

Urban Regeneration: An Instrument for Redevelopment of the Slums

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Abstract- The rapid trend of urbanization in different countries worldwide is forging informal settlements. These unplanned and unauthorized settlements are the major cause of slum formations and needs redevelopment strategies for better community development. Pakistan unfortunately is facing the tremendous population growth with uncontrolled urbanization. Lahore which is the major metropolitan city of Punjab is challenged by huge informal settlements throughout the city. The social, economic and environmental problems created due to slums has endangered the city. The research has addressed the issues of targeted slum development in the city of the Lahore and formulated an urban renewal strategy as a result for the community. The research methodology includes site survey, questionnaire survey and interviews of residents to identify the issues and their causes. Furthermore, the physical upgrading plan for the urban renewal of the area was also formulated that contributed in the social sustainability of the community. The proposed interventions in the built environment act as catalyst for the improved urban image of the area and can be replicated in the other parts of the city as well.

Keywords- Urbanization, Urban Renewal, Slums, Informal Settlements

I. INTRODUCTION AND LITERATURE REVIEW

Urbanization and Slums

The growing trend of urbanization reveals the world's future as urban. The spatial distribution of the population worldwide is well determined by urbanization. The rapid increase of urbanization is alarming as figures show that from 1950 to 2018 the increase of number in urban areas is by 25%. North America is the most urbanized area with population in urban areas by 82%. However, Asia is urbanized by 50% till 2018 [1]. This rapid gathering of people to urban areas is linked to industrialization and different employment patterns worldwide. In 1990, 2.3 billion

populations were urban which increased to 4 billion in 2015 and the rate is increasing continuously everywhere with varying trends. However, there is no place on earth which reported decrease in trend [2]. The rate of urbanization in Asia is highest with 2.11 billion people living in urban areas by 2016 [2]. Eighty percent (80%) of Asia's urban poor are found in South Asia. Between 1990 and 2008, South Asia's proportion of urban poor people increased dramatically. At the same time, the number of rural poor people in South Asia decreased, albeit slightly. This data has frequently prompted urban experts to claim that South Asia is mostly responsible for consumption poverty in Asia, if not entirely, that South Asia may be falling into the "urbanization of poverty" trap [3]. In many South Asian nations with extremely low gross national incomes (GNI), there is extreme poverty. India has the greatest rate of global poverty among the eight countries in the region. According to official statistics the poor people in the country are around 239 million, with nearly 28% of the world's extreme poor. With 27 million people, Bangladesh has the second-highest proportion of those living in extreme poverty. Pakistan has the third-highest number which makes 10 million people living in such conditions [4].

This ever-increasing trend of urbanization is responsible for many environmental, social and economic problems in all countries. Along with the environmental and many potential inimical impacts of increasing city dwellers, the sustainable growth can help to minimize the effects. Therefore, in order to ensure harmonious growth of human activities and natural environment, economic balance and sustainable approach is necessary [5]. Since the current situation of urban planning cannot accommodate the people coming from rural areas for better standards of life and higher opportunities. This results in the development of informal settlements throughout the cities called the slums, which are increasing at tremendous rate and are expected to be increased up to 3 billion till the year 2050 [6].

Slums are the informal densely populated settlement in urban areas. It comprises of settlements which have

closely packed units of weak building quality and poor and fragile infrastructure. People living here are deprived of basic facilities and are confined to live in small living areas with low quality of life and poor living conditions. People living in slums have no guaranteed residential status [7].

The term when first appeared in 1820s, was used for houses of poorest quality and highly unsanitary conditions. Today the term is critical and with varying meanings, is collectively used for various range of settlements of low income and sub-standard living conditions. These settlements are deprived of many municipal services like clean water supply, proper sanitation, electricity, waste collection system. There is clear disparity in availing the opportunities in education systems, hospitals, employment and medical care between the urban population and slum dwellers. Also, their accessibility towards community amenities and public urban spaces is restrained, making their lives more miserable [8]. Unfortunately, some of these areas remain unserved for long periods of time, such as 20 years and more.

