

UNDERSTANDING THE SOCIO-ECONOMIC  
DETERMINANTS OF SMALL FARMERS TO RETAIN  
AGRICULTURAL LAND AMIDST RISING  
COMMERCIAL PRICES: A CASE STUDY OF  
BAHAWALPUR



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**CERTIFICATE**

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## Author's Declaration

I Shahmeer Haider Sumra state that my M.Phil. thesis titled Understanding the Socio-Economic determinants of small farmers to retain agricultural land amidst rising commercial prices: A case study of Bahawalpur is my own work and has not been submitted previously by me for taking any degree from Pakistan Institute of Development Economics or anywhere else in the country/world.

At any time if this statement is found to be incorrect even after my Graduation the university has the right to withdraw my M.Phil. degree.

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## **DEDICATION**

This thesis is dedicated to my parents and the strong farmers from Bahawalpur. My parents have always been more than just the overall support for me. I have always looked up to them as my constant source of learning, guidance and help. Thank you Amma and Baba.

Moreover, I dedicate this thesis to the small farmers of Bahawalpur as well. They have small nights and big days just to ensure that they can live and we all can have food. Their sustenance is a debacle of strength and constant fight against the system. I bid them success and best future.

## **ACKNOWLEDGMENTS**

What a man gets is what the man does. Seeing one's efforts reach a professional and a reasonable conclusion renders a sense of confidence that no other thing of beauty can provide. As I start to gather my thoughts on writing the acknowledgement of my thesis, I feel utmost humility before Allah Almighty for blessing me with few of the best mentors and people during the process of my thesis. An idea of longing, lodged in a brain, took me to land of wonders and people of utmost strength. The beauty of learning lies in its continuum of evolution, therefore, I believe that this is not the end but a start towards the best of times to come.

I would begin by acknowledging the, "belief" that my parents have had in me. As a student who has spent most of his time in a boarding school, the only thing that never left my side was the belief that my parents have had in me. I look at my Baba, with a renewed sense of gratitude with every passing second. I look at him and I know that he believes me for what I am. His constant reassurances and his pats on my back are the real rewards for any efforts that I do. I would also like to use this opportunity to thank my Amma for her sense of ownership towards me. A journey from her lap to standing with her, shoulder-to-shoulder, everything has changed since then other than the fact I have needed her then and I will need her forever.

I thank my supervisor Ms. Lubna Hassan for her generous and very productive support to the cause of my thesis. It is due to her swift responses that I was able to manage the thesis not only in-time but also was able to achieve the right understanding of the topic. Moreover, I want to acknowledge my supervisor's support through all the administrative hurdles that I as a student had to face. If it were not for her my thesis would still be sitting on the external examiner's table waiting for a review. This document is an evidence to not only my efforts but the efforts of my supervisor without whose guidance and direction this would not have come to be what it is.

I personally believe that the people around you make the person inside you. I cannot thank my colleague Ms. Jawaria Abbasi enough for her constant support throughout the process of my dissertation. From helping me find a supervisor till making the final presentation for my thesis defense, she has been a constant support for me. I believe that the influence of people who inspire you, makes every day a new learning experience and she is one of those finest souls who have been there in every inch of my journey and inspired me in every second of the journey. I

stand in utmost gratitude to every moment she has led me towards a better solution, a better self and a better sense of inspiration every day. Moreover, I would also like to take this moment to thank Mr. Taimoor Butt from the department of Development Studies for his unwavering support in every way. He has been one of the most understanding guide, teacher and most importantly the best of the friend. I thank both of them for believing in me and making me believe in me.

This thesis is a small effort towards my people, the strong and peaceful farmers of Bahawalpur who have stood in the face of tyranny and still keep on doing so. I believe that a time will come when the land of green will realize the role of the people who toil this earth to keep it green. The farmers are the backbone of the nation's food security and are as important as the external defense of the country. We must address the issue of massive urbanization to keep the already oppressed farmers of the region so that a better policy input may serve deliverance for these farmers. I hope that this small effort, helps the policy doctors to cure the patient rather than kill the patient.

May Allah be our guide.

Sincerely,

Shahmeer Haider Sumra

## **Abstract**

Arable land Conversion or ALC is real threat to the agricultural development in Pakistan. Arable land conversion has been taking place across the globe since the industrial revolution, however, the pace of ALC has exponentially increased since the beginning of the 21<sup>st</sup> century. The frequent mobilization of industrial resources from within the cities to the surrounding agricultural lands has shifted the modern city's structure from being mono-concentric to being poly-centric. This poly-centric concentration is allowing multiple residential schemes to take advantage of cheap lands around the cities. In Lahore City, about 283,257 acres (114,630.04 hectares) of farmland had been converted to 252 housing schemes and other uses (Industrial, informal settlements, and mega projects) during the last 40 years". Such repercussions has devastating impacts on the livelihood of the small farmers. The decision to sell the land is non-linear therefore involves complex decision making dynamics that have been explored in this study. Recently more small farmers have started to hold their land instead of selling it even at much higher prices. These reasons include the lack of value in inherited land and poor access to alternate employment. Therefore, in order to understand the impact of land acquisition on small farmers, the factor of price has clearly failed to demonstrate as being the sole factor of decision. This study explores multiple factors of land retention other than the increased value and has recommended multiple policy discourse for effective long term planning of agricultural resource allocation in the region of Bahawalpur.

**Keywords:** *Agriculture land conversion, Urban sprawls, Rural land, Dynamics of land conversion, Stakeholder management*

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## Chapter No 1: Introduction

### 1.1. Background of the study:

Arable land conversion is a phenomenon that indicates the conversion of arable land into non-arable land for commercial or any other purpose. The arable land conversion (ALC) is happening across the globe but the pace at which this conversion is taking place in underdeveloped countries is quite unprecedented (Muhammad Mohsin, 2014). The rate of farmland conversion is quite high in the developed world as well. China converted 12.5 million acres of arable land into commercial lands between the years 1987 – 1992. “The case Pakistan is not much different either. In Lahore City, about 283,257 acres (114,630.04 hectares) of farmland had been converted to 252 housing schemes and other uses (Industrial, informal settlements, and mega projects) during the last 40 years” (Mustafa, 2019) (Zaman, 2012). The major causes of ALC are identified as urbanization, population growth, and mass migrations. Naveed & et al (2019) show that factors such as income, commodity prices, and access to basic health facilities such as hospitals have been the main causes of urbanization. In the year 2017, more than 33% of arable land in the surroundings of Faisalabad was converted into commercial housing schemes (Farah, Khan, Maan, Shahbaz, & Cheema, 2019) Hyderabad, which is the 6<sup>th</sup> most populous city in the country with an average density of 4000/km<sup>2</sup>, is growing at a much faster pace than Karachi (Hassan, 2016). It grew at a rate of 129% from 1998 to 2011. Many studies such as (Muhammad Mohsin, 2014) (Zaman, 2012) have attributed rapid urbanization and mass migrations as the main cause of ALC in Pakistan. Arable land conversion is becoming one of the biggest issues across the globe. Pakistan, being an agricultural country, highly depends upon the agricultural

land for employing more than 50% of its population. However, the land available to its farmers has shrunk from 17.3 acres per capita to 5.3 acres per capita (Hashmi, 2018).

Small farmers are the major victim of ALC. According to a report published in a local newspaper, more than 45% of the total cultivatable land in Pakistan is withheld by the 2% of the total agricultural population whereas the rest of the 98% of agricultural families rely on the remaining 55% of cultivatable lands (Mustafa, 2019). High location quotient in the agricultural sector of Bahawalpur indicated high level of concentration in the sector i.e.,  $>1.5$  (Tasneem, 2018) whereas the data for agricultural land shows that the arable land has been constantly decreasing in the area. Major changes were observed in 2010 when the Municipal administration of Bahawalpur estimated that the residential area was yet again dominant i.e from 1,468.78 in 1974 to 3,802.55 acres in 2010 (51.56%) while agricultural land area had depicted significant fall and shrank 3.22 acres (0.04%) from 1,147.06 acres (26.62%) in 1974 (Muhammad Mohsin, 2015).

High sectoral concentration amidst shortage of arable land has made the agricultural land quite lucrative investment, therefore the small farmers in the area withhold their land even when the prices are rising for better opportunities. Apart from this, the lack of opportunities in alternative occupation and skills are also a reason for land retention. In recent times, another trend among the small scale farmers has emerged that they send their children for education and employment purposes to urban areas and still retain their land as a means of sustenance thereby ensuring dual employment amidst decreasing per family land holding even when the prices for arable land are rising.

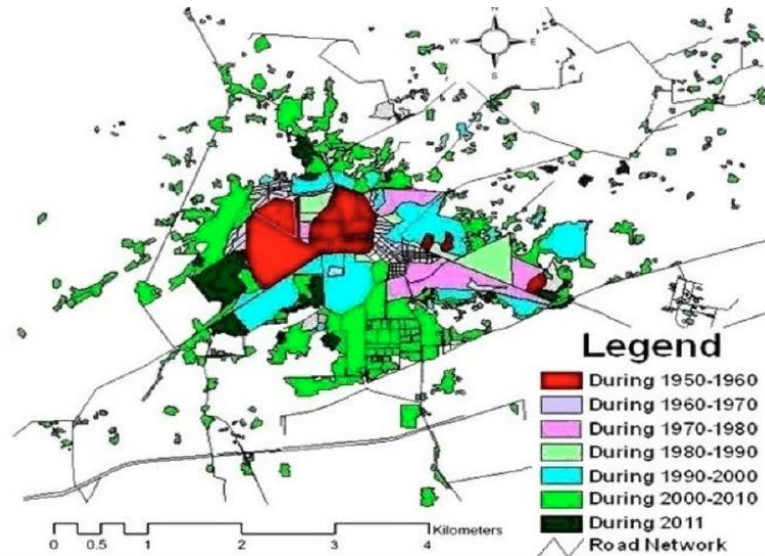
## 1.2. Locale

Bahawalpur City is the headquarter of Bahawalpur district and the 12<sup>th</sup> largest city in Pakistan in terms of population. ALC in Bahawalpur has been growing rapidly because of many reasons. In 1987 the total cultivated land area of Bahawalpur City was 1,147.06 acres (464.19 hectares) but in just 10 years that was reduced to just 50.15 acres (20.29 hectares) in 1997.

Time Period	Number of colonies	Converted Land Area (Acres)
During 1950-1960	7	97
During 1960-1970	12	155
During 1970-1980	11	123
During 1980-1990	28	239
During 1990-2000	7	66
During 2000-2010	32	422
During 2011	5	40
Total	102	1142

Source: Expansion of Residential Colonies and Conversion of Farmland in Bahawalpur City, Pakistan: A Temporal View (2016)

Figure 1: Expansion of Residential Schemes



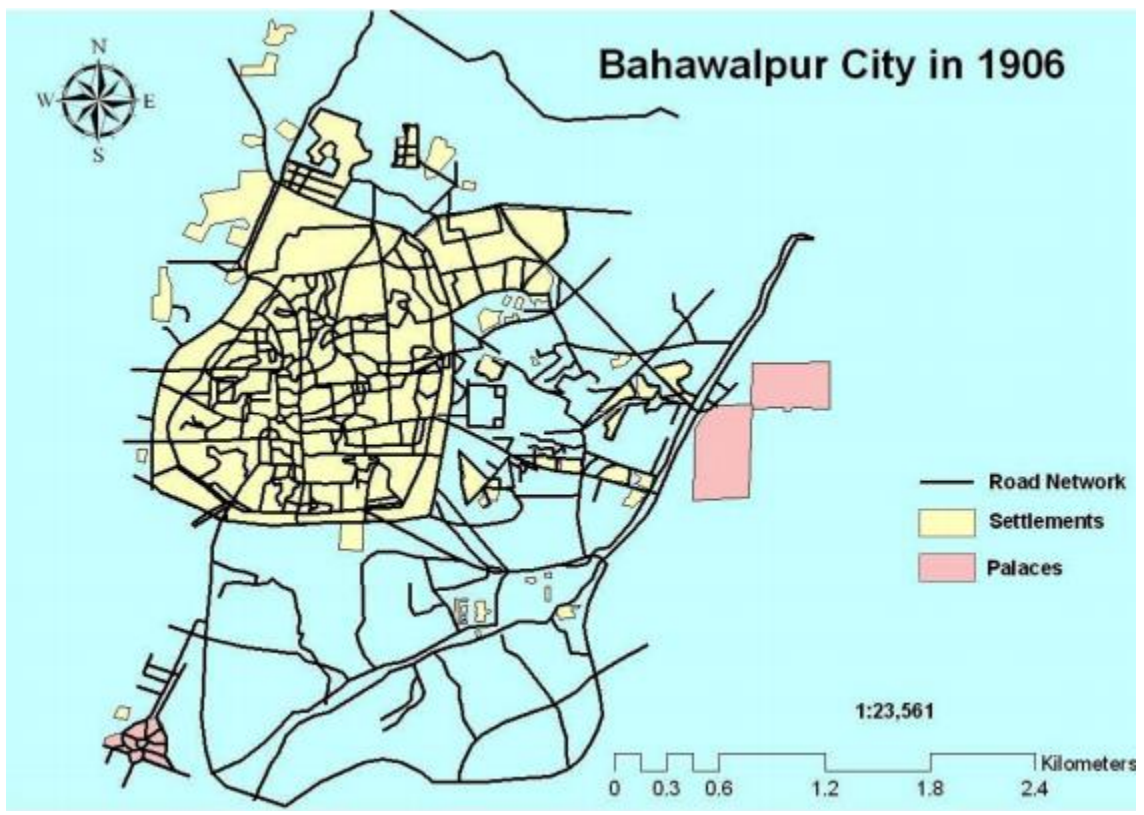
The locale for this study is the city of Bahawalpur. Bahawalpur is situated in Punjab and is an important city in South Punjab. Khalid & Gilani (2010) state that ‘in 1739, Nawab Sadiq Muhammad Khan I laid the foundation of city of Bahawalpur.’ According to Journal of Historical studies, “Bahawalpur was one of the thirty-six princely states under Punjab government. Two-thirds of the state comprised a desert called the Cholistan”. The agricultural revolution in Bahawalpur was a direct result of Sutlej Valley Project that was inaugurated in the year 1923. The total project costed around 33 crores and was completed in the year 1940. Under this project, mass migrations were adopted and residential areas (Chakks) were set for the migrants. These migrants were basically from the central region of the Punjab and this scheme was mainly aimed at settling the Punabi soldiers who had fought for the British in the World War 1. Under this scheme 3 heads works were put in order namely Head Punjanad, Head Islam and Head Bahwal. A total of 2,000,000 acre was auctioned, sold or leased out to farmers (Hashmi, 2018)

Figure 2: Head Punjanad



All the major cities of Paksitan including Bahawalpur have been rapidly growing in the recent times. Bahawalpur has an average growth rate of 2.8% annually (PSLM, 2019a). Bahawalpur is a monocentric city therefore it has a central and focal point of gravity. It attracts visitors and offeres economic activities at the cost of agricultural land (Muhammad Mohsin, 2015). The population outbrust of Bahawalpur is similar to that of the Lahore. Although at this point of time the physical and demograohic features of both the cities are quite different (Qureshi & Breuste, 2010).

