

Socio-Cultural Consequences of Urban Sprawl: A Case Study of Dera Ismail Khan (Pakistan)

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Abstract

This study aimed to investigate the socio-cultural consequences of urban sprawl in Dera Ismail Khan. The three main objectives explored are that urban sprawl has negatively impacted social cohesion and social interaction among the members of society. It has affected the cultural heritage and cultural identity. It also has hindered people's access to essential resources. Qualitative research methodology was used as a research method for this study. A quota sampling method was used to select the participants. Sixty-four respondents were selected based on age, gender, and locality. Focus group discussions were conducted using a focus group guide to collect the data. There were a total of 8 groups; 4 of them were migrants, and 4 were local respondents. The female ratio was 50% each. Groups were categorized based on age, gender, and identity. This enabled the participants to share their opinions without hesitation. The research findings indicate that urban sprawl has negatively impacted the social and cultural life of the people in Dera Ismail Khan. Urban sprawl has negatively affected their cultural identity, social interaction, social cohesion, cultural traditions, and access to public amenities. They have lost their social interaction and social cohesion among the community members. The researchers found that cultural changes occurred in the local cultural values, traditions, and norms of the migrants. Both migrants and locals now follow a homogenized culture. Their access to public amenities is much affected by the unplanned urban expansion. People became dependent on private cars because of the lack of public transportation. This increased use of private vehicles leads to air pollution and traffic problems. It is also observed that the local government is inefficient in mitigating these consequences.

Keywords: Urban Sprawl, Social Cohesion, Cultural Identity, Social Interaction.

Introduction

Urban areas' unplanned, unauthorized expansion outside their metropolitan boundaries is known as urban sprawl. Urban sprawl emerged as a global issue in the 20th Century after the second World War, when people migrated from rural to urban areas to seek a good quality of life, education, and employment. In the 21st century, during the past two decades, the modern world has faced problems that have emerged due to rapid urban sprawl. The cities become overcrowded, the quality of life is poor, unemployment and poverty are significant outcomes of urban sprawl, and water and air pollution are significant. The main reasons cities expanded outside their

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metropolitan boundaries are rural-to-urban migration and migration of core city residents to suburbs (Ahmed et al., 2021).

People from rural areas migrate to cities because of good quality of life, health, and educational facilities. Urban areas are considered business hubs, providing people employment and business opportunities. While overcrowding in core urban areas results in slums, most people move towards suburbs. Suburbs attract people because these areas have fresh air, abundant underground clean water, and cheaper land than the core urban areas. Instead of making a good impact, these migrations, such as leapfrogging developments, result in urban sprawl (Waseem et al., 2021).

Traffic congestion and air pollution occur due to urban sprawl. The main reasons are the increase in population, low-density developments, and car dependency. Longer commutes between public amenities and residential areas made people car-dependent because of the lack of a public transport system. This creates traffic problems and air pollution, resulting in several other problems (Yasin et al., 2021). The major contributing factors to urban sprawl are the low cost of land, rural-to-urban migration, and quality of life. However, people need to be made aware of the side effects of these new developments. In response, this creates other problems for the city, such as poor infrastructure, health hazards due to poor healthcare facilities, increased crime rates, poor quality of air and water, poor sanitation, congested homes, and price hikes (Shah et al., 2015).

Urban sprawl has greatly affected European urban territories. Almost 80% of the people in Europe live in cities. European urban settlements became densely packed due to an increase in population by 4% every year. In 2030, almost 97 % of Europeans will shift toward urban areas because Europe has become a hub for business and education. This population increase will result in overcrowding, lack of resources, unemployment, and loss of green areas (Pandey & Seto, 2015). Increased crime rates and health issues are also the outcomes of urban sprawl. People in urban areas prefer to order food and grocery items online.

