

HOUSING AND THE QUALITY OF LIFE: INTRA-CITY DISPARITIES AND VARIATION IN URBAN DELHI*

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DEFINITION AND THE MODEL

Quality of life is a concept, a new phrase being popularised very recently. In pursuit of it in the different countries of the world, "Quality of Life" is added as a new objective to the national goals of the countries from the beginning of the year 1970. Social goals in the national development plans need to improve the quality of life and social welfare of the people (U.N.O., 1977). Definition of quality of life varies from country to country and within the country as well. Here an attempt is made to define quality of life in our context basing upon the socio-economic and cultural backgrounds of the people. For that reason, two important facets of life in urban housing are taken into consideration. The definition and the Model is based on the "existing condition" and "perception" of the people. The quality of life in urban housing is visualized as the function of three major components: (a) Individual and Family, (b) Unit of Neighbourhood, and (c) Productivity. In other words, quality of life in urban housing, that each human-being attempts to optimize from his own perception and the existing conditions can be defined as an out-put function of three inputs as causes, a portion of which he shares with other people in the community (society), a portion of which he derives from the environment (man-made and natural) at a given unit of time as a productive inhabitant of the urban residential neighbourhood in particular, and urban housing in general under consideration. The theoretical model for urban housing quality of life can be expressed mathematically as follows (Islam, 1980).

$QOL_{it} = F(F_{it}, N_{it}, P_{it})$ Where,

QOL_{it} = Quality of Life in Urban Housing in Unit Time

F_{it} = Individual and Family Component

N_{it} = Component of Unit of Neighbourhood

P_{it} = Component of Productivity

Within each of the components two distinct goal areas are delineated. For each of the goal areas an attribute of quality of life is selected. In all, six attributes are selected comprising twenty-eight indicators. The attributes are:

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I. Nature, II. Socio-psychological, III. Cultural and Spiritual, IV. Amenities, V. Material, and VI. Accessibility. The selected attributes according to the Model, have got their own significances and functions in the process of assessing the index of quality of life (Table-1).

TABLE —1

COMPONENTS, ATTRIBUTES AND INDICATORS OF QUALITY OF LIFE	
A. COMPONENT OF INDIVIDUAL AND FAMILY	
I. Nature	
1. Access to Nature	
2. Open Spaces	
II. Socio-Psychological	
3. Social Awareness	
4. Privacy	
5. Sense of Belongingness	
6. Value of Leisure	
7. Sense of Security	
8. Social Participation and Interaction	
9. Scope to Fulfil Spiritual Needs	
10. Scope for Participation in Visual Art and Architecture	
11. Family Cooperation and Stability	
12. Community Relation and Cohesion	
B. COMPONENT OF UNIT OF NEIGHBOURHOOD	
III. Cultural and Spiritual	
13. Community Centre	
14. Club Facilities	
15. Religious Places	
IV. Amenities	
16. Supply of Water	
17. Electricity Supply	
18. Sewerage System	
19. Supply of Coal, Gas, etc.	
20. Shopping Centre	
21. Educational Facilities	
22. Health and Medical Facilities	
C. COMPONENT OF PRODUCTION ENVIRONMENT	
V. Material	
23. Physical Planning and Environment	
24. Living Conditions	
25. Facilities within the Residence	
VI. Accessibility	
26. Accessibility to Work-place	
27. Distance-Mobility	
28. Time-Mobility	

ATTRIBUTES OF QUALITY OF LIFE

Love for nature and natural beauty is the inborn quality of human-beings. The nature in which one is born and brought up cannot be thought in isolation. The first attribute of quality of life has got its own quality in shaping the life of a man.

The second attribute which is most important attribute covering a number of indicators drawn from the fields of social and perceptual psychology of community living.

The third attribute, covers cultural and spiritual aspects of human life. The significance of the attribute is better understood when one is in alienation or in distress. The affluent society of Western countries has also started thinking afresh about the significances of cultural and spritual life of man (Goustad, 1976).

The fourth attribute, Amenities has a wide perspective and leaves no doubt about its significance in urban living. The functional realm of the attribute which concerns mostly in the residential neighbourhood are quite associated with the index of quality of life.

