

ENABLING AND CREATING SUPPORTIVE DESIGN MODEL FOR ELDERLY AND ORPHANS – A SUSTAINABLE APPROACH

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Abstract: Shakespeare through his famous play “As You Like It” divides a man’s life into seven stages - First being infancy and last being old age. Old Age Home and Orphanage are the two different public spaces serving the same purpose of guiding and developing the lives of two extreme age groups with same psychological needs. Both the buildings have traditionally played a significant role in shaping the life of both elderly and orphans in their own independent ways. This paper elaborates the need of developing a Home for the elders along with a child care institute – a solution for the elderly and orphans so that they can fight their crisis in midst of a comfortable and conducive environment depending on each other. When both clubbed in a single building - the Architecture of the space needs to develop the interconnectedness between the elderly and the orphans. The environment will help the elders to use their time taking care of the orphans where the orphans will no longer feel abundant. Simply pushing the elders in an old age home or just providing with a shelter to orphans is not the best way to solve the problem considering the psychological aspects attached with these age groups. The best way is to give them back what they have lost by providing a homely environment where both the groups will support each other and may discover the undiscovered dynamics of the new built space, environment and relationship. The paper will also conclude about various design methods and strategies need to be adopted to enable the creation of supportive design model for both Elderly and Orphans.

Keywords: Design Models, Elderly, Orphans and Sustainability.

Introduction: Developing nations which often have a rich cultural heritage are rapidly changing their character to meet with the fast moving life. The technological advancement has led to increment in age expectancy. The change in lifestyle and the compulsion of modern working conditions led to a breakdown of the traditional family systems in urban areas making them more nuclear in nature with every passing phase. On the other hand thousands of homeless children in the urban areas are growing up under dreadful conditions. Preserving them is a big challenge. These children are most vulnerable to crime, slavery and sexual exploitations.

Family support is a significant component in the lives for every human being. It becomes the responsibility of architects and designers to create a model which fits the needs of Elderly as well as Orphans. Neither aging can stop nor orphans be eradicated from the society. But through appropriate architecture the environment could be shaped in order to make a ‘HOME’ for elderly and orphans, both. This would help them to mutually resolve their needs and associated problems since the physical environment plays key role for healthy living and make a living and to mark their Identity.



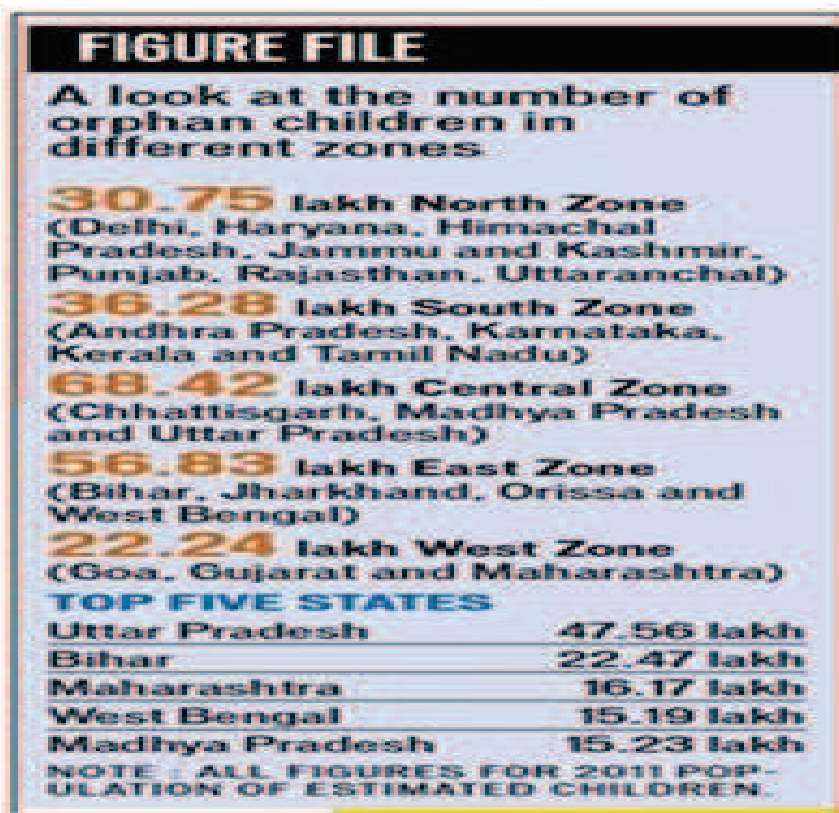
About Orphanages: As per National Family Health Survey-3 for the year 2005-06 and the population

estimation by the Census of India about 20 million children, about 4% of their



population in India are orphans. According to the study done by UNICEF 2009, different zones shows variations in number of orphan children, but the states are having only few numbers of registered orphanages; these are run on grants and amounts

given directly by the Government of India, Education Department. Numbers of orphans will increase dramatically by 2010/2015, at an estimated growth of 15 to 20 million per year.



