Expansion of Residential Colonies and Conversion of Farmland in Bahawalpur City, Pakistan: A Temporal View

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Abstract: This study focuses on the issue of farmland conversion into housing colonies in Bahawalpur City. In order to understand the magnitude of this issue, data of 102 sample colonies was collected for the period of 1950-2011 through field survey and secondary sources including TMA Bahawalpur City. The year of establishment, area occupied and legal status of colonies were recorded and the data were aggregated into 10-year categories for analysis and to produce temporal maps. Results indicate that during the last 61 years, an area of 1,142 acres (462.15 hectares) had been converted to 102 colonies at an average rate of 18.72 acres per year. Among these colonies only 18 were approved by concerned authorities whereas 84 were not approved legally. Approved colonies occupy an area of just 197 acres (17.25% of the total) whereas non-approved colonies and towns cover a huge area of 945 acres (82.74%). The conversion of farmland fluctuated substantially over time. During the period of 1950-1960 merely seven colonies were built which consumed an area of 97 acres indicating a conversion rate of 9.7 acres per year, while during the period of 2000-2010 a total of 32 colonies were built that consumed an area of 422 acres (170.77 hectares) indicating conversion rate of 42.2 acres per year. These findings indicate that the rate of farmland conversion is accelerating. If this trend goes unchecked, the problem of farmland conversion may change into a serious threat for future food supplies. This study identified several suggestions to tackle the issue.

Keywords: Farmland conversion, Bahawalpur City, TMA, Housing schemes, Legal status.

1. INTRODUCTION

Farmland conversion is an issue in many developing countries with large and rapidly growing populations such as Pakistan, India, Bangladesh, Indonesia, the Philippines, and China [1]. However, this issue has been ignored for a long period of time particularly in developing countries that also have dominant share of farmland [2]. The loss of farmland due to rapid urbanization is prevalent the world over, but in recent years the rate of urbanization has been astonishing in many Asian countries including Pakistan [3]. Productive farmland is often suitable for housing and other urban uses, and as a result land prices shoot up rapidly [4-5]. The rapid growth and changing patterns of urban areas has awaked the serious issue of farmland conversion for planners that clearly noticed on the fringes of cities where haphazard urban growth results in conversion of productive agricultural land [6]. For example in Japan farmland has been continuously decreasing over several decades [7]. The rate of productive farmland conversion is also very high in the United States at almost 2.5 million acres (1.01 million hectares) per year [8]. In China, during the period of 1987 to 1992 almost 12.5 million acres (5.05 million hectares) of farmland had been converted to cities and towns [9]. In Nigeria over 12,849.70 acres (5,200 hectares) of agricultural land have been converted to low density residential, commercial and industrial uses in cities [10]. High rate of increase in population placed enormous stress on land availability in developing countries where urban growth is continuously encroaching on fertile farmland [11].

Arable land and water are the major and vital natural resources of Pakistan. Pakistan ranks 40 among more than 200 countries for its amount of arable land, holding 24.44% out of its total land area under cultivation [12]. Pakistan's agriculture sector accounts for over 21% of GDP and engages about 45% of the country's labor force [13]. However, rapid urban growth has been responsible for striking demographic changes during the last few decades and resulting in increased congestion in cities [14]. Census records depict that in Pakistan, the increasing rate of urban population has risen from 17.7% in 1951 to 32.5% in 1998 [15]. Rapidly expanding population and haphazard urbanization has been unfolding quickly since that time. In recent decades the problem of farmland conversion in Pakistan joins other agricultural problems like water logging, soil salinity and reduced per acre production [17]. Additionally, the shift in people socio-economic characteristics (financial conditions, per month income, preference) is also responsible for conversion of farmland to residential

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colonies [18]. Migration from rural to urban areas by people seeking a better standard of living is one of the major factors driving farmland conversion in the form of housing colonies [19]. For instance, in Lahore City about 283,257 acres (114,630.04 hectares) of farmland had been converted to urban built-up land during last 40 years, and a substantial part of that land was converted to support 252 housing schemes [20]. Roads as developmental work also consumes massive amount of farmland. For example, nearly 10,000 acres (4,046 hectares) of prime farmland was lost in the development of a 335 km long motor way from Islamabad to Lahore [16].

