



# Urbanization and causes of agricultural land conversion in Hyderabad, Sindh, Pakistan

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## Abstract

Land, plays an important role in the life of human beings; as a result, people don't hesitate to sacrifice their lives, to save it from every obstacle. Land is a single source of livelihood. Pakistan is an agricultural country where 70% of its population directly and indirectly depends upon it. While its contribution to GDP is 19.8 percent, source of livelihood of 42.3% people and 44% exports are agricultural based. While its agricultural land is converted very quickly. Therefore, the purpose of this study is to find out causes of agriculture land conversion and its impacts on population of study area. Therefore, primary and secondary sources of data were used in this research. Primary data was collected by questionnaire while secondary data was taken from UN Population Division and Pakistan economic Survey. Different data sets from official records were used. According Hyderabad Development Authority (HDA) in last 20 years convert around 13,000 acres of pure agricultural land. Urbanization, overpopulation, water shortage, housing demands and land valuation is main reason behind agricultural land conversion in study area. So, there is need of land management system and land use policy required to save the conversion of agricultural land from concerned factors.

**Keywords:** Population; Agricultural Land; Conversion; Impacts; Hyderabad; Pakistan

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## 1. Introduction

Over increasing population is one of the most important and serious global issue, because it demands shelter, food, education, health care must raise apace. So, provision and management of economic and social comfort is a dilemma. Therefore, it is a very hot issue for economist, policymakers, politicians, scientists and every individual which lives in this society. Land is also a scarce resource which is affected by these issues (Peerzado et al., 2017). From very small thing to a big office, hospital, university etc and basic human want affect land. Thus, land plays an important role in the life of human beings; as a result, people don't hesitate to sacrifice their lives, to save it from every obstacle. Land is a single source of livelihood. Pakistan is an agricultural country where 70% of its population directly and indirectly depends upon it. While its contribution to GDP is 19.8 percent, source of livelihood of 42.3% people and 44% exports are agricultural based. While its agricultural land is converted very quickly. Therefore, the purpose of this study is to find out causes of agriculture land conversion and its impacts on population of study area Lui et al. (2013). Which are a difficult and a very big challenge for economist, policymakers, politicians, scientists and every individual who lives in this society? The way the development and economic process happen in urban areas, it demands more land area for residential, hospitals, schools, industrial and commercial purpose, which increase towards cultivatable land and its periphery Bertaud, (2010) and Kau et al. (1979). The way different sectors expand, extensive movement from farming areas to urban areas takes place, and the growth rate of urban centers and populace is rising day by day. It seriously impacts on development attempts taken by many city planners and governments. It is due to attraction of basic health facilitation, economic, social, educational, economic development, economic wellbeing and social development Lui et al. (2013), Bertaud (2010), GOP (2016), Cho et al. (2014) and UN (2015).

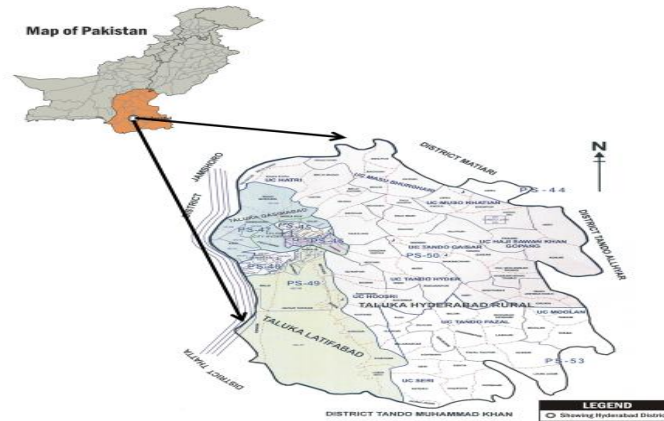
Urban population is increasing day by day, about 54 percent of world population become urbanized in 2017. In starting of nineteenth century the world urban population was only 220 million and reached at 732 million in mid nineteenth century. While it reached at more three billion in early 20 centuries and the world half population become urbanized in 2007 was an alarming situation (Source: UN Population Division).

