## ECONOMIC FUNCTIONING OF SECONDARY CITIES OF PAKISTAN AND ITS INTEGRATION WITH THE PHYSICAL LAND USE: CASE OF LARKANA AND MANSEHRA\*

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#### **ABSTRACT**

Secondary/ intermediary cities are important urban centers in their physical and economic contexts. They play a vital role in the linkage of the rural economy to the larger network of cities/ primate cities. A UN Habitat and NED University collaborated project was initiated at the Department of Architecture and Planning, NED University in 2011. This project was based upon case study documentation, analysis and urban design alternatives formulation of eight secondary cities of Pakistan. Drawing from the above mentioned research and study the following paper aims to highlight the economic role of secondary cities as urban centers in Pakistan. Looking at the economic role of two cities of varying provincial contexts from Pakistan; namely Larkana and Mansehra, located in Sindh and Khyber Pakhtoon Khawa (KPK) the prevalent land uses with respect to the economic functioning of the cities are outlined, their potential as intermediate urban centers is highlighted and the key issues in the economic functioning of the city are looked at in terms of physical development and land use planning of the cities. Cross analysis between the cities highlighting the contextual differences, political setups, role of the informal sector and resultant morphology of the cities is presented.

International and national literature review was conducted to understand the relationship of economic status of an urban area and impact upon urban morphology and approach of developing countries in proposing policy recommendations to create equitable cities that cater to balanced land uses.

All the maps included in this paper were prepared by Department of Architecture and Planning, NED University as part of the research.

*Keywords*: Secondary cities, Larkana, Mansehra, Economic functioning

## 1. RESEARCH METHODOLOGY – AN INTRODUCTION TO THE UN-HABITAT NED COLLABORATIVE PROJECT

The UN-Habitat NED Collaborative Project was based on the concept of sustainable urbanization. Sustainable urbanization refers to a process of population concentration in cities that generates new social, cultural, political and economic values and institutions that contribute towards balancing the environmental factors, creating an equal and just society and opening up opportunities for innovation and creativity that improves lifestyle and maintains cultural and bio diversity. The project aimed to cover the entire Pakistan and Azad Jammu and Kashmir (AJK). Within Pakistan, the component in the first phase selected one urban area in each of the provinces - Baluchistan (Kech), Gilgit Baltistan (Gilgit), Khyber Pukhtoonkhwa (Mansehra), Punjab (Sialkot) and Sindh (Larkana) – and in Federally Administered Tribal Areas (Jamrud/ Landi Kotal) to introduce the concept (Figure 1). Besides these, Mingora-Saidu Sharif in Malakand Agency was selected as a post conflict and post disaster region for building urban community resilience. In the post flood scenario, the Sustainable Urbanization component specifically looked at rebuilding services, monitoring impact on urbanization, land development and housing reconstruction.

The project aimed to:

- 1. Establish baseline data and mapping on critical urban issues through development of an urban observatory that aims to update and monitor this data.
- 2. Create multi stakeholder based mechanisms for participatory urban planning and management.
- 3. Improve indicators of settlement dwellers through demonstration projects and urban policy development.

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<sup>1</sup> Terms of Reference, UNHabitat-NED Collaborative Project, Sustainable Urbanization Annexure

The research methodology included physical and social surveys. Information was gathered through; mapping, interviews, questionnaire surveys and photographic documentation. Data gathered was converted into tables and drawings which were analyzed and tabulated as matrices, tables and graphs. Faculty members from the Department of Architecture and Planning at NED University of Engineering and Technology were part of the project. The faculty prepared the socio-economic questionnaires, visited the various cities for physical case study area documentations and analysed and tabulated the socio-economic data received by socio-economic surveys conducted in the various cities under the UN-Habitat management. Based on the physical and socio-economic documentation detailed reports and project proposals were developed for each of the above mentioned eight cities.

The indicators that were outlined for the purpose of analysis of each of the cities were land and housing, water and sanitation, traffic and transport, energy and horticulture. Both needs and impact analysis was done for these sectors for each of the eight cities. The Sustainable Urbanization framework mobilized promotes conservation of nature, caters to needs and demands of poor and marginalized groups, and aims to improve governance to make development work sustainable.

This paper looks at the economic roles of the secondary cities, with focus on Mansehra and Larkana and its relationship with the physical and spatial dimension of the cities. The questions that have been posed for this paper are: What economic roles do secondary cities play in their geographical contexts? What land uses are important for the economic growth of these secondary cities? What are some of the major issues faced by such cities in their economic development? Who are the main stakeholders in the economic development of intermediary cities and how does their decision impact upon the physical shape of the city? What role does the informal sector play in the economic development of the cities? Undergoing physical changes in the city center and the periphery are evidence of economic practices prevalent and expanding in the city? These are highlighted in the paper pointing to the major related issues and potentials for development of secondary cities. Although the two cities of Larkana and Mansehra have been taken as cases in point, but the conclusions drawn for these two cities are applicable for most of the secondary cities of Pakistan (including the ones documented as part of this project).

### 2. DEFINITION OF A SECONDARY CITY WITH RESPECT TO THEIR ECONOMIC FUNCTION

For the purpose of this paper the literature review started out with developing the understanding and classification of a secondary city. The intermediate or secondary cities cannot be classified by population alone (Jamal & Ashraf (2003) Bolay & Rabinovich (2004). Their economic features are equally important thus it is vital to situate them within their economic functions. According to David Satterthwaite<sup>2</sup> secondary cities "are the economic heart for large rural areas in the third world" thus their rural linkage is important as they are integrated within a rural hinterland (Baker, 1997). These secondary cities offer rural populations access to better living conditions, jobs, health care and social facilities and act as local markets for their products and provide public administration services. The primary potential role of secondary cities is to act as centers of demand for agriculture produce from the rural region, for production and distribution of goods and services to their rural region, and become centers for the growth and consolidation of rural non-farm activities and employment. Moreover, towns and small cities serve as centers for marketing, services, commerce, processing, transportation, distribution and communications and as centers for small-scale manufacturing for the diffusion of innovation, and for social interaction. (Rondinelli, 1983). The various economic roles that a secondary city can adopt have been classified in the table 1.