Figure 3 Political Map of Bahawalpur



Source: Bahawalpur’s History and Architecture. Oxford University Press Pakistan

### 1.3. Area of study:

The urban and peri-urban areas located within the 20 km radius of the city in all 4 directions were chosen for this study i.e., *Chak 8 BC (East)*, *Chak 13 BC (South)*, *Hothwali (West)*, *Basti Miani (North)*. Bahawalpur City is the divisional headquarter of Bahawalpur and the 12<sup>th</sup> largest city of Pakistan. The city has very distinctive features and is quite diverse when it comes to terrain ecology. The city is located at the southern bank of the river Sutlej and is also a part of its



plains. The western part of the city is occupied by the 25, 800 sq. km long Cholistan desert. As per the recent figures Bahawalpur had the population of 845,288 and covering an area of 2,372 km<sup>2</sup> (Nations., 2020). Bahawalpur is the biggest producer of cotton and most of its rural population is highly dependent on agriculture. With big housing schemes taking over the geographical landscape of the city, the agricultural land is suffering the most. The small scale farmers are holding on their land even when the prices are constantly rising because of rapid commercialization of agricultural land.

#### 1.4. Problem Statement:

The rapid increase in Arable Land Conversion has caused massive consumption of agricultural lands for commercial purposes. Up till 2011, the total arable land of Bahawalpur that had been converted into commercial lands was 1142 acres and the total number of colonies was 102, whereas in the same time period the dependence of people on agriculture for sustenance was growing because of the Sutlej Valley Project (Hashmi, 2018). In 2015, DHA announced its housing projects in Bahawalpur and since then it has consumed more than 5,000 acres of arable land (Muhammadi Property, 2020) leaving small farmers more helpless and in a worse off condition. Historically, mass migrations from India post-independence had put a very high pressure on the population of the area. Moreover, various other factors such as canal systems, and land connectivity increased the sustenance of the people on agriculture. As the land prices continue to rise, the small farmers in the peri-urban centers of Bahawalpur are trying more and more to retain their land. Moreover, the Cholistan desert of Bahawalpur, which occupies more than 25,000 sq. km of land, has not been used for housing purposes.

Location Quotient in the agricultural sector of Bahawalpur indicates high level of concentration in the sector i.e., >1.50 whereas the data for agricultural land shows that the arable land has been constantly decreasing in the area<sup>1</sup>. This raises the question as to what factors are responsible for land retention by small farmers amidst rising land prices and what are the alternative modes of sustainable housing in Bahawalpur?

### 1.5. Objectives:

- To understand the socio-economic factors of land retention by small farmers amidst rising land prices.
- To identify the threats of Arable land conversion and how it can be mitigated.

### 1.6. Research Questions:

- What are the socio-economic factors that lead to land retention by small farmers amidst rising commercial prices?
- How is Arable Land Conversion (ALC) a threat to the agriculture of Bahawalpur and small farmers?

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<sup>1</sup> Location quotient is an index that is used to find the occupational concentration in a specific demographic area. It relates the total occupation demand with the regional occupation thereby giving a better understanding of the occupations in demand.

## Chapter No 2: Literature Review

### 2.1. Existing Literature:

Cities throughout the developing world have been facing rapid and excessive pressure to cope up with the high rates of population growth. Cities or urban centers in any country are considered the central hub of economic, political, social, cultural, and entertainment activities. Cities are considered the engines of economic and social progress that embody the diversity and energy of human pursuits. While urbanization is defined as an increase in the proportion of people living in cities, one reason for this phenomenon is a movement from the rural centers to the urban centers (Muhammad Mohsin, 2015). Pakistan, just like any other country in the South Asian region, has experienced a massive outburst in its population growth and its cities have been accommodating more people than their resources. The latest population census (2017) depicts that Pakistan has seen an increase in its rate of urban population from 28.3% in 1981 to 36.38% in 2017 (Wazir & Goujon, 2019). The urban population was only 6 million in the year 1951 and by the year 1998, it had already climbed up to 43 million. It has been estimated that by the year 2030 the urban population of Pakistan will have become equal to the rural population of Pakistan and also one out of every two persons will be living in cities by that time (Arif & Hamid, 2009).

Over the past decade the third world countries have seen massive growth in their urbanization trends. In 1950, only 285 million people, or 16% of its total population, dwelt in urban areas. By 1985, the number of urban inhabitants in developing countries had expanded to 1.2 billion (Kasarda & Crenshaw, 1991). At present, 55 percent of the world population is urban, which is expected to grow to 68 percent by 2050 (World Urbanization Prospects, 2018). The magnitude of

urbanization depends on the technological and social wellbeing that the urban centers have to offer (Kasarda & Crenshaw, 1991). This rapid urbanization is accompanied by social and environmental problems (Kasarda & Crenshaw, 1991). The ecological theory of urbanization relates the third world urbanization with reference to the modern/traditional economic dichotomy and demographic transition theory. According to this theory, urbanization is most likely to occur because of the fall in mortality rate and the increase in birth rate due to modern technology and control of mortality. The farmers sell more at high costs and commercial housing schemes raise the values of the housing projects. Moreover, the urban bias theory values the fact that most of the elites reside in the urban centers of the country therefore most of the policies favor the urban areas in terms of development and other social accessibility. The developmental projects are a massive indicator for the mass migrations that take place from agricultural areas to urban areas (Reese & Johnson, 1978). The dynamics of urbanization are directly inked with the conversion of arable land (Fazal, 2001).

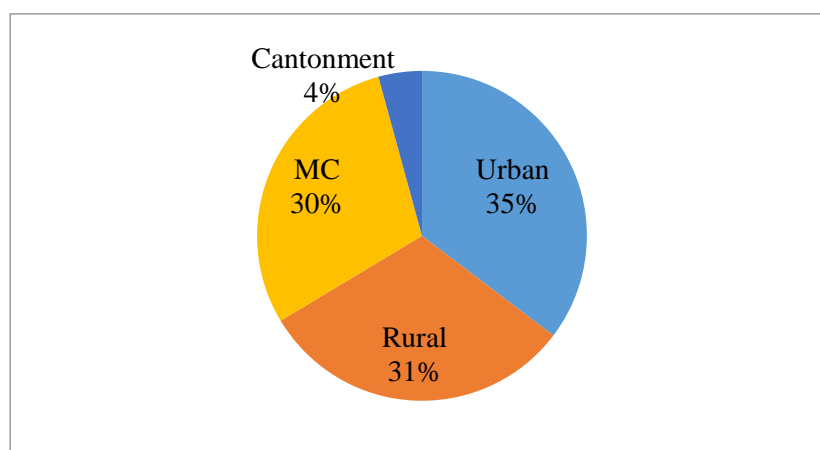
The city of Bahawalpur was founded in the year 1748 by the Abbassis. Abbassi family ruled the state for more than 150 years. Bahawalpur is the 11<sup>th</sup> largest city of Pakistan with respect to population. The current population of the city is more than 0.7 million. The area of the city is 246 km<sup>2</sup> (95 sq. mi) with a density of 3,100/km<sup>2</sup> (8,000/sq. mi) (PCO, 2000). According to Pakistan Bureau of Statistics the average annual increase rate since from 1998 to 2019 has been 2.8% (HIES, 2019).

Table 1: Population Characteristics of Bahawalpur

Tehsil		Both	Female	Male
	<b>Urban</b>	429236	1961118	233118
	<b>Rural</b>	377344	179759	197585
	<b>Total</b>	8065080	375877	430703
<b>MC</b>		356626	169655	186971
<b>Cantonment</b>		51769	16512	35257

Source: District Census Report 2010.

Figure 4: Residential Dynamics of Bahawalpur



Source: District Census Report, 2010.

## 2.2. Periodical and Urban Growth Dynamics of Bahawalpur:

From being a desert based and a walled city, Bahawalpur has come a long way in reaching its current position and state. Post Canal Colonization after the year 1934, Bahawalpur saw a sudden outburst of population and a need for setting up new places for accomodating its settlers. The periodical growth of the city can be linked with the uni-dimensional spatial growth of the city.

The monocentricity of the city lies in its medieval structure and the irregularities of the cities to expand from east to west. The city was initially confined within an area of 1.5 square kilometers and the wall stretched through an area of 17 square kilometers (Ahmed, 1995). Until 1940's the city remained within its boundaries and retained a medieval architecture thereby confining road connectivities and any other sort of links with the outside world (Muhammad Mohsin, 2015).

With the transfer of powers to the British in 1858, a rapid and a full fledged canal colonization program was launched in Punjab in order to tackle the shortage of food and arable land in its Eastern and Central Part due to congestion (Hashmi, 2018). Bahawalpur was one of the 36 princely states in the province. Canal Colonization in Bahawalpur was a direct consequence of the Sutlej Valley Project (Darley, 1941). The physical characteristics of the state of Bahawalpur were quite diverse and offered a wide range of land attributes. The irrigable area that was estimated for the agricultural purposes was about 2,000,000 acres (Ahmed, 1995). The population dynamics of the city can be categorized into these four phases (Hashmi, 2018).

a. **The first phase/ Pre canal colonization (1778-1911):**

This phase relates to the indigenous people who migrated from different parts of the world and lived in a walled city. This phase extends till the early stages of the Sutlej Valley project. The medieval structures of the city expanded from west to east and were monocentric in dimensions. The city initially lacked the required infrastructure to ensure connectivity with the outside world.

b. **Second phase/ Canal Colonization Phase (1911-1974):**

This phase is the beginning of the mass migration and the people coming to Bahawalpur in order to perform economic activities. This phase coincides with mass migrations from India after partition because of its close proximity with the country (Hashmi, 2018). Secondly, extensive housing schemes came into existence as part of the modernization campaign for the city, and thirdly, after the action of one unit the city gained much population because of its regional status (Hashmi, 2018).

c. **Third Phase/ Post canal colonization phase (1974-1999):**

This phase is known as the expansionary phase as this phase related to the rapid expansion of the city. This phase saw enhanced connectivity and better land links with the outside world.

According to the Government of Pakistan census report (2000) the growth rate during this time was more than 5% (PCO, 2000).

d. **Fourth Phase/ Agricultural Urbanization Phase (1999-till date):**

The city still continues to grow at a rapid rate. According to the GOP census report 2000 the city grew at a rate of more than 4% in the previous year and it was only second to the capital city of Pakistan

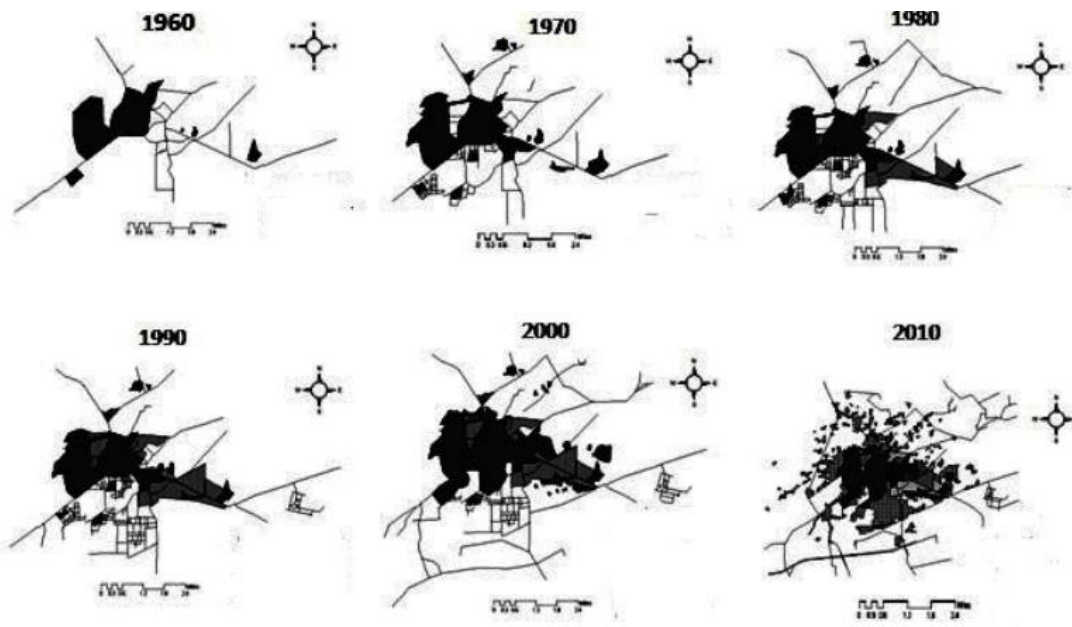
### 2.3. Spatial Growth dynamics of Bahawalpur:

During these phases of population outburst and growth, the city of Bahawalpur expanded in all directions but the major outgrowth was towards the direction of East. This uni-dimensional

growth was majorly caused due to population growth, encouraging economic prospects, rise in land values, enhanced connectivity and preference of the rich (Muhammad Mohsin, 2015).

