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#### **Abstract**

Over the last few decades, urban sprawling and agricultural land consumption has been out of control in Pakistan. Pakistan is one of the most rapid urbanizing countries in South Asia. The present study examined the issue of urban expansion in Bara Kahu Islamabad Pakistan, relating the expansion of urban sprawl, loss of agricultural land, and evolution of new socioeconomic impacts on agricultural societies. This study identifies the socioeconomic drivers. Explanatory and qualitative research designs and unstructured questionnaires were used to collect data. A sample of 30 respondents was taken from the population using snowball sampling. Urban sprawl leads to demographic change which leads the younger population to shift to urban areas in search of better economic opportunities, jobs, and employment this leads to aging farmers and a shortage of farm labor. Ultimately, urban sprawl has lots of socioeconomic consequences on agricultural communities, like economic instability, unemployment and health issues. Addressing these issues to make urban planning and policies that balance urbanization with the preservation of agricultural land and rural livelihood.

Keywords: Socioeconomic, Livelihood, Urban Sprawl, Agriculture, Explanatory

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#### **Title**

#### Socio-Economic Consequences of Urban Sprawl on Agricultural Communities in Bara Kahu Islamabad

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#### **Abstract**

Over the last few decades, urban sprawling and agricultural land consumption has been out of control in Pakistan. Pakistan is one of the most rapid urbanizing countries in South Asia. The present study examined the issue of urban expansion in Bara Kahu Islamabad Pakistan, relating the expansion of urban sprawl, loss of agricultural land, and evolution of new socioeconomic impacts on agricultural societies. This study identifies the socioeconomic drivers. Explanatory and qualitative research designs and unstructured questionnaires were used to collect data. A sample of 30 respondents was taken from the population using snowball sampling. Ultimately, urban sprawl has lots of socioeconomic consequences on agricultural communities, like economic instability, unemployment and health issues. Addressing these issues to make urban planning and policies that balance urbanization with the preservation of agricultural land and rural livelihood.

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#### Introduction

Within the next couple of decades, the urban sprawl and urbanization rate will be predicted to increase and more than 50% of the world's population will start living in cities by 2050 (Brears & Robert, 2016). Urban sprawl, Urbanization, and other demographic changes created many

challenges in developing countries such as food insecurity, hunger, and malnutrition, the food system in many third-world countries where urbanization is growing fast, such as Asia and Africa will face many challenges, and conversion of fertile agricultural land into an urban residential areas led to pressure on food adjustment (Seto et al., 2012).





One of the most vulnerable impacts of urban sprawl is the loss of agricultural land, which is increasingly being converted into urban areas. This results in a decrease in the availability of fertile land and poses a threat to food security. Due to the unprecedented rate of urban growth and sprawl, fertile agricultural lands are being transformed into residential areas. This issue is prevalent worldwide but is particularly common in the Global South (Lasisi et al., 2017). The economic dimension is one of the important factors that pull the world towards urbanization and urban sprawl (Farrell, 2018).

There are many factors that are the cause of urban expansion like rural poverty, inability of basic facilities, transportation problems, and other services that drive rural residents towards urban for search of a better life (Sridhar et al., 2012). Urban sprawling and land cover change are the most important global issues facing developing countries, especially in Asia, Africa, and South America. Uncontrolled population and economic growth led to changes in agricultural land into industrial and residential areas, due to this urban sprawl in developing countries emerged as a major economic and social challenge (Tacoli, 2020).

Cities have a great experience in dealing with immigrants sent from one or more places (Brettell, 2000). With time, cultural changes and social development bring lots of changes in human society. Due to these changes some culture or tradition breakdown, some reoriented and some emerged. In this scenario, urbanization is one of the main factors that has a significant impact on the social and natural environment of the society (Chaudhuri, 2015).

Urban sprawling is the expansion of suburban or urban areas that takes place due to many factors such as population growth, economic development, and natural catastrophes. In Pakistan urban sprawling and urbanization have been occurring for the last few decades. Pakistan experiencing the highest urbanizing country in South Asia by annually increasing 3% of urbanisation rate.it is estimated that half of the country's population will live in cities by 2025. The

main reason for urbanization and Urban sprawl in Pakistan is due to intermigration from rural to urban and the displacement of people from other parts of the country due to terrorist attacks (Hasan, 2016).

# **Objectives**

- To study the impact of urban sprawl on community structure, and cultural and demographic change.
- To investigate the effects of urban sprawl on agricultural land, productivity, and source of income.

#### **Review of Literature**

The rapid urbanization and demographic shifts, particularly in developing countries, unprecedented challenges related to hunger, food insecurity, and malnutrition. As urbanization accelerates, especially in regions like Africa and Asia with the highest urbanization rates, food systems face significant pressures to adapt, particularly as urban growth encroaches upon some of the world's most fertile agricultural areas. The importance of urbanization in shaping the economic and social trajectories of nations has attracted increasing attention from international research and development communities. While urbanization was implicitly recognized in the past Millennium Development Goals (MDGs), the current Sustainable Development Goals (SDGs) explicitly acknowledge the direct link between urbanization and the degradation of natural resources, food insecurity, poverty, and sustainable development (Hatab et al., 2019).