History of Slums

It is a thought that the term slum originated from East End of London and is a British slang word, which means “back alley” or “street of poor people” [9]. There are some other words which are also used instead of slum like; shanty town, rookery, inner city and basti [10]. The word has negative impression used as a stamp for poor areas. However, the rich and the poor people had no segregating boundaries before 19th century. They used to live in same areas with the rich occupying the high street areas and poor living behind the high streets in the service lanes. In 19th century the shift came with the moving of elite and upper middle class out of the fast-bustling cities to the nearby suburbs, leaving the poor behind. [9].

In early 20th century due to industrial revolution and rapid urbanization there had already been many slums developed in different parts of United States and Europe. The East End London is considered as an origin point from where the term originated and became the reason of slum due to rapid urbanization of industrial and dockside areas. In 1940 the British Government took the initiative of slum clearance by replacing it by council houses. The government initiatives were very successful and most of the slums were designed and replaced by better houses for public, while a small portion of slums were still left behind.

Slum Formation and Factors Involved

There are different reasons for slum growths and many factors are involved in its development. The slum formations are not only confined in the under

developed and developing countries but are also seen in different parts of the world. However, such shanty places are mostly found in the third world countries, where the chances of their removal or upgradation are less likely to achieve. The causes which are mainly responsible are;

- Rapid migration of people from rural to urban areas.
- Lack of economic boom in rural areas.
- Absence of policies for planned land use.
- Poverty and high unemployment.
- Natural disasters and social conflicts.
- High unemployment
- Informal economy

Slums in Pakistan

Rapid and un controlled urbanization has great consequences on overall urban environment. Slums are caused due to this rapid and haphazard urbanization, especially in cities, which instead of offering equal opportunities and prosperity to its individuals are pushing a large amount of its urban population to live sub- standard life. At the present state of global financial crisis, cities need to address the challenge with new approach to create a sustainable model of development.

It is certainly surprising that two out of ten people were living in urban areas a century ago. Un fortunately few years ago, history marked the appearance of ‘urban millennium’, when the urban population of the world surpassed the rural one. Now the trend is showing that by middle of this century, seven out of ten people would be living in urban areas [11].

Population of Pakistan is increasing rapidly. According to the GOP of 2017, its population is almost 207 million. The urban share out of it is 76 million, increasing 3% per annum. However, 1.6 million people are also added annually in this share without any proper planning [12]. The urban population of Pakistan increased to 32.5% in 1998, which further increased to 40% in next sixteen years and is expected to increase by 50% in 2025. The major cities of Pakistan which are Karachi, Lahore and Faisalabad constitute 20% of the total urban population, followed by another 15% in later two cities [13].

There is a continuous rise in urbanization without solving the parallel problem caused due to it. The increased population is added without any proper urban planning. The shortage of land and affordable housing is another dilemma. Many developing countries are facing continuous shortage of affordable housing. In developing countries like Pakistan there is considerable shortfall of houses. There is a steady increase in housing deficit in Pakistan by 270,000 units every year. Also, the country has a huge backlog

of units, which are estimated to be around 7.5 million units [12]. Simply a great majority of people cannot afford proper housing and are unwillingly living in informal houses, slums or kachi abbadis. According to the report by UN-Habitat State of 2012/13 the urban population growth which resulted in slums increased to 49% in Pakistan. This increase in slum dwellers can only be controlled or decreased by availability of service land and equal approach of low income people to affordable housing. However, there is a major limitation to that in Asian countries, which is the high initial or regular instalment cost. The slum dwellers or low income group people which makes actually the majority of urban population, cannot afford the public improvement schemes at all [14].

Punjab is the densely populated province of Pakistan and according to the Economic Survey of 2018-19, it has population around 110 Million. However, Lahore the capital of Punjab and the second largest city in Pakistan, has 30% of settlements as slums. These slums are home to almost 1.7 million people of Lahore [15]. The population density of these slums are 400persons/km. According to these surveys reports the slum settlements in Lahore are around 308 dispersed throughout the city [13]. Faisalabad which is another large city of Punjab and the third most populous city in Pakistan has around 104 slum settlements and the range of slum units is from 42 to 2851 [16].

