Qazigund Tunnel: One of the longest tunnels in India, the 8.45 km long tunnel reduced the road distance between Banihal and Qazigund by 16 kms, and reduced journey time by around one and a half hours.
- c. Dhola-Sadiya Bridge or The Bhupen Hazarika Setu - Longest River bridge in India: A 9.15 km bridge linking Assam with Arunachal Pradesh over the Brahmaputra river. The bridge reduced the travel time between Assam and Arunachal Pradesh from six hours to just one hour or by 185 kms. The bridge will not only save money, reduce travel time but comes as a foundation for the beginning of a new economic revolution. It will expedite industrial investments, aid in providing health and education facilities, promote tourism in the region, increase border trade, boosts defence, and is of strategic importance.
- d. Sela Tunnel project: The Sela Tunnel project will reduce the distance and travel time, ensure speedier movement across the Sela Pass, and ensure connectivity even during winter. It has a great strategic importance adding to the tourist potential of Tawang, contributing not just to border security but also socio-economic development of the region.

ET: National security challenges have spurred new infrastructure development at the borders. What are the key challenges of infrastructure development at the borders in India?

AG: The Border Road Organization, attached to the Indian Military has been active since ages to make sure the Indian borders remain accessible in all weather conditions. However, due to challenging conditions, road maintenance was always an issue. The infrastructure focus has always been on developing those roads which serve large populations and can generate revenues through tolls, while remote areas with smaller populations gets ignored. Some problems associated with infrastructure development in the borders are:

- a. Land Acquisition: The state governments, especially the special status states, have been sluggish in acquiring land vitally needed for infrastructure development in the border regions. Sometimes, local interests predominated the decisions, resulting in avoidable delays. For instance, works on seven projects in West Bengal continue to remain stalled because of land acquisition and transfer related issues. An alternate access to Tawang took so many years of effort because of land acquisition issues. And this is an area which the Chinese strongly claim as theirs.

- b. Extreme weather and climatic conditions.
- c. Tectonically active and geologically complex regions.
- d. Irrational and inadequate funding.
- e. Cease fire violation and border intrusions.
- f. Red tapism and bureaucratic delays in projects.
- g. Lack of appropriate expertise and equipment.

ET: In what way has technology aided in creating a sustainable infrastructure development landscape, better project monitoring and faster issue resolution in India?

AG: Technological adaptation has brought lots of changes in the way the infrastructure projects were taken up these days right from inception stage, investigation, design, to construction. Geospatial engineering brought a transformational change in the way topographical surveys are done. The speed and accuracy of it far exceeds the previous methods. Similarly geo-physical methods are being adopted now for quick preliminary underground scanning to assess the ground condition and feasibility for building a structure on it. Computer aided modelling and designing, mechanised rapid construction, progress monitoring by drone cameras, instrumented quality checks, project management software, etc. has brought a tectonic shift in the way construction projects are done today. Environmental impact assessments, green coverage monitoring through satellites, preference for local labourers, substitute materials for construction with low carbon footprints, or low consumption of natural construction material, mandatory special passage for wild animals in forest areas, etc. add to the sustainability aspects of development. Even in urban infrastructure the regulatory changes bringing mandatory water harvesting, energy efficient buildings, etc. is at the core.

ET: In your opinion what are the factors that will encourage Public-Private participation for the overall infrastructure development of the country?

AG: I think PPP is an inevitable model so that more resources are available for boosting infrastructure development with shared risks and efficient progress. To encourage the PPP model, the government should look into some key pain points and remove them by taking ownership of it. Some steps that government can take are:

- a. Taking over the responsibility of land acquisition and environment clearances since it is best obtained by them and not the private sector. Several projects have been stalled with huge time and cost overruns due to delay in land acquisition and transfer of its possession to the private sector.
- b. Healthy competition amongst the stakeholders so that quality of the construction is not affected.
- c. Strong political will and formation of nodal agency to adopt best practices.

- d. Standardized procurement procedures to ensure efficiency, transparency, ease of approvals, and a balanced contract.
- e. Presence of strong technical team in government to look after project finance, legal provisions, and technical matters.

ET: Can you please share more about your company, Genstru Consultants, and the concept of Inclusive Engineering©? What are some of the milestone projects that your firm has been involved in?

