Celebrating 25 years of excellence

Newsletter

Vol 9 Issue 2 February 2026

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ഉറപ്പാക്കുന്നു
മനഃസുഖ-സുസ്ഥിരവാസം-സമൃദ്ധകേരളം

KERALA SURGES AHEAD

KIIFB Facilitates Investment Worth 1 Lakh 10 Thousand Crore Rupees in Kerala's Infrastructure Development

Projects - Statistics

Department	KIIFB Approved Projects	
	No. of Projects Approved	Approved Amount (₹. in Crore)
PWD	527	₹ 39,378.97
Agriculture	1	₹ 21.43
Animal Husbandry	2	₹ 32.57
Ayush	2	₹ 204.28
Backward Classes Development Department	1	₹ 17.73
Coastal Shipping & Inland Navigation	19	₹ 3,520.46
Culture	17	₹ 499.57
Devaswom	2	₹ 138.51
Fisheries and Ports	26	₹ 642.88
Forest	13	₹ 636.94
General Education	158	₹ 3,240.33
Health & Family Welfare	110	₹ 6,888.52
Higher Education	70	₹ 2,343.50
Home	6	₹ 230.60
Industries	2	₹ 203.11
Information Technology	7	₹ 2,080.78
Labour & Skills	5	₹ 93.84
Local Self Government	29	₹ 843.20
Power	18	₹ 5,200.00
Planning & Economic Affairs Department	5	₹ 199.94
Registration	6	₹ 89.91
Revenue	5	₹ 104.19
SC/ST Development	10	₹ 182.23
Science & Technology Department	5	₹ 319.45
Sports & YA	42	₹ 987.65
Tourism	14	₹ 639.14
Transport	3	₹ 607.33
Water Resources	104	₹ 7,207.46
Total	**1209**	**₹ 76,554.53**

Projects under Land Acquisition Pool of ₹ 20,000 Crore

PWD-NHAI	1	₹ 6,769 .01
Industrial Parks - 3 projects - ₹14006.13 Cr	6	₹ 16,420.73
Taking over of land from HNL - ₹200.60 Cr		
Kochi - Banglore Industrial Corridor & Global City - ₹ 2214.00 Cr		
Total	**7**	**₹ 23,189.74**

KIIFB Approved Projects Grand Total

Infrastructure Projects	1209	₹ 76,554.53
Projects under Land Acquisition Pool	7	₹ 20,000.00
Total	**1216**	**₹ 96,554.53**
Fund disbursed to projects (as on 31/01/2026)		**₹ 38,621 Cr.**

Editorial

"The people along the sand
All turn and look one way," wrote Robert Frost in *Neither Out Far Nor In Deep*.

As the cover page picture of KIIFB Newsletter this time there is someone who creates that much of enthusiasm in all turn and look everywhere everyone; A strong figure who carries the road, the rail, the bridge, the hospital, the seaport, the school and what else in his body! Or a peculiar new creation who is made of all of these! When he appears on the screen, whether it is in a TV Ad or in the strip displayed in a running train or in a wayside electronic advertisement display board, all turn and look him only. He is the powerful single point declaration of KIIFB's completed projects.

KIIFB along with GRIHA Council hosted the Southern Regional Conclave on Green Building Initiatives in Trivandrum this month. The newsletter carries an article by Architect Ameya AP, Sr. Architect Sustainable Practices of KIIFB on Net Zero Buildings vs. Carbon Neutral Buildings: understanding the differences. It says that creation of truly low carbon, resilient and future ready assets is not only the need of the hour but it also comes as an answer to many ethical questions that we are bound to answer.

A well-conceived design is inevitable to ensure accountability and safety. Lt Col (Dr) Arunsekhar Chandrasekharan (Retd), Principal Project Advisor of KIIFB, in this background writes about "Design for X: An Iterative Approach for Design Optimization in Pre-Engineered and Precast Construction". Constructability coupled with smooth assembly using minimum labour is essential for value addition according to his findings.

There is also an article about the major Infrastructure projects which are funded by KIIFB in Thiruvananthapuram District and the kind of transformation that it brings in connectivity and social life.

Why Kerala needs Regional Road Transit now? A detailed and timely analysis of this pertinent question is presented in Shri Vineeth V.T.'s article, "***Kerala's Mobility Future: The RRTS Revolution.***" If we go through his article, a fully operational RRTS is projected to remove 100,000 daily vehicle trips from Kerala's roads!!! Imagine the economic and ecological benefits of it. Well, his article is only the first part in this issue; it will continue with the technological details of RRTS in the next issue.

Happy reading!! STAY TUNED.

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Contents

Net Zero Buildings vs Carbon-Neutral Buildings: Understanding the Difference

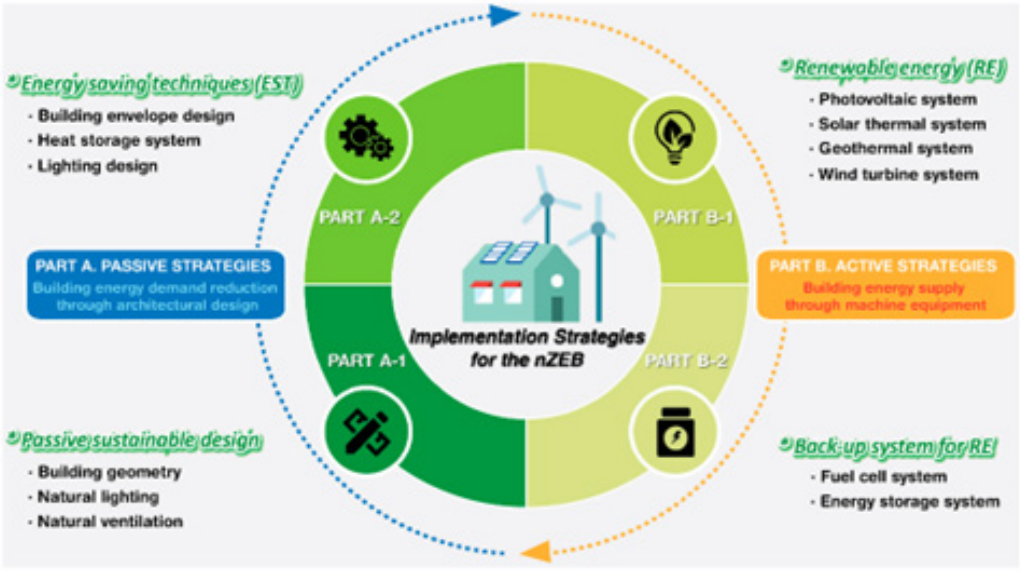
Ar. Ameya A P, Sr. Architect Sustainable Practices -ESG Wing

Introduction

As climate commitments intensify and energy costs rise, sustainability in the building sector can no longer rely on intent-based design or checklist-driven compliance. The focus is shifting toward measured performance, life-cycle accountability, and verifiable reductions in energy use and carbon emissions. In this context, Net Zero Buildings and Carbon-Neutral Buildings have become central to low-carbon development discussions, yet they are often used interchangeably despite representing distinct pathways to emission reduction. With buildings accounting for nearly 40% of global energy-related carbon emissions, this distinction is critical: **net zero buildings primarily address operational energy performance,** while **carbon neutrality expands the lens to the entire life-cycle carbon footprint**, including materials and construction. Together, they provide a robust framework for reducing the environmental impact of the built environment and advancing a low-carbon, resilient future.

Net Zero Buildings: A Performance-Based Energy Approach

A **Net Zero Energy Building** is designed to achieve an **annual balance between energy consumption and renewable energy generation**. Over the course of a year, the energy used by the building is offset by energy produced from renewable sources, either on-site or through verified off-site procurement. The focus of net zero buildings is primarily on **operational energy performance**.



Strengths of the Net Zero Approach

Direct reduction in operational energy demand

Net zero buildings achieve measurable reductions in energy consumption through integrated design strategies and high-performance systems.

Lower long-term energy costs

By generating renewable energy on-site and minimizing consumption, these buildings significantly reduce operational expenses over their lifetime.

Reduced dependency on fossil-fuel-based power

Integration of renewable energy systems decreases reliance on grid electricity generated from fossil fuels.

Clear, measurable performance metrics (kWh, EUI)

Net zero buildings provide tangible, verifiable data that can be monitored and reported consistently.

For institutional and public-sector projects, net zero buildings provide a **tangible and verifiable pathway** to reduce operational emissions.

Limitations of Net Zero Buildings

While net zero buildings significantly reduce operational emissions, they **do not automatically address embodied carbon**, which includes emissions from construction materials and processes. As buildings become more energy-efficient, embodied carbon can account for 50–70% of Total life-cycle emissions.

