(Cover page with illustration)

(Godrej Design Lab logo)

Understanding Conscious Living in India

A report on spaces, materials and the environment

(Godrej & Boyce logo)

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Introduction

India is on a path of exponential economic growth, projected to be within the top three economies in the world in the next decade. At the same time the world faces an ecological crisis as a result of exploitation of resources that jeopardises our future. Towards a goal of better living for people and the planet, driven by the aspirations of more than a billion people, we ask ourselves: what does conscious living mean to India?

We use the word 'conscious' here to denote intentionality - the idea that our thoughts and actions have an impact on ourselves, the people around us and the planet.

The focus on 'conscious' leadership has always been a priority for Godrej & Boyce with its track record of many innovations that have shaped independent India's history. With this report on Understanding Conscious Living in India we look to create conversations that spark ideas and more importantly, our collective conscience, towards better living with regards to our spaces, materials, and the environment.

About the Report

To set a foundation for this conscious conversation, Godrej Design Lab partnered with Unbox Culture Futures, a leading qualitative design research firm, to explore themes that govern conscious living in India today. Their approach was a focus on secondary sources as well as investigations with experts and edge-case users, with the intent to arrive at a synthesis that would shed light on an Indian perspective to conscious living.

After months of in-depth research and interviews, we zeroed in on '4 Big Shifts' that we believe have the potential to shape conscious living within India's complex socio-economic climate.

Each of these shifts has been further broken down into drivers, exemplified by case studies, events and projects. These trends reveal factors within an intrinsic relationship between spaces, materials and the natural environment that need our attention and action, now more than ever.

By collectively acknowledging these shifts and drivers, we can hope to build a future that walks the fine line between conscious living and transformative progress. Our aim is to inspire designers, architects and creative professionals to enhance their products and services with mindful designs, in order to revisit the context of how we live, work, and interact as individuals and a society.

Defining 'Consciousness'

Through detailed discussions looking at contemporary associations and understanding future aspirations, we arrived at a direction for 'consciousness' to drive this conversation.

Consciousness, at its simplest, is the awareness of internal and external existence.

As we look at conscious living, we consider three states of awareness:

Sensing the world

The awareness and sensorial experience of the external world - organisms, objects, events, context, surroundings, and environment

Sensing the body

Conscious awareness of our body, its internal sensations, bodily functions, and physical states

Sensing the mind

Conscious awareness of our mind, its feelings, emotions, thoughts, memories, mental processes, and cognitive states

India - An Overview

India is modernising its infrastructure in line with the Prime Minister's vision to achieve 'developed nation' status by 2047. This includes advanced transportation, cutting-edge mobility tech, clean energy and digital public infrastructure. With a young and dynamic population, the government is eager to foster a core national identity and a promising international image. India is actively establishing itself on the global stage.

While India grapples with the challenge of forging a cohesive national identity rooted in its diverse languages, cultures, and traditions, the concept of the 'global Indian' has emerged as a prominent narrative.

The country is witnessing significant overhauls, upgrades, even upheavals on many fronts - be it technology, transportation, and connectivity. By harnessing the potential of its youthful population, India, as one of the world's youngest countries, can unlock abundant opportunities for growth in this landscape. Like thoughts racing in an excited mind, we as a nation are witnessing a frenzy of shifts that simultaneously resemble both chaos and opportunity.

In Conversation: Rahul Mehrotra & Nyrika Holkar

with Sneha Ullal Goel on conscious living, responsibilities of civil society and the future of promise of collective action.

The following is an excerpt from a conversation between Rahul, Nyrika and Sneha.

Sneha Ullal Goel: In this report we define the word 'conscious' as an awareness of internal and external existence. What does 'conscious' mean to you, as an architect, as a business professional, as a human being?

Nyrika Holkar: 'Conscious' denotes intentionality - the idea that our thoughts and actions have an impact on oneself and families, the community and the planet. Many of us as individuals and organisations are becoming increasingly alarmed by the rapid and adverse changes in climate, and are increasingly making fresh choices as consumers conscious of this change.

The power of conscious behaviour is multiplied manifold if this effort can involve our communities, therefore becoming a 'collective' effort. I firmly believe that more than ever, we need to come together to drive change in this context. This new 'conscious' behaviour not only signals a growing awareness of one's own existence but also of the people around us, as well as the surrounding environment.

Rahul Mehrotra: Consciousness is an awareness that's physical, spiritual and mental. It is also about ecological consideration. As architects, when we think ecologically, we create feedback loops. I might be designing a green building in Borivali in Mumbai, but I might be extracting materials from elsewhere, which could cause forms of displacement. If I'm not conscious of that, I've negated my intentions of making something green.

For me as a human being, consciousness is about being aware of this notion of interconnectedness. How we create an equilibrium and a harmony within that broader ecology that we exist in, is being conscious.

SUG: Speaking of impact: the *Understanding Conscious Living* report – to be followed by the *Conscious Collective* event. Nyrika, can you tell us why these are coming into the spotlight today?

NH: With the report, we wanted to uncover how conscious living trends are manifesting in India today. It highlights how our renewed understanding of traditional techniques and knowledge can potentially have a conversation with our optimism for modern technology innovation and new materials. It also underlines the idea of progress and development on one hand, and the need for conservation on the other - but then how do we conduct a sensible, non-polarising discussion while balancing the trade-offs? Then of course, the idea of authenticity needs to be fine-tuned - how can we be true to ourselves, and true to our purpose and thus be driven by it? The report hopes to address these questions while underlining our sense of responsibility and collective action.

