

Unauthorized infill Development and Commercialization of high class Residential Area: A study of University Town Peshawar, Khyber Pakhtunkhwa

Samina Bibi*, Fazlur Rahman**

Abstract

Throughout the world, urban land use and land cover change is a common phenomenon in both developed and developing countries of the World. The main driving forces behind this process are rapid population growth due to natural increase and large scale rural urban migration. Urban population of the developing countries specifically in Asia is increasing at a very rapid rate. Consequently, there is substantial stress on the existing urban centers to accommodate the increasing population. Additionally, in these countries urban planning is in a juvenile stage and the relevant authorities consistently remain under political pressure. The absence of strict plan implementations and lack of monitoring are also creating problems in the implementation of byelaws and building codes. This study is an attempt to explore the illegal land use conversion in the University Town Peshawar. It is based on official data collected from Town III office and comprehensive field survey conducted in the study area in 2016. Analysis of the available data revealed that the high class residential neighborhood has been considerably transformed through infill development and illegal conversion of approved land uses.

Keywords: Infill development, land use, urbanization, monitoring

Introduction

Globally, urban development and land cover change is an observable fact which is related with urban densification as well as urban sprawl (Fazal, 2013). To accommodate the increasing population in urban areas availability of suitable land is one of the main prerequisites (Shirazi&Kazmi, 2014). Usually, urbanization attracts more activities and people into the urban area that essentially requires land and quite often need readjustment of the existing land uses(cf. Adebayo, 2009).This task is simultaneously accomplished through a combination of three interrelated processes i.e. filling up the vacant land, intensification of existing uses and peripheral development (Dewan, et al., 2012). At micro level the degree of urban land use intensification is generally related with the

*Lecturer in Geography, Government Girls Degree College, Sarai Saleh, Haripur, khushhabib@gmail.com

**Chairman, Department of Urban & Regional Planning, University of Peshawar, fazal367@uop.edu.pk

location of a neighborhood, accessibility and availability of urban facilities (Yusufzai, 2016). Moreover, absence of monitoring and proper implementations of bye-laws and approved structure plan is also encouraging encroachments and illegal changes in land use of existing town and cities (Wei, 1993). Compared to the developed world, in developing countries, unauthorized land use changes in planned townships and cities is quite common and considered as part of usual practices, where violation of byelaws and unplanned development is considered as a routine work in both traditional towns, and newly established site and service schemes (Pacione, 2001). In this regard, three interconnected factors such as political pressure, power of land mafia and real estate businessmen, play a decisive role in consistently undermining the implementation of building codes and structure plans. Additionally, relatively weak urban local governments and monitoring authorities are unable to sustain with political pressure and it always leads to violation of existing byelaws and illegal urban densification within the declared open spaces as well as infill development through the illegal division of large size residential plots (Bi Bi, 2018). However, at present, the situation has considerably improved and in most of the site and service schemes, developed both by state and private entrepreneurs, building codes and byelaws are strictly followed (cf. Kreutzmann, 1997; 2014). In the present study an attempt is made to find out unauthorized changes and commercialization in a pioneer low density high class residential neighborhood i.e. University Town, Peshawar.

The study area

Peshawar remained as one of the oldest surviving cities of Asia (Nadiem, 2007). From its initial establishment till present it has performed several functions such as administrative, commercial, educational, civics and others (Khan, 1985). According to Ahmad Hassan Dani, (1969) Peshawar has passed through many stages under the rule of Durrani, Afghans, Mughals, Sikhs and British till 1947. For many centuries Peshawar remained a fortified town with gates (Raverty, 1852). With the passage of time many physical developments had taken place including the addition of suburbs and major changes occurred during the colonial period from 1849 to 1947 (Imran, 2002).