This limitation highlights the need to look beyond operational energy alone.

Carbon-Neutral Buildings: A Life-Cycle Carbon Perspective

A carbon-neutral building aims to eliminate or offset all carbon emissions associated with its life cycle, including:

- Embodied carbon from materials and construction
- Operational carbon from energy use
- Emissions from maintenance, refurbishment, and end-of-life

Key Elements of Carbon-Neutral Buildings

Life-cycle carbon assessment (LCA)

Low-carbon material selection

Energy-efficient and renewable-powered operation

Carbon offsetting for unavoidable emissions

Carbon neutrality demands a broader scope of assessment compared to net zero buildings.

Strength of the Carbon – Neutral Approach

- Address the full carbon footprint of a building
  Encourages low-carbon material innovation
  Aligns closely with long-term climate targets
  Supports economy-wide decarbonisation
- Carbon -neutral frameworks are particularly relevant for projects with high material intensity, such as large campuses and infrastructure buildings.

Challenges in Achieving Carbon Neutrality

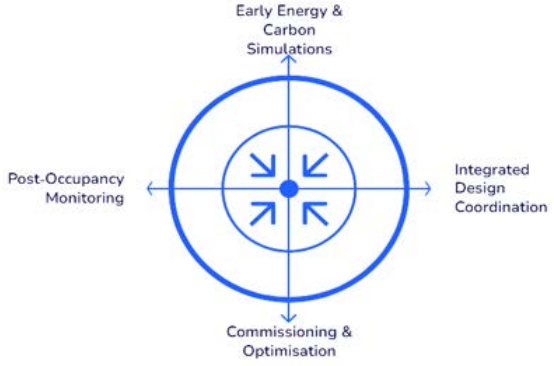
- Reliable embodied carbon data may be limited
- Life-cycle assessments require technical expertise
- Over-reliance on offsets can reduce credibility
- Carbon neutrality claims depend heavily on verification

Without robust reduction strategies, carbon neutrality risks becoming offset-driven rather than performance-driven.

Why Performance-Driven Design Is Critical for Both

Whether targeting net zero or carbon neutrality, performance-driven design is the common foundation.

Performance-based approaches help close the gap between predicted outcomes and actual results.



Integrating Both Approaches: The Ideal Pathway

Rather than choosing between net zero and carbon neutrality, the most robust strategy is to combine both:

This hierarchy ensures that carbon neutrality is achieved through real reductions first, not compensation alone.

Challenges in Implementation

1. Higher upfront design coordination effort
2. Capacity gaps in carbon accounting
3. Limited availability of low-carbon materials
4. Need for skilled facility management

However, these challenges diminish rapidly with scale, standardisation, and capacity building.

The Way Forward

KIIFB's green building initiatives have already adopted best practices aligned with national and international commitments, evolving from compliance-driven certifications toward performance-based standards that integrate life-cycle carbon reduction, climate resilience, and operational efficiency. In this context, carbon-neutral buildings may serve as a transitional step; however, public green finance should anchor future investments in verifiable net-zero buildings, moving beyond labels toward measured life-cycle performance and the creation of truly low-carbon, resilient, and future-ready assets.

Sreedhari bridge across Manali river in Thrissur District

Design for X: An Iterative Approach for Design Optimization in Pre Engineered and Pre-Cast Construction

Lt Col (Dr) Arunsekhar Chandrasekharan (Retd)
Principal Project Advisor, KIIFB

I Introduction

Design for Excellence is not a novel concept in Construction Industry as targeting excellence is natural to achieve maximum utility from a product or a project. But its definition and scope kept on changing with every emerging technology. The mathe-matical and quantitative approach to design, made the scientific community realize the importance of effective management of the execution process. The construction needed to be safe, ergonomic, reliable and within planned schedule to provide value to the client [1-3]. A well-conceived design was inevitable to ensure accountability and safety [4]. Today the Construction projects are executed and monitored on the principles of well researched management theories where each penny has to be ac-counted for [5-7]. Most of the modern day marvels are more of management land marks rather than engineering ones. It was realized that every fancy design cannot be constructed without affecting the budget and hence constructability started gaining its prominence in design criteria. Almost 40% of the change orders or deviation or-ders are rooted in the design phase [8] and 30% cost escalation is attributed to poor communication during design phase [9]. This amply highlights the importance of re-ducing the change orders during execution phase and targeting constructability on the design table. Generating value for money is the new mantra in construction in-dustry as specific targets like cost, time, constructability, assembly, manufacturabil-ity, procurement and reusability dictates the ultimate value. This shift towards tar-geting specifics according to the client's requirement, justifies the use of algebraic term 'X' which is used to denote an unknown quantity. But the real task is to substi-tute 'X' with the correct target or targets in right proportion. This right mix can be reached by an iterative approach as enumerated in the case study of pre-cast and pre-engineered construction which is an evolutionary product in the origin of tech-nologies. The study looks into the iterative design process of pre-engineered and pre-cast construction to examine the targets which are evolved from conventional construction methods towards achieving excellence. Constructability translates to be the ability to construct something using appropriate technology within a specified budget and schedule producing the intended value. Value Engineering has to be an integral part of constructability as its prime aim is to increase value than to reduce cost [10]. The design table is very much a place where the fate of the Project lies and decides the value it will generate. In

this paper, the constructability and value gener-ation is critically analyzed in adopting emerging technologies like pre-engineered and precast construction to draw lessons in iterative design optimization using DfX concept along with procurement management challenges.

2 Genesis and Evolution for Pre Engineered Technology

Pre Engineered technology emerged as a cost effective method to economically use steel in large span structures. Spans up to 90 m were achieved using this tech-nology for aircraft hangars. Using RCC was out of question while planning these large spans as the beam depth would be too large making it uneconomical and un-safe. The urge to cut cost and reduce waste and thus produce more value was natural in early 2000 for the metal building industry to stay afloat in a competitive market. Steel was the answer to reduce self-weight of the structure and reduce construction time. But as the span increased the depth of the section also increased. It occurred to the structural designers that the cross section of the steel frame can be matched with the bending moment profile to reduce dead weight and make the structure more eco-nomical. Figure 1 shows the Pre Engineered Building portal frame superimposed on its bending moment diagram to bring in the striking similarity in both profiles. The section requirement is directly proportional to the stress at that point.

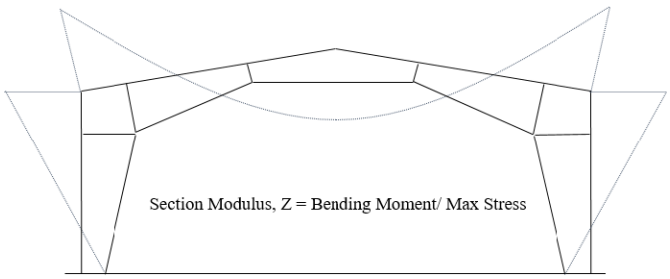


Figure 1, Bending Moment Diagram super imposed on PEB frame

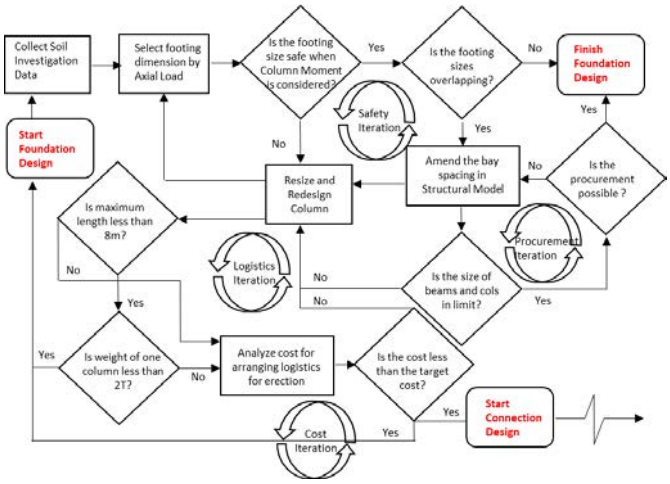


Figure 2, Iterative design process of PEB

2.1 The Iterative Design Approach

It can be seen that a Pre Engineered Building (PEB) frame is an attempt to follow the bending moment profile in most adverse loading conditions. This design for stress approach actually translates into design for cost as material is saved for a giv-en span and floor area. Other considerations include structural safety, cost and the maximum member size for transportation. Length of a column as per design is 12m, but for the ease of transportation via road and for easy handling at site that might have to be restricted to 8m, thus dividing the column into two members of 8m and 4m to make members of almost equal weight being tapered section. The connections need to be pre designed, connection plate pre welded and bolt holes provided at the manufacturing yard. Else the column height has to be restricted to 8m. These logisti-cal considerations force the designer to have a relook again at the dimensions. The 8m section should be available with the steel manufacturers and cost of assembly should fit into the procurement plan. This iterative design process continues till the loop is closed with a technically feasible, financially viable and legally valid con-tract document is evolved. Figure 2 shows the iterative design process of a PEB foundation design process which are closely connected with column and connection design. The maximum member size is 8m