They do not prefer to go on walks, which creates health implications for them, such as diabetes, fatigue, obesity, and mental depression. On the other hand, crime rates are increasing day by day. These issues are alarming for city life (Nithila et al., 2019). A wide range of problems emerged as a result of urban sprawl. Researchers are conducting many studies to find out the consequences of urban sprawl. The one thing that makes this research unique is that before this, no research was conducted to check out the social and cultural consequences of urban sprawl.

Research Objectives

1. To explore the impact of urban sprawl on community cohesion and social interaction.
2. To examine how urban sprawl is a threat to cultural heritage and cultural identity.
3. To find out the impact of urban sprawl on access to essential resources.

Literature Review

Previous studies have highlighted the impacts of urban sprawl, its root causes, and contributing factors. However, there is some literature gap in these studies, and that is to explore the socio-cultural consequences of urban sprawl. As cities expand, the social relationships and interaction between communities usually weaken. Doing this research will help us identify potential solutions to promote community cohesion and discourage community exclusion.

Urban sprawl is a constant threat to cultural identity and cultural heritage. After examining the socio-cultural consequences of urban sprawl, potential steps and measures should be adopted to protect the cultural heritage and identities from deteriorating. Urban sprawl also leads to social inequalities regarding access to healthcare, education, and employment opportunities. After doing

this research, we will find out the main reasons for these inequalities, and it will help us make effective policies to counter these social inequalities and promote social equity in society. Inefficient land use and the increased expense of infrastructure building are the outcomes of urban sprawl (Ali et al., 2019). This study will help us develop sustainable developmental policies to overcome extra infrastructure expenditures. This research will help provide evidence-based insights into potential strategies to minimize urban expansion and promote sustainable urban development.

Urban sprawl is the rapid and unplanned expansion of urban areas. This phenomenon of urban sprawl is increasing daily and has grabbed the world's attention. Urban sprawl has various consequences, including social, cultural, political, economic, health hazards, environmental deterioration, etc., in different parts of the world (Jarrah et al., 2019). Urban sprawl indirectly leads to the emergence of suburban areas. Suburbs are low-density areas within and outside the metropolitan boundaries. Suburb areas separate commercial and residential areas from one another. An unplanned growth leads to various outcomes that might become problematic with time.

Leapfrogging development is an outcome of urban sprawl. Leapfrogging development occurs when people skip over land to get cheaper land somewhere away from cities. Leaving empty areas between the city and the new development is known as leapfrogging development. People choose these areas to live in because of the clean environment and find it desirable due to cheaper rates than core urban areas. However, this development has consequences, such as the distance between residential areas and essential service centers like schools, hospitals, etc. The distance increases, and time is consumed in commuting long distances (Jarrah et al., 2019).

The erosion of community cohesion is one of the socio-cultural consequences of the unplanned rapid expansion of cities. Traditional urban societies used to have strong cohesion in the community. However, due to urban sprawl, the population is dispersed, social ties between them have weakened, and there needs to be more social cohesion among the community members (Hasan, 2015). Alteration in the cultural landscape is also one of the significant consequences of Urban Sprawl. It leads to losing cultural heritage, historical sites, and traditional architecture (Iram et al., 2012).

A social change occurred due to urban sprawl as people migrated from rural to urban areas, which they experienced in their lifestyle. Their socio-cultural orientations and traditional values and customs also change as an outcome. Structural changes occurred as they migrated from mechanical to organic societies. Their lifestyle is affected, and they seek better education, health, and employment opportunities. They also encountered social exclusion, social segregation, and low community-level engagement. Their cultural pattern changed from agrarian to non-agrarian culture (Gumma et al., 2017).

Urbanization in Europe started with the emergence of the industrial revolution in the seventeenth century. The movement of people from core urban areas increased daily after the Second World War to seek quality lifestyles and a safe environment. Almost 78 % of the European population lives in cities. The rapid increase in the population of cities resulted in urban sprawl in Europe, and it has badly impacted society. Urban sprawl has threatened agricultural land, environment, and health. Over 25-50 % of the air quality in Europe is polluted. The underground water quality could be better. European countries are now upgrading their policies to manage and control urban sprawl and make urban planning more efficient (Shi et al., 2020).

