

Eleven-Twelve-Thirteen Affordable Housing in Climate and Resource Constrained India



CRDT or Centre for Rural Development and Technology is a recognised unit of IIT Delhi which came into existence on 1979 with the aim to highlight the issues faced by the rural communities and to improve their quality of life with the inclusion of technology. On the occasion of its Foundation Day, Zeenat Niazi, Senior Vice President of Development Alternatives, gave a speech at IIT Delhi, the audience was taken on a 40-year voyage, delving into the organisation's remarkable journey from inception to its present standing as a leader in sustainable development. From introducing farmers with innovative techniques, to transform zero farming opportunities to double or triple farming and DA being the second Civil Society Organisation in India that started a Community Radio, which with coming years has gained fame as a very strong source of Climate Communication.

Amidst the introduction of the organisation, she also threw light on some of the ongoing projects of DA or Development Alternatives, such as udyame, MSME (Micro, Small and Medium Enterprises), Fly Ash Bricks, LC³ (Limestone Calcined Clay Cement), etc. that aims at achieving success on the three major impact areas broadly as: Resource Efficiency, Climate Resilience & Ecosystem Restoration, and Livelihood Security and Entrepreneurship. These projects not only aim at fulfilling the goals of DA but also aim at achieving the 11th, 12th and 13th Goals of SDG (Sustainable Development Goals) that states as:

- Goal 11: Mobilise Sustainable Cities and Communities
- Goal 12: Influence Responsible Consumption and Production
- Goal 13: Organise Climate Action

With these goals in mind, Zeenat Niazi highlighted the approach that has been adopted by DA, Innovate, Incubate, Implement, Influence and Impact. She then puts light onto the Three Core High-Impact Programmes, namely: Low Carbon Economies, Local Resource Regeneration, and Inclusive Entrepreneurship Ecosystems. She discussed on Low Carbon Economies which focused on Decarbonisation within the environment sphere and Transformation of the Built Environment through Sustainable Materials that will as a whole, result in the decrease of carbon footprint but with enhancement of productivity solutions. This in return will help in achieving the goal of Housing and

Habitat Space to look at Adequate and Sustainable Habitat for all. This initiative is progressed with the mission to bring Innovation in Housing Systems, innovation in the demonstration of viable models and support the replication of scale. Ms Niazi adds to it the transformation of Manual Production system of bricks such as **Balram Machine** to a Hydraulic and Semi-automatic production system that went through several changes on-ground with the help of mechanical engineers. This enhances the utility of the machine as with passing time the requirements are increasing as well.

Moving forward Zeenat Niazi mentioned about DA's work on Technology Market Creation, Capacity Building and Finance, that strategises with approaches of reducing environmental costs, introducing cost-effective techniques, decentralising supply, building local capacities, increasing value to customers, reducing delivery costs, etc. Under this, DA has brought innovation in eco-materials, production, and supply of fly ash bricks or LC³, produced using technical support for participatory design and construct, eco construction training and delivery services and integrated village development. By keeping the motive of Sustainable Housing solutions in mind, DA has introduced (MaS SHIP) or Mainstreaming Sustainable Social Housing in India that has brought upon several transformations leading to progressive, eco-friendly, and sustainable solutions with lesser carbon footprint. This has enabled the dream of housing affordable and achievable for everyone without causing any harm to the environment.

In conclusion Zeenat Niazi spoke about DA's current focus, being on **Ashraye**- that transforms built environment through Sustainable Materials in Odisha's Bhubaneswar and Maharashtra's Thane, Affordable Housing, desired technology to enhance the demand of fly ash bricks in masonry, and to bring shifts in policy and practise small achievements.