and weight is 2T for safe transportation and easy installation in the present case. Any dimension higher than this will attract an additional cost. It can be assimilated that the foundation design flows through it-eration of safety, logistics, cost and procurement to arrive at a constructible design. In pre-engineered and pre cast construction, the building components are manufac-tured in a factory and transported to the site. The components are assembled at the site using appropriate tools and machinery. In this method, the designer's targets are different compared to a cast-in-situ process. The components have to be with in the acceptable dimensional tolerance limit as there is little room for site corrections. Target Value Design gives the stakeholders more rationale inputs for monitoring and decision making. Target Values have to be identified to incorporate in the design process which might vary for each stakeholder. The study aim to define values in a design process for optimization of resources. For this purpose the concept of Value needs to be addressed in a more objective way.

3 Value in Design

Value is a set of concerns with respect to cost and function. It has a futuristic component which is based on a various inputs and assumptions. It can be expressed as ratio of design function to cost. It is obvious that in order to increase value, the cost has to be reduced or the design functions have to be increased. But while pre-paring a tender document, in the process of procurement, the price is the only readily available factor. A correlation between price, cost and value need to be established to define the target values in design. Table 1 illustrates the comparison of price, cost and value with respect to various functions as derived from focus group discussions with stakeholders in an EPC project. It can be seen that value is a user's utility per-spective through opinion. The comparison illustrates that price is related to past tense, cost to present tense and value in future tense when we evaluate a facility or a project at planning. The price comes from the market and documented in the sched-ule of prices by various agencies and the cost is budget at completion of the project. The value is an opinion which goes back to market as set of benchmarks with respect to utility of the product or service. Figure 3 gives the value generation process in a typical construction project using price and cost. Price is a fixed factor compared to cost and value. In a Project it makes sense to plan cost cutting, but not price reduc-tion. Price of materials are fixed with respect to time and location.

Price	Cost	Value
Amount paid for acquisition	Amount incurred in production	Utility of a product or service
Ascertained from consumers perspective	From producers perspective	From users perspective
Estimates through policy	Through fact	Through opinion

Table1, Comparison of Price, Cost and Value

Pre-Cast	Cast-in-Situ
Faster Construction	Slow Construction
Greater control on quality	Less control on Quality
Not hampered by adverse weather	Severely hampered by weather
Assembly based	Activity based
Minimum Waste	Considerable Waste

Table 2, Comparison of Pre-Cast vs. Cast-in-Situ

Once the BOQ is prepared the price factor has been considered. But the cost factor eludes the designer as that is depended on change orders, contingency and force majeure. Value is a promise in future which is based on opinion, perception and market

forces. In order to optimize the value what should we aim for? Though a civil engineering project cannot be templated into a product manufacturing process, many lessons can be drawn from the evolution of assembly line manufacturing process which revolutionized the industrial production of construction materials.

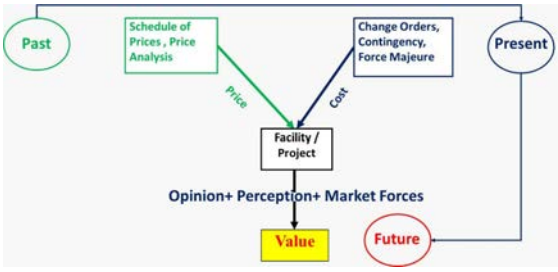


Figure 3, Interaction of Price, Cost and Value

4 Genesis of Pre-Cast Technology and QFD

The pre-cast construction technology was emerged as a natural evolutionary process by improving on the lacunas of cast-in-situ construction with reinforced cement concrete. The advancements in reinforced concrete technology and feasibility of slender sections made designers to take a bold step towards treating the concrete members like steel. From table 2, it is evident that the industry has adopted pre-cast technology for achieving value by taking advantage of certain unique features of the new technology.Quality Function Deployment in construction industry is not often practiced due to its invisibility compared to other manufactured products. A direct translation of QFD concept from an automobile production unit may not suit a build-ing contractor. Customer's aspirations from a car varies greatly from a building or an apartment. Constructability is the synthesized end product after analyzing all QFD inputs. Table 3 illustrates the conflicting yet complementing requirements of users and designers while planning a pre-cast apartment building. It is pre requisite of any high rise building to be earth quake proof and in pre cast facility this translates to be monolithic beam column connection for the designer. It is quite natural for the cus-tomers to expect a smooth finish of exterior and interior. In pre cast the designer has to ensure vibro compaction and smooth shuttering to save cost of plastering and en-sure smooth finish at the same time. Customers are often smitten by the cost not by the value. At the same time cost eludes the designers as they are indulged in price. These conflicting demands in constructability makes it more challenging to set spe-cific targets for planning the project. From construction activity, the entire process got converted to a manufacturing process to add value. In an evolutionary curve we can see that steel overtook cement concrete as a preferred material for fast track construction. It is interesting to note that though the technology is not based on any new theory, the adoption happened by default, not by design. The reason is more value generation through manufacturing and assembly with relatively less effort. Pre cast system is widely used now in many repetitive structures and claddings due to its versatility to act both as architectural and structural material.

Customer	Designer
Should be Earth Quake proof	Monolithicity of connections
Smooth finish	Vibro Compaction and smooth shuttering
Low maintenance cost	Easy access to MEP lines
No disputes	EPC Contract
Affordability	Break even quantity
Fast delivery	Steam curing of RCC members
Quick assembly	Cranes part of inventory

Table 3, QFD of Customers and Designers for a Pre-Cast facility

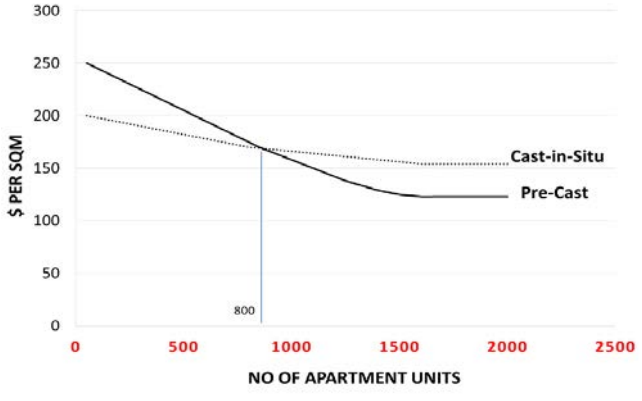


Figure 4, The Break Even Quantity for Pre-Cast feasibility

4.1 Cost Benefit Analysis and Break Even Quantity

The actual value of pre-cast is often misunderstood as the direct cost of structural components will be high compared to the cast-in-situ framed system [11]. The com-ponents have to be manufactured in a pre-cast plant and transported to the site. Huge initial investment of casting plant and steam curing facility can be justified only with a minimum assured order of repetitive nature. This technology is ideally suited for housing sector as the layout is similar and slabs are spanning less than 5m. The Cost Benefit Analysis in figure 4 shows a minimum number of 800 units have to be con-structed to make the rate comparable to the conventional cast-in-situ technology. This break even quantity is specific to a turnaround distance as the distance of plant increases from the construction site, the cost changes. Figure 4 shows the data col-lected from Delhi, India.

4.2 The Design Targets

Having defined the relation between Price, Cost and Value; the design targets specif-ic to the intended value can be assessed. These target values may be required in var-ied quantities as per the design optimization which should fit in the cost and time framework. In the case of pre-cast facility, location of a manufacturing plant can be selected as per the logistical requirement but if the components are not fit for assem-bly, there is no scope to perform any repair on site. Taking them back to the plant for changes will incur huge financial burden which may derail the whole financial plan. As time progresses, the influence of design aspects of logistics starts reducing and manufacturability increases. The iterative design process zoom in on to design for assembly as the prime target to achieve in the design process and constructability remains the strong foundation to achieve the final aim of producing a foolproof ready to construct drawing which is a legally valid document having implications on change orders and final cost.