Hyderabad Sindh Pakistan is second largest city of Sindh province, and sixth largest of the country. Hyderabad Pakistan is second largest city of the world and leading in Pakistan in urban density Geographia, (2015). Hyderabad Sindh was known as Paris of India and Asia. It serves as transit hub between rural and urban Sindh. It is known as city of wind catcher, had a 4.5 Km longest royal gold market (bazar) of the Asia and world, leading bangle producer in the world. Similarly, Hyderabad is famous due to its food. A fish variety named "Pallo" only found in Sindh river in Hyderabad Sindh Pakistan and due to cakes of legendary Bombay Bakery Akhtar, (2015) and Wendell, (2015). Hyderabad Pakistan is most affected city by the process of urbanization in Pakistan. It increased even more faster between 1999 and 2011 than Karachi "Karachi is leading populous city of Pakistan and present in the list of top 15 city of the world" Therefore this study is being conducted to find out cause of agricultural land conversion in Hyderabad Pakistan and its impacts on population of study area. Thus, this study was conducted to find out the factors were affecting sustainable development and land management, to reach up at real facts and answers. So, following specific objectives were formulated. To find population density per square kilometers, average households size and impact of

local population in study area. This study would be pioneer step in the field of development economics and development of study area Magsi et al. (2013). Additionally, the purpose is to sensitize the policy maker to understand the needs of local people as regards infrastructural and social, rural development of study area and Pakistan.

## 2. Research methodology

### 2.1. Study area



**Figure 1.** Location map of study area

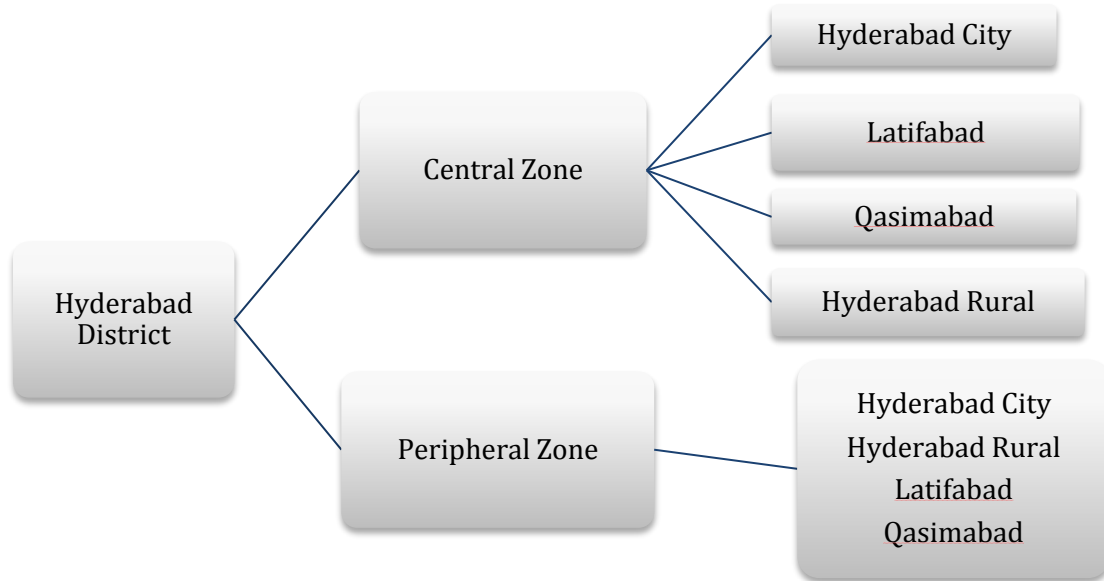
Hyderabad, Pakistan is 2<sup>nd</sup> largest urban city of Sindh province; with population of 4.7 million, and 6<sup>th</sup> in Pakistan. But it grows faster “between” 1998-2011. It remained twice the capital of Sindh. It was founded by Mian Ghulam Shah Kalhoro in 1786. Historically a brutal and bloody battle of Miani between Amir Talpor and British under the leadership of Sir Charles Napier of east India Company took place on March 24, 1843, and British controlled over the city see fig 1. Historically Hyderabad had a glorious past. It was known as Paris of India, where its streets were washed with perfumes and lamps were lit by pure butter. It remained rich in education, health, culture, tradition, and socio-economic. It is largest bangle producer in the world; serve as a transit hub between rural and urban Sindh and home of oldest university in the region. It is also a very unique city in the world; city of wind catchers; had a 4.5 km longest bazar of gold of Asia and world leading bangle producer. It is also famous in the world due to cakes and “Pallo” fish only found in Indus river Akhtar, (2015) and Wendell, (2015).

