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# Newsletter

Vol 8

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September 2025



## *Water Supply Schemes under KIIFB*



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**Kerala Infrastructure Investment Fund Board**



# Projects - Statistics

| Department                              | KIIFB Approved Projects  |                               |
|---|--------------------------|-------------------------------|
|   | No. of Projects Approved | Approved Amount (₹. in Crore) |
| PWD                                     | 516                      | ₹ 34,109                      |
| Agriculture                             | 1                        | ₹ 21                          |
| Animal Husbandry                        | 1                        | ₹ 16                          |
| Ayush                                   | 2                        | ₹ 198                         |
| Backward Classes Development Department | 1                        | ₹ 18                          |
| Coastal Shipping & Inland Navigation    | 19                       | ₹ 3,518                       |
| Culture                                 | 17                       | ₹ 500                         |
| Devaswom                                | 2                        | ₹ 139                         |
| Fisheries and Ports                     | 26                       | ₹ 643                         |
| Forest                                  | 9                        | ₹ 617                         |
| General Education                       | 158                      | ₹ 3,220                       |
| Health & Family Welfare                 | 100                      | ₹ 6,528                       |
| Higher Education                        | 67                       | ₹ 2,121                       |
| Home                                    | 6                        | ₹ 231                         |
| Industries                              | 2                        | ₹ 106                         |
| Information Technology                  | 6                        | ₹ 1,945                       |
| Labour & Skills                         | 5                        | ₹ 94                          |
| Local Self Government                   | 29                       | ₹ 817                         |
| Power                                   | 18                       | ₹ 5,200                       |
| Planning & Economic Affairs Department  | 2                        | ₹ 138                         |
| Registration                            | 6                        | ₹ 90                          |
| Revenue                                 | 5                        | ₹ 95                          |
| SC/ST Development                       | 10                       | ₹ 182                         |
| Science & Technology Department         | 5                        | ₹ 279                         |
| Sports & YA                             | 41                       | ₹ 921                         |
| Tourism                                 | 14                       | ₹ 639                         |
| Transport                               | 3                        | ₹ 601                         |
| Water Resources                         | 102                      | ₹ 6,958                       |
| <b>Total</b>                            | <b>1173</b>              | <b>₹ 69,941</b>               |

| Projects under Land Acquisition<br>Pool of ₹ 20,000 Crore          |          |                 |
|--|----------|-----------------|
| PWD-NHAI   | 1        | ₹ 6,769         |
| Industrial Parks - 3 projects - ₹13988.63 Cr                       | 6        | ₹ 16,421        |
| Taking over of land from HNL - ₹ 200.60 Cr                         |          |                 |
| Kochi - Bangalore Industrial Corridor & Global City - ₹ 2214.00 Cr |          |                 |
| <b>Total</b>   | <b>7</b> | <b>₹ 23,190</b> |

| KIIFB Approved Projects<br>Grand Total               |             |                     |
|--|-------------|---------------------|
| Infrastructure Projects                              | 1173        | ₹ 69,941            |
| Projects under Land Acquisition Pool                 | 7           | ₹ 20,000            |
| <b>Total</b>   | <b>1180</b> | <b>₹ 89,941</b>     |
| <i>Fund disbursed to projects (as on 31/08/2025)</i> |             | <b>₹ 37,044 Cr.</b> |



# Editorial

“Water, water everywhere, but not a drop to drink.”

Thus wrote Samuel Taylor Coleridge in his famous poem *The Rime of the Ancient Mariner*. The line captures the desperate thirst of sailors surrounded by the vast ocean — water in abundance, yet undrinkable because of its salinity. Metaphorically, the phrase signifies a situation where something valuable is plentiful yet unusable or inaccessible, highlighting the frustration of abundance without utility. When we discuss the challenges Kerala faces in the water sector, it is particularly relevant to recall Samuel Coleridge’s proverbial expression. With a coastal belt stretching 590 km, 44 rivers, and extensive backwater networks, water is indeed everywhere in this blessed State. But to give good quality drinking water to all its areas and household, Kerala has to work a lot. This issue of the newsletter features a cover story highlighting the progress made in the water sector. Over the past nine years, KIIFB has taken up 102 projects in the Water Resources sector, amounting to ₹6,958 crore. In addition, as part of utility shifting for almost all road and bridge projects, extensive water supply networks have also been replaced. It is a huge investment indeed, but which serves a genuine purpose.

The Wayanad Rehabilitation Project and its major construction activities are progressing on a fast track. This issue features an article that provides a comprehensive picture of both the policy decisions taken by the Government and the various components and facilities of the model township.

The principles and characteristics of the National Guidelines on Responsible Business Conduct, issued by the Ministry of Corporate Affairs in 2019, are elaborately described by Dr. Subhash and Ms. Peggy in their effort to familiarize readers with this important document.

How has the Indian economy fared over the past 12 months? Ajosh Krishna Kumar presents an insightful analysis in his article “Economy and Market Watch.” Readers interested in the sector-wise ups and downs will find it particularly engaging.

As usual, new attempts and updates are included in the session ‘Tender Update,’ which provides details of 16 projects with a total outlay of ₹128.90 crores.

Happy reading !! STAY TUNED

**Chief Editor**

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Pic Courtesy : Akshay H, Project Engineer



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# From Principles to Practice: Operationalising **Environmental Stewardship** under **NGRBC Principle 6**

Dr. Subhash M, Senior Sustainability Lead  
Peggy Nepram – Sustainability Expert – Social

The National Guidelines on Responsible Business Conduct (NGRBC), issued by the Ministry of Corporate Affairs (MCA), Government of India in 2019, provide a comprehensive framework to integrate sustainability, ethics, and social responsibility into business practices. They are built on the “Respect and Protect” approach, emphasizing accountability toward all stakeholders while contributing to inclusive growth and sustainable development. These guidelines are aligned with global sustainability frameworks such as the UN Sustainable Development Goals (SDGs), UN Guiding Principles on Business & Human Rights (UNGPs), aiming to ensure that businesses in India operate responsibly, ethically, and sustainably and serve as the foundation for disclosures under SEBI’s Business Responsibility and Sustainability Reporting (BRSR).

## The Nine Principles of NGRBC

1. **Businesses should conduct and govern themselves with integrity, and in a manner that is ethical, transparent, and accountable. (Ethics, Transparency & Accountability)**

Businesses shall conduct and govern themselves with integrity, ensuring ethical practices, transparency, and accountability. This builds trust with stakeholders and reduces the risks of misconduct.

2. **Businesses should provide goods and services in a manner that is suitable and safe (Sustainable Goods & Services)**

Enterprises shall provide goods and services that are safe, sustainable, and contribute to resource efficiency. This principle promotes innovation while minimizing adverse social and environmental impacts.

3. **Businesses should respect and promote the well-being of all employees, including those in their value chain (Employee Well – Being)**

Businesses shall promote the well-being, safety, and dignity of all employees, including those in the value chain. This ensures fair wages, equal opportunity, and a safe, inclusive workplace.

4. **Businesses should respect their interests and be responsive to all their stakeholders (Stakeholder Responsiveness)**

Enterprises shall respect the interests of all stakeholders, particularly the vulnerable and disadvantaged. Transparent and responsive engagement helps prevent conflicts and strengthens community endorsement.



**5. Businesses should respect and promote human rights (Human Rights)**

Businesses shall respect and uphold human rights in operations and across their supply chains. This includes non-discrimination, freedom of association, and preventing exploitative practices.

**6. Businesses should respect and make efforts to protect and restore the environment (Environment Protection)**

Enterprises should protect, restore, and sustainably manage the environment while addressing climate change. Efficient resource use and adoption of clean technologies are central to this principle.

**7. Businesses, when engaging in influencing public and regulatory policy, should do so in a manner that is responsible and transparent (Public Policy Engagement)**

Businesses shall comply with laws and support public policies that promote sustainability. Active participation in policy dialogues should be responsible, transparent, and constructive.