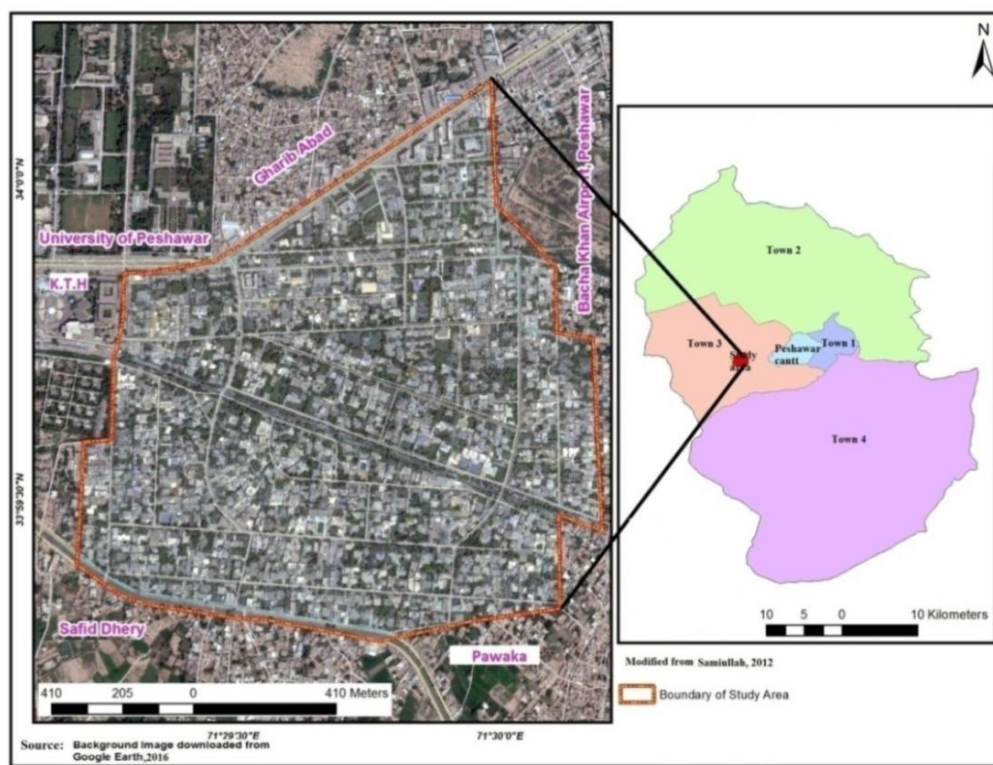
During the colonial period, it became a major strategic town in northwestern India, and most important changes occurred in the city with the addition of planned cantonment towards the west of the walled city (Spain, 1962 and Imran, 2002). Similarly, in 1901, North West Frontier Province was created and Peshawar was made its capital. This has further attracted commerce, trade and services. Moreover, the establishment of Islamia Collegiate School and Islamia College in 1913 also took place towards the west of the cantonment (Dani, 1969). In November 1925, the railway line was also extended from Peshawar to Torkham – the Afghanistan border – through the historic Khyber

Pass(Bayley, 1934).Thus with the passage of time, due to the addition of new infrastructure the existing land use of Peshawar city remained under consistent changes. However, major changes in all aspects of urban life became visible after independence and in the aftermath of Soviet invasion on Afghanistan in the late 1970s. In 1980s the influx of Afghan refugees and establishment of local as well as international mom governmental organizations (INGOs) in this city not only increased the population many fold but also added new functions to the existing neighborhoods. In order to accommodate increasing population, initially unplanned and semi planned residential neighborhoods were established and annexed with the walled city in all directions (cf. Sholes 1983).

Meanwhile the problem of housing was also felt by the government right in the beginning and in early 1950s a planned township for government officials was initiated on the south of new Jamrud road, close to Peshawar University, named University Town. It was a first planned high class low density residential neighborhood with total area of about 349 acres. There were 361 residential plots ranging in size from 12 to 2 kanals[†].The Peshawar international airport is located towards the east and this newly planned neighborhood was placed on both sides of the famous Peshawar Landi Kotal railway line. Geographically it stretches between 33°59' 23"to 34°00' 07" North Latitude and 71° 29' 12" to 71°30' 06" East Longitude (Map 1).Land for this township was acquired by the Government from Mouza Sufaid Dhery and Pawaka and six categories of residential plots were carved out. Based on size these residential plots were labeled from A through F, and earmarked for government officials based on their official rank. According to the available data 83% of the total town area was given to residential uses and almost 6% kept as open space and 10% was given to urban utilities including roads and streets (Table 1).