In the developing world, most cities face the issue of urban sprawl, mainly due to the rapid population increase in urban areas. The primary reason for the rapid increase in the population is

the migration of people toward urban areas because cities provide a quality lifestyle, which attracts people, and due to better healthcare facilities, mortality rates in urban areas are lower, and fertility rates are higher than in rural areas. The other leading cause of urban sprawl is regional economic disparities between rural and urban areas, where rural areas need more facilities like employment opportunities and access to basic amenities compared to urban areas. Therefore, people migrate to urban areas to avail these opportunities, but in response, it increases the urban population immensely. This kind of urban population growth threatens city life and results in urban sprawl (Akhter & Noon, 2016).

Cities grow in physical size and population due to rapid urbanization. Urban sprawl is an outcome of this rapid urbanization, creating an alarming situation in developing countries. It has become a threat to the environment and quality of life. Rapid urbanization has affected urban life in several sectors, and public health is one of them. Increased use of transportation and industries has polluted the urban environment, and its air and water quality is inferior, which has directly affected health problems such as diarrhea, obesity, malaria, jaundice, typhoid, and stomach burning issues because of air and water pollution (Iram et al., 2012).

Pakistan is an agricultural country, and almost 60% of its population relies on agriculture. However, urban areas have continuously swallowed agricultural lands outside their boundaries in the past three decades. Consumption of agricultural land by housing and industrial sectors results in urban sprawl, where leapfrogging development occurs. It has directly affected agriculture, water quality, and vegetation. Due to industrial sectors and housing societies in the Faisalabad region in Pakistan, local government bodies' lack of urban planning and monitoring has become a significant threat to agricultural land. Landscape in Faisalabad has changed due to urban sprawl and industrialization. It has threatened natural habitats, air quality, and agriculture (Safder, 2019).

Urban sprawl has become a global problem, and international organizations are closely monitoring it. It has created instability in urban areas and disturbed several sectors, such as healthcare, employment, education, and political participation. Industrial waste, traffic congestion, and increased use of automobiles have polluted the urban climate. Effective urban planning is needed to minimize and control urban sprawl and reduce its impacts. This issue should be addressed on every platform. Local government and municipal authorities should monitor this issue closely (Zafar et al., 2019).

Pakistan is continuously facing the consequences of urban sprawl. Due to the increase in the core city's population in Peshawar (Pakistan), people are moving towards suburban areas outside the city's geographical territory. However, this has resulted in urban sprawl, which has destroyed natural vegetation. Illegal and unplanned housing societies and industrial zones outside the city's boundaries are the primary sources of air, water, and soil pollution, directly affecting agricultural land and the environment. Buildings, industrial zones, and roads are being replaced by vegetation surfaces, which threaten the natural environment (Akhter & Noon, 2016).

Smaller urban settlements outside Karachi City (Pakistan) continuously contribute to the spread of urban sprawl. These settlements are locally termed "*katchi abadis*." *Katchi Abadis* are overcrowded slum areas with poor quality of life, lack of sanitation, poor infrastructure, and no proper solid waste management system. One of these areas is Orangi Town in Karachi, Pakistan, where the residents migrate from rural areas to get quality lifestyle, employment, and healthcare facilities. However, indirectly, this resulted in many problems, such as overcrowding, lack of sanitation, lack of solid waste management, etc. This is all because *katchi abadis* are unauthorized, unplanned, and illegal urban settlements outside the city's geographical territory and are regarded

as slum areas (Hasan, 2006). Having discussed the relevant literature, the key concepts are defined below.

Urban Sprawl

Urban sprawl is cities' unplanned, uncontrolled, rapid expansion outside their geographical territories. Generally, it is characterized by low-density development.