AG: GENSTRU Consultants Private Limited is a boutique geotechnical engineering firm, with specialization in providing optimized design solutions in the realm of geotechnical engineering and structural engineering such as tunnel design, slope stabilization, rock fall mitigation, landslide mitigation, erosion control, foundation design ground improvement works, etc., using latest technology and innovative designs. GENSTRU has completed over hundreds of projects in a short period since its inception, mostly related to geotechnical engineering and soil structure interaction issues. The geographical coverage of projects in India spans from Arunachal Pradesh (North-East) to Kerala (South-West), and Jammu & Kashmir (North-West) to Andhra Pradesh, (South-East). Beyond India, GENSTRU has successfully worked on projects in Thailand, Indonesia, Bhutan, Yemen, USA, Jordon, and UAE.

To back-up our design and technical support from a geotechnical engineering perspective, we have a complete set-up for conducting geotechnical investigation and an ISO 17025:2017 NABL accredited laboratory for testing soil and rock samples. We also carry out Geophysical Investigation by Electrical Resistivity Tomography (ERT) and Seismic Refraction Test (SRT). We use a digitized way of Borehole logging by using an in-house developed Android App "BOReLOG".

Inclusive Engineering©, a copyrighted term by Genstru, is our motto, to reflect engineering solutions which shall include considerations for the local environment, aesthetics, and social aspects; in addition to technical correctness, to give value to all stakeholders.

Some of the milestone projects that our firm was/is involved in, are:

1. Designed arguably as the world's Tallest Reinforced Soil Wall for Pakyong Airport - Sikkim.
2. Design of landslide mitigation measures of Baliyanalah landslide which has continued sporadically for decades posing an existence threat to Nainital town, with slope height over 230 m.
3. Design of Datki Devi tunnel with finished diameter of 12 m for 2 lane highway through difficult to construct strata of sedimentary deposit of 'Doon Gravel' comprising of boulders and pebble in matrix of silty sand.

4. Cut slope stabilization consultancy services for Bairabi-Sairang Railway line, a 51 kilometers long railway line stretch in Mizoram, for the Northeast Frontier Railway.
5. Protection works for ghats of river Saraswati and structural design of new Shri Adi-Shankaracharya Samadhi at Kedarnath which was devastated in June 2013 due to landslides and flash floods that killed more than 5,000 people in Uttarakhand. The disaster highlighted the need for sound planning, analysis, and construction in the high-altitude terrain of the Himalayas.
6. Detailed geotechnical investigation and design of countermeasure structures for a 650 m stretch of a two-lane road in a landslide-prone area of Boxcut -Trongsa-Gelephu PNH, in the Sarpang District of Bhutan. Occurrences of landslides have affected the traffic and conveyance of goods along this highway. The DOR, under the Ministry of Works & Human Settlement, Bhutan, with financial support from the UNDP/Green Climate Fund (GCF), initiated this project given the need for detailed geotechnical and geophysical investigations and design of countermeasure structures.
7. Design of Rockfall Protection Measures at ghat section of Mumbai-Pune Expressway.

Apart from similar other projects, several investigation works using drones, geospatial and geophysical methods for survey, digitised logging of boreholes, tests in ISO 17025 accredited lab, live instrumented monitoring of embankments and high slopes, etc., are the other works we do to bring reliability in geotechnical engineering domain.

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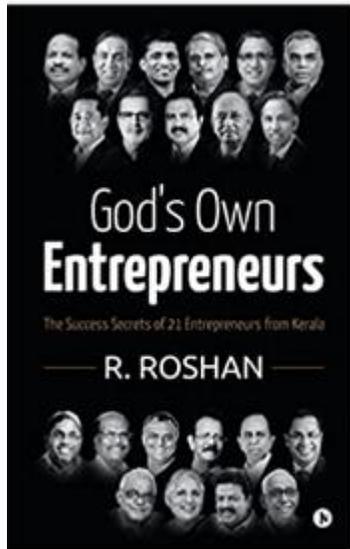
Mumbai Roti Bank, a non-profit, food rescue organization initiated by Roti Foundation, Mumbai, bridges the gap between hunger and excess food. Started in December 2017 under the able mentorship of former Director General of Police, Maharashtra, Mr. D. Sivanandhan, the organization aims to eliminate hunger, malnutrition and food wastage, many meals at a time. Help make a difference by calling +91 86555 80001 to donate food or by making a [contribution](#).

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We Recommend

God's Own Entrepreneurs R. Roshan



"Most of the important things in the world have been accomplished by people who have kept on trying when there seemed to be no hope at all."