Like other areas, the problem of farmland conversion is gaining the status of serious threat in Bahawalpur. Bahawalpur is the 12th largest city of Pakistan according to 2009 estimates the City had a population of 507,228 with population growth rate about 3% per annum compared to only 40,000 people in 1941 [21-22]. The City's population growth rate reached 4.93% during 1981-98 [23]. The city is currently experiencing significant increase in urban population and rise in socio-economic activities due to its unique position and place in the region. In Bahawalpur, approximately 40% land area is under cultivation while 60% land area is still uncultivated [24]. Conversion of farmland into other non-arable uses is also growing in Bahawalpur City over the last few years. In 1987, total cultivated land area of Bahawalpur City was 1,147.06 acres (464.19 hectares) but in 10 years that was reduced to just 50.15 acres (20.29 hectares) in 1997 [16]. Recently it was reported that non-agricultural residential use increased from 7,731 acres (3,128.62 hectares) in 1998 to 11,500 acres (4,653.88 hectares) in 2012 [25]. The emerging housing schemes on fertile agricultural land becoming a major threat and about 256 acres of farmland has been lost to these housing schemes in Bahawalpur City during 1988-2008 [26]. Bahawalpur is not an important commercial or industrial centre so the major proportion of urban land is devoted to local residential uses [27]. The objective of this study was to evaluate the legally unauthorized private housing schemes that are continuously encroaching upon highly productive farmland by determining the rate of converted farmland for the establishment of housing colonies according to their legal status in Bahawalpur City.

2. STUDY AREA AND METHODOLOGY

Bahawalpur City is the divisional headquarter and has a very unique position in district regarding to its historic, geographic, physiographic, climatic,

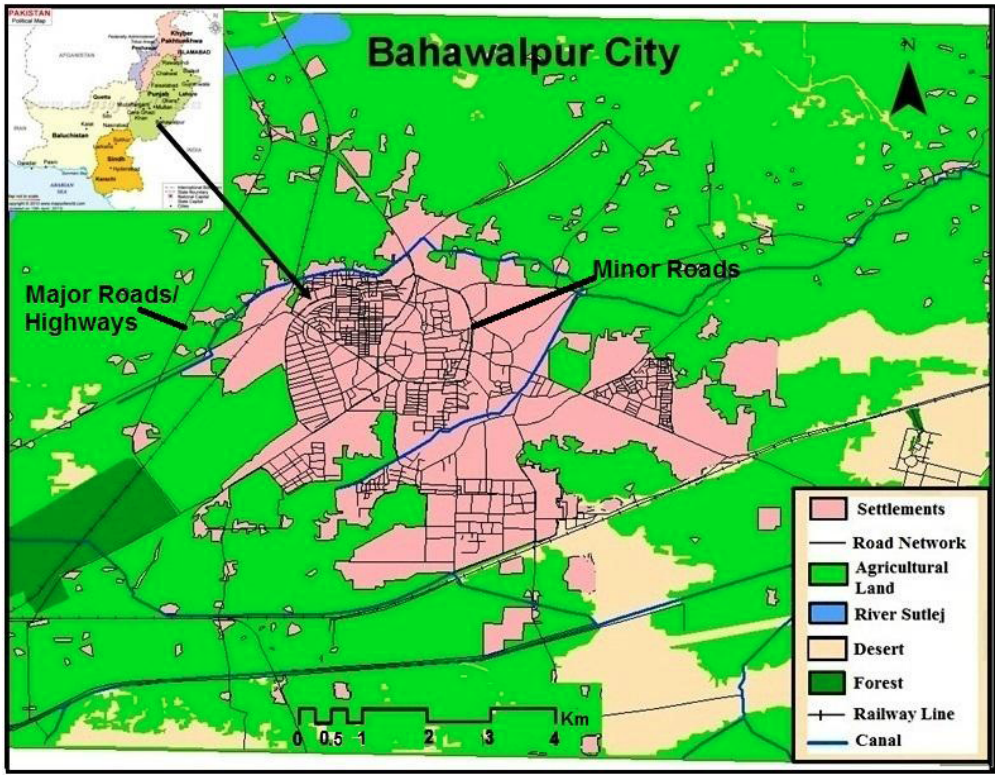

Figure 1: Land use map of Bahawalpur City in 2013.

Source: Modified from [29]

demographic and cultural features. It is lies between 71º– 41´ east longitudes and 29º – 20´ north latitudes with a mean sea level of about 384 ft. The City is situated on the southern bank and floodplain of the River Sutlej while on its eastern margin it borders the famous Cholistan desert (Figure **1**). According to recent figures Bahawalpur had the population of 550,388 and covered an area of 586,134 acres (237,200 hectares) [28-21]. Bahawalpur is one of the rapidly expanding cities of Pakistan that has surrounded by fertile agricultural land that is very essential for it. The new residential colonies of Bahawalpur City are the main concern of this research that has established on pure peripheral farmland though a significant proportion of farmland grab by other major non-agrarian uses as commercial and industrial centers, public constructions, roads, filling stations, service workshops and others.