Map I Peshawar district showing the location map of study area

[†]A kanal is a unit of land area it is equal to 20 marlas, 505.857 square meter.

**Table 1 Area allocated for residential and other uses 1960**

Category and size of residential plots	Number of Plots	Area in (acres)	Area in (sq meters)	Percentage
A 12 Kanals	22	29.2	118,168.312	8.35
B 10 Kanals	53	64.5	261022.47	18.45
C 8 Kanals	69	71.2	288136.4	20.37
D 6 Kanals	88	66.8	270330.2	19.11
E 4 Kanals	98	46.9	189797.7	13.42
F 2 Kanals	31	12.4	50181.0	3.55
Total Residential	361	291	1177636.3	83.24
Open Spaces	0	20.8	84174.7	5.95
Rail Road	0	33.9	137188.5	9.70
Urban utilities	0	3.9	15782.7	1.12
Total other uses	0	58.6	237145.9	16.76
Grand Total	361	349.60	1414782.3	100.00

Source: Data collected from the office

Building byelaws and commercialization

For development of the university town, preparation of structure plan and drafting of byelaws University Town Development Committee was constituted in late 1950. This whole task from initial planning, implementation and monitoring of the ongoing developmental work was entrusted to that committee. The site plan was prepared and byelaws were drafted. There were 30 clauses in the byelaws. Clause 5 and 28 were providing guidelines for general land use and construction of houses on a residential plot. For the purpose of this research and analysis of available data these clauses are reproduced as under:

(5). The main residential building shall not occupy more than 30 percent of the whole area and the subsidiary building i.e. (servant quarters, garages and stables) not more than another 12% of the total area of the compound. Clause 5 above has been amended by the committee in its meeting held on 25-3-1957 vide item No. (i) 8 Sub item No. (ii), and (iii) as follows-

- (i) That the plots have been allotted for building only one residential house and annexes etc. will not be allowed. (emphasis added)
- (ii) The total built up area [covered area] of a plot including servant quarters should not exceed 33% of the total area. (emphasis added)

(28). No residential plot in University Town can be converted as a whole or part for commercial purposes i.e. shops, cinema, restaurant, petrol pumps etc. (emphasis added)

Since the surrounding area of this town was not developed and at that time it was located in the periphery of the city. The only advantage of this town was its proximity to Islamia College and Peshawar University. The developmental work started as per schedule and during that time both the structure plan and byelaws were properly followed and implemented in letter and spirit. However, with the passage of time urban expansion and ribbon development took its momentum on both sides of the Jamrud road with the establishment of Pakistan Academy for Rural Development (PARA) and Khyber Hospital. Meanwhile, due to population growth, improved security situation and opportunities of employment, construction of houses also started in northern side of the Jamrud road. However, rapid and haphazard development in the western side of this town started with the establishment of Hayatabad planned township. The influx of Afghan refugees further accelerated the occupancy of the vacant buildings and construction of new houses there as most of the wealthy refugees get settled in Hayatabad.

Similarly, the problem of unauthorized commercialization in University Town Peshawar accelerated with the arrival of Afghan refugees in 1980s. A number of international non-governmental organizations (INGOs) rushed towards Peshawar for the assistance of

Afghan refugees and their head offices were mainly based in the study area. As a result, many houses have been totally or partially converted into INGO offices, hospitals etc. Even today, the International Red Cross office is located within the premises of the study area (Ullah 2016a; Bi Bi, 2018). Later on with the repatriation of Afghan refugees in 1988, other uses also penetrated and residential areas were converted into private medical clinics/laboratories, private schools/colleges/universities and guest houses. The mushrooming growth of Non-Governmental Organizations (NGOs) during 1990s also worked as a catalyst of change and many NGOs opened their offices in the study area. The proximity to the Khyber Hospital has its considerable influence on the western margins of this town, where many houses on both sides of the park road have been converted into medical clinics, diagnostic centers and pharmacy stores. The process of encroachment of commercial areas on residential uses was going on quite rapidly after 1990. Moreover, few houses were also converted into large scale commercial centers, shops and restaurants were opened there. The residents of the study area were not happy with this unauthorized and illegal development (The News 2016).

