Estimation of Rent of Dwellings - Rural and Urban in Uttar Pradesh

REPORT

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Contents

List of Tables

List of Figures

CHAPTER – I

Significance, Contextualization and Focus of the Study

1.0 Introduction

Housing− what we often call 'shelter'−is a primary need of human beings alongside food and clothing. It is a secure, decent and affordable structure that provides space for living, study, security, civic amenities, vitality and structural stability for community's successful social life. It is a fundamental right and necessity of human being across the globe to enhance their economic prospect and well-being.

Housing serves the purpose of long-term investment, and a consumption good that generates considerable utility for both the lessor and the lessee (Global Financial Stability Report, April 2019). Every commodity has demand and supply, so does housing. Housing as a commodity has a very peculiar nature for its dependency upon the services it provides. This economic naturemakes demand, supply, and eventually determination of value of housing very challenging. In 1983, United Nations General Assembly declared the year 1987 as the International Year of Housing and Settlement (IYHS), instating the availability, affordability and accessibility of housing. Moving one step ahead, UN further reaffirmed its concern for this sector by coining the idea of 'adequate housing' instead of emphasizing on availability as an essential minimum. The idea of 'adequate housing' consists of 'adequate' privacy, space, security, lighting and ventilation, basic infrastructure and locational benefits with regard to workplace and other elementary facilities at an economical cost (Global Strategy for Shelter 2000, UN General assembly, December 1988).

Ostensibly, this renewed and vigorous focus on housing seems perplexing as housing and its demand is a part of Private Final Consumption Expenditure (PFCE) whereas decisions like what to produce, how to produce, where and at what cost something should be produced are fundamentally a manifestation of the balance between demand and supply in the market. Given that, there is a limit to physical resources and available land for any nation, there arises the need for Government intervention for

efficient channelization of resources to meet the demand for housing at affordable prices. This study tends to throw light on one of the backward, populous and largest state in India: Uttar Pradesh which has a population of 19.96 crore (Census 2011). If this state had been a nation in itself, it would have been the fifth largest nation after China, India, America and Vietnam. This state is currently undergoing a change in the form of urbanization like never before. According to Census 2011, 16 cities in this state had population of more than 4 lakhs and to establish the growth process it is undergoing, we can refer to the selection of its 10 cities (up to January,'18) in Central project of 'Smart Cities' development'. This clearly shows the process of growth and its future prospects of development. Being a land locked state with around 240 thousand sq. km, availability of per capita land is less thereby pushing up the population density (829 people/sq. km). This partly explains the ever increasing demand for housing at an affordable cost given the scarcity of resources. The empirical study on rent of dwellings in India, especially in Uttar Pradesh, is scarce due to the paucity of 'ready-to-use' information. Hence, this study has sought to estimate the rent of rural and urban dwellings (commercial and residential) across the four major socio-economic regions in Uttar Pradesh.

1.1.Situating the Problem

Uttar Pradesh is experiencing a perpetual increase in population both in rural and urban areas. Nearly 22.50 per cent of state's population presently lives in urban areas. With an addition of 33.60 million in last decade, Uttar Pradesh has been recognized as the most populous state in the country with a population size of 199.81 million (Population Census, 2011). The decennial growth of population in 2001-2011 was 20.09 per cent which was higher than the prevailing national average (17.64 per cent).

The perpetual increase in population has led to progressively increasing demand for land and dwelling units (housing) in the State. Dwelling units have always been recognized as a basic need of mankind. However, there has been a chronic shortage of dwelling units, particularly in urban areas. Several structural issues such as high gestation period of housing projects, limited and expensive capital, spiraling land and construction cost, high fees and taxes, unfavorable development norms and low affordability by Economically Weaker Section (EWS) and Lower Income Group (LIG) households are

chokepoints, restricting desired growth in dwelling stock in the state (Ministry of Rural Development and the Ministry of Housing and Urban Poverty Alleviation, 2011).Due to rapid urbanization and increased mobility of the people for job, education, livelihood and marital settlement, demand for rental houses has skyrocketed in urban as well as in rural areas. Demand for rental houses or dwellings on rent can be categorized into – demand for commercial purposes and demand for residential purposes. The complexity in the market of rental dwellings is progressively increasing.

Over 27 per cent of urban residents in India are currently living in rental houses (Census of India, 2011); and surprisingly, 25 per cent of the rental dwellings are informal in nature (NSSO: 65th Round Report on Housing Conditions and Amenities in India, 2008-09). All the constituent states of India are governed by their respective Rent Control Act (RCA) which is highly skewed towards tenant protection. Consequently, RCA indirectly forces tenants or seekers of rental dwellings into unrecorded and informal arrangements. Renting of homes is treated as commercial activity which increases property and service taxes successively for individuals and institutional rental housing operators (e.g. Hostels/ Paying Guesthouses/Dormitories etc.), for whom electricity and utility rates are always charged at the rates of commercial properties. Hence, the net rent from dwelling units with a formal agreement is always lower than the informal one. This higher outflow caused by the commercial treatment deters the growth of rental dwelling units and leads to underreporting in GDP/GSDP estimation. Given the underlying situation, it is of great significance to undertake a heedful estimation of rents for tenant and owner occupied dwelling units in both urban and rural areas across Uttar Pradesh. Dwelling rent (residential) is a component of personal consumption expenditure (PCE) and consequently becomes a part of Gross State Domestic Product (GDP). The rental value of tenant occupied dwelling and the imputed value of owner-occupied dwellings are both part of PCE dwelling services.

With increasing urban population, the demand for housing has marked an escalation, particularly in urban centres and their adjoining rural surroundings. When provision for affordable housing is doing the rounds, UP has not been exempted from it. Due to the insufficiency in supply of serviced land and housing units, illegal and sub-

standard housing stock is being created which further degrades the quality of available housing. One study estimates that at the beginning of the 12th Five Year Plan, housing sector registered a shortage of 5.46lakh units, and based on the population projection in the state, it was expected to increase upto 13.20lakh by the end of the plan period. If the demand for housing kept on increasing at this pace, it would soon outdo the supply capacity of the state, which would, in turn, lead to a supply shortage condition and an upsurge of cost in affordability of housing in general and rental houses in particular. Even at national level, the gap between demand and supply for housing has been widening with increasing prices of the real estate sector. The shortage in urban housing in India has been estimated to be 18.78 million during the 12th Plan period, which is expected to intensify further due to urbanization and ever growing demand for affordable housing (UNSDG Report, 2015). India is presently facing a massive shortage of housing, specifically for the Economically Weaker Section (EWS) and Lower Income Groups (LIG), who are heavily dependent on governmental support. Though provision of affordable housing has been a priority for the Government but providing so to all on ownership basis is quite difficult.

The fact that a large proportion of households still live in congested condition, indicating that they find decent housing unaffordable and, hence, assistance is required from the Government and the town planners for the provision of housing at a reasonable cost. The enormous shortages of ownership houses in urban centres in India in general, and UP in particular have led to a higher dependency on the rental houses. The Census (2011), however, reveals that country is facing a huge housing shortage while there is massive stock of vacant houses in urban centres− 11.09 million. Although the exact reasons for this vacancy are hard to ascertain, low rental yield, fear of repossession, lack of incentives and so on might be contributing to this phenomenon. Making these vacant houses available in the rental market may partly mitigate the acute supply side constraint.

In the national income calculation, rental values of residential and commercial dwellings are treated differently. As per National Account Statistics- Sources and Methods 2012, the rental activity of residential dwellings is mentioned under 'ownership of dwellings' and covered under tertiary sector. The economic activities covered in this sector are ownership of dwellings (occupied residential houses) including imputed value

of owner occupied dwellings. Services rendered by non-residential buildings are considered to be a subsidiary activity of the industries, which occupy the buildings and therefore, are not included in this sector.

Gross Value Added (GVA) estimates for the ownership of dwellings are estimated as the gross rental (actual rent paid and imputed rent for owned dwellings) of the residential houses less the cost of repairs and maintenance. The data available on dwellings from the Population Census and the data on rent from the NSS Consumer Expenditure Surveys are the principal sources for estimating the GVA of 'ownership of dwellings'. However, for the rural areas, the methodology for estimating value added from rural dwellings has been changed to one that is based on user cost approach. To be noted that a gap exists between NSS surveys (Consumption Expenditure Surveys and Debt and Investment Surveys) and Population Census. The adjustments and assumptions are mostly made to match these three series to get GVA from ownership of dwellings which are often doubted. Therefore, this study would be of paramount importance in the sense that it would certainly provide a base for more robust estimation of gross domestic product (GDP) of the state.

1.2 Review of Literature

Keeping the variegated theoretical contexts of housing in general, and rental dwellings in particular in view, the review of literature areas has been sketched under the following sub-headings:

1.2.1 'Dwelling' or 'Housing': Meaning, Concept and Definition

'House' and 'housing' or 'dwellings' are two different yet interrelated terms. House literally refers to a place where people live in, whereas housing refers to the provisioning of dwellings or houses or living spaces. In economic categorization, housing is a flow variable that increases its number in a country or territory over time (Tiwari and Parikh, 1998). On the contrary, a house is a composition of some characteristics such as size, quality and location (Sirmans, 2005; Sirmans and Benjamin, 1991; Rosen, 1972). For a number of reasons, valuing a house is difficult. Being a physical asset, each house has its own spatial location. Also, a house is a long-term durable good, which implies that

houses with substantially different ages can exist at the same time in the same market. Each house has its own unique set of characteristics that affect value. Moreover, certain housing characteristics may be valued differently across different geographic location (Sirmans 2005, Follain and Jimnez 1985). Once produced, housesremain as it is and go on depreciating because of wear and tear caused by its use, which make houses a 'stock variable' (Tiwari and Parikh 1998).

Housing as a composite commodity provides bundle of services (Mayo, 1982; Malapezzi and Mayo, 1987). In the 1980s, one strand of scholars (Follain et al, 1980, 1982; Follain and Jimnez, 1985a; Quigley, 1982) attempted to measure and conceptualize housing in terms of services it provides. Follain and Jimenez (1982) argue that housing as a heterogeneous commodity is generally understood in terms of availability of apartments, bungalows, houses etc. Housing yields demand-side flow of heterogeneous services that depend upon the characteristics of the project component of the quantity and quality of independent structures, the land on which they are built, the neighbourhood in which they are located, and the kind of urban services with which they are provided. Harvey (1972)defined housing as a multidimensional commodity which includes not only the structure and services it provides but the environmental amenities such as waste disposal, water supply etc. He further opined that neighborhood and locational services, such as education, health, and recreation facilities are also a part of the housing or dwelling.

1.2.2 Market and Rental Dwellings

'Housing market' like the market for any commodity in neo classical conception is assumed to be anonymous and impersonal; and the only factors which play out in its function are demand and supply of housing units. But this way of understanding the market hide and obscure more than revealing the true picture of market functioning (Arrow 1998).

1.2.3 Rental Dwellings and Discrimination

Contrary to the markets of the rental dwellings, social or religious discrimination in rental market has been hard to ascertain. This inherent complexity of discrimination

measurement virtually represents the nature of housing market prevailing in a locality, which is also variegating in nature altogether (Mayo, 1985; Jimenez and Follaine,1987). Yinger et al (2001) argue that this variation can also be seen in the way discrimination is meted out to different groups. Becker (1961) points out two sources of commonly present discrimination in the literature of markets of rental dwellings: 'taste-based' and 'statistical' discriminations. The former refers to discrimination which occurs simply due to the fear of difference, meaning thereby that the agents who discriminate have personal hostile attitudes towards a foreign ethnic group (xenophobia, racism, or also personal preferences of other kinds) or comply with the negative attitude of the group of individuals to which they are attached (Becker, 1957; Yinger, 1986). In the rental housing markets this corresponds to the cases where private landlords or real-estate agents discriminate lessee because of their personal preferences or do not accept individuals from another ethnic group. Taste-based discrimination is hard to counter as it comes from preferences rooted in individuals.

On the contrary, the latter is less intuitive, and occurs in the presence of a lack of correct information about the ethnic group that is subject to discrimination (Phelps, 1972; Arrow, 1998). In statistical discrimination, ethnic origin is taken as a proxy for unknown characteristics in a way where individuals may decide to discriminate a person belonging to a foreign ethnic group in favor of an individual from their own group because it "reassures" them. It stems from a certain risk-aversion. According to Arrow (1998) discrimination is broadly the act of treating or planning to treat some people differently or unfairly because of whom they are or for possessing certain characteristics.