Condition of Pakistan

Urban slums are a common phenomenon in areas of extreme poverty. The concentration of Pakistan's population close to the poverty line suggests that major population are quite susceptible to going into poverty with even a small increase in the cost of basic necessities and housing, an increase in health and educational costs, unemployment, a decline in wages and income. A natural disaster can also cause a large number of households to fall into poverty. In Pakistan, a wide range of governmental and local measures have been implemented to combat poverty. For instance, the Pakistan Poverty Alleviation Fund (PPAF) was founded in 1997. The Asian Development Bank (ADB) is working since 2002 and has contributed great amount in effort to reduce poverty. Now there is need to look into how government programs and policies are working in slum areas to handle the matter [17].

To achieve urban safety there is need to regulate terrorism, crime, insecure land tenure, poverty, urban poor and disasters. For the success of all these issues, it is necessary to make the governing system more responsive, effective, and responsible. To effectively combat urban poverty, interventions may be needed in the areas of skill development and education, no-interest or low-interest credit services, labor markets,

the housing industry, and food pricing. To help the urban poor find employment, the government supports initiatives like the Benazir Income Support Program and technical education. Additionally, positive outcomes from Non-Governmental Organizations (NGOs) efforts to combat urban poverty in Karachi's Orangi and Baldia, as well as elsewhere in Pakistan, show how crucial collaboration between the government and NGOs and Community Based Organizations (CBOs) is for achieving sustainable and lasting results in eradicating poverty [13].

II. MATERIALS AND METHODS

The research framework developed for the research comprised of many steps, starting from gathering the basic information by surveying the area, after detailed literature mapping. The literature highlighted the similar case studies that helped in the development of research questions that were answered by thorough investigations on ground.

The research includes the qualitative investigation to understand the basic challenges regarding the informal settlements. This helps in gaining more considerate knowledge of the issues and problems faced by the urban slums in everyday life. Also, the research is exploratory in nature, as it different areas in the city were visited and explored. The collected data from various sources regarding the issues faced by people living in slums is not sufficient to indicate all the situations and challenges faced by them on regular basis. Therefore, various surveys were conducted to support the collective data from literature sources. The survey also includes the interviews of the occupants and filling of questionnaires after discussions to further clarify the situation in realistic manner.

Study Area

First of all, the area of Johar Town in Lahore was explored. There are many informal settlements of diverse nature in this area. The informal settlement of Sumsani Khoi near Expo Centre Lahore was taken under consideration. The research focused the social, economic and environmental issues of this settlement. The challenges faced by the dwellers were highlighted and upgradation strategy and planning for better development of overall community is suggested. Figure 1 shows the location of Sumsani Khoi.

Sampling Design

The area selected for the research consists of approximately 100 informal settlement units. In total 20 people of that settlement were interviewed for gathering information about different issues of that area.

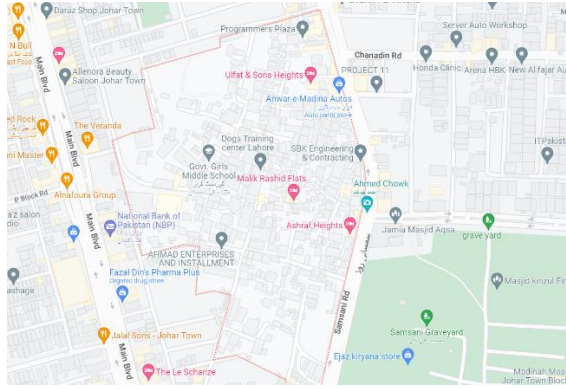


Figure 1: Map of the study area (Sumsani Khoi).
Source Google Maps

Limitations

Total people interviewed were 20 as some people were not interested to give their views and majority of people were at work. Kids were not interviewed, only adults were taken into consideration.