### 2.2. Data and collection procedure (sampling technique) Population and Sample

Primary and Secondary data sources were used in this research.

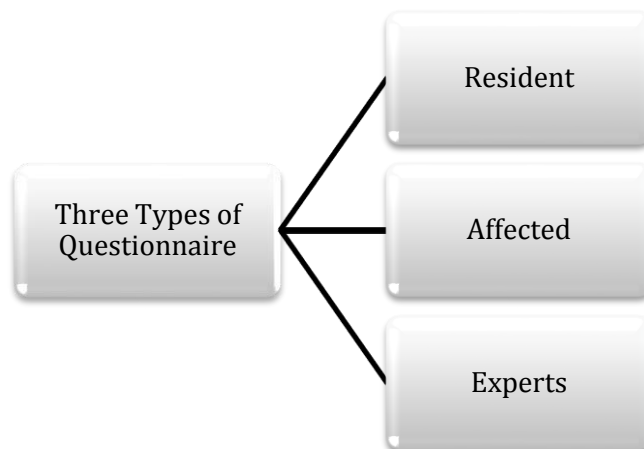
For primary data a comprehensive questionnaire was used in this research. Multistage cluster sampling technique was applied, due to nature of data and population. Where population was scattered and available in

different Taluka’s with different clusters, such; as Taluka Hyderabad City, Taluka Qasimabad, Taluka Hydeabad Rural and Taluka Latifabad. Therefore, each cluster was divided into two different zones central and peripheral see figure 2 (Central zone may be defined as a place where market is near to resident, where peripheral zone is a place which is little far from the central zone).



**Figure 2.** Showing the Hyderabad District was divided in central and peripheral zone (Authors Made)

Sample size was 100. Hundred respondents were selected purposively, which equally distributed in 4 talukas of Hyderabad district. In stage I Hyderabad district was selected, i.e., where four Taluka exist named as Hyderabad City, Hyderabad rural, Qasimabad and Latifabad. In stage II: from those talukas two zones were derived, i.e., central and peripheral zone see figure 2. Three types of questionnaires were developed for this study.



**Figure 3.** Showing the types of questionnaire (Authors Made)

First questioner was made for local dwellers, second affected people and third for expert opinions from public and private organizations. Sample of 100 respondents were selected in which 40 were dwellers (10 Hyderabad city, 10 Latifabad, 10 Qasimabad and 10 Hyderabad rural) were selected, 40 were affected (10 Hyderabad city, 10 Latifabad, 10 Qasimabad and 10 Hyderabad rural) were selected and 20 (5 Hyderabad city, 5 Latifabad, 5 Qasimabad and 5 Hyderabad rural) experts were interviewed as depicted in figure 3. Thus 100 respondents were selected.

Secondary data was also used in this research; Secondary data was collected from, Hyderabad development authority, official records, books, official websites magazines, economic survey of Pakistan, UN population division and world data sheet. Therefore, different types of data sets were analyzed by some mathematical and statistical tools. For data analysis Microsoft Office Excel, was be used. Data were analyzed to get the desirable result.

### 3. Results and discussion

From review of literature it was found that every 39 people of world was a resident of Pakistan. Its share in world population was 2.56% and 6<sup>th</sup> most populous country of planet. So, his cities are growing very immensely; as an outcome populace of rural areas is decreasing 61.1 to 61.4 percent, while urban areas are increasing 69.87 million (37.9 %) to 72.5 million (38.56%) in 2016. Karachi is most leading populous city of Pakistan and will be world most leading populous city in 2030 and progressed even faster between 1998 and 2011. None of the city other than Karachi in the world history grows fast in ten years with 8.7 million people. Hyderabad of Pakistan is second largest city of Sindh province claimed that it grows even quicker than Karachi "between" 1998 to 2011 from 1.4 to 3.4 (129%) million Wendell, (2015). Further the finding of study explains situation of the population and house hold in major cities of Pakistan. Karachi city is leading in urbanization in Pakistan followed by, Lahore, Faisalabad, Rawalpindi, Multan, Hyderabad, Gujranwala, and Peshawar. Average house hold size was high in Quetta and Peshawar followed by Gujranwala, Multan, Faisalabad, Lahore, Karachi and Hyderabad. Additionally, the situation of urbanization in Hyderabad throughout 47 years of history is impressive. It is 2<sup>nd</sup> largest urban city of Sindh and 6<sup>th</sup> of Pakistan, with population of 2.5 million people with area of 993 sq. Km. Area of urban centers were spread over 247 sq. km and population was 1167 thousand in 1998 and changes 40 sq. km "40 km<sup>2</sup> = 9885 acres (Source: <http://www.metric-conversions.org>) become 287 sq. km and 1626 thousands in 2010 and reached at 2.0 million in 2016 (Pakistan bureau of statistic GOP, (2016). Urbanization is increasing day by day very speedy in Hyderabad. Surprisingly last 34 years give a picture of boom urbanization in urban centers of Hyderabad where only agricultural land exists.