SUG: What also stands out for me, through this initiative, is how design and architecture play a role in adapting to all of these choices. How can this platform attempt to tie all of this together, without having to single out the role of individual entities?

RM: With younger architects and designers especially, the spheres of concern and influence need to be balanced. We're worrying about the planet, trying to debate a host of social, political, ideological questions, thus exponentially expanding our sphere of concern. Simultaneously, our sphere of influence is so diminished that we've become cynical and frustrated. The challenge for us in the future is to calibrate how we synchronize these two spheres. If these map upon each other, in equal proportion, we can effectively realize a sense of consciousness.

Values are a common denominator that can bring people together, because they are linked to aspirations. How do we then create the narratives that emerge from the idea of consciousness? If we understand consciousness as being a sense of interconnectedness, it will inform our values.

SUG: But who sets these values? Shouldn't this be a collaborative effort? Or does it have to be dictated by an authority, in order to be effective? What do you think would work within India's complex ecosystem?

RM: We can, through consensus building and ratification - but it has to be a process. When we look at, what we call, slums - the *kutchha* city - they are victims of standards, because we've deemed the materials they use as being not permanent and not worthy of being acknowledged as habitation. This dichotomy is a result of the code. In rural India, they use mud walls, tiled roofs, and GI (galvanised iron) sheets. This is all propelled by that weird imagination of the "world-class" city - every building is high-rise, built in concrete and clad in glass! Of course, these buildings exclude people - everyone cannot live in them, as they are victims of the code. That said, if you ratified making mud walls and tiled roofs, people might start improving their homes because they wouldn't be deemed illegal any longer.

NH: Adding to your point about standards - at Godrej & Boyce, we've been experimenting with recycled concrete. The perception, rather misconception, is that it's less durable than virgin material. The building codes here are strict about what are acceptable materials. How do we change some of these codes that have existed for years and need revisiting? Given the fact that infrastructure projects are large-scale and we're building rampantly all over the city, would it be possible to consider circularity when we're looking at these kinds of materials?

SUG: It's sometimes terrifying that issues like climate change are dismissed as non-existent or something that can be dealt with, "when the time comes". As corporate entities too, how do you reinforce responsive action and responsibility among your consumers?

NH: Corporates must play a role in shaping preferences, and work towards strengthening public-private partnerships. A good example is LED lights - government policy and incentives

influenced corporates in shaping energy and lighting consumption behavior, and now these lights are

ubiquitous. As Rahul mentioned earlier, the sphere of influence is limited, but if we converge with the civil society, we can strengthen our relationship with consumers effectively.

RM: Climate change is a frightening rubric, but it's also comfortable in terms of rhetoric. It doesn't commit you to anything. As entrepreneurs and designers, we need to break this down into actionable tasks, which then aggregate in some way - this again is connected to the idea of consciousness where the tasks are interconnected, and the action is more effective. Civil society is perhaps the only part of society that has a pulse on the grassroots, as well as the wherewithal to negotiate with more powerful forces. For example, NGOs that advocate for slum dwellers have a pulse on the grassroots, but can negotiate with the World Bank and state governments. I agree with Nyrika on the important role that civil society needs to play in the imminent future. I personally believe that the greatest constituency or "client" for designers in the future is going to be civil society.

Rahul Mehrotra is an architect, urbanist and educator. He is the Founder Principal of RMA Architects and is Professor of Urban Design and Planning at the Department of Urban Planning and Design at Harvard University's Graduate School of Design.

Nyrika Holkar is Executive Director, Godrej & Boyce.

Sneha Ullal is a culturist and curator.

The 4 Shifts

A look at the shifts that have the potential to shape conscious living in India

Looking Back to Move Forward

The uncertainties of our future have led us to look inwards and into our past for solutions

Balancing Act: Consumption & Conservation

The play between consumption and conservation is reshaping collective responsibility

Spaces Activated

A perception of cities as living organisms is evolving, urging us to address resilient urban planning

Search for Authenticity

The pace of information dissemination and the quest to be noticed have never been more pronounced

Looking Back to Move Forward

The uncertainties of our future - technological, political, and most critically, environmental - have led us to look both inwards and into our past. We have begun to rediscover ancient systems of knowledge and revisited the use of local resources. These allow us to unpack answers to address these challenges with new insights.

India's <u>scientific capabilities</u>, built through collaboration on a global stage, have empowered us to view our <u>rich cultural knowledge</u> and heritage through a new lens. This has resulted in a masterpiece-like convergence of the old and the new, the traditional and the modern.

We have learnt to move away from loaned ideas and interventions of the West, to empirically establish new wells of knowledge rooted in our own resources, flecked with contemporary insights.

Looking Back to Move Forward

WHAT DRIVES THIS SHIFT?

India, Rebranded

India is experiencing a holistic rebranding through the eyes of the world

Make in India, Sustainably

India's vision of becoming a manufacturing hub is slowly taking shape

New Material Library

There is a need to infuse the "man-made" world with resilience and healing properties

India, Rebranded

India is experiencing a holistic rebranding through the eyes of the world.

We are seeing a consolidation of the past and present and a reimagining of our cultural identity. In the last decade, we have seen how India has taken control of its own narrative - for instance, actively restoring the original names of streets and cities.

In architecture, food production, and material science too, we are seeing a revival of age-old traditions. There is a proactive shift towards techniques that help us adapt to a more judicious use of resources. This resurgence of cultural knowledge resonates with the country's inherent desire to maximise value from how we choose to consume. There is a move to extend this concept of value from the self (mind and body), to our surroundings (built spaces and environment).