City's total urban land area was 4,308.40 acres in 1974, wherein residential area had a leading share of 1,468.78 acres (34.09%) whereas agricultural land area was 1,147.06 acres (26.62%) and was ranked second after residential area. Major changes were observed in 2010 when the Municipal administration of Bahawalpur estimated that the residential area was yet again dominant i.e from 1,468.78 in 1974 to 3,802.55 acres in 2010 (51.56%) while agricultural land area had depicted significant fall and shrank from 1142 acres (26%) in 1974 to 3.22 acres (0.04%) in 2010

Figure 5: Growth Dynamics of Bahawalpur



Source: Mohsen M. Urban Growth and Conversion of Farmland in Bahawalpur City, Pakistan



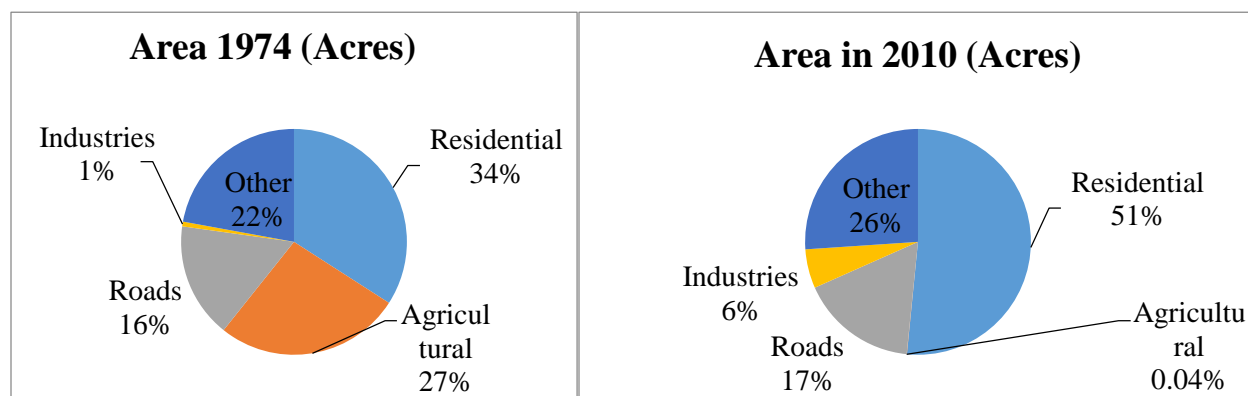
Table 2: Land Use Changes in Bahawalpur (1974-2010)

Land Use type	Area 1974 (Acres)	%	Area in 2010 (Acres)	%
Residential	1468.78	34.09	3802.55	51.56
Agricultural	1147.06	26.62	3.22	0.04
Roads	710.19	16.48	1234.12	16.73
Industries	29.06	0.67	412.44	5.59
Other	953.31	22.13	1921.67	26.06
Total	4308.40	100	7373.90	100

Source: Urban Land Area of Bahawalpur City2010. TMA Bahawalpur City

Figure 6: Land use Change Between 1974-2010

Figure 7: Residential Area Comparison



Source: Urban Land Area of Bahawalpur City2010. TMA Bahawalpur City.

As can be seen, there is a clear increase in the residential area of the city and it is coming at the cost of the agricultural land. The agricultural land shrunk by more than 99% whereas the agricultural population increased by more than 50%. The arable or the agricultural land when compared to the people employed with the agriculture shows an inverse relation. According to

the most latest estimates available with the Pakistan Bureau of Statistics following is the employment ratio with in Bahawalpur (PSLM, 2019b).

**Table 3 Percentage of Employed Population by Industry and Rural/Urban Areas 2019**

Industry	All Areas %	Rural %	Urban %
Agriculture, Fishing and Forestry	58.7	72.6	22.0
Construction	16.5	12.7	26.5
Transport	1.6	1.4	2.2
Community Servicing	12.1	6.7	26.4
Financial sector	0.2	0.1	0.4

Source: The Urban Unit P&D Punjab, Bahawalpur City Profile.

### Location Quotient:

Location Quotient (LQ) estimates the concentration of an industry/sector or a particular demographic cluster. It is used to understand the growth opportunities and the future prospects for a particular sector, and to compare the sectoral employment in an area with respect to the region. Table 4 above shows that agriculture still employs a percentage of population in Pakistan. For Bahawalpur, the agricultural land in the city has shrunk to mere 0.04% of total area whereas the location quotient shows high level of sectoral concentration in agriculture (Table 5 below). Thus, implying that there is competing demand for land for agriculture, to accommodate the new farmers, as well as for new housing schemes. This is a paradoxical situation that needs to be addressed.

Demand for Land is rising by two rival but parallel factors. These factors are Commercial housing schemes and much of the population being related with agriculture for employment. High sectoral concentration combined with low levels of agricultural land presence means more land prices and less wages for the farmers. The location quotient for each of the following sector is the following:

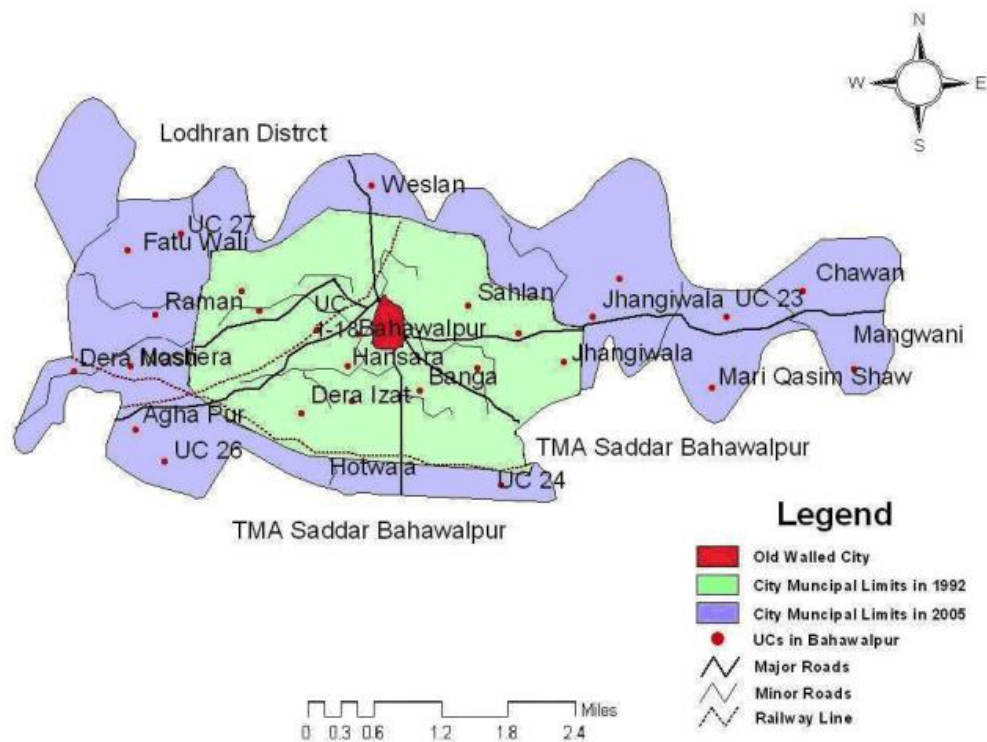
Table 4: Location Quotient for Different Sectors in Bahawalpur

Industry	Location Quotient
Agriculture, Fishing and Forestry	3.58
Construction	1.37
Transport	1.03
Community Servicing	1.16
Financial sector	1.36

Source (Tasneem, 2018)

The periodic growth in Bahawalpur has resulted in high concentration in the agriculture as the location quotient for the sector is the highest i.e., 3.58 whereas other sectors such as construction and transportation have location quotients less than 1.50. The location quotient for agriculture in Bahawalpur is high in comparison to other cities of South Punjab due to its historical context with the canal colonization (Hashmi, 2018). Through the above literature we can assume that there exists an inverse relation between the arable land and the agricultural employment. It implies that higher the location quotient, lower the arable land.

Figure 8: Growth of Bahawalpur City from 1992-2005



Source: Mohsin, 2015.

## 2.4. Agricultural Urbanization:

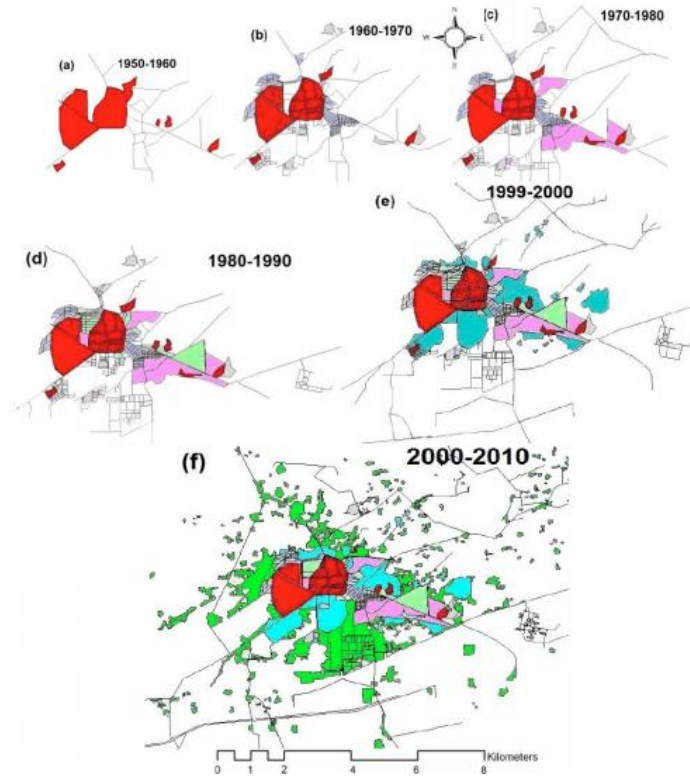
Conversion of farmland into non-agricultural land has become a major issue in the developing world because of an exponentially growing population (Muhammad Mohsin, 2014).

Urbanization is an ongoing process since long, however, it has picked up exceptional pace in recent time. Productive farmlands and other agricultural lands are in demand for the competing residential use, thereby putting an upward pressure on the demand for these lands hence raising their prices (UN Habitat, 2008). The conversion rates for arable lands into non-agricultural purposes are already high across the globe. For example, in the United States more than 2 million acre of arable land were converted into commercial lands in 2008 and the trend remain the same.

Same is the case with other developing countries such as China (Chris, 2010). Pakistan has also been a witness of this conversion. Arable land is one of the core resources for Pakistan. The arable land in Pakistan accounts for almost 24.4% of the total land area of Pakistan (*Economic Survey of Pakistan 2020*). Agriculture ensures food security in the country and employs more than 60% of the labor. On the other hand, the country has been fast urbanizing. Its urban population rose from 17% in 1951 to more than 36.4 % in 2017 (PCO, 2000) (*Economic Survey of Pakistan 2020*) putting pressure on the arable land in the peri-urban areas. 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 (Zaman, 2012).

Like many other cities in the country, Bahawalpur is also facing many issues with regards to land conversion. The total area that is being cultivated accounts up to 40% of the total arable land whereas 60% still remains uncultivated (Ali, Tahir, & Arif, 1999). 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 (Khan, 2014). 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 (Khan, 2000).

Figure 9: Development of colonies in Bahawalpur City from 1950-1960 to 2000-2010(



Source: Mohsin, Minallah, & Khan 2016

## 2.5. Land Retention of small farms:

Small scale farmers constitute 60% of the total agriculture population. These 60% population represents the families whose sole means of survival is based on these agricultural lands (Nation, 2019). The average farm holding per family currently stands at 5.63 acres which was more than double of the current holding in the year 1972. Moreover, more than 45% of the total arable land is held by the 2% of the landlords and the rest of 98% of the total agricultural population is left with only 55% of agricultural land. These disparities are the direct outcome of agricultural laws that regulate the sector. Following are some of the laws that regulate the land market in Pakistan (UN Habitat, 2008).

i. The Transfer of Property Act, 1882

- ii. The Punjab Tenancy Act, 1887
- iii. The Government Tenants Act, 1893
- iv. The Land Acquisition Act, 1894
- v. The Registration Act, 1908
- vi. The Colonization of Government Lands Act, 1912
- vii. The Sindh Tenancy Act, 1950
- viii. The Khyber Pakhtunkhwa Tenancy Act, 1950
- ix. The Provincial Land Revenue Acts of 1967
- x. The Baluchistan Tenancy Ordinance, 1978