III. RESULTS AND DISCUSSION

The slums of Samsani Khoi are showing the vulnerable state. It is basically a small slum settlement which is located between the formal housing units and land occupied by officially sanctioned owners. People here came from the villages for better opportunities in cities but their living conditions are miserable. Since these dwellings exist on government property illegally, they can be demolished and removed anytime. The majority of people living in these slums earn their living by working in the houses of neighboring upper class houses. The area is deprived of basic physical infrastructure. Present condition and on ground situation can be seen in figures 2-4. They have no access to the social infrastructure in their surroundings as the schools and clinics are expensive and they cannot afford them. Social discrimination is another factor for their acceptance in nearby facilities. The demographic study of the area is shown in the table I.

TABLE I: Demographic Characteristics of The Study Participants

Characteristics	Numbers
Slum dwellings	100
Adults per house	3 (average)
Adults qualified	
Middle-Matric	11
Matric-Intermediate	1
Intermediate and above	0
Children per house	5-6/house (average)
School going children	1 per 8 houses



Figure 2 Overview of the slum settlement. Source; author



Figure 3 Disposed garbage and stagnant water in front of the slum settlement. Source; author



Figure 4 Children playing on garbage. Source; author

The slum dwellers of Samsani Khoi have various issues regarding social, economic, environmental and infrastructure problems. They are deprived of basic shelter, lack with water and sanitation facilities, less opportunities of progress and jobs and are exposed to severe weather conditions. There is high concentration of people living here where kids can suffer from severe health issues. Presence of trash and stagnant water is making their lives more miserable. Furthermore, they tolerate the harsh man-made and environmental hazards. Major issues and challenges are tabulated in table II.

Table II: Issues and Challenges Under Consideration

Social	Economic	Environmental
<ul style="list-style-type: none"> • Basic Shelter • Health Issues • Education 	<ul style="list-style-type: none"> • Job Opportunity • Income • Community Participation • Tenure Insecurity 	<ul style="list-style-type: none"> • Drinking Water • Waste Disposal • Weather Conditions • Toilets • Water Drainage system

Social Issues

The Samsani Khoi settlement is highly deprived of the basic infrastructure facilities. The basic shelter is weak and shabby. The primitive facility of electricity, gas, sewerage and sanitation are totally absent. As this development occurs illegally so they do not come under the jurisdiction of municipal corporation. As a result, they do not have access to the urban infrastructure in the surrounding, i.e. the schools and clinics etc. Also, as they have no documented ownership in land registry record, therefore they cannot apply for any loan or housing finances to upgrade their living conditions.

The survey of the area showed the social issues of the occupants of that area. People were interviewed and questionnaires were filled after getting their views on different aspects. The basic social issues faced by the people were the lack of proper shelter, inadequate health facilities and no education centers.

The main concern of the occupants was the basic shelter. All 20 people mentioned the need of basic shelter as their priority. 80% of the participants showed their concern for the non-availability of health care facilities in that area, whereas rest of the occupants did not show any concern regarding health. Only 45% of participants were worried for their children's education, whereas the rest did not show interest in the education facility at all. Figure 5 shows

the response of the inhabitants of this slum settlement.

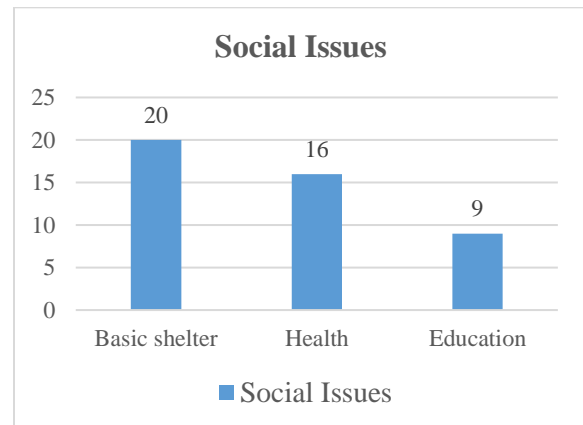


Figure 5: Social issues faced by the residents of the settlement.

