

## *Enabling Circular Economy: A Pathway to Resource Efficiency*

Considering the massive scale of construction to meet the affordable housing needs in India, the building materials used in the coming years will become significant drivers of the production and consumption patterns for natural resources. There is an opportunity for India to integrate decarbonisation strategies and circular economy principles in affordable housing development to meet sustainability standards and achieve high environmental performance in the built environment. This approach can simultaneously help generate livelihoods and new economic opportunities through innovative business models and productive utilisation of available secondary resources from industrial wastes, agricultural wastes, and construction and demolition waste.

Further, by aligning with ongoing initiatives at the national level, including Mission LiFE, PMAY, CITIIS, Smart City Mission, and others at the subnational level (for example, Jaga Mission, Shakti Mission, Mukta Mission in Odisha and Mumbai Climate Action Plan, Net-zero targets, Maharashtra New Housing Policy in Maharashtra), India can pioneer new holistic models of sustainable, affordable housing development based on localised, participatory approaches and meet its commitments towards SDGs 7, 8, 9, 11, 12, 13 and NDCs.

Development Alternatives has been championing the cause of sustainable buildings for the last four decades. We are working to address supply and demand side bottlenecks in the construction sector value chain to facilitate a transition to low-carbon pathways for the sector by developing a sustainable building materials market in Indian states. This national campaign has been designed as a primary catalyst for achieving both mandates.

### **Initiatives Towards Enabling Circular Economy Model in Bundelkhand**

DA's work in Bundelkhand focuses on enabling a circular economy and accelerating resource efficiency, primarily through material innovation, waste management, and green energy. Our technologies and methods in the region include:

1. **LC3 Cement (Limestone Calcined Clay Cement):** This low-carbon cement technology reduces carbon emissions by 40% compared to traditional cement, offering a sustainable alternative for the construction industry.
2. **Fly Ash and Good Bricks:** These innovative building materials mitigate carbon emissions, utilising industrial by-products and cutting-edge technology to create durable, eco-friendly bricks.
3. **Waste Management:** Under Waste Management, DA has been working towards utilising C&D waste as a building material that reduces adverse environmental impacts such as air pollution, land pollution, and water contamination.

At TARAGram Yatra 2024, *Yatris* will be able to:

- a. Visit the villages which have used alternative building materials/ solutions and will get an understanding and learning of the emerging patterns in the future of sustainable habitats and materials.
- b. Look at how we at DA are creating entrepreneurial ecosystem around sustainable building solutions

Be a part of the changing narratives of the micro-movements of change that we are co-creating with the community!

BACKGROUND NOTE