The next attribute, 'Material' concerns house and housing. The significance of the attribute dates back the dawn of civilization. To-day mere shelter is not enough, it has incorporated with other faculties of man which is an enlargement of one's own personality.

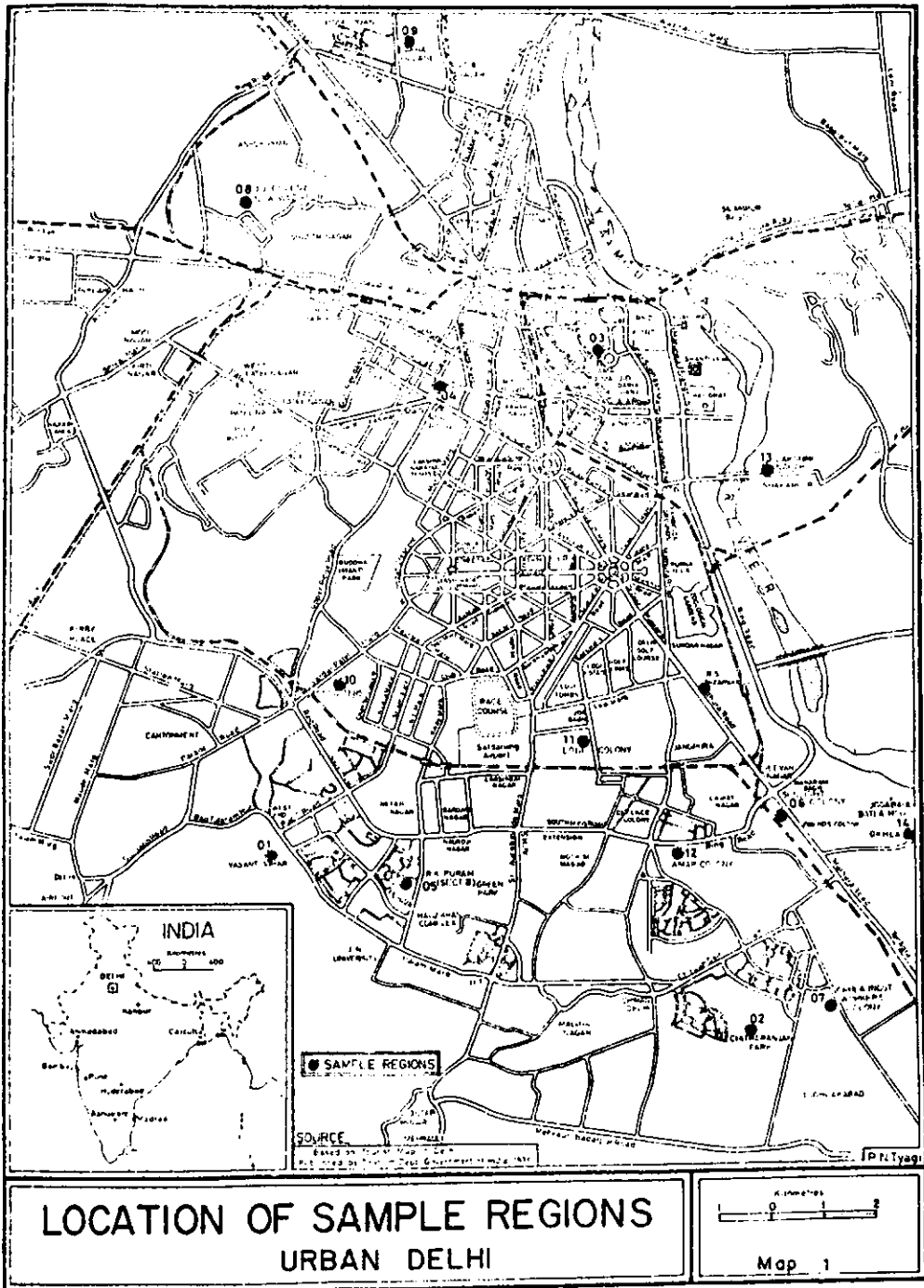
The last attribute of quality of life which has been considered in the Model is Accessibility. Accessibility concerns minimization of efforts in reaching and back to different activity centres such as work places, commercial areas, industrial areas, and other service and facility centres in the city. The significance and functions of the attribute lie in achieving greater accessibility and mobility with least efforts which ultimately add for enhancing better and healthy living.