Economic Issues

The dwellers of this slum are facing several economic issues. They have limited opportunities for jobs. The female use to work in the neighboring upper class houses. Few men had permanent jobs but majority were earning from daily labor and few were still unemployed. The monthly income of single unit ranges from 30 to 50 thousand rupees on average. This amount varies among different units as in some cases all the occupants are earning and in some cases, the kids are very small and only parents are earning. In this settlement majority of kids are working. Only 25 of the kids are going to school and the rest are working in people's houses or some odd jobs. According to United Nations report, 8.5 million children are involved in child labor worldwide. Also, these people had very less sense regarding their role in community. Unfortunately, they are unaware of their basic right. One of the essential concern of such settlements is the reassurance of secure tenure. The main issue of the people here is that, they can be asked anytime to vacate the area. According to United Nations Report, total percentage of squatters and slums is 20 of all household, and two-third of which have insecure tenure. The response regarding economic issues is presented in graph in figure 6.

The questionnaire and survey results are shown by the graph. Maximum respondents were facing the problems in their jobs. Only 4 respondents were satisfied with their jobs and remaining 80% were extremely worried as they had no permanent jobs. They all had low income. No one was earning a handsome amount of money, actually they were far away from that. Most of the participants were unaware of their role in community and did not give any response for the community participation. Only 8 respondents showed interest for their involvement in

community participation and the rest were not even aware of such thing. Some people were really concerned for their insecure tenure but some people showed careless response regarding this. 60% respondents were distressed as the government orders can any time evacuate this land. However, some respondents were comfortable in any circumstances, as they mentioned that in worst scenario they will move to any other slum settlement.

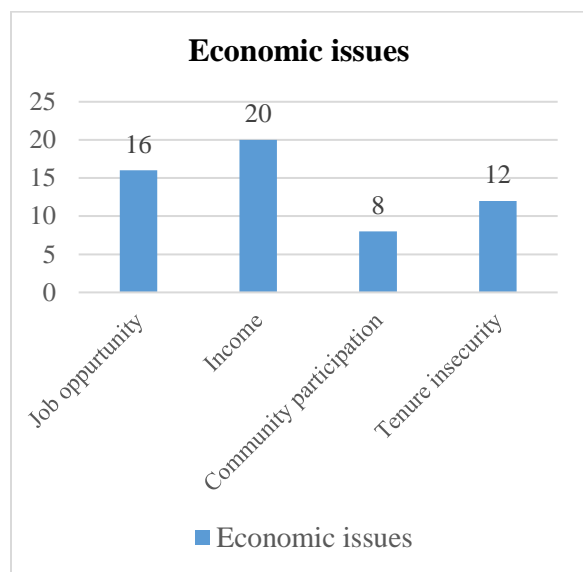


Figure 6: Economic issues faced by the residents of the settlement

Environmental Issues

The people living in this slum have to face all the worst environmental situations. They are not only exposed to environmental hazards but man made hazards are not even less. The traffic pollution and garbage dumped all around is creating serious health risks. The killer diseases severely affect the people of slums. They are inordinately suffered from tuberculosis, HIV/AIDS, various waterborne diseases and currently from the worst situations of Coronavirus disease. These dwellers of slum lack water and sanitation system. Water which is basic human necessity, should be available to every person. Unfortunately, this settlement has no provision of water. These people have to go to nearby filter area to get water for their daily usage. Another major issue is the absence of toilets. People here have no toilet facility and they have made temporary structures and dump their waste. This is creating highly unhygienic environment in their surroundings. Water drainage is another main problem. Due to the absence of drainage system the rain water gets collected and is responsible of mud puddles. Also, the stagnant water is unhygienic and is responsible of many diseases along with the high

probability of dengue cases in the settlement. Environmental issues faced by the people of this settlement is shown in figure 7.

The people of this slum were very depressed due to no availability of water, water drainage system and abundant of garbage dumped all around. All the respondents were extremely upset due to the problems they face every day for toilets, getting water and due to presence of garbage around their dwellings. Some respondents were extremely depressed due to the severe weather conditions, only 1% said that we are used to of all weather conditions.