According to Rondinelli (1987), the growth of cities strongly influences agricultural cropping patterns, the intensity of landuse and returns to agricultural investment in surrounding areas. In addition, it creates demand for cottage industry goods produced by rural households. Increased agricultural productivity drives people from rural areas to cities in search of new employment and economic opportunities, and the employment of migrants in cities is a source of income remittance to farm households in rural areas.

Through a similar study and analysis of eleven intermediate cities of Latin America, Bolay and Rabinovich (2004) classify medium sized cities (Table 1). Similar classification is observed in the study of eight secondary cities of Pakistan. The medium-sized city is defined more by the position it occupies and the role it plays not only in the urban network but also in the global economic system. This is primarily determined by its position between local centers with direct contact to the rural world, or specialized towns on the one

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hand, and metropolitan centers that function at national and international level on the other. "The territorial location of the intermediate city will determine its function within its region, and the role it will play at different territorial levels, alongside the other agglomerations of the urban network." (Bolay and Rabinovichm, 2004: 121).

Territorial occupation and demographic expansion, as well as urban planning and development, socio-economic, political, institutional, environmental and cultural aspects, infrastructures and services all interact at different levels – local, regional, national and international. The interplay between these various aspects and their relative importance determines intermediate cities, which act as an interface to

the outside world. The following section situates the two case cities of Larkana and Mansehra, within the framework presented here as per their regional importance and urban functions.

## 3. GEOGRAPHIC AND ECONOMIC ROLE OF LARKANA AND MANSEHRA WITHIN THEIR CONTEXTS

#### 3.1. Geographical Context

The two cities of Larkana (in Sindh) and Mansehra (in Khyber Pakhtoonkhawa) are located in two different provinces having contrasting geographies (Figure 1).

Table-1: Typology of Urban Functions (Bolay and Rabinovich, 2004)

1.	Regional market	The city is a driving force for the production and exchange of goods and services at the level of the local and immediate regional economy
2.	Service centre	The city offers a number of public services health care, secondary and tertiary educational institutions as well as private services banks, businesses, leisure and information centres for both the urban community and the surrounding population
3.	Regional capital	The city hosts various provincial and/ or national political and administrative institutions for the territory in which it lies
4.	Economic location	The city develops a concerted national and international strategy as a large-scale industrial and trade centre, by making the necessary infrastructural investments and facilitating the action of economic agents
5.	Tourist centre	The city makes use of its comparative advantages location, natural resources, historic legacy, culture, etc. to promote activities linked directly to domestic and/ or international tourism
6.	Communication hub	Owing to its strategic location and the development of relevant infrastructure, the city acts as a platform for the exchange of persons, goods and information
7.	Metropolitan periphery	The growth and development of the city depend directly on its integration within a metropolitan area with its underlying national and international dynamics
8.	National/ International	The city's geographic location (border zone, coast, city-state) and its development interface strategy (duty free zone, "maquiladoras", international tourism) endow it with a role shaped primarily by ever more international exchange mechanisms
9.	Cities in a conurban area	The city's development depends on its integration within an agglomeration of several urban municipalities linked together at various levels of the urban framework, with each municipality retaining its own identity
10.	Association of a group	Several small towns in a preponderantly rural region constitute a group and of towns influence each other
11.	Urban region	Settled areas within diffuse urban zones

Larkana city has a flat terrain and falls within the alluvial plain stretching from north to south adjacent to Indus River, which is rich in agriculture on one side of the city. The Indus river is of great significance to Sindh along which lie agricultural lands and forests as well as most secondary cities of the province. Larkana lies in the northwestern part of Sindh housing a population of approximately 500,000 (Figure-2). The city has acted as an agricultural market for the region. Railway linkages with the north and the south of the province laid by the British in the early 19<sup>th</sup> century



Figure-1: Location of eight secondary cities chosen for documentation as part of the UN-Habitat project.

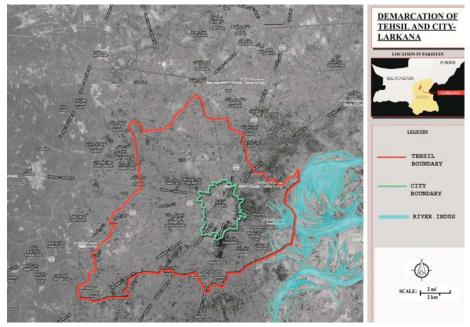


Figure-2: Demarcation of Tehsil and city of Larkana.

helped establish this role of the city (Figures 3-4). Larkana is the largest city in this region, acting as a district service center with a catchment area for Dokri, Naudero, Ratodero, Kambar, Bakrani, Shahdadkot, Badah and Miro Khan.

The city of Mansehra in is the second largest city of the Hazara division and the largest in Mansehra district. It houses a population of approximately 100,000 people and serves as a catchment area for settlements like Kaghan Valley, Batgram, Balakot, Shinkiari and Baffa (Government of

NWFP, 2000) (Figure 5). The area has tall trees, high mountains, plains, beautiful valleys and lakes.

The economy of the area is largely agrarian, with high dependence on natural resources like minerals and forests which are fast depleting. Due to high population growth rate, small land holdings and lack of alternative sources of income, the pressure on land and natural resources is continuously increasing.



Figure-3: Transport and traffic network of Larkana city.

District Mansehra is also one of the major mining regions of the KPK. In terms of infrastructure, the district is relatively well served both by major roads and telecommunications networks.

Mansehra city is located 24 kilometers (15 miles) from Abbotabad. The Karakoram Highway (KKH) which passes through Mansehra serves as a link to rest of Pakistan and the Northern Areas while the Mansehra Narran Jalkhat

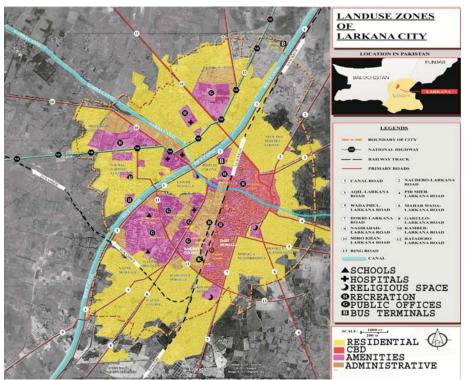


Figure-4: Landuse zones of Larkana city.