Litigation and amendment in local government act 2013:

For the first time in 1999, the Administrator University Town Committee attempted to implement the then NWFP Building Regulations of 1985 and issued notices to all unauthorized and illegal users within the territorial limits of University Town. However, the defaulters challenged those notices in Peshawar High Court through writ petition No. 679 of 1999 which was decided on 30.10.2003 whereby all commercial and unauthorized activities within the jurisdiction of the study area were declared illegal by the honorable Court (*Haq V_GoKP* 2015). However, that judgment was not implemented by the concerned authorities in letter and spirit and consequently mushroom growth of illegal activities took place within the said Township. Nevertheless, the concerned authorities again issued notices to the illegal occupants. These notices were individually challenged by the defaulters in Peshawar High Court through Writ Petitions No. 2635-P of 2013, as well as W.P. Nos. 3152-P, 3375-P, 3380-P, 3468-P, 3491-P, 3492-P, 4578-P, 3658-P, 3653-P of 2014 and W.P No 47-P of 2015. The honorable Peshawar High Court dismissed these petitions in 10.03.2015 and issued directions to the respondents for compliance (GoKP, 2015). Since the violators/mafia was quite strong and large in number, therefore, the court judgment of March 2015 was again put under the carpet (Ali 2016; Bi Bi, 2018). Moreover, during the course of hearing, the Town Municipal Officer (TMO) Regulation had informed the bench that as per the court's directives they conducted survey and found out that **300 buildings** were being used for commercial purposes (Amin, 2016). Additionally, it was also reported in the press that the officials of United Nation High Commissioner for Refugees (UNHCR) did not cooperate with the Town III administration (Yusufzai, 2016).

With the passage of time increasing number of illegal/unauthorized activities considerably disturbed the daily life and comfort of the residents. The owners of educational institutes are busy in making improvement through adding new structures to the existing institutes (Baseer, 2015). Moreover, the CCTV cameras installed around the NGO's offices and different UN aid agencies buildings consistently breaching the privacy of local residents (The News, 2016). To ameliorate the situation and implementation of court directions, residents of the study area filed two writ petitions i.e. 250-P and 520-P of 2016 in Peshawar High Court (*Haq V_GoKPK* 2015). Consequently, before the judgment of the honorable court on these petitions, an amendment was passed by the provincial assembly in the Khyber Pakhtunkhwa local government act 2013 section-9 has been amended and sub-section 4 & 5 have been added to it, whereby five-year extension has been given to illegal and unauthorized uses in the study area (GoKP, 2017). Thus, both businessmen and elected public representatives joined hand together to rob the legal rights of genuine residents of the University Town.

Meanwhile, it is very interesting to note that the population of the study area decreased almost three times from 9661 persons in 1972 (GoP, 1975), to 3269 in 1998 (GoP, 1999). These figure needs strong justification for interpretation, however, with other administrative cause i.e. inclusion and exclusion of localities in the town committee limits one of the main reason can be the conversion of houses into educational institutions, offices and guest houses.