The basic principle of the Model is that it operates at three levels, such as house-hold, within the neighbourhood, and outside the neighbourhood (City-level).

The quantum of fragmental index of quality of life comes out as an out-put through the two scanning processes vide, existing condition and perception of the people. Composite index of quality of life is the end product accumulated quantum by quantum in this process through inputs derived from the attributes.

DATA BASE AND METHODOLOGY

"It has quite often been inadequately realized that quantitative methods are not a substitute for thinking" (Raza, 1981). As the present study being at micro-level, the analysis is mainly dependent upon the primary sources of information. 968 households are surveyed in the study area with a pre-coded questionnaire prepared on the basis of the Model. For the household survey, fourteen sample regions are selected from the Union Territory of urban Delhi depending upon the socio-economic characteristics. For selection of individual household random sampling method was adopted. About 15% of the households from the selected sample regions are chosen for survey. In general, stratified random sample method is used. Because of intrinsic qualitative nature of the study, the



questionnaire contains both qualitative as well as quantitative type of variables. For measuring all types of variables a general flexible nine-point scaling method is developed. This scale is developed on the basis of different interval scales currently in practice. According to this scale, measurement of variables of any type is done with the digits 1 to 8. All of them are placed in equal intervals. The variable containing dichotomous answers, for most favourable answer value '8' is given and for the least, value '1' is given. For multiple-choice answers, for the most favourable one, for example with five alternate answers, value '5' is given for the most favourable one, for the next value '4' and for the least value '1' is given. The digits '0' and '9' are meant for the not responded cases and not applicable cases for particular questions respectively. The quantitative type of variables are kept as it is, except where necessary. Some are grouped into eight classes and values are given according to the hierarchy, that is for the highest, value '8' and for the lowest, value '1' are given. For compositing of variables into indicators and attribute, modified additive model is used. For computation of index of quality of life and also for attributes, the mean value of the study area (considering all 968 observations) for individual indicator is subtracted from the index of the same indicator (after compositing into indicator, mean for sample region under consideration). For index of the attribute, simple algebraic addition of the indices is done with the requisite number of indicators. Thus the difference is considered as departure from the average condition (either above or below mean). For final index, percentages of the departures from the average conditions are computed. They are ranked according to hierarchy.

For assessing the variations, co-efficient of variation as well as Gini-co-efficients are computed for the attributes of quality of life.

Composite index of quality of life as well as indices for the attributes are computed on the basis of the methodology developed and adopted. Out of fourteen sample regions (Table-2) seven have come above the normal condition and seven below.

FINDINGS AND IMPLICATIONS

The composite index of quality of life in the study area is directly associated with the average monthly income of the households. Disparities are conspicuous in cases of upper and lower income group sample regions. This observation imply that the areas which are predominantly inhabited by the lower income group needs special attention by the policy makers so that overall improvement in the quality of life is possible.

Considering the impact of literacy on the quality of life in the study area, it has been observed that, higher the percentage of well qualified respondents in a particular sample region, higher is the index of quality of life. Similar observations are made regarding the executives and assistants including technical persons in the study area. This may suggest that for better quality of life, proper educational qualifications and better occupational status are the pre-requisites. The policy maker may find it worth-thinking for providing facilities for mass education giving emphasis on vocational training so that there is enough job opportunities. For this purpose, vocational training institutes and centres will

need to be established after proper evaluation. Special attention should have to be given to the areas of lower income group so that it is at their easy accesses.

This is the general observation that higher the rate of fertility lower is the index of quality of life in the study areas. Which may imply that for enhancement of better quality of life an effective family planning policy would go a longer run. But this does not suggest mere opening of family welfare centres but expert team of inter-disciplinary motivators can help a lot. The objective of family planning should be socio-psychological rather than technical and economic alone.

