

## Peoples' Perception and Satisfaction about the Provision of Utilities and Community Facilities under the Katchi Abadi Improvement Programme

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**Abstract:** The main objective of the study was to assess impact of Katchi Abadi Improvement Programme that was implemented from 1985 to 1990 on the user's opinion about the change in the social environment as one of parameters, which was used for measuring the impacts of KIP on the social environment. The survey therefore, included recording the inhabitants' perceptions about improvement in the physical and social environment of the study area. Moreover, the inhabitants' level of satisfaction with utility services and community facilities provided under KIP in various *katchi abadis* was also assessed in Punjab province. Seven hundred households from the *katchi abadis* of three districts (Rawalpindi, Faisalabad and Multan) which are representatives of three geographical zones (Northern, central and Southern) of the Punjab were selected by using the systematic random sampling technique. The analysis of the data reveals that the overall perception of improvement made in the social and physical environment was 69.1%. Moreover, the overall percentage of the respondents who were satisfied with the water supply, sewerage, drainage of the area, street pavement, electricity, gas and telephone was 65.9%. It can be concluded that KIP was relatively successful to achieve its objectives.

**Key words:** Perception, satisfaction, utilities, community facilities, public facilities, environment

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### Introduction

The concept of community satisfaction can be thought of as a fairly broad concept including a variety of sub-concepts such as satisfaction with physical situation of community, satisfaction with social environment of community, satisfaction with economic aspects of community and other related factors (Schule *et al.*, 1963).

Along with satisfaction level, the perception of improvement and attitudes study is also important both from theoretical and practical point of view. At theoretical level it relates perception variable to various explanatory variables and thus offers meaningful perspective of the interaction between the mental and neural state of readiness and social and environmental aspects. At practical level, the study of perception and attitudes provides an input into the planning process and serves as a vehicle for public participation in decision-making. It needs to recognize that the starting point for considering the perception and attitude in relation to needs and problems of planning agency. This may be adopted as a method of improving the

assessment of public preferences and as a means whereby lay-public may become directly involved in planning and future development of their areas. In the absence of the consideration of people's preferences, difference of opinion may irrupt, which may take the political turn such as disruption and dislocation of the community in case of a particular strategy of the Katchi Abadi Improvement Programme (KIP).

Marans and Rodgers (1975) presented a conceptual model of community satisfaction where objective attitudes about the environment are linked to the objective experience of individual in that environment. They further explained that satisfaction with a particular environment, therefore, depends on an assessment of two fundamental attributes of the environment, 1) the manner in which the attributes are perceived and 2) the standard or reference against which the attribute is judged. To test for systematic biases in the perceived environmental attribute, Marans and Rodgers introduced a set of variables referred to as "personal characteristics". The result of their analysis revealed that the personal characteristics have an extremely important effect on community satisfaction. At the same time, the assessment or perceived environmental attributes (public schools, streets, parks, dispensary, community hall, post office, crime rate and children delinquency, use of alcohols, gambling, theft and addiction) strongly influence the respondents' sense of community satisfaction.

Rojek *et al.* (1975) discussed community satisfaction based on provision of services in their brief article "Community Satisfaction", a study of contentment with local services (sewerage, water supply, electricity, gas, drainage, solid waste management, garbage disposal and telephone. They used a scale of 15 items to represent the level of community satisfaction.

Butt (1981) stated that like other governments, Government of Pakistan has also a determined goal for housing; the decent shelter for every one-improve the katchi abadis. He viewed that:

1. Peoples' level of satisfaction varies with different housing subsystems with respect to location, water supply, sewerage and garbage disposal system, road and walkways, neighborliness, security, rent, job accessibility and house conditions.
2. There exists a strong relationship between the level of satisfaction with location, water supply, sewage and garbage disposal system, road and walkways neighborliness, security, rent, job accessibility and house conditions and the different housing sub-systems.

This paper is about the impact assessment on the perception and satisfaction level of the dwellers living in the *katchi abadis* since 1985 or before it. The Katchi Abadi Improvement Programme was implemented with full speed from 1985 to 1990. The implementing agencies did the improvement works like provision of utilities and community facilities with concerted efforts. The change in perception of the residents will reflect that whether the KIP was successful or not? Similarly the level of satisfaction of the community members gives us a good yardstick to measure the degree of success of the KIP.