Figure 1 Infill development of study area 2015-16



Source: Background Image downloaded from Google EarthPro.4.2

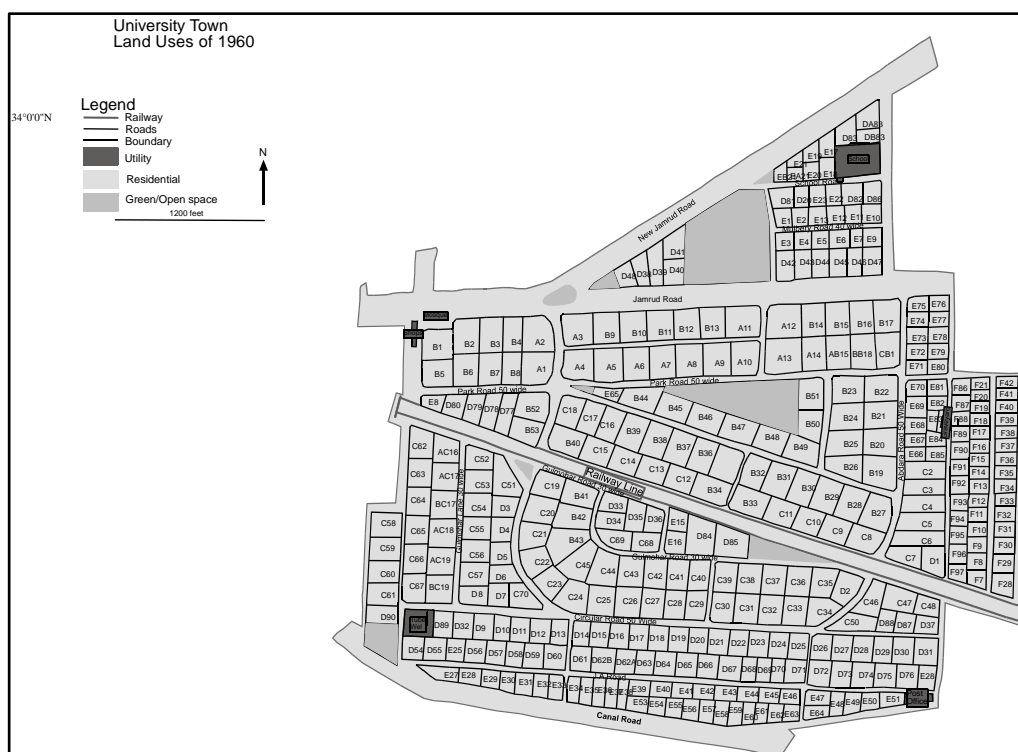
Materials and methods

The present study is mainly based on data collected from the office of the University town committee. However, for the preparation of general land use map comprehensive fieldwork has been conducted in the study area. The map of study area has been scanned, geo-referenced and then digitized by using Arc GIS software to show the distribution of different land uses. For changes related to infill development, the base map of the study area has been overlaid on Google earth image. Population data have been collected from district census reports of Peshawar district.

Results and discussions

Initially 83.96% of total town area was given to residential and remaining 16.59% was set aside for other utilities or urban facilities (Map II). However, analysis of the official data and updated land use map revealed that 33% residential and 5% open/green spaces have been illegally converted into commercial and other uses as shown by Map III. The analyzed data further revealed that major changes in residential land uses have taken place along the principal roads, such as Park road, Abdara and Chinar road. Most of the new additions along these and other roads within the study area were educational institutions, private health care centers and commercial outlets. According to the information provided by Tehsil Municipal Officer (TMO) in 2017, 300 buildings were used for commercial purposes in the study area and around 15,000 persons are engaged in these activities. The number regularly enrolled students in the educational institutions of various levels from kinder garden to university have been estimated to be more than 50,000 (Ullah, 2016b). Additionally, the tuition centers popularly known as academies also enroll thousands of student on short time basis throughout the year for various tests and examinations.

Map 2 showing the University Town land uses of 1960



Source: Town III Committee office Peshawar

The analyzed data revealed that up to 2016-17, major changes in land use has been taken place in the study area. More than 117 residential plots of various categories have been converted into illegal uses. Infill development also widely took place throughout the study area whereby one residential plot has been illegally subdivided and many houses have been constructed there (Map 3). This can be very easily identified from the numbering system of residential units like B-1(4) reveals that four separate/independent housing units had been constructed on a 10 Kanal size plot B-1 (Table 3). It is worth mentioning that the concerned authorities have never taken notice of this illegal bifurcation and violation of the byelaw. Moreover, the bonafide residents and property owners of the study area are also in favor of this activity. This process of infill development and urban densification has its impact on urban facilities as well. The collected data also revealed that a new residential category has been added in the northern side of the study area in a declared vacant plot between the old and new Jamrud road and named as G Category (Map 3). According to the approved structure plan of the study area this was a green space which had been illegally converted into residential area. Similar to infill development and unauthorized urban densification neither the resident and nor the town committee officials raised any objection (Bi Bi 2018).