Socio-cultural Consequences

Socio-cultural consequences are the social and cultural factors that impact individuals or communities. Socio-cultural consequences include changes in cultural identity, social cohesion, social interaction, cultural traditions and practices, and access to public amenities.

Research Methodology

This study aimed to explore the impact of urban sprawl on social cohesion and social interaction. To understand how social cohesion and social interaction are affected by urban sprawl. Secondly, to assess how urban sprawl became a threat to cultural identity and heritage and to explore how it affects their access to essential resources. To conduct this research, the researchers used a qualitative research method. The reason for using the qualitative research method is that it provides an in-depth insight into human thought.

Research Method

The researchers have used focus group discussion to explore the socio-cultural consequences of urban sprawl. The researchers selected the focus group discussions for data collection to get an in-depth understanding and experience of the respondents about the topic. These group discussions unravel insights into their beliefs, ideas, attitudes, and opinions about the variables under study.

Data Collection Tool

The data collection tool for the research was a focus group guide. This guide contained questions about how the urban sprawl impacted their cultural identity, social cohesion, and social interaction. What cultural changes occurred due to urban sprawl? How is their access to public amenities affected, and what initiatives is the local government taking to mitigate the consequences of urban sprawl?

Research Site

This research was conducted in Dera Ismail Khan, Arif Abad Colony. Dera Ismail Khan is currently facing major problems due to rapid urbanization. People from other areas migrated to Dera Ismail Khan because it has become a business hub. The land mafias are continuously making money by building new development sectors without any planning or government permission. Dera Ismail Khan has its own rich culture but these new developments are continuously affecting the social and cultural life of Dera Ismail Khan. The researchers have chosen Dera Ismail Khan as a research site to learn about how urban sprawl has affected the cultural and social life of Dera Ismail Khan and what cultural and social changes occurred.

Sampling

This research was conducted in Dera Ismail Khan, Arif Abad Colony. The sampling method that the researchers used to select the respondents is quota sampling. In total, there were total 64

members selected as a sample for data collection. They were divided into 8 groups, and each group consisted of 8 members. Male female ration of the respondents was 50% each. Groups were made on the basis of their identity (locals/ migrants), age and gender. The independent group categorization was meant to gather independent opinion of the participant without the influence of the dominant community members. For instance, seniors, male influence on females, local influence on migrants or vice versa.

Table 1: Focus groups by age, gender, and identity

Groups	G 1	G 2	G 3	G 4	G 5	G 6	G 7	G 8
Gender	Male	Femal e	Male	Female	Male	Female	Male	Female
Age in years	Above 50	Above 50	20-35	20-35	Above 50	Above 50	20-35	20-35
Identity	Locals	Locals	Locals	Locals	Migrants	Migrants	Migrants	Migrants

Data Analysis

According to Biber and Leavy, (2011) there are four steps in data analysis. The first step is data preparation, the second is data exploration, the third is data reduction, and the fourth is data interpretation.

Data Preparation

This is the preparatory stage of data analysis. The researchers have collected the data by conducting focus group discussions using a focus group guide. This focus group guide contains several research questions. The researchers have recorded the data in written records. Then, he translated that data from Urdu to English.

Data Exploration

This is the second step in the data analysis. This step is about data exploration. The researchers have explored all the themes according to their objectives and research questions.

Data Reduction

Systematically, the researchers have reduced the data after careful observation and analysis. Then, he observed all the themes in the data, and according to them, he reduced the data.

Data Interpretation

In the fourth step of data analysis, the researchers compared the data of all eight groups, which was collected through focus group discussions. The researchers found multiple themes in the data, and then he compared those themes and found similar themes in that data.

Ethical Considerations

Following the ethical considerations of the research

- Permission was given to the senior community members to collect the data from female respondents.
- The purpose of the research was discussed with the respondents.
- Identities of all the participants of focus groups were kept confidential.