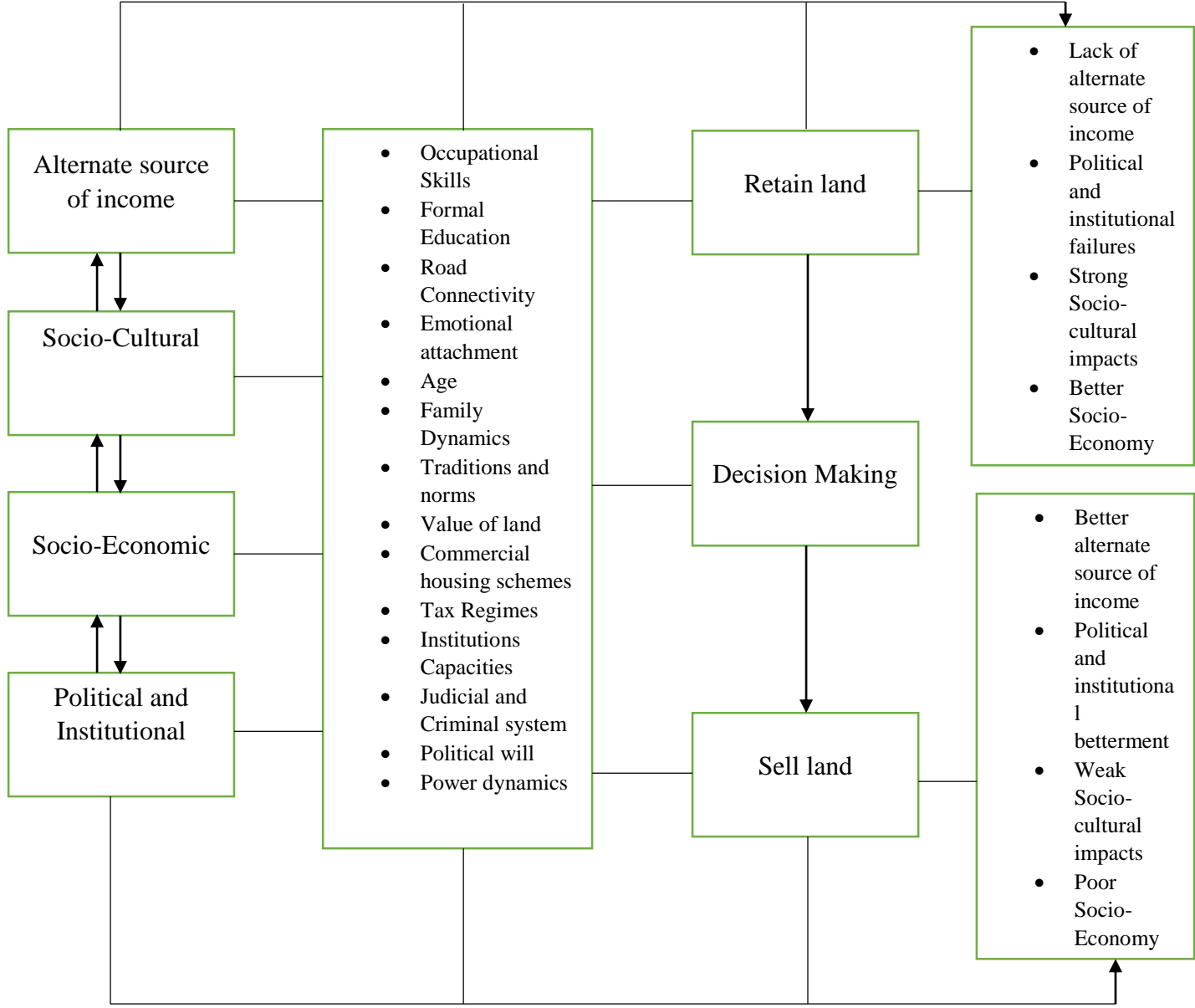
The property and land laws are bound to work in accordance with the Islamic laws therefore the inheritance plays an important role in land retention in Pakistan(Zaman, 2012). There are various factors that can be related to the retention of land by the farmers. As most of the farmers in the country are small farmers therefore, they cannot raise enough capital to sell their land and buy homes in the city or afford the urban lifestyle. (Zaman, 2012) indicated towards few reasons for land retention in the case of Lahore, yet they cannot be adamantly applied to Bahawalpur because of the diversity of physical features of both the cities. Lahore is a more organic and closed city as compared to other cities of Punjab such as Gujranwala and Multan. The density of Lahore is 6300/sq. km whereas the density of Bahawalpur is 150/sq. km. Apart from this, Bahawalpur caters to a desert area of more than 25,800 square kilometers which can be used as a

potential resource for sustainable housing (A. Mohsin, Dawood, M., Shah, Jamal, & Basit, M, 2019). As per Zaman (2012), the small farmers retain land because they are unable to sell their lands at a price that can buy them sustenance in the urban areas. Moreover, they are not skilled for the occupations that are in demand in the urban areas (Muhammad Mohsin, 2015; Zaman, 2012). Another trend has been witnessed where the farmers send their children to the urban places to search for work and settle there while the farmers retain land because this is the only asset they have and they use it to provide for their family.



2.6. Theoretical Framework:

Figure 10 Theoretical Framework



Source: Author's Own.

The theoretical framework is a multi-variable framework that is based on complex and non-linear interactions of dynamic processes involved in the decision-making process of land retention. Land retention is a result of long-term strategic choices that impact the farmer's choice not only in the long run but also in the short run. The framework takes into account the long-term impacts in a short run socio-cultural, socio-political and economic correlations. As indicated in the theoretical framework, there are various factors that influence the decision of a farmer to retain their land. The long run major themes take form of a singular or non-singular channel that correlates with one or more themes. These themes may take place in the decision-making process individually or as collective mechanism. The farmers make their decision of retention or selling of land based on the following factors:

**Land Retention:**

- Lack of alternate source of income
- Political and institutional failures
- Strong Socio-cultural impacts
- Better Socio-Economy

**Land Selling:**

- Better alternate source of income
- Political and institutional betterment
- Weak Socio-cultural impacts
- Poor Socio-Economy

The study has analyzed these factors and their significance in the small farmers' decision to retain or sell their land.

## CHAPTER NO 3: Methodology

### 3.1. Data and Methodology:

This study uses a qualitative approach to understand why small farmers retain land in the face of rising land prices. It relies on Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) to gain insight into the phenomenon of land retention. The author has used both primary and secondary data for a qualitative analysis. The data was collected in two tiers. The two-tier approach has been used in order to bifurcate the data based on basic demographic insights and more complex interactive insights. The 1<sup>st</sup> Tier is a basic demographic data set that collects respondents' information on the following variables:

- Income
- Availability of conveyance
- Provision of housing facilities
- Occupation in demand skills
- Value of withheld land
- Age
- Yield (last)
- Average income
- Education

The data obtained under the 1<sup>st</sup> tier responds to factors such as impact of age or income on land retention and to find if older people prefer to hold their land more than the young people? Do people with more income prefer to hold their land more than the people with less income? The

tier 1 data has been collected through questioners that were spread out to the audience before focused group discussions took place. The tier 1 data is very insightful when it comes to understanding the thinking patterns of youth and how it relates with the thematic perspectives gained through the in-depth analysis.

Whereas data for tier 2 is a non-linear interactive data that has been collected through Focused Group Discussions and is solely based on open ended and semi-structured basis. This is the very foundation of the key insights that have been obtained for the thematic analysis. The data collected in Tier 2 corresponds to the mechanistic decision-making patterns of the small farmers. The tier 2 data correlates with tier 1 data to establish a structured view of demographic insights that play a vital role in the decision-making process of the small farmers.

### 3.2. Data collection Techniques:

The primary data was collected in two tiers. In the first tier, a questionnaire was distributed to the respondents to collect their basic demographic information. In the second tier, data was collected through Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs, from the lambardars or village elderlies) from the nearby chaks. Only those respondents were considered whose agricultural land area is less than 12.5 acres. The total number of participants was 50. Secondary data was collected through various sources such as TMA Bahawalpur, Pakistan Bureau of Statistics, Census Data and Open Access Maps. Secondary data has been used to build themes, review literature and develop theoretical foundations of the study.

### 3.3. Data Analysis:

Qualitative data was analyzed in order to conduct a thematic analysis. The thematic analysis allowed the author to develop a pattern with regards to the significant factors for land retention that are hard to measure in a quantifiable manner. The data has been gathered through structured and semi structured interviews in a tier-based approach (Hassan, 2016). The interviews were conducted through Focused Group Discussions. Focal people include small farmers with land holdings of less than 12.5 acres (Punjab Government) and real estate agents. The structured and semi structured interviews had both open and closed ended questions.

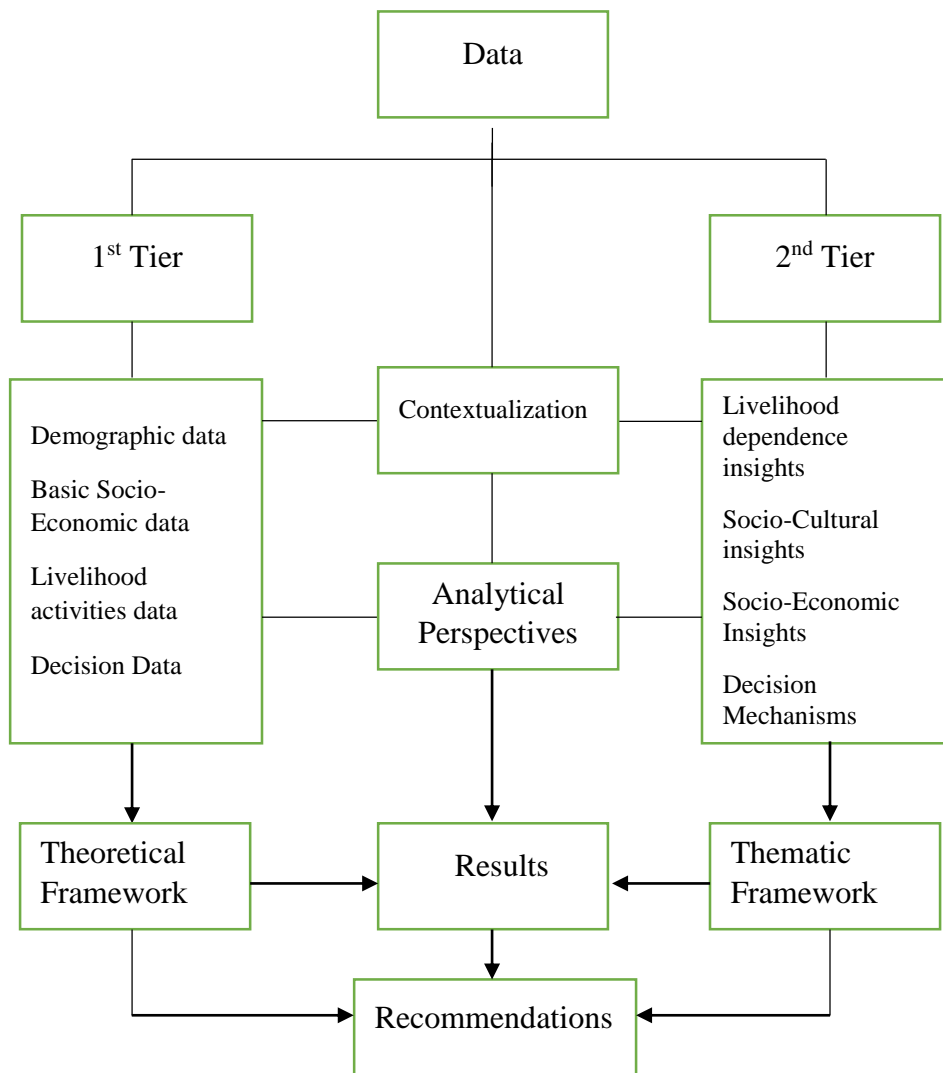
As Thematic analysis is a qualitative research design that takes its root in the development of coding mechanisms to analyze the context of data therefore the thematic analysis must be conducted as such to obtain better and un-partial themes. The author believes that there is high probability of one's opinion influencing the other's opinion and there is also a high chance that most of the farmers were following the narrative set by their lumberdar or the elderly. These elderly people had been in the farming sector for all their lives and another phenomenon was observed that the elderly people were more rigid towards the retention of land whereas the young people were less rigid when it came to retention of land.

To come to unbiased and un-partial themes, the thematic analysis was conducted in a phase-based approach. There were total of 6 phases in the thematic analysis (Castleberry & Nolen, 2018). These 6 phases are the following:

**Table 5 Process of Qualitative analysis**

<b>Phases</b>	<b>Analytical processes</b>
Familiarization with the data	Narrative Preparation (transcribing ideas) Re-listening/Reading the data
Generation of initial codes	Coding systematic patterns with-in the data Collecting data relevant to each code
Searching for themes	Collating codes into potential themes Gathering all data relevant to the potential themes
Reviewing themes	Checking the workability of the potential themes Checking the workability of themes with the data collected Reviewing the data to search for additional themes Generation of thematic map for the analysis
Defining and naming themes	On-going analysis to refine the specifics of each theme and the overall story of the analysis Generation clear definitions and names for each themes
Producing the report	Selection of clear examples Final analysis of certain extracts Relating analysis back to the research objective

**Figure 11 Data Analysis Framework**



Source: *Author's own*



## Chapter 4

### Key Informant Interviews:

The analytical foundation of this research is based on thematic analysis of the primary data that has been collected from the rural and peri-urban areas surrounding the city of Bahawalpur.

Below discussed are the main insights that were gained through detailed interviews of the lambardars of Chak 8 B.C, Chak 13 B.C and Hoothwali. All of these are within the 20 km radius of the city and possess almost homogenous cultural, linguistic, political and economic patterns.

All these Chaks and Bastis were developed under the patronage of the Nawab of Bahawalpur during the Sutlej Valley Project in the year 1932. The KIIs present an ideal instance for gaining insight into the factors that have mainly contributed to retention of land by small farmers in the recent past. As discussed in the literature review, the per capita land holding of the farmers in the last decade has declined from 12.5 acres to 5.5 acres, therefore this transition of farmers from selling their land to holding their land in the recent times is to be understood. The cultural dynamics within the small farmers' community were not as stringent as compared to large farm owners when it comes to land retention. Big landowners were more reluctant on selling their land as compared to small farmers. Each of the lambardar stated that he speaks on behalf of the whole locality and must be taken as the opinion of the whole.

A perspective analytical approach was used in trying to conjecture upon the insights that were obtained through the interviews. The analytical context included the following framework.