Figure-5: Demarcation of Tehsil and city of Mansehra.

(MNJ) Pass originates from KKH in Mansehra city and links Kaghan Valley with rest of the country (Figures 6-7). It also connects to important scenic and touristic places in the Kaghan Valley, such as Naran, Shogran, Lake Saiful Muluk and Babusar Top.

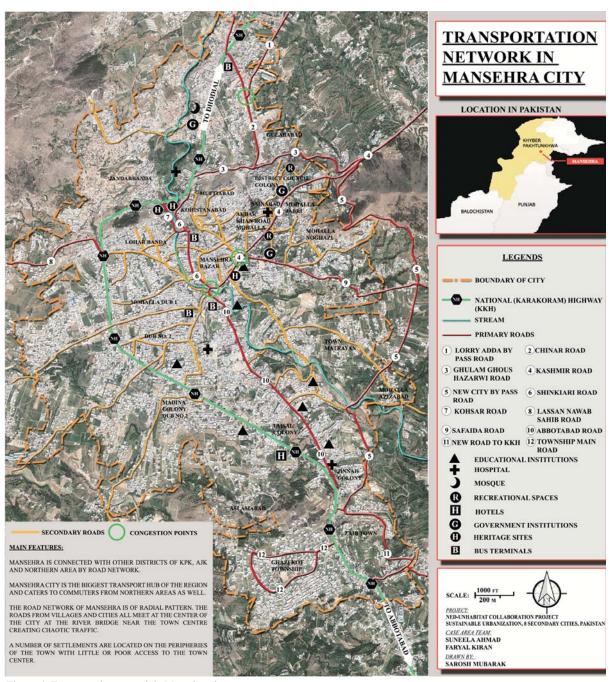


Figure-6: Transportation network in Mansehra city.

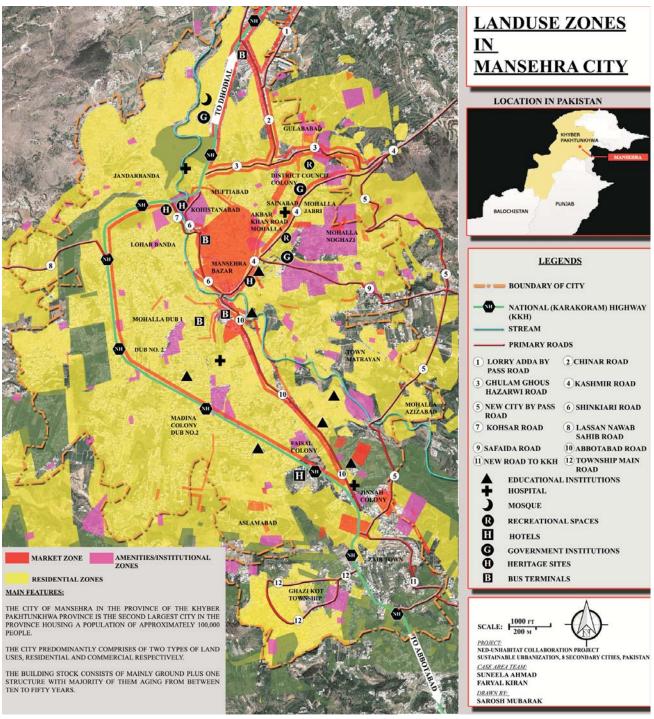


Figure-7: Landuse zones in Mansehra city.

### **3.2.** Economic Role of the Two Cities: Their Strengths and Weaknesses

and the strengths and weaknesses of these landuses have been summarized in Table 2.

The economic role of the two cities, the resultant landuses

Table-2: Economic roles of Mansehra and Larkana – their Strengths and Weaknesses

Economic Role of Larkana and Manehra  1. Services Centre:  Catchment area for surrounding towns for urban, social, services, transport and employment facilities	Prevalent Land Uses  District/ Municipal authority offices Court of law- Katcheri Medical institutions Educational institutions	Strength  Has previously catered to a large catchment area/region and continues to attract nearby population for services offered. Specialized medical facilities and technical colleges cater to district population Supported by strong informal sector service economy Presence of political support in Larkana	Weakness  Poor transport planning/management Informal activities and encroachments show lack of enforcement of regulatory controls in expansion of services Energy crisis Inadequate number of facilities to cater for entire district population Lack of planning strategy to cater for day time increase in population in Mansehra Political biases and lack of enforcement of planning despite political support in Larkana
Regional Market:     Agricultural market base	Whole sale markets     Retail markets	Whole sale agricultural market well integrated with transport connections to the agricultural hinterland     Specialised (wholesale and retail) markets include electronics markets, mobile market, households, handicrafts	City center infrastructure overburdened with expanding services and trade and narrow roads, densifying residential landuse and open drain sanitation and solid waste issues
3. Tourism:  Political and historical tourism in Larkana and natural sightseeing tourism in Mansehra	<ul> <li>Hotels</li> <li>Tombs of Pir/ Sufis</li> <li>Mohenjordaro/ Airport</li> <li>Transport Stands</li> <li>Restaurant</li> <li>Motels</li> <li>Internet Cafes</li> </ul>	Presence of landmark historic and cultural architecture in city Proximity to touristic sites including Mohenjodaro, tombs of pirs, Naudero (PPP) in Larkana Strategic location and scenic quality of the city of Mansehra Availability of affordable transit accommodation and support services in Mansehra	Poor planning to cater to tourism related services including recreation spaces and options in the city     Un integrated public touristic networks     Lack of conservation of important historic sites     Insufficient availability of transit accommodation and support services     Lack of Conservation of inner city areas
Peripheral real estate development	<ul> <li>Newly developed housing scheme on periphery for low and high income housing in Larkana and Mansehra</li> <li>Construction of bypasses in Mansehra</li> <li>Conversion of agricultural land into housing schemes</li> </ul>	Attraction of investment     Development standards enforced in high income housing development in both cities creating a reference.	Conversion of agricultural land-deforestation     Burdening the existing infrastructure of the city

#### 1. Service Centers

Both Larkana and Mansehra act as service centers<sup>3</sup> for their region. They have a catchment area catering to surrounding towns and region for administrative, urban and social services including court of law, schools, colleges, hospitals, small scale industry, vegetable and fruit whole sale and retail markets, commercial centers, banking, finance, public administration and municipal authority offices as well as act as communication hubs for intercity/ regional transportation connectivity. Both cities act as important historical nodes in their regional networks and are hence well established as service centers. They offer off-farm employment opportunities for temporary job seekers coming from rural agricultural areas, who return to their farms in the harvest seasons.