CASES

A cool house of mud in one of the hottest cities in Rajasthan

Built and designed by Sketch Design Studio, this mud house situated outside of Alwar in the countryside, Rajasthan, seamlessly blends tradition with sustainability and sits right at the centre of a permaculture-inspired farm. Crafted using traditional techniques typically used by builders of the region and local materials like mud, reclaimed stone, and tall wild grass, it stays naturally cool and ventilated in the hot, arid months, and well-insulated during the winter. The outdoor areas have also been designed as suntraps to help tide through the cold weather.

Image credit: Sketch Design Studio

Expert quote

"There is great potential in looking at systems that have worked for thousands of years which we have let go of in the name of modern architecture and construction and blindly accepted whatever marketing suggests."

Monish Siripurapu

Founder & Principal Architect, Ant Studio

Earthquake-resistant homes in Himachal Pradesh

Based in the foothills of the Himalayas, Rahul Bhushan's architectural practice Studio North is working hard towards reviving vernacular building techniques like dhajji dewari (a timber frame with stone and earth infilland) kath kuni (alternating layers of wood and stone masonry, held in place without using mortar) to create earthquake-resistant structures in Himachal Pradesh. Dhajji House, in Naggar, is the best example of this kind of least invasive, natural, phenomena-proof housing, built from materials like

timber from an abandoned house, stones from a nearby riverbank and mud from Himalayan sand. Image credit: Studio North

Expert Quote

"A lot of the construction is very aspirational in some of the remote areas where they think that using concrete is a great approach. The use of local materials helps make our infrastructure become more climate responsive."

Priyal Shah

Senior Program Associate for the Climate Program, World Resources Institute, India

A 'living' memorial that blends with its sinuous surroundings

Built and designed by Rajeev Kathpalia and his team at Vastushilpa Sangath, the <u>Smritivan Earthquake</u> <u>Memorial Museum</u>, in Bhuj, Gujarat, is a tribute to the victims of the Bhuj earthquake in 2001. With the vision of 'planting a tree for every victim', the design of the museum draws on age-old wisdom and traditional techniques to create 81 water reservoirs. The reservoirs have been charted out based on understanding the contours of the land, serving the integral need for water harvesting in this arid region. The path of the reservoirs is a pilgrimage and the spine along with a forest will develop. Featured also is a circular reinforced concrete structure with shuttering made from wood battens and symbols used by Kutch farmers imprinted on the concrete surface.

Image credit: AB Gusai for Vastushilpa Sangath

Make in India, Sustainably

India's vision of becoming a manufacturing hub is slowly taking shape.

The pandemic exposed the fragility of global supply chains, which led to an increased focus in India to build more robust local supply chains by extending our manufacturing capabilities into new areas.

Aimed at reviving India's economy, the Vocal for Local campaign was rolled out in 2020, to not only highlight India's rich local traditions but also create employment opportunities and further encourage indigenous and sustainable production.

In a pitch for self-reliance, the Product Linked Incentive (PLI) scheme continues this agenda with a focus on making Indian products and services globally competitive through promoting local manufacturing.

CASES

Policy support for green manufacturing

Many initiatives have been introduced to improve India's 'sovereign capability' with a particular focus on sustainability in the production of LED bulbs, EVs and solar panels. However this remains a complex issue involving governance, sustainability and geo-politics which leaves many opportunities as well as pitfalls to take advantage of policies that make a sustainable impact.

Image credit: XXXXXX

LED bulbs command 76% of the Indian market share today - bubble

A path to sustainable processes and products

The manufacturing sector contributes to nearly 40% of the country's total energy consumption and is one of the major sources of greenhouse gas emissions. Pictured above is the Godrej & Boyce manufacturing plant in Shirwal, Maharashtra, an IGBC Platinum certified manufacturing facility. The plant manufactures Godrej appliances including India's first 100% Chlorofluorocarbon (CFC) and hydrochlorofluorocarbons free refrigerator and pictured on the right, air conditioners with energy efficient R290 refrigerant. Image credit: Godrej Appliances

New Material Library

There is a need to infuse the "man-made" world with resilience and healing properties.

We are witnessing the creation of a new repertoire of materials and ingredients thanks to meticulous research and conscious reflection. A treasure trove of traditional ingredients and local resources has resurfaced to help lay the foundation for developing new, innovative ones. This helps us to counter properties that have been diluted or overlooked entirely because of excessive, wasteful overproduction.

This inward gaze has allowed us to revisit our strategy for consumption that is additive instead of extractive, and proactive, not reactive. We need to apply a thoughtful approach for solutions to manage the existing, unsustainable production and consumption across sectors – whether it's food, fashion, design, appliances or architecture.

CASES

Material innovation for 'green' construction

India generates an estimated 150 million tonnes of construction and demolition waste every year of which only 1% is estimated to be recycled. Godrej Construction has created a concrete mix comprising approximately 30% of recycled concrete aggregates recycled from construction waste. Additionally, the company's recycled concrete plant is powered by 100% renewable energy, ensuring that the recycling process itself leaves a minimal carbon footprint. Pictured above is the Godrej Construction 3D-printed bus shelter using recycled concrete, and on the left, their recycled concrete blocks and pavers.

Images credit: Godrej Construction

Waste to wealth material exploration

Anomalia is a research studio run by two architects, Bhakti Loonwawat and Suyash Sawant, who are committed to progressive materials. Pictured above is their 'Elephant in the Room' collection made with recycled plastic boards that are free from resins, rendering them waterproof, termite-proof, fire-resistant, and recyclable. They are currently devoted to the research of Mycomaterials and its applications, with a focus on hybridising everyday objects by introducing Mycelium parts, featured on the left.