**8. Businesses should promote inclusive growth and equitable development (Inclusive Growth & Development)**

Enterprises are expected to contribute to inclusive and equitable economic

development of communities. This includes creating livelihood opportunities, supporting social infrastructure, and bridging inequalities.

**9. Businesses should engage with and provide value to their consumers in a responsible manner (Customer Value & Responsibility)**

Businesses shall engage responsibly with customers by providing quality products and services, ensuring fair practices, and protecting consumer data and privacy. Trust and long-term relationships with customers are key outcomes.

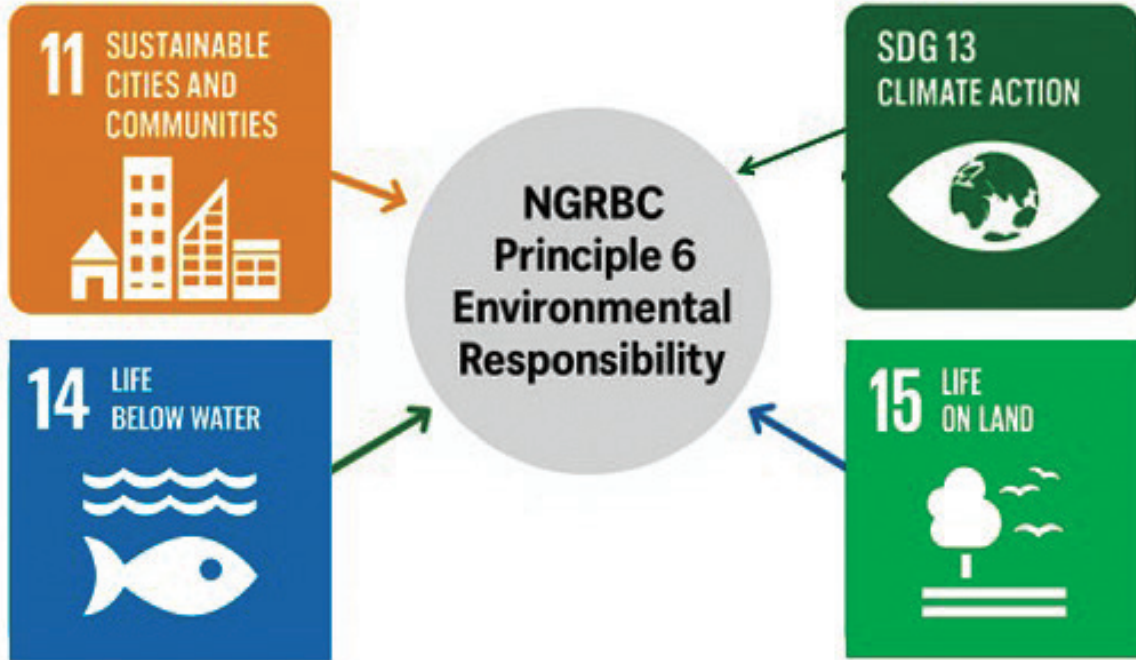
Among the 9 principles, **Principle 6 — “Businesses should respect and make efforts to protect and restore the environment” — stands out as particularly urgent**, given the growing climate crisis, biodiversity loss, and pollution challenges facing India and the world.

**Principle 6 – The core idea**

Principle 6 emphasises that environmental responsibility is a prerequisite for sustainable growth and societal well-being. It recognises that environmental issues are interconnected across local, national, and global levels — from rising urban air pollution to global climate change. Businesses, therefore, must adopt practices that minimise their environmental footprint and actively contribute to ecological restoration. This principle aligns closely with several Sustainable Development Goals (SDGs), particularly SDG 11, 13, 14 & 15.



## NGRBC Principle 6 Alignment with SDGs



The NGRBC sets out practical core elements for businesses to operationalise Principle 6:





## NGRBC & SEBI BRSR (Business Responsibility & Sustainability Reporting)

The Securities and Exchange Board of India (SEBI), through Circular No. SEBI/HO/CFD/CMD-2/P/CIR/2021/562 dated 10th May 2021, mandated Business Responsibility and Sustainability Reporting (BRSR) for the top listed entities from FY 2022–23, aligning it with the National Guidelines on Responsible Business Conduct (NGRBC)—

particularly Principle 6, focused on environmental responsibility. The BRSR framework requires disclosure of both quantitative and qualitative indicators, including energy use, water consumption and recycling, raw material efficiency, GHG emissions (Scope 1, 2, and 3), air pollutants, and waste generation. While NGRBC sets the ethical foundation, BRSR operationalizes it through measurable disclosures on energy, emissions, water, waste, biodiversity, and climate action, promoting transparency and corporate accountability.

### Alignment and Distinctions Between NGRBC (2018) and SEBI's BRSR Framework

| Aspect                 | NGRBC (2018)   | SEBI BRSR   |
|------------------------|--|---|
| Core Principles        | Nine principles on responsible business conduct aligned with UNGPs & SDGs              | Operationalize NGRBC for reporting purposes   |
| Origin & Basis         | Introduced by the Ministry of Corporate Affairs in 2018                                | Developed by SEBI & structured directly around NGRBC principles   |
| Scope & Applicability  | Voluntary guidelines for all businesses, regardless of size or sector                  | Mandatory reporting requirements for top top-listed companies in India  |
| Purpose                | Encourage responsible, sustainable and accountable business aligned with UN frameworks | Mandate disclosure of ESG performance in alignment with NGRBC, enhancing transparency and comparability         |
| Structure & Indicators | Principles accompanied by core elements (i.e recommended actions & focus areas)        | Requires reporting across "essential" (mandatory) and "leadership" (voluntary) indicators.                      |
| Reporting alignment    | Designed as a guiding policy framework - non reporting focused                         | BRSR reporting ties directly into NGRBC principles, with clear guidance and structured disclosure expectations. |

### Responsible Finance: KIIFB's BRSR Commitment

The Kerala Infrastructure Investment Fund Board (KIIFB) has successfully issued Green Domestic Bonds (GDB) amounting to 300.02 crores, with the proceeds disbursed towards a portfolio of 18 certified green building projects, covering the financial years 2023–24 and 2024–25 in line with KIIFB's sustainability-linked infrastructure development strategy.

As a listed issuer of Green Debt Securities, KIIFB is subject to continuous disclosure obligations under Clause (2) of the SEBI Circular No. SEBI/HO/DDHS/DDHS-RACPODI/P/CIR/2023/023, dat-

ed February 6, 2023. This circular outline updated disclosure and reporting requirements for green debt issuers in India, aligning them with the principles of the Business Responsibility and Sustainability Report (BRSR) and internationally accepted green taxonomy frameworks.

### Compliance with SEBI's BRSR and Green Debt Securities (GDS) Mandates:

To ensure full regulatory compliance, KIIFB has prepared and submitted its BRSR reports for both FY 2023–24 and FY 2024–25, as mandated, and will continue to do so throughout the 10-year tenure



of repayment. These reports provide project-level environmental and sustainability disclosures for all projects funded through Green Bond proceeds. Furthermore, all 18 projects comply with green building certification and performance standards, guided by frameworks such as GRIHA (Green Rating for Integrated Habitat Assessment) and EDGE (Excellence in Design for Greater Efficiencies). These standards serve as benchmarks to validate the environmental integrity of the projects and ensure alignment with SEBI's green use-of-proceeds criteria.

### Disclosures on Key Environmental Indicators:

In compliance with SEBI's enhanced GDS reporting requirements, the BRSR reports published by KIIFB disclose several quantitative and qualitative environmental performance indicators, including but not limited to:

- **Electricity Consumption:** Total electricity and renewable electricity used across green building sites.
- **Fuel Consumption:** Use of non-renewable fuels (e.g., diesel, petrol) and any alternative sources.
- **Energy Consumption from Other Sources:** Including solar or waste-to-energy installations.
- **Water Withdrawal:** Breakdown of water sourcing by category – LSGI/KWA water supply, groundwater, rainwater harvesting, recycled water, etc.
- **Air Emissions:** Quantified data on Nitrogen Oxides (NO<sub>x</sub>), Sulphur Oxides (SO<sub>x</sub>), and Particulate Matter (PM) released during construction and operational phases.
- **Greenhouse Gas Emissions (GHG):**
  - Scope 1: Direct emissions from owned or controlled sources.
  - Scope 2: Indirect emissions from the generation of purchased electricity, and other sources consumed.