Accordingly, population of Hyderabad district which was 2.5 million in 2016 and further explained in figure 4.

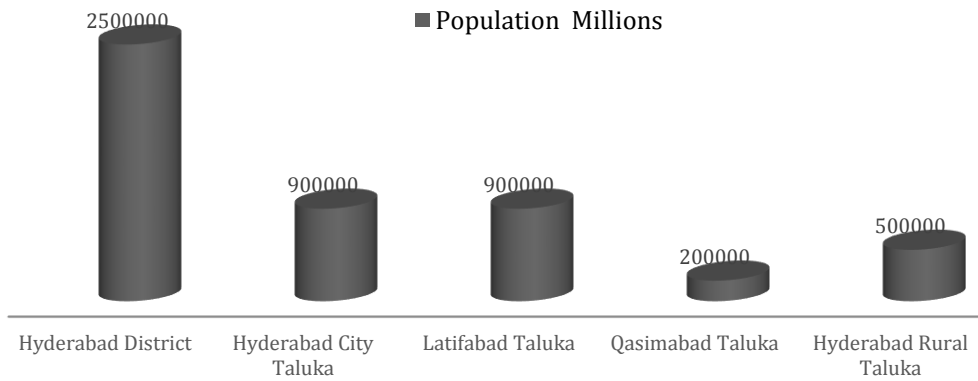


Figure 4. Showing the population of Hyderabad district in 1998 (Authors Made)

