
Land Use in Sahiwal District, Pakistan

MUHAMMAD IRSHAD HUSSAIN

Punjab University College of Information Technology,
University of the Punjab, Lahore, Pakistan;
GIS Engineer,
Ministry of Municipal and Rural Affairs, Saudi Arabia

1. Introduction

Land use includes the variety of uses of all the land available in the area. Land use is the human use of land. Land use also involves the management and modification of natural environment or wilderness into build environment such as fields, pastures, and settlements. It has also been defined as "the arrangements, activities and inputs people undertake in a certain land cover type to produce, change or maintain it." The present study on this subject includes:

1. Existing Land Use

The existing land use depicts a general pattern of mixed land use, for a better and comfortable living atmosphere. Its found are the scattered pockets of the built up and open area. Ultimately it joins the agricultural land around the city. Considering only the built up area the study reveals that about 35% of the total built up is used for residential purpose. The second largest use includes the transportation system that occupies about 17% of the total built up area. The other uses include industry 5%, open spaces 10%, commerce and trade 3% and health 2%. Other minor uses are canals, distributaries and

Government Buildings occupy 10%, 8% and 10% of the built up area respectively

2 Land Use Classification

Land Use Classification is the analysis of land according to its use: agricultural, industrial, recreational, and residential. On occasion, the land may have more than one use, as in upland areas used for sheep farming and for recreation. With the passage of time, the city gained momentum in development and has emerged as a major administrative industrial and commercial town. Since no comprehensive plan was available in the early days, the land was given to various uses irrespective of its suitability for the particular use. As a consequence, the present day city is a mixture of various quite often incompatible uses, except for the new planned colony. The Land Use of the urban area as a whole can be described as developed out of sprawl without any preconceived plan, which could relate the uses either with each other or with the transportation system. The result is the prevalence of chaos and unpleasant living conditions. However, for an overall pattern of land use, the area has been divided into urban and Rural area as under:

2.1 Urban Area:

“A geographical area constituting a city or town”. It is characterized by higher population density and vast human features in comparison to areas surrounding it. Urban areas may be cities, towns or conurbations, but the term is not commonly extended to rural settlements such as villages. The traditional concept of a town or city would be a free-standing built-up area with a service core with a sufficient number and variety of shops and services, including perhaps a market, to make it recognizably urban in character. It would have administrative, commercial, transport would focus on the area, and it would be a place known beyond its immediate vicinity.

2.1.1 Determinants of Urban Area

- Population
- Density
- Level of community facilities and services
- Economy
- Social and ethnic connotations
- Administrative status

2.1.2 Classification of Urban Area

- Commercial and Trade Centers
- Industrial Unit Areas
- Main Industrial Area
- Mixed Industrial Area
- Government Offices
- Government Residential Areas
- Educational Institutions
- Residential Areas
- Old City
- Planned Colonies
- Parks and Recreational Places;

Commercial and Trade Centers:

The commercial and trade centres are limited to the old city, surrounded by High Street, Railway Road, Hall Road, Masood Shaheed Road, Depalpur Bazar, Sori Galli, Sua Bazar and further extended up to Jinnah Chowk. Development of commercial activity within this area is due more to historical reasons rather than other planned effort. The other uses are restaurant, hotels, bus stands and commercial offices. Among them the Bus Stands, which cater needs of the city and the joining areas create hindrance and chaos in the area. This situation has choked the normal functioning of the junction and if some direct and indirect drastic measure is not taken, the traffic conditions might reach to strangulation level.

Industrial Unit Area:

The main industrial units are located on Sahiwal-Pakpattan Road, Arifwala Road and across the Lahore-Multan Road, with the exception of a few small units those are scattered in the city as well. 568 industrial units are working in the Sahiwal District. The presence of a water distributary "9L" has further helped this area for industrial purpose. Presently this is satisfying the needs but with the future industrial expansion, the alignment of the L.M.Q. road is to be delineated again.

Main Industrial Area:

The Main Industrial Area constitutes the industries located along Sahiwal-Pakpattan and Sahiwal Arifwala Road. The major industries in this area include Biscuit, Confectionary, Sugar Mill, Cotton Ginning and Pressing, Dairy Products, Drug and Pharmaceuticals, Flour Mills, Food Industries, Textile Weaving, Tobacco, Woolen Textile Spinning/Weaving, Seed Processing Units, and Pesticides Packing and Distribution Units.