- Anonymous codes were used for participants' names, such as "P1" for participant 01.
- All the participants were treated equally with respect and dignity.
- The respondents were told they could leave the focus group discussion anytime.
- All the participants participated voluntarily and were not forced to join the discussion.
- No sensitive questions were asked of the respondents.

Results and Discussions

Cultural Identity

The participants were asked about how urban sprawl impacted their cultural identity. The participants' responses are quoted below.

Urban sprawl is a threat to social and cultural identity because of urban sprawl people migrate from other areas to Dera Ismail Khan and they come with their own social and cultural ideas which mix up with our ideas and are a threat to our social and cultural identity, (Participant 6, G1)

Our social and cultural identity is affected by urban sprawl due to the migration of people from rural areas to Dera Ismail Khan we almost lost our cultural and social traditions such as dress code and marriage patterns over time. A lot of change occurred as a result of urban sprawl our language which we spoke is Saraiki, but now due to the influx of migrants we prefer to speak Urdu with them, (Participant 5, G 2)

In rural areas, there are unique cultural enclaves, while here in Dera Ismail Khan this trend is almost over. The communities are scattered and we have lost the sense of belongingness. People now try to meet up their basic needs and they don't care about cultural values and norms. We migrants have lost our cultural identity, (Participant 5, G 7)

The cultural identity of people in Dera Ismail Khan is badly affected by urban sprawl. Both the migrants and locals believed that their cultural identities were in danger due to urban sprawl. Most of the local migrants in Dera Ismail Khan are Saraiki-speaking. They said that their cultural language, "Saraiki," is overshadowed by Urdu because of the migration of people from rural areas. They do not understand their language; therefore, locals prefer to speak Urdu with them. Though it is a good initiative that they started speaking the National language, their viewpoint was different. Language is a medium of communication and a carrier of cultural heritage. This medium passes Social values and traditions to the next generation. When people of different regions migrate, it is not their language that is troubling them but the entire heritage of their region. The locals consider the amalgamation of languages distorting their cultural traditions. A significant concern of the elders is for the younger generation raised in this mixed culture where identities are not truly defined.

They said language is their cultural identity, and do not want to lose it. Similarly, the locals think that the migration of people towards Dera Ismail Khan threatens their cultural identity. On the other hand, urban sprawl has also affected the cultural identity of migrants. The migrants said that they felt cultural shock due to the language barrier. Most migrants are Pashto-speaking, and speaking Urdu with the locals was more challenging. They feel a difference in local food culture and dress codes. They added that the local cultural values threaten their cultural identity. It seeps through the cultural traditions and creates new values and norms.

Social Cohesion

Due to rapid urbanization, most of the people in Dera Ismail Khan shifted towards new developmental zones, which they call "colonies." In the same way, they lost their connections with their community members. Their responses are quoted below,

Social interaction and social cohesion are almost zero among our community members. There are two reasons one is urban sprawl and the other is technology. Members of our community are far away from each other which is why they do not interact physically with each other and through social media they only interact formally, (Participant 3, G 1)

Social cohesion and interaction between members of our community is much affected by urban sprawl. Most of our community members have shifted towards housing societies outside the geographical territory of Dera Ismail Khan. We have no interaction with them. In our neighborhood, there are mostly migrants from other areas. It gives us a sense of alienation, (Participant 1, G 3)

Social cohesion between female members of the society is eroded due to urban sprawl. Before urban sprawl, female members of our community would go to market together. But now due to longer commutes our social interaction has ended, (Participant 3, G 6)

The urban sprawl has badly impacted the social cohesion and interaction between the community members in Dera Ismail Khan. New urban developments are scattered, their density is low, and they are segregated from the city. Urban sprawl in Dera Ismail Khan resulted in the loss of social interaction and social cohesion and led to social segregation. Scattered settlements reduce the interaction among the community members. Spatial distances further add to this very factor. Researchers have observed that the community members feel estranged, negatively affecting social integration and group unity. Social interaction and cohesion among the local community members are greatly affected by urban sprawl. They responded that before urban sprawl, their community members would interact with each other, but urban sprawl has created a wider gap between them. Due to longer commutes and busy life schedules, their interaction has become limited to merely a phone call. Meanwhile, social cohesion is almost zero amongst their community members. Social cohesion and social interaction of migrants were also affected. They said their social cohesion is almost zero because they do not know people in their neighborhood. No one pays attention to them. Their social interaction with the members of their community is also significantly less because of the longer distance between their residential zones. Although social media allows people to connect even from a distance, they miss out on various mutual activities that require physical proximity or presence.