In delivering this role, both cities are faced with transportation planning and management issues. Highways linking the cities to the rest of the region lead to the commercial city centers, causing major conflict between through and local traffic. Serving as a catchment area for the region, the two cities experience influx of people coming from rural areas on daily and seasonal basis. Transportation, infrastructure and utilitarian facilities are used by these seasonal migrants.

Both cities are supported by strong informal sector service economy that offers various services to the city, its hinterland and its passersby, cashing in on the major demands/ needs of people. However, it is also a cause for various spatial and environmental issues. A later section in the paper further elaborates on this (Figures 8-11).

Larkana is a major institutional hub, performing high order functions in health and education sectors with a significant number of institutions which make the city an important one for its neighboring cities, districts and talukas including specialized health facilities (example Kidney Center), hospital for cancer, technical colleges and universities. Mansehra on the other hand, faces issues due to inadequate number of facilities to cater for the entire district population. About a tenth of the working population of Larkana work in the education sector<sup>4</sup>, showing its importance for the economy of the city.









Figures-8-11: Informal sector operational in the two cities.

A socio-economic survey was conducted in Mansehra and Larkana city in the year 2011 as part of the "Sustainable Urbanization" component within the Joint Program on Environment (JP-E4), which envisions building capacity to provide an effective and sustained improvement in urban poor living conditions, including urban issues relating to climate change. As part of this program 3770 and 4300 socio-economic questionnaires were filled in Mansehra and Larkana city respectively. The questionnaires were divided over the city, inner city and peripheral localities within the city. The data collected from these questionnaires was then tabulated and analyzed.

<sup>4</sup> Socio-economic survey conducted in Larkana in 2011, part of the "Sustainable Urbanization" component within the Joint Program on Environment (JP-E4), sample survey size included about 4300 questionnaires.

#### 2. Regional Market

Large cities and metropolitan areas are the final markets for many agricultural products of rural regions with commercial farming and the sources for many manufactured goods. Both Larkana and Mansehra act as regional wholesale and retail trade markets for agricultural and other goods with a catchment area of surrounding countryside as well as towns for certain specialized products. Guavas, mangoes and dates are major productions in Larkana district among other fruits and vegetables. Between 1872 and 1929, the British (re)planned villages in these areas, and located towns among the villages at reasonable distances. These towns were central market places, called mandis for livestock and agricultural produce. Perennial irrigation was developed, which resulted in a great increase in agricultural produce. The *mandi* towns were linked with a network of roads, with the more prosperous mandis linked through the railway network to collect produce of the region for export by sea, mainly via Karachi (Vandal, 2004). The presence of the railway network as well as the Ghara and Rice Canal built by the British in Larkana shows that the city was a prosperous mandi town at the time, linking the northwestern part of the province as well as the province of Baluchistan. Over time, the commercial landuse of the city has increased significantly as recorded, from 41 acres in 1985 to 153 acres in 2000 (PEPAC, 1985). Its retail trade market has evolved to take center stage in the city's economy.

The city of Mansehra has served as an important junction on an ancient trade route connecting to Kaghan Valley and Muzzaffarabad via the Karakoram Highway. Hence its importance as a regional market cannot be underestimated.

The commercial city center of the two cities is the place that caters to this economic function (Figures 12-15). Its transportation linkage with the surrounding agricultural areas and other towns is a basic requirement for its convenience. With the decline of the railways acting as transportation means for goods and people even uptil the 1970s, this is now relied on the road network. While transportation linkages are adequate in number however, growing size of city overtime, densification of the city center with the need to cater to increasing number of people, has led to congestion and an overburdening of the infrastructure in the city center. The scale of Larkana's central commercial areas is much more than that of Mansehra primarily due to the difference in population of the two cities (500,000: Larkana; 100,000: Mansehra). Larkana thereby is faced with major issues of congestion in its central commercial area.









Figures-12-15: Wholesale activities in Larkana and Mansehra

There are strong linkages between formal and informal enterprises involved in marketing of agricultural produce and manufactured goods in urban areas. The built environment of the city center is affected by informal practices including encroachments, building extensions along with narrow roads and densification all add to the issues of the city center. In order to conserve the physical and economic structure and role of these regional markets, they require planning with respect to their future needs and demands and regulations for control guidelines.

#### 3. Tourism

Both cities of Mansehra and Larkana are associated with regional tourism of very different types. The city of Mansehra, lying at the base of the mountainous ranges is a transit camp for local as well as foreign tourists destined for natural sightseeing spots, hill resorts, mountain peaks and valleys. Strategic location of the city, its scenic quality and availability of affordable transit accommodation and support services are factors that support this economic role of the city. The city has evolved from a trade base to a services based economy which serves as a transit camp for people enroute to Kaghan, Muzzafarbad, Gilgit and Kashmir. Thus Mansehra is a service centered city with the tourism industry dominating its services sector. The prevalent land uses which support this economic role as a transit city for tourists are hotels, restaurants, motels, internet cafes and transport stands.

