

Universal Public Designs

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In a heterogeneous society, the goal of every state is to provide equal access to its citizens. When it comes to physical-public domain design, infrastructure for persons with disabilities assumes another dimension of architecture. It has certain implications from the special-need quotient of demography, and disability as an asocial construct. The international community is building competencies for delivering quality governance on universal designs. India too has initiated Sugamya Bharat Abhiyan as a credible step towards sustainable goals in universal designs.

iversity is everywhere, be it in culture, language, climate, topography, gender and abilities of people; inclusion stands for giving freedom for access for all and building commonalities. When it comes to residential space, the requirements of people vary as per their taste, economic means, and functional requirements. But, most of the times housing solutions are standardised for common users and not for special needs. There is a standard approach for building residential space which traditionally does not focus people with special needs. But when it comes to physical public domain design it assumes another dimension of architecture. It has certain implications for the vision of a country on development, accountability in the use of state's budgeted funds, and the special need quotient of demography. When administrators consider people with all kind of abilities and their accessibility issues while building public utilities and spaces, it can be coined as universal design. Universal or inclusive design provides for a holistic approach in designing public spaces and utilities.

The UN Convention on the Rights of Persons with Disabilities (UNCRPD) inspires and focuses on universal design. It highlights the sovereign government's responsibility to make improvements since accessibility is a right. Member States are responsible for systematically removing obstacles and creating inclusive solutions for everyone, irrespective of their functional capacity, characteristics and preferences (Maria, 2018). When we look at those countries with high living standards and quality of life, universal design certainly forms a modality

for indexing in terms of life quality. Nordic countries for instance and universal design is a good example of vision for inclusive growth. There are three vital aspects of inclusive designs in any situation. One is the social responsibility or commitment of the entity that evolves strategies for inclusion. Secondly, the reward to such organisations which initiate such changes, and finally, the sustainability of such initiatives.

Challenges

A major challenge in implementing such changes is on emphasising the value of such indicatives at the policy level and at the execution level. Inclusive design is about



- Accessible well-lit corridor
- · Tactile flooring for visually impaired
- · Double height handrail for support
- Wide corridor, obstruction free path for wheelchair movement

An accessible corridor developed in Maulana Azad Medical College, Delhi for Persons with Visual Impairment.

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Discovering the real Exclusion in architecture **Definition** of alternatives and experience of special users

Developing
an architecture
solution with
expectations from
end users

Delivering the architecture solution with sustainable administration

Basis of Universal Designs

placing people at the heart of the designing process, it is about creating buildings and spaces, streets, public parks, gardens, etc., that are really comfortable and easy for all of us to use. Another challenge in providing for inclusive architecture is that the people who are working at various capacities in construction are, no doubt, experts in their fields but they lack knowledge about the whole structure, and issues of accessibility fail to bring those minute changes at their ends for universal designs. Sugamya Bharat has been formulated by considering all possible lacunae. The country with such diverse structure demands a systemic approach to tackle the existing challenges.

Approaches and Principles

In 1997, a team of architects and designers from North California State University created a set of principles for a universal design. To understand the suitability of piece of architecture as universally designed, these principles can be used as a test for suitability.

- 1. A piece of architecture should provide an *equitable* use for every person irrespective of their differential ability.
- 2. A piece of architecture should possess a quality of flexibility in use.
- 3. A piece of architecture must have the quality— *Simple* and intuitive use.
- 4. A piece of architecture should have perceptible information and its layout.
- 5. A piece of architecture should possess the quality of *tolerating for errors*. If people commit mistakes due to their disability.
- 6. A piece of architecture should possess the quality of usage or access should demand *low physical effort*.
- 7. A piece of architecture should possess adequate size and space for use.

Implications

While looking at a strategic approach for engaging a universal design for system problems, a time-phased systematic approach is suggested. In all the domains of public work, an integrated approach by incorporating the end users' feedback can deliver quality of governance to people with differential abilities. Most importantly, reward for such initiatives of universal designs should be given to build public consciousness.

Sugamya Bharat Abhiyan

On 3 December 2015 i.e., World Disability Day, the Govt. of India launched Accessible India Campaign as a country-wide campaign for achieving universal accessibility for Persons with Disabilities. It has three important components including the build environment, transportation sector, and the ICT ecosystem.

Built Environment Accessibility

An accessible physical environment benefits everyone, not just persons with disabilities. Measures are taken to eliminate obstacles and barriers to indoor and outdoor facilities including schools, medical facilities, and workplaces. Further, these would include all public spaces such as roads, footpaths, parks and gardens, etc.



Disabled-friendly parking in Pune, Maharashtra

An accessible government building is one, where persons with disabilities have no barrier to entering it and use all the facilities therein. It covers the built environment – services, steps and ramps, corridors, entry gates, emergency exits, and parking, as well as indoor and outdoor facilities including lighting, signages, alarm systems, and toilets. The technical specificities are covered in ISO 2542:2011, Building Construction – Accessibility

and Usability of the Built Environment, delineates a set of requirements and recommendations concerning construction, assembly, components, and fittings.

The programme directs that identifying accessible buildings requires annual accessibility audits that determine if a building meets agreed standards. The Department of Empowerment of Persons with Disabilities is working out a comprehensive code which will be a hitherto attempt in Indian context as the first step towards universal design, Sugamya Bharat Abhiyan has indeed made an affable attempt.

Conclusion

Manmade physical environment is posing enormous pressure in the lives of persons with disabilities. Disability

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is largely viewed as a social construct, as such, the right to live independently is not a gesture of mercy rather, it is a natural claim of decent living. The present architecture designs ignore the presence of differential abilities of people. They struggle in inadequate lighting, uneven pavements, stumble at objects on their movements, pigeonhole doors and innumerable steps (for aesthetic appeal) cause point of accidents. To evolve a strategic action

plan for architecture as universal design for our schools, colleges, street, parks, museums, railway station, airports public offices, etc. It must be conceived with a broader thought process. An egalitarian approach should be inducted to the mindset of designers and architects. Disability should be viewed as a persisting possible phenomenon for any demography. In exclusive architectural models, children or aged population could also be exposed to risky obstacles as it would do to disabled. Universal design will also indirectly help the state in soliciting the global community to enjoy the iconic tourist spots in India.

Reference

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