Cultural Traditions

Urban sprawl resulted in the loss of cultural heritage. People now do not follow their cultural traditions; instead, they follow modern cultural traditions and values. They ignore the loss of their cultural heritage.

Yes, urban sprawl has affected our cultural traditions and customs because people are now shifting towards suburban areas and they do not pay attention to their cultural values and traditions. They are now mixing up their cultural values with those of those who recently migrated to Dera Ismail Khan, (Participant 1, G 1)

Yes, it has impacted our cultural traditions and customs. Most of our community members do not get themselves engaged in our cultural festivals. They do not follow

cultural norms and values because all of our community members are scattered some of them are living outside the city on one end and some of them at the other end. We have almost lost our cultural traditions, (Participant 1, G 3)

Urban sprawl has created a challenging environment for us. All of our cultural traditions are mixed up with that of local cultural traditions. Before urban sprawl, our community members used to support each other, but now it has changed members of our community do not support each other, (Participant 1, G 6)

Cultural traditions, customs, and practices are central to any culture. A loss of cultural traditions becomes a threat to cultural identity. Before urban sprawl, people in Dera Ismail Khan followed their cultural traditions, practices, and customs. However, this has changed, and the cultural traditions of migrants and locals are mixed up. Technological advancement and modern cultural traditions have also impacted their cultural traditions. Urban sprawl was central to changing cultural traditions, practices, and customs. Ceremonies and rituals associated with vital events, including birth, death, and marriage, are evolving. One significant influence is observed through the practice of the migrants. These contemporary practices are often perceived as a threat by the elderly members of the community. The younger fellows are not much bothered by this change. It is observed that marriage patterns have changed, including some modern practices and some other cultural traditions. Cultural traditions are mixed because Dera Ismail Khan has become a multicultural society where members from different communities live together and share their culture. In this way, their cultural traditions and customs are mixed up. The young community members do not follow their cultural traditions. Instead, they follow modern cultural traditions. Before urban sprawl, they lived by their cultural values and norms, but this has changed.

Cultural Change

Both the migrants and local members of the society were asked about any cultural change that occurred due to urban sprawl. They responded that,

Our social and cultural values are mixed up with the migrants from other areas. It now includes some other cultural traditions and practices which were counter to our culture but now people follow them and have forgotten their own, (Participant 7, G 1)

Our dress code and food culture is changed. After the influx of migrants from Waziristan and Afghanistan during the war on terror, we followed their food culture and their traditional dress code also, (Participant 3, G 2)

Our culture is modified now as the city expands, people migrate to seek quality life the share their own culture with the residents. Migrants are increasing day by day in number than the residents. Our cultural ideas are now mixed up with the cultural values of migrants, (Participant 1, G 3)

A lot of cultural changes occurred due to urban sprawl. After the migration of people towards Dera Ismail Khan, their cultural traditions, practices, values, and norms were different from those of the local culture. The local respondents said that their food culture, language, marriage patterns, and cultural identity are much affected by the migrants' cultural traditions and values. Change is an inevitable part of any society or culture. However, the locals view it as a damaging factor for their culture and younger generation. Language, food, dressing styles, participation in various festivals seemed altered with the influx of migrants who have different living styles and thinking patterns. They added that after the influx of migrants, the local culture is dominated by other cultures because now migrants are higher in numbers than the locals. Their increase in population affected

their culture and as a result, cultural change occurred in local culture. The viewpoint of migrants about cultural change was different. They said that their cultural traditions and values are mixed up with the local culture. The researchers explored that with the passage of time most of the local and migrant cultural values, norms, and traditions mixed up. This led to the establishment of a homogenized culture. This phenomenon is called cultural hybridization. Now they both local and migrant, follow a homogenized culture.