4.2.1 Design for Logistics (DfL)

The Pre-Cast components have to be manufactured in a location which makes the turnaround time logistically feasible and economically viable. The location of the plant has to be decided based on the availability of the raw material and resources. The logistical challenges involve setting up the Pre-Cast plant, transportation of raw materials and transportation of manufactured components to the construction site. The dimension of vehicles for the above purpose will be governed by the size of the building components and their weight. The maximum height clearance permissible under the rail bridges and fly overs on the way plays an important role in this logisti-cal planning. Once the location of manufacturing plant is fixed, rest of the parame-ters will be dependent on this aspect of logistical baseline. Figure 5 shows the map of three sites A, B, C and the location of the pre-cast plant, P. The location of plant is so selected that the time to reach each site is almost same. The plant is sited based on the logistical feasibility which has a direct bearing on the overall cost and thereby being a value deciding factor.

4.2.2 Design for Manufacturability (DfM)

The components have to be pre cast in the plant and assembled at the site. This assembly operation will be requiring cranes. That infers to the correct size and shape of components which will make the assembly easy. Assembly will govern manufac-turability. The beams, columns, floors and walls have to be cast in the casting yard. The dimensions of structural components have to be fixed and ready mix concrete is poured using automated systems. How can compaction be achieved? A normal vibra-tor cannot be used as it will consume more time and will result in non-uniform com-paction. The casting bed has to act as a vibrator to save time and effort. This im-portant criteria for casting bed design and the cost involved is a governing factor in manufacturability. The components have to be cured for required

period to attain full strength and this for fasten the process, a steam curing facility has to be set up. All members should be hoistable using cranes as they will be moved several times once removed from casting bed. The location of these lifting hooks will have to be decided on the drawing table as they are part of structural analysis process. Table 4 lists the criterion considered for manufacturability of pre-cast technology.

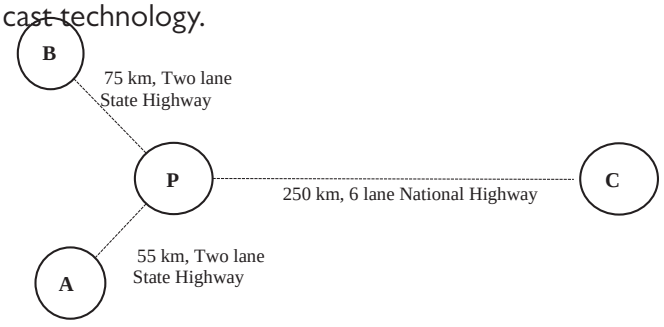


Figure 5, The Location of Plant P, with respect to sites A, B and C

Criterion	Manufacturability
Concreting	Automated Concrete Pouring Facility
Compaction	Vibro Compaction of Casting Bed
Curing	Steam Curing Facility
Mobility of Components	Overhead Crane in the Plant
Execution at Site	Limiting the weight of each components

Table 4, The Manufacturability criterion

4.2.3 Design for Assembly (DfA)

Assembly of various structural components at site has to be in perfect sequence to ensure a smooth execution. Unlike the cast-in-situ method, the pre-cast members lack monolithic connection. The structural analysis is carried out based on certain rigidity of connection and these design assumptions have to match with the site con-ditions. In reality, the DfA is the most important factor in a pre-cast design process. If the connections are not strong enough, catastrophic failures might happen. After the structural analysis and design, a scaled model may be tested in a lab condition to ensure that the assumptions are correct. The cost for these tests has to be borne part of the Research and Development effort rather than in the estimates of the design at hand. These are part of the initial investments as it is practically impossible to carry a destructive shake table test every time. The results of the initial test can be interpo-lated or extrapolated in subsequent designs as the case may be. The aspect of assem-bly is so important that the structural design has to be carried out by taking these as-sembly into consideration. The design of floor slabs will illustrate this aspect in de-tail. Unlike a cast-in-situ slab, the pre cast slab has many functions to perform. It should have shear connectors to ensure connection between next slabs, it has to give a smooth floor finish and it should be easily hoistable by crane. A lattice girder in re-inforcement steel is specifically manufactured for slabs to serve two purposes, to help in assembly as a lifting hook and to act as a shear key for connections. These functions are to be designed both for structural loading conditions and to facilitate construction.

5 Procurement Management, Monitoring and Control

The processes involved in procurement management is limited to plan, conduct and control as per PMBOK [12]and is a reaction to what is designed. But when we plan to adopt an assembly based technology, the procurement management cannot be inde-pendent of the design process. The Design-Build format suits procuring the pre-cast systems as the bid preparation is challenging when it comes to design and estimation. In an open competition to bid for a specific design, the purpose of providing equal opportunity and level playing field is not achieved. Moreover the DfA challenges will make the design favour a particular firm who has adopted a specific dimension for their projects in hand. Using design-build procurement format, the owner saves time and effort by executing only one contract with a design–builder, who takes re-sponsibility for completing both the design and construction of the project [13]. The Engineer, procure and Construct (EPC) model is often considered synonymous with Design-Build one in function as both shift the design and build responsibility and a bigger portion of risk to the contractor [14]. In EPC mode the contractor is often

en-trusted with the desired output in the case of a production facility. In the Design-Build system, the designer, the builder and the consultant, all could be rolled into one due to uniqueness of technology and there may be very less control by the client over the Project once the design has been finalized. But the designer has to ensure assembly, manufacturability and logistical feasibility by taking the client on board. Design for Procurement (DfP) is also an important parameter in construction when it comes to innovative and emerging technologies. Every exotic design cannot be con-structed and every technological feasibilities are not buildable on ground. There is a fine line between building a design and design something buildable. The design is tailor made for procurement to suit a Design-Build system so that the facility is built by the firm which designs it, thereby eliminating communication hiccups between a consultant and contractor. But is this killing fair competition and leading to monopo-ly of business? This question lingers on with all new innovations where very few people are experts initially. The fittest and adaptable will survive and probably the theory of evolution is applicable to construction industry too. The traditional moni-toring and control process is designed to keep the budget always on track and effect minimum change orders. The stakeholders involved are reacting to the precedence diagram actual unravelling on site. So the monitoring process almost reduces to an assembly supervision as there are very less decisions to be taken. The scope is fixed in pre-cast no change order with respect to architectural or structural is feasible. This lack of flexibility is accounted for by numerous design iterations after repeated in-teractions with stakeholders.

6 Summary and Scope for Future Work

As the theory of evolution has proved, only the ergonomic design will be passed on and imbibed by the next generation. Economic viability with desired value will re-main the sole criteria for the project's success in the modern world. Only constructi-ble designs will be executed and a trade-off will be arrived between design and con-struction which could be an iterative process to reach at minimum financial burden, carbon foot print and maximum value for money. The monitoring and control tech-niques like EVM will be helpful only when Design-Construction interface is hitch free with clearly defined target values. The study validates ample reasons to predict more impactful application of Lean principles with emerging material research for construction. Design and Construction will remain complimentary activities with the constructability deciding the success and client satisfaction. The study predicts that constructability coupled with smooth assembly using minimum labour is essential for value addition. Emerging technology like modularity needs to be validated on the DfX iterative process before adopting in a large scale. The bottom up approach of new policy initiatives and better communication between stakeholders promise more refined designs in future where technology will be pushed to achieve design optimi-zation.

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Sreedhari bridge across Manali river in Thrissur District

Transforming Connectivity: Key Infrastructure Projects in Thiruvananthapuram District

Introduction

As part of the Government of Kerala's sustained efforts to strengthen infrastructure and improve regional connectivity, several road and bridge projects in Thiruvananthapuram District have reached advanced stages of completion, with many already inaugurated and opened to public. Implemented under the Kerala Infrastructure Investment Fund Board (KIIFB) funding and executed by the Public Works Department (PWD) through the Kerala Road Fund Board (KRFB), these projects focus on enhancing road safety, reducing traffic congestion, and ensuring seamless mobility for the public. Together, these projects are expected to significantly contribute to the socio-economic development of the district by improving access, travel efficiency, and overall quality of transport infrastructure.

Improvement to Pazhakutty – Mangalapuram Road in Thiruvananthapuram District

The Pazhakutty–Mangalapuram Road is a major arterial corridor in Thiruvananthapuram District, passing through Nedumangad Municipality and the Grama Panchayats of Anad, Vembayam, Manickal, Pothencode, Andoorkonam, and Mangalapuram, with a total length of 19.80 km. The road plays a vital role in facilitating regional connectivity and supporting socio-economic activities across the Nedumangad and Vamanapuram Assembly Constituencies.