Images credit: Anomalia

Expert Speak ASHA SAIRAM Principal, Studio Lotus

On the principles of conscious design, reviving traditional craft techniques and the collaborative process of working with traditional craft communities.

Asha is a Principal at Studio Lotus where she leads the branded experiences and hospitality interior design verticals.

(Caption for Krushi Bhawan) Krushi Bhawan, Bhubaneshwar, Odisha

Developed for Government of Odisha's Department of Agriculture & Farmers' Empowerment, Krushi Bhavan transcends the typical, closed-off office campus morphology by bringing together governmental functions with direct community engagement. Studio Lotus worked with over 100 local artisans under the guidance of local architect Sibanand Bhol. The project showcases how 'contemporising' of craft relies on the ability of the craftsperson and their understanding of the technique they are working with, creating a dialogue where the artisan's knowledge informs design and process - a true partnership.

Why is it important for your practice to not only integrate craft but work towards the revival of craft techniques?

We want to create a shift in the identity of what a modern Indian articulation of craft techniques could look like. To make these techniques more relevant to a modern Indian home, a workspace or government building. This widening of its scope translates into a more sustainable livelihood for the craftspeople. Also, for us as a nation to lose this wealth of our own heritage would be a tremendous loss. So, I think that's why we work on integrating craft - the fact that it revives it, is a happy by-product.

How does Studio Lotus' process and work, especially Krushi Bhawan in Odisha, best represent this shift of "Looking Back to Move Forward"?

We are driven by creating a sense of identity while remaining deeply conscious of the purpose it serves. With Krushi Bhawan, we took the opportunity to engage in a dialogue with an administration that was open to reinventing an experience. We designed the building to bridge the gap between bureaucracy and the community by incorporating a sense of collective ownership.

The entire building is lifted to create a public plaza-like experience on the ground level - a space for farmers to have upskilling workshops, be able to create a seed bank, run markets. The brick on the façade is inspired by the various colours of soil you would find in Odisha, it being a building for the Ministry of Agriculture. So yes, it's about craft, but its success lies in integrating it with purpose and meaning.

What has been the most important lesson you've learnt from India's historic design and architecture principles?

In India there is a lot of knowledge that isn't documented or assimilated. It's important to start listening, learning and absorbing all of this knowledge, because it's all so relevant. There are lessons that I am learning from the usage of lime plaster in construction that we are now able to apply to a residence in Dubai.

Balancing Act: Consumption & Conservation

A nuanced understanding is emerging on the complex interplay between consumption and conservation. This deeper comprehension is reshaping how we perceive collective action, responsibility, and accountability, ultimately prompting a question of who brings the solutions to conscious consumption.

Consumers are looking to policy and private players to address their mounting consumption needs while at the same time managing and measuring environmental impact.

They are looking at government policy to take on the role of driving environmental progress, by fostering an ecosystem that involves private industry, venture capitalists, innovation grants, and where substantial funds are allocated for research and development.

Balancing Act: Consumption & Conservation

WHAT DRIVES THIS SHIFT?

Shifting Accountability to Public Policy

India is enabling policies to position itself as a global leader in green practices

Community-Driven Eco-Sentiments

Communities-driven efforts being made to manage and adapt to global warming

Rise of Circular Businesses for Conscious Consumers

Awareness of the climate crisis has led to sustainable consumption patterns

Shifting Accountability to Public Policy

India is enabling policies build green practices.

India has been making substantial investments in solar, wind, and hydropower technologies. This transformation is evident in various spheres, from the <u>formulation of policies</u> with environmentally friendly goals across sectors to detailed strategies in the building and <u>construction sector</u> for <u>resource efficiency</u> or subspecific agendas such as <u>low carbon cooling solutions</u>.

In the private sector, voluntary consortiums like the World Resources Institute or Xynteo are defining strategies for <u>decarbonization</u> and <u>industrial innovation</u>.

CASES

India commits to renewable and non-fossil fuel energy

At the recent G20, India announced its energy-shifting commitments and committed to reducing emissions intensity by 45% by 2030. India also committed to supply 50% of power requirements using non-fossil fuel energy resources (up from 40% pledged in the Paris Agreement in 2015). To realise these commitments experts envision that the country will require a substantial investment of Rs 13,000 bn per year till 2030 – almost three times more than the current investment.

India ranks 3rd globally for its green building footprint

Research shows that buildings contribute to over 20 percent of carbon emissions in India - with their connected industries being one of the biggest consumers of natural resources. The green building approach attempts to reduce the impact of buildings on the environment through their entire life cycle from planning to design, construction, operation, maintenance, renovation, and demolition. Indian Green Building Council (IGBC) leads green building certification in India supported by partners like the Godrej & Boyce Green Consultancy and Energy Management (GCEM) vertical.

(Left) The Navi Mumbai Municipal Corporation, certified by GCEM.

Community-Driven Eco-Sentiments

Communities-driven efforts being made to manage and adapt to global warming

Community-level endeavors are underscoring the importance of bottom-up approaches in fostering eco-conscious behaviors and environmental stewardship. A grassroots example is the group led by Warrior Moms in Gurugram which demonstrates how citizens are transcending individual efforts and mobilizing collective action.

The rising trend of eco-villages in India demonstrates how sustainability, simplicity and serenity co-exist to make a difference not only to the quality of lives of the inhabiting citizens, but also to the natural habitats around them. The village of Baghuwar, Madhya Pradesh has been Open Defecation-Free (ODF) since 2007, plus it has over 55 biogas plants that produce fuel used for cooking, 100% literacy and active rainwater harvesting initiatives to increase ground water levels.