Larkana on the other hand has not much to offer as natural scenery. The city lies close to remnants of one of the oldest, ancient world civilization; that is Moenjodaro belonging to the Indus Valley civilization (3000BC). Apart from this, the presence of the Bhutto shrine in Naudero, the city is the home town for several Pakistan Peoples Party leaders, with strong political affiliations (Figures 16-17). Several important district amenities and services including Moenjodaro Airport have been established through this affiliation. Political processions and sermons happen now and then. Yet another reason that attracts locals to the city is the presence of the tombs of the pirs, whose festivals are held regularly. With several Sindhi artists coming from the city, it has a history of being culturally active. For all these reasons, the city attracts local tourism. While the city offers accommodation and transportation services for this purpose, however, these are insufficient.

Both Mansehra and Larkana are cities that offer services that supports their status as destinations for tourism. However, they need development and planning to attract tourists to stay longer and possibilities of engagement in diverse





Figures-16-17: Bhutto's shrine in Naudero

directions. Open spaces which are present in the city are not properly utilized and integrated as urban space. Moreover, the open spaces which were developed as recreational spaces previously are not maintained in a proper manner that it could serve the community. Hence there is a problem of insufficient green spaces, parks, trees, etc., while once it was called the Eden of Sindh. Mansehra on the other hand has natural scenery all around (Figures 18-19). However, its recreational facilities for the communities present are also underdeveloped. Apart from this, the old historic city centers of both cities also lack any attempts at conservation and their urban, social and recreational spaces are starkly underdeveloped.

The informal sector offers certain services to make spaces along waterbodies and landscapes enjoyable and accessible, for example, eating and dining areas, mobile shops, transportation, etc. However, this is limited in its capacity and needs to be promoted. It also needs to be regulated to avoid traffic and environmental issues.



Figures-18-19: Natural scenary around Mansehra city



#### 4. Real estate investments of the elite

Peripheral housing schemes are being developed in both Larkana and Mansehra. High income suburban housing development in both cities are physical manifestation of the economic investments of the elite of the cities (Figures 20-21).

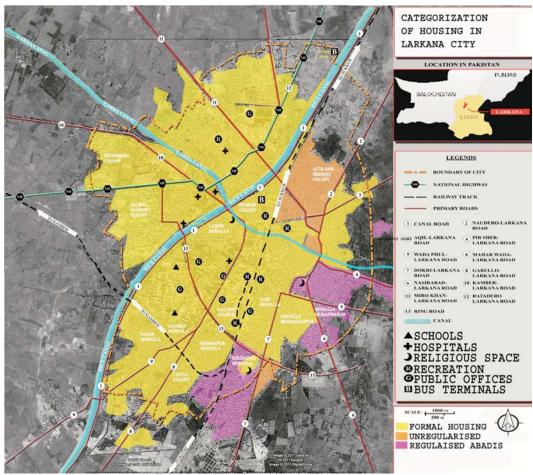


Figure-20: Categorization of housing in Larkana city

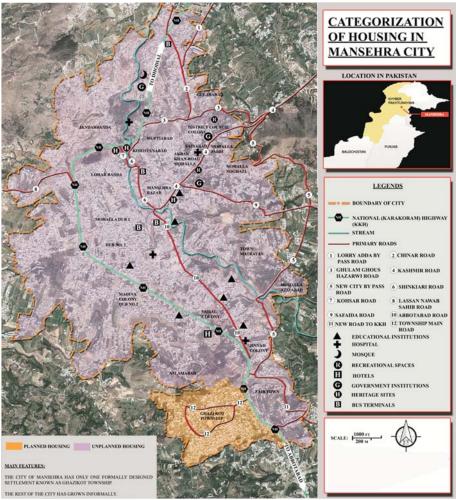


Figure-21: Categorization of housing in Mansehra city

Ghazikot Township in Mansehra, for example, a suburban settlement for high income Pakistani expatriates, attracts investment through foreign remittances by residents of Mansehra working abroad (mostly in the Middle East) and is an elitist development in contrast to the rest of the city. As a planned area, it is developed according to bylaws prescribed under the Tehsil Municipal Authority (TMA) in whose jurisdiction the land is. Although these bylaws have not been followed in the strictest sense and there are various violations but its morphological setup is different from the rest of the city. The plot sizes are bigger, the road widths are more than a typical Mansehra street, the provision of amenities and supporting commercial centers have been incorporated in the planning and spaces for green areas/ parks have also been catered for (Figures 22-23). The execution of this township has been done through a conscious

planning and development strategy aimed at creating a suburban picturesque residential area attracting high income residents.

Sachal Sarmast Colony is a similar planned suburban neighbourhood in Larkana, that is designed with public amenities at walking distance. Larkana also faces adhoc real estate subdivision of plots from agricultural land, which is bought for speculation and investment. Apart from this, peripheral development in secondary cities are mostly a result of agricultural landuse conversion. With mostly private land holdings, land use conversion and subdivision is happening on an adhoc basis, lacking reference to a larger master plan for both cities. These are not particularly controlled or following any policies and regulations for the city. Related issues are discussed in a later section.



Figure-22: Urban morphology of Ghazikot Township, Mansehra



Figure-23: Development in Ghazikot Township, Mansehra

# 4. KEY ISSUES OF PHYSICAL DEVELOPMENT HAVING A MAJOR IMPACT ON THE ECONOMIC FUNCTIONING OF CITIES: LARKANA AND MANSEHRA

Secondary cities of Pakistan are carriers of historical and cultural significance of the region and mostly have good regional and local road and rail linkages. Due to their urban scale and well laid out road networks, most city dwellers can reach their destinations within 15 minutes walk or using

public transport. This came across as a commonality in the comparative surveys of the cities. These cities also offer sustainable living ingredients, clean air, good connection with the open spaces of the rural contexts, fresh food, less dense (incomparison to big city living), better services of health and education and market (in comparison to rural context). They serve as catchment areas for the region they are located in and offer health, commerce and educational facilities. Secondary cities can help to achieve a more sustainable and geographically balanced process of urbanization and need to be planned to develop as centers that establish more direct and balanced relationships with their surrounding territories and/ or their economic and social hinterlands.

The recognition of the function of cities as service centers and regional markets and spatial provision, infrastructure support accordingly can be major steps in giving physical support to the economic functions. As an example, with 7000 *chingchis* in a small city, informal inter city bus stops and bus routes passing through the city's central commercial areas, show the importance of Larkana in the regional communication. Narrow roads and inadequate spatial provision lead to congestion and bottlenecks, commonplace to various parts of the city. These issues need to be catered to through planning.