Table3 Conversion of residential plots along the major roads 2016-2017

Details of residential plots totally and partially converted into;

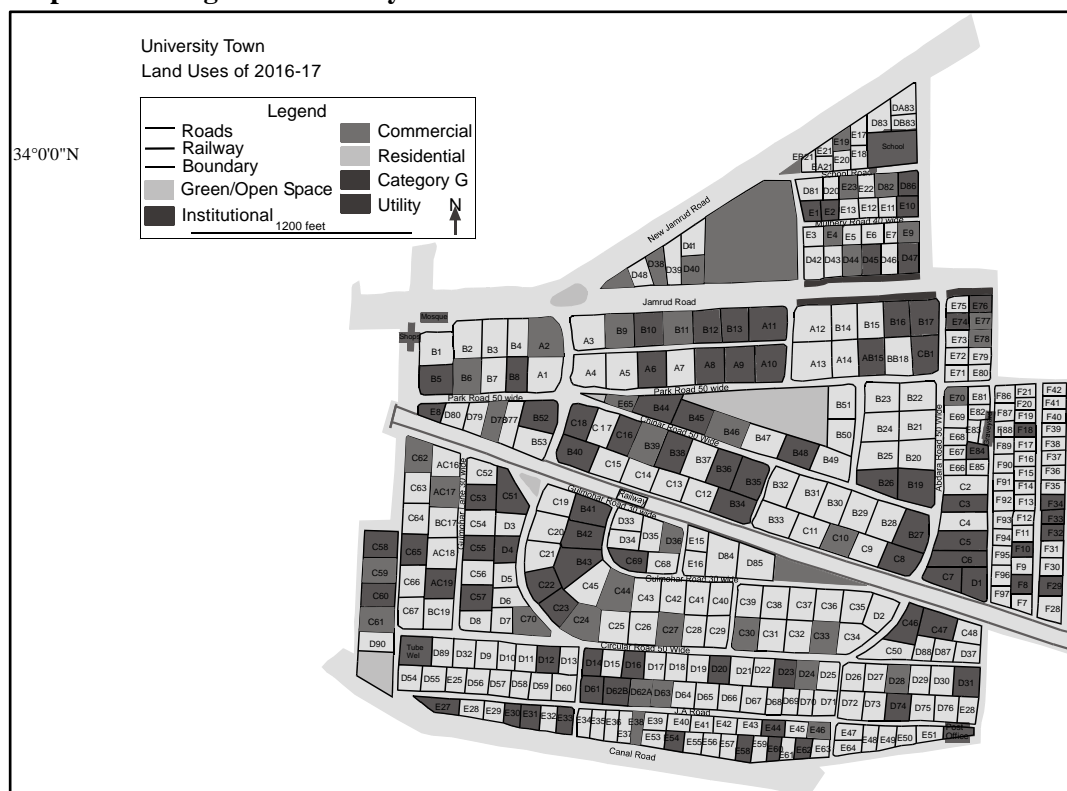
Name of the Road	Institutional Land uses (offices and educational institutions)	Commercial Land uses (clinics and other out lets)	Total
Khushhal Khan Road	F18, F24, FA17, F129, F32, F33, F34 (7)		7
Rehman Baba Road	FA8, D1, E76, E84, F10, C5 (3Plot), F3-(9)	E77, E78- (2)	11
Abdara Road	C6, B17, B1-17, E10, D86, C3, CB1, E74, D86(5)-(14)	E70, C71, B98A, D-86-(18)	18
Old Jumrud Road	A11, B13, B12, B16, D47, D45, (6)	D45, D44, B10, B32-(4)	10
Park Lane/ Park Road	A10, A8, A6, D80 (2), B5, B52, AB15, AB-9(2), B44, B1(4), B8, E8, B5-(18)	C23, E65, D78, B6, E8, E8, E8, E8, E8, E8-11	29
Chinar Road	B45, B38, B45(2), B36, B27, B48, B26, B19, B1-19(10)	C18, C2-18, C16, B39, B46, B27-(6)	16
Jamaluddin. Afghani Road	E27, E44, D74, E38, D62, D61, E33, D31, E31 -(9)	A2, E46, D63, D62-(4)	13
University Town Road	C60, C65, C58, C1-58, C1-62-(5)	C 59, C1-59, C61, C62-(4)	9
Circular Road	D20, D23, D14, DA12, DB12, D16, D31, C46-(8)	B11, D24, C33, C1-46(4)	12
Canal Road	E 31, E54, E58, E60-(4)	C 27, E38-(2)	6
GulMohar Road	AC19, C57, B41, E15, C16, C18, C55, C53, C68-(9)	AC17, D36-(2)	11
S.A.Q Road	C47, C35, C39, B34, B42, B43, C69-(7)	C 44 -(1)	8
Park Avenue	D4, C22, C23-(3)	C51, C70, C24 -(3)	6
Railway Road	B40, 10C-2, C8, C7-(4)		4
Total			160