Data for 102 urban colonies and new housing schemes including their date of establishment, total area and legal status was obtained from field survey and Tehsil Municipal Administration (TMA) of Bahawalpur City from the period of 1950 to 2011 to investigate the rate of farmland conversion. Field survey was conducted using structured interview to obtain data from the various urban colonies regarding the variables like colony/ town name, total area, year of establishment while status of approved/ not approved colonies data was mainly obtained from TMA City. In addition, useful secondary data were also collected from, the site offices of housing colonies, the Punjab Bureau of Statistical Planning and Development, the Agriculture (Extension) Department, District Bahawalpur, the Punjab Housing and Town Planning Agency, Region Bahawalpur offices about the total agricultural land area converted to housing schemes.

All data of housing colonies were aggregated into seven groups (cohorts) of time period with the interval of 10 years except the 2011 considered as a single year viz. during 1950-1960, during 1960-1970, during 1970-1980, during 1980-1990, during 1990-2000, during 2000-2010 and during 2011. In order to find out the rate of converted farmland, the subjected colonies were analyzed by using descriptive statistics (e.g. averages) with respect to their year of establishment, total area and legal status. After this, the ancillary maps of the development of colonies were prepared by ArcGIS 10.1 software's using on screen digitization, geo-referencing, rectification and reshaping functions. The base maps for this operation were gathered by hardcopy of the maps derived from TMA office while land use map of Bahawalpur City 2013 obtained from Department of Geography, The Islamia University, Bahawalpur and modified. Output maps indicate the phenomena of farmland conversion in the form of expansion of urban built-up land in Bahawalpur City during different time periods.

3. RESULTS AND DISCUSSION

3.1. During 1950-1960

This period is mainly influenced by the effects of post independence of Pakistan after 1947 and the merger of Bahawalpur State with Pakistan in 1955. A huge flood of humans then came into Pakistani territories and majority of Muslim migrants were settled in southern parts of the Punjab province. In Bahawalpur, these migrants that came in large number had been settled by the local *Nawab* of the Bahawalpur state in old *Muhajir* (Migrant) colony and Shahdrah that were built for these migrants and were also approved legally. During this period few colonies had been built

Table 1: List of Developed Colonies in Bahawalpur City (1950-1960)

Sr. No.	Name of Colony/ Town	Total Area (Acres)	Year of Establishment	Approved/ Not Approved
1	Marri Allaichi*	10	1954	Not Approved
2	Old Muhajir Colony (near Shahdrah)*	6	1954	Approved
3	Muhajir Colony (near Hamytian)*	35	1955	Approved
4	Haider Colony**	4	1955	Not Approved
5	Jaffari Town**	12	1960	Not Approved
6	Sadiq Colony**	15	1960	Not Approved
7	Goth Noora*	15	1960	Not Approved
	Total Area	97		

Note: * Colonies data collected during Field Survey in 2011.
Source: ** [30].