1.2.4 Rental Housing Markets & Discrimination: Methods and Approaches

Discrimination in the metropolitan housing market has been a subject of study by a number of scholars in Europe and the US, and is based on well-developed methodologies. Researchers have developed models to capture discrimination in the urban rental market and, over a period time, have improved the methods of measurement. The study of discrimination in the housing market through model building was first undertaken by Kain and Quigley (1972). Later on,Campbell and Stanley (1966) undertook some Audit Studies that used a quasi-experimental research design. Even though they offered

researchers more control and greater internal validity than other designs commonly used in the social sciences, they were, however, criticized for too often relying on ambiguous definitions of "unequal treatment" and for confounding random and systematic effects.

While the audit method had been used earlier (Wienk Ronald, et al., 1979), self-reporting methods through administration of questionnaires were also used. Some scholarships further improved the method by using the in-person audits approach (Yinger, 1986; Ondrich, et al., 2003), and online in-person audits through emails (Bertrand and Mullainathan,2004; Carpusor and Loges, 2006; Hanson and Hawley, 2010;Broeck and kantleen,2016). Recent studies on discrimination in the housing market include those by Ahmed and Hammarstedt (2008) and Ahmed, et al. (2010). These studies have facilitated rich insight into discrimination prevalent in the rental market and the working of rental market in USA and other western nations.

Studies focusing on 'methodologies and approaches' to markets of rental dwellings and discrimination are marked with substantial inadequacy. To the best of our knowledge, only a handful of studies (Banerjee et al., 2011; Thorat etal., 2014; Datta and Pathania, 2016) focusing on Indian rental housing markets have dealt with discrimination aspects quite rigorously. The Scheduled Caste and Muslims more often than not face differential treatment from the upper caste while looking for rental dwellings (Thorat etal., 2014). Banerjee et al. (2011) noticed caste and religion based discrimination in terms monthly rent charged, security deposits or advance payment, payment schedules, nature of response and final outcome. While Banerjee et al. (2011) used in-person audit method, Thorat etal.(2014) explored in-person as well as telephonic interviews for collecting data. However, the broad results that both studies put forward are that there exists caste and religion based gross discriminations in the markets of rental dwellings. Furthermore, the caveat that comes forth vividly is the discriminatory behavior becomes more pronounced for Muslims in the non-Muslim neighbourhoods in India.

1.3Objectives

1. To estimate the rental value of residential dwellings (Rural and Urban) in Uttar Pradesh;

2. To estimate the rental value of commercial dwellings in Uttar Pradesh; and
3. To identify and analyse the factors (socio-economic and physical) determining the rent of the dwellings in both rural and urban areas in Uttar Pradesh.

1.4 Data Source

This study is primary based on the data collected through two sets of structured questionnaires: residential (1973) and commercial (541). The samples have been drawn from eight districts of four major regions (Western, Eastern, Central and Bundelkhand) in UP.

The analysis largely based on primary data has also been complemented by the secondary data acquired from theNSS: Socio Economic Survey- Housing Condition Survey 65th Round (July 2008- June 2009), NSS: Socio Economic Survey-Drinking water, sanitation, hygiene and housing condition survey 69th Round (July 2008- December 2009), NSS: Socio Economic Survey-Consumer Expenditure Survey 64th Round (July 2008- June 2009), NSS: Socio Economic Survey- Consumer Expenditure Survey 68th Round – type 1 and type 2 (July 2011- June 2012), and Population Census 2001 and 2011.

1.5 Sampling and Methodology

As stated in the preceding section, the study is primarily based on the data collected through two sets of structured questionnaire-based sample surveys. The fundamental unit of the sample is 'dwelling unit', which is of two types: Residential and Commercial. Because the rental dwellings are primarily concentrated in urban centres and the surrounding peri-urban villages of comparatively larger urban centres, the areas selected for drawing samples are 'urban and peri-urban village centric'. And the urban centres selected for drawing samples match or equate with the classification of urban centres (Class-I to Class-VI) determined by the Population Census.

The state of Uttar Pradesh comprises 75 districts, which falls under four different economic regions: Central (10 Districts), Eastern (28 Districts), Western (30 Districts) and Bundelkhand Region (7 Districts). From each zone, one from each category of Class-I to Class-VI urban centres have been chosen to conduct the survey. In other words, from four major zones, (6x4)-1[1] = 23Urban centres have been chosen for drawing samples. To be noted here that because district GautamBudh Nagar is an outgrowth of the national

[1] Central zone does not have any Class 6 category urban centre.

capital New Delhi, we consider it an outlier, and aim to estimate the rental values of its dwelling units separately. For this reason, alongside the above stated 23 urban centres, we have drawn both residential (235) and commercial samples (52) from four urban centres: Noida (Class-I), Dadri (Class-II), Jewar (Class-III) and Jahangirpur (Class-IV)[2]. In totality, 27 urban centres had been chosen for drawing samples (Table 1). While residential dwellings are very clearly understood, commercial dwelling units are not, and a bit tricky in its very definition. For the commercial dwellings, we have considered hotels, guesthouses, home-stays, serviced apartments, hostels, paying guest services, lodges and privately owned hostels. Because the commercial dwelling units are not found in the rural areas or hardly found in urban centres below Class-III category[3], they have been drawn solely from the Class-I to Class-III urban centres of each zone. Residential dwelling units have been drawn only from villages surrounding the selected Class-I and Class-II urban centres (08) of the four major zones. From each zone, 100 rural residential dwelling units have been drawn. In other words, (4*100) = 400 residential dwellings have been drawn from rural areas. And samples of commercial dwelling units have drawn from Class-I to Class-III urban centres of each zones. In totality 541 commercial dwelling units have been surveyed from all four zones (including outlier GautamBudh Nagar). Both types of samples have been drawn randomly such that they represent different neighbourhoods of the selected urban centres and the surrounding peri-urban villages. Also, emphasis has been given on the urban agglomerations and other prominent and comparatively more developed urban centres to capture the better quality data on the rental values of both the commercial and residential dwelling units. Among the two types of samples, greater emphasis has been centered upon the residential dwellings to capture the rental values.

[2] The commercial dwelling units had been drawn largely from Noida due to their non-availability in sufficient numbers in other selected urban centres.

[3]Even in cases of Class-III urban centres in GautamBudh Nagar and Brailey, no commercial dwelling units have been found while conducting the survey.

We have attempted to capture the rental values of both tenant occupied and owner

Table 1.1: Zone wise samples of residential and commercial dwellings drawn

Zone	Urban Centers	Class	Sample drawn		
			Residential Urban	Residential Rural	Commercial
Eastern	Varansi(M Corp.) (Varanasi)	Class1	75		
	Bela Pratapgarh(NPP) (Pratapgarh)	Class 2	60		
	Ramnagar(NPP) (Varansi)	Class 3	50	100	140
	Varanasi(CB) (Varansi)	Class 4	50		
	Kakarmatta(CT) (Varanasi)	Class 5	50		
	GauraKala(CT) (Varansi)	Class 6	50		
Bundelkhand	Jhansi (M.Corp.) (Jhansi)	Class1	75		
	Mauranipur(NPP) (Jhansi)	Class 2	60		
	Jhansi(CB) (Jhansi)	Class 3	50	100	58
	Chirgaon(NPP) (Jhansi)	Class 4	50		
	Baragaon(NPP) (Jhansi)	Class 5	50		
	BanguwanKalan(CT) (Lalitpur)	Class 6	50		
Central[4]	Lucknow (M Corp.) (Lucknow)	Class1	75		
	Lucknow (CB) (Lucknow)	Class 2	60		
	BakshiKaTalab (NP) (Lucknow)	Class 3	50	100	140
	Dewa (NP) (Barabanki)	Class 4	50		
	Mahona (NP) (Lucknow)	Class 5	50		
	##	Class 6 ##	-		
Western	Bareilly (M Corp.) (Bareilly)	Class1	75		
	Baheri (NPP) (Bareilly)	Class 2	60		
	Bareilly (CB) (Bareilly)	Class 3	50	50	151
	Shahi (NP) (Bareilly)	Class 4	50		
	Padarathpur (CT) (Bareilly)	Class 5	50		
	Iffco Census Village (CT) (Bareilly)	Class 6	50		
	Noida (CT) (GB Nagar)	Class 1	75		
	Dadri (NPP) (GB Nagar)	Class 2	60	50	52
	Jewar(NP) (GB Nagar)	Class 3	50		
	Jahangirpur(NP) (GB Nagar)	Class 4	50		
4 Zones	27 Urban Centres	Total Samples	1525	400	541

Source: Sample Survey, 2019.
Note: ## indicates 'not available'.

[4]No Class 6 category urban cntre has been found in the Central Zone comprising 10 districts: Lucknow, Barabanki, Kanpur Nagar, Hardoi, Rae Bareili, Sitapur, Kheri, Unnao, Fatepur, and Kanpur Dehat.

occupied or tenant and owner occupied dwellings. Rental value of the former is the output of housing services (the rental value) less the related expenses, such as depreciation, maintenance and repairs, property taxes, and mortgage interest. On the other hand, for the latter, rental value is the imputed net income of the owners which is calculated as the imputed output of housing services (rental value) less the expenses associated with owner-occupied housing, such as depreciation, maintenance and repairs, property taxes and mortgage interest.

1.6 Organization of the Study

The study has been organized into six chapters. Chapter one provides the conceptual and theoretical background of the study along with data and methodological issues. The second chapter gives an overview of the state of the economy of Uttar Pradesh vis-à-vis India. Trends in the rent of residential dwellings and its components on the basis of secondary data (NSS data) are presented in the chapter three. Chapter four provides the evidences from the field survey of residential dwellings whereas the chapter five presents the results of field survey of the commercial dwellings. The last chapter summarizes the study and suggests a few policy measures keeping the context and outcome of this study in view.

1.7 Limitations of the Study

Despite the fact that Uttar Pradesh is a very large state with profound diversities, we could draw samples only from 28 urban centres of eight districts due to paucity of fund and time. Because the commercial dwelling units are not profoundly found in all three classes (I, II & III), the sample across the urban class could not be drawn in equal proportion, which, in other words, implies that more samples of commercial dwellings have been drawn from the Class-I urban centre.

CHAPTER – II

State of the Economy of Uttar Pradesh

2.0 Introduction

The level of development and structure of the economy determines the demand for residential dwellings for rental purposes to a great extent. In a growing economy like India with large population living in rural areas, the demand for residential dwellings arises as people move from one place to another place in search of job and livelihood. Easy availability of means of transport has made this quest for better job easier. Clusterisation of development in selected pockets is also luring people from other places.Uttar Pradesh is characterized as the most economically backward state after Bihar with large intra-state and inter-regional inequalities. Even, it is the most populous state of the country. As per Census 2011, the population of Uttar Pradesh is 19.98 crore with a decennial growth of 20.09 percent. It is also the state which has the highest rural-urban migration during 2001-2011 (Census, 2011). However, Uttar Pradesh as a part of global trend is advancing towards an increasing urbanisation.

This is high time that the policy makers atpresent should press upon the need of authentic data on housing and demand for residential dwellings. It will not only help in strengthening estimation of state domestic product but also make benefit of the poor and underprivilegedsection of the society.In this chapter we aim to map out the economic progress of the state in order to understand the dynamics of progress of the state in the recent years and its potential impact of rent and demand for residential dwellings.

2.1 Demographic profile

The demographic profile of the state is presented in the table 2.1. UP has added more than 33.6 million to the total population of the country in the last decade, the most by any state, recording an annual growth of 20.09 percent. However, the corresponding figure of growth for the previous decade (1991-2001) was 25.61 percent, thereby, displaying a decline of more than five percent which is quite significant. The compound annual growth rate has come down to 1.85 percent during 2001-2011 as compared to a high 2.33

percent during 1991-2001. The pressure on land is very high in the state as the population density is more than twice of national average. The deteriorating land-population ratio indicates rising pressure on natural resources as well as worsening forest land and residential land relation. Natural growth rate of population is much higher than the national average mainly because of high birth rate. Although, crude death rate is similar to the national level but infant mortality (41) is still high signifying poor maternal and child health care situation in the state.

Table 2.1: Major Demographic Indicators: Uttar Pradesh and India.