CASES

Mothers fighting for clean air and climate change

Originating in 2020 from Gurugram, Warrior Moms is a network founded by 10 mothers who came together two years ago with a common aim of fighting for their children's right to breathe clean air. Since then, they have launched many initiatives to fight climate change and air pollution. Today, this community has 10 core mothers and a network of 2,000 plus mothers from nine states across India. Warrior Moms has also collaborated with organisations like Doctors for Clean Air, Raahgiri foundation, etc., to conduct online and offline awareness. They have also organised informative sessions on the health impact of air pollution, sustainable mobility and related topics.

Images credit: Warrior Moms

Green villages by the youth, for the youth

International federation Life Project 4 Youth Alliance (LP4Y) has a global program called Green Village - which aims to encourage young people (aged 17-24) to take positive civic action for their community, with a focus on sustainability. This has currently been activated in villages in Chhattisgarh and West Bengal, where LP4Y organises workshops on ecology and training sessions on composting, gardening and water management for dishwashing, to name a few. In 2024, this program will train youth who will come to the Green Village for an internship, and then join sustainable projects run by enterprises or local governments to become climate entrepreneurs - project initiators or trainers with the aim of developing positive actions for the climate.

Images credit: LP4Y

Rise of Circular Businesses for Conscious Consumers

Awareness of the climate crisis has led to more sustainable consumption patterns.

We are adopting eco-conscious lifestyles as a response to urgent climate concerns and a desire for well-designed experiences. As individuals become increasingly aware of the climate crisis, they are embracing more sustainable consumption patterns. Simultaneously, there is a growing aspiration for products and designs that align with contemporary trends while incorporating eco-friendliness.

The global race to innovate to create a more sustainable supply chain while fostering collaboration among stakeholders is underway. **Companies are now closely examining the long-term profitability of sustainable practices, realizing that innovation in this sphere can confer a significant competitive advantage.** These companies are attracting the attention of climate-aware investors and venture capitals, looking for more conscious, sustainable and long-term investments. A striking example of this trend is the alternative packaging sector. Biodegradable plastic packaging is a growing market. In 2020, the global market value of biodegradable plastic packaging amounted to nearly USD 2.8 billion. By 2026, it is forecast to grow to nearly USD 9 billion.

CASES

Green energy is shaping the hospitality industry in India

The 2022 Sustainable <u>Travel</u> Research Report by Bookings.com found that 91% of Indian travellers would want to travel more sustainably. Of these travellers, 64% said that sustainability efforts of accommodation and transport providers have a strong impact on travel decisions, which provides more incentives to the hospitality players to shift their practices to better align with sustainable goals. (Above) A solar plant installed at Ahilya Fort, a heritage hotel at Maheshwar, by Godrej Electricals & Electronics.

Images credit: Godrej Electricals & Electronics

Eco-friendly packaging alternatives have led to seaweed

Despite unsettling research and studies on the hazardous effects of single-use plastic and petroleum-based packaging, they continue to be popular packaging ingredients. However, there are organisations like Pune-based Zerocircle, that have come up with ingenious and useful alternatives to plastic - seaweed. Through in-depth research, tests and experimentation, Zerocircle has figured a way to convert various species of seaweed into packaging the founder, Neha Jain, claims is "low-cost, completely dissolvable, home-compostable, and bio-digestible". Images credit: Zerocircle

Expert Speak ANUPAMAA KUNDOO

Architect & Educator

On the housing projects she's built in Auroville like the Full-Fill Homes and working with materials like <u>ferrocement</u> - a unique construction material, combining wire meshes and cement mortar in a symphony of versatility.

The trend/theme where we are representing your interview and Full-Fill Homes is titled "Balancing Act - Consumption & Conservation". This explains that India has a nuanced understanding when it comes to striking a balance between consumption and conservation. It also addresses how we're looking at both authorities and private players to lead the way - managing and measuring environmental impact. Your work exemplifies this trend/theme really well, given that you always focus on a conscious approach to building and design. In your opinion, how should we balance the way we conserve with the way we consume?

In your experience and with your more recent interactions with clients, have you seen a conscious shift in adapting to climate conditions and even a preference of more local materials integrated in their structures and buildings? Do you think this shift can be more consistent and can even sustain long-term?

For Full-Fill Homes, why did you choose to work with a material like Ferrocement? What is the potential of a material like this for large scale and even cost efficient building solutions, especially in a complex landscape like India's?

Your work consciously combines handmade techniques with knowledge-based scientific systems. Why is this union of the "handmade" and the "scientific" important in the way you build?

Spaces Activated

Our perception of cities and spaces as living organisms is evolving. The pandemic served as a wake-up call, to not only revitalise medical, cultural and environmental contexts, but also address the urgent need for <u>resilient urban planning</u>.

This post-pandemic world has reshaped our expectations of where and how we are supposed to live, and live well. In this "new normal," cities are becoming more socially oriented, with community spaces that prioritize social development, nation-building, leisure, entertainment, and spectacle.

From developing new tourist destinations to state-run competitions for the creation of public spaces, there is a concerted institutional effort to breathe new life into built spaces. Many challenges lie ahead, from a growing population to climate change, but they also present opportunities to reimagine cities as havens of inclusivity, well-being, and sustainability.

Spaces Activated

WHAT DRIVES THIS SHIFT?

Tactical Urbanism

Efforts are being made to create cities that allow community engagement and well-being

Inclusive Adaptations

New spaces of belonging are emerging to cater to diverse groups

Phygital Synergies

As urban landscapes in India transform, the physical fuses with the digital

Tactical Urbanism

Efforts are being made to create city spaces that allow community engagement and well-being.