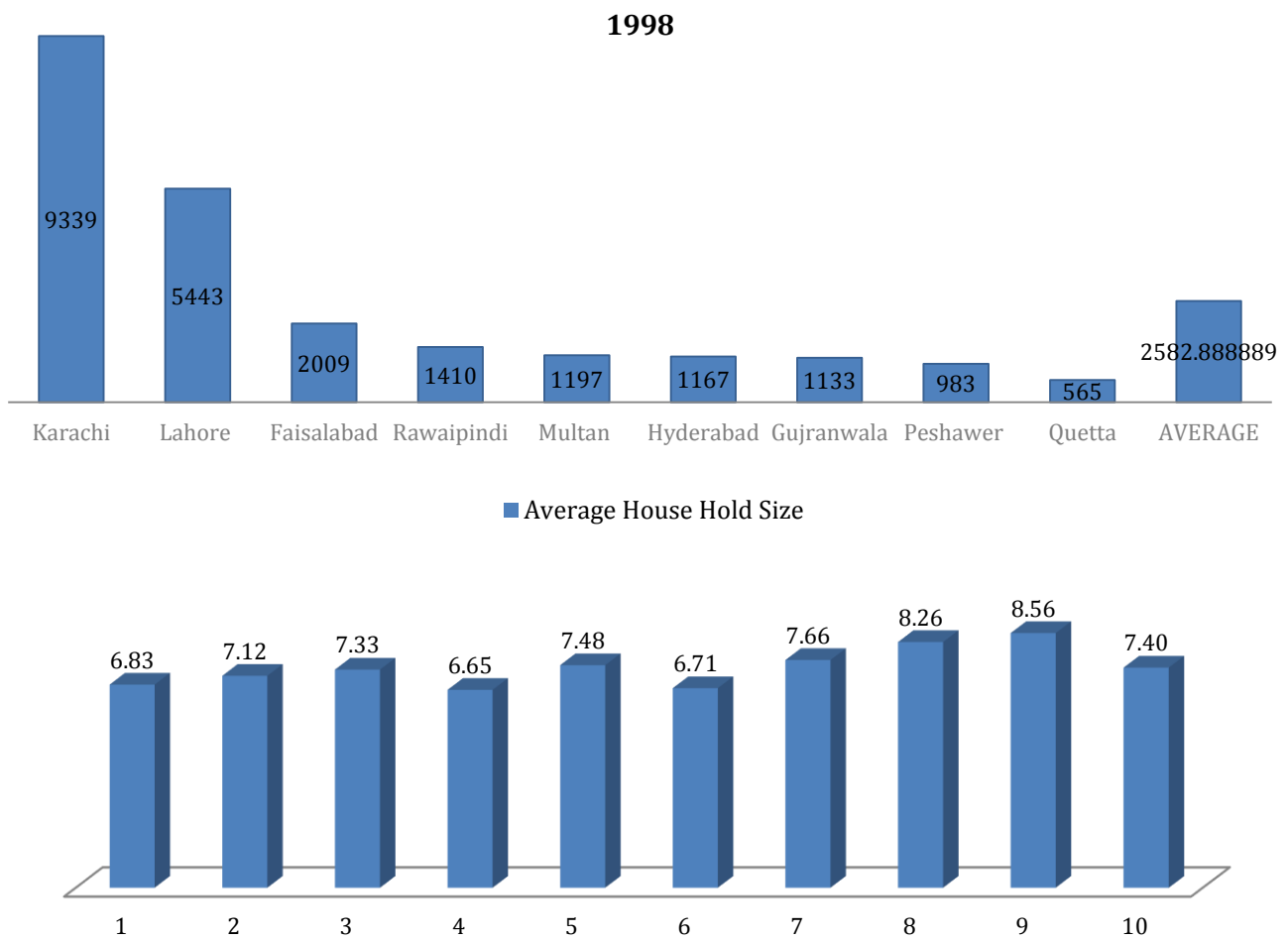


Figure5. Population & household of major Cites in 1998 in Pakistan (000) (GOP, 2016)

**Table 1.** Following are the main reasons of agricultural land conversion in study area

Causes and reasons of sale of agriculture land conversion according to respondent, affected people and experts.	Percentage out of 100		
	Respondents	Affected	Experts
Land prices	70	85	45
Population	70	80	75
Money	70	90	65
Family problems	30	20	20
Disease	20	25	10
Wrong habits	60	65	35
Right habits	40	35	20
Conflicts	30	50	15
Competition	100	50	20
Winner	60	40	12
Looser	40	60	08
Business	60	30	20
Profit	65	68	53
Loss	35	32	47
Service	48	60	30
Income / Earning	55	30	70
Development			
Schools (Education)	50	20	35
Hospitals (Medial facilities)	30	15	23
Roads (Infrastructure & Transportation)	25	10	16
Factories	20	14	13
Water Shortage	60	60	40
Costs increase	25	70	23
Low production	36	55	20
0 = Other	30	23	15

**Table 2.** Agriculture land has impacted positively and as well as negatively on the local population

Sale of agricultural land impacted on your life				Due to agricultural land, which kind of food product you owned and do not buy from market	
Positively	100	Negatively	100	Which Product Owned	100
I have car	30	Buy milk	75	Milk	97
Children to school	70	Buy grain (wheat)	80	Oil	30
Bungalow	45	Buy floor		Yogurt & Lasi	60
Better health	60	meat	70	Eggs	38
Flats	20	egg	65	Wheat / Flour	85
Economical sound	15		70	Vegetables	35
				Meat	45

#### 4. Conclusion

It is found that over population is one of the most important and serious issue of not only of study area, but it is a global issue, because to provide shelter, pure drinking water, good food, quality education, and health is

also a challenge. Therefore, provision and management of economic and social comfort is a dilemma. It demands more houses to shelter, more food to eat, more land to urbanize and basic amenities to safeguard the rights of individuals. Government should make rule to restrict that no further agricultural land can be converted for urbanization and housing schemes should be built in areas where no pure agriculture land exists. There is need of government interventions, not to make only rules and regulation implementation of those rules and regulation is need of today.

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