The cities with their cultural, historical and natural assets

can be planned to support a tourism economy through incorporation of required landuses. For example, Larkana needs more hotels and guest houses to accommodate tourists. Furthermore, the cities' existing open spaces including parks, playgrounds and natural sites need to be developed, enhanced adding recreational and entertainment facilities and maintained regularly. Lastly, pedestrian paths need to be developed to promote the walking experience of the city.

The key issues of physical development that have major relation with the economic functioning of most secondary cities of the country, in particular the two case cities of Larkana and Mansehra can be listed as:

- 1. The predominant role of the informal sector in the economy,
- 2. Consolidation of the city's central commercial area as one catering to the region.
- Peripheral development: Conversion of agricultural landuse to urban use.

#### 4.1. Informal Economy

In developing economies, the government's inability to recognize and regulate the rapidly developing market economy gives rise to the informal sector, which delivers and manages employment, financial and social services, housing, transportation, physical infrastructure and services, protection and security services, etc. This results in creation of parallel governance and social, economic and cultural values and institutions that corrupts and challenges the normative way of life.

A large portion of the country is employed in the informal sector; this sector employs more than 70 percent of Pakistan's total labour force. Proportion of employed persons involved in rural informal sector (73 percent) is higher as compared to that of urban areas (67 percent). Informal sector's employment has surged by 5.0 percent from 65 percent in 2001-02 to 70 percent in 2003-04 as is represented in Table-3 (Ministry of Finance, 2010).

Informal sector is, therefore, the main source of employment generation.

Despite the declining employment share (Table 4), agriculture still dominates as the largest provider of employment in Pakistan at 43 percent. Over the years, there has been a paradigm shift towards informalization in the agriculture sector with a trend of self-cultivation and a decline in share of tenancy. Previously, the feudal order organized agricultural production, helped supporting infrastructural development, controlled the marketing of produce, maintained law and order on behalf of the state, created conditions conducive to the collection of revenue and guaranteed to the establishment the results required in the political arena. This feudal order no longer exists in most agricultural areas of Pakistan. This change has led to more rural urban migrations. Introduction of green revolution technologies and the mechanization of agriculture and transportation have further supported this change (Hasan, 2000). Secondary cities are witness to and are affected by this as well. New modes of production, transportation, services and credit mechanisms are now handled by an informal sector, well connected with urban centers. Hence, the process of change has generated a large services sector, with the informal sector playing a major role in this.

**Table-3: Distribution of Labour Force (%)** (Ministry of Finance, 2010)

		2001-02			2003-04	
Sector	Total	Male	Female	Total	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0
Formal	35.4	35.3	37.0	30.0	29.6	34.3
Informal	64.6	64.7	63.0	70.0	70.4	65.7
Rural	100.0	100.0	100.0	100.0	100.0	100.0
Formal	31.7	31.5	34.3	27.1	26.7	30.1
Informal	68.3	68.5	65.7	72.9	73.3	69.9
Urban	100.0	100.0	100.0	100.0	100.0	100.0
Formal	38.9	38.9	39.3	32.8	32.2	38.4
Informal	61.1	61.1	60.7	67.2	67.8	61.6

**Table-4: Basic Economic Indicators of Pakistan** 

	Contribution to gross domestic product by sector (%)	1950	1997	2010
1	Agriculture	53.2	24.2	21.2
2	Manufacturing	7.8	26.4	25.4
3	Services, trade and others	39	49.4	53.4
	<u>Labour</u> Force, by sector (%)	1950	1995	2005
1	Agriculture	65.3	46.8	43
2	Manufacturing	9.5	18.5	20.3
3	Services, trade and others	25.2	34.7	36.6

Source: (Ministry of Finance, 2010))

Table-5: Larkana's Commercial Development Profile- 2000

Type	Number
Formal	6000
Informal	8000
Total	14000

Source: (PEPAC, 1985)

The presence of the informal sector is quite apparent in the physical built environments of secondary cities. Commerce and provision of services, small and large scale are all common observations. According to the Larkana Development Plan 2001, more than 50 percent of commercial outlets in the city are informal. In Mansehra the number of respondents engaged in informal sector was 36.3% with 51.2% respondents engaged in domestic help which earns an income (Nizamuddin et.al, 2011). Apart from their strong presence in the urban spaces, field observations also show that many low and low middle income residents do various activities at home which are used for livelihoods. Such activities mostly include handicraft making, small scale agricultural or livestock upkeep.

Small scale enterprises have been the primary source of labour absorption in cities in developing countries and will continue to play a crucial role in the future. Policies are required to improve the capacity of small scale enterprises to generate jobs. The challenge facing governments and the private sector include: (1) creating an economic environment conducive to small-enterprise development; (2) removing regulatory and administrative obstacles to small-enterprise expansion; (3) tailoring small enterprise promotion programs to local conditions and needs; (4) providing capital and credit for small-business owners; (5) involving the private sector in small enterprise development programs; and (6) providing technical assistance, training and educational programs through public-private partnerships (Rondinelli and Kasrada, 1992).

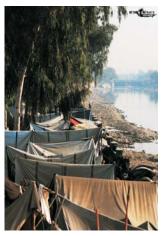
#### 4.1.1. Informal urban space use

Predominant informal space uses in any city are related to:

- Informal commerce
- Transportation; infrastructure, bus and *chingchi* stands, narrow road widths, parking
- Land encroachment
- Informal low income housing

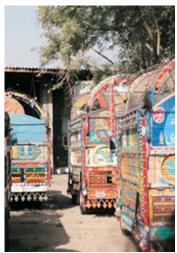
Given the scale of informal economy, informal space uses, building extensions, encroachments, presence of mobile/ temporary structures are physical space indicators of this. Intercity road transportation although private and registered (formal), lacks support of planning (routes identification), infrastructure and space allocation (terminals/ maintenance) resulting in informal use of space and encroachments in the city adding to congestion. Location of intercity transit stops on the main city arteries passing through central commercial areas, while conducive to serving the clientele, are reasons for creating major congestion issues in the cities. Land encroachment is a major issue in these cities which is mostly along the roads, station and canals as it contains lots of open and un-utilized land. This results in congestion and pollution and it impacts upon the quality of life. The encroachments are in the form of temporary and mobile structures. Informal extensions are common practice in commercial areas. In Larkana the banks of rice canal are being used by the flood victims for housing. These problems are due to the lack of planning/building bye-laws and the policy regarding new developments (Figures 24-28).