The project is being implemented under the Kerala Infrastructure Investment Fund Board (KIIFB) scheme and received administrative sanction for ₹200 crore, as announced in the 2017–18 Budget Speech. Based on detailed estimates prepared for the rehabilitation of the entire stretch, KIIFB accorded revised financial sanction for ₹169.95 crore, inclusive of land acquisition costs.

The execution of the project is being carried out under the supervision of KRFB–PMU, Thiruvananthapuram Division, with development planned in three phases. As part of Phase II, the Pothencode–Mangalapuram stretch, having a length of 6.50 km, was taken up for improvement. Technical sanction for ₹44.40 crore was accorded on 21.12.2023.

The road has been developed with a Right of Way (ROW) of 13.60 m, comprising a 10.00 m wide carriageway, 1.80 m wide drains on either side, and provision for utility space, ensuring improved safety, drainage efficiency, and riding comfort. Adequate road safety measures, including footpaths and handrails, have been provided at important junctions, schools, and similar locations. The road works were completed well before the stipulated construction period.

The works for Stretch–III (Pothencode–Mangal-

apuram) were executed by M/s Sreedhanya Construction Company. The work was inaugurated on February 03rd 2026 by Hon'ble PWD Minister,marking a significant milestone in the phased upgradation of the Pazhakutty–Mangalapuram corridor and enabling improved traffic movement and regional connectivity.

The improved stretch is expected to reduce travel time, enhance traffic safety, and support commercial and local development in the region.

Chirayinkeezhu Railway Over Bridge, Thiruvananthapuram District

The Chirayinkeezhu Railway Over Bridge (ROB) is a key infrastructure project being implemented in Thiruvananthapuram District to eliminate the level crossing at LC No. 566 (KM 191/500) between Chirayinkeezhu and Murukkampuzha Railway Stations, thereby improving road safety and easing traffic congestion in the region.

As per GO(Rt) No. 535/2020/PWD dated

19.06.2020, the Government decided to construct 10 Railway Over Bridges in the district using steel–concrete continuous composite superstructures. The adoption of steel composite structures ensures faster construction, reusability of materials, and improved environmental sustainability. Accordingly, KIIFB accorded financial sanction for the project "Construction of 10 Nos. Road Over Bridges across Kerala with Steel Concrete Continuous Composite Super Structure on Design, Build and Transfer (DBT) mode" vide Proceedings No. PWD005-06/PE-5-PAD/2021/KIIFB dated 01.03.2021 for an amount of ₹222.79 crore.

The ten ROBs were tendered as a single package, and the work was awarded to M/s SPL Infrastructure Pvt. Ltd for a contract value of ₹251.48 crore (excluding GST).

The proposed Chirayinkeezhu ROB is a two-lane structure with a 7.50 m wide carriageway and a 1.50

m wide footpath. The total length of the ROB is 700 m, including a 56.24 m railway span, with an overall width of 10.15 m. The bridge has a gradient of 1 in 25 on the Attingal side and 1 in 16 on the Chirayinkeezhu side. A 4.0 m wide service road, including a 1.0 m wide drain, is proposed on both sides.

The Attingal side approach has a total length of 359.88 m, comprising 38 m on embankment with retaining walls, 225.75 m of approach road, and 96.14 m on RCC deck slabs. The Kadakkavoor side approach has a length of 280 m, including 94 m on embankment with retaining walls, 47.24 m of approach road, and 138.76 m on RCC deck slabs. RCC crash barriers have been provided on either side of the carriageway. The railway portion has a total width of 12.0 m, accommodating a 7.50 m carriageway and 1.50 m wide footpaths on both sides.

The cost of construction is estimated at ₹21.93 crore (excluding GST). In addition, ₹69.27 lakh has been allocated for KSEB and KWA utility shifting, and ₹20.20 lakh for compensation to affected structures.

At present, all works up to bituminous concrete, crash barriers, and handrails have been completed, including the railway portion. Painting, drain works, and approach road works are in progress. The project has achieved approximately 90% physical progress and is expected to be completed shortly, providing a safe and uninterrupted road–rail crossing and significantly improving traffic flow in the Chirayinkeezhu area.

Construction of Kumbichalkadavu Bridge across Karippayar

The Kumbichalkadavu Bridge, constructed across the Karippayar River within the Neyyar Dam reservoir in Amboori Grama Panchayat, represents a landmark infrastructure achievement under the Kerala Infrastructure Investment Fund Board (KIIFB) initiative. The project, executed by M/s SERMS Infrastructure Pvt. Ltd, has been completed and is nearing formal inauguration, significantly strengthening connectivity for remote settlements and opening new avenues for socio-economic advancement.

Project Sanction & Funding

The project's financial sanction was issued for an amount of ₹24,68,55,860.58 (including ₹24,61,58,873 for contract work and ₹6,96,987.60 for electric post shifting).

Technical Features

The bridge is designed as a two-lane structure with a 7.5 m carriageway and 1.5 m wide footpaths on both sides, totalling a 252.60 m span arranged in seven segments: 2 × 35.625 m and 5 × 36.20 m. It provides all-weather safe passage across the river and reservoir.

Approach and connecting road works include:

- 211.975 m on the Amboori side and

78.925 m on the Puravimala side.

- Additional links of 73 m (Amboori), 84.3 m (Puravimala), and a 720 m stretch from Poochamukku to Amboori.
- A 105 m service road (Mayam Road) on the Amboori flank.

Community Impact & Connectivity

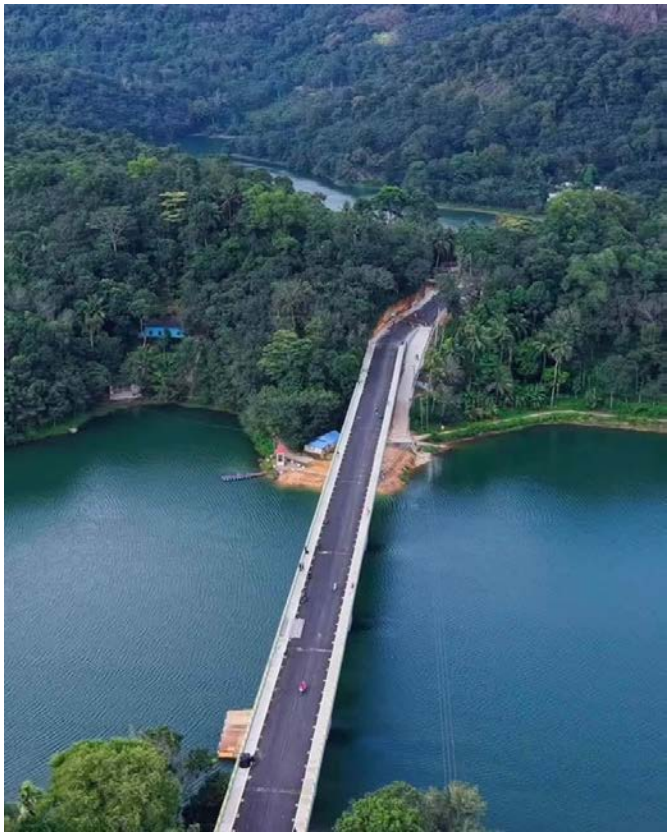
The bridge is described in state media as Kerala's longest multi-span river bridge, marking a transformative infrastructure addition for the region. It will end decades of relative isolation for the high ranges of Amboori and directly benefit over 1,000 tribal families across 11 interior settlements, including Karikkuzhi, Chakkappara, Sankumkonam, Kaipanplavila, Thenmala, and Kunnathmala.

Local leadership has underscored the project's role in enhancing access to education, healthcare, markets, and essential services. The bridge is poised to catalyse improved mobility, stimulate local economic activity, and integrate the region more fully into the district's transport network.

Tourism & Long-Term Significance

Earlier assessments of the project anticipated secondary benefits for tourism by linking scenic destinations such as the Neyyar Dam, hill stations, and cascading waterfalls through an expanded road network.

The project has been completed in full and is expected to be inaugurated shortly, reinforcing KIIFB and PWD's commitment to enhancing rural connectivity and infrastructure delivery in Kerala's hilly terrains.



Improvement of Muthuvila–Chellanchi–Kudavanadu–Nandiyode Road

The proposed project road starts from Muthuvila Junction and terminates at Nandiyode Junction on State Highway–2 (Thiruvananthapuram–Thenmala). The road serves as a major connectivity corridor linking the plantation areas of Kallara, Chellanchi, Kudavanadu, etc., to the Nandiyode market. The total length of the project road is 13.650 km.