Indicator	UP	India
1. Total Population (in million)*		
2001	166.0	1029.0
2011	199.6	1210.2
2. Decadal rate of population growth (Percentage) *		
1981–1991	25.61	23.86
1991–2001	25.85	21.53
2001-2011	20.09	17.64
3. Average Annual Exponential growth rate (Percentage) *		
1981-1991	2.27	2.14
1991-2001	2.33	1.94
2001-2011	1.85	1.64
4. Population density (per sq. km.) *		
1991	548	267
2001	690	325
2011	828	382
5. Sex Ratio (Female per 1000 males) *		
1991	876	927
2001	898	933
2011	908	940
6. Percentage of scheduled castes and scheduled tribes population in total population (2001)*		
Scheduled Castes	20.7	16.6
Scheduled Tribes	0.6	8.6
7. Crude Birth Rate, 2016 **	26.2	20.4
8. Crude Death Rate 2016**	6.9	6.4
9. Natural Growth Rate, 2016**	19.3	14.0
10. Infant mortality rate 2016**	41	34
11. Life expectancy at birth 2012-2016**		
Total	64.8	68.7
Male	63.9	67.4
Female	65.6	70.2

*Sources: *Registrar General, India, Census of India.*

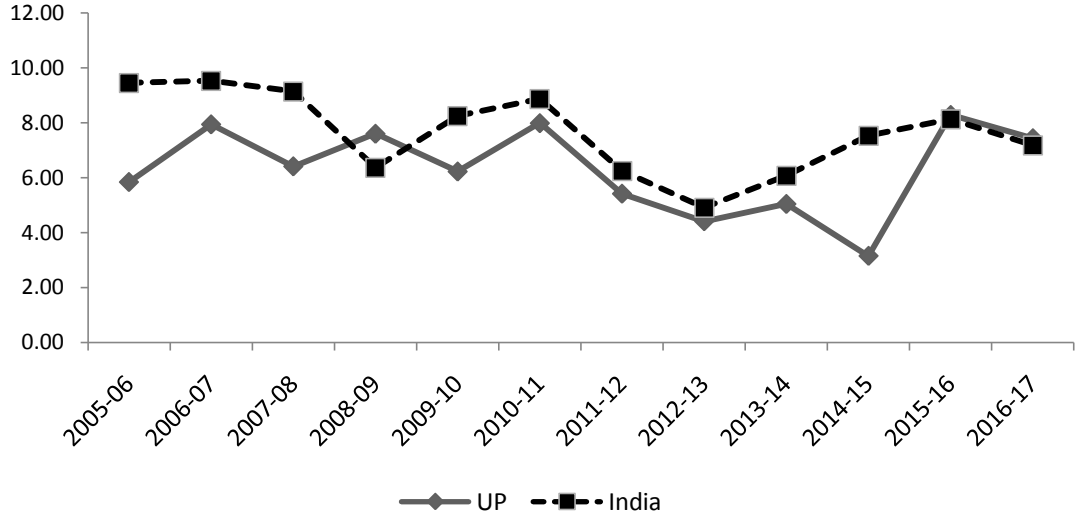
***Registrar General, India, Sample Registration System, 2017*

2.2 The state economy

The national economy cannot achieve high economic growth without a handsome growth of UP[4]. Graph 1 shows annual growth rate of net state domestic product (at constant prices) from 2005-06 to 2016-17. In the last decade, growth in state's net domestic product (NDP) lagged behind the national growth rate except 2008-09 when it was about one percent more than the national growth rate.

National economy is experiencing a moderate decline in the growth rate in the recent years, even then, the state was unable to match-up. It is in the last two years when both the growth rates are converging. This continued gap between growth rates has resulted in falling share of UP in all India NDP at constant prices (Graph 2). During early 2000s, the UP's share was around 9 percent which fell down to 7.80 in 2014-15 before a meager rise in 2016-17 to 7.83 percent.

Figure 2.1: Growth Rate of Net State Domestic Product (at constant prices 2011-12).

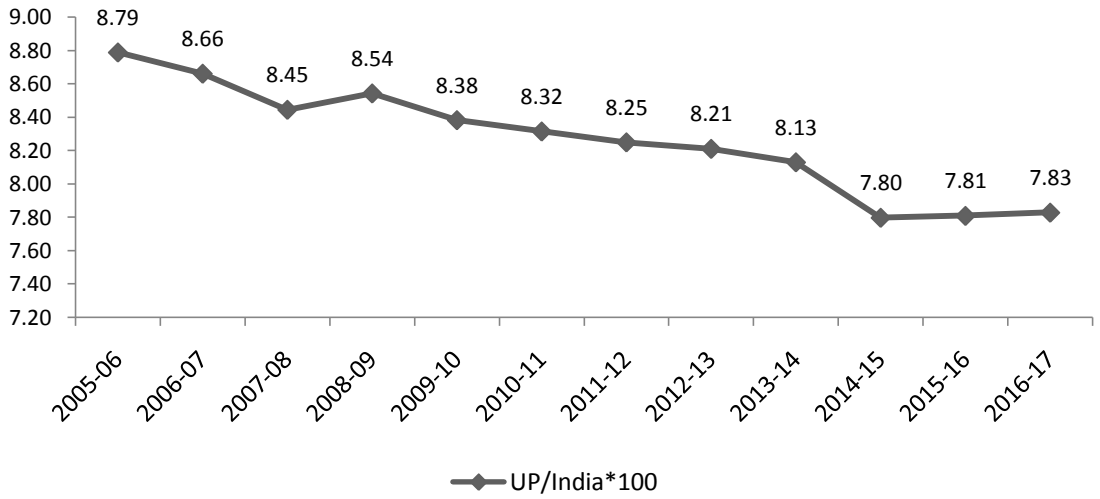


Source: Author's calculation based on RBI's Handbook of Statistics on Indian States- 2018.

UP's Per capita income is the second lowest in the country after Bihar. The state's per capita income is half of the national level figure (Table 2). High growth rate of population and poor economic growth are widening the gap further. The main reasons for the low growth in the state are slow structural transformation along with low capital investment.

Figure 2.2: Share of UP'sNDP in All India (At Constant prices 2011-12)

[4] Uttar Pradesh comprises 16.50 percent of total inhabitants of the country as per the Census 2011.



Source: Author's calculation based on RBI's Handbook of Statistics on Indian States- 2018. Note: 2013-14 Revised Provisional, 2014-15 Revised Quick & 2015-16 Revised Advance.

Table 2.2: Per Capita Income at Constant Prices (2011-12).

Year	Per Capita Income (Rs.)		Growth Rate		UP/India*100
	UP	India	UP	India	
2004-05	23005	40269	-	-	57.13
2005-06	23885	43392	3.82	7.75	55.04
2006-07	25300	46814	5.93	7.89	54.04
2007-08	26425	50592	4.45	8.07	52.23
2008-09	27914	52964	5.63	4.69	52.70
2009-10	29118	56545	4.31	6.76	51.49
2010-11	30890	60383	6.09	6.79	51.16
2011-12	32002	63462	3.60	5.10	50.43
2012-13	32908	65538	2.83	3.27	50.21
2013-14	34044	68572	3.45	4.63	49.65
2014-15	34583	72862	1.58	6.26	47.46
2015-16	36883	77803	6.65	6.78	47.41
2016-17	39028	82269	5.82	5.74	47.44

Source: Author's calculation based on RBI's Handbook of Statistics on Indian States- 2018. Note: 2014-15 Revised Provisional, 2015-16 Revised Quick & 2016-17 Revised Advance.

Table 2.3 represents the pace of structural transformation in the state. One third of the total state's product comes from agriculture and allied activities whereas services contribute around half of the total. The major cause of concern is the sluggish growth of the industrial sector. Huge fluctuation can be seen in yearly performance of the industrial output in both i.e. Uttar Pradesh and India (Graph 2.3).

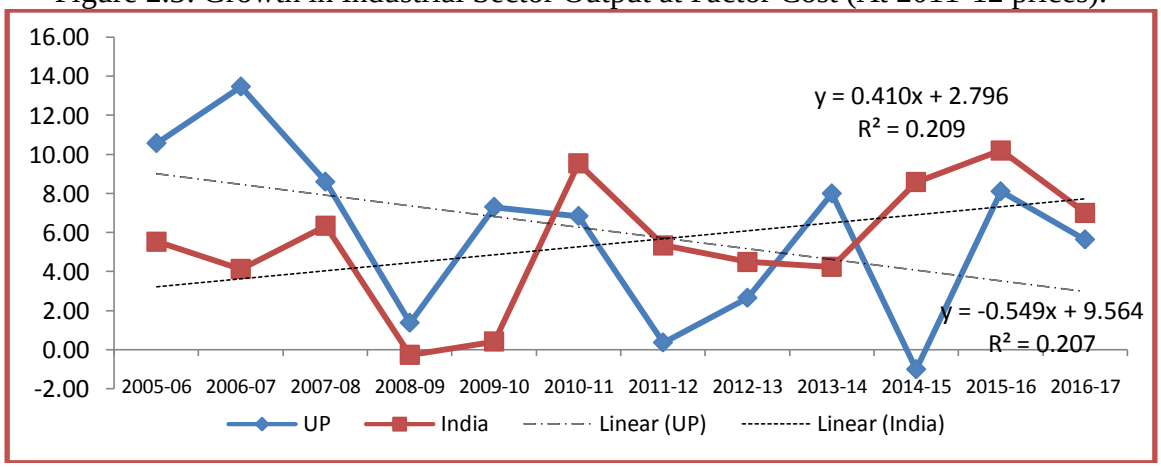
Table 2.3: Structural Changes in Uttar Pradesh (at constant prices in %)

Sector	2004-05	2011-12	2015-16 (RE)
(A) Primary	29.74	29.03	29.50

(B) Secondary	23.26	25.92	25.25
(i) Manufacturing	13.49	11.48	11.21
(ii) Construction	7.34	13.42	12.87
(C) Tertiary	47.01	45.05	45.25

Source: Author's calculation based on data from Directorate of Economic and Statistics, Government of Uttar Pradesh.
Note: 2015-16 Revised Estimates.

Figure 2.3: Growth in Industrial Sector Output at Factor Cost (At 2011-12 prices).



Source: Author's calculations.

Although, the industrial sector is not very strong for the national economy but it performed poorly even more in the case of Uttar Pradesh. Long term trends suggest average growth of industrial sector in the state is continuously falling.

2.3 Structural Transformation and Employment

Given the large labour force and low economic progress in the state, revival of the industrial sector is of utmost importance. It is the only sector which can fuel faster shifting of labour from agriculture to industries along with change in sectoral share of state's income. Structural shifts in employment have been shown in table 4. The process of structural shifts in employment is slow. About 50 percent of the total direct employment is still in agriculture sector. In recent years, the construction sector has emerged as the fastest growing activity under the industrial sector along with creating large employment opportunities. Employment share of the construction sector grew six times from 2.34 percent in 1993-94 to 13.62 percent in 2011-12, however, questions on the sustainability of employment in the construction sector are often raised. A majority of employment is casual in nature. It is either on daily basis or project basis with poor working conditions and almost no social security benefits. The quality of working condition is far from satisfactory. Further, construction and real estate activities are in

boom phase in the state, once the sector stabilizes many people will have to find the alternatives. Therefore, manufacturing has to break the low productivity and low growth cycle to become leading job provider and income generating sector. For the corresponding period, employment in manufacturing rose from 10.05 percent to 13.18 percent which is not very encouraging.

Table 2.4: Structural shifts in employment (share of workers, %)

Industry	1993-94	2004-05	2011-12
Uttar Pradesh			
Agriculture	67.19	58.66	49.73
Mining and Quarrying	0.17	0.22	0.58
Manufacturing	10.05	12.97	13.18
Electricity, Water, etc.	0.31	0.18	0.47
Construction	2.34	6.29	13.62
Trade, Hotels and Restaurants	7.5	10.5	10.13
Transport, Storage and Communication	2.76	3.81	3.6
Other services	9.69	7.37	8.69
Total	100	100	100
India			
Agriculture	62.63	55.09	46.2
Mining and Quarrying	0.78	0.62	0.59
Manufacturing	10.72	12.43	13
Electricity, Water, etc.	0.42	0.31	0.57
Construction	3.43	5.97	11
Trade, Hotels and Restaurants	7.7	11	11.46
Transport, Storage and Communication	3.1	4.3	5.26
Other services	11.22	10.28	11.92
Total	100	100	100

Source: Mamgain, P R and SherVerick (2017), The state of employment in Uttar Pradesh: Unleashing the potential for inclusive growth, International LabourOrganisation (ILO).

Table 2.5: Industry-wise growth in employment (Compound annual growth rates)

	Uttar Pradesh		India	
Industry	1993-94/2004-05	2004-05/2011-12	1993-94/2004-05	2004-05/2011-12
Agriculture	1.2	-1.6	0.9	-1.9
Mining and Quarrying	4.9	16	-0.1	0
Manufacturing	4.9	1	3.5	1.2
Electricity, Water, etc.	-2.6	15.9	-0.7	9.7
Construction	12.1	12.5	7.4	9.8
Trade, Hotels and Restaurants	5.7	0.2	5.4	1.2
Transport, Storage and Communication	5.6	-0.1	5.2	3.6
Other services	0	3.1	1.3	2.8
Total	2.5	0.7	2.1	0.6

Source: Mamgain, P R and SherVerick (2017), The state of employment in Uttar Pradesh: Unleashing the potential for inclusive growth, International LabourOrganisation (ILO).