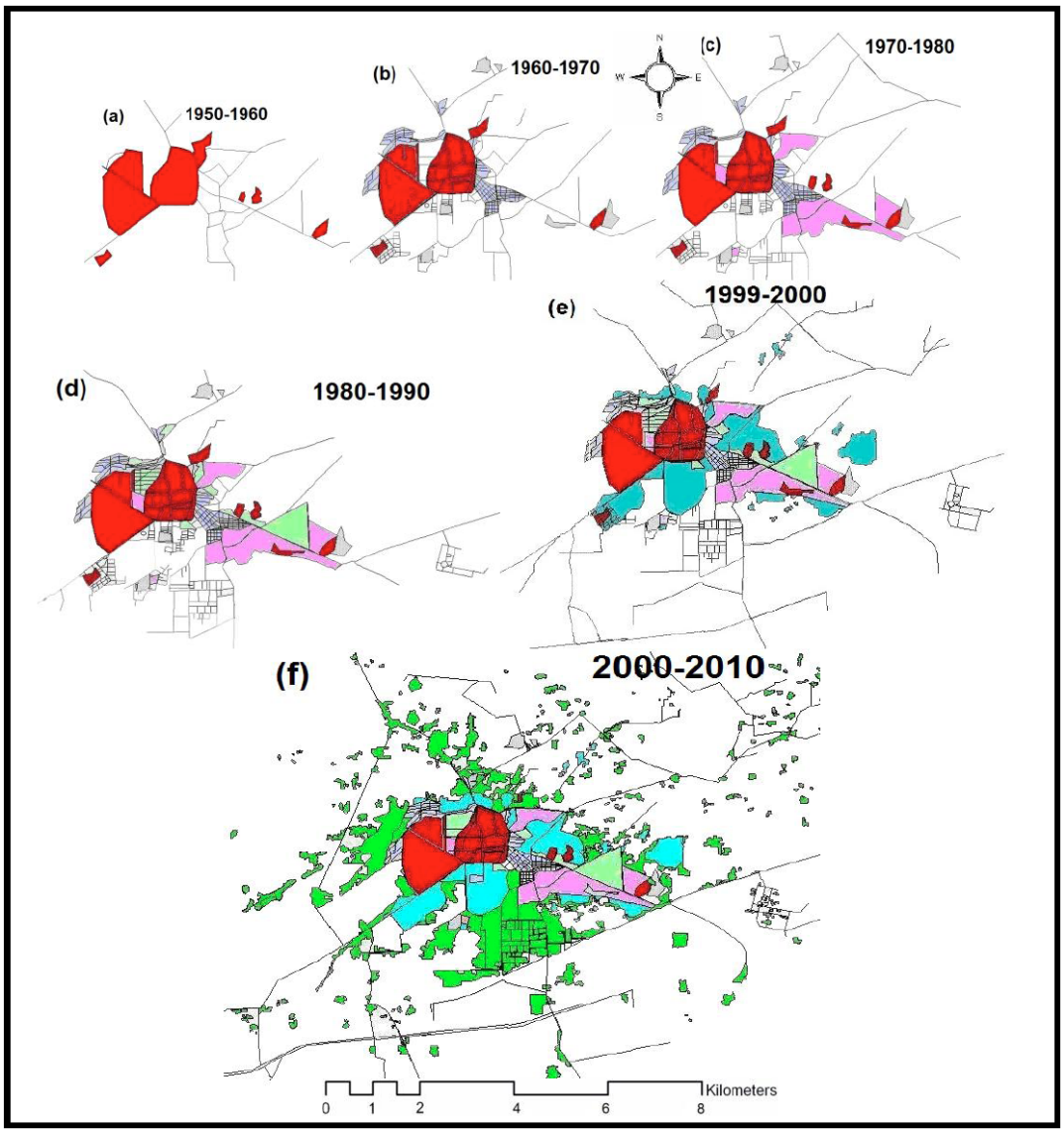

Figure 2: Development of colonies in Bahawalpur City from 1950-1960 to 2000-2010.

mainly for housing the migrants. Beside, some major planned colonies by government in Bahawalpur City such as Model Town A, B, and C were also built for residing rich (Model Town A) and low income (Model Town B, C) people for the main purpose of giving cheap and affordable housing facilities (Table **1**). The other colonies that were built during this time as follows;

The selected seven colonies that were built during that time occupied an area of 97 acres of farmland (Figure **2a**). In these colonies Marri Allaichi and Goth Noora were less developed areas and house of low and middle income people. According to the old inhabitants of these colonies, at the time of development these were consisted very fertile agricultural land used for crops (e.g. wheat, cotton, gram and others) and inundated by River Sutlej. Similarly, other colonies that were built also had productive land suitable for cropping. In these colonies five out of seven colonies were legally not approved.

3.2. During 1960-1970

During this period of time, many new housing colonies and towns were built in the city and all of them were private housing projects that had been started by the owners of these farmlands [1-33]. The development of colonies and towns by local planners and developers was very limited until the 1990-2000s when this trend began (Figure **2b**). During the decade of 1960-1970 different colonies and towns have been built (Table **2**).

These 12 colonies were occupied an area of 155 acres that was predominantly farmland. Basti Karna,

Table 2: List of Developed Colonies in Bahawalpur City (1960-1970)

Sr. No.	Name of Colony/ Town	Total Area (Acres)	Year of Establishment	Approved/ Not Approved
1	Noor-ul-Haq Colony**	12	1965	Approved
2	Shams Colony*	4	1965	Not Approved
3	Zia-ul-Din Colony**	4	1965	Not Approved
4	Basti Karna*	15	1965	Not Approved
5	Bindra Sharqi*	10	1965	Not Approved
6	Anwar Colony**	6	1965	Not Approved
7	Bahawal Colony*	4	1970	Not Approved
8	Dilawar Colony*	10	1970	Not Approved
9	Anwarabad Colony**	2	1970	Not Approved
10	Rahman Colony**	5	1970	Not Approved
11	Arshad Town**	8	1970	Not Approved
12	Javed Colony*	75	1970	Not Approved
	Total Area	155		

Note: * Colonies data collected during Field Survey in 2011.
Source: ** [30].