### **Materials and Methods**

The data were collected both from primary and secondary sources. The baseline data collected by the KIP implementing agencies in 1985 before the intervention of KIP (level of provision of utilities and community facilities) were used as 'comparison' group. Moreover, the cross-sectional design was adopted to collect the primary data through a follow up survey from the field by using well-structured questionnaire. The data collected from secondary and primary sources were used to compare the 'before and after' situation for impact assessment purposes.

Three districts of the Punjab province i.e. Rawalpindi, Faisalabad and Multan as true representatives of three (Northern, Central and Southern) geographical zones of Punjab were selected to assess the economical impact of Katchi Abadi Improvement Programme in Punjab. The main reason for the selection of three districts was to capture more variation and to increase the scope of the study from the viewpoint of generalization of the research findings, which are based on three geographical zones of the Punjab.

Keeping in view the population size and characteristics, kind of the data analysis, time and resources available and practical evidences, a sample of 700 respondents was randomly selected.

Fitzgibbon and Morris (1987) stated a simple principle or rule of thumb that "as the size of the population increases the sample size decreases". This principle was the basis of sample selecting procedure for this study. A list of recognized katchi abadis for each district was obtained from the office of the Directorate General of Katchi Abadis and Urban Improvement (KA and UI), Local Government and Rural Development Department, Government of the Punjab, Lahore. These three lists (one for each district) were used as sampling frame for the study. There are 73 recognized katchi abadis in Faisalabad, 25 in Multan and 8 in Rawalpindi as per the lists provided by the concerned directorate. A proportionate number of katchi abadis from each district, keeping in view the total number of katchi abadis in the respective district, was taken. Therefore, six katchi abadis from Faisalabad, three from Multan and two from Rawalpindi were selected randomly. Fifty percent katchi abadis were selected randomly from the rural area and fifty percent from the urban area for each district. Subsequently, a proportionate number of respondents from the total sample size were taken for each district. The calculated number came out as 483 (69%) respondents for Faisalabad, 161 (23%) for Multan and 56 (8%) for Rawalpindi. The sampling weights technique has been advocated by Kish (1965) and his book on survey sampling is considered one of the standard books in the sampling field. A simple random sampling technique was used to select the required number of katchi abadis from each district both from rural and urban area. A systematic random sampling technique was used to identify the individual respondents for interview from each selected katchi abadi. Only those respondents were interviewed who were living in the katchi abadis since the implementation of KIP (1985) or before it? The interview was conducted only with the head of household. If he/she was not available at the time of visit, a second visit was paid to conduct his/her interview. If, he/she was again not available then the next house was selected for interview.

### **Results and Discussion**

#### **Impact on Perception Level of the Respondents Regarding Improvement**

The perception of improvement about living conditions tells that how much the KIP has been

able to achieve its objectives. The higher the level of improvement perceived by the respondents (target population), better the impacts of the programme. This section describes the peoples' perception regarding the improvement made by the KIP.

**Perception of Improvement about Environmental and Social Aspects**

The complete data about the social issues/environment before the implementation of KIP were not available. However, data on the physical environmental aspects were collected by the local agencies in 1985. The data for this study on environmental aspects were collected from the implementing agencies as well as through the surveys. However, user's opinion about the change in the social environment was one of parameters, which was used for measuring the impacts of KIP on the social environment. The survey therefore, included recording the inhabitants' perceptions about improvement in the physical and social environment of the study area. The perception of the respondents about the physical improvement was *cross-triangulated* with the secondary data collected from the implementing agencies, which were responsible for implementing the KIP.

The results of data collected through the surveys are described in Table 1, which reflect the users' opinion about the improvement made in the environment due to KIP. The analysis of the data reveals that the percentage of the respondents who perceived better improvement in cleanliness, health of the households' members, physical outlook of the area, access to school, access to open spaces, crime rate, addiction, use of alcohols, gambling, theft, children delinquency, neighborliness, distance to water supply and access to dispensary was 64.1, 67.1, 71.9, 77.9, 77.9, 66.6, 71.3, 49.3, 59.3, 68.6, 60.9, 64.1, 67.3, 71.0, 69.3,

Table 1: Perception of respondents about the environmental and social improvements