- Dale Carnegie

The year 2022 is being celebrated as the 'Year of Entrepreneurs' in Kerala to recognise the spirit of entrepreneurship and the government has set an ambitious goal of establishing 100,000 micro medium-small enterprises (MSMEs) in 2022. Yet, arguably, Kerala is not the obvious first choice for an investor in India. Despite proclamations of having become business friendly, the state makes more headlines for its periodic bandhs, agitations, and when industrialists threaten to move out (the famous Kitex Garments case, for instance). While the hangover of the communist era is still very real in Kerala (the Left government swept back to power in the last election, with a stronger majority than before), the exodus of Keralites to the Middle East has not abated. And, with the UAE turning a new leaf with generous golden visa offerings, it is not wrong to believe that the next generation of entrepreneurial Malayalees will emulate their illustrious predecessors like Yusuf Ali, PNC Menon, Ravi Pillai, et al by first establishing themselves overseas and then returning home to create a branch.

Therefore, R. Roshan's book, '**God's Own Entrepreneurs**' is a refreshing contribution and a tribute to the unsung entrepreneurs who have succeeded against the odds of a challenging business environment. Roshan offers snapshots of this entrepreneurial spirit that fuelled the vision of 21 entrepreneurs and did not wilt under the challenges both personal and external.

Crafted through research of his selected 21 entrepreneurs, Roshan uses his business journalism skills to outline the personas of these moguls, and how they created, invested, and generated wealth to eventually give back to

the society. What runs common among each of these entrepreneurs is the humble way of life which was fuelled by a passion to change the situation they were in. Roshan eloquently puts forth a read that examines the beginnings of each of these entrepreneurs, their source of funds and their journey through the difficulties of the entrepreneurship world. He shares the challenges that they overcame and the lessons they learnt, as these determined individuals did not accept their misfortune and shaped their own magnificent destiny.

Think gold, spices, textiles, education, retail, construction and tourism and Kerala will give you one famous brand to reckon with under each segment. For example, think retail, and what comes to mind is Yusuf Ali who features in the Forbes list of billionaires. He looked at the Gulf War as an opportunity to start a trading business. Today, LuLu Group International has 255 stores and shopping malls in the Gulf and elsewhere. Ravi Pillai, Chairman of RP Group of Companies, struggled as a child, faced poverty but continued to power through. Today, he has business interests in India and in the Middle East across the construction, hospitality, and oil and gas industries.

Another entrepreneur, T.S. Kalyanaraman chairs Kalyan Jewellers, with 137 stores spread across India and the Middle East. Kalyanaraman worked in the family's textile trade from age 12 until 1993 when he started the jewellery chain. Today, the brand has expanded into real estate with Kalyan Developers and has projects in south India. The book also summaries the journeys of Kris Gopalakrishnan (Co-founder of Infosys), Kochouseph Chittilappilli (V-Guard Industries), Byju Raveendran (BYJU'S), among others. Some of these entrepreneurs have replicated their successful business models from abroad to back home in India as well. At the end of each chapter is a summary of the entrepreneur with a quick look at their personal life and the values that drive them towards their respective philanthropic efforts.

The author does not feature many women entrepreneurs in his book. Is that a statement of the social environment of Kerala? While female professionals from Kerala have made their mark both in civil services and professional fields, they seem to be a rare sight in the business world! Maybe this is intentional, and we can expect another inspiring book from Roshan featuring women entrepreneurs of Kerala. The only woman entrepreneur mentioned is Pamela Anna Mathew - the Managing Director of O E N India - who continues to smile along the way while building up her electronics components manufacturing business.

Roshan is a business journalist with more than 15 years of experience in the industry. Currently, the Head of Business News of Mathrubhumi, the second most widely read newspaper in Kerala, Roshan is also a start-up evangelist and brand strategist, who is enthusiastic about emerging businesses. This book comes at a time when the economy is witnessing a rise in the number of young people leaving their steady corporate income to forge a path that some in the yesteryears dared to dream of. This seminal work serves as a ready reckoner for young entrepreneurs to dream, do, overcome, and deliver. Echoing thoughts of Anas Rahman Junaid, Founder and MD,

Hurun India, who has penned the Foreword, "the read serves to inspire young entrepreneurs, especially from 'God's Own Country'."

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THROUGH THE LENS



Bird photographer, **Rupesh Balsara**, spots the elusive Himalayan Cutia, a resident species of Nepal. These birds inhabit tropical to sub-tropical humid forests of the Eastern Himalayas and are also found in Bhutan, China, Malaysia, Myanmar, and Thailand. The Himalayan Cutia feeds on insects, beetles, seeds, and berries and is not considered threatened by the International Union for Conservation of Nature.

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