Bindra Sharqi, Rahman colony are less developed areas on north western side of the city that were consist agricultural land before turned into residential colonies. These colonies also near to River Sutlej at the time of their beginning and the local people were engaged in farming and fish catching activities. In these colonies only Noor-ul-Haq colony was approved that is very close to city core.

3.3. During 1970-1980

During this period increase in urban population characterized with low growth rate. But colonies were built by both public and private sectors. During this period two major housing projects were inaugurated by the government like Model Town C and Govt. Employee housing scheme on Hasilpur road but construction work started later. These colonies were built to house low income people including government servants. Other colonies that were built during this period are shown in Table **3** and Figure **2c**.

A total of 11 colonies were built during the decade of 1970-1980 of which only Nazirabad colony was approved while the remaining 10 colonies were not approved on legal grounds. All of these urban colonies like Muhamdia colony, Cheema town phase I and Shadab colony were completely occupied by productive agricultural land before conversion into residential areas. These all colonies had been built by private developers that were owners of these lands and sale out to earn more capital with little effort and time. A closed flour mill in Shadab colony is evidenced the high agricultural potential of this area that was self sufficient for food crops and commodities in near past. But now these areas are vastly being cemented and dependent on surrounding rural vicinities for food crops and other agro based commodities.

3.4. During 1980-1990

The decade of 1980-1990 had possessed a high annual population growth rate of 4.93% in Bahawalpur City [23]. This period is associated with a high rise in city's population numbers and ultimately had resulted in the form of more than two dozen colonies those occupied a vast land area. Moreover, the majority of these colonies were not approved by TMA City except *Major* colony that had been legally approved (Table **4**). These colonies were established in every direction of the city (Figure **2d**).

These 28 colonies covered a huge area of 239 acres. During this decade, 18 colonies were built in the year of 1985 whereas remaining 10 colonies had been established in 1990. This era is also allied with high increase in population of the city with an alarming rate. These colonies were also built by private developers, owners, property dealers and the trend of building private housing schemes and projects is initiated in severe nature that later become extremely worse. Majority of the colonies had been established on

Table 3: List of Developed Colonies in Bahawalpur City (1970-1980)

Sr. No.	Name of Colony/ Town	Total Area (Acres)	Year of Establishment	Approved/ Not Approved
1	Nazirabad Colony**	5	1975	Approved
2	Mjidabad Colony**	5	1975	Not Approved
3	Muhamdia Colony**	20	1975	Not Approved
4	Faizabad Colony**	10	1975	Not Approved
5	Qasim Town**	7	1980	Not Approved
6	Ghosia Colony**	2	1980	Not Approved
7	Cheema Town P. I *	10	1980	Not Approved
8	Muslim Town**	6	1980	Not Approved
9	Riaz Colony*	4	1980	Not Approved
10	Shadab Colony*	50	1980	Not Approved
11	Bankers Colony**	4	1980	Not Approved
	Total Area	123		

Note: * Colonies data collected during Field Survey in 2011.
Source: ** [30].

significant area of prime farmland rich with mango orchards and wheat fields too like Khyaban Ali housing scheme, new satellite town, Gulshan Iqbal housing scheme.

3.5. During 1990-2000

During the period of 1990-2000 only seven colonies were built in which six colonies had been established in 1995 and one colony had built in 2000. These colonies are shown in Table **5** (Figure **2e**) and unexpectedly, these colonies had occupied relatively less amount of land area. Al-Janat town was situated on *Jhangiwala* road and previously covered with mango orchard but now dominantly occupied with built-up houses. Similarly, Sabzazar colony, Khakwani colony, and Yasrib town once were occupied with farmland. Among these, Al-Janat town and Gulshan colony were approved legally.

3.6. During 2000-2010

The decade of 2000-2010 brought broader changes in the city's spatial and demographic profile. This period was more influential in the context of building of colonies and towns and pure farmland had been substantially destroyed during this decade. City's urban limits started to expand outside the old town areas and population boosting with high natural increase and growing trend of rural to urban migration. Majority of the colonies and towns had been established during this period (Table **6**).