Social and Environmental Aspects	Perception Levels					
	Better		No Change		Worst	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Cleanliness	499	64.1	115	16.4	136	19.4
Health of the Household Members	470	67.1	146	20.9	84	12.0
Physical Outlook of the Area	503	71.9	122	17.4	75	10.7
Access to School	448	64.0	158	22.6	94	13.4
Access to Open Spaces/Parks	503	77.9	121	17.3	76	10.9
Crime Rate in General	466	66.6	104	14.9	130	18.6
Addiction	499	71.3	99	14.1	102	14.6
Use of Alcohols	345	49.3	131	18.7	216	30.9
Gambling	415	59.3	103	14.7	182	26.0
Theft	480	68.6	120	17.1	100	14.3
Children Delinquency	426	60.9	111	15.9	163	23.3
Neighborliness	449	64.1	156	22.3	95	13.6
Distance to Water Supply	471	67.3	119	17.0	110	15.7
Access to Dispensary	496	71.0	112	16.0	91	13.0
Overall Perception Level	485	69.3	123	17.6	92	13.1

71.9, 64.0, 77.9, 66.6, 71.3, 49.3, 59.3, 68.6, 60.9, 64.1, 67.3 and 71.0 respectively. It reveals from this analysis that majority of the respondents perceived that the present environmental and social situations were better than before the implementation of KIP.

According to the data obtained from the local development agencies there was very unhygienic situation in the *katchi abadis* before the implementation of KIP. Moreover, the responsible personal members during the focus groups' interviews told that a great improvement had been achieved in the living conditions of the inhabitants of the *katchi abadis* as compared to their previous (before the implementation of KIP) conditions. The better perception of improvement about the living conditions in *katchi abadis* as perceived by the respondents indicates that KIP has been successful to achieve its objectives.

In addition of above-mentioned descriptive analysis the Yeh's index was also used for further analysis. Yeh's Index of improvement number is very suitable measure for the level of perception. It gives a precise and comparable figure, which indicates the opinion of the respondents about a particular facility (Anonymous, 1975; Zaidi, 1982). In index of improvement the scale was converted into a three point Likert's scale, identifying three levels of perception i.e. better, no change and worst.

Subtracting the number of respondents who replied as worst from the number of respondents who replied as better and then dividing it by the total number of respondents obtained the index number. This number was used in this study and further the composite/average index of perception to give an overall picture of the various elements of KIP was also calculated on similar pattern.

The Table 2, indicates that the majority of inhabitants perceived that the present environmental conditions in *katchi abadis* are better than before the implementation of KIP. The index values of perception for health of households' members, physical outlook of the area, access to school, access to open spaces, addiction, theft, neighborliness, distance to water

Table 2: Indices of improvement perceptions for various environmental and social aspects

Environmental and Social Aspects	Index of Improvement
Cleanliness	0.447
Health of the Household Members	0.551
Physical Outlook of the Area	0.611
Access to School	0.505
Access to Open Spaces/Parks	0.610
Crime Rate in General	0.480
Addiction	0.567
Use of Alcohols	0.184
Gambling	0.332
Theft	0.542
Children Delinquency	0.375
Neighborliness	0.505
Distance to Water Supply	0.501
Access to Dispensary	0.580
Overall index of perception	0.561

supply and access to dispensary indicating the perception of respondents about the improvement due to KIP were 0.551, 0.611, 0.505, 0.610, 0.567, 0.542, 0.505, 0.501 and 0.580 respectively. The overall index value of perception was 0.561 indicating that people had better perception about the improvement made due to intervention of KIP. This indicated that the people had perceived a high level of improvement in physical and social environment. In other words the perceived improvement by the dwellers of katchi abadis is better. This is a positive impact of KIP.

**Impact on Satisfaction Level of the Respondents Regarding Improvement**

The level of satisfaction with various elements of KIP gives us a very useful yardstick to measure the quality of various services provided in the katchi abadis and the degree of success of KIP. The higher the level of satisfaction, the more effective is the programme (KIP) as community satisfaction is prime objective all development projects.