A heightened focus on overall well-being is leading to more demand in cities for recreation. By creating vibrant and people-centric urban environments, cities are adopting an action-oriented and cost-effective approach to catalysing meaningful civic changes.

Such initiatives play a role in revitalizing spaces for movement and leisure that promote mental and physical well-being, further enhancing the quality of urban life.

These spaces are being designed in a way that they encourage feedback and instill confidence in the feasibility of such infrastructure that contributes to India's transition toward more sustainable, energy-efficient urban solutions. Collaboration between governments and private sector stakeholders is crucial in funding and executing these projects, leveraging both expertise and resources.

CASES

Neglected spaces under a flyover, become the space to be

StudioPOD, along with MVRDV, transformed the neglected concrete mess below Mumbai's Senapati Bapat Marg flyover, into a thriving space for the entire local community. One Green Mile is a "complete street" project that addresses the global challenge of transforming vehicular dominant corridors to reclaiming streets for its people in the heart of the city's financial district. The project demonstrates how using principles of good street design and placemaking can convert encroached and underutilised spaces into safe, fun public places.

Images credit: StudioPOD

Astro-turf football stadium with renewable energy, in Ladakh

As part of the Khelo India programme, an initiative by the government to promote sports culture in the country, a new football stadium was constructed in Ladakh, which boasts the union territory's first open synthetic track as well. This open stadium has an ultimate capacity of 20,000 spectators including a youth hostel for 1,000 students. According to the architectural firm, Studio for Habitat Futures (SHiFt), the hostel and VIP lounge are designed with solar passive architectural features, with each room being thermally insulated thanks to a trombe wall.

Image credit: SHiFt

Cycle-friendly cities with Cycles4Change

Thanks to the Smart Cities Mission by the Ministry of Housing and Urban Affairs, the Cycles4Change Challenge was launched in 2020, to inspire cities to implement quick cycling-friendly initiatives. 95 cities registered to participate. At the Lodhi Art District in New Delhi, for example, architecture studio AfD collaborated with the city's municipality to design and rollout cycle infrastructure through a week-long pilot. In partnership with St+Art and SmartBike Mobility, the 500-metre cycle track through Lodhi Gardens was activated with public art. Images credit: AfD

Expert quote

"I believe that the growing awareness towards public spaces is rather related to the rapid sprawl of Indian cities than to a post pandemic reality. Urbanisation is occurring at an unprecedented pace and often without proper planning. A regulated planning which foresees a balance between public and private spaces is crucial instead of a retrofitted and tokenistic approach on the same. We have a responsibility as professionals to contribute to creating scalable innovative models and suggesting policies towards more accessible sustainable public spaces."

Giulia Ambrogi, Co-founder, St+Art

Inclusive Adaptations

New spaces of belonging are emerging to cater to diverse groups

We see a growth of projects aimed at taking into account the diverse nature of communities and needs across India. These initiatives are focused on creating an approach that benefits both people and planet.

Creating inclusive design spaces in response to India's varied groups and identities, each with unique needs and aspirations is the order of the day - one size does not fit all. In online and offline spaces, there are 'new spaces of belonging' emerging that preserve stories of Indian heritage and foster conversations about traditions and sustainable practices, acknowledging and filling the gaps in historical narratives. Paired with this angle of being a responsible consumer, there is growing acknowledgment of re-use, re-adapt, or recycling. However, examples of re-adapted spaces in India are largely driven by economic choices rather than eco-consciousness. This might change in the future.

CASES

A school for those who may not have a home tomorrow

Every year, parts of Indian cities disappear as settlements built informally by the poor continue to be evicted. ModSkool is a modular school designed as a response to the evictions and demolitions of slums in Delhi, specifically for the children of farmers along the river Yamuna. After a school for around 200 children in a farming community on the floodplains of the river Yamuna was demolished due to the "illegal" status of the settlement, the community approached Social Design Collab to help them design a temporary school that could be dismantled before the bulldozers could arrive on ground to demolish it.

Image credits: Social Design Collab

Built spaces that inspired children to learn and absorb knowledge

Located in the middle of the Thar Desert, the Rajkumari Ratnavati School built by Diana Kellogg Architects, serves girls from nearby underserved communities. The building is designed in a way that it shields against the harsh, excessive sunlight, and also incorporates ancient water harvesting techniques to maximise rainwater usage and recycle grey water. Furthermore, the school's lighting and fans are powered by solar energy, and the building is made by using locally sourced materials, thereby effectively reducing carbon emissions. In a recent collaboration with St+Art India and through the BALA (Building as Learning Aid) initiative, one wall in each of the school's classrooms was painted based on a theme. This intervention was done with an effort to create an environment where learning extends beyond textbooks.

Image credit: CITTA India

Expert quotes

"One size never fits all—and while it is important to understand and address the diverse identities that make up our communities, it is equally, if not more critical to identify commonalities and shared motivations upon which we can draw spaces, places and imagine alternative futures. This is not only relevant for divergent groups of people, but imperative to bridge the widening gap between people and the planet. We need to overcome our severely anthropocentric perspective on crises to institute sustainable systems that can actually be sustained."

Mrinalini Ghadiok Architect, Writer & Design Culturist

Phygital Synergies

As urban landscapes in India transform, the physical seems to be fused with the digital.

"Phygital Synergy" represents a conscious linkage between the physical and virtual worlds, reflecting the evolving way of life in an increasingly connected society. Within this phygital existence, a distinct subtrend is emerging—one that underscores the fusion of physical and digital realms while prioritizing inclusivity and adaptation.