**Table 6 Perception Approach (Author's own)**

<b>Topic</b>	Understanding the socio-economic determinants of land retention by small farmers
<b>What does the interviewee believe about the topic?</b>	The interviewees believed that the small farmers are holding land because of various reasons as will be discussed in the thematic analysis
<b>Why does the interviewee believe that?</b>	He believes that based on his personal and professional experiences
<b>What is another way to look upon the topic?</b>	Small farmers are left with no choice other than retaining their land
<b>Why might someone else hold a different opinion?</b>	Someone else might hold a different opinion because he is looking at an issue from a different angle
<b>What have I learned about the topic</b>	The dynamics of land retention by small farmers

### Key Informant Interview 1: Chak 8 B.C:

Mr. Majeed Haq is the current lumbaradar of the Chak. He holds a significant amount of influence in the area. He is a favored political worker of a powerful political party and has been the lumbaradar of the area for the previous 7 years since the death of his father who remained the lumbaradar of the Chak for more than 22 years. He has a personal land holding of 7.5 acres and moreover runs a shop of fertilizers.

Initially when I went to the Chak for the interview, he did not allow me to meet him because he thought I was some sort of a government employee who wanted to buy his political affiliations. He straight forwardly denied meeting me and asked me to not come back. This was the first hurdle that I faced during the collection of my data. Upon inquiry and a little bit of search I was able to trace out a link to him and after 3 days he allowed me to meet him. He was a bit tough to open up initially, but had quite an insight into government policies and was a keen observer and a commentator on the current political scenarios of the country later on. He asked me to not ask any political questions but was very quick to indulge in political discussions by himself. He highlighted that there are variable factors that have been impacting the decision of land holding among the small farmers.

He stated that small farmers these days are very much dependent on their land holdings, but they fail to capitalize on their land as per the potential of the land. The obsolete technologies that are being used by the farmers are not very productive. Even if they go for fertilizers and other such capitalizations, they fail to optimize their lands because of incapacity to utilize these resources in the most efficient manner. Moreover, the sales tax incorporated by the government is regulated through FBR's 236 C. Under this regulation, the small farmers with a land holding of more than 5 years are not required to pay a capital gains tax thus making it easier for the farmers to sell

their land but still they do not sell their land. Therefore the tax component is not an issue for the farmers.

Moreover, he highlighted some very persistent issues with the small farmers. He was of the view that the farmers have always been traditional. Their traditions overcome their economic manifestations. The farmers cannot sell their lands because this is the only skill they have. Traditionally, farmers had not acquired professional education that could help them sustain their lives in the urban settings. He highlighted that the small farmers must acquire education as a means of sustenance to have a prosperous future because if they are unable to grow their land holdings, they will be forced to sell their lands. When asked about how he feels about the commercial housing landscape that has taken over the agricultural land acquisitions he stated that their land has been grabbed by many public sectors institutions. He stated that the Islamia University of Bahawalpur, Baghdad Campus acquired land from these farmers at PKR 3000 per acre in 1989 even when it was far more valuable. However, no official and legislative evidence in this regard could be found therefore he blames institutional fissures as the main cause of land devaluation and rise of commercial housing schemes. He stated that the farmers sold their land at devalued rates and now are left with bear minimum and with no skills to practice in the city the small farmers are holding on to their lands.

### Perspective analysis for Case 1:

<b>Topic</b>	Understanding the socio-economic determinants of land retention by small farmers
<b>What does the interviewee believe about the topic?</b>	The interviewees believed that the topic was an essential topic and the small farmers have more than economic factors to retention of their lands however economic factor is the major one.
<b>Why does the interviewee believe that?</b>	The interviewee believes that because he himself is a small farmer and is facing many issues because of the commercial housing schemes.
<b>What is another way to look upon the topic?</b>	Another way to look upon the topic is that it has become the option of last resort for the farmers to retain their land
<b>Why might someone else hold a different opinion?</b>	Someone else might hold a different opinion because he has his personal interests at stake
<b>What have I learned about the topic</b>	The dynamics of land retention by small farmers

## Key Informant Interview 2: Chak 13 B.C:

Javaid Baloch is the lumbaradar of the chak 13 B. C. He is 42 years of age and has a personal land holding of 6.5 acres. He is a lean and a wise man. He lives a quiet life and only comes out of his home when he needs to go to his fields. He is a Saraiki speaking Baloch and has been settled here since his birth. He didn't know the whereabouts of his parents and where they came from. Javaid Baloch happily accepted to give an interview and called on his fellow farmers on the site so that collective opinion could be obtained. All the farmers in the area had harvested only wheat in the last season. The nearest commercial housing scheme to their area was Al-Raheem garden housing scheme. The total area of the scheme is 42 acres and is spread on agricultural land. The scheme is still under construction and it belongs to a family of landowners. 5 years ago, the area occupied by the housing scheme was cultivated, but now the housing scheme, which was still under the process of development, replaced it. According to the lumbaradar, the housing scheme had not seen much success because it still lacked basic facilities such as gas and sewerage lines.

Mr. Javaid identified various reasons for why they would not leave their land in the next 10 years. The concerns he raised were the same as the ones raised by Mr. Majeed. He also pointed out the lack of education, occupational skills and the fact that agricultural land is worth more than what could be paid for by the commercial housing schemes as reasons for land retention. Although he was of the view that the new generation is more likely to sell these lands, but he did not see that happening in the next 10 years because the cultural values were still strong enough.

There was a clear difference between the opinions of the younger generation and the older generation. The younger generation was more inclined towards getting education than the elderly people. Although not in a decision-making space yet the younger generation were more focused towards their children's education as compared to their elders. Literacy was more prevalent in

this Chak as compared to Chak 8.BC. Although there is no formal data to back up this claim, yet this can be a functional judgment based on the observation of the author.

Mr. Javaid did not go in any technicalities involved in the process of selling and purchasing of land. He had no formal education but one of his children had cleared his matriculation from the local school and was now working in the city at a Medical store. He pointed out the fact that current landholding was not enough to feed all the family therefore additional income has become mandatory for meeting household expenditure. He stated that due to proximity of the area with the desert it is difficult to grow anything in the area. He pointed out that salinity is the biggest issue in the region. Asia has the largest area under salinity (Singh, 2009). Salinity was a major issue in the Thar Desert area of Rajasthan in India because of the rise in the water levels (Singh, 2009). Therefore, with low level of yield and more people working on farms, it has become quite difficult for farmers to make ends meet.

## Perspective analysis for Case 2:

<b>Topic</b>	Understanding the socio-economic determinants of land retention by small farmers
<b>What does the interviewee believe about the topic?</b>	The interviewees did not comment on the standards of the topic but he believed that the people need to know about their issues
<b>Why does the interviewee believe that?</b>	The interviewee believes that because he along with his fellow farmers feel excluded in the process of commercialization and this will have great impacts on their livelihood
<b>What is another way to look upon the topic?</b>	Another way to look upon the topic is that commercialized housing schemes need to be looked up from a multi-dimensional perspective instead of just as a need for increased population
<b>Why might someone else hold a different opinion?</b>	Someone else might hold a different opinion because most of us do not understand the ground realities faced by the small farmers
<b>What have I learned about the topic</b>	The long term implication of short term choices.

## Key Informant Interview 3: Hoothwali

Hoothwali is a Chak located to the South-East of the main city of Bahawalpur. Its distance from the center of the city is approximately 6.8 kms. The Chak is located near Shumai Canal and has effective water system to feed the crops. Mr.Karamt is the lumbardar of the Chak. He is 66 years of age and has a total land holding of 4 acres. The lumbardar, though a respected man, lived in a broken house that lacked almost all the basic facilities.

Upon inquiring if he had any intention of selling his land, he replied in a very firm manner that no way can he sell his land while he lives. During the conversation, Mr. Karamat opened about how he had sold his land for pity pleasures in his early days. He would sell his land spend it all on useless things. The author cannot explicitly state the exact wordings of the protagonist



because of academic sensitivities involved in the process however they can be categorized as useless pleasures. He did not have any male heirs and now that when he is near death he does not want to sell his land. The author further inquired that whether his daughters would use this field or not? He stated that he had no clear answers to that however he had advised his daughters to keep the land and give it to their children when the right time comes.

Mr. Karamat did not talk much about any education or occupational skills, but he did talk about the emotional values attached to the land. He stated that in Saraiki, “*Asan jiwain apni maa nai waich sgday, owain zameen wi nai waich sagday*” (We must not sell our lands as we cannot sell our mothers). Moreover, he stated that land must be held at any cost because this is what provides for us throughout the lives. Although the interview with Mr. Karamat was an informative one but it was majorly based on emotional value attached with the land.

### Perspective analysis for Case 3:

<b>Topic</b>	Understanding the socio-economic determinants of land retention by small farmers
<b>What does the interviewee believe about the topic?</b>	He believes that land must be held at any cost
<b>Why does the interviewee believe that?</b>	The interviewee believes that because he has positioned his regrets in correlation with his past actions
<b>What is another way to look upon the topic?</b>	Another way to look upon the topic is that cultural values have a very strong role to play in land retention
<b>Why might someone else hold a different opinion?</b>	Someone else might hold a different opinion because of the different levels of attachments that everyone has to their own assets
<b>What have I learned about the topic</b>	Decisions are not taken in a void, there are many factors impacting the decision mechanism

## Chapter 5

### 5.1. Analysis and Results

The analytical approach adopted by the author uses a qualitative technique based on thematic analysis in order to develop full scale of themes that can be concluded as factor components for understanding the land retention mechanisms by small farmers. The applicability of the developed frameworks under the thematic analysis is generalizable and valid for general use.

### 5.2. Thematic Analysis:

The thematic analysis was conducted based on the above-mentioned phases approach. The approach was quite helpful in determining the major themes of the analysis. As the data was collected in FGDs and the evidence was recorded through videos therefore this allowed the author to develop an efficient solution to the thematic analysis. The major themes that were identified are the following:

#### 1. Unavailability of alternate sources of income:

Agriculture is the biggest source of income for the population of the region. More than 58% of the total population is employed in the agriculture sector, whereas out of the 58% more than 72% of the population belong to the rural side of the region. With such an excessive amount of employment and a concentration of 3.58 on location quotient it is imperative to assess the dynamics of employment within the region.

Table 7: Demographic Employment percentage

Industry	All Areas %	Rural %	Urban %
Agriculture, Fishing and Forestry	58.7	72.6	22.0
Construction	16.5	12.7	26.5
Transport	1.6	1.4	2.2
Community Servicing	12.1	6.7	26.4
Financial sector	0.2	0.1	0.4

Source: PBS, 2017

Lack of alternative source of income is one of the biggest hurdles that was found while developing patterns in the study. Most of the small farmers find it next to impossible to go out and seek employment in the city. Farmers consider land as the only source of income and due to their long-term employment in the fields they are unable to develop any alternate sources of income. Although 9 of the total participants had alternate employments such as jobs at fertilizer stores, yet their primary source of income is their land. As calculated from the data collected by the author, small farmers have an average income of approximately PKR 35000 PKR. According to HIES (2019), the estimated median household income in Punjab is PKR 42, 861 (HIES, 2019). This amounts to a lower median income in the study region by approximately 23%. The major difference is indicated in the portfolio diversification of the people. According to the Percentage distribution of monthly household income by source and quintiles (2018-2019) only 6.23 % of the total agriculture sector has an average income of more than PKR 62000 per month. This lack of alternate source of income contributes to poverty in the rural sector. Following are some of the sub-themes that were developed under the lack of alternative sources theme.

#### **I. Lack of Occupational Skills:**

According to the statistics released by the statistia.com the highest median salaries were paid to the professionals in the service industry. Chartered Accountants were the most highly paid workers in Pakistan. They have a monthly median income of PKR 32562. Followed by the engineers, accountants, and doctors. People belonging to agriculture sector have a median annual income of PKR 15338 only (HIES, 2019). Thus indicating that the farmers have the lowest monthly income amongst all the sectors. As 58% of the total land area in the vicinity of Bahawalpur is dedicated for agriculture and out of this total area the 72% of the area comes under rural jurisdiction, therefore much of the labor force in the area lives in the rural areas. This gives rise to two issues:

- a) According to the PSLM (2019), 36% of the total rural population aged between 45-50 only has primary education. The data collected by the author has an average age of 48 years, thus assuming the same level of education in the sample size it is least likely for any service-related firm to invest in the region because of the lack of educated and skilled population.
- b) More and more people are likely to migrate to mega cities such as Lahore, Karachi, and Islamabad in search of alternate employment thus making it more saturated. More than 67% of the participants considered lack of occupational skills as one of the major issue in switching to alternate employment prospects. Phrases such as *“Beta; Humy aur kui kam aata hi nahi hai”* and *“Hum nai puri zindagi yahi kam kia hai aur kuch seekha hi nai hai”* (Translation: “Son, we know no other work” and “We have done this all our life and know nothing other than this(farming)”) were the most common. Whenever inquired about their willingness to learn if government initiated any learning program, most of the participants replied with a negative, citing that they do not even have any basic knowledge about modern techniques of farming.

Most of the farmers were saying that they love their land because it feeds them. Any prospects of an alternative source of income were negligible due to lack of training.