Table 3: Satisfaction level of respondents regarding provision of utilities and community facilities under the KIP.  
Satisfaction Level of Respondents about the Provision of Utilities under the KIP

Utilities	Satisfaction Levels					
	Satisfied		No Opinion		Dissatisfied	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Water Supply	435	62.1	84	12.0	181	25.9
Sewerage	357	51.0	142	20.3	201	28.7
Drainage of Area	397	56.7	131	18.7	172	24.6
Solid Waste Management	232	33.1	212	30.3	256	36.6
Garbage Disposal	290	41.4	170	24.3	240	34.3
Street Pavement	369	52.7	114	16.3	217	31.0
Electricity	451	64.4	88	12.6	161	23.0
Sui-gas	365	52.1	154	22.0	181	25.9
Telephone	419	59.9	127	18.1	154	22.0
Overall Satisfaction Level	461	65.9	95	13.6	144	20.6

Satisfaction Level of Respondents for the Provision of Community Facilities under the KIP

Utilities	Satisfaction Levels					
	Satisfied		No Opinion		Dissatisfied	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Primary School	428	61.1	102	14.6	170	24.3
Dispensary	370	52.9	135	19.3	195	27.9
Open Spaces/Parks	411	58.7	107	15.3	182	26.0
Shopping Facility	357	51.0	134	19.1	209	29.9
Mosque	461	65.9	84	12.0	155	22.1
Post Office	398	56.9	130	18.6	172	24.6
Community Hall	84	12.0	168	24.0	448	64.0
Banking	170	24.3	146	20.9	384	54.9
Overall Satisfaction Level	456	65.1	100	14.3	144	20.6

### **Impact on Satisfaction Level Regarding Provision of Utilities**

Table 3, depicts the inhabitants' level of satisfaction with utility services provided under KIP in various katchi abadis. The analysis of the data reveals that the percentage of the respondents who were satisfied with the water supply, sewerage, drainage of the area, street pavement, electricity, gas and telephone was 62.1, 51.0, 56.7, 52.7, 64.4, 52.1 and 59.9 respectively.

In addition the percentages of the respondents who did not give opinion (moderately satisfied) for the same utilities were 12.0, 20.3, 18.7, 16.3, 12.6, 22.0 and 18.1 respectively. The percentage of respondents who were overall satisfied with the provision of utilities in katchi abadis under the KIP was 65.9. This reveals that more people in katchi abadis were satisfied with the provision of utility services under the KIP. In other words a good level of satisfaction has been estimated in case of utility services. However, the percentage of the respondents who were satisfied with solid waste management and garbage disposal was 33.1 and 41.4 respectively. The lower percentage for these two items indicates that dwellers were not satisfied with solid waste management and garbage disposal. It is a positive impact of KIP.

### **Impact on Satisfaction about Community Facilities/Amenities**

Table 3, also indicates the inhabitants' level of satisfaction with various community facilities provided/constructed through the implementation of KIP. The analysis of the data reveals that the percentage of the respondents who were satisfied with the primary school, dispensary, open spaces/parks, shopping facility, mosque and post office was 61.1, 52.9, 58.7, 51.0, 65.9 and 56.9 respectively. The percentage of the respondents who were satisfied with the overall provision of community facilities is 65.1. It is evident that a good level of satisfaction has been achieved in case of community facilities provided under KIP. The percentage of respondents who were satisfied with the community hall and banking was 12.0 and 24.3 respectively. The lower percentage for these two community facilities indicates that dwellers were not satisfied with the provision of community hall and banking. It is pertinent to mention that these both community facilities were not provided under the KIP.

The higher level of satisfaction of the respondents regarding the provision and operation of utilities and community facilities under KIP is a good yardstick to measure the quality of services provided under KIP and its degree of success, which confirmed the positive impact and success of KIP.

The satisfactions of the respondents vary with the provision of utilities and community facilities. This has already been proved by various studies conducted in slums and squatter settlements in South Asia. Marans and Rodgers presented a conceptual model of community satisfaction. The results of their analysis revealed that the personal characteristics have an extremely important effect on the community satisfaction. At the same time, the assessment or perceived environmental attributes (public schools, streets, parks, dispensary, community hall, post office, crime rate, children delinquency, use of alcohols, gambling, theft and addiction) strongly influences the respondents' sense of community satisfaction (Marans and Rodgers, 1975).

Butt, (1981) conducted a study in Lahore, Pakistan on Housing Delivery Systems for his masters' thesis. The findings of that study also confirmed the findings of the study in hand. He

viewed that peoples' level of satisfaction varies with different housing subsystems with respect to location, water supply, sewerage and garbage disposal system, road, neighborliness, security of tenure, rent, job accessibility and housing conditions. Moreover, he further concluded from his study that there exist a strong relationship between the level of perception and satisfaction with location, water supply, sewerage, drainage of the area, garbage collection, solid waste management, street pavement, electricity, gas, telephone, access to primary school, dispensary, open spaces, post office, mosque, shopping facility and crime rate, use of alcohols, addiction, theft and gambling.

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