- **Waste Generation:** Total quantity and category of waste generated (hazardous, non-hazardous, construction debris, biodegradable), with information on disposal methods (recycled, landfilled, incinerated, etc.).

These disclosures are in line with the Essential Indicators outlined in SEBI's BRSR Framework and help provide stakeholders with verifiable evidence of environmental stewardship and responsible project execution.

### Appointment of Independent Reviewer:

To reinforce transparency and credibility, KIIFB has appointed an independent third-party reviewer/certifier. The reviewer is tasked with:

- Verifying the environmental impact and sustainability claims of the GDB-funded projects and the impact reporting.
- Reviewing the project evaluation and selection process, including screening criteria based on environmental eligibility.
- Certifying the alignment of project implementation with the objectives defined in the Green Finance Framework of KIIFB.

The third-party review process adheres to global assurance standards and SEBI expectations for periodic external validation of green initiatives, ensuring that the "use of proceeds", project impact metrics, and governance mechanisms remain consistent with SEBI's Green Debt Securities framework.

### Conclusion

KIIFB's Green Domestic Bond initiative demonstrates a proactive and structured approach toward sustainable infrastructure financing. By aligning its project selection and implementation with recognised green building standards such as GRIHA and EDGE and ensuring transparent reporting in accordance with SEBI's BRSR framework and the principles of the National Guidelines on Responsible Business Conduct (NGRBC), KIIFB underscores its commitment to environmental responsibility, regulatory compliance, and public accountability. The integra-



tion of key sustainability disclosures, supported by independent third-party verification, reflects best practices in green finance and positions KIIFB as a leading example in India's evolving sustainable finance ecosystem.

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*Elevenchery- Pallassana Comprehensive Drinking water project in Palakkad District*



# Water Supply Scheme Under KIIFB Funding - Overcoming The Water Needs of Kerala

Akshay H, Project Engineer, Project Appraisal Division

Water is one of the most essential resources for sustaining life, and the availability of safe drinking water is a key public health priority. Raw water obtained from natural sources such as rivers, lakes, and reservoirs often contains impurities including suspended solids, colloidal particles, dissolved minerals, organic matter, and pathogenic microorganisms. Direct consumption of such water poses serious health risks and can also damage distribution infrastructure due to scaling and corrosion.

A **Water Treatment Plant (WTP)** is designed to convert raw water into clear, potable water through a systematic series of physical, chemical, and biological treatment processes. Each stage from intake to disinfection is engineered to remove specific impurities and ensure compliance with national and international drinking water standards.

The transformation of raw water into clear, potable water in a Water Treatment Plant involves a se-

quence of physical, chemical, and biological processes. The treatment methodology is selected based on raw water characteristics such as turbidity, colour, hardness, microbial contamination, and the presence of dissolved solids and organic matter. The standard process includes intake, screening, coagulation, flocculation, sedimentation, filtration, and disinfection, followed by storage and distribution.

## Intake well cum pump House:

The treatment process begins with the intake structure, where raw water is drawn from the source such as a river, reservoir, or lake. Intake chambers are designed to minimize the entry of silt and floating matter. Coarse and fine screens are installed at this stage to remove large debris like leaves, sticks, plastics, and fish. Flow velocities are carefully maintained to prevent clogging and to ensure the protection of pumps and downstream equipment.



Intake

**Raw Water Transmission Mains:**

The raw water transmission main serves as the lifeline between the source and the treatment plant. Its primary role is to transport large quantities of raw water reliably under varying flow conditions, ensuring that the treatment plant receives sufficient inflow to meet demand during both average and peak consumption periods.

**Aeration System:**

The aeration is provided immediately after in-

take. Aeration allows water to come into contact with air, facilitating the removal of undesirable dissolved gases such as carbon dioxide and hydrogen sulphide. It also oxidizes dissolved iron and manganese into insoluble forms, which can be removed in subsequent stages. Aeration is typically carried out using cascade aerators, diffused aeration systems, or mechanical surface aerators, with the goal of achieving near-saturation levels of dissolved oxygen.

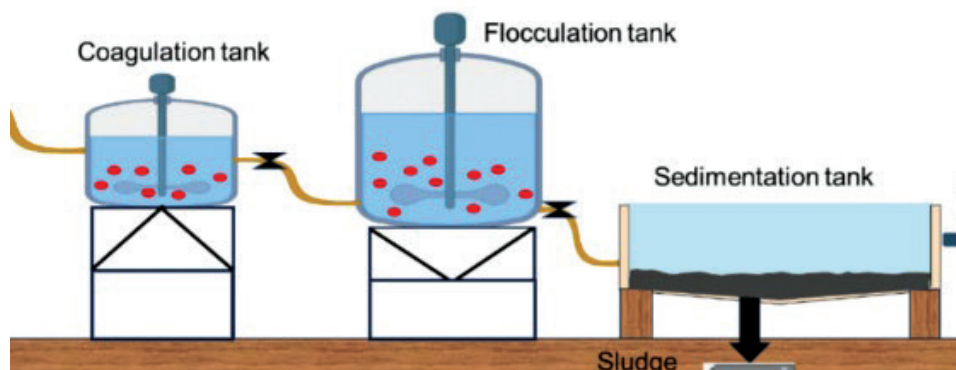


*Aerator*

**Coagulation and Flocculation Units:**

The coagulation process involves the addition of chemicals, usually alum and lime (powdered form), into a rapid mixing chamber where high intensity mixing ensures uniform dispersion. This neutralizes the charges on colloidal particles, allowing them to

come together. The water then enters flocculation basins, where gentle stirring promotes the aggregation of destabilized particles into larger flocs. The efficiency of this stage depends on controlled mixing energy and detention time, both of which are carefully designed for optimal floc formation.



*Coagulation and Flocculation*



### Sedimentation (Clarification) Tanks:

After flocculation, the water flows into sedimentation tanks or clarifiers, where gravity settling of flocs occurs. Heavier particles settle at the bottom as sludge, while clarified water flows out through weirs. Sedimentation units can be rectangular, cir-

cular, or fitted with tube or plate settlers to improve efficiency. The design ensures sufficient detention time and surface overflow rate to achieve maximum particle removal. Sludge collected at the base is periodically removed to prevent septic conditions.



*Sedimentation tank*

### Filtration Units:

The clarified water then passes through filtration units, which remove remaining fine suspended solids, flocs, and microorganisms. Rapid sand filters are most commonly used, comprising layers of gravel, sand, and anthracite that physically trap particles. As water passes downward through the filter bed, suspended particles are trapped within the pores

of the media. Additionally, flocculated particles and microorganisms are adsorbed onto the surface of sand grains, enhancing overall removal efficiency. For smaller systems, slow sand filters may be employed, which rely on biological activity within the filter bed. Rapid filters require regular backwashing to restore their efficiency, while slow sand filters require periodic scraping of the top layer.



*Rapid Sand Filter*



### Disinfection System:

Disinfection is a critical stage that ensures the destruction of pathogenic microorganisms. Chlorination is the most widely used method, owing to its effectiveness and the residual protection it provides within the distribution system. Chlorine can be applied in the form of gas, sodium hypochlorite solution, or bleaching powder. Other methods such as ozonation and ultraviolet (UV) treatment are also employed in certain cases, though they lack residual protection. The dosage and contact time are carefully controlled to achieve pathogen inactivation while maintaining residual chlorine levels of at least 0.2 mg/L at the point of distribution.

### Chemical Conditioning and pH Adjustment Units:

Treated water may require chemical conditioning to ensure stability during storage and distribution. Lime or soda ash is often added to adjust pH and alkalinity, thereby preventing corrosion of pipes or scaling due to hardness. Depending on local regulations and water quality, fluoridation may be introduced to protect dental health, or defluorination may be applied in areas with excess natural fluoride content.