## **II. Lack of Education:**

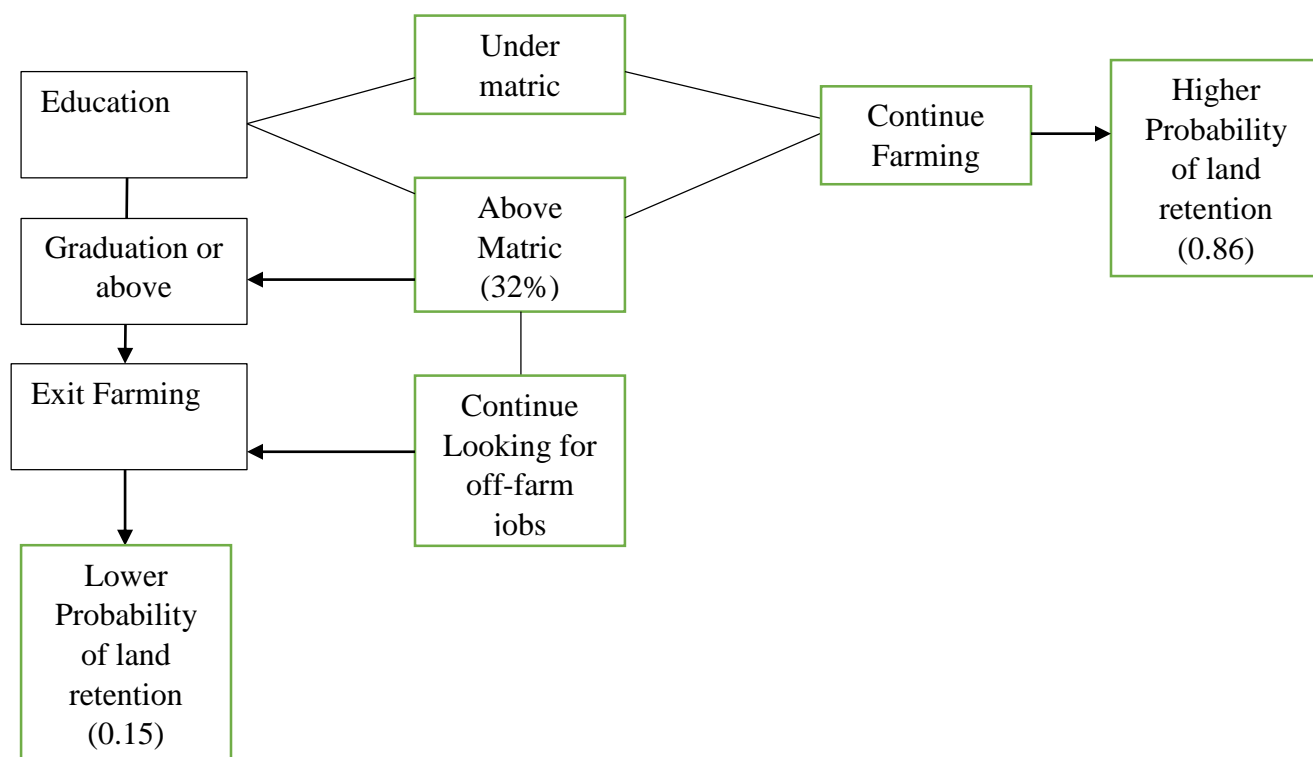
Most of the participants were under matriculation. On average, out of every 20 participants only 4 were above matriculation and only one was a graduate. This makes an aggregate of 94% of total participants with a matriculation and above certificate. A peculiar pattern was identified during the interviews. Upon an in-depth analysis of the impact of education on the farm retention, an “exit or continue” pattern was observed. This was another decision dynamic that was observed in a particular age group. This pattern was not identified while interviewing the participants but was noticed during the analysis. The pattern identified an “Exit” pattern if the participant got a job and “Continue” if the participant did not get a job after the education. This pattern was normally identified in the people with graduation. A third dimension to this process was the continuity dynamic. Under this process the participant would keep on looking for a job in the city if the number of heads dependent upon per acre area of land were more than 5. Every 6<sup>th</sup> individual on per acre of land wanted to go out for better employment opportunities.

However, the education was a major factor in the future discourse of the generations. Most of the farmers who had young children were either sending their children to school or planned on sending their children to school.

One of the farmers from Basti Miani stated that, “ *Taleem aik asasa hai jis k liye mai apny baqi saray asaray daao pai laganay k liye tayar hun* ” (Education is an asset for which I am willing to sacrifice all of my other assets). According to Percentage distribution of Population by Age, Sex, Literacy and Level released by (HIES, 2019) it was stated that for the people aged from 45 to 49,

only 0.10% of the population belonging to the agriculture sector has any professional education, 0.20% have an inter but lower degree and 0.26% have a matric but not above degree. This predicament indicates towards the fact that with changing pace of development and increased accessibility the importance of education in the sector has risen indeed.

**Figure 12 Behavioral framework to understand exit or “continue patterns” (Author’s own)**



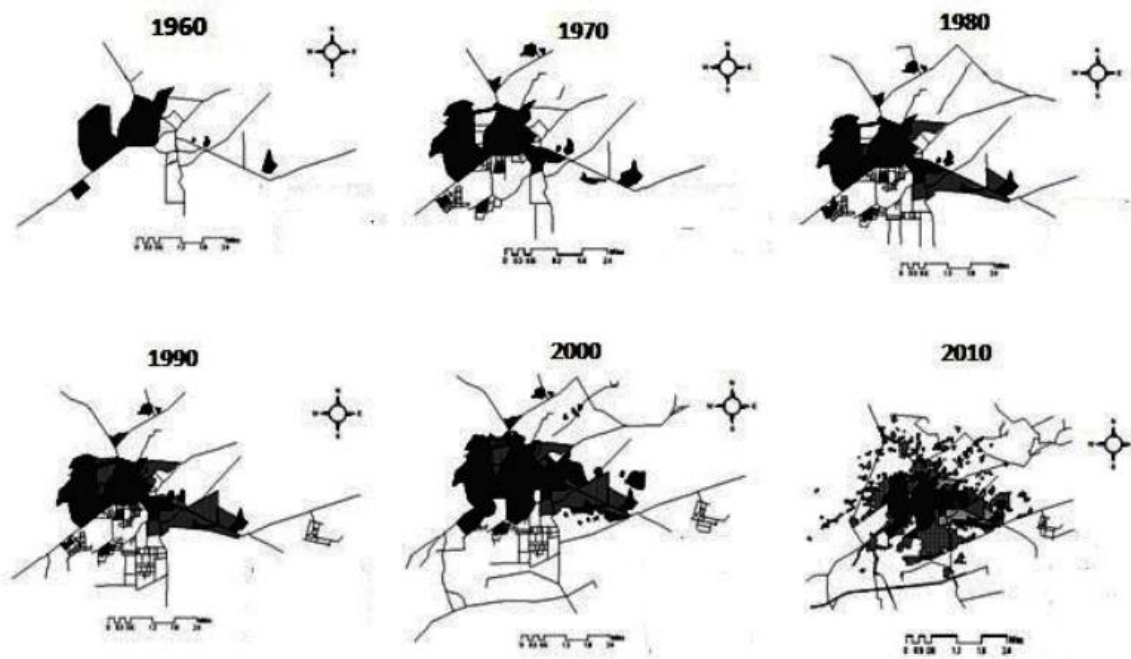
**Table 8 Probabilities of land retention (Author’s own)**

Probability of A NOT occurring: $P(A')$	0.15	
Probability of B NOT occurring: $P(B')$	0.86	
Probability of A and B both occurring: $P(A \cap B)$	0.119	
Probability that A or B or both occur: $P(A \cup B)$	0.871	
Probability that A or B occurs but NOT both: $P(A \Delta B)$	0.752	
Probability of neither A nor B occurring: $P((A \cup B)')$	0.129	
Probability of A occurring but NOT B:	0.731	
Probability of B occurring but NOT A:	0.021	

### III. Poor Connectivity:

Khan related undocumented historical facts in the social-spatial growth patterns of Bahawalpur (Khan, 2000). He stated that the city of Bahawalpur after merging into the state of Pakistan started gaining pace with regards to urbanization. The wealthy were settled in the government owned housing schemes such as Model Town A and Model Town B, whereas the poor started settling in the Islamia colony. The growth patterns depict a unidimensional growth of the city towards the South-East. As the new settlers acquired land in the Cholistan and Yazman region of the city, therefore, the nearest settlement was the Islamia Colony. The colony is situated in the Southern-East part of the city and is in close proximity to the region of Yazman. The map below shows the spatial growth patterns of the city.

**Figure 13 Spatial Growth of Bahawalpur**





The city has grown outwards to the region of Yazman and this is a direct result of the Sutlej Valley Project (Muhammad Mohsin, 2015). He further states that the region became more and more connected towards the southern region because road connectivity was initially only developed on the Southern side of the city in order to connect the main city to the nearby ruling areas (ibid). These ruling areas were connected through the *Bekanari Road* thereby giving a major focus only towards the south. This initiated a growth pattern of unidimensional therefore even up till now the surrounding areas of Bahawalpur such as Hoothwali and Basti Mian have very poor connectivity with the road.

This was evident in the data collected by the author. The average monthly visits paid by the participants to the main center of the city (Circular road, BVH, Larri Addass and recreational sites) were 1.5 only. Following is the ordinal sequence of patterns that were developed in lieu of city visits:

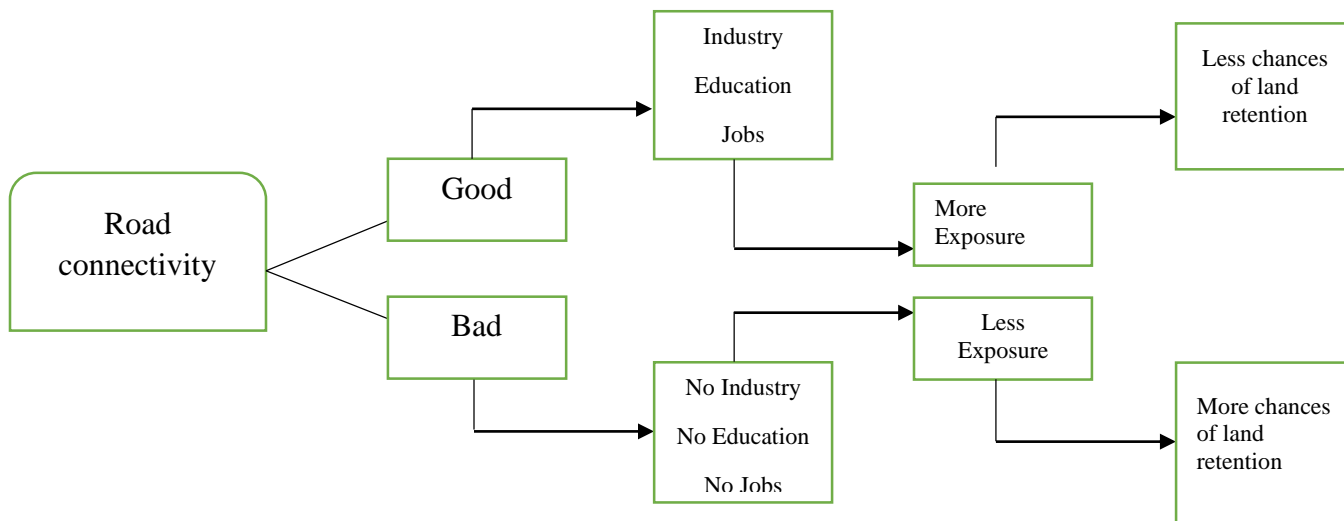
**Table 9 Ordinal Ranking of City Visit Purposes**

Ordinal Ranking (%)	
Place/Reason	1 <sup>st</sup> Preference
Hospital	52%
Educational	13%
Commodity purchasing	20%
Out of City Travelling	10%
Recreational	5%
Total	100%

This poor connectivity is one of the biggest reason of poor exposure. With an average visit rate of 1.5 per month, the villagers rarely leave their land thus have little to no experience of city life. Poor exposure makes them highly dependent on their land. Lower productivities force the

farmers to sell their land to ensure short-run sustainability, whereas lack of any other occupational skill makes them dependent of their small piece of land.

**Figure 14 Connectivity-Exposure Impact Framework**



## 2. Political and Institutional

### I. Tax Regimes:

Under the section 236C of the Income Tax Ordinance 2001, the seller of the agricultural property is supposed to pay 5% of the net payment that he receives if the immovable property is sold within the first year of the purchase, 3% in the second to third year and 1% in the fourth and the fifth year. The property can be sold with no capital gain tax to be paid after the five years. The main issue of the farmers lies with the withholding tax. Withholding tax can be defined as the amalgamation of both the value tax and capital gains tax. Under this tax both the parties are required to pay the tax. Under the section 155A of the Withholding Income Tax Regime (WHT) Rates Card as per finance Act 2020, the seller has to pay an amount equivalent to 1% of the total income gained if he or she is a filer and in case of non-filer the seller has to pay a sum equivalent to 45% of the total income gained and the same applies to the purchasing partner.

None of the participant was a tax filer, therefore all the farmers were afraid of paying heavy taxes to the government. To avoid paying taxes, the farmers declare their lands at less than the market price, at which the commercial housing schemes become willing customers. The taxation system of Pakistan is one of the most complex in the world. The tax system is difficult to understand for the famers, therefore, once they want to sell their property they have to either involve a third party who is well aware of the systems and knows the procedures or they have a higher probability of being looted. 7 out of 49 participants identified tax regime as an issue whereas 39 out of the total 49 participants agreed that the tax regime was either complex or it did

not favor the farmer or both. Whereas the rest of the 10 participants said that they knew nothing about the tax regime and would rather not comment on the issue. The issues related to tax regime are complex and dynamic in nature therefore the only reason for it being selected is the frequency at which the issue has been brought up by the participants. As far as the author's opinion is concerned the author thinks that this point may have a probability of bias for the following reasons.

- a) The issue was brought up in a collective meeting therefore it is high chance that the issue might have been highly influenced by the opinions of the others.
- b) Most of the participants seemed to have very low or no knowledge about the subject.

## **II. Institutional failures:**

Institutions have an important role to play in the efficient allocation of resources. A multitude of institutions are involved in the process of the distribution of land. For most people, land is not purchased land but inherited land. 100% of the participants had inherited land and none of the participants had bought the land by themselves. The inherited land can be traced back to the distribution of land by the British in the year 1936 as a result of the Sutlej Valley Project (Hashmi, 2018). 13 of the participants had their cases pending in the upper and lower courts. Three had their petitions in the civil court. These petitions were related to their land being occupied by the local feudal or the "*wadera*". The feudal lord had captured their land because they had failed to pay him their debts. The debts were in form of case money, grain and as a payment of rent because they had borrowed some machinery from the feudal. Their cases had been pending in the court for more than 4, 6 and 3 years respectively. On condition of anonymity, they even disclosed the name and all of them had this issue with the same person.