Table 2.6: Unemployment rate (UPSS), 15-59 years

Year	Uttar Pradesh			India		
	Male	Female	Total	Male	Female	Total
1993-94	1.37	0.43	1.14	2.33	1.79	2.15
2004-05	1.40	0.58	1.17	2.38	2.78	2.51
2011-12	1.96	1.23	1.79	2.28	2.57	2.36

Source: Mamgain, P R and SherVerick (2017), The state of employment in Uttar Pradesh: Unleashing the potential for inclusive growth, International LabourOrganisation (ILO).

Industry-wise growth of employment figures suggest growth in employment in the recent years is mainly generated by the industrial sector particularly mining and quarrying, electricity, gas & water supply and construction (Table 5). Growth in employment is not able keep match with growth in labour force consequently unemployment is rising. Unemployment in the state rose from 1.17 percent in 2004-05 to 1.79 percent in 2011-12. However, unemployment at the country level is even higher (Table 6).

2.4 Poverty

The poverty estimates according to Tendulkar's poverty line are given in the table 3.8. The state had a higher incidence of poverty as compared to the country. Although, substantial decline has been registered in the case of overall poverty (by 11.5 percent[5]) during 2004-05 to 2011-12, the rural poverty (a change of 25.38 percent) is still very high i.e. 29.4 percent in 2011-12. Its breakup as per place of residence i.e. rural and urban reveals some interesting outcomes. The decline in incidence of rural poverty (by 25.38 percent) is much higher as compared to urban poverty (by 5.07 percent). However, Uttar Pradesh is also among the few states of the country where urban poverty is higher than rural poverty.

This has serious implications for the policy makers. Reducing urban poverty is a bigger challenge. The urban growth is attributed to both natural population growth, and rural to urban migration. Urban centers "*provide opportunities for many, particularly the poor who are attracted by greater job prospects, the availability of services, and for some, an escape from constraining social and cultural traditions in rural villages. Yet*

[5]The overall poverty in Uttar Pradesh was 40.9 percent in 2004-05 and 29.4 percent in 2011-12. The corresponding figures for India are 37.2 percent and 21.9 percent respectively.

city life can also present conditions of overcrowded living, congestion, unemployment, lack of social and community networks, stark inequalities, and crippling social problems such as crime and violence. Many of those who migrate will benefit from the opportunities in urban areas, while others, often those with low skill levels, may be left behind and find themselves struggling with the day to day challenges of city life" (Baker 2008).

Table 2.7: Incidence of poverty in Uttar Pradesh and India, 2011-12

Region	Rural			Urban		
	2004-05	2011-12	Change	2004-05	2011-12	Change
Western	45.48	19.46	26.02	43.18	33.95	9.23
Central	51.3	41.06	10.24	29.57	37.11	-7.54
Eastern	62.81	32.72	30.09	49.74	44.62	5.12
Bundelkhand	53.9	29.86	24.04	56.14	37.38	18.76
UP	54.38	28.99	25.38	42.31	37.24	5.07
India	43.76	28.1	15.66	26.64	16.98	9.66

Source: Mamgain, P R and SherVerick (2017), The state of employment in Uttar Pradesh: Unleashing the potential for inclusive growth, International LabourOrganisation (ILO).

2.5 Urbanization and Households

2.5.1 Urbanisation

The extent of urbanisation is an important determinant of the demand for the residential dwellings. Urbanisation affects demand for the residential dwellings in two ways–first, rural-urban migration creates demand for new rental houses for residential purposes. Second, it also incnetivises people to create inventory for the new residential dwellings. The pace of urbanisation in Uttar Pradesh is very slow. Although, the urban population (31.8%) grew faster than the rural population (12.2%) during 2001 to 2011, the share of urban population in total population rose from 20.78 percent in 2001 to 22.27 percent in 2011, about 8 percentage points lower than the national average.

Table 2.8: Trends in Urbanisation

Share of Urban Population			Growth Rate Of Population (2001-2011) (In %)	
Year	India	Uttar Pradesh	Total	17.6
2001	27.82	20.78	Rural	12.2

2011	31.14	22.27	Urban	31.8

Source: Authors' calculations based on the Census data.

Table 2.9: Growth in Households

Items	2001 (in crores)		2011 (in crores)		India (% Change)	UP (% Change)
	India	UP	India	UP		
Total Households	19.36	2.58	24.95	3.34	28.89	29.86
Rural Households	13.77	2.04	16.86	2.57	22.41	26.08
Urban Households	5.58	0.54	8.09	0.78	44.88	44.15
			Share in Total (%)			
Rural Households	71.16	79.10	67.58	76.79	-5.03	-2.91
Urban Households	28.84	20.90	32.42	23.21	12.41	11.01

Source: Authors' calculations based on the Census data.

2.5.2 Households

Table 2.9 shows the status of households in Uttar Pradesh vis-à-vis India. The pattern presented in the growth of urban population is reflected in growth of households too. Urban households are growing much faster than the rural households. However, share of total urban households in total is still very low and behind the national average.

2.6 Concluding Remarks

To sum up, Uttar Pradesh is lagging behind in terms of indicators of economic and social development. The pace of economic progress and structural changes is inadequate to break the low equilibrium trap. Rising unemployment, high rural and urban poverty and low economic wellbeing will definitely have downward pressure on human development achievement.

CHAPTER – III

Estimation of Rent of Residential Dwellings: Evidences from the Secondary Data

3.0 Introduction

Rental value of residential dwellings is included under the head 'real estate, ownership of dwellings and business services. The economic activities covered under this sector are (i) ownership of dwellings (occupied residential houses), (ii) real estate services (activities of all types of dealers such as operators, developers and agents connected with real estate), (iii) renting of machinery and equipment without operator and of personal and household goods, (iv) Computer and Related Activities, (v) Accounting, Book-keeping and Related Activities, (vi) Research and development, market research and public opinion polling, business & management consultancy, architectural, engineering & other technical activities, advertising and business activities not elsewhere classified and (vii) legal services.

As per National Accounts Statistics (2012, p. 170) – "In the production boundary of national accounts, only two categories of services produced by households for own final consumption are included, namely, (a) Services of owner-occupied dwellings:Owner-occupiers are deemed to own household unincorporated enterprises that produce housing services for their own consumption; and (b) Domestic services produced by employing paid staff: Households are deemed to own household unincorporated enterprises in which they employ paid staff – servants, cooks, gardeners, etc. – to produce services for their own consumption."

The first kind of services is treated as the consumptionof housing services (can also be said as housing good) by oneself and these are covered under the head 'ownership of dwellings (occupied residential houses)' including imputed value of the owner occupied dwellings also. Here, the ownership of dwellings includes rental values of occupied residential houses and the imputed value of owner occupied dwellings. Services rendered by non-residential buildings are considered to be a subsidiary activity of the industries, which occupy the buildings and therefore, are not included in this sector.

In the old series (1999-2000), the gross value added estimates for the ownership of dwellings were estimated as the gross rental which was equal to the actual rent paid and imputed rent for owned dwellings of the residential houses less the cost of repairs and maintenance. The data available on dwellings from the Population Censuses and the data on rent from the NSS Consumer Expenditure Surveys are the principal sources for estimating the gross value added of the residential dwellings. Under the new approach, the old method has been followed for the urban dwellings but for the rural areas, the methodology for estimating value added from rural dwellings has been changed to that based on user cost approach. This change has been made in order to replicate international practice which says that when few dwellings are rented, the output of dwelling services should be estimated by the user cost approach.

3.1 Urban Sector

The number of census dwellings in the base year in urban areas was arrived at by assuming the growth rate between the latest census and previous census to hold good.
For instance,

- By 2011-12: Previous census 2011
- By 1999-2000, 2004-05 : Previous census 2001
- By 1993-94: Previous census 1991
- By 1980-81: Previous census 1981

The number of census houses so arrived has been multiplied by the average rent per household, information on which is obtained from results of NSS consumer expenditure surveys. From this estimated gross rental, the cost of repair and maintenance (estimated from the NSS All India Debt and Investment Surveys (AIDIS)) is subtracted to obtain the gross value added estimates for urban areas. For subsequent years, the estimates of number of urban (census) residential houses are prepared using the inter-censal average compound growth rate in dwellings. The estimates of rent per household are moved to subsequent years with the index of house rent using CPI (UNME) up to 2008-09, then CPI(IW) from 2009-10 to 2011-12, and since 2012-13, the CPI-Urban is used.

Gross rental: Average rental per dwelling X Number of dwellings
(Rental includes actual rent paid and imputed rent for owned dwellings)

Ownership of Dwellings Gross Value Added = Gross Rental *less* Repairs andMaintenance cost

3.2 Rural Dwellings

The estimates of rural dwellings are being prepared using the user cost approach. Thisapproach consists of estimating each of the expenditure that owners of dwellings wouldneed to take into account in fixing a market rent if they decided to rent their dwellings. These expenditures are repair and maintenance, consumption of fixed capital and net operating surplus. The benchmark estimates of repair and maintenance is derived from AIDIS. For subsequent years, these estimates arecompiled using growth observed within number of rural dwellings and superimposing the price effect. The net operating surplus of owner occupied dwellings is calculated by applying a rate of return (8%) to the current value of stock of dwellings.

3.3 Trends in Rental of Residential Dwellings: Evidences from the Secondary Data

We shall now discuss the trends in rental value of ownership of residential dwellings on the basis of time series national accounts statistics and NSS consumer expenditure surveys. Table 3.1 presents the share of real estate, ownership of dwellings and professional services in gross domestic product.

At current prices, the share of the sector under consideration at all India level shows a rising trend (in both the series). At 2004-05 base year, the share of the whole sector grew from 9 percent in 2004-05 to 10.4 percent in 2010-11, whereas, at base year 2011-12, the share increased from 13 percent in 2011-12 to 15.2 percent in 2016-17. At constant prices, the share of the whole sector at all India level remains stable around 9 percent at the base year 2004-05 series. However, it showed rising trend at the base year 2011-12 series. In the case of Uttar Pradesh, the share of the whole sector remains stable i.e. around 8 percent of state domestic product at old base and about the 14 percent in the new base. However, the constant price series are showing different trends. The series at old base shows that the share the second under review has gone up from 9.1 percent in 2004-05 to 10.5 percent in 2010-11. On the other hand, the series on new base is showing declining trend.

Table 3.1: Real Estate, Ownership of Dwellings and Professional Services as % of GDP/SDP

Year	At Current Price		At Constant Price	
	All India	UP	All India	UP
2004-05 series				
2004-05	9.0 (5.6)	9.1	9.0 (5.6)	9.1
2005-06	9.1 (5.4)	9.0	9.0 (5.3)	9.1
2006-07	9.3 (5.2)	8.8	9.0 (5.0)	9.1
2007-08	9.6 (5.3)	8.7	9.0 (4.7)	9.4
2008-09	10.3 (5.5)	8.8	9.3 (4.5)	9.9
2009-10	10.4 (5.4)	8.9	9.3 (4.4)	10.1
2010-11	10.4 (5.4)	9.2	9.0 (4.1)	10.5
2011-12 series				
2011-12	13.0 (6.8)	13.5	13.0 (6.8)	13.5
2012-13	13.5 (7.0)	14.0	13.5 (6.9)	13.8
2013-14	14.2 (7.0)	13.8	14.2 (7.0)	13.7
2014-15	14.8 (7.0)	14.3	14.9 (6.8)	13.9
2015-16	15.1 (6.7)	13.9	15.5 (6.5)	13.4
2016-17	15.2 (6.4)	13.8	15.5 (6.1)	13.0

Note: Values in the parenthesis show share of rental value of residential dwellings. Source: Authors' calculations based on EPWRF data.

3.4 Trends in Monthly Per Capita Expenditure (MPCE)

Table 3.2 provides trends in monthly per capita expenditure on mixed reference period (MRP) for three different points of time i.e. 2004-05, 2007-08 and 2011-12.The expenditure is presented by place of residence i.e. rural and urban for Uttar Pradesh and India separately. These are presented at current prices. The monthly per capita expenditure in rural Uttar Pradesh increased from Rs.532.63 to Rs. 1072.93 during 61st to 68th round.

Table 3.2: Monthly per capita expenditure on Mixed Reference Period basis (in Rs.)