Considering the relatively low traffic volume, the improvement works are proposed to be carried out within the existing Right of Way (ROW). The project is being executed as a deposit work through Kerala Road Fund Board (KRFB).

The proposed improvements include development of a 5.50 m wide carriageway, provision of 0.50 m wide Irish drains, and construction of retaining walls at required locations, based on site conditions.

The work has been awarded to M/s. Sree Dhanya Construction Company for a contract amount of ₹16,00,77,748.00. As on date, approximately 90%

of the project works have been completed.

The improved road will significantly enhance connectivity to major tourism destinations such as Ponmudi and Braimore Hill Stations and Thenmala Ecotourism Centre, thereby supporting regional development, tourism, and local economic activities.

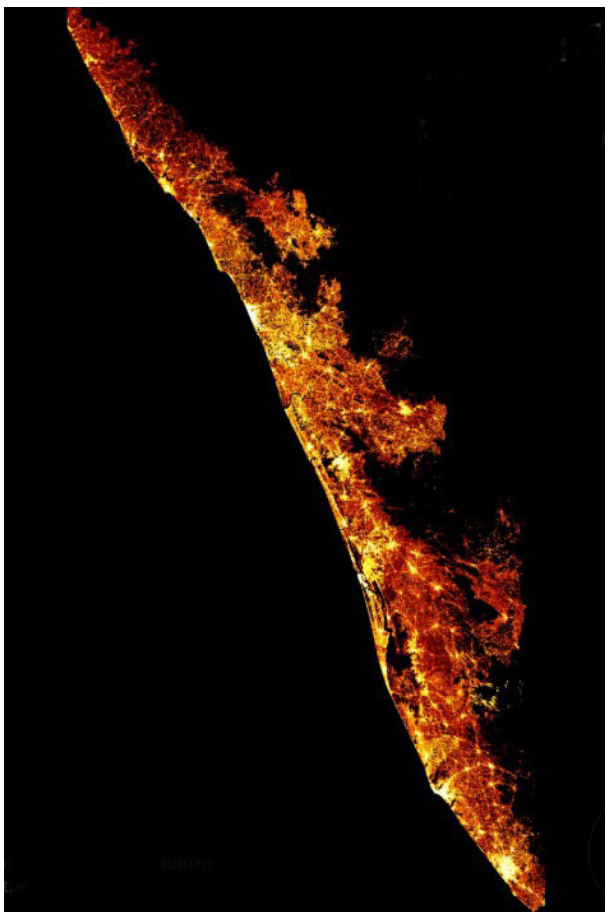
KERALA'S MOBILITY FUTURE: THE RRTS REVOLUTION

Vineeth V T,
Program Implementation Cell, O/o CPS to CM

Part 1: Why Kerala Needs High-Speed Regional Transit Now

One State, One Linear City.

Stand at any point along National Highway 66, and you will witness a geographic phenomenon unique in India. Kerala is not a collection of isolated urban islands separated by rural stretches; it is a 580-kilometer "linear city" stretching from Thiruvananthapuram to Kasaragod. In this continuous urban continuum, cities do not end, they simply transition. Six corporations and hundreds of municipalities merge into an unbroken settlement pattern that functions less like a state and more like a single, massive neighbourhood. This is Kerala's "living room"—a space where life, work, and family should flow seamlessly, but are currently blocked by a transit system that has not kept pace with the people it serves.



Kerala Population Density heat map

The "Invisible Tax" of 43 Days a Year

For tens of thousands of professionals in Kerala, the commute is a grueling daily marathon. Consider the typical day of an IT professional living in Thrissur but working in Kochi. The day begins at 5:30 AM to catch a 6:15 AM train. By the time she navigates connections and reaches her office, it is 9:00 AM. After a full workday, she returns home at 8:30 PM.

This translates to average four hours a day, twenty hours a week, and over 1,000 hours annually. This is the equivalent of losing 43 full days every year to transit. This "invisible tax" is paid in the currency of human connection: mornings without breakfast with children, missed school events, and weekends lost to pure exhaustion. It represents a fundamental failure of infrastructure to respect the most limited re-

source of its citizens: time.

"These are professionals forced to choose between career growth and family proximity- a choice no modern society should demand."

The Ancestral Home vs. The Urban Apartment

Kerala presents a fascinating cultural paradox. Despite having the highest per-capita car ownership in India, the "Malayalee professional" maintains a deep, cultural preference for public transport. This isn't just about affordability; it's a committed lifestyle choice. In July 2023 alone, the Thiruvananthapuram-Ernakulam corridor recorded over 13,000 monthly tickets (passes)—a massive, loyal base of daily commuters who have turned their backs on the highway in favor of the tracks.

Railway revenue data from September 2024 further highlights this staggering demand:

- Thiruvananthapuram Central: ₹281.12 crore from 1.31 crore passengers.
- Ernakulam Junction: ₹241.71 crore from 87.96 lakh passengers.
- Kozhikode: ₹190 crore from 1.14 crore passengers.

This demand stems from the "ancestral home" factor. Unlike the migrant workforces of Bangalore or Mumbai, the average professional in Kerala would rather endure a three-hour train journey than relocate to a cramped urban apartment, choosing deep roots and family proximity over personal convenience.

Why Kerala's Trains are "Stuck in the Past"

While the appetite for rail is high, the infrastructure is failing the population. Kerala's current rail network operates at speeds 30-40% slower than those in neighboring states. To see the absurdity of this deficit, one only needs to look at the National Capital Region (NCR). In the NCR, an 80-kilometer commute via the new RRTS takes just 90 minutes. In Kerala, traveling that same 80 kilometers can take between 3 to 4 hours.

The full 532-kilometer journey from Thiruvananthapuram to Kasaragod currently takes 10 to 12 hours. To put that in perspective: a resident of the capital could board a flight and be in Dubai in less time than it takes to reach the northern tip of their own state. It is a system that effectively treats the state's geography as a barrier rather than an asset.

The "Missing Link": Lessons from Delhi-Meerut

The solution lies in a new category of transit: the Regional Rapid Transit System (RRTS). Think of it as the "missing link" in urban planning—it's faster and covers longer distances than a standard metro, yet provides much higher frequency and faster acceleration than conventional rail.

A fully operational RRTS is projected to remove 100,000 daily vehicle trips from Kerala's roads, slashing CO_2 emissions by 300 tonnes every single day and making the air in our "linear city" breathable again. Beyond the economy, this is a massive sustainability win for one of India's most ecologically sensitive zones.

Delhi RRTS

India's first RRTS on the Delhi-Ghaziabad-Meerut corridor has already proven the "wawoo!" moment of this model. By using 160 km/h speeds, it turned a punishing 3-hour journey into a 60-minute commute. For Kerala, the RRTS offers a specific technological solution to its dense geography: grade-separated infrastructure. By utilizing elevated viaducts and tunnels, high-speed tracks can be built through densely populated areas with minimal land acquisition—a critical factor in a state where every square meter is cherished.

Collapsing the State into a Single workforce Market

Implementing an RRTS would fundamentally redefine Kerala's economy by "collapsing" distance and triggering agglomeration economies. When you connect workers, employers, and suppliers at 160 km/h, the entire state functions as a single, integrated workforce market, boosting productivity without the social disruption of mass relocation.

The projected time savings are transformative:

- **Thrissur to Kochi:** 35–40 minutes (currently 2 hours).
- **Kozhikode to Kannur:** 40 minutes (currently 1.5 hours).
- **Thiruvananthapuram to Kasaragod:** Under 4 hours (currently 10–12 hours).

Beyond the economy, this is a massive sustainability win for one of India's most ecologically sensitive zones. A fully operational RRTS is projected to remove 100,000 daily vehicle trips from Kerala's roads, slashing CO_2 emissions by 300 tonnes every single day and making the air in our "linear city" breathable again.

Conclusion: Beyond the Tracks

The RRTS is more than just a faster train; it is a tool for balanced regional development. When a town like Shornur is suddenly only 40-50 minutes from Kochi, it transforms into an economic satellite of a major hub. This prevents the "talent drain" where opportunities and wealth concentrate in only two or three cities, allowing smaller municipalities to thrive while maintaining their unique character.

Infrastructure should match how people actually want to live. Malayalees have clearly signaled that they want to remain connected to their hometowns while pursuing modern careers. The RRTS offers a future where distance is no longer a barrier to opportunity, turning a 580-kilometer challenge into a state-wide community.

In Part 2 of this series, we will take a deep dive into the specific technology, design, and alignment strategies that will make the Kerala RRTS a reality.