Access to Public Amenities

Urban sprawl has created a wider gap between residential areas commercial sectors, and public healthcare centers. The distance between residential areas and public amenities is increased and there is a lack of public transport because of low-density development.

Our access to public amenities and communal spaces is limited. People do not take their families to public places due to overcrowding. Communal spaces are now almost lost. The only communal space left is the town hall which is now also a property of Tehsil Municipal Authority of Dera Ismail Khan. It is far away from our home we cannot get access due to the long distance between the town hall and residential areas, (Participant 4, G 1)

When I was 10 years old, my family used to go outside such as public parks and restaurants but now due to the population increasing and male dominance in society parks are filled up with male gender. Families do not go outside to prevent harassment, (Participant 2, G 2)

Urban sprawl resulted in massive population growth, migrants and tourists from rural areas visit public parks and town halls. 95% of these visitors and migrants are male. To avoid an unhappy incident our families do not allow us to go outside, (Participant 4, G 2)

The unplanned rapid expansion of Dera Ismail Khan has negatively impacted people's access to public amenities. Their access is limited because of urban sprawl. The researchers found that the increased population resulted in overcrowding and a lack of resources. In the same way, there is no public transport available in new urban zones. They are dependent on private vehicles. The increase in the number of vehicles creates traffic problems and air pollution. It is observed that the administration has no proper arrangements to manage the situation. The unchecked influx of migrants and growing suburban settlements are causing multiple problems for the people. There are limited social and public services that become problematic for the natives as well. The marginalized and vulnerable groups are mainly suffering from this scenario.

People in Dera Ismail Khan have limited access to pure water. Their hospital access is hindered by overcrowding and a lack of proper health facilities. The researchers noticed that the public parks were overcrowded, and the local government needed to work more efficiently to clean roads, dispose of garbage in parks, and manage solid waste. Access to public amenities for local and migrant residents was greatly affected by urban sprawl, especially for aged ones and females. They said that their regular checkup from hospitals is interrupted by heavy traffic and a lack of public transportation. One of the aged members said that they have no access to clean water and drink underground water because of the inefficiency of local governments in providing purified water to the people.

Discussion

This research was conducted to study how urban sprawl affects people's social and cultural life in Dera Ismail Khan. The researchers enquired about the socio-cultural consequences of urban sprawl through focus group discussions with the local and migrant residents of Dera Ismail Khan.

The first objective was to determine urban sprawl's impact on social interaction and cohesion. He found out that social cohesion and social interaction between the community members of Dera Ismail Khan are also being affected by urban sprawl. Low-density scattered development due to urban sprawl has negatively affected the social cohesion among the community members of society in Dera Ismail Khan (Ali et al., 2019). Social Cohesion and social interaction are the main aspects of society. Low-density development resulted in social segregation. Urban sprawl has eroded the social cohesion among communities while traditional societies had strong social cohesion in the past. The researchers found a research gap in how social interaction is affected by urban sprawl because social cohesion occurs as a result of social interaction. After doing this research, we found no physical interaction between members of society in Dera Ismail Khan. An aged local respondent said that technology and urban sprawl are the reasons for the loss of social interaction and cohesion. He added that their community members are far from each other due to scattered development. This has affected their social cohesion and social interaction. Now, their community members do not interact physically but through social media.