Notably, <u>institutions are embracing virtual environments for</u> hosting conferences, highlighting the growing reliance on digital platforms for collaborative endeavours. AR apps are providing interactive tours, where visitors can use their smartphones to access additional information and multimedia content. Security and surveillance systems with advanced facial recognition technology and video analytics, are enhancing safety in public spaces.

Cases:

Tamil Nadu's app-powered and digital tourism

The Tamil Nadu government is investing in <u>digital tourism</u> with digital tours of heritage sites and VR booklets. It is also in the process of launching an app, which will have features such as a guide to exploring tourist attractions on your own, sharing information and visuals of new-found destinations, and finding everything from authentic souvenir shops to clean and safe public restrooms anywhere in the state.

Image credit: XXXXXX

The future of workspaces in India

Social shifts in the last few years has led to a relook at the structure of offices and a focus on more agile work experiences. There is an increased focus on connected spaces that foster collaboration and also allow for rejuvenation. The Godrej Interio 'Social Office' concept offers design solutions that foster ideas exchange, offer quiet places for individual work as well focus on technology integrations that allow freedom for work settings.

EXPERT SPEAK

Sameep Padora

Principal, sP+a

On the evolution of designing public and community-driven spaces and why stakeholder collaborations are key to realising public projects.

Sameep is Dean, Faculty of Architecture at CEPT University, and founder of sP+a (Sameep Padora & Associates).

Caption:

Temple of Steps, Nandyal, Andhra Pradesh

Inspired by a 10th century temple for the same deity at Tirupati in South India, this temple was designed and built for the residents of villages around Nandyal, Andhra Pradesh. In the dry terrain of Nandyal, the main concern was to provide a space that would marry the socio-cultural expectations of a temple with the ecological framework and dynamics of and around the site. The team designed a *kund*, a low-lying pit for recharging the groundwater and also collecting water overflow from limestone quarries, for the surrounding cotton and chilli farms in the region. The banks of this *kund* were imagined as a social space - a traditional *ghat* with a flight of steps leading down to the water-body.

Images credit: Sameep Padora & Associates

What is your opinion on what has changed or evolved in terms of realising public spaces with improved social orientation?

I disagree with the premise that our cities are becoming more socially oriented, if anything it is the opposite. Mumbai's planning if anything has become only more insular - our imagination of the city's development operates between binaries of construction on plots and the installation of big transportation infrastructure. Public/community spaces that prioritize social development, nation-building, leisure, entertainment, and spectacle lie in between the two and we have no planning mechanism to produce that.

There are two possible ways that the production of public space can be impacted. One - ask a simple question 'what does one's building do for the neighborhood/city?' and then develop facilitating regulations to enable that question to be answered by individual plot owners as they look to develop/redevelop their plots. Two - create a mechanism enabling neighbourhoods to identify and propose ways to valorise public space and then have city-wide agencies collate that into a plan.

What does an inclusive approach towards designing community and public spaces look like?

In the case of the Temple of Steps, the brief was to simply build a temple for a group of villages around the JSW plant. During our interactions with the clients as well as the residents of the settlements around Nandyal there were a number of conversations about the need for a temple, its program and materiality but absolutely nothing to do with water.

It was through our experience in and around our site, the depleting water table, change in cropping patterns and our understanding of water runoff from the quarrying process that allowed us to layer water harvesting and recharge as a part of the project's program. This was, of course, not possible without the support we received from Mrs Aushree Jindal, the client on the project

What are your suggestions on collaborating with governments and private players to safeguard spaces like public parks, gardens and even places of worship?

All public projects are about negotiation and in that case the role of the architect/designer is really an editorial one, suturing everyone's aspirations and ambitions into the fabric of a singular project.

Search for Authenticity

We live in a world of 24-hour news cycles, instant internet fame and perpetual gaze of social media. The pace of information dissemination and the quest to be noticed have never been more pronounced. The advent of 'Generative Al' has further <u>distorted perception</u>s and blurred our reality.

This technology-driven, knowledge-production is pushing us to define the <u>boundaries</u> of 'self' in relation to identity and how we present ourselves. What it has led to is a conception of new identities and aesthetics in this search for uniqueness.

Search for Authenticity

WHAT IS POWERING THIS BIG SHIFT?

Push Me, Pull Me

In a new journey of discovery, contrasting concepts and ideas intersect leading to unexpected outcomes

Micro-hyper-(g)local

India's increasing influence on the world has had a cascading effect on the lives of average Indians

Everything, Everywhere, All at Once

Our everyday need for the internet and advanced tech, has transformed our screens to portals to worlds within our world

Push Me, Pull Me

In a new journey of discovery, contrasting concepts and ideas intersect leading to unexpected outcomes.

The <u>Global Outlook on Sustainability by Mintel 2023</u> showcased the say-do gap with consumers in India claiming that living sustainably is their top priority, however only 15% were recycling and 17% commuting in an ecofriendly manner.

As India steps into an era marked by unprecedented economic growth, technological advancements and climate uncertainty, we are still reconciling the concepts of the globalised age with our traditional values and responsibilities towards the natural habitat.

The consumer landscape and what it offers, has become a playground for this kind of experimentation globally, that wasn't possible for many Indians before. While as consumers, we grapple with balancing aesthetics, value and functionality, the outcomes range between the profound and profane.

CASES

The great low-waste Indian wedding

There is a rising, seemingly contrasting trend emerging in India of low-waste weddings that combines the opulence and grand scale of the 'big fat Indian wedding' while playing up sustainability and zero waste as its ethos. Nose To Tail for instance, is a unique green events firm whose work involves not only curating "love with purpose", eco-friendly celebrations that keep the carbon footprint as low as possible, but also collaborating with artisans to create handcrafted and unforgettable experiences.