Figures-24 to 28: Informal usage of Public spaces in Larkana and Mansehra

The informal sector is characteristic of self created economic opportunities given limited resources, and is able to determine 'demands'/ needs of the city or large set of people. The benefits of an informal sector include that they are generators of employment sources, are efficient and low cost and market responsive. However, major issues relating to it can be listed as:

- No regulations and byelaws enforced
- Congestion and adhocism on the roads
- Compromising public safety
- Environmental pollution

In short, there is a need to regulate this. The scale at which the presence of informal sector exists is enormous and ignoring their presence or attempts at eradicating this are impossible. These conflicts can only be resolved if this process of change is supported, politicized and institutionalized, thereby regulating them through the following strategies:

- Stronger development controls for building and town planning
- Making spatial allocations for transit infrastructure and other essential infrastructure that support the city's economy
- Widening of roads
- Incorporating informal sector commerce as part of the formal sector, regulating public safety, widening roads, removing encroachment, equity in urban space use and mitigating adverse effects of environmental pollution

The evolution of the role of the government in public private partnerships is facilitating economic growth and safeguarding public interests through contracts, policies and regulations. Associations and unions of informal sector service providers safeguard their primary interests and can act as a network base for understanding their needs and demands in service provision.

### 4.2. Consolidation of the city center as a major commercial area of the region

The commercial city center of secondary cities continues to act as regional market in most cases. Regional market systems are based on a relationship between the spatial/physical arrangement of the market systems and the social and economic opportunities for the people living in the region. The location of transport services, bulking facilities and market centers and their connectivity and access, play

a major role in determining the efficiency of the market system (Painter, 1987).

The adequate functioning of each of these land uses need to be supported by the provision of well-maintained and highly workable infrastructure like properly laid out sewerage lines, uninterrupted water, electricity and gas supply which is a major issue for most secondary cities and thus the people engaged in commercial, residential and institutional activities face problem.

Central commercial areas of many cities are also their historical cores. Of a mixed landuse and narrow roads, these areas are also potential attractions for tourists. Kashmir Bazaar, Mansehra and Shahi Bazaar, Larkana are both examples of commercial hubs of the city, historical in nature. With an organic morphology, narrow winding roads, with only a few roads accessible by big vehicles, they are mostly pedestrian in character. Motorcycles and very few chingchis are used here for bringing the goods (Figures 29-30). The close knit morphology works well in two ways; one, it makes distances walkable between the various commercial, residential and institutional areas of the city and second, the residential areas are well integrated with the commercial areas. Their inner compound spaces allow them to have privacy and linkage with the public areas simultaneously, as well as an activated area round the clock, facilitating security and maintenance.

Major inter city transportation corridors pass through the city center commercial areas. The old city areas with their characteristic narrow roads coupled with the requirement for loading and unloading of local merchandise creates bottle necks and traffic congestion. Local and through traffic uses the same corridors, along with the inter city public transportation nodes also located here. Densification, building extensions (usually illegal) narrow road widths, informal practices and traffic issues all contribute to add pressure on the old infrastructure of the city center.

Increasing density and commercial expansion requires up gradation of infrastructure in particular, solid waste and transportation access to the markets. New buildings, replacing aesthetically appealing old buildings, are mundane and of not particularly good quality construction. Inner core of many smaller cities are rich in their historic and cultural value. Conserving them would add further to the tourist economy and potential of these cities. At present the secondary cities of Pakistan are not developed or explored in their economic potential for tourism, local or international.

#### 4.3. Peripheral Development

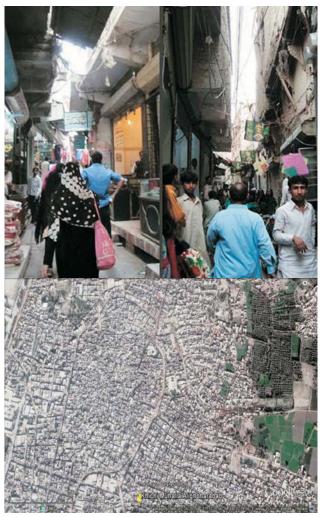
The government does not provide housing for low income people which results in formation of informal low income settlements, katchi abadis in the peripheries of the cities which are rural in nature. The scale of katchi abadis or illegal land subdivisions for low income settlements is almost twice (if not more) of Larkana's listed low income settlements for regularization<sup>6</sup>. Natural disasters over the past few years have led to the growth of such settlements in the peripheral areas of Mansehra (Figures 31-32). There is little land available in residential areas inside the city as they are densely populated. Comparatively, there is much more land available at the periphery of the city and used for agricultural purposes. Agricultural land is thereby being converted into housing colonies through sub-division but there are no large scale amenities present here. This creates several issues:

- 1. Adhoc small scale land subdivisions do not include planning for amenities for the area
- 2 Peripheral development causes increasing distance to accessible services and will require more commuting to city center<sup>7</sup>.

The current major issue in the peripheral areas of both Mansehra and Larkana is the infrastructure of low income settlements. Planned infrastructure provision in these settlements is missing. In Larkana, with its flat topography, they are low lying settlements, drainage of sewerage and storm water is a common issue, as agreed by 88 percent of the respondents in the peripheral areas. The open drain sewerage system acts as the storm water drainage carrier too, however its capacity is limited. Further, the flat topography of Larkana city requires the drainage to be pumped out from housing areas to the final destination.

<sup>6</sup> There are 20 *katchi abadis*, illegally and irregularly formed low income settlements in Larkana city of which seven have been notified and part of areas of two others are notified. Eleven remain un-notified.