The issue of land grabbing was brought up by the locals in the police station. The police station attached to that area was Thana Raman. According to the locals they had registered numerous complaints against a group of people involved in land grabbing, but they were taking no action. A single FIR had not been registered against these persons. These dysfunctional institutions contribute a lot to the retention of land in the area. Small farmers are afraid that if they sell their land now, they will have nothing in their hands because not only will these feudal lords get all their money from them but will also buy the land through their own agents as this has been the precedence. All the petitioners related the same event.

### **III. Lags in the judicial and criminal systems:**

Judicial delays are common in Pakistan. While an average case is resolved in 7 years, it is not surprising that the country's judicial system is full of lapses and lags. According to a recent report published by the Legal Aid Office (2016), the biggest reason for the adjournment of the cases was the absence of the witnesses. Although witness has much importance in the judicial system of Pakistan, yet the Judge has no authority when it comes to penalizing the non-appearance of the witnesses. The graph below shows the other reasons:

**Figure 15 Center of South Asian Studies, LSE**

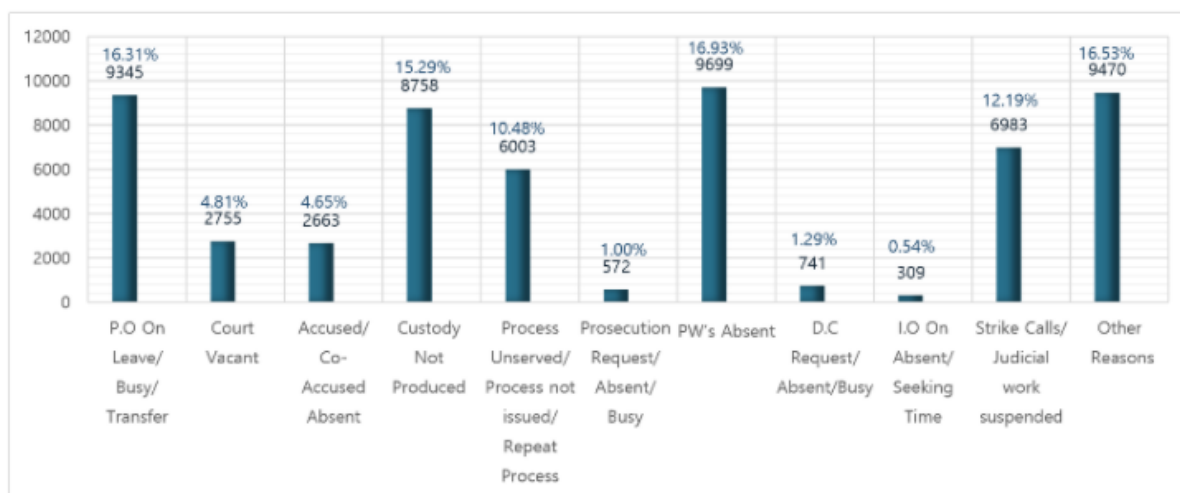


Chart depicting reasons of adjournment of hearings of All LAO cases in Sindh as of May 2013 to March 2016

Out of 49 participants, 19 of the petitioners had their cases petitioned in the courts. Two of the cases in this regard were the most prominent. The first one was of Fareed Jhammat. He told that his land had been accumulated by Civil Aviation Authority (CAA) in the year 2002 for Sheik Rashid Terminal. He was not only forced to sell his 17 acres of land because it was in the path of the runway, but he was also underpaid even according to the agreement. He said that the agreed upon payment was PKR 0.8 million per acre of land whereas he was only paid PKR. 0.3 million per acre. He approached the session court, but could not get justice and afterwards the High Court of Bahawalpur ordered payment of PKR. 0.6 million more per acre. The CAA went to the Supreme Court of Pakistan on the reason that the Bahawalpur High Court had ordered to pay more than the initial agreement therefore it cannot be paid. He was not the only petitioners as there were many others as well who still wait for their payments, however he was the only one amongst the participants (Documented evidence can be furnished on demand).

#### **IV. Absence of political will:**

Political will is the most important absent factor in all this scenario. The local politicians are not willing to resolve the local issues. The areas have 2 elected Members of the National Assembly and 3 members of the Provincial Assembly. According to the majority of the participants, their legislative members have not visited their constituencies more than 3 times. All the members of the National Assembly belong to agricultural professions and have a large personal landholding. Most of them harvest a multitude of crops and do not harvest a single one. This gives them leverage over other small farmers and they have no issue in selling some part of their lands, but the small farmer cannot sell his land because he has nowhere else to go and nothing else to do. The patterns developed through an in-depth analysis of the recorded interviews were quite traumatizing to know. The feudal system runs the political gear in the region whereas the small farmers only work as their vote bank. Most of the poor villagers are in-debt to these politicians cum feudal lords. These feudal lords grant debt to these poor farmers at the cost of a guarantee of their land. Once the small farmers are unable to pay back the debt, their land is taken over and sold to the commercial housing schemes in lieu of debt repayment and the interest is also collected from that money. The absence of political will basically is the presence of personal interests of these feudal lords. The grave inequality of land and mass void in the power equation is one of the most important factors when it comes to not selling the land. The land is the only security that these small farmers have against these feudal lords.

No documented evidence was given of most of the incidents as elaborated by the participants, yet most of the participants were witnesses of each other's predicament.

#### **V. Power dynamics:**

“When the missionaries came to Africa, they had the Bible, and we had the land. They said, 'Let us pray.' We closed our eyes. When we opened them, we had the Bible, and they had the land” (Desmond Tutu). Wealth in any form is behests on the gates of Power. Land is deemed as one of the strongest forms of wealth and people with land have always been deemed as the people of power in the society. Power patterns in the region are distributed as per the land patterns in the region. This is a common theme in power distribution mechanics of the country. Each village is distributed along a center of power that rests with a feudal of the village. These feudal lords lead the local justice system of the area and have great influence over the people. A unique pattern was observed in the analysis of power dynamics in the present study. The power rests with the feudal lords but also in the interaction with them. The people who had some sort of better interaction with the feudal lord were the people who were in decision-making place. The decision-making place can be as such as of the local tribe or they were leading one way or the other.

Decision making =  $f(\text{personal land holding, interaction with the local feudal lord})$

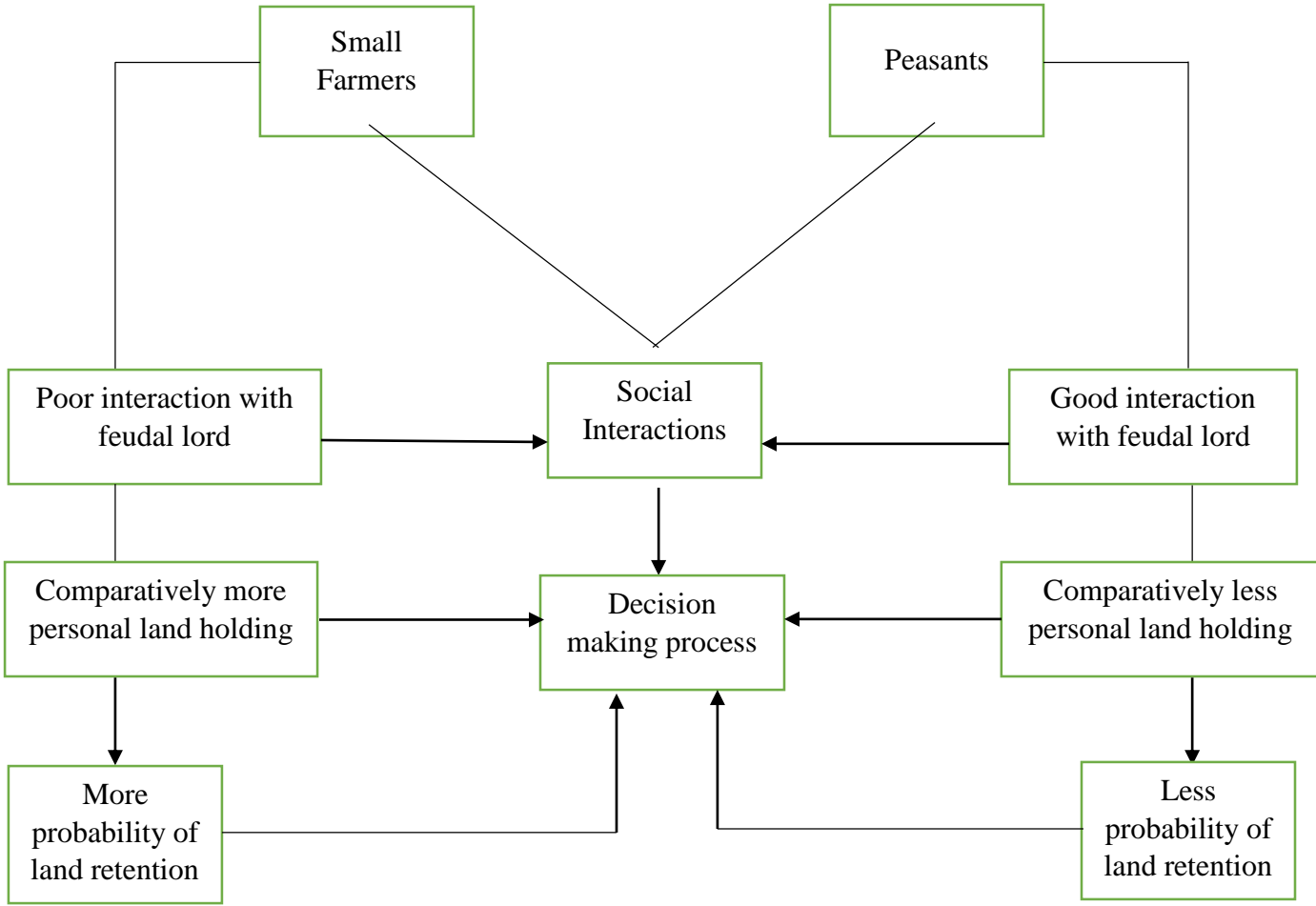
***Assumptions:***

- Decision making is positively related with the interaction with feudal lord.
- Whereas land retention is a positive function of personal land holding
- Peasants have less personal land holding.
- Small farmers have comparatively more personal land holding.
- The interactions between the peasants and small farmers are non-linear and sometimes conflicting.



- Small farmers want to retain land in order to retain their decision-making position in the society whereas the peasants want to maintain their interaction with the feudal in order to maximize their position of influence in the society.

**Figure 16 Vertical interaction land retention framework**



3. Socio-cultural themes

I. Emotional Attachments:

Emotional attachments are an important component of land retention when it comes to understanding the factors of land retention in a cultural context. The cross-cultural land retention

is a complex mixture of non-linear processes. Many small farmers deem land not only as their sole source of income but have emotional attachments beyond comprehension. The emotional attachments expand beyond just the retention of land so much so that land is treated as their guardian. A common phrase that the author got to hear during the interviews from the participants was “*Zameen bechnay ka mtlb hai jaise maa baich dain*” and “*Zameen baich di tu matlab maa baich di*” (To sell land is like selling mother). This factor is beyond dialectical cultural instincts. It spreads across all the provinces of Pakistan. After having interviewed my participants I loosely asked from different people from different regions of the country about their emotional attachment with their land and all of them related to the same phrase in one way or the other.

I could not develop any specific framework in order to define the clear-cut features of the emotional attachment but this component is one of the most important factor that the small farmer takes into account while making his decision about land retention because more or less most of the participants repeated this phrase when they were being interviewed. The emotional attachment can be categorized in the following two categories:

- a. Emotional attachment because of traditions and hereditary nature of land
- b. Economic sustenance on the land

Both of these categories loosely relate with the farmer’s position in the society. More attached the farmers are with their land higher are the chances that the farmer will be respected in the society. More the land better the economic condition of the farmer thus more credibility for the land holder.

## **II. Age:**

In total 49 individuals participated in the FGDs and out of those 49 participants only 8 of them said that they would sell their land in the coming 10 years. Out of these 8 participants 5 were under the age of 40. In general, the author observed that the relatively younger participants were less rigid about the retention of the land as compared with the elderly participants. The 5 participants under the age of 40 who openly declared that they would sell their land for a better opportunity within the next 10 years had on average a land holding of 5.1 acres, whereas the average land holding of the sample size under the age of 40 was 5.84 acres and the average land holding of the whole sample size was 5.59 acres. Given the context, comparatively young farmer (<40) with an average land holding of less than 5.84 acres has a relatively more probability of selling his land as compared with a farmer aged above 40 with the same average land holding.

Moreover, the author observed that the younger generation had a massive presence on social media platforms and used it quite frequently. Most of the younger generation even pointed out social media as their primary source of information and news as well. This gap can also be an indication towards the fact that social media is changing the thinking patterns within a set social structure. The disruptions can have great effect on the social patterns of these villages therefore it is the need of the time to assess these factors and formulate a comprehensive strategy to ensure a safe transition period.

## **III. Change in family dynamics of fieldwork:**

In a traditional village household, the working patterns are homogeneous. The women of the house are responsible for managing most of the routine indoor and outdoor tasks. It includes

looking after the cattle, maintaining the daily household, taking care of the children, and going in the fields to cut off the harvest. The tradition still prevails in the present times; however, the unpaid nature of the work has forced the women to go to fields other than the personal land to gain an additional income. Harvesting from personal land did not involve any monetary or non-monetary payment therefore these women have shifted to other landowners for benefits. Most of the participants indicated towards a unique pattern in this process. They cited modernization as the basic evil because according to them modernization had made their women sluggish and the new generation of female workers did not know how to collect cotton from the field or cut wheat therefore, they had to pay a good amount of money to the workers they hire for collecting the harvest.