About Old Age Homes: A report jointly brought out by United Nations Population Fund (UNFPA) and Help Age International says India’s population is likely to increase by 60% between 2000 and 2050 but the number of elders, who have attained 60 years of age, will shoot up and the government should start framing policies now else its consequences are likely

to take it by surprise. India has around 100 million elderly at present and the number is expected to increase to 323 million constituting 20 per cent of the total population, by 2050. Population of Elderly people in India As per the Census 2001, account for 7.4% of total population in 2001.

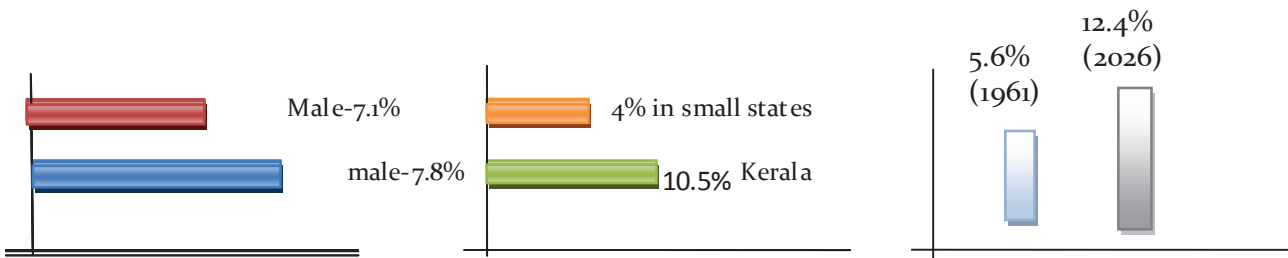


Fig. 1

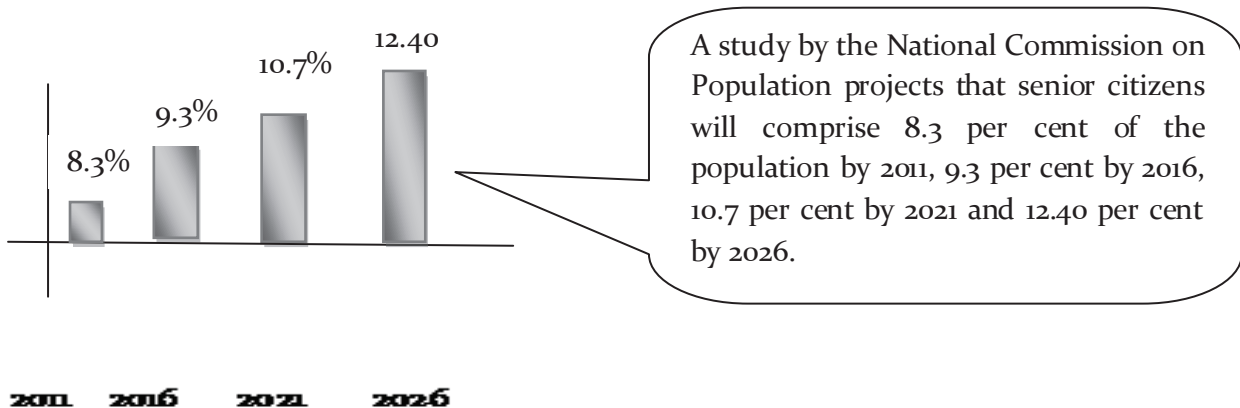
Fig. 2

Fig. 3

Fig-1 showing the increase in percentage of male and female.

Fig-2 showing the increase in elderly in small states and Kerala.

Fig. 3 shows the projected rise from 5.6% in 1961 to 12.4% of population by the year 2026.



A study by the National Commission on Population projects that senior citizens will comprise 8.3 per cent of the population by 2011, 9.3 per cent by 2016, 10.7 per cent by 2021 and 12.40 per cent by 2026.

Why Old Age Homes cum Orphanages: Old people and children are the two sides of the same coin. Both exhibit certain amount of innocence and dependency in them. Both the groups need numerous aids to be taken care of - 1. Health care 2. Proper living environment 3. Good communication 4. Domesticity 5. Proper mental, physical and psychological development 6. Love and attachment with the space of living 7. Social and Emotional need.

The various reasons which led to the development of elderly homes and orphanages:

Reasons for old age homes are:

1. Communication gap.
2. Isolation
3. Financial Issues
4. Fear and abuse
5. Behavioral Issues and violence
6. Lowered self esteem