Image credit: Nose To Tail

A family home that embraces both traditional and modern values

Architect Varun Goyal's 'Courtyard House' in Bhilai, Chhattisgarh brings together diverging conceots of togetherness with privacy, and traditional materiality with a modern composition of space. The project imbues sustainability with rustic detailing and contemporary flourish. Image credit: Atelier Varun Goyal

Micro-hyper-(g)local

India's increasing influence on the world has had a cascading effect on the lives of average Indians.

This newfound familiarity with global pop culture and media has led to the emergence of an urban Indian lifestyle that combines global cosmopolitanism with Indian traditions and values. In this age, addressing 'Indianness' cannot be viewed in isolation; it is a complex blend of influences and a mixed reality of sorts.

In the race to be more exotic and unique than each other, an amalgamation of a global identity along specific niches along ethnic, regional and denominational lines is underway. Bringing lesser heard voices to the mainstream and galvanising new communities and practices around them.

CASES

Terttulia by Otherworlds, Panjim, Goa

Multidisciplinary design studio Otherworlds transformed this 1980s villa in Panjim, into Terttulia, a restaurant and bar that draws inspiration from the ubiquitous Goan balcão (a traditional porch where local Goans love to spend their time). They blended hyperlocal techniques and materials to seamlessly combine old-world charm with contemporary aesthetics.

Images credit: Otherworlds

Everyday India by Bombay Duck Designs

Contemporary artists and designers Sameer Kulavoor and Zeenat Kulavoor curated this book and exhibition that pays tribute to the designs we live and breathe without our knowledge, reminding us how much we take our surroundings for granted. Aptly titled, Everyday India, this book is a rich tapestry of storefronts, signage and packaging that represent the chaos of everyday life in India. Images credit: Bombay Duck Designs

Everything, Everywhere, All at Once

Our everyday need for the internet and advanced digital technologies, has transformed our screens to portals to worlds within our world.

The <u>democratisation</u> of the internet has brought us closer together, offering a window into each other's lives, entwined within the web of synapses on the information highway. With this digital transformation and India's push for digital public infrastructure, the line between physical and digital has been blurred further, presenting opportunities for innovation too.

If this is leveraged well, we can be more empowered and in control of our own narrative.

CASES

Ayaz Basrai

World's first inclusive large-scale e-commerce platform

Building on the success of India's Digital Public Infrastructure projects, ONDC (Open Network for Digital Commerce) exists to provide equal opportunities for all kinds of brands, buyers and sellers. Rivaling the likes of giants like Amazon and Flipkart, through its "non-platform centric model", it hopes to bite into India's booming e-commerce presence by "enabling population-scale inclusion of all types and sizes of sellers". While their focus is on retail and restaurants, facilitating real-time transactions, it will gradually extend to travel, mobility. The goal is to bring on board 30 million sellers and 10 million merchants online.

Image credit: XXXXXXX

Expert Quotes

"In a dynamic world of modern Indian living, we often miss out on the fine balance of aesthetics, value, and functionality. As India's influence echoes globally, a new urban lifestyle emerges - where global cosmopolitanism intertwines seamlessly with our rich traditions. 'Indianness' is no longer a singular concept but a nuanced fusion of diverse influences, a kaleidoscope of identities."

Krsnaa Mehta Founder & Design Director, India Circus

Expert Speak

ROOSHAD SHROFF

Architect + Designer

On blending international design expertise with craft and creating a global identity through innovative curations and collaborations

Rooshad is an architect, curator and product designer, whose projects range from architecture to interiors and bespoke furniture, with a special focus on artisanry and high-end luxury.

(Caption)

Marble inlay plates with contemporary flavours

Through most of his signature products, Rooshad tries to push the boundaries of contemporary design, local craft like marble inlay and collaboration across talents and generations. Doodles was designed with Alejandro Shroff-Jiminez, Rooshad's 7-year-old nephew. Each plate in this playful collection is the young artist's imagination brought to life, featuring white, delicately hand cut Makrana marble inlaid with black Bheslana stone by the artisans of Agra. On the other hand, the Gyaan Project is a limited edition line of marble plates designed by 12 renowned talents in fashion, design and architecture like Atul Dodiya, BV Doshi, Bijoy Jain, Christian Loboutin and Abu Jani Khosla, each handmade by inlay artisans in Agra. The proceeds from the sales of each plate went towards the construction of CITTA Foundation's Rajkumari Ratnavati Girls School in Jaisalmer.

Image credit: Rooshad Shroff

How would you define "authentic design"?

Design that does not really follow trends, but is reflective of one's true intuition; design that consistently follows a certain path or process, so that projects by a particular firm or individual may not necessarily look the same, but carry their signature regardless.

Your work can be described as playing with the dichotomy of traditional/global values and Indian/international tastes. Why is the integration of craft important to your contemporary designs and process?

From its very commencement, my practice has centred around the implementation and revival of artisanry across the design spectrum. India's wealth of ancient handicrafts is legendary; the different time-honoured techniques add a layer of sophistication to any product, and we work principally to push the boundaries of each craft, contemporising it and rendering it relevant in today's design language.

The world's eyes seem to be on India now with respect to all aspects, whether it's hosting

G20, advancements in science and tech and renewable energy resources, or even being the next big global powerhouse for arts, design and culture. How would you define this evolving identity of India, especially in the global map of design and craft?

The last decade particularly has seen far more appreciation of Indian artists and brands, which is definitely a step in the right direction. This in turn gives rise to further opportunities of collaboration, particularly on the international front. There is also a perceptible evolution within the Indian market and consumer; clients are more open to taking creative risks.

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