Source: Town III Committee Office Peshawar

Similarly, the population growth has also increased burden on available urban facilities. The data collected from town committee office revealed that the number of water connections increased more than four times from 300 in 1970 to 1000 in 2017. Moreover,

the number of tube wells also increased from 4 in 1970 to 8 in 2016. Moreover, the sewerage system was also expended to sustain the population pressure.

Map III showing the University Town land uses of 2016-17



Source: Field survey in University Town Peshawar

Findings and conclusions

University Town Peshawar, established as a first planned high class residential area in 1960, has undergone a lot of illegal and unauthorized changes. A number of factors have played their role in transforming this town from low density residential neighborhood to unauthorized commercial and institutional area. This reflects the weakness of our institutions in implementation of structure plan and byelaws. Though residents of the study area have taken notice of this development and the honorable court also played its role. However, the concerned authorities showed considerable negligence in the implementation of court directives and allegedly favored the defaulters and damaged the sanctity of the rule of law. Meanwhile both the residents and law enforcing authorities remained on the same page. This led to unplanned illegal infill development. The end of the whole process of serving notices on defaulter, litigation in the court of law ended in an expected tragic way whereby implementation of law and court directive were set aside

through amendment in the local government act by the provincial assembly. This highlights the fact that how difficult it is to implement the structure plan of a town when the defaulters were wealthy and politically active. Based on this study it is concluded that the owners of businesses in collaboration with the officials of University Town Committee joined hands with the public representatives in order to rob the rights of genuine inhabitants of the Town.

References

- Adebayo, M. (2009). Impact of urban land use changes on property values in Metropolitan Lagos. *The Social Sciences*, 4(1), 111-117
- Ali, F. (2016). Final Warning, District govt ordered to seal commercial entities till Oct 18. *The Express Tribune*. Published: September 8, 2016 URL= <https://tribune.com.pk/story/1178177/final-warning-district-govt-ordered-seal-commercial-entities-till-oct-18/>
- Amin, A. (2015). Schools, Hospitals ordered to shift from Peshawar University Town, *The News International* Islamabad. Published March 12, 2015 URL= <https://www.thenews.com.pk/print/28791-schools-hospitals-ordered-to-shift-from-peshawars-university-town>
- Bayley, V. (1934). *Adventure through khyber*. London: Gian Publishing house.
- Baseer, S. K. (2015). Commercial activities in residential area, *The Nation*. Published September, 29. 2015 URL= <https://nation.com.pk/29-Sep-2015/commercial-activities-in-residential-area>
- Bibi, S. (2018). Infill Development and Commercialization of High Class Residential Areas in Khyber Pakhtunkhwa Pakistan. Unpublished M.phil Thesis, submitted to the Department of Geography University of Peshawar.
- Caroe, O. (1957). *The Pathans*: Oxford university Press.
- Dani, A. H. (1969). *Peshawar, Historic City of the Frontier*. Khyber Meel Publications, Peshawar.
- Dewan, A. M., Yamaguchi, Y., & Rahman, M. Z. (2012). Dynamics of land use/cover changes and the analysis of landscape fragmentation in Dhaka Metropolitan, Bangladesh. *GeoJournal*, 77(3), 315-330.
- Fazal, S. (2013). *Land Use Dynamics in a Developing Economy: Regional Perspectives From India.*: Springer.
- Farroq, U. (2016) UN offices in Peshawar's University Town likely to be sealed. *The Express Tribune* Pakistan. Published: August 18, 2016 URL= <https://tribune.com.pk/story/1164748/deadline-expires-un-offices-university-town-likely-sealed/>
- GOP (Government of Pakistan). (1962) *Peshawar District Census Report 1961*. Population Census Organization, Islamabad.
- GOP (Government of Pakistan). (1975) *Peshawar District Census Report 1972*. Population Census Organization, Islamabad.
- GOP (Government of Pakistan). (1999) *Peshawar District Census Report 1998*. Population Census Organization, Islamabad.
- GoKP (2015). The Khyber Pakhtunkhwa Tehsil and Town Municipal Administration Rules of Business, 2015. Available at URL= lgkp.gov.pk/.../The-Khyber-Pakhtunkhwa-Tehsil-and-Town-Municipal-Administration.