Place of Residence	61st Round (2004-05)		64th Round (2007-08)		68th Round (2011-12)	
	UP	India	UP	India	UP	India
Rural	532.63	559	680	763.07	1072.93	1287.17
Urban	857.05	1052	1121	1463.72	1942.25	2477.02

Source: Compiled from various NSS data reports.

The consumption expenditure in urban Uttar Pradesh increased from Rs. 857.05 to Rs. 1942.25 during the same corresponding period. The annual growth in monthly per

capita consumption expenditure is given in table 3.3. The growth in rural areas is lower than urban areas in Uttar Pradesh as well as in India. Between 61st and 64th round, consumption expenditure in rural Uttar Pradesh recorded an annual growth of 9.22 percent whereas in urban Uttar Pradesh growth rate was 10.27 percent.

Table 3.3: Annual Growth in MPCE (MRP) (%)

Place of residence	Between 64th round and 61st round		Between 68th round and 64st round	
	UP	India	UP	India
Rural	9.22	12.17	14.45	17.17
Urban	10.27	13.05	18.32	17.31

Source: Calculated from the table 3.2.

During 64th to 68th round, the consumption expenditure in rural Uttar Pradesh grew by 14.45 percent and 18.32 percent in urban areas. The second period (64th to 68th round) has recorded faster growth in consumption expenditure as compared to first period (61st to 64th round). The faster growth in consumption expenditure is an indicator of higher aggregated demand. Higher demand leads to faster growth of income and employment in the economy which is corroborated by the high growth rate achieved by the Indian economy during 2008-09 to 2014-15. It only urban Uttar Pradesh which has recorded faster growth in consumption expenditure during second period than national growth rate, otherwise, Uttar Pradesh growth rate has been lower than national average in all other instances.

3.5 Trends in Rental Value of Residential Dwellings

Rent is the part of the consumption expenditure and the information is collected through Household Consumption Expenditure Surveys. The trends in rent as expenditure on the basis of different NSS surveys are presented in table 3.4.The trends reveal that in rural areas rental activities of residential houses are still negligible. Demand for rental houses is very low. The monthly per residential dwelling expenditure on rent is Rs. 2.90 in 2004-05 which increased to Rs. 7.96 in 2011-12 in Uttar Pradesh. The corresponding values for India are Rs. 14.08 and Rs. 30.21 respectively. It implies that the demand for rental residential houses is mainly arising from urban areas only. In urban Uttar Pradesh, monthly per residential dwelling expenditure on rent increased from Rs. 132.64 to Rs.

494.03 during 61st to 68th round. In the case of India, the rent increased from Rs. 270.77 to Rs. 712.65 during the same period.

Table 3.4: Trends in Rent per dwelling (at current prices)

Place of Residence	61st Round		68th Round		Per annum change (%)	
	UP	India	UP	India	UP	India
Rural	2.90	14.08	7.96	30.21	24.88	16.36
Urban	132.64	270.77	494.03	712.65	38.92	23.31

Source: Compiled from various NSS data reports.

Table 3.5: Item-wise Per dwelling rent values of Uttar Pradesh (in Rs. At current prices)

Items	61st Round (2004-05)		68th Round (2011-12)		% Change per annum	
	Rural	Urban	Rural	Urban	Rural	Urban
House Rent, garage rent (actual)	2.66	125.71	5.99	491.00	17.84	41.51
Hotel Lodging charges			0.58	2.54	-	-
Residential land rent	0.24	6.05	0.00	0.18	-14.29	-13.86
Other consumer rent	0.00	0.88	0.14	0.31	-	-9.28
Rent	**2.90**	**132.64**	**7.96**	**494.03**	**24.88**	**38.92**

Source: Compiled from various NSS data reports.

Although, the growth in rent in urban Uttar Pradesh is much faster than the urban India (see table 3.5) but the difference in terms of absolute values is very high in favour of India. The value of rent in urban Uttar Pradesh was 40 percent of urban India in 2004-05 and about 58 percent of urban India in 2011-12. This significant gap is reflecting the low degree of urbanization and lackluster growth of the state economy of Uttar Pradesh vis-a-vis national economy.

3.5.1 Region-wise classification

Region-wise trends in monthly per residential dwelling rent for 61st round and 68th round are given table 3.7. Classification of the rent is also as per rural and urban areas as well as disaggregation into housing rent, hotel lodging charges, residential land rent and other consumer rent. Interesting findings are reflected from the table 3.7. In rural areas during 2004-05, only Western (7.11) and Central region (1.32) records rent values and Bundelkhand region shows zero collections as rent. However, the situation entirely

changes in 2011-12. Bundelkhand emerges (13.42) as the region with the highest rent collections among all regions followed by Western regions (8.44 and 11.81), Eastern region (6.91) and Central region (2.90) in the rural areas. One explanation for this surprising turnaround can be the degree of urbanisation. The Western and Central region are more urbanized as compared to the other two. Thus, the most of the residential dwelling may have been falling in the urban area whereas in the Bundelkhand region such dwellings officially may have come under the rural areas. The majority of the rent is coming from house rent, garage rent category in both the rounds.

In the case of urban areas during 2004-05, the Central region (222.27) has the highest rent followed by Eastern (123.50) and the Western region (107.32). Again the Bundelkhand region has the least rent (23.13). However, here the things have changed in some other manner. Western region (1211.64) has the highest rent followed by the Eastern region (382.95), Central region (375.31) and Bundelkhand region (181.86). The rent and development level seems to be poorly correlated as reflected from the secondary data. The Central region is far ahead of the Eastern region but both have similar rent values, latter is even marginally high. The rural-urban comparison shows that rental activity is a basically urban dominated activity. Although the demand in the rural areas for the rental residential dwellings gearing-up, it is still very low as apparent from the low rent values.

We have also analysed the trends in rental value religion-wise (table 3.8) and social-group wise (table 3.9). The Buddhism and Zoroastrianism do not have rental values for any of the two rounds under consideration. The Christian (89.46), Jain (42.1), Sikh (26.92) and Hindu (12.90) have higher expenditure on rent for residential dwellings as compared to other religions during 2004-05.

Table 3.7: Monthly Per Residential Dwelling Rent Values (in Rs. At current prices): Region-wise classification

Region	House Rent, garage rent (actual)	Hotel Lodging charges	Residential land rent	Other consumer rent	Rent	House Rent, garage rent (actual)	Hotel Lodging charges	Residential land rent	Other consumer rent	Rent
	61st Round (2004-05)									
	Rural					Urban				
Western	6.42	-	0.69	0.00	7.11	106.36	-	0.96	0.01	107.32
Central	1.63	-	0.00	0.00	1.63	202.64	-	18.05	1.57	222.27
Eastern	0.32	-	0.00	0.00	0.32	114.08	-	6.99	2.42	123.50
Bundelkhand	0.00	-	0.00	0.00	0.00	23.13	-	0.00	0.00	23.13
Total	2.67	-	0.24	0.00	2.91	125.72	-	6.06	0.86	132.64
	68th Round (2011-12)									
Western (Upper Ganga Plains)	8.44	0.00	0.00	0.00	8.44	1207.73	3.32	0.00	0.59	1211.64
Central	0.47	1.39	0.00	1.04	2.90	367.66	7.60	0.02	0.03	375.31
Eastern	3.90	0.07	0.00	2.93	6.91	381.72	0.26	0.80	0.17	382.95
Bundelkhand	13.42	0.00	0.00	0.00	13.42	181.36	0.50	0.00	0.00	181.86
Western (Lower Ganga Plains)	10.45	1.36	0.00	0.00	11.81	96.48	0.00	0.00	0.52	97.00
Total	5.99	0.59	0.00	1.39	7.96	490.99	2.54	0.18	0.33	494.04

Source: Compiled from various NSS data reports.

Table 3.8: Monthly Per Residential Dwelling Rent Values (in Rs. At current prices): Religion-wise classification

Religion	Place of Residence	61st (2004-05)				68th (2011-12)				
		House Rent, garage rent (actual)	Residential land rent	Other consumer rent	Rent	House Rent, garage rent (actual)	Hotel Lodging charges	Residential land rent	Other consumer rent	Rent
Hinduism	R	1.77	0.05	0.00	1.82	3.33	0.11	0.00	0.25	3.69
	U	58.98	2.07	0.14	61.18	210.75	1.27	0.00	0.07	212.09
	T	12.45	0.43	0.03	12.90	44.29	0.34	0.00	0.22	44.85
Islam	R	0.52	0.00	0.00	0.52	0.14	0.00	0.00	0.00	0.14
	U	8.53	0.29	0.00	8.82	40.26	0.00	0.29	0.03	40.58
	T	3.30	0.10	0.00	3.40	15.47	0.00	0.11	0.01	15.60
Christianity	R	0.00	0.00	0.00	0.00	201.57	0.00	0.00	0.00	201.57
	U	122.85	0.00	0.00	122.85	134.44	0.00	0.00	0.00	134.44
	T	89.46	0.00	0.00	89.46	170.53	0.00	0.00	0.00	170.53
Sikhism	R	5.98	0.00	0.00	5.98	0.00	0.00	0.00	0.00	0.00
	U	38.77	0.00	0.00	38.77	144.14	0.00	0.00	0.00	144.14
	T	26.92	0.00	0.00	26.92	115.76	0.00	0.00	0.00	115.76
Jainism	R	-	-	-	-	-	-	-	-	-
	U	42.01	0.00	0.00	42.01	1002.24	0.00	0.00	0.00	1002.24
	T	42.01	0.00	0.00	42.01	1002.24	0.00	0.00	0.00	1002.24
Others*	R	-	-	-	-	0.00	0.00	0.00	0.00	0.00
	U	0.11	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00
	T	0.11	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00

Note: *Buddhism and Zoroastrianism do not have rental values. Source: Compiled from various NSS data reports.

Table 3.9: Monthly Per Residential Rent Values (in Rs. At current prices): Social Group-wise classification

Social Group	Place of Residence	61st (2004-05)				68th (2011-12)				
		House Rent, garage rent (actual)	Residential land rent	Other consumer rent	Rent	House Rent, garage rent (actual)	Hotel Lodging charges	Residential land rent	Other consumer rent	Rent
SCs	R	0.00	0.00	0.00	0.00	12.35	0.00	0.00	0.00	12.35
	U	57.08	2.85	0.00	59.93	283.27	0.00	0.00	0.00	283.27
	T	13.09	0.65	0.00	13.74	65.62	0.00	0.00	0.00	65.62
STs	R	0.06	0.00	0.00	0.06	0.79	0.07	0.00	0.00	0.87
	U	24.23	0.21	0.08	24.51	50.80	0.00	0.01	0.07	50.88
	T	3.08	0.03	0.01	3.12	6.86	0.07	0.00	0.01	6.94
OBCs	R	0.98	0.05	0.00	1.03	3.77	0.00	0.00	0.40	4.17
	U	37.13	0.48	0.04	37.65	93.03	0.01	0.18	0.09	93.30
	T	7.47	0.13	0.01	7.61	22.36	0.00	0.04	0.33	22.74
Others	R	5.61	0.08	0.00	5.69	4.49	0.44		0.00	4.93
	U	60.39	3.06	0.16	63.62	287.68	2.24	0.00	0.03	289.94
	T	26.54	1.22	0.06	27.83	123.75	1.20	0.00	0.01	124.96

Source: Compiled from various NSS data reports.

However, other than the Hindu and Islam, Christians, Sikhs and Jains are mainly concentrated in the urban areas only. In fact, no rural observations have been in the case of Jain and Christian. Again, similar is the situation is during 2011-12, the Jainism landing with the highest rent component i.e. 1002.24. However, we need to be careful such analysis as the sample distribution is highly skewed in this case. The representation of other religions than Hinduism and Islam is not very significant. However, two important observations are first, that Islam remains the religion with lowest rent expenditure during both rounds. Second, the rental activity has also been noted in the rural areas for the Christian community. However, the Others category remain negligible during the both the rounds.

3.5.2 Social-group wise

The NSS classifies the social group into SCs, STs, OBCs and others. The trends are clearly visible that rent expenditure is the highest for Others followed by the SCs, OBCs and STs in the same order during both the rounds. Besides, rental activities are spreading significantly in rural areas too. All the social groups recorded rent in rural areas in 2011-12 as compared to 2004-05. In urban areas during 2004-05, monthly per residential dwelling rent expenditure was Rs. 63.62 for the Others, Rs. 59.93 for SCs, Rs. 37.65 for OBCs and Rs. 24.51 for STs. There has been more than 4 times jump in rent values from 2004-05 to 2011-12 for almost all social groups in urban areas. The difference between SCs and Others monthly per residential dwelling rent in urban area is marginal in 2011-12. Surprisingly, the urban rent of the OBCs is one-third of the Others and SCs. This is a significant gap.