Moreover, upon inquiring that why did not they collect the harvest by themselves they said that this is not the tradition and the women are responsible for collecting the harvest and therefore we are more likely to hire other female to collect the harvest from our fields and pay them rather than paying our own women to work in the fields or work there by themselves. Interestingly, the women that are being hired by one farmer to collect the harvest from the field must be paid less than the amount that is being paid to his women who is working in someone else's field thus the harvest collection market has automatically become a free market with a fair enough competition that is self-regulatory. This phenomenon is linked with land retention in the context of free market operations. The women try to maximize their payoffs by working in the highest paying farm and try to sharpen up their skills to find a place at a better land. This helps them get paid better. Although the difference per acre is not that much and is fluctuating on an hourly basis yet they work extra hours just to get a few extra rupees.

#### IV. Culturally not acknowledged:

*“Yai zameen meray walid ki taraf sai meray pass amanat hai, iska hissab wo mjhe sai akhrat mai lain gai”* (This land has been confined to me by my father, I will be answerable to him on the day of judgement). Most of the participants related to their land in the same manner. The basic consideration that needs to be taken into account while making a decision-based analysis is the impact of social factors on the individual’s decision-making capacity. ‘Sense making’ is an integral part of the decision-making process and the process of sense making is highly influenced by the culture within a socio-structural paradigm (Glazer & Karpati, 2014). They identifies countries on the basis of their collective cultural outlook. They have distributed countries according to their cultural outlook with regards to decision making. Pakistan has been identified as a country with high collectivism when it comes to decision-making process. It means that the decision-making process is not linear, and it is known to the decision maker. A group takes a certain decision in accordance with the task at hand and takes collective responsibility over the success or failure of the task. In this socio-cultural context of decision-making, major reliance is put on unwritten rules and precedents. Consultative and consensus-based decision making is preferred.

During the FGD, there was no clear indication of every individual being somehow connected to the cultural fragmentations, however. (Odongo, 2016) identifies culture as a catchall term that to characterize a group of people who share a common history and perception of appropriate normative behaviors, values, and beliefs. Therefore, one can say that the homogenous characteristics of the socio-cultural system induced a sense of association with this behavior of land retention. The farthest of the individuals in the sample size were almost 45 kms away from

each other yet their beliefs, social norms, values and decision-making process depicted extreme homogeneity. Although it is hard to state the magnitude of the impact of culture on the decision-making process of farmers, yet it is quite inevitable to state that the sub-conscious part of the decision making is highly influenced by the cultural mechanics embedded in the minds of these farmers.

#### 4. Socio-Economic Factors:

##### I. Value of land:

There is 89% chances of land retention if the value of land per acre in the Chak is more than the value of land per acre in the premises of the city. This was the first factor that was identified specifically by 100% of the respondents. Amongst the total sample size of 50, only 8 participants cited that they would sell their land in the coming 10 years because they want to settle in the city. Out of these 8, 6 cited that they would want to sell their land for commercial purposes whereas the other two were not clear about whether they wanted to sell their land for commercial purposes or any other purposes. The average land holding for the sample size was approximately 6 acres whereas the average land holding size for the participants who wanted to sell their land in the next 10 years was 5.25 acres.

Amongst the 8 farmers who acknowledged the fact that they wanted to sell their land in the next 10 years, only two thought that their personal land holding value per acre was equivalent to or more than the per acre value of land in the premises of the city or within the city. The individuals who deem the value of their personal land holding to be more than the value of land per acre in the city have a 89% more chance of retaining their land as compared with the person who thinks

the value of his land is worth less than the same in the city. Edwards (2015) deems that the sale decision of land for a farmer includes the profitability component in the cash flow that it would be generating. In simple words it means that the farmer will hold his land if he thinks that the selling of land is not profitable either yet or for anytime to come. The economic analysis for land sale includes the net cash flows that are generated and are measured against the opportunity costs. If the farmer deems the opportunity costs to be greater than the profit of holding the land, the farmer would sell his land. The same pattern was observed amongst the farmers in their decision of land retention in the present study. The farmers either wanted to hold their land so that it may appreciate in value or they wanted to hold it as it was their only source of income. The economic component of the decision making emerged as the main factor in the decision to retain land.

## **II. Surrounding commercial housing schemes:**

The theme was identified as the result of interviews conducted by the author from the real estate agents and builders. In total 3 people were interviewed for this purpose. Out of these three two were real estate agents and one was from the construction industry. The real estate agents pointed out that the farmers knew the value of their land. The farmers who have lands in the inner circle of the Chak or the village would not want to sell their land instantly and the pattern that has been observed indicates that the farmers sell their land once a value addition has been made to their land. The value addition can be in form of a road, hospital, or any other structure because it inherently increases the value of the land. Moreover, the real estate agents gave a different yet a stereo-typical outlook towards the land retention. They said that the farmers were inherently greedy and would always sell their land provided that they are given a good sum. Both real estate

agents quoted the example of DHA, Bahawalpur. The DHA acquired desert as well as the arable land in the region and the amount that they paid were quite normal. However, the farmers had an opposing view. They said that their land was forcefully acquired from them and they are still fighting for their land. They said that the feudal has a lot of land to sell. He can sell his land and yet have a lot of land left, but this is not the case for us. The commercial housing schemes acquire land from these landlords and force us to sell our land because our land comes in the center of the commercial scheme<sup>2</sup>.

According to the patterns that were obtained from the conversations with these real estate agents and constructor, it can be concluded that the farmers retain their land because they want the value of their land to appreciate so that they can sell it for better prices.

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<sup>2</sup> Both these claims are un-documented, and the author takes no responsibility of these claims.



## Chapter 6

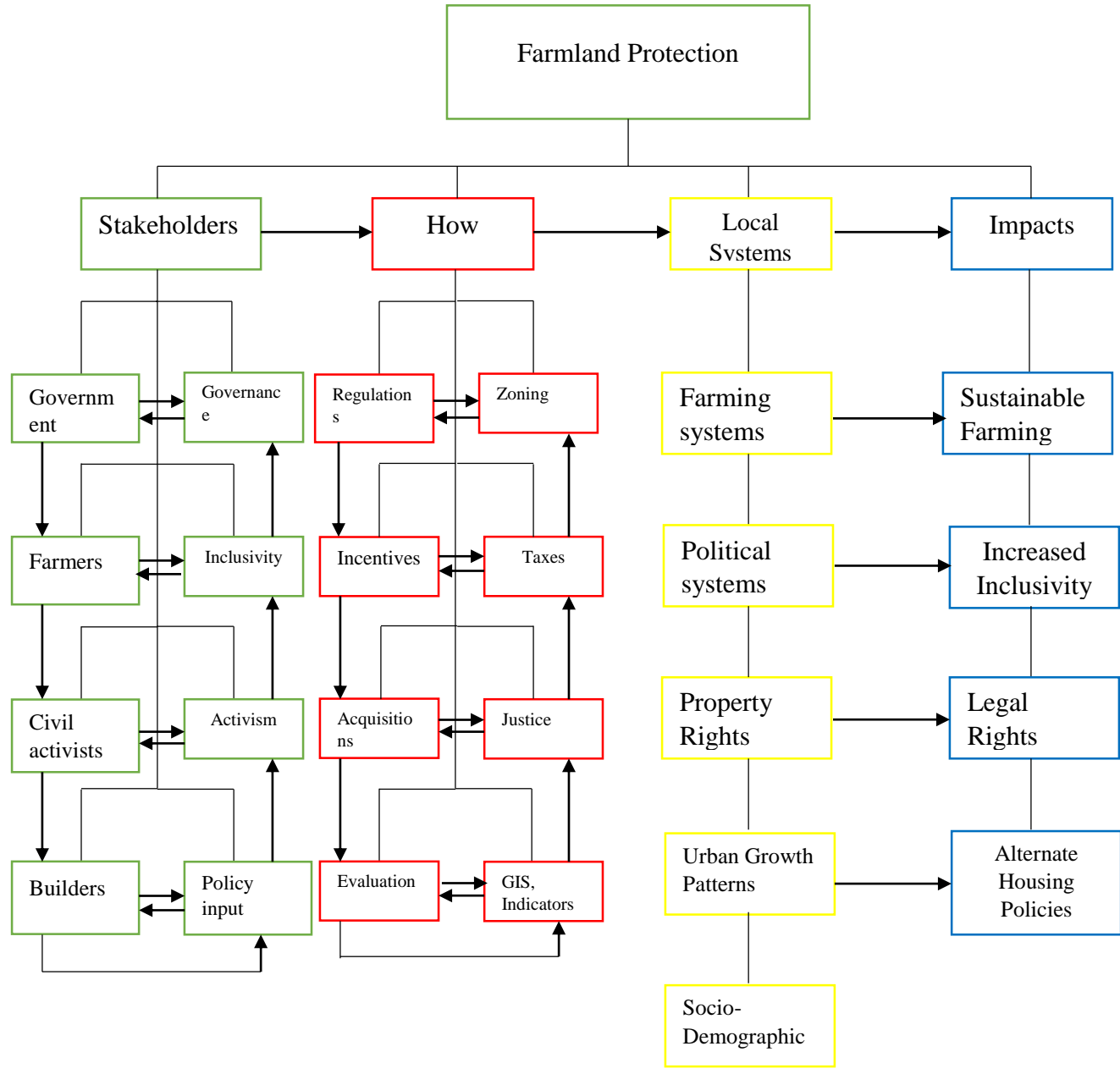
### 6.1. Policy Recommendations:

The following policy prescription follow from the above analysis:

1. Small farmers must be considered as one of the key stakeholders and must be involved in the policy process as an input to land dynamics so that an integrated policy discourse can be developed.
2. Immediate measures should be taken in order to educate farmers of their rights when it comes to policy implementation thereby ensuring equitable access to relatively less expensive justice for them.
3. Inclusivity of relevant small farmers in the Housing policy is a key determinant to enable a co-growth model thereby ensuring a just compensations mechanism in case of land purchase by housing agencies.
4. Agricultural Zones should be devised so that the farmers can optimize their yield through geo-optimization procedures.
5. A shift of paradigm from acquisition of agricultural land to acquisition of desert land must be considered in the housing policy.
6. Arable land conversion must be monitored and regularized through an independent agency thereby justly adjusting the proportions for better economic domains.
7. Establishment of courts related to farmlands must be exercised so that farmers can have quick justice rather than waiting for generations to fight the case.
8. Land reforms must be implemented as a rapid measure so that the extortion of small farmers can be repelled through legislations.
9. Legislative and judicial reforms must be taken on an urgent basis. Formal judicial system should ensure a swift delivery of justice.

10. Individual involvement in the process of power must be replaced by institutional involvement so that an eco-system based on yield maximization can be developed.
11. Occupational and Educational trainings to inculcate alternative skill sets must be undertaken and proper incentives should be devised for better decision making in the long run.
12. Taxation system must be made simpler through digitalization and inclusive processes so that the farmers do not have to indulge in lengthy paper work.
13. A maximum cap on land holding must be ensured and power must be decentralized from the feudal to the farmer. This will lead to a loop of political will to ensure maximum rights to the small farmers.

Figure 17: Socio-Dynamic Mind Map of land Retention



## 6.2. Conclusion

Agriculture is one of the key contributors in the national economy. According to the statistics released by the ministry of finance for the year 2020, more than 35% of the employment is still provided by the agriculture sector, although the growth of the agricultural sector has declined from more than 4% in 2018 to 2% in the year 2020 (*Economic Survey of Pakistan 2020*).

According to World Development Indicators (2016), the total arable land in Pakistan was more than 40%. However, the continuous increase in the population is shrinking the land per capita. The agricultural land is being converted into housing schemes. According to Mohsin per capita land holding in Pakistan has declined from 10.5 acres to 5.5 acres in the last decade whereas the population dependent on agriculture for employment has decreased from 43% of total employed population being employed in the agriculture sector in 2011 to 38% of the total population being employed in the agriculture sector in the year 2020 (Muhammad Mohsin, 2015). According to United Nations the urban population was 32% in the year 2005 and in the year 2020 it is more than 35% (Nations., 2020). The increased urban population is an indication of the demographic change patterns in the region.

The population growth has taken a heavy toll on the agricultural land of Pakistan. Arable land conversion is a direct outcome of increase in population growth and urbanization. In Lahore City about 283,257 acres (114,630.04 hectares) of farmland had been converted to urban built-up land during the last 40 years, and a substantial part of that land was converted to support 252 housing schemes. Furthermore, Naveed & Babar showed that factors such as income commodity prices and access to basic health facilities such as hospitals have been the main cause of urbanization (Farah et al., 2019). In 2017, more than 33% of arable land in the surroundings of Faisalabad was converted into commercial housing schemes (Naveed & Babar, 2019). The case of Bahawalpur

is no different. There has been a substantial increase in the number of housing schemes in the region. The data shows that since the late 1970's more than 17 commercial housing schemes excluding DHA have been established. According to the documented data these residential schemes have acquired agricultural land of around 1100 acres, however it is feared that the number is much larger than this. DHA Bahawalpur was established in the year 2015 and since then it has acquired a total land of 5500 acres. This includes both desert and agricultural areas.

In recent times, farmers have started to retain their land even when they are offered good prices. This study has analyzed factors that are the part of small farmer's decision-making process when it comes to land retention. There are various factors that influence the decision to retain land. The trend of land retention is different amongst the aged farmers and the relatively younger generation. The decision of land retention is not only based on tangible and quantitative factors, rather the process is not only interactive but is also non-linear. There are various socio-economic and cultural factors that are also at play here. These factors are essential as they provide an insight into farmer's land retaining decision. The process of urbanization has emerged as a factor of dissent amongst the farmers. The farmers find themselves trapped in a never-ending misery because of lack of proper engagement mechanisms for the purchase and sale of agricultural land. With limited resources and little to no knowledge of legal frameworks that regulate the agricultural land markets it is the farmer who is inevitably at the suffering end.

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