Mixed Industrial Area:

The Mixed Industrial Area is bounded by the Lower Bari Doab Canal (L.B.D.C), Railway Line and the L.M.Q.road. The area contain the industrial like Oil Processing Units, Animals Skin Processing Units, Tanneries, Iron/Steel Remolding Units and Carpets Weaving Centers.

Government Offices:

The Government Offices include Deputy Commissioner Office, Municipal Corporation, District Council, District Court, Public Health Engineering Department, District Health Offices, Irrigation Department, District Forest Office, Education Department, Environment, Protection Agencies, Police and many other s. Most of these Offices are located on or near the Farid Road.

Government Residential Area:

The Government Residential area includes colonies of the various Department.

Educational Institutional:

The education Institutions include school and colleges at government and private level. They are mainly located on College Road. However, the school and colleges of the private sector are randomly placed.

Residential Area:

The Residential Areas include old city along Jinnah Road and Railway Road and Planed colonies along Farid Road and Pakpattan Road and Sahiwal by pass. It is further divided into old city and Planned Colonies as under:

Old City:

The Old City consitutes mainly the areas in heart of the Sahiwal city from Jinnah Road to Noor Shah Road, Ghalla Mandi, Vegetable Market and Railway Road. These settlements are quite haphazard with narrow streets, open drainage and devoid of most of the civic amenities.

Planned Colonies:

The zone of planned colonies comprises the area of the Satellite Town, known as “Farid Town”, and Tariq Bin Ziad Colony. The Land Use Character in these colonies is very distinct and different from the rest of the city. The residential density is very low as compared to the old city. Beyond Farid Town, there is again the character of haphazard growth and new slums are being created. The better skeletal growth here is bound to effect the satellite Town and other good neighboring localities. The same pattern can be seen on the western side of Farid Road, towards the aviation ground and beyond the Central Jail.

New settlement s are being developed by the private sector in South of Lower Bari Doab Canal, between pakpattan

Road and Lahore –Multan By pass Road. These are planned colonies having their own water, sewerage and sanitation systems but these systems neither possess any treatment plant nor connected with any public service system. The sewerage water is simply drained out without any treatment in the fields for the agriculture purposes. Such colonies are also under development along Noor Shah and Faisalabad Road.

Parks and Recreational Places:

With the exception of Stadium and the Race Course the old city is completely devoid of any recreational place. However, recently Farid park and Canal Park are developed. Farid Park is simply a park without any recreational attraction whereas Canal Park also needs some attention for the improvement on the modern lines.

2.2 Rural Area:

Rural areas or the **country** or **countryside** are areas of land that are not urbanized, though when large areas are described, country towns and smaller cities will be included. They have a low population density, and typically much of the land is devoted to agriculture and there may be less air and water pollution than in an urban area.

2.2.1 Classification of Rural Area:

- Agriculture Land
- Barren Land
- Rural Settlement/Villages/Dwellings

Agriculture Lands:

The land of Sahiwal District is supposed to be the most fertile land of the region. Most of the area is used for agriculture purpose. The main crops include Wheat, Maize, Rice, Cotton and Sugar Cane. In addition all types of vegetable are grown. Particularly Potato grown areas exceeds all over vegetable

products. The Orchards are common throughout the area. These have cultivation of citrus fruit trees and cover about 10% of the agriculture land.

Barren Land:

The Barren Land includes the areas, which are not cultivated because of the non availability of water and the problem of water logging and Gullied Terrain. These areas can be brought under cultivation in future, by arranging water in those parts, reclamation of land by installation of tube wells in Water Logged areas and leveling of the Gullied Terrain and rough topographic areas.

Rural Settlement/Villages/Dwellings:

The Rural Settlement/Villages/Dwellings include those areas that are populated in between the agriculture land around the city and the suburbs. These areas are generally having a low profile of facilities and civic amenities. But at the same time they represent a better hygienic atmosphere because of open spaces and lack of traffic congestion.

Land use in Pakistan

- arable land - 27%
- permanent crops - 1%
- permanent pastures - 6%
- forests and woodland - 5%
- Other - 61% (1993 est.)
- Irrigated land: 171,100 km² (1993 est.)