### Over Head Service Reservoir (OHSR):

The final treated water is collected in a clear water reservoir, which acts as a buffer between the treatment process and the distribution system. These reservoirs provide storage for 4–6 hours of supply to balance fluctuations in consumer demand. They are equipped with



Over Head Service Reservoir

proper ventilation, overflow, drainage, and inspection facilities to prevent contamination. The design ensures that treated water remains safe and clear until it is pumped into the distribution network.

### Clear Water Transmission Mains:

Once water has been treated and stored in the Clear Water Reservoir (CWR), it must be conveyed to service reservoirs or directly to the distribution system. This is accomplished through Clear Water Transmission Mains, which are large-diameter pipelines designed to carry treated water over long distances, often under pressure, from the treatment plant to storage and distribution points. The primary function of clear water transmission mains is to transport treated water safely and efficiently, without recontamination or loss of quality, from the Water Treatment Plant to the distribution network.

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### Distribution System:

From the clear water reservoir, water enters the distribution system, which delivers it to consumers under adequate pressure. The system includes rising mains, pumping stations, overhead service reservoirs, and a network of pipelines. It is designed to maintain sufficient residual pressure at consumer endpoints and ensure equitable distribution across the service area. Regular monitoring and maintenance are essential to prevent leakage, contamination, and service interruptions.

### Transmission Mains:

The Pipe materials and other allied accessories contribute to over 60% of the total cost of the project. The pipes commonly used in water supply projects funded by KIIFB include the following:

The pipe selection depends on several factors including:

- Carrying capacity of the pipe.
- Strength of pipe.
- Resistance to buckling.
- Life & durability of the pipe.
- Ease of handling.
- Availability of skilled labour.
- Maintenance requirements.
- Selection based on laying condition and structural stability
- Selection based on hydraulic parameters.
- Selection based on nature of fluid and external soil / atmospheric condition.
- Selection based on user profile e.g. risk of third-party damage.
- Selection based on availability.
- Final Selection based on economics.

The specifications, characteristics and use of various types of Pipes, required in Water Supply Schemes are as follows:

#### A. Metallic Pipes:

##### (I). Cast Iron (CI) Pipes:

Cast Iron pipes are manufactured by centrifugal spinning of molten iron as per IS:1536. They are usually of spigot and socket type, joined with rubber gaskets, while larger diameters are often produced with flanged ends. A bituminous coating is applied inside and outside for corrosion protection.

These pipes are available in sizes from 80 mm to 1050 mm diameter with lengths of 5–5.5 m and have a pressure rating of 10–16 kg/cm<sup>2</sup>, making them suitable for medium- and high-pressure water transmission.



Cast Iron Pipes

#### Advantages:

Cast Iron (CI) pipes offer moderate strength, good compressive resistance, and high beam strength. Their simple jointing system allows flexibility, dismantling, and easy installation, even by relatively unskilled labour. They are corrosion-resistant under normal soil conditions, impermeable to gases and contaminants, and available in a wide range of diameters (80–1050 mm). CI pipes are easy to locate underground, require no special bedding materials, and come with a complete range of fittings. Electrical discontinuity at joints further minimizes the risk of stray current corrosion.

#### Disadvantages:

Cast Iron (CI) pipes are relatively heavy, especially above 300 mm diameter, and are brittle, making them prone to hairline cracks during handling and laying. They are unsuitable for high-pressure or surge conditions and, lacking cement mortar lining, are prone to incrustation and tuberculation over time, reducing flow capacity and causing red water issues. With the advent of Ductile Iron (DI) pipes in the wa-

ter supply sector, many manufacturers have either switched to DI or reduced production of CI pipes.

### Application:

**Suitable for:** This type of pipe is suitable for all applications, including pumping mains subject to moderate water hammer, gravity distribution mains, and pump delivery systems using CI flanged pipes.

**Not recommended for:** This type of pipe is not recommended for use with extremely aggressive waters, in very high-pressure applications or where there is a possibility of surge, and on grounds that are susceptible to horizontal or vertical movement.

**(II). Ductile Iron (DI) Pipes:** DI pipes are available in diameters ranging from 80 mm to 2000 mm and lengths up to 6 m, with the normal production range currently between 150 mm and 1000

mm. They are available in K9 and K7 grades, with a pressure rating of 20 kg/cm<sup>2</sup> to 70 kg/cm<sup>2</sup>. During manufacturing, a small amount of magnesium is added to molten iron to form an alloy, which transforms the flaky graphite into microscopic spheres. This uniform distribution of modular carbon graphite enhances the pipe's corrosion resistance, tensile strength, ductility, and toughness. DI pipes are typically manufactured using the centrifugal process to ensure uniform wall thickness throughout their length. Cement mortar lining provides a smooth inner surface, prevents tuberculation by creating a high pH at the pipe wall, and acts as a physical and chemical barrier against water. IS 8329 specifies the standards for centrifugally cast DI pipes. The pipes are of the spigot and socket type and are joined using push-on rubber gaskets.



DI pipes

**Advantages:** Ductile iron (DI) pipes offer high mechanical strength and toughness, as well as excellent fatigue resistance. They can be laid by relatively unskilled labor and are highly resistant to damage during handling, transport, or accidental impacts at the site. The pipes feature simple-to-install joints, allow for pipe deflection (5° for 80–300 mm diameter and 4° for 350–1600 mm diameter) and longitudinal withdrawal for dismantling. They are internally protected against corrosion with cement mortar lining, impermeable to gas and organic contaminants, and easy to locate for underground pipe or leakage de-

tection. A complete range of fittings is available, and under-pressure connections or system modifications are straightforward. Additionally, electrical disconnectivity at the joints reduces the risk of stray current corrosion.

**Disadvantages:** Ductile iron (DI) pipes are relatively heavy and may cause an increase in pH for cement mortar-lined pipes when conveying soft water with alkalinity below 25 mg/L, unless bitumen or seal coating is applied. In very aggressive soils, they should be laid with polythene sleeving. For diameters up to 300 mm, their cost is higher compared



to plastic pipes. Additionally, they are not ideal for smaller distribution lines with numerous tappings.

**(III). Mild Steel (M.S) Pipes:** MS pipes are available in diameters ranging from 168.3 mm to 2,540 mm and lengths of 6 m to 12 m, with the pressure rating depending on the grade of steel and specific design requirements. Smaller-diameter MS pipes can be manufactured as seamless tubes from solid bar sections using hot or cold drawing (extrusion) processes. Large-diameter pipes are produced by longitudinal or spiral welding of edges or suitably

curved plates. The thickness of an MS pipe is generally less than that of a corresponding CI pipe. Owing to their elasticity, MS pipes can adapt to changes in relative ground levels without failure. To protect against corrosion, MS pipes require internal and external lining. Internally, they may be lined with epoxy, hot-applied coal tar/asphalt, or rich cement mortar applied using the centrifugal process. Externally, underground pipelines are typically coated with cement mortar or hot-applied coal tar asphaltic enamel reinforced with fiberglass fabric yarn.



M S Pipes

**Advantages:** Mild steel (MS) pipes offer longer lengths of 6 to 12 m, resulting in fewer joints and reduced risk of leakage. They possess high mechanical strength, toughness, and excellent fatigue resistance. MS pipes can be fabricated in non-standard sizes and special shapes, and can be welded for repairs or anchoring to resist end loads. They are impermeable to gas and organic contaminants, and their underground location and leakage detection are relatively easy. Repairs can also be carried out conveniently by welding.

**Disadvantages:** Mild steel (MS) pipes are relatively heavy, and welded joints require skilled installation with special equipment, increasing costs. They are susceptible to corrosion if protective systems are not provided or become damaged, and welded joints are particularly difficult to protect in-

ternally. Cathodic protection systems require regular monitoring and maintenance. A potential rise in pH may occur when conveying soft water. Retrospective installation of fittings or repairs can be challenging, especially for non-standard sizes. MS pipes are generally supplied without factory-applied corrosion protection, and any subsequent site-applied protection on corroded pipes is often less effective.