Total 32 colonies were established during this period covered an area of 422 acres (170.77 hectares) of farmland. Ten colonies were approved by TMA, but the other 22 were un-approved. Previous study also certified that most of the housing colonies in Bahawalpur City were legally un-approved due to deviation in the planning standards, rules and criteria set by provincial government [31]. In 2004 and 2005 five colonies were established each while in 2007 and 2008 eight and six colonies were built respectively. While, two colonies each were originated in 2002, 2003 and 2010. The colonies that built during that time used up vast farmland area like Shadman City, Royal City, Baharia City, Hashmi garden, Faisal *bagh* (garden), Allama Iqbal town and others and brought notable change in city's farmland area and land use. Moreover, these colonies were located inside the peripheral agricultural land creating high risk of conversion to adjacent farmland [1]. Figure **2f** indicates the areal congestion during this period of sensational increase of city urban limits.

3.7. During 2011

The proliferation of these colonies on productive farmland is still carrying on without any serious check or restriction. Recent study indicated that the City's outer limits are notably exaggerated during last two decades due to this urban rage and recently this trend is more geared up [32-18]. As there is available vacant space in inner parts of the Bahawalpur City reducing the construction of colonies and towns have been

Table 4: List of Developed Colonies in Bahawalpur City (1980-1990)

Sr. No.	Name of Colony/ Town	Total Area (Acres)	Year of Establishment	Approved/ Not Approved
1	Major Colony**	13	1985	Approved
2	Abbasi Town**	25	1985	Not Approved
3	Gulshan Hashmia Colony**	12	1985	Not Approved
4	Jaffar Colony**	8	1985	Not Approved
5	Chaudary Town**	4	1985	Not Approved
6	Rehmat Colony**	5	1985	Not Approved
7	Muslim Colony**	6	1985	Not Approved
8	Gulberg Colony**	8	1985	Not Approved
9	Maqbool Colony**	7	1985	Not Approved
10	Khurshed Colony**	2	1985	Not Approved
11	Jillani Colony**	2	1985	Not Approved
12	Mushtaq Colony**	2	1985	Not Approved
13	Gulshan din Muhammad Colony**	8	1985	Not Approved
14	Khyaban Ali HS*	25	1985	Not Approved
15	Ch. Bilal HS**	2	1985	Not Approved
16	Sajid Awan Town**	7	1985	Not Approved
17	New Satellite Town*	8	1985	Not Approved
18	Gulshan Iqbal HS**	25	1985	Not Approved
19	Green Town**	12	1990	Not Approved
20	Madina Town**	12	1990	Not Approved
21	Yasir Town**	8	1990	Not Approved
22	Mansoor Town**	5	1990	Not Approved
23	Hafizabad Colony**	6	1990	Not Approved
24	Faisal Town**	6	1990	Not Approved
25	Faisal Colony*	5	1990	Not Approved
26	Jalwana Town**	5	1990	Not Approved
27	Ismail Town**	4	1990	Not Approved
28	Gulshan Hussain Town**	7	1990	Not Approved
	Total Area	239		

Note: * Colonies data collected during Field Survey in 2011. HS= Housing Scheme.
Source: ** [30].

Table 5: List of Developed Colonies in Bahawalpur City (1990-2000)

Sr. No.	Name of Colony/ Town	Total Area (Acres)	Year of Establishment	Approved/ Not Approved
1	Al-Janat Town*	16	1995	Approved
2	Yasrib Town**	2	1995	Not Approved
3	Millat Colony**	8	1995	Not Approved
4	Fahad Colony**	2	1995	Not Approved
5	Sabzazar Colony*	14	1995	Not Approved
6	Khakwani Colony**	20	1995	Not Approved
7	Gulshan Colony**	4	2000	Approved
	Total Area	66		

Note: * Colonies data collected during Field Survey in 2011.
Source: ** [30].