The second objective of this research was to explore how urban sprawl has impacted their cultural identity and traditions. It is a claim and a reality that urban sprawl has impacted cultural identity. Khan et al. (2012) explored how urban sprawl has affected the cultural heritage, traditional architecture, and historical sites. The researchers found a research gap in how the urban sprawl has impacted cultural identities and traditions. The researchers explored people's cultural identity in Dera Ismail Khan, which is affected by urban sprawl. One of the aged local respondents revealed that their cultural identity is much affected by urban sprawl due to the migration of people towards Dera Ismail Khan. The migrants came up with their cultural ideas, values, and traditions. The cultural values of migrants and locals are mixed now and have affected their cultural identities. A young male respondent said that urban sprawl has increased population because of people's migration towards urban areas. He was of the view that he felt like he was from a minority group because of the increase in migrants.

In the same way, the cultural identity of migrants is also being affected by urban sprawl. An aged male respondent said that they have lost their cultural fabric. Urban sprawl has resulted in a homogenized culture that has overshadowed their cultural identities (Baqar et al., 2021).

The third objective of this research was to explore how their access to essential resources is affected by urban sprawl. Leapfrogging developments have created a wider gap between residential areas and primary service centers. This research describes how and why people are moving towards suburban areas. The researchers found a research gap in this research about how people's access to public amenities is being affected by urban sprawl. The researchers explored people's access to public amenities and primary resources. There, he found out that their access to local transportation, healthcare centers, pure water, public parks, and markets is negatively affected by urban sprawl. An aged local respondent said their access to healthcare centers is hindered because of a lack of access to public transportation. Public buses are crowded, and the bus stand is far from our home. Most of the respondents revealed that public parks are full of drug abusers, and one can see them all lying on benches. The female respondents added that their access to the market is also affected by heavy traffic.

Discussion with the participants (locals and migrants) unveiled their views about cultural identities that they consider being threatened because of urban sprawl in such a way that their language, dress codes, and food culture are being changed. Researchers have found that social cohesion among the members of communities in Dera Ismail Khan has almost ended because of urban sprawl. The main reasons are new urban settlements and long commutes between these new residential areas and core urban areas. The migration of people from rural areas towards Dera Ismail Khan has created a strange environment. Less social interaction was observed between local community members and migrants. During the data collection process, researchers found that the cultural traditions of local and migrant residents of Dera Ismail Khan are also being changed. The researchers found out the main reason behind changing cultural traditions, which is that the cultural traditions of locals and migrants in Dera Ismail Khan are mixed up and follow mixed cultural traditions, which also lead to a hybridized culture. The researchers refer to these mixed cultural values and traditions as hybridized cultural values and traditions.

Moreover, the process is termed cultural hybridization. The increase in population leads to overcrowding in Dera Ismail Khan. The researchers observed that traffic congestion and poor road infrastructure had affected people's access to public amenities.

Conclusion

Urban sprawl has impacted people's social and cultural life in Dera Ismail Khan, so their cultural identity is in danger. They have lost their social interaction and social cohesion among the community members. The researchers found that cultural changes occurred in the local cultural values, traditions, and norms of the migrants. Both migrants and locals now follow a homogenized culture. Their access to public amenities is much affected by the unplanned urban expansion. People became dependent on private cars because of the lack of public transportation. This increased use of private cars leads to air pollution and traffic problems. The local government needs to be more efficient in mitigating the consequences of urban sprawl.

Recommendations

Following are some suggestions and recommendations for future research.

- Long-term studies should be conducted to explore the evolution of urban sprawl.
- For future research, it will be helpful for entertainment to explore the consequences of urban sprawl on climate change.
- Research should be conducted to study the consequences of urbanization on health.
- Future research about the impact of urban sprawl on the city's infrastructure will help highlight the infrastructural consequences of urban sprawl.
- It will be helpful to research the economic consequences of urban sprawl.

Limitations

While conducting this research, the researchers encountered some limitations regarding the accessibility of relevant literature on the researcher's research topic. The second limitation of this research faced by the researchers while conducting the focus group discussion was the shortage of time. A focus group discussion took almost 70 minutes, which the researchers think was insufficient. Respondents were not willing to spare more time.

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