**(V). Galvanized Iron pipes (GI pipes):**

GI pipes are used for internal water supply connections in the house and for pumping main in rocky strata in hilly areas. The pipes are available in heavy, medium and light duties. As a general policy the usage of GI pipes are to be minimised due to its vulnerability to corrosion at joints and should be resorted to only when other options are not possible.



*GI Pipes*

**B. Cement pipes:**

(I). Asbestos Cement Pressure Pipes (AC Pipes): AC pipes are available in diameters ranging from 50 mm to 1000 mm, with lengths of up to 6 m. Their pressure rating ranges from 5 kg/cm<sup>2</sup> to 25 kg/cm<sup>2</sup>.



*AC Pipes*



**Advantages:** Asbestos Cement (AC) pressure pipes are easy to joint, rigid, and resistant to corrosion from most soils and waters. Their flexible joints can tolerate a certain degree of deflection.

**Disadvantages:** Despite these benefits, AC pipes have several limitations. Pipes cut on-site require machining to the correct diameter for proper jointing. They are heavy and brittle, making them susceptible to point loading and impact damage, and they also have low beam strength. The external diameter varies with class, and underground pipe location is difficult, which complicates leakage detection. Installation or repair with CI fittings is complicated, as AC fittings are not readily available. Their shorter lengths result in a relatively high number of joints per unit length. They are permeable to certain organic contaminants, especially when dry, and present health risks related to asbestos during manufacturing, cutting, or site machining. Additionally, AC pipes have a relatively low service life, and replacement can be problematic. Roots of trees can also penetrate joints, spread inside the pipe, and reduce hydraulic capacity.

### C. Plastic pipes:

**Polyvinyl Chloride (PVC) Pipes:** PVC pipes are available in diameters ranging from 40 mm to 600 mm, with lengths of up to 6 m. Their pressure rating ranges from 2.5 kg/cm<sup>2</sup> to 10 kg/cm<sup>2</sup>. Polyvinyl chloride is produced by the polymerization of vinyl chloride, forming long chains of the polymer. PVC pipes are manufactured using the extrusion process, followed by calibration to ensure accurate internal diameters with smooth internal bores. They are manufactured in accordance with IS 4985:2000.

**Advantages:** PVC pipes are corrosion resistant in most environments, lightweight, easy to joint, and economical.

**Disadvantages:** However, they have several limitations. PVC pipes allow only very limited joint deflection, and their strength tends to deteriorate over time. Joints need to be properly anchored, and the pipes are susceptible to impact damage as well as poor installation practices. Leakage detection and underground pipe location are complicated. Appropriate pipe zone backfill material must be

used to ensure stability. PVC pipes are not suitable for high-pressure applications and are vulnerable to ultraviolet degradation when exposed to direct sunlight for prolonged periods. They also pose a risk of flotation, and are susceptible to failure under cyclic loading.



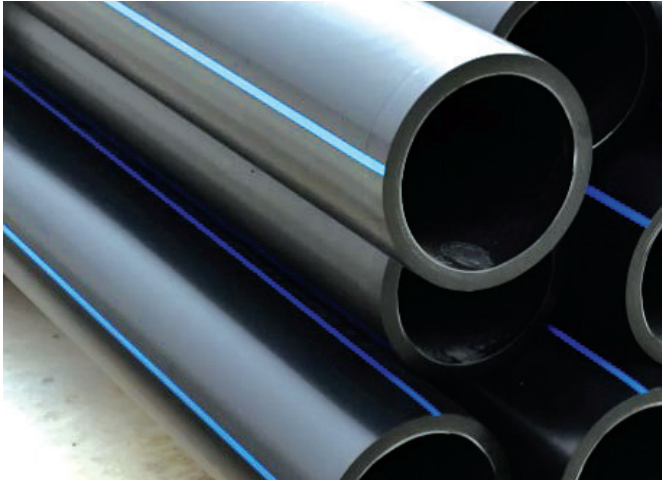
*PVC Pipes*

**High Density Polyethylene (HDPE Pipes)**  
**Pipes:** The pipes are available in 6 meter and 12 meter lengths. Also HDPE pipes are available in coil form (lengths 50m to 300m) for sizes up to 110mm. The pipes are available in the size range of 20mm to 1200mm. The pipes are available in various pressure classes to suit the design needs. The pressure classes of the pipe are PN 2.5 (which means 2.5 kg/cm<sup>2</sup>); PN 4; PN 6; PN 8; PN 10; PN 12.5; PN 16.

Different types of jointing methods are available and are in use for the jointing of the PE pipes. Fusion jointing is the best option for the jointing of the pipes as it gives a homogenous joint. There are two types of fusion jointing, namely butt fusion and electrofusion.

**Advantages:** High-density polyethylene (HDPE) pipes offer several advantages, including the possibility of out-of-trench jointing and the use of alternative installation techniques such as trenchless installation

and narrow trenching. They are corrosion resistant, flexible, relatively lightweight, and recyclable. HDPE pipes can be fusion welded to form a leak-free system and are available in coils that can be easily bent, reducing the need for specials and minimizing leakage.



HDPE Pipes

**Disadvantages:** HDPE pipes have some limitations, including the complexity of retrospective installation of fittings or repairs. They are vulnerable to ultraviolet degradation when exposed to direct sunlight for prolonged periods. Their strength may deteriorate over time and with rising temperatures, and they are also susceptible to permeation by certain organic contaminants.

### Case Study: KIIFB- Comprehensive WSS to Ponnani & adjoining Panchayaths

This comprehensive water supply scheme is for meeting the drinking water demands of the people in Ponnani Municipality and adjoining nine Panchayaths namely Maranchery, Veliyancode, Perumpadappu, Nannamnukku, Alancode, Edappal, Vattamkulam, Tavanur and Kalady covering the entire area of Ponnani Taluk. The project was proposed ultimately to benefit to around 5,96,534 people. The total number of households benefitted by this project is estimated to 74660. Ultimate design demand is taken for the year 2050 AD proposing 150 lpcd for the Municipal Area and 100 lpcd for the rest of the project area.

The following are the components proposed in the project:

1. Construction of intake well and RCC intake channel
2. Raw water pumping main, valves etc.
3. WTP, Staff Quarters
4. Clear water pumping main, valve chamber etc.
5. Construction of transformer substation building and shiftroom
6. Interlinking of existing pumping system of UWSS to Ponnani and RWSS to Ponnani.

The project was approved in the 27th General Body meeting of KIIFB and the financial sanction was accorded for an amount of Rs. 74.4 Crores. The work has been completed on 27-08-2022.



Water Treatment Plant



WTP Site



*Conference Hall*



*Filter House*

### **Post implementation benefits of Water Supply Scheme:**

The implementation of the water supply scheme in Ponnani Municipality brings about significant benefits to the public. With an estimated demand for the entire Taluk area expected to reach 66 MLD by 2035 and 77 MLD by 2050, the scheme ensures a reliable and sustainable water supply for a growing population. By serving approximately 511,056 people initially and eventually reaching 596,534 people, the project addresses critical water needs, enhancing public health and sanitation standards. Moreover, it promotes economic development by supporting industries, businesses, and households with a consistent water supply, thereby improving overall quality of life and fostering community well-being in the region.

### **Summary:**

KIIFB is funding comprehensive water supply schemes aimed at providing safe and reliable

water supply to communities, including those in remote and underserved areas. These projects are carefully planned and executed to ensure that design standards and safety are never compromised, even while extending coverage to regions that are difficult to access. By prioritizing both efficiency and durability, these schemes address not only the immediate need for clean water but also long-term sustainability. The initiatives help improve public health by reducing the prevalence of waterborne diseases, enhance the quality of life for residents, and support socio-economic development in areas that have historically faced challenges in accessing essential water services. Additionally, the projects incorporate modern materials and construction techniques to ensure minimal leakage, robust infrastructure, and ease of maintenance, thereby optimizing both performance and cost-effectiveness.