Malayalees have clearly signaled that they want to remain connected to their hometowns while pursuing modern careers. The RRTS offers a future where distance is no longer a barrier to opportunity, turning a 580-kilometer challenge into a state-wide community

Kerala's Mobility Revolution:
Connecting the 580-Kilometer Linear City

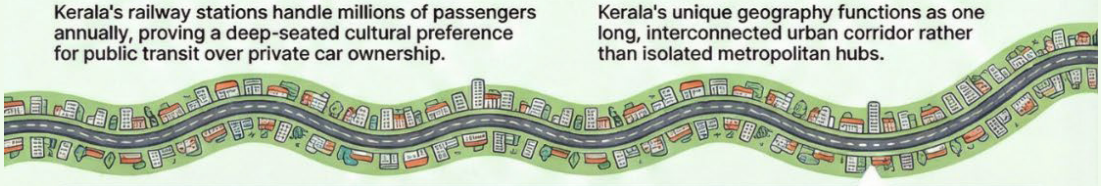
THE STRAIN ON THE SYSTEM

Massive Passenger Demand

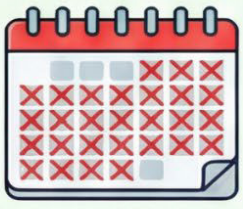
Kerala's railway stations handle millions of passengers annually, proving a deep-seated cultural preference for public transit over private car ownership.

The 580km "Linear City"

Kerala's unique geography functions as one long, interconnected urban corridor rather than isolated metropolitan hubs.



THE 'INVISIBLE TAX' OF COMMUTING

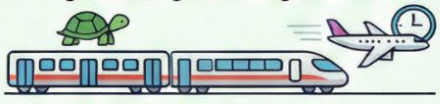


43 Full Days Stolen per Year

Long-distance commuters spend an average of **4 hours daily** in transit, equating to **1,000+ hours** or **43 days annually**—time lost to family and rest.

Slower than Neighbors

Karala's current rail network operates **30-40% slower** than neighboring states, making a trip to Kasaragod take longer than a flight to Dubal.



THE RRTS SOLUTION: SHRINKING THE STATE

160 km/h Regional Connectivity

RRTS fills the gap between slow intercity trains and local metros with high-speed, frequent (every 5-15 min) service.

Travel Time Comparison

	CURRENT TRAVEL TIME	RRTS TRAVEL TIME
TVM to Kasaragod	10–12 Hours	Under 4 Hours
Thrissur to Kochi	2 Hours	35–40 Minutes
Kozhikode to Kannur	1.5 Hours	40 Minutes

A GREENER, MORE EFFICIENT FUTURE

100,000 Fewer Daily Vehicle Trips

By shifting commuters to electric rail, the RRTS will significantly reduce the number of cars on Kerala's congested highways.

300 Tonnes of Carbon Saved Daily

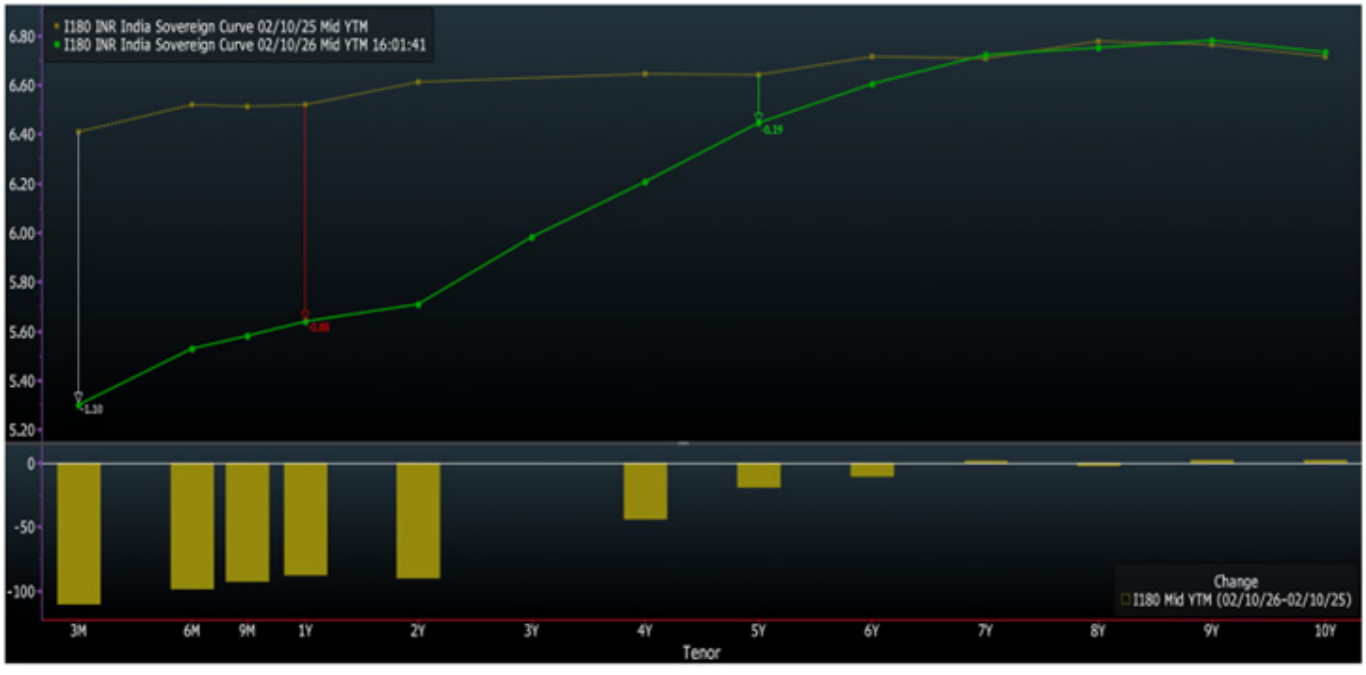
The projected environmental impact includes a massive reduction in daily CO_2 emissions, contributing to the state's sustainability goals.

Economy & Market Watch

Ajosh Krishnakumar,
General Manager, Finance & Administration

In this edition of Economy & Market Watch, we do a study on India Sovereign yield curve to analyse how the yield curve has evolved in the last 12 months.

The following chart depicts the India Sovereign yield curve on 10th February 2025 and the yield curve dated 10th February 2026.



As may be seen from the above chart, there has been a significant change in the slope of the India Sovereign yield curve, with the shape of the curve changing to a conventional upward sloping one, in the last 12 months. During the period, yields for India Sovereign bonds of 3M tenor dropped by 110 bps while yields for 10 Y tenor remained at ~ 6.7% levels.

The above chart also indicates a significant steepening of the current India Sovereign yield curve compared to the one in February 2025 with the spread in yields between 3 M and 10 Y tenors increasing from ~30 bps on 10th February 2025 to ~143 bps on 10th February 2026.

Additionally, a slight inversion could be seen in the current sovereign yield curve between the tenor of 9Y– 10Y.

Resolution of Monetary Policy Committee (MPC) in February 2026:

In the 59th meeting of Monetary Policy Committee (MPC) held in February 2026 (4th to 6th of February) under the chairmanship of Shri Sanjay Malhotra, Governor RBI, MPC, after assessing the current and evolving macroeconomic situation, voted to maintain the policy repo rate at 5.25 per cent and decided to continue with the neutral stance.

In terms of inflation outlook, the inflation numbers remained muted at 0.7 per cent in November 2025 and 1.3 per cent in December 2025. February MPC projected CPI inflation for FY 2025-26 at 2.1 per cent, with Q4 FY 26 at 3.2 per cent. CPI inflation for Q1 and Q2 of FY 27 are projected at 4.0 per cent and 4.2 per cent respectively, with risks evenly balanced.

On domestic economic growth outlook, real GDP as per the First Advance Estimates (FAE), is estimated to grow at 7.4 per cent (YoY) in 2025-26. February MPC revised the projections for real GDP growth upwards for Q1:2026-27 and Q2:2026-27 to 6.9 percent and 7.0 per cent, with risks evenly balanced.