The conversion of agricultural land into non-agricultural areas causes many problems such as the migration of the farming community from rural to urban causing many social and economic challenges (Güneralp et al., 2017). People in the neighborhoods always engage with each other by sharing equipment, celebrating festivals with each other, land leasing, and in irrigation developments. In the process of economic development, all these benefits and social loyalties are lost (Alford &

Yates, <u>2015</u>). In developing countries, the rapid growth of urbanization caused the loss of rural communities, and the lack of economic activities turned some communities into ghost towns (Wu et al., <u>2016</u>).

The rapid increase in industrialization creates conflict between agricultural and non-agricultural sectors on land use (Wang et al., 2018). Loss of agricultural land leads farmers to suffer many problems such as food security, and rural unemployment, and forces farmers to migrate towards cities (Helming & Tabeau, 2017). Urban sprawling and agricultural land loss cause food security, threats to traditions and rural lifestyles, loss of community identity, demographic change, rural-urban migrations, and increased crime rates. It also has economic impacts such as land price increase, reduction in agricultural products and agricultural land, income sources reduction, job security, household revenue increase, and increase in rural unemployment (Zhang et al., 2023).

Uncontrolled population growth is a serious matter for a country like Pakistan, whose economy lies in agriculture, high population, urban sprawl, and urbanization rate in Pakistan agricultural land lost and sustainable farming is endangered (Fatima, 2023). Agriculture is the backbone of Pakistan 18.9 percent of the country's GDP depends on agriculture. It provides direct or employment indirect opportunities approximately 70 percent of the population.it is the source of livelihood for more than 50 percent of Pakistanis and its driving source of the economy (Peerzado et al., 2018). Economic activities in Islamabad have risen during 2010-2019 due to business activities, especially in construction and real estate. These happened after the Governmental reforms in construction and real estate (Rehman & Zeb, 2020). The financialization of the capital led to urban sprawl, too many development activities, housing scenes, and real estate are causing urban sprawl in Islamabad (Rauf & Weber, 2020).

#### **Research Methodology**

The purpose of the study was to explore the socio-

economic consequences of urban sprawl on agricultural communities in Bara Kahu Islamabad. The researcher used an explanatory methodology and a qualitative research method for data collection. The researcher chose a qualitative method because it provides in-depth insight.

#### **Research Method**

The researcher has used observation, structured and semi-structured interviews and focus group discussion to explore the socio-economic consequences on the community. The researcher used the above methods for data collection to get in-depth knowledge and experiences of the respondents.

#### **Data Collection Tools**

The data collection tools were an observatory checklist, interview guide, and focus group discussion guide. These guides contained questions about how urban sprawl impacts on socio-economic system of the community. How urban sprawl changes the culture and tradition of society and how agricultural land use changes due to urban sprawling.

### Sampling

The research was conducted in Bara Kahu Islamabad. The researcher collected data through the snowball sampling method. The researcher selected 30 respondents to collect data.

#### Geography and Demography of Bara Kahu

Islamabad the capital of Pakistan is situated between Punjab and Khyber Pakhtunkhwa provinces. It is only federal territory that comprises both rural and urban regions. Bara Kahu is one of the rural territories of Islamabad which is facing urbanization and urban sprawl now. Bara Kahu comes under the jurisdiction of the UC Kot Hathia. It is the gateway of Muree and some other Northern areas. It is covered by Margalla hills which provide a beautiful sight for viewers. Despite being a well-established suburb of Islamabad but still, they are

still facing problems and lack the requisite infrastructure.

Figure 1



#### **Results and Discussion**

The finding of the research shows many socioeconomic consequences of urban sprawl on the agricultural community of Bara Kahu. Data were collected from interviews, observation, focus group discussions and document analysis to make known many facts about the topics. One of the major changes due to urban sprawl is demographic change due to urban sprawl young people move towards cities leaving aging farmers. This causes a deficiency in agricultural labor. The conversion of agricultural land into residential areas caused economic instability. As the price of land became high the desire to sell farmland became high too which led to the loss of farmland due to this local food production became low and people started to rely on imported food which is more expensive. Land loss caused the loss of traditions and culture of the society. Urban sprawling causes economic and social instability which causes a rise in health issues.

Urban sprawl causes economic and social instability which has many impacts on the health of citizens. Many economic, social, and demographic changes caused physical and mental health issues. Studies suggest that urban sprawl affects the indoor and outdoor environments of the

communities and their health (Zhang et al., 2023).In a social context, urban sprawl causes the loss of traditional and cultural norms and values, and urban sprawl is a threat to Cultural heritage and identity (Yasir & Farooq, 2024). Cultural heritage identity such as traditional farming, and equipment exchange, and celebrating festivals with each other. One of the most negative impacts of urban sprawl is the corrosion of the socio-culture of the community, traditional urban and rural communities have strong cohesion, but due to urban sprawl local communities are dispersed and the ties between communities are lost (Hassan, 2015). Urban sprawl affects the social cohesion of the agricultural community where they share equipment, celebrate festivals together, and perform many cultural rituals. Migrations of foreign people in the community led to a loss of social cohesion.