- GoKP (2017). The Khyber Pakhtunkhwa Tehsil and Town Municipal Administration Rules of Business, 2017. Available at URL=lgkp.gov.pk/.../The-Khyber-Pakhtunkhwa-Tehsil-and-Town-Municipal-Administration.
- Haq V GoKPK(2015)Writ Petition No.2635-P of 2013: Judgment sheet Peshawar High Court,PeshawarJudicial Department
URL=<https://www.peshawarhighcourt.gov.pk/PHCCMS//judgments/WP-No.2635-P-13-and-9-others.illegal-business-.pdf>
- Imran, I. R. (2002). *Peshawar Cantonment through the ages*.
- Khan, A. (1985). *A Case Study of Socio-Economic Conditions in Urban Fringe of Peshawar*. Unpublished M.Phil Thesis submitted to Department of Geography, Applied Geography, Urban and Regional Planning University of Peshawar.
- Kreutzmann, H. (1997). Prospects and presence of a planned capital city: The case of Islamabad in Pakistan. *Applied Geography and Development*, 50, 64-86.
- Kreutzmann, H. (2014). Islamabad - Living with the plan. *Sudasien*, 3, 135-160.
- McConnell, V., & Wiley, K. (2010). Infill Development: Perspectives and Evidence from Economics and Planning. Available at URL=<http://www.rff.org/News/Features/Pages/Infill-Development-Perspectives-and-Evidence-from-Economics-and-Planning.aspx>.
- Nadiem, I. H. (2007). *Peshawar, Heritage History Monuments*. Lahore: Sang-e-Meel Publications.
- Pacione, M. (2001). Models of Urban Land Use Structure in Cities of the Developed World. *Geography*, 86(2), 97-119.
- Shirazi, S. A., & Kazmi, S. J. H. (2014). Analysis of Population Growth and Urban Development in Lahore-Pakistan using Geospatial Techniques: Suggesting some future Options. *South Asian Studies*, 29(1), 269-280.
- Scholz, F. (1983). Urbanization in the third world--the case of Pakistan. *Applied Geography and Development*, 21, 7-34
- Spain, J. W. (1962). *The Way of Pathans*. Robert Hale Limited London.
- The Daily Dawn. (2016, May 06). Commercial activities in University Town protested. Bureau, Report The daily Dawn. Retrieved October 12, 2019 from <https://www.dawn.com/news/1256649>
- Ullah, I. (2016, August 31). 50 Illegal Commercial Outlets Sealed. *The Express Tribune Pakistan*. Retrieved January 12, 2020 from <https://tribune.com.pk/story/1173028/50-illegal-commercial-outlets-sealed/>
- Ullah, I (2016b) University Town issue: Sealing of institutes to affect education of thousands. The Express Tribune Pakistan Published: September 5, URL: <https://tribune.com.pk/story/1175924/university-town-issue-sealing-institutes-affect-education-thousands/>

- Wei, Y. (1993). Urban Land Use Transformation and Determinants of Urban Land Use Size in China. *GeoJournal*, 30(4), 435-440.
- Yusufzai, A. (2016, July 18). UN contacts center to retain offices in University Town, *the daily Dawn*. Retrieved December 02, 2019 from <https://www.dawn.com/news/1273721/un-contacts-centre-to-retain-offices-in-university-town>