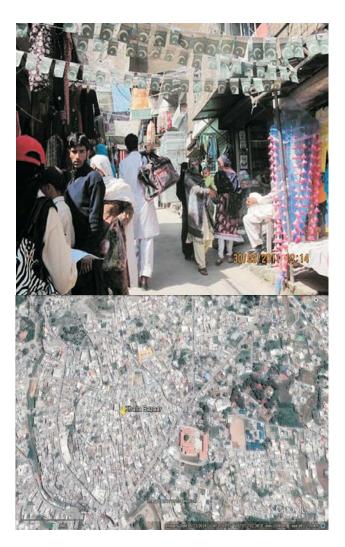
People generally live close to the place that they work. A few examples of this can be observed, from the socioeconomic surveys in Larkana. Forty five people working at Miro Khan Chowk (located as the periphery) live in the periphery; eighty three people working in Nazar Mohalla live in the city area, which falls within the city zone; twenty four people working in Resham Gali in the inner city; One hundred twelve people working in Shaikh Zaid Colony in the city zone; twenty one people working in the Rehmatpur Mohalla also in the city zone.



Figures-29 & 30: Historical bazaars in Larkana and Mansehra

Failure of pumping infrastructure can lead to serious flooding issues in the residential areas. After the earthquake of 2005 and floods of 2010 and 2011, low income settlements termed as slums have developed mostly in the northern periphery of the city of Mansehra. In both Mansehra and Larkana, informal systems of sewerage, electric and water lines have been laid with sewerage, drainage and flood water systems being almost non-existent (Figures 33-34). The water quality is also very poor. The roads are unpaved and get flooded in heavy rains. People have laid minimum infrastructure in an adhoc manner and on a self-help basis.

Holistic master plans for the cities are required which encompass a vision and envisage the future growth direction of the cities without posing a hazard to the ecology of the



region and natural assets, incorporate policies and regulations for agricultural land sub division, proposes improvement of housing stock and up gradation of area infrastructure in low income areas.

#### 5. CONCLUSION

Strengthening the functions of urban centers must be done carefully, incrementally and strategically in developing countries. One of the major tasks of regional planning, as seen in the case study of Larkakna and Mansehra here, is to firstly support investments made by private enterprenuers and alongside to ensure that investments in services, facilities, infrastructure and productive activities are located strategically in towns and cities that can serve a wide area





Figures-31 & 32: New housing settlements on the periphery of Mansehra city

with adequate linkages for access by greater number of people (Rondinelli, 1987). The strategically located infrastructural investments can aim to spatially integrate the medium sized urban centers, also supporting social transformation. The informal sector economy plays a major role in these urban centers. Its strategies to earn and serve requires recognition by giving legal cover to the processes that promote sustainable urbanization. Governments can strengthen the ability of towns and cities to perform economic and social functions that support and stimulate agricultural development, service provision for the region as well as sustainable urbanization.

The economic role of secondary cities as services centres, regional markets, promoters of tourism and attracting of real estate should be promoted by adequate policies to make these cities self sustaining and less dependent on primary cities.

International assistance organizations and governments in many developing countries have been promoting the growth and development of intermediate cities for a number of reasons. It has been argued by some development planners that a strong network of intermediate cities is needed to redistribute urban population and reduce polarization in the settlement patterns of countries with 'primate city' spatial systems.(Rondinelli, 1982). The UNHabitat-NED Collaborative Project was one such project initiated through international assistance. The objectives of the project were met through documentation and analysis of the eight secondary cities of Pakistan, establishment of baseline data and mapping on critical urban issues and outlining of intervention and improvement strategies of the urban morphology. Strategic demonstration projects were also designed for each of the eight cities and are in the process of being implemented under the management and direction of UN-Habitat. A virtual urban observatory was also





Figures-33 & 34: Absence of infrastructure planning in housing schemes of Mansehra

successfully launched on which all the reports, data and analysis produced during the project is available for free access.

#### REFERENCES

Baker, J., Ed. (1997). Rural-urban Dynamics in Francophone Africa. Sweden, Gotab.

Bolay, J.-C. and A. Rabinovich (2004). "Intermediate Cities in Latin America Risk and Opportunities of Coherent Urban Development." Cities 21(5): 407-421.

Government of NWFP. (2000). TA No. 2940-PAK NWFP Urban Development Project. Pakistan Asian Development Bank.

Hasan, A. (2000). The Unplanned Revolution. Karachi, City Press.

Jamal, Z. and M. Ashraf (2003). "Development of Intermediate-Size Town: An Alternative Form of Urbanization." Quarterly Science Vision 9(1-2).

Ministry of Finance. (2010). Pakistan Economic Survey 2010-2011. Islamabad.

Nizamuddin, M. et.al. (2011). Living Conditions in Urban Slums: A Study of Selected Areas of Six Cities in Pakistan-2011. Gujrat.

Painter, M. (1987). Spatial analysis of regional marketing systems in the Third World. Patterns of change in developing rural regions. R. Bar-El, A. Bendavid-Val and G. J. Karaska. Boulder, Westview Press.

PEPAC (1985) Larkana Development Plan 2001. Larkana.

PEPAC (1985) Larkana Outline Development Plan- Pre Planning Report. Larkana.

Rondinelli, D. (1982). "Intermediate Cities in Developing Countries – A Comparative Analysis of their Demographic, Social and Economic Characteristics." Third World Planning Review 4(4): 45-64.

Rondinelli, D. A. (1983). "Towns and Small Cities in Developing Countries." The Geographical Review 73(4): 379-395.

Rondinelli, D. (1987). "Cities as Agricultural Markets." The Geographical Review 4: 408-420.

Rondinelli, D. and J. D. Kasarda (1992). "Foreign Trade Potential, Small Enterprise Development and Job Creation in Developing Countries." Small Business Economics 4: 253-265.

Vandal, P. (2004). The Lesser Cities of the Punjab: Forgotten or Neglected? Seminar on Urban and Regional Planning Department of Architecture and Planning, NED University of Engineering and Technology, Karachi.