3.6 Conclusion

Tiwari, P., & Parikh, J. (1998)[6] said that the demand for housing in India is inelastic with respect to income and elastic with respect to price. However, in the case of Uttar Pradesh it seems that inelastic income demand and slow growth in rent prices both are working together. The low amount of rental value and stagnant share of rent in state GDP shows that the growth in gross value added of rent of residential houses including imputed rent

[6]Tiwari, P., & Parikh, J. (1998). Affordability, Housing Demand and Housing Policy in Urban India. *Urban Studies*, *35*(11), 2111–2129. https://doi.org/10.1080/0042098984033

is low implying poor growth in state income. It also indicates the pace of urbanisation and development of non-farm sector is inadequate. Diversification of economic activities especially agriculture sector is quite slow. Process of industrialization is slow and highly skewed. Overall, it indicates that the pace of structural transformation in the economy is poor and unsatisfactory.

Chapter - IV

Rents of Urban and Rural Dwellings in UP: A Macro Regional Scenario

4.0 Introduction

Households in Indian urban centres, especially large cities, today have to considerably rely on the market to satisfy their housing or dwelling needs. The growing freedom in human mobility for jobs, education and family bond and value practices (e.g. marriages) has led to progressively increasing variations in all aspects of housing consumption. It is for this reason perhaps examination of individuals' dwelling preferences seems to be crucial in understanding these variations (Wang and Li 2006: 305).While dwelling preferences, to a large extent, are contingent upon myriad of factors, such as family income, age, education, nature of employment, social status, life style, physical environment and so on, these in turn essentially determine the dwelling rents.

The housing sector in India for several decades faced a number of set-backs, such as unorganizedmarkets, development disparities, compartmentalized development approaches, and deterrent rent control systems (Mahadeva 2006). No concerted attempt had been made to understand the housing problems in India until the 1990s when the country first launched its housing reform. While housing in the post-reform period has witnessed a seesaw changes in terms of designing shelter policies, housing finance market, introduction of fiscal incentives, increase in public investment, and legal reforms and other initiatives, these chances have been effectively linked to both 'reducing the housing shortage and increasing the number of quality housing stock besides increased accessto various other housing amenities like safe drinking water, good sanitation and household electricity' (Mahadeva 2006: 412). These initiatives in the housing sector, however, required to undertake deep roots in ways that can address the incidences of poor, sub-standard and dilapidated housing stocks.

India was one of those developing countries until the late 1980s that experienced critical housing situations. This was, as argued by Mahadeva (1994, 1997, 2006) largely due to nonexistence of an effective policy force and absence of developed housing finance systemthat could guide housing activities of different income groups in the country. Furthermore, disparities in housing development

aggravated the situation in the backward regions and rural areas. While housing reforms introduced in the 1990s had a positive impact on the development of housing and its amenities to some extent, it could not completely satisfy the demand of dwelling units. This mismatch in demand and supply sides has still kept the rental dwelling units 'going' in both rural and urban housing markets. Estimates claim, as it has been noted at the outset, that over 27 per cent of urban residents in India are currently living in rental houses (Census of India, 2011); and surprisingly, 25 per cent of the rental dwellings are informal in nature (NSSO: 65th Round Report on Housing Conditions and Amenities in India, 2008-09). The scenario in Uttar Pradesh is no less phenomenal.

All Indian statesare governed by their respective Rent Control Act (RCA) which is highly skewed towards tenant protection. Consequently, RCA indirectly forces tenants or seekers of rental dwellings into unrecorded and informal arrangements. Renting of homes is treated as commercial activity which increases property and service taxes successively for individuals and institutional rental housing operators (e.g. Hostels/ Paying Guesthouses/Dormitories etc.), for whom electricity and utility rates are always equated with the rates of commercial properties. Hence, the net rent from dwelling units with formal agreements always becomes lower than what it is from the informal ones. This higher outflow caused by the commercial treatment deters the growth of formal rental dwelling units (with legal agreements) and leads to underreporting in GDP/GSDP estimation. Given the underlying situation, it is of great significance to undertake a heedful estimation of rents for tenant and owner-occupied dwelling units in both urban and rural areas across Uttar Pradesh. Dwelling rent (residential) is a component of personal consumption expenditure (PCE) and consequently becomes a part of Gross State Domestic Product (GDP). Keeping the above stated caveats in view, this chapter aims to estimate the rental value of residential dwellings in both Rural and Urban areas in Uttar Pradesh.

4.1 Data and Methodology

This chapter has is an outcome of the data collected through the structured questionnaire surveys carried out in 1925 urban and rural residential dwelling units (1525 urban and 400 rural dwellings) in four major regions in UP. The estimation of rent has been carried out separately for both urban and rural dwelling units across different regions. We have kept our estimation centred on two types of rents: net and

total rents. While net rent is the housing charges less repairing and maintenance cost, total rent is the housing charges plus all other charges (water, electricity, sewerage, garbage collection, security etc.) less repairing and maintenance cost. In other words, the latter inclusive of other rental charges, and thus is always larger than the former. Because the rent of any dwelling unit is contingent upon its size; or in other words, rent of any dwelling unit has a positive linear relation with size, estimation of average rent at dwelling unit would either be overestimated or underestimated. It would be overestimated for those dwellings that fall under the lower end categories, and underestimated for those that fall under the upper end categories. To overcome these limitations, based on the quartile values[7] of floor areas of all sample dwellings drawn from both the urban and rural areas, the sample dwelling units have been categorized into four size categories: (a) below 290.00 square feet, (b) 290.01 to 460.00 square feet, (c) 460.01 to 700.00 square feet, and (d) above 700 square feet. Also, in order to bring size category wise subtle features of dwelling rent to light, we have estimated the rent per square feet across all the major regions in UP. Since we have considered GautamBudh Nagar as an outlier, we have estimated rents of its dwellings separately, meaning thereby that GautamBudh Nagar has not been included in western region while estimating rents.

4.2 Rent of Urban Residential Dwellings: Regional Portrayal

In this section we have attempted to look into the scenario of rents of urban residential dwelling units by both size category and region. The study, however, substantiates that regardless of the size classes, as per our categorisation, the highest rent−both net and total rents− for urban residential dwelling units has been registered in GautamBudh Nagar (Rs. 12556 for net and Rs. 17776 total rents respectively), which we had chosen as an outlier for this study, followed by the central region (Table 4.1). The higher rents of urban residential dwellings in the former are possibly an upshot of its proximity to the national capital. In other words, GautamBudh Nagar in general and Noida in particular being an outgrowth of the national capital New Delhi have happened to be catalytic factor for skyrocketing the demand for rental dwellings. It is this escalation in demand that has caused a mismatch with the supply side, which in turn has shot up the rent as compared to any other region in the state. Proximity to the

[7] The quartile (Q) values of the floor areas are: Q1 = 290.00 square feet, Q2 = 430.00 square feet, and Q3 = 697.50 square feet, which has been approximated to 700.00 square feet.

national capital has accrued extra locational advantage to it. The highest rent of urban residential dwellings in GautamBudh Nagar validates the assumption we undertook while designing the sample methodology in the first chapter that 'Noida being an outgrowth of the National Capital Delhi will have much higher rent of residential dwellings'. On the contrary, Bundelkhand being the most backward among all major regions has registered the lowest net and total rents: Rs. 2046. 27 and Rs. 2588.86 respectively, which are about seven and four times lower than that of GautamBudh Nagar and central region. While the average rent differential between the smallest size category of urban residential dwellings (below 290 sq. ft.) and the largest category (above 700 sq. ft.) has been observed utmost in the more developed regions, such as central and western regions, a few caveats do exist (Table 4.1).The rent differential in GautamBudh Nagar − both for net and total rents − has surpassed all regions, and is substantially larger than any other region in the state.

While estimation of rent per dwelling unit across different regions by size category portrays a broader scenario of dwelling rental markets in the state, it does blank out illustrating how different size categories of dwelling units generate different rents per unit of area (per square feet); in other words, it fails to show the pattern of variations in terms of rent per square feet among different size categories of dwelling units. The rent always has, as stated in preceding section, a positive relationship with the size of dwellings, but that does not necessarily imply that the dwelling rent per unit of area, i.e. per square feet will be larger among the larger size categories. Our study interestingly reports that the urban dwelling rent per square feet is, regardless of region, the highest among the smallest size category of dwellings with floor areas below 290 square feet (Table 4.2), and vice versa. Furthermore, both net and total rents of dwelling units per square feet for the smallest size category in the outlier are substantially larger than any other region in the state. While the lowest average net rent per square feet (Rs. 7.70) has been found in Bundelkhand, the highest average net rent (Rs. 20.89) has been reported in GautamBudh Nagar, followed by the central region (Rs. 20.84). Although the Table 4.2 hardly reflects any difference between the central region and GautamBudh Nagar in terms of net rent per square feet, a considerable difference does exist between the two in terms of total rent per square feet. This connotes that comparatively higher other rental charges (e.g. electricity, water, garbage and maintenance etc.) in the latter has shot up the average total rent,

resulting in a difference of Rs. (29.02 – 21.86) = Rs. 7.16 per square feet. In other words, the total rent per square feet of residential dwellings in urban centres in GautamBudh Nagar is greater than that of central region by Rs. 7.16. A careful observation across the major regions (Table 4.2) broadly establishes an inverse relationship between the rent per square feet of residential dwellings in urban centres and size category, meaning thereby that the rent per square feet for smaller dwellings is greater than that of the larger dwellings.

4.3 Rent of Rural Residential Dwellings: Regional Picture

The rent of rural residential dwellings− both net and total rents− in all major regions of UP as well as in the outlier (GautamBudh Nagar) reflects a picture that resembles the scenario of rent of urban residential dwellings to a lesser extent. From the Table 4.3 presented below, we can see that the largest net and total rents per rural dwelling have been registered in GautamBudh Nagar (Rs. 4373 and Rs. 6203 respectively), followed by the western (Rs. 3141 and Rs. 3279 respectively) and central regions (Rs. 1394 and Rs. 1505 respectively).

Unlike the rents of urban dwellings analysed in the preceding section where could see that the central region registered the second largest rent per dwelling unit in the state, the western region has outnumbered/ surpassed the central region in terms of both net and total rents per rural residential dwelling. The lowest dwelling rent− both net and total− has been reported in the Bundelkhand region (Rs. 243 and Rs. 288 respectively) (Table 4.3). The average rent differential between the smallest size category of rural residential dwellings (below 290 sq. ft.) and the largest category (above 700 sq. ft.) has been observed maximum in the western region, followed by GautamBudh Nagar (outlier) and central region (Table 4.3). However, it is to be noted that the extent of rent differential within urban residential dwellings (analysed in the preceding section) is greater than that of the rural residential dwellings (see Tables 4.1 and 4.3). Like urban dwelling rent, rural dwelling rent also has a positive relationship with the size. In other words, rent of rural dwellings increases with increase in their sizes.

As far as the rent of rural dwellings per square feet is concerned, it is, unlike the urban residential dwelling units, not establishing any clear relationship with the size category. For instance, in the Eastern and the Bundelkhand regions, we can see

that the highest net rent per square feet of rural residential dwelling (Rs. 1.87 and Rs. 0.84 respectively) has been registered for those dwellings that have floor areas (size) ranging from 460.01 square feet to 700.00 square feet (Table 4.4), followed by the second lowest size category ranging from 290.01 square feet to 460.00 square feet. The smallest and the largest categories of rural residential dwellings have reported comparatively lower net rents per square feet of dwellings. On the other hand, in both central and western regions, the smallest category of rural residential dwellings dwelling has produced the highest net rent per square feet (Rs. 4.20 and Rs. 10.80 respectively), followed by the largest category (Rs. 2.98 and Rs. 8.71 respectively). Both net and total rents per square feet of rural residential dwellings in the western region, regardless of the size categories, have outnumbered all other Regions as well as GautamBudh Nagar (outlier). Nonetheless, the total rent per square feet of residential dwellings for all size categories in GautamBudh Nagar has been greater than all regions.

Table 4.1: Region and size category wise rent of dwellings in urban areas in UP.

Dwelling Units by Size (Sq. Ft.)	Eastern Region		Bundelkhand Region		Central Region		Western Region		GB Nagar		All Regions	
	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent
Below 290.00	2295.21	3027.01	1472.30	1977.48	5843.46	6576.14	1591.94	1792.99	5883.95	6947.47	1791.63	2220.29
290.01 - 460.00	3261.17	4188.87	2533.33	3238.64	8076.07	8972.20	3105.18	3413.44	7475.60	10543.09	5155.90	6238.55
460.01 - 700.00	5714.09	6699.70	3117.33	3589.33	9334.36	10247.55	4893.80	5513.21	10524.06	15040.66	7504.22	9355.17
Above 700.00	8937.62	10712.21	4957.14	5455.36	12553.79	13656.13	6330.23	6991.96	23383.63	32994.27	11581.30	14365.48
All Categories	6515.47	7833.78	2046.27	2588.86	9330.60	10268.14	3210.42	3573.54	12555.88	17776.01	6266.42	7735.56

Source: Sample Survey, 2019-2020.