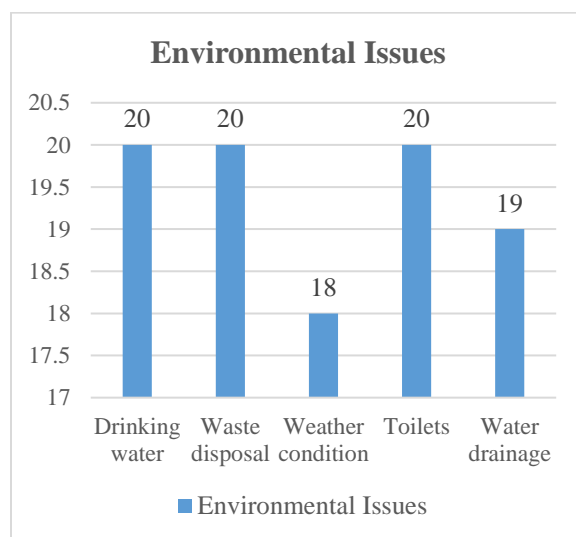


Figure 7: Environmental issues faced by the residents of the settlement

IV. CONCLUSION

The study revolved around the development of informal settlements due to rapid increase of urbanization. Among many urban slum settlements in Lahore, the slum of Samsani Khoi with its critical vulnerable condition is studied in detail. Majority of people came from the nearby villages for the sake of better opportunities but ended up in slum settlement for their survival. The problems identified from qualitative research were crosschecked according to the issues faced by selected slum. The results show that the major social issue is the lack of infrastructure and their sustained existence. Absence of basic facilities and limited supply of water is the critical issue and every day's challenge. However, the greatest dilemma of these informal settlements is the critical condition of infrastructure. The rain causes severe damage to the structures where they live and water gets collected all around due to poor drainage condition. The garbage all around and the rain collectively creates many health hazards. Another

alarming factor is the presence of open defecation points as there is no toilet facility. This factor is responsible for many acute or adverse infectious intestinal diseases which can be life threatening for the residents of the slums. Other than this there is no provision of electricity, sanitation, sewerage, drinking water, waste disposal, garbage management and environmental security. All these factors are responsible for marginalized living condition in urban slums.

The problem originates due to no planning strategy for land use and the negligence of development control strategies. Urban sprawl and informal settlements are the result of these ignorance's. The slum settlements are not according to any set building codes, only the planned housing schemes which fall under the jurisdiction of Lahore Development Authority (LDA) follow the norms and regulations set. Other cities growth occurs haphazardly which falls under the control of Tehsil Municipal Administration (TMA). Unfortunately, TMA has not played any significant role for planning and development of cities according to some rules and regulations. Government can play important role to provide basic needs to people living in slums but only planning's and promises are made and implementation is not seen.

V. RECOMMENDATIONS

The social economic and environmental issues suffered by the people living in slums should be addressed as a priority for the sake of human right. The action cannot be taken by one party or organization, rather its success depends on the active participation of all key factors.

Social Protection

In order to mitigate the vulnerability condition of the people living in poor conditions, there is need to organize the schemes by government agencies for providing basic shelter, affordable healthcare and education system. Permanent source of insurance system or social protection system for low income groups to support their life and upgrade it is extremely necessary. One of the greatest agenda of SDG is to remove poverty from the world by 2030, for this purpose the Social Safety Nets (SSNs) are developed to provide cash to poor people for achieving their basic social, economic and environmental needs.

Resettlement

Resettlement is a better approach as it covers various strategies to cope with the slums. It considers the agreement of slum dwellers and help from the NGOs. Government initiative or NGOs cooperation is needed to resettle these people somewhere with reliable tenure

and low cost housing facility for saving them from the social and environmental hazards. Current COVID-19 pandemic is also a great challenge they are facing.

Community Based Planning

Community role for identifying the problems and planning the project after problem identification and developing the design stages. The planning phase to be done by community and directing it to local and national level. Developing an organization which is based on community can impart significant role for arranging meetings, involving public, analyzing slum situations, their main challenges and priority needs, preparing the basic plan and submitting the complete schedule to LDA or TMA for further action.

Developing System of Urban Budgeting

To achieve sustainable urban development one of the important consideration is to develop a system that confirms the availability of local budgets for proper development and reducing informal settlements. Improving the system of local taxes and using for upgrading informal settlements in local communities. Revising and improving the laws of local budgeting and their availability to low income citizens. Authorities should also be supported through private public partnership in case of urban renewal programs.