Table 6: List of Developed Colonies in Bahawalpur City (2000-2010)

Sr. No.	Name of Colony/ Town	Total Area (Acres)	Year of Establishment	Approved/ Not Approved
1	Gulshan-e- Bahawalpur**	3½	2002	Approved
2	Garden Town, Yazman Road**	12	2002	Approved
3	Usman Bin Afan Town**	5	2003	Not Approved
4	Hashmi Garden*	25	2003	Not Approved
5	Rehman Garden Phase I**	18	2004	Approved
6	Rehman Garden Phase II**	9½	2004	Approved
7	Faisal Bagh**	20	2004	Not Approved
8	Khalid Garden & Asif Garden**	12	2004	Not Approved
9	Cheema Town Phase II*	9	2004	Not Approved
10	Canal City**	46	2005	Not Approved
11	New Green Town**	3	2005	Not Approved
12	Al-Harum Town**	5	2005	Not Approved
13	Umer Garden**	7	2005	Not Approved
14	Canal Garden**	7	2005	Not Approved
15	Tariq Aziz Town**	3	2006	Not Approved
16	Al-Mehboob Gardens*	7	2007	Approved
17	Al-Momin Garden*	10	2007	Approved
18	Bahawal Town*	8	2007	Approved
19	Madni Town**	9	2007	Approved
20	Atif Aziz Town**	8	2007	Not Approved
21	Al-Khair Town*	3	2007	Not Approved
22	Darbar Mehel Town*	8	2007	Not Approved
23	Allama Iqbal Town*	20	2007	Not Approved
24	Yousuf Garden**	11	2008	Approved
25	Shadman City*	53	2008	Not Approved
26	Royal City*	27	2008	Not Approved
27	New Shadab Colony*	9	2008	Not Approved
28	Hamza Town*	3	2008	Not Approved
29	Baharia City*	27	2008	Not Approved
30	Paragon City**	8	2010	Approved
31	Fine City*	17	2010	Not Approved
32	Goheer Town*	9	2010	Not Approved
	Total Area	422		

Note: * Colonies data collected during Field Survey in 2011.
Source: ** [30].

started to build on city's fringing areas where cultivated land is frequently transformed. Currently, the construction of these colonies can be observed in all directions of the city with a fast speed and occupied much large area as compare to the colonies that were built few years back.

As during 2011, five colonies had been established on peri-urban areas of Bahawalpur City (Table **7** and Figure **3**). Surprisingly, within few months of 2011 these selected five colonies had been converted an area of 40 acres of pure farmland were cultivated before conversion. This shows rapid conversion of farmland that is continuously grabbing by urban built-up

Table 7: List of Developed Colonies in Bahawalpur City (2011)

Sr. No.	Name of Colony/ Town	Total Area (Acres)	Year of Establishment	Approved/ Not Approved
1	Shaheer Garden*	10	2011	Approved
2	Doctors Town*	9	2011	Not Approved
3	Zakariya Town*	5	2011	Not Approved
4	Diamond City*	6	2011	Not Approved
5	Qurashi Garden*	10	2011	Not Approved
	Total Area	40		

Note: * Colonies data collected during Field Survey in 2011.

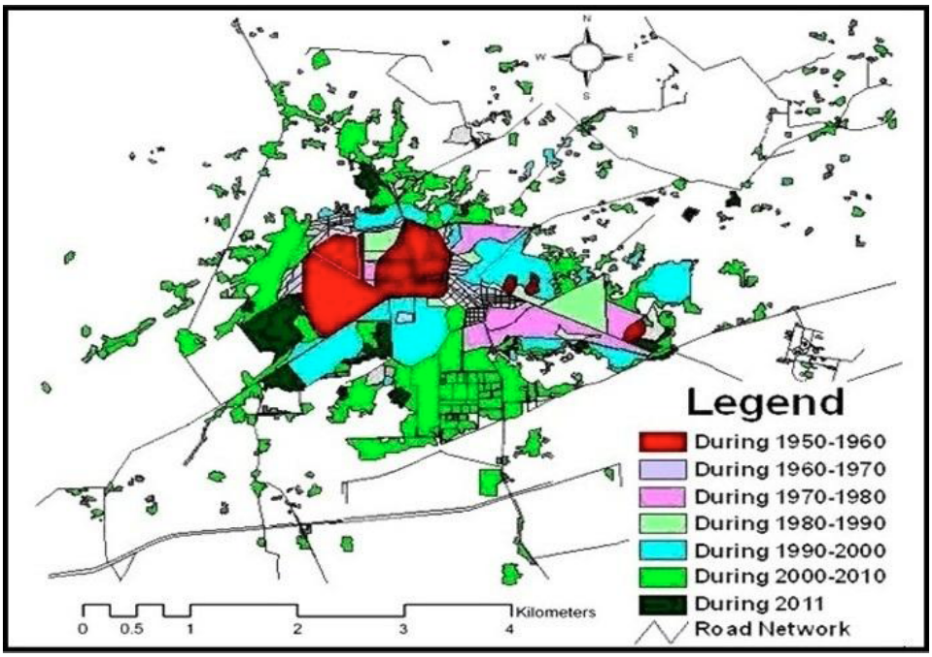

Figure 3: Development of colonies in Bahawalpur City in 2011.

land. Among these colonies only Shaheer garden has been legally approved by TMA.