Table 4.2: Region and size category wise rent per square feet of dwellings in urban areas in UP.

Dwelling Units by Size (Sq. Ft.)	Eastern Region		Bundelkhand Region		Central Region		Western Region		GB Nagar		All Regions	
	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent
Below 290.00	10.21	13.42	8.14	11.11	25.17	28.38	9.63	10.79	36.20	41.92	9.84	12.28
290.01 - 460.00	9.08	11.68	9.34	10.15	22.48	25.05	8.84	9.69	19.89	28.13	14.37	17.38
460.01 - 700.00	9.33	10.98	5.21	6.02	16.81	18.46	8.45	9.52	18.52	26.48	13.04	16.29
Above 700.00	8.7	10.34	4.97	5.48	11.74	12.84	5.80	9.54	23.68	33.41	11.32	14.07
All Categories	9.01	10.90	7.70	10.22	20.84	21.86	8.77	9.77	20.89	29.02	12.89	15.16

Source: Sample Survey, 2019-2020.

Table 4.3: Region and size category wise rent of dwellings in rural areas in UP.

Dwelling Units by Size (Sq. Ft.)	Eastern Region		Bundelkhand Region		Central Region		Western Region		GB Nagar		All Regions	
	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent
Below 290.00	240.75	267.50	159.17	198.68	663.94	701.54	1960.47	2032.54	1350.26	1426.14	620.78	667.26
290.01 - 460.00	523.43	651.17	271.20	318.78	988.96	1048.32	2438.88	2554.43	2904.72	4033.78	1066.25	1211.61
460.01 - 700.00	1047.15	1165.86	469.33	519.33	1279.88	1402.83	4093.39	4293.09	4463.83	6292.71	2263.36	2870.89
Above 700.00	1191.74	1252.73	688.00	718.00	2916.24	3179.38	9433.37	9755.78	5729.14	8283.26	2246.81	2696.84
All Categories	950.32	1060.67	243.22	287.95	1393.84	1504.74	3140.81	3278.54	4373.41	6203.33	1579.47	1898.58

Source: Sample Survey, 2019-2020.

Table 4.4: Region and size category wise rent per square feet of dwellings in rural areas in UP.

Dwelling Units by Size (Sq. Ft.)	Eastern Region		Bundelkhand Region		Central Region		Western Region		GB Nagar		All Regions	
	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent	Net Rent	Total Rent
Below 290.00	0.96	1.07	0.64	0.80	4.20	4.45	10.80	11.12	1.75	2.63	3.40	3.61
290.01 - 460.00	1.50	1.86	0.77	0.90	2.74	2.90	6.67	6.98	7.08	9.87	2.90	3.28
460.01 - 700.00	1.87	2.08	0.84	0.93	2.30	2.52	6.56	6.88	7.83	11.04	3.91	4.97
Above 700.00	1.01	1.21	0.44	0.46	2.98	3.22	8.71	9.02	7.69	11.13	2.45	3.01
All Categories	1.30	1.51	0.73	0.83	2.83	3.03	7.75	8.07	7.53	10.66	3.13	3.70

Source: Sample Survey, 2019-2020.

4.4Scenario of Residential Dwelling Rents: Analysis across the Urban Centres/ Classes

The analysis that we have done thus far has mainly focused on the variations in rent of residential dwellings across different size categories and major regions in Uttar Pradesh, and have not at all concentrated on how rent of dwellings varies across the urban centres in UP. In what follows, we attempt to look into this aspect.

Out of four major regions in UP, only in Western and Bundelkhand regions, Class-I urban centres (Jhansi and Bareilly Municipal Corporations) have registered the highest rent per residential dwelling unit (net rent of Rs. 4834 and Rs. 2362 respectively) while in other two major regions (Eastern and Central regions) Class-II urban centres (BelaPratapgarh and Lucknow Cantonment Board) have reported the largest rent per residential dwelling unit (Table 4.5). However, among all 27 sample urban centres of four major regions and the outlier (GautamBudh Nagar) across the state, the largest rent per dwelling unit− both net and total rents− has been observed in Noida (Rs. 19123 and Rs. 26697 respectively), followed by Lucknow Cantonment Board (Rs. 14534 and Rs. 15278) and Pratapgarh (Rs. Rs. 6989 and Rs. 8772 respectively). Nonetheless, both net and total rents per dwelling in Noida (Class-I urban centre) have been substantially larger than its counterpart Class-I urban centres in all four major regions. Noida has also registered the largest rent differential between the net and total rents (Rs. 26696.61 – Rs. 19122.89 = Rs. 7573.72) as compared to any other urban centre chosen for drawing samples in the state (Table 4.5). This implies that the aggregate expenses on electricity, water, sewerage, garbage and maintenance per dwelling in Noida have outnumbered all other sample urban centres in the state. On the other hand, among all the Class-II urban centres, Lucknow Cantonment Board has registered the highest net (Rs. 14534) and total (Rs. 15278) rents. All urban centres of Bundelkhand region have generated the lowest residential dwelling rents among their respective urban classes.

As far as the net and total dwelling rents per square feet across the urban centres is concerned, the highest figure among the urban centres of any class (class-I to class-VI) across the major regions has been found in GautamBudh Nagar, followed by the central region (Table 4.5). In case of the former, the largest net residential dwelling rent per square feet (Rs. 23.73) has been reported in the class-I urban centre (Noida) while, in case of the latter, it has been registered in the class-II urban centre

(Lucknow Cantonment Board, Rs. 24.81). The noticeable caveat here is that despite being the class-II urban centre, the net rent per square feet dwelling in Lucknow Cantonment Board has surpassed all other urban categories, meaning thereby that the net rent per unit area is the largest in Lucknow Cantonment Board.

Table 4.5: Net and total rents of residential dwelling units by urban centre class and region in UP.

Region	Urban Centers	Class	Sample Drawn	Average size (Sq. Ft.)	Net Rent	Total Rent	Net Rent /Sq. Ft.	Total Rent /Sq. Ft.
Eastern Region	Varansi (M Corp)	I	75	683.75	5927.63	6784.25	8.68	10.16
	Bela Pratapgarh (NPP)	II	60	579.00	6988.52	8771.93	9.33	11.43
	Ramnagar	III	50	755.09	6275.02	7472.11	8.59	10.19
	Varansi(CB)	IV	50	752.40	6569.28	7916.01	9.01	10.90
	Kakarmatta(CT)	V	50	703.63	673.86	814.91	9.87	12.13
	Gaura kala	VI	50	751.40	6742.59	8182.09	8.56	10.74
	All Classes	**6**	**335**	**736.90**	**6515.48**	**7833.79**	**9.01**	**10.90**
Bundelkhand Region	Jhasi(M corp)	I	75	351.47	2362.13	2961.47	7.45	9.66
	Mauranipur(NPP)	II	60	204.50	1680.00	2181.50	8.54	11.28
	Jhansi(CB)	III	50	341.40	2224.80	2849.80	7.59	10.17
	Chirgaon(NPP)	IV	50	305.90	2004.40	2556.00	7.59	10.91
	Baragaon(NPP)	V	50	248.20	1821.60	2331.60	7.27	9.54
	Banguwankalan	VI	50	315.80	2100.00	2547.60	7.71	9.82
	All Classes	**6**	**335**	**296.10**	**2046.27**	**2588.86**	**7.70**	**10.22**
Central Region	Lucknow(M Corp)	I	75	611.12	9604.11	10867.06	18.23	20.73
	Lucknow(CB)	II	60	741.31	14533.77	15278.03	24.81	26.07
	Bakshika Talab(NP)	III	50	458.00	8754.25	9550.83	21.67	23.74
	Dewa(NP)	IV	50	490.80	6654.04	7864.90	14.14	17.09
	Mahona(NP)	V	50	473.40	5941.28	6492.88	14.28	15.55
	All Classes*	**5**	**285**	**565.97**	**9330.60**	**10268.14**	**20.84**	**21.86**
Western Region	Bareilly(M Crop)	I	75	434.73	4834.23	5494.96	11.64	13.42
	Baheri (CB)	II	60	394.67	3528.97	3444.15	9.70	10.24
	Bareilly (CB)	III	50	400.80	2540.30	3360.12	6.88	9.12
	Shahi (NP)	IV	50	496.30	2366.36	2489.46	6.90	7.30
	Padarathpur (CT)	V	50	342.72	3640.08	3665.68	11.53	11.61
	Iffco Village(CT)	VI	50	326.60	1476.97	1692.03	4.74	5.39
	All Classes	**6**	**335**	**401.45**	**3210.42**	**3573.54**	**8.77**	**9.77**
G B Nagar	Noida (CT)	I	75	795.50	19122.89	26696.61	23.73	32.64
	Dadri (NPP)	II	60	574.75	11901.64	15170.54	21.04	30.13
	Jewar (NP)	III	50	417.50	8360.65	11880.98	19.99	28.34
	Jahangirpur (NP)	IV	50	493.60	7685.39	11156.16	15.87	22.92
	All Classes	**4**	**235**	**594.38**	**12555.88**	**17776.01**	**20.89**	**29.02**
	Total		**3050**	**512.47**	**6264.60**	**7732.77**	**12.28**	**15.15**

Source: Sample Survey, 2019-2020.

Note: * indicates no Class 6 category urban centre has been found in the Central Region, comprising 10 districts: Lucknow, Barabanki, Kanpur Nagar, Hardoi, Raebareili, Sitapur, Kheri, Unnao, Fatepur, and Kanpur Dehat

Although the dwelling rent per square feet in Bundelkhand, regardless of its different urban classes, is comparatively meagre, the class-II urban centre (Mauranipur) has reported the highest net rent (Rs. 8.54) per unit area.

4.5 Conclusion

The analyses drawn in the preceding three sections substantiate that considerable variations in terms of rent of both urban and rural residential dwellings by size classes do exist between the major regions in Uttar Pradesh. The highest net and total rents of urban residential dwelling units have been found in GautamBudh Nagar, followed by the central region while Bundelkhand being the most backward among all major regions has registered the lowest net and total rents. The average urban dwelling rent in GautamBudh Nagar is seven times larger than that of the Bundelkhand region. The rent differential between the smallest size category of urban residential dwellings (below 290 sq. ft.) and the largest category (above 700 sq. ft.) has been observed utmost in the more developed regions, such as central and western regions. The study interestingly finds that the urban dwelling rent per square feet, regardless of the region, is the highest among the smallest size category of dwellings with floor areas below 290 square feet, and vice versa. However, for rural residential dwellings across different regions, it could not find any clear relationship between rent per square feet and size category of the dwellings.

Among all four major regions (excluding outlier), the western region has reported the largest rent per rural dwelling, followed by the central region. However, the rent in the former has been larger by two times. Both net and total rents per square feet of rural residential dwellings in the western region, regardless of the size categories, have outnumbered central, eastern and Bundelkhand regions. It has also outnumbered GautamBudh Nagar (outlier). In the Western and Bundelkhand regions, Class-I urban centres have registered the highest rent per residential dwelling unit while in the Eastern and Central regions Class-II urban centres have reported the largest rent.

Chapter V

Trends in Rents of commercial dwellings

5.0 Introduction

Over a period of time the mobility has increased manifold not only globally but at the country level as well as at region level. The movement of people mainly flows from rural to urban areas or to say from low developed places to developed places in expectation of better education, remunerative jobs, gainful employment, better living condition and health facilities. Karanth (2015) rightly argues that "towns and cities have always been sites of attraction not only as centers of trade and commerce, seats of administration and power centers but also providing facilities for health and education". The author argues that in the last thirty-forty years, there has been widespread social change and India witnessed a rise in aspirations of rural students seeking formal education at places far away from their own native place - be they villages or small towns. Not only this rising road, rail and air connectivity made movement of people cost effective and time saving. It has led to increased 'frequent movements' of people to different places be it for business, social function, tourism (religious or adventure), official work or others.

The process of renting homes for different reasons is not a new phenomenon. The sector is experiencing revolutionary changes due to advent of technology and online booking system. Guttentag et al.(2017) say"the rise of peer-to-peer short-term rental services (home-stays) within the sharing economy represents a transformative innovation within the tourism accommodation industry". Demand for guest houses, hotels, home-stays, paying guest houses is on the rise with the rising aspirations of the people about job and education. Social functions have experienced sea change in terms of expenditure and their grandeur. Guest houses, marriage lawns and banquets are now new places of social functions rather than the home, the traditional places.