*Comprehensive WSS to ponnani and adjoining panchayaths*





# Designing Dignity, Delivering Resilience: KIIFCON at the Elston Estate Township, Wayanad, Kerala

## Brief Background

In the early hours of July 30, 2024, a catastrophic debris-flow-induced landslide struck Meppadi Grama Panchayat in Wayanad, triggered by extreme monsoon rainfall recorded at the Kalladi gauge—200.2 mm on July 29 and 372.6 mm on July 30. The event devastated settlements across Wards 10–12, claiming 231 lives, with 128 persons still reported missing as of August 15, 2024. At the height of displacement, 4,102 people sought shelter in relief camps (1,871 remained as of August 1, 2024). Housing losses were severe: 1,555 homes were destroyed or severely damaged and a further 452 sustained partial damage. Livelihoods were also hit hard: 626 hectares of agriculture were affected—359 hectares belonging to small and marginal farmers and 267 hectares to others—undermining immediate incomes and medium-term agrarian recovery. In response, Kerala mounted a coordinated, multi-agency effort spanning search and rescue, debris clearance, relief camps, and targeted livelihood support, while planning for recovery that recognised the need for safe, climate-resilient resettlement. Guided by this assessment, the Government of Kerala—through the Disaster Management Department—resolved to establish a dignified rehabilitation township in Wayanad, anchoring recovery in resilient housing, public infrastructure, and community services tailored to hilly, hazard-prone terrain. (Source - Post-Disaster Needs Assessment

(PDNA): Meppadi Landslide (2024) – Impact summary and recovery framework (casualty, housing and agriculture figures)

## Key Facts at a Glance

- Disaster Event: Landslide on 30 July 2024 in Wayanad (Meppadi).
- Project Location: Elston Estate, Kalpetta, Wayanad District, Kerala.
- Implementing Structure: Employer – Government of Kerala (DMD); ER/PMC – KIIFCON; EPC Contractor – ULCCS.
- Administrative Sanction: ₹351.48 crore (16 May 2025), with TS to be prepared at DSR-2021 (CPWD/MoRTH) and EPC value within TS (exclusive of contractor's profit + GST).
- Project Scale: ~410 homes plus core public amenities and internal infrastructure.
- Contract Form: EPC based on FIDIC Silver Book (with Particular Conditions).
- Specifications: CPWD/MoRTH, relevant IS codes; DSR-2021 for estimate/TS baselining.
- Delivery Ethos: 'Speed with Structure'—fast-tracked, yet standards-anchored and audit-ready.

## Policy Response and Institutional Architecture

The Wayanad landslide of 30 July 2024 demanded a durable rehabilitation pathway rooted in safe siting, resilient construction, and integrated ameni-



Figure 1: Elston Estate—Location and Access (NH-766).

ties. In response, the Government selected Elston Estate, Kalpetta (Vythiri Taluk) for an integrated rehabilitation township and adopted a fast-tracked EPC delivery structure. M/s Uralungal Labour Contract Cooperative Society Ltd. (ULCCS) was nominated as the EPC Contractor and KIIFFCON Private Limited—a wholly-owned subsidiary of KIIFB—was designated as the Employer’s Representative/Project Management Consultant (ER/PMC). To sustain momentum pending full EPC execution, an early Notice to Proceed (28 February 2025) confirmed these roles and authorised tightly bounded preparatory works, preserving both pace and procedural integrity.

Administrative Sanction (AS) was accorded on 16 May 2025 for ₹351.48 crore (including pre-project expenses) and a Special Officer was appointed as the head of the Project Implementation Unit (PIU). Tak-

en together—  
Government’s  
site decision  
and EPC mode,  
KIIFFCON’s ER/

*“Speed with Structure: authorize what is essential early, but regularize everything within the contract spine.”*

PMC stewardship, ULCCS’s nomination as EPC, AS/TS cost discipline, and the Special Officer’s PIU-anchored mandate—the institutional architecture couples speed with structure, enabling accelerated planning-to-execution while preserving rigorous technical and financial controls

### KIIFFCON’s Mandate and Method

KIIFFCON’s mandate combined planning, engineering and programme stewardship. The backbone was a complete contract pack: Employer’s Requirements, Technical Specifications & Standards, Conditions of Contract and Forms, and Drawings and Schedules. This integrated suite ensured that scope, standards, risk allocation, and payment logic were mutually reinforced. KIIFFCON also guided the sequencing of a Notice to Proceed (NTP) and Interim Work Orders (IWO) to enable mobilisation, site establishment, model house construction, investigations and monsoon preparedness while the full contract was moving through approvals and execution.

### From Concept to Contract: The Documentation Spine

Employer’s Requirements (ER) provided the functional brief and performance criteria for buildings, roads, MEP, water and wastewater, solid waste, landscape, post-construction obligations, and the Project Management Plan and Work Programme. Technical Specifications anchored materials and workmanship to CPWD/MoRTH and relevant IS codes (e.g., IS 456 for concrete, IS 1892 for geotechnical investigations). The contract adopted FIDIC Silver Book as General Conditions with tailored Particular Conditions—defining programme controls, Schedule of Payments, performance damages, progress reporting (including environmental and social (ES) metrics), and the Work Programme. As ER/PMC, KIIFFCON ensured internal consistency so that every drawing,



test, inspection and bill could be traced back to an authoritative clause or schedule.

**Site and Master Planning at Elston Estate**

Elston Estate’s topography, access and hydrology informed a master plan that prioritised safety, serviceability and walkability. Residential clusters are connected via a three-tier road hierarchy (primary, collector and local), with drainage designed for high-rainfall events. Utilities are routed to minimise disturbance and enable maintenance. The plan allo-

contract execution, the Employer, advised by KIIFCON, issued a Notice to Proceed on 28 February 2025 and an Interim Work Order on 19 April 2025. These instruments authorised time-bound, non-prejudicial activities: site establishment, surveys, geotechnical investigations, setting-out, access improvements, a model house, monsoon-readiness measures, and submission of master plan, GFC drawings and deployment plans. KIIFCON curated the scope wordings to ensure subsequent regularisation under the EPC contract, maintaining continuity without compromising contractual integrity.

**Quality Assurance, ESHS and Safety**

The ER/contract requires the Contractor to prepare and implement ESHS Management Strategies and Plans, Inspection & Test Plans, calibration protocols and materials approvals, with traceability from laboratory to location chainage/Housing Unit ID. KIIFCON’s site team reviews RFIs/IRs and test dossiers against acceptance criteria before recommending milestone payments. Monthly QA Audit Packs—covering checklists, Non-Conformance Report logs, Inspection & Test Plan compliance dashboards, and lab correlations—feed into a governance loop that unites field reality with HQ oversight. Safety is embedded through method statements, toolbox talks, and incident reporting aligned to statutory norms. Even when an incident occurs off-site (e.g., a worker’s hospitalisation), the system examines any potential linkages to site conditions to improve welfare.

**Engineering for Resilience and Dignity**

Structural systems, materials and detailing are selected for durability and maintainability. Minimum grades (e.g., M25 concrete, Fe500D reinforcement), codal spacing and cover, and anti-corrosion practices are prescribed. Drainage, retaining structures where necessary, and appropriate foundations respond to geotechnical findings (with SBC variations addressed through design options like grade slabs/plinth beams). Inside the home, layouts support everyday dignity—adequate daylight/ventilation, robust flooring and joinery, safe wiring and plumbing, and barrier-free features where applicable. Public buildings—Health Centre & Lab, Anganwadi, Community