Source: RBI, Bloomberg

Peechi - Vazhani Tourism Corridor - Improvements with BM & BC to road from Mudikkode to Karumathra (Phase I) km 7/000 to 18/650 in Thrissur District

Tender Update - January 2025

Sl. No.	SPV	Sector	Work Description	Tender Value
1	KRFB	PWD	KIIFB-Development of Hill Highway (SH-59)- Ambayathode- Boystown road- KM 0/000 to 5/760, Kannur District-General Civil Work	₹ 340,649,161.00
2	KWA	WRD	KIIFB-KIIFB - Augmentation of CWSS to Nattika Firka Phase-l-Package III -Dismantling existing pipe line and laying of 700/500/200 mm pipes at Proposed WTP compound	₹ 15,747,018.00
3	INKEL	GED	Upgrading Schools as Centres of Excellence - Infrastructure Development - Vertical Extension of HSS block of GHSS Maroor, Pathanamthitta	₹ 10,253,433.00
4	KDISC	PEA	Supply installation testing and commissioning of networking equipment and cabling for access points	₹ 18,925,464.00
5	KIIDC	WRD	KIIFB-CMI-MRBC-Providing Community Micro Irrigation on the Ayacut of Extension of Moolathara Right Bank canal from Korayar to Varatayar- Zone-I-General Civil Work	₹ 132,254,848.00
6	KRFB	PWD	KIIFB-2019-20-Construction of coastal Highway -From 0/000 (Palakkode) to km 4/665 (kunnaru city) in Kannur District-General Civil Work	₹ 275,089,561.00
7	KRFB	PWD	KIIFB-Construction of Coastal highway-From Kolavippalam to Kottakkal Kadavu in Kozhikode District General Civil Work	₹ 241,749,325.00
8	KRFB	PWD	KIIFB-Coastal highway-Construction of coastal highway from Kodikkal to Kolavipalam in Kozhikode District-General Civil Work	₹ 525,733,521.00
9	KRFB	PWD	KIIFB-Coastal highway-Construction of coastal highway from Kodikkal to Kolavipalam in Kozhikode District-General Civil Work	₹ 37,284,270.00
10	KRFB	PWD	KIIFB- Improvements to Sasthamangalam - Vattiyoorkkavu Thoppumukku Mannarakonam (Reach I), Mannarakonam Peroorkada (Reach II) Road and Mannarakonam Junction Development in Thiruvananthapuram District-	₹ 568,299,304.00
11	KRFB	PWD	KIIFB-Improvements to Mannanthala Powdikonam Sreekaryam Road in Thiruvananthapuram District Reach 1- Mannanthala-Society junction Powdikonam Part TS General Civil Work	₹ 237,283,602.00

12	KRFB	PWD	KIIFB-Urgent Rectification Works to Changanassery - Kaviyoor Road -Rectification of carriage way by Providing 40 mm MSS in Changanassery - Kaviyoor Road Ch 2/500-13/300 kms -General Civil Work	₹ 38,811,513.00
13	KRFB	PWD	KIIFB-2023-2024 Improvements to Plamudy Kottappady Panipra Irumalappady Ooramkuzhy Road -Ch.0/000 to 10/683 in Ernakulam District - excluding ch 2/100 to 2/345 Surfacing work- Balance work	₹ 96,016,813.00
14	KSCADC	FSH	KIIFB -Shore Protection Works from Kollam Beach to Thanni-Groyne Head Protection Works(8 nos)	₹ 57,204,110.00
15	KSITIL	PEA	Interior Fitout and allied works for Work near home facility at ASAP building Kalamassery Ernakulam	₹ 24,232,609.00
16	SKF	SYA	KIIFB-Construction of Mattannur Sports Complex at Kannur District	₹ 162,566,675.00
17	SKF	SYA	KIIFB-Construction of Municipal Stadium at Adoor, Pathanamthitta - Retender	₹ 102,906,308.00
18	INKEL	HFW	Development of Govt. Medical College, Ernakulam - Interior Furnishing works (SH Furniture and Other Miscellaneous works)	₹ 16,121,347.00
19	KIIDC	ITD	KIIFB-Construction of IT Park for Kallada Irrigation Headquarters -Ravinagar Campus Kottarakkara-KIP,Kollam District-General Civil Work	₹ 722,790,235.00
20	KRFB	PWD	KIIFB Project -Improvements to Vakkethara -Kapikkad road-in Kottayam District -General Civil Work	₹ 203,577,358.00
21	KRFB	PWD	KIIFB-2023-2024 Improvements to Plamudy Kottappady Panipra Irumalappady Ooramkuzhy Road -Ch.0/000 to 10/683 in Ernakulam District - excluding ch 2/100 to 2/345 Surfacing work- Balance work due to termination of existing contract-General Civil Work	₹ 96,016,813.00
22	KRFB	PWD	KIIFB-Kattilkadav Bridge-Construction of Kattilkadav Bridge Across TS Canal in Kollam District-General Civil Work	₹ 359,429,798.00
23	KRFB	PWD	KIIFB-KALLAMOOLA AND CHENGODE BRIDGE-PWD013-51 - Hill Highway - Construction of Bridges (Chengode Bridge and Kallamoola Bridge in Wandoor LAC) coming under Hill Highway in Malappuram District"	₹ 65,352,326.00
24	SKF	SYA	Rectification works at Mini Indoor Stadium Aymanam	₹ 34,100,000.00

25	WAPCOS	TSM	Development of Kovalam and Adjacent Beaches Phase 1(Renovation of existing walkway at Light House Beach and rectification works for the existing amenity centre on Corporation land)	₹ 78,363,811.00
26	WAPCOS	TSM	Rejuvenation of Akkulam Lake AND its Watershed - Rebuilding Kerala the Sustainable Way - Phase-I	₹ 32,912,282.00
27	HITES	HFW	Supply and installation of loose furniture and curtains at taluk hospital cherthala	₹ 14,613,798.00
28	INKEL	HFW	Development of Govt. Medical College, Ernakulam - Interior Furnishing works (SH Furniture and Other Miscellaneous works)	₹ 16,121,347.00
29	KIIDC	ITD	KIIFB-Construction of IT Park for Kallada Irrigation Headquarters -Ravinagar Campus Kottarakkara-KIP,Kollam District-General Civil Work	₹ 722,790,235.00
30	KRFB	PWD	KIIFB 2017-18 PWD015-100- Construction of Alathur Parakkunnam Bridge and Approach Road in Palakkad district General Civil Work	₹ 96,070,492.00
31	KRFB	PWD	KIIFB-Construction of Thriprayar Bridge-KIIFB-2016-17 - Construction of Thriprayar Bridge across Canoli canal in Cherpu - Thriprayar road,Nattika LAC in Thrissur District--General Civil Work	₹ 237,487,022.00
32	KRFB	PWD	KIIFB-Chalakkudy Anamala road--Construction of retaining wall at land slide locations and reconstruction of an existing culvert at Pathadippalam in Chalakkudy Anamala Road - General Civil Work	₹ 24,917,000.00
33	KRFB	PWD	KIIFB-Urgent Rectification Works to Changanassery - Kaviyoor Road -Rectification of carriage way by Providing 40 mm MSS in Changanassery - Kaviyoor Road Ch 2/500-13/300 kms -General Civil Work	₹ 38,811,513.00
34	KRFB	PWD	KIIFB-PWD015-23-Kannanalloor Junction Development in Kollam District-General Civil Work	₹ 99,375,453.00
35	KRFB	PWD	KIIFB-KALLAMOOLA AND CHENGODE BRIDGE-PWD013-51 - Hill Highway - Construction of Bridges (Chengode Bridge and Kallamoola Bridge in Wandoor LAC) coming under Hill Highway in Malappuram District	₹ 65,352,326.00
36	KRFB	PWD	KIIFB-Kattilkadav Bridge-Construction of Kattilkadav Bridge Across TS Canal in Kollam District-General Civil Work	₹ 359,429,798.00
37	KSITIL	ITD	Construction of IT Park at Kannur	₹ 2,593,318,028.00
38	KRFB	PWD	Improvements to Changanassery Kaviyoor road Km 0/000 to 13/272 in Pathanamthitta District- Balance work (working Ch 0/000 to 2/400) Part TS	₹ 37,284,270.00
39	KSCC	RGD	KIIFB - construction of new building for sub registrar office at chadayamangalam in kollam district	₹ 11,606,342.00

Fund Mobilization Status	
Particulars	**Amount (₹ Cr.)**
Contribution from Government of Kerala	25,738
Fund mobilized from financial market	37,921
Total	**63,659**

** Provisional figure as on 31-12-2025*

PRAVASI Chitty Statistics as of 31ST JANUARY 2026

Total number of customers	241991
Total number of subscribers	70495
Total amount collected	INR 6126.31 Cr
KIIFB Deposit bond subscribed	INR 875.50 Cr
KIIFB Security bond subscribed	INR 286.41 Cr

PRAVASI Dividend Scheme

Total number of registrations	52472
Total no. of depositors	4233
Total amount deposited	INR 331.05 Cr

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