Reasons for Orphanages are -

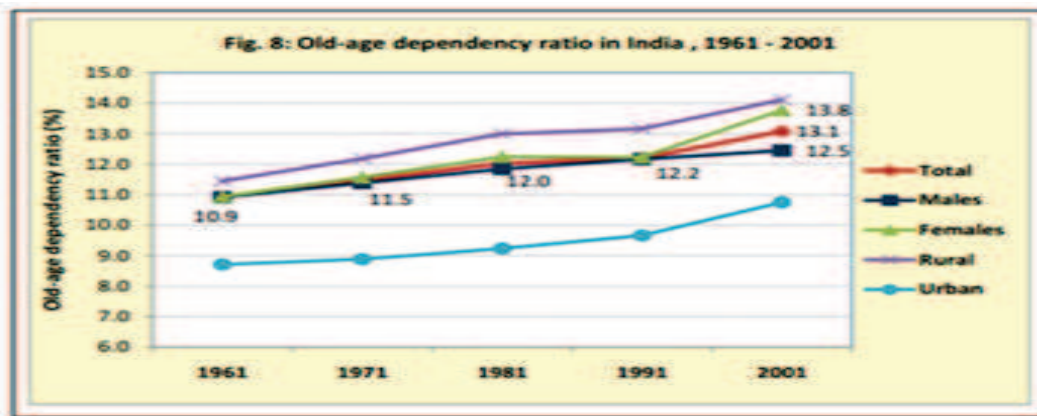
1. Due to the death of Parents
2. Poverty
3. Social unrest and terror
4. Living with single parent
5. Social Stigmas
6. Abandoned

Dependency Ratio - Research shows - the dependency part usually includes those under the age of 15 and over the age of 64. The productive part makes up the population in between, ages 15 - 64. for example: Total Population: 1000 Persons, In age group above 60: 300 Persons, In age group 15-59: 400 Children (0-14 years): 300 In this example, Child Dependency Ration as well as Old Age Dependency ration is → 75%.

Situations in an isolated Elderly Homes:

- Feeling of Loss of independence that can create tremendous frustration,
- Feelings of uselessness, sadness, due to a sense of loss of control.
- Feelings of shame, embarrassment, fear, confusion, and anger
- Uncomfortable with assistance
- Unable to adjust to the new surrounding and environment
- Feeling of Loneliness and missing family members, grand children.
- Unable to pursue new experiences, new friendships, interests, hobbies.
- Uncertainty and vulnerability, wondering how they will manage on their own.

- Expectations that close friends and family to be always available for them.
- Frequent visit by outsiders, tourist, NGO, school children, press.



Situations of isolated Orphanages -

- No support system
- The stigma of being an orphan.
- Uncertainty as these children in many areas are asked to walk out of the orphanage.
- Frequent visit by outsiders, tourist, NGO, school children, press.
- Uncomfortable with assistance
- Feeling of Loneliness.

Their Basic Needs for both the groups are - Shelter, Recreation, Safety, Security, Sports, Good food, Medical facilities, Counseling, Guidance, Future plan, Healthcare, Access to technology, Clothing etc. So, rather than creating, supporting and funding

solutions differently that keep vulnerable children in Orphanages and lonely elderly in Old age homes, we need solutions that gives a space an identity that ensures belongingness by meeting the diverse personal needs of both ends. The principle behind this design should maximize opportunities for friendship, interdependency, recreation and physical activity by creating interesting functional spaces and built forms.

Design Model - Proposals and Recommendations:

The problems identified and the overall thrust areas can be further detailed to integrate provisions as in given below:

RECOMMENDATIONS	SUGGESTED MODES OF APPLICATION
Suitable built space	Suitable built forms which are simple and not confusing. Suitable use of views and sightlines to create recognizable zones. Well connected two different built spaces. Creating better sensory environment with tactile, visual and auditory stimulation Cost effective and easily installed built environment
Adaptability & Interaction	Willingness to adjust with surroundings and new people. Emphasis on interaction between both the age groups. Adapting each other as one Family.
Improved communication	Exchange of ideas between the two groups. Feeling of being in family.
Creative use of Space	Designing of common open and closed spaces. Living spaces of both the groups designed closely More interactive zones.
Suitable Health care	Health care safety Internet enabled interactive health care monitoring. Suitable design fixtures.
Appropriate growth	Proper development of both the groups along with architecture.

	Creative and income generating project.
Barrier Free Environment	Easy on the hand Friendly floor Lighted Pathways Symbols and Signage Safe Stairs Safe Bath Sensory Clues Wide Doorways Safe Bath, Comfortable rooms, Entryways

Conceptualized Spaces: Some common integrated spaces that can bring the both together -

1. Common rooms
2. Centralized Dining
3. Common outdoor spaces
4. Closely placed rooms
5. Maximized day lighting
6. Maintained landscape
7. Adequate signage
8. Resting areas

Another very important technique which can be used in these homes is **Crime Prevention through Design**. There are specific techniques that can be used on individual buildings and their surroundings to increase natural surveillance like addition of windows facing up to public spaces, corridors and alleyways, positioning windows so that neighbors

can watch each other's houses, bringing parking areas in front of stores rather and marking sure hallways and lobbies are clearly visible.

Conclusions: A well conceived old age cum orphanage home can give elderly and the orphans the confidence and support for a sustainable livelihood. The designing of built form and surrounding spaces should focus on the age groups of the users. To achieve this objective the psychological aspect attached has been taken care of to achieve an optimum functional solution. The buildings should be designed in such a way that it will act as a filter between internal spaces and outdoors. The basic needs are catered by the fact that the old age people get the children to take care of and the orphans gets their love and security in the elders.

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