Improving Municipal Governance

To control urban growth and to prevent the formation of slums, the strengthening of local departments with improved municipal government is extremely significant. Development of such communities which are based on experts and formulating policy and ensuring its implementation must be assured. All citizens should have equal access to such departments with their involvement in reporting issues, building policies and making decisions for upgradation of slum areas. Issues regarding urban planning must include the local government with the full participation of different NGOs, donor organizations and experts.

REFERENCES

- [1] United Nations. (2019) *World Urbanization Prospect: The 2018 Revision*. New York: United Nations. Department of Economics and Social Affairs. U
- [2] N Habitat. (2016) *Urbanization and Development: Emerging Futures*. Nairobi, Kenya: United Nations Human Settlement Programme (UN-Habitat).
- [3] Om Prakash, M. (2012) *Urban Challenges in South Asia*. In United Nations ESCAP Cities of Opportunity: Partnerships for an Inclusive and Sustainable Future. Bangkok: UN ESCAP.

- [4] Islam, TT. et al., (2021) International Comparisons of Poverty in South Asia. *Asian Development Review*, 38 (1): 142–175.
- [5] Zeng, C. et al., (2016) Urbanization and Sustainability: Comparison of the Processes in “BIC” Countries. *Sustainability*. 8(4):400. Available at: <https://doi.org/10.3390/su8040400> (Accessed on 10th January 2022)
- [6] UN- Habitat. (2010) *State of the World’s Cities 2010/2011- Cities for all: Bridging the Urban Divide*. Nairobi, Kenya: UN-Habitat.
- [7] UN-Habitat. (2014) *A practical guide to designing, planning and executing citywide slum upgrading programmes*. Nairobi Kenya: United Nations Human Settlement Programme (UN- Habitat).
- [8] Calderon, C. (2008) Learning from Slum Upgrading and Participation: A case study of participatory slum upgrading in the emergence of new governance in the city of Medellin-Colombia.
- [9] Wohl, A. (2017) *The eternal slump; housing and social policy in Victorian London*. New York: Routledge Taylor and Francis group
- [10] UN-Habitat. (2003) *Slums of the World: The Face of Urban Poverty in the New Millennium?* Nairobi, Kenya: UN-Habitat
- [11] UN Habitat. (2012/2013) *State of the World’s Cities- prosperity of cities*. London: Earthscan.
- [12] UN-Habitat. (2011) *Affordable land and housing in Asia*. Kenya: Nairobi.
- [13] Ministry of Climate Change. (2015) *National Report of Pakistan for HABITAT III*. Islamabad: Government of Pakistan.
- [14] Rondinelli, D.A. (1990) ‘Housing the Urban Poor in Developing Countries: The Magnitude of Housing Deficiencies and the Failure of Conventional Strategies Are World-Wide Problems’, *The American Journal of Economics and Sociology*, Vol. 49(), pp. 153-166. Available at: <https://cooperative-individualism.org/rondinelli-dennis-housing-the-urban-poor-1990-apr.pdf> (Accessed: 17 March 2022).
- [15] UNICEF. (2020) *Report of Coverage Survey in Slums/Underserved Areas of 10 Largest Cities of Pakistan*. Pakistan. UNICEF.
- [16] Ahmed, R., Mustafa, U., Khan, A. (2015) ‘Socio-Economic Status of Transferred and Non Transferred Urban Slums: A Case Study from Faisalabad’, *The Pakistan Development Review*, 54(4), pp. 947-962. Available at: <https://pide.org.pk/pdfpdr/2015/947-962.pdf> (Accessed: 2 March 2022).
- [17] Khan, E. (2010) ‘Life in Slums: A Case Study of Bahawalpur’, *Afro Asian Journal of Anthropology and Social Policy*, 1(1), pp. 31-50. Available at: <https://center4affordablehousing.org/wp-content/uploads/2020/03/Pakistan-Slums-Life-in-Slums-A-Case-Study-of-Bahawalpur.pdf> (Accessed: 15 July 2022).