The result of this study shows the multiple socioeconomic effects of urban sprawling on agricultural communities. It shows the demographic shifts and rising unemployment changes in economic activities and farmland. The change in agricultural land into residential and industrial areas lead to altered economic activities. In Islamabad Pakistan, the land expansion was

165km in 1972, in 2009 it expanded over 252.35km. Similarly, the area of farmland has also decreased by 640.71km to 561.35 from 1972 to 2009 (Butt et al., 2011). The demographic change affects not only the farming community's economic activity but also the traditional farming knowledge. Urban sprawl affected many fields of human life among them socio-economic is one of the most important factors in human society it covers the social and economic domain of the society. 'At the beginning of urban sprawl, it became a new urban development pattern, and new social and economic issues emerged, most of the changes brought by developed countries. Many changes in societies come from globalization and industrialization which are caused by urban sprawl. Social change is the root cause of all political demographic and cultural change' (Masoumi et al., 2018).

The result suggests that the people of Bara Kahu strongly agreed that rural tradition, resources and ecosystem have decreased over the last two to three decades. Continuous urban growth leads to social and economic growth however urban sprawling is also responsible for environmental degradation and sensitive to ecological changes. Urban development needs lots of land resources resulting in loss of farming land, change in structure, and demographic changes (Tian & Mao, <u>2022</u>). According to the respondents they have lost their cultural and traditional identity also the sources of income generated by agricultural land. Intermigration is one of the important factors which cause urban sprawl. As the people who migrate from rural to urban experience their lifestyle, caused social change, their socio-cultural orientation and traditional norms and values change as they migrate from organic to mechanical society. Their lifestyle becomes better as they meet the opportunity to seek better education, health, and job opportunities. Their experience of social segregation and loss of community-level engagement (Gumma et al., 2017).

Through urban sprawling, the development and agricultural land use caused economic instability which is a critical issue. Urbanization has a direct impact on economic growth at the same time urban sprawl and urbanization pose many challenges as the population of cities grows rapidly. Developing countries have no proper plan to overcome this challenge (Hussain, 2016). As a developing country, Pakistan has been facing the wrath of urbanization for many decades but the policymakers of the country have no vision to overcome the challenges faced by the country due to urban sprawl and urbanization (Hussain, 2016). It has been seen in many developing countries as the land price becomes high farmers sell their agricultural land for immediate benefits and stay out-weight for long-term benefits. Urban sprawl causes deforestation, loss of biodiversity, environmental degradation, and agricultural land loss at the local level which has an impact on the global level (Abahussain et al., 2002). Loss of agricultural land caused food insecurity and people started to depend on imported food which is more costly and less accessible. Which caused economic instability and led to higher food prices and low assessable. In Pakistan migration and population increase are the major reasons behind urban growth, as a developing country due to insufficient facilities provided in rural areas, people migrate towards urban to seek better economic, social, education, and health opportunities (Akram & Siddiqui, <u>2018</u>).

According to the respondents, urban sprawl in Bara Kahu grew fast after 2008 during the military regime. Urban growth in Pakistan has taken place since 1971, after the military regime when democracy was restored in the country and the government created many job opportunities due to this people migrated toward urban to avail better opportunities (Shahbaz et al., 2017). Urban sprawl has affected the social cohesion of the agricultural community of the Bara Kahu. Urbanization and urban sprawl caused the erosion of social networks and community identity which are significant demographic, economic, and social consequences. Urban sprawl and urbanization are caused by economic development and modernization (Martínez-Zarzoso & Maruott, 2011). countries developing experience the situations where the influx of non-agricultural residents and migrations of youth from rural areas lead to social stratification. Lose of social and traditional bonding destroys the sense of belonging which was the historical characteristic of the rural communities.

#### Conclusion

Urban sprawl has caused the degradation and fragmentation of much agricultural land, which affects the feasibility and productivity of farming and has led to a threat to food security and agricultural productivity. The landscape change shifted the farmer economy, increasing land values and encouraging farmers to sell their farming land. However, some farmers have adopted diversified

sources of income from remaining farming practices. Urban sprawling disturbs the culture and traditions of the community and it affects the social networks and ways of life of the people. Many farmers were displaced and this transition led to problems like adjustments and urban and to get employment. Urban sprawl causes environmental, degradation, destroys and disturbs the natural ecosystem, increasing pollution, water and food security, and threats to remaining agricultural areas. Despite these negative effects and challenges, people are happy with this change because they think urban life has more opportunities education, employment, business, and health than rural.

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