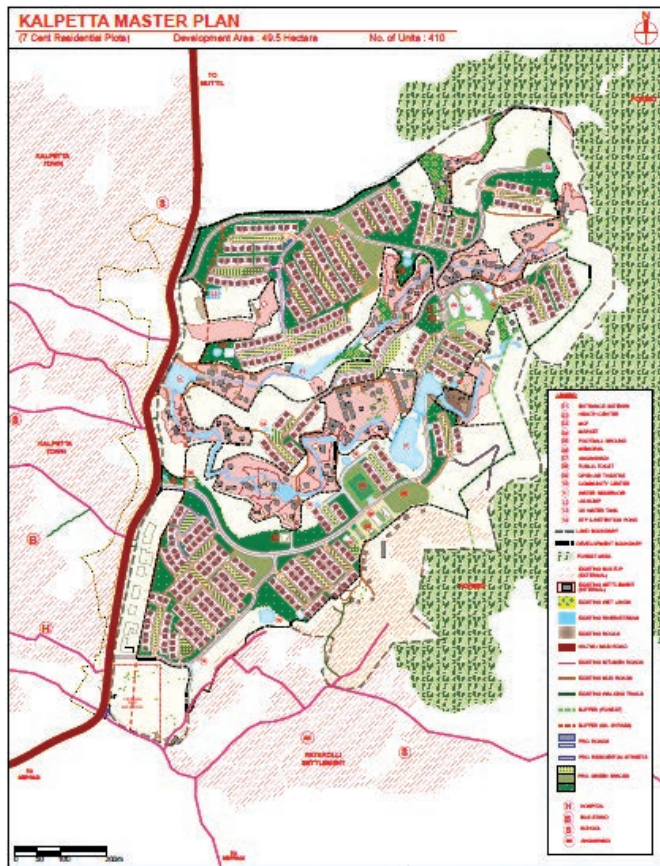


Figure 2: Township Master Plan—Residential Clusters and Road Hierarchy.

cates land for health, education, markets, community facilities and recreation, ensuring that social infrastructure grows in step with housing delivery. Master planning preserved the primacy of the approved layout—allowing engineering optimisation only through defined approval pathways to avoid scope drift.

**Early Works: NTP and IWO as Continuity Bridges**

To keep momentum between sanction and full



Centre-cum-Disaster Relief Shelter, Market—extend the resilience ethos beyond the doorstep.

### **Commercial Quote and Contract Finalisation: A Clean, Comparable Offer**

Given the sanction and TS discipline, obtaining the commercial quote required clarity on scope, standards and the payment schedule. KIIFCON's documentation enabled the EPC contractor to quote a clean, comparable price anchored to DSR-2021 baselines and measurable milestones. Particular Conditions clarified risk allocation, while the Schedule of Payments tied cashflows to deliverables. Any value engineering proposals were channelled through a controlled change mechanism to protect cost and schedule while allowing genuine productivity gains.

### **Risk and Change Management**

Hilly terrain, monsoons and ground variability introduce risk. The contract's risk matrix and ER provisions allocate responsibilities clearly. Controlled change under FIDIC Clause 13 (variations) and a Value Engineering Change Proposal (Value Engineering Change Proposal (VECP)) pathway allow optimisation without undermining quality or safety. KIIFCON's role is to test proposals for structural adequacy, standards compliance and whole-life value, and to document approvals for audit. Monsoon-season plans prioritise drainage, erosion control and protection of fresh works.

### **Stakeholder Engagement and Governance**

Families, local bodies, utilities, and departments (KSEB, KWA, PWD, Forest, Revenue) are part of a coordination matrix. KIIFCON supports the Special Officer's office with dashboards and progress notes



Figure 3: Model House

for high-level reviews (including the Coordination Committee chaired by the Chief Secretary). Transparent communication—site walks, model house showcases, grievance registers—helps align expectations and reduce friction. The memorialisation element ('Resilience Ridge') recognises collective loss and hope.

### **Digital and Documentation Discipline**

Drawings, RFIs, test reports, checklists and approvals are version-controlled. Submission registers and document logs ensure that the 'latest approved' is the one built. Billing folders are assembled physically and digitally, with indices, sign-offs and cross-references to drawings and tests. This discipline is critical for EPC contracts where design and build occur in overlapping windows.

### **What Makes This Model Replicable**

Three pillars support replication: (i) Speed with Structure—early works authorised in a controlled, non-prejudicial manner; (ii) Standards-anchored TS and contract—DSR-2021 and CPWD/MoRTH specs as a common language; and (iii) Evidence-linked billing—cashflows governed by the testable status of work, not subjective progress percentages. KIIFCON's proximity to KIIFB enables fast fiscal checks without compromising technical due diligence.

### **Outcomes and Trajectory**

As the township advances through construction, the success metric remains human-centred: safe, durable homes connected to services and livelihoods. The 410-unit project reflects a calibrated balance between land availability, geotechnical realities and service capacities. Public buildings and streets knit the neighbourhoods into a living township. The governance loop—DMD/PIU/KIIFCON/Employer—helps sustain budgetary discipline and timely decisions.

### **Lessons for Public Investment in Disaster Rehabilitation**

Rehabilitation must be treated as infrastructure—planned, specified and controlled like any capital asset. Clear ceilings (AS), standardised estimates (TS),



a robust contract spine, and a vigilant ER/PMC produce predictable outcomes. Early works can and should be used, but within a documented corridor that is later regularised. Finally, the audit trail is a public good—every rupee must be traceable to a clause, a drawing and a test.

**“Rehabilitation is infrastructure—planned, specified and audited like any capital asset.”**

### Conclusion

The Elston Estate Township demonstrates that building back better is a system, not a slogan. KIIFCON’s role—translating policy into drawings, tests, schedules and bills—makes the system visible and verifiable. For families returning from loss to stability, that visibility is trust. And trust is the bedrock in which communities are rebuilt.



Model Township - Wayanad

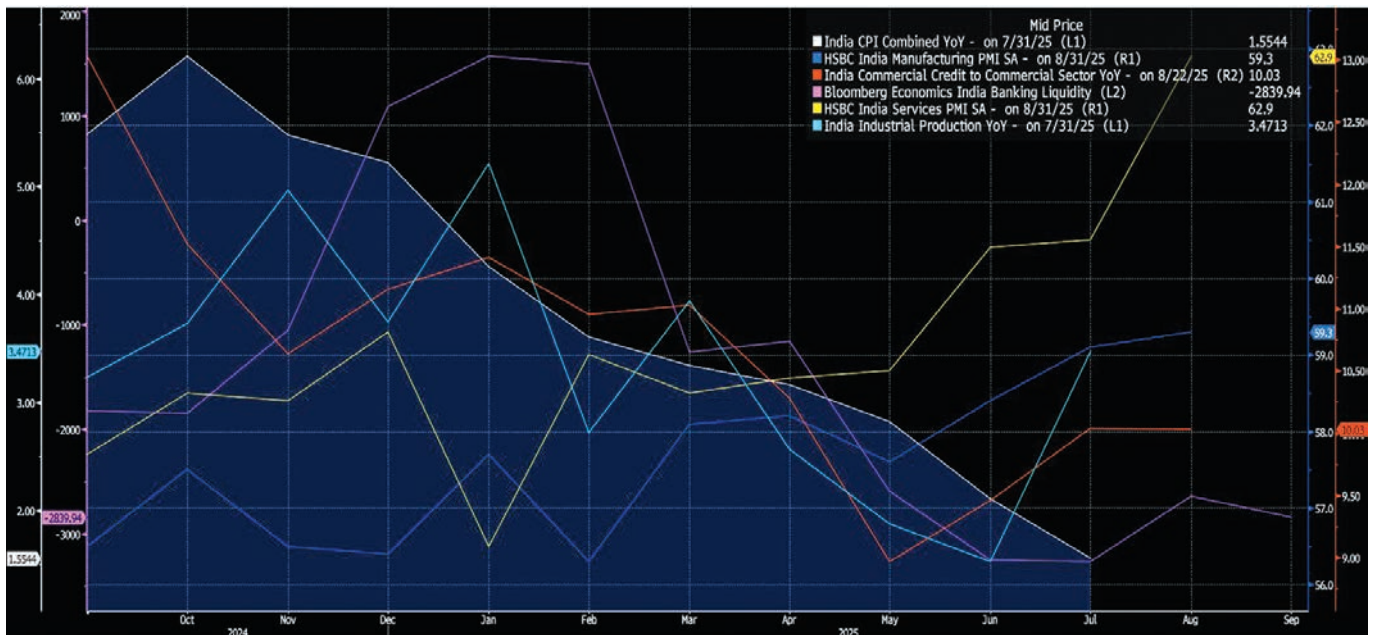
# Economy & Market Watch

Ajosh Krishnakumar,  
General Manager, Finance & Administration

In this edition of economy & market watch, we look at a few high frequency indicators of real economic activity in the country to analyse how the Indian economy has fared during past 12 months.