Table **8** summarizes that during last 61 years, 102 colonies have been built that were covered an area of 1,142 acres (462.15 hectares) at a rate of 18.72 acres of farmland converted per year. Among these colonies only 18 colonies were approved by concerned authorities whereas 84 colonies were not approved legally. Approved colonies were occupied an area of just 197 (17.25%) acres whereas un-approved colonies and towns were covered a huge area of 945 (82.74%) acres. Hence, if farmland converted with such alarming rate than in 2020 it will take out 400 acres of farmland in 10 years time span and at the same rate, after one century over 4,000 acres of farmland would be convert only to construction of colonies and towns but it has anticipated that this trend and rate might become worse and more farmland would be converted particularly in account of new housing schemes and projects by both private and public sector like industries, roads, commercial zones with boosting population.

Surprisingly, no major public housing scheme had launched by the government after 1992 in Bahawalpur City. The planned colonies built by housing and physical department are expected to facilitate all modern housing requirements and utilities as found in new modern private housing schemes like outer wall, entrances, park, green belt, commercial area and others. Instead of these, few other public and government housing schemes are also were built to house government employees and officials like Officers colony, one unit staff colony, Canal colony, Faugi basti and also occupied considerable area. The major planned colonies in Bahawalpur City are shown in Table **9**.

Table 8: Total Converted Land Area under Different Colonies since Last 61 Years

Sr. No.	Period	No. of Colonies Established	Approved	Not Approved	Converted Land Area (Acres)	Per Year Converted Land Area (Acres)
1	During 1950-1960	7	2	5	97	9.7
2	During 1960-1970	12	1	11	155	15.5
3	During 1970-1980	11	1	10	123	12.3
4	During 1980-1990	28	1	27	239	23.9
5	During 1990-2000	7	2	5	66	6.6
6	During 2000-2010	32	10	22	422	42.2
7	During 2011	5	1	4	40	40
	61 Years	102	18	84	1,142	18.72

Table 9: Some Major Planned Housing Schemes of Bahawalpur City

Sr. No.	Name of Colony	Area (Acres)	Date of Completion
1	Model Town A	608	1952-53
2	Model Town B	428	1952-53
3	Satellite Town	86	1992
4	3 *Marla* Housing Scheme	56.89	1992
5	Model Town C	80	1986
6	Old Satellite Town Garden Area	22.75	1985
	Total Area	1,281.64	

Source: [33].

4. CONCLUSION AND SUGGESTIONS

The rapid conversion of farmland to urban housing colonies now is becoming a dangerous sign for farmland sustainability in Bahawalpur City. Findings of the study revealed past 61 years (1950-2011) witnessed huge amount of farmland (1,142 acres) were taken out of agricultural use to mainly residential colonies and housing schemes with increasing rate of conversion. As during the period of 1950-1960 just seven colonies had been built that covered an area of 97 acres (9.7 acres of land converted per year) but during the period of 2000-2010 total 32 colonies were built that covered a vast area of 422 acres and has the highest ratio of per year land conversion (42.2 acres of land converted per year). A dominant share of this converted land was occupied by un-authorized housing schemes and residential colonies also highlighting the seriousness of the issue. Such figures had been strongly advocated that the farmland conversion during last decade has been shooting up with a high rate and still keep going. Planned colonies by government were also occupied significant amount of land area in which major share was cultivated land before their establishment. In addition, the year of 2011 was also worrisome and within this year about 40 acres of farmland had been taken out from cultivation to colonies. Hence, the conservation of the limited farmland resource is a dire need for all. Therefore, to bring sustainability and efficiency in urban land use and check on the illegal housing schemes the following suggestions are made; Master plan of city should be prepared so that use of urban land can be made more appropriate and efficient, Strict rules and regulation towards developers should be made in practice, TMA city should be imposed strict taxation and charge on illegal housing schemes, Decision makers of district government should be devised effective long term policies to protect farmland conversion into other un-necessary uses, District government should be provided incentives and subsidies to farmland owners to avoid farmland conversion, TMA city should be commenced public awareness campaign to save farmland.

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