In the present study of quality of life in the Metropolitan city of Delhi which got cosmopolitan character, no remarkable disparities have been observed because of religious and linguistic groups with regard to the distribution of index of quality of life. But it has been observed that scheduled castes are predominantly respondents of lower income group sample regions scoring low index of quality of life. Which may suggest that scheduled castes and scheduled tribes sought for special attention by the policy makers with regard to allocation of resources in different forms for enhancing their quality of life. As the scheduled castes are integral part of the society, their problems cannot be looked in isolation. Their problems to be dealt as the problems of the total society, otherwise there is every possibility of emergence of other new problems. Nevertheless, the policy makers need to keep in mind that they are the deprived class of the society.

In general, it has been observed that majority of well planned posh residential sample regions have secured higher indices of quality of life. Further, it has been observed that the physical quality of housing for these neighbourhoods are equally good. Only in case of traditional housing area of Shajahanabad, the observation is reverse. Though index of quality of life is high in this area, the problems need to be tackle with special emphasis on the overall socio-economic condition, analysing the perceptual psychology of the people. The policy maker need to put special attention on the sentiments of residents of that areas besides the existing condition.

It has been observed that in most of the cases, the sample regions of higher indices of quality of life, higher the percentage of respondents travel greater distances (15 k.m. and above) than the sample regions securing lower indices. It is further observed that the respondents of regions of higher indices use mostly bus or fast moving private transport, on the other hand respondents of sample regions with low indices use bus, truck or slow-moving transport.

From these observations two inferences can be derived. Firstly as it has already been observed that sample regions of upper income group in general, secured higher index of quality of life prefer to live away from their places of employments and reverse is the case of lower income group sample regions. Secondly, as bus is used commonly both by the upper as well as lower income groups, leaving aside the impact of public transports, it can be inferred that the respondents of upper income group use fast moving private transport and the respondents of lower income group use mostly slow moving personal transport or even prefer to walk. Which ultimately compell them (lower income group) to seek jobs

TABLE-2

DISTRIBUTION OF QOL INDICES FOR ATTRIBUTES ACCORDING TO SAMPLE REGION WISE

Sample Region & Code No.	No. of H/H sur- veyed	1. Nature Index	2. Socio- psychological Index	3. Cultural & Spiritual Index	4. Amenities Index	5. Material Index	6. Accessibility Index
1	2	3	4	5	6	7	8
01. Vasant Vihar	60	0.245 (1)	0.941 (3)	0.592 (4)	3.347 (1)	2.196 (1)	0.062 (6)
02. Chitraranjan Park	93	0.235 (2)	0.958 (2)	-0.136 (8)	2.430 (3)	0.964 (2)	-0.793(12)
03. Jama Masjid Area	62	0.149 (4)	1.441 (1)	1.646 (1)	-2.056(11)	-0.702(10)	1.510 (1)
04. Karol Bagh	85	-0.132(11)	0.084 (7)	0.165 (6)	-0.139 (6)	0.653 (3)	0.842 (2)
05. R.K. Param (III)	90	-0.101(10)	-0.467 (9)	0.978 (3)	1.350 (5)	0.155 (6)	-0.104 (9)
06. Sunlight Colony	78	-0.033 (9)	-1.823(14)	1.134 (2)	-2.56 (13)	-0.813(12)	0.691 (3)
07. Okhla Ind. Colony	99	-0.262(13)	-0.579(10)	-1.391(13)	-2.152(12)	-0.907(13)	-1.008(13)
08. J.J. Colony	55	-0.171(12)	-0.884(11)	0.340 (5)	2.199 (4)	-0.713(11)	-0.001 (8)
09. Dhaka Village	50	0.052 (6)	-0.358 (8)	-0.944(12)	-0.937(10)	0.138 (7)	-0.590(11)
10. Squatters	52	-0.841(14)	-1.050(13)	-2.554(14)	-6.361(14)	-2.868(14)	0.630 (4)
11. Lodhi Colony	65	0.041 (7)	0.515 (6)	-0.619(11)	3.064 (2)	0.477 (4)	0.427 (5)
12. Amar Colony	52	0.076 (5)	0.515 (4)	-0.293(10)	-0.452 (9)	-0.346 (9)	-0.457(10)
13. Lakshmi Nagar	75	0.233 (3)	-1.011(12)	0.163 (7)	-0.431 (7)	0.063 (8)	0.005 (7)
14. Jogabai & Balla House	52	0.011 (8)	0.324 (5)	-0.268 (9)	0.438 (8)	0.397 (5)	-1.251(14)