The following chart shows how the India Ser-

vices & Manufacturing Purchasing Managers Index (PMI), growth in credit to commercial sector, growth in Index of Industrial Production and retail inflation (Combined CPI YoY) fared during the past 12 months.



The HSBC India Manufacturing Purchasing Managers' Index (PMI), Seasonally Adjusted (SA), came in at 59.3 (highest during the period of study) in August 2025 compared to 59.1 in July 2025 and 58.4 in June 2025. During the period of study, the index recorded a low of 56.3 in February 2025. Moreover, Manufacturing PMI has been above 50 for all months during the period of study, indicating growth/ expansion. Additionally, it is worthwhile to note that

Manufacturing PMI has consistently been above 50 for 50 consecutive months in total.

The HSBC India Services PMI (SA) improved to 62.9 (highest during the period of study) in August 2025 compared to 60.5 in July 2025 and 60.4 in June 2025. During the period of study, Services PMI hit a low of 56.5 in January 2025. It may be noted that Services PMI has also been consistently above 50 for the last 49 months, indicating growth/ expansion.



Bank commercial sector credit growth on a year-on-year basis came in at 10.03% in August 2025 compared to 9.62% in June 2025 and 8.97% in May 2025 (Lowest during the period of study). The commercial sector credit growth (YoY) was below 12 % since October 2024. During the period of study, the commercial credit growth on a YoY basis hit a high of 13.03% in September 2024.

India's Industrial Production(IIP) measured on a YoY basis, recorded a growth of 3.47% in July 2025 basis provisional estimates of IIP for July 2025, as against 1.52% (lowest during the period of study) in June 2025. The YoY growth in IIP for July 2025 is primarily attributable to the growth in Manufactur-

ing sector (5.4% YoY), Electricity sector (0.6% YoY) and Mining sector (-7.2% YoY). During the period of study, IIP on a YoY basis hit a high of 5.21% in January 2025.

India's headline inflation rate based on the Consumer Price Index (CPI) YoY came in at 1.55% (lowest during the period of study) in July 2025 compared to 2.10% in June 2025 and 2.82% in May 2025. In the past 12 months, Consumer price index (CPI) inflation has been within the Monetary Policy Committee's target of **4 per cent within a band of +/- 2 per cent for all months except October 2024, during which Consumer price index (CPI) inflation hit a high of 6.21%.**



*Elevenchery- Pallassana Comprehensive Drinking water project in Palakkad District*



## Tender Update - August 2025

| Sl. No. | SPV    | Sector | Work Description   | Tender Value     |
|---------|--------|--------|--|------------------|
| 1       | HITES  | HFW    | Supply and Installation of loose furniture and curtains at Taluk Hospital Alathur  | ₹ 26,64,619.00   |
| 2       | HITES  | HFW    | Supply and Installation of koose furniture and curtains at Taluk Hospital Adimali  | ₹ 32,95,708.00   |
| 3       | HITES  | HFW    | Design Supply Installation Testing And commissioning of Electro-Mechanical And Plumbing Works For 100 Kld Sewage Treatment Plant With Mbr Technology Including Pre Treatment Plant For Effluent and One Year O And M (Excl Civil Work) at Th Chettikad | ₹ 47,93,450.00   |
| 4       | INKEL  | HFW    | Development of Govt. Medical College Thiruvananthapuram - Phase Ii - Mlt Block (Sh Supply of Chair)  | ₹ 34,06,450.00   |
| 5       | KRFB   | PWD    | KIIFB-Improvements To Venjaramoodu Ring Roads In Thiruvananthapuram District -Construction of Inner Ring Road Part -Ts - General Civil Work  | ₹ 5,17,89,601.00 |
| 6       | KSCADC | FSH    | KIIFB FSH 003-07- Strengthening of Fish Marketing Infrastructure of Seven Coastal Districts of The State Pazhayan-gadi Fish Market In Kannur District Civil And Electrical Works   | ₹ 1,07,91,309.00 |
| 7       | KRFB   | PWD    | KIIFB-Construction of Pulinjolkadavu Bridge Across Anjakkandy River In Kannur District- Laying oow Boundary Pillars-Investigation Work   | ₹ 3,19,122.00    |
| 8       | KSCADC | FSH    | FSH003-06 Strengthening of The Fish Marketing Infrastructure of Trivandrum, Kollam And Alappuzha Districts - Poonthura Fish Market In Thiruvananthapuram - Design, Supply Testing And Commissioning of 5 Kld Effluent Treatment Plant                  | ₹ 14,87,362.00   |



|    |       |     |  |                     |
|----|-------|-----|--|---------------------|
| 9  | KRFB  | PWD | KIIFB-Survey And Valuation of Affected Structures, And Any Other Value Addition to The Land (Multi Storied Building Etc.) Within The Prow of The Work of Kiifb 2017-2018 Improvements To Thiruvangad - Champad Road (Champad-Koppalam Thalassery Road) ( | ₹ 14,11,080.00      |
| 10 | KWA   | WRD | Deposit-KIIFB-2017-18-Improvements to etc Poomangalam - Mazhooor - Padeppangadu - Madakkadu Road Km 0-000 to 13-551-Shifting of Kwa Utilities - Phase li - From Padappengad to Madakkad Junction Ch 11-850 to Ch 13-551 And Balance Portion of Phase I   | ₹ 59,91,132.00      |
| 11 | KRFB  | PWD | KIIFB-KIIFB-Sasthamcotta Kottarakkara Neeleswaram Court Complex Road- Sasthamcotta - Kottarakkara Road-Urgent Patch Work-General Civil Work  | ₹ 16,31,789.00      |
| 12 | KWA   | WRD | Deposit KIIFB Project Comprehensive Development of Muzhapilangad And Dharmadam Beach In Kannur District Character Area 1 Water Supply Arrangement From Wss to Anjarakandy, Peralassery And Adjoining Panchayath  | ₹ 71,80,330.00      |
| 13 | KRFB  | PWD | KIIFB-Four Laning of Vazhayila - Pazhakutty - Kacherinada - 11th Stone Road in Thiruvananthapuram District-Reach 2 - Keltron Jn to Valicode Jn Ch 3/940 to 8/100 Part TS 4-General Civil Work  | ₹ 1,01,09,08,454.00 |
| 14 | KITCO | HFW | Development of Taluk Hospital Parassala Furniture Work   | ₹ 41,94,544.00      |
| 15 | KDISC | PEA | Supply Installation Testing And Commissioning of Nvidia AI MI Computing System and Integrating With High Performance Computing Facility for Kerala Genome Data Centre  | ₹ 7,00,00,000.00    |
| 16 | KITCO | HFW | Development of Taluk Hospital At Neeleswaram Kasaragod Civil Plumbing Sanitary Electrical HVAC Fire Protection System Elv Elevator Mgps Furniture  | ₹ 10,90,90,979.00   |

| Fund Mobilization Status               |                |
|--|----------------|
| Particulars                            | Amount (₹ Cr.) |
| Contribution from Government of Kerala | 23,313         |
| Fund mobilized from financial market   | 33,004         |
| <b>Total</b>                           | <b>56,317</b>  |

\* Provisional figure as on 30-06-2025



**PRAVASI Chitty  
Statistics as of  
31<sup>ST</sup> AUGUST 2025**

|                                |                |
|--------------------------------|----------------|
| Total number of customers      | 228012         |
| Total number of subscribers    | 66096          |
| Total amount collected         | INR 5593.50 Cr |
| KIIFB Deposit bond subscribed  | INR 835.50 Cr  |
| KIIFB Security bond subscribed | INR 257.40 Cr  |



**PRAVASI  
Dividend Scheme**

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

*Designing the Future...*  
(A 100% Subsidiary of KIIFB)

**Our Key Service Areas**

1. Consulting & Advisory Services
2. Environment Services
3. Design & Engineering
4. Project & Contract Management
5. Geographic Information System
6. Quality Management

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