Index values are kept upto three places of decimal.

Digits within the parentheses indicate Rank.

near their places of residences and vice-versa. The transportation planners as well as the decision makers need to find out some solutions so that public transportation system in the Metropolitan city can be improved effectively to eliminate the necessity of owning private transports.

For most of the attributes of quality of life, the indices are concentrated in the sample regions which are purely residential rather than the mixed areas. And also the sample regions which are located on the northern part of Delhi, have got lesser concentration of indices of quality of life attributes. These may suggest for better quality of life in urban housing, residential environment is to be designed; this of course does not mean rejection of small commercial centres like neighbourhood shopping centres etc. Further, the New Delhi and most of the newly developed residential areas fall in South Delhi which account for most of the upper income group and upper middle income group respondents with planned posh environmental areas, consequently higher concentrations of indices are also observed. This may indicate that the development authorities should divert their attention for improving the quality of life of North Delhi as well so that minimum disparities are observed.

Out of Fourteen sample regions, only one has secured all attributes of quality of life having indices above mean. In other words, departures of quality of life attributes from the mean are all positive only in one sample region which is a posh residential neighbourhood of upper income group. On the other hand, departures of quality of life attributes from the mean are all negative (below normal) in a sample region which is a planned multi-storied residential colony for the industrial workers at Okhla. Of course, all the facilities and amenities need to be provided for residential neighbourhood are yet to be completed. The condition of squatters is a bit better than this sample region only in case of the attribute Accessibility and the rests are much worser. This may provide sufficient indications for the development authorities that mere planning is not enough but also proper implementation of necessary facilities in time is a must for enhancing quality of life.

Little impact is observed due to ethnicity and linguistic backgrounds of the respondents with regard to their perceptions but other factors such as, income, educational qualifications, employment status, physical quality of housing with available amenities and facilities are mostly responsible for varied perceptions of the people in the study area. Which suggests that for better perceptions of the people regarding quality of life, overall improvements of socio-economic, cultural and spiritual aspects of the respondents are of utmost importances.

The co-efficient of variation of the index of quality of life is found to be 23.26%, but Gini-co-efficient is computed as 0.0918. Thus the overall variation of the index of quality of life is not less. Such variations of the index suggest the unequal distribution of facilities and amenities which are essential for the overall improvement of quality of life. Highest variation is observed for the quality of life attribute, Nature. This suggests that facilities like open space and also scope for better access to nature is not adequate. Whatever is available due to lack of proper maintenance people are reluctant to use those. Similar high variation of index of quality of life attribute, 'Material' is observed. The attribute mostly concerns the physical quality of housing and facilities available within the residences. This also sought for the attention of the policy planners and decision makers so that at least adequate shelter is available for all with minimum basic facilities of living.

CONCLUSION:

It is fact that all of are concerned about the quality of life. We want to improve the quality of life. We want to preserve better quality of life. All are concerned, while the city planners worry about urban structure and the form of the city, however, the people care mostly about its functions. People want shelter which suits their needs at a price they can afford. They want good and easily accessible jobs. They want schools for children, nearby shopping, security, privacy, community, recreation and pleasant neighbours and surroundings. They do not much care whether all this is in new towns or old cities or in sprawling sub-urbia, whether they live in linear cities or nucleated cities, in cities which planners consider too crowded or cities which planners consider too spread out. They want social justice so that they can live in peace and tranquility with the average level of quality of life. The policy planners and decision makers including the professionals should value the sentiments which will go a longer run improving the quality of life of the people.

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