This chapter dwells into trends in rent of guest houses, hotels, homestays, paying guest and hostels. The main argument, for taking the cases of abovementioned services, is that they are providing residential services, although not on permanent basis. Under the current framework of NAS, the abovementioned activities are treated as commercial

services, thus, they become the part of services sector and their treatment is done accordingly.

5.0.1 Defining commercial dwellings

As discussed before, commercial dwellings here comprise all the commercial establishments whether kutcha semi-pucca or pucca which are providing residential dwellings or services similar to residential dwellings like hostels, guest house, hotels, paying guest, etc. not included in residential dwellings category.

5.0.2 Defining rent

Rent is defined as the difference between the rental charges (charges for providing commercial dwellings services) and operating and maintenance cost (not the capital cost). The rental charges without adjusting operating and maintenance cost is termed as 'gross rental charges' whereas the adjusted amount for operating and maintenance cost is referred as 'net rental charges'. In our study, the rent has been calculated for commercial dwelling on month basis. The periodicity may have some conceptual issues as some of the commercial dwellings may have more business during seasons like guest houses, hotels but their monthly distribution provides a value to make comparison with other commercial dwellings.

5.0.3 Data

A separate structured schedule for collecting information about commercial dwellings was constructed and information was collected from all four regions of the Uttar Pradesh. A total of 541 commercial dwellings have been surveyed from the urban areas only. The sample distribution is given in the table 5.1. The data has been collected urban class-wise. The detailed description of choosing the district from each region for the survey has already been mentioned in the first chapter. We did not find any observation below urban class IV. 77.3 percent samples are from class I urban areas. It is not surprising as most of the abovementioned commercial dwellings are expected to be mainly located in the higher urban classes.

Among type of commercial dwellings, hotel comprises about 50 percent followed by guest houses (22.2%), home-stay (16.8%), hostels (7.6%) and remaining by other categories. Region-wise distribution of total sample shows 203 samples are from the western region and 58 from the Bundelkhand region and 140 each from Central and Eastern regions. The sampling distribution shows adequate representation of each region. As we have argued in the case of rent of residential dwellings that area is a qualitatively better way of estimating and comparing rental values for policy purpose, the same cannot be done in the case of commercial dwellings. The different types of commercial dwellings tend to vary in size in a significant manner. Hotels and hostels generally charge rent less on the basis of area rather more on the basis of facilities provided (for instance AC and Non-AC rooms). Similarly, guest houses had to have to be large in area by their own basic nature.

Table 5.1: Distribution of Sample

Particulars		N	Percent	Cumulative Percent
The class of town/ urban agglomeration	1, 00,000 & above	418	77.3	77.3
	50,000-99,999	48	8.9	86.1
	20,000 - 49,999	35	6.5	92.6
	10,000-19,999	40	7.4	100.0
	Total	541	100.0	
Type of Commercial Dwelling	Hotel	273	50.5	50.5
	Guest house	120	22.2	72.6
	Home-stay	91	16.8	89.4
	Hostel	41	7.6	97.0
	Paying guest services	9	1.7	98.7
	Others	7	1.3	100.0
	Total	541	100.0	
Region of Uttar Pradesh	Western Region	203	37.5	37.5
	Bundelkhand Region	58	10.7	48.2
	Central Region	140	25.9	74.1
	Eastern Region	140	25.9	100.0
	Total	541	100.0	

Source: Authors' compilation from field survey data.

5.1 Descriptive statistics of major characteristics

Table 5.2 presents summary statistics of major characteristics. As stated before the whole sample is drawn from the urban area only. The data has been collected through first four urban classes only as the required sample units were not available (or we can say were locatable) in other two classes. The mean value of gross monthly rental charges (per commercial dwelling) is Rs. 22974.3. However, the variability in the distribution is significant as the coefficient of range (0.979) is very high. On the other hand, the mean operating and maintenance cost is Rs. 7605.8 whereas net monthly charges (per commercial unit) is Rs. 15368.5.

Table 5.2: Descriptive Statistics of Major Characteristics

Summary Statistics		Rural/ Urban	If Urban, the class of town/ urban agglomeration	Type of Commercial Dwelling	Gross Monthly Rental Charges (Per commercial Unit)	Total monthly operating and maintenance cost (per commercial unit)	Net Monthly Rental Charges (Per commercial Unit)	Region
N		541	541	541	541	541	541	541
Mean		2.00	1.44	2.04	22974.3	7605.8	15368.5	2.4
Minimum		2	1	1	1400.0	100.0	1000.0	1.0
Maximum		2	4	9	135000.0	44000.0	116000.0	4.0
Percentiles	25	2.00	1.00	1.00	13000.0	3000.0	7850.0	1.0
	50	2.00	1.00	1.00	18500.0	6000.0	12000.0	3.0
	75	2.00	1.00	3.00	28500.0	9900.0	19200.0	4.0

Source: Authors' compilation from field survey data.

5. 2 Region-wise commercial dwellings rent

We shall now discuss the trends in commercial dwellings rent. The table 5.3 presents region-wise commercial dwellings rent which are further divided into urban classes. The region-wise distribution shows that some interesting outcomes. The gross rent is the highest in the Bundelkhand region followed by the Central and Western region. The Eastern region has the least gross rent. Operating and maintenance charges also show the similar pattern as shown by the gross rent. The possible explanation of this emerging picture is that the sample representation of the Bundelkhand region is only 10.7 percent of the overall sample. The presence of outliers is affecting the mean value of the region.

Figure 5.1: Box-plots of Gross Rent of Bundelkhand Region

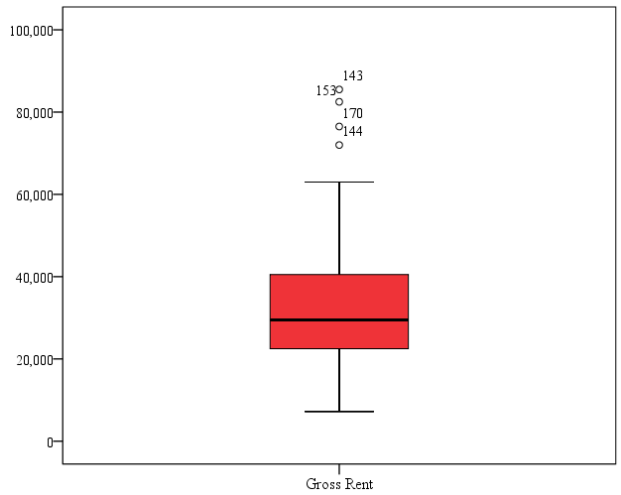


Figure 5.2: Box-plots of Operating and Maintenance Cost of Bundelkhand Region

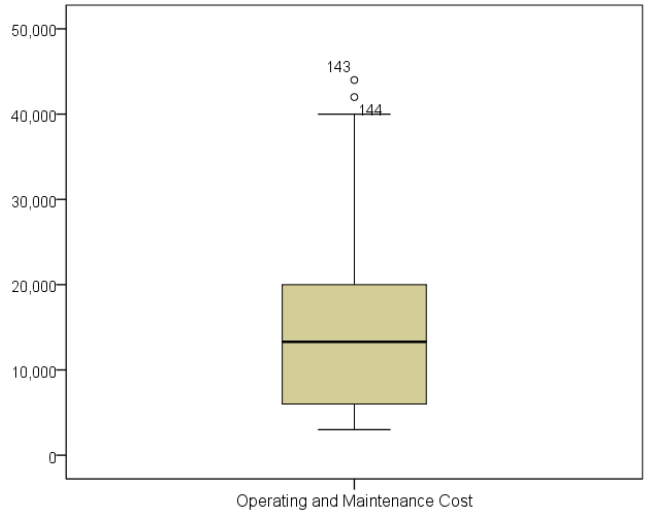


Figure 5.3: Box-plots of Net Rent of Bundelkhand Region

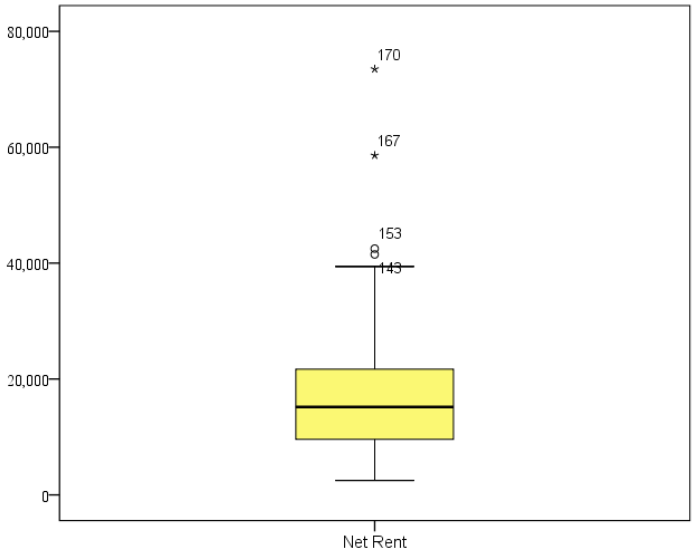


Figure 5.1 to 5.3 are showing box-plot of gross rent, operating and maintenance cost and net rent respectively. It is apparent from the figures that rental charges are affected by the presence of outliers. The gross rent box-plot indicates presence outliers towards higher side. However, only two such values are found in the case of operating and maintenance cost. It explains that higher values do not get adjusted by the higher operating and maintenance cost and resulted into outliers in the case of net rent. We are not saying that rent values of other regions do not have outliers but in other cases the effect of outliers has been smoothed outdue to large sample size (other regions have at least more than double of the Bundelkhand region).

Table 5.3: Region-wise trends in rent in commercial dwellings

Region	Urban Class	Monthly Gross Rental Charges per commercial dwelling (Rs.)	Monthly Operating & Maintenance Charges per commercial dwelling (Rs.)	Net Rental charges per commercial per commercial dwelling (Rs.)
Western Region	1, 00,000 & above	21144.25	6097.05	15047.20
	50,000-99,999	23250.00	7666.67	15583.33
	Total	21175.37	6120.25	15055.12
Bundelkhand Region	1, 00,000 & above	33956.41	14876.92	19079.49
	50,000-99,999	20160.00	7920.00	12240.00
	20,000 - 49,999	36000.00	25000.00	11000.00
	Total	32802.30	14451.72	18350.58
Central Region	1, 00,000 & above	33515.56	10380.00	23135.56
	20,000 - 49,999	9652.00	2696.00	6956.00
	10,000-19,999	15626.40	6002.40	9624.00
	Total	26059.71	8226.14	17833.57
Eastern Region	1, 00,000 & above	17572.37	6113.03	11459.34
	50,000-99,999	22032.50	7688.50	14344.00
	20,000 - 49,999	12388.89	2344.44	10044.44
	10,000-19,999	16753.33	5950.00	10803.33
	Total	18425.71	6303.43	12122.29
Uttar Pradesh	1, 00,000 & above	24752.35	8114.35	16638.00
	50,000-99,999	21913.54	7711.25	14202.29
	20,000 - 49,999	11108.57	3242.86	7865.71
	10,000-19,999	16049.00	5982.75	10066.25

Source: Authors' compilation from field survey data.

The distribution of the sample according to urban class shows that each region has different number of urban classes covered. For instance, the Western region has first two urban classes only, the Bundelkhand region has first three, the Central region has first,

third and fourth urban classes and the Eastern region has first four classes. The table 5.3 also presents the distribution of rent values at aggregate level for Uttar Pradesh. According to this classification, the class I urban towns have the highest net rent values (Rs. 16638.0) followed by class II towns (RS. 14202.29), class IV towns (Rs. 10066.25) and class III towns (Rs. 7865.71). Thus, prima facie the size of urban class is highly correlated with the rent values. The Spearman's correlation coefficient between rent values and urban class is presented in the table 5.4. The correlation coefficients are statistically significant at $p<0.01$ between the concerned variables. It simply implies that in higher class urban centers (means more developed places) have higher demand for commercial dwellings and therefore, higher rental charges too.

Table 5.4: Correlation Matrix (Spearman correlation)

Variable	Urban Class	Monthly Gross Rental Charges per commercial dwelling (Rs.)	Monthly Operating & Maintenance Charges per commercial dwelling (Rs.)	Net Rental charges per commercial per commercial dwelling (Rs.)
Urban Class	1.000	-.192**	-.123**	-.169**
Monthly Gross Rental Charges per commercial dwelling (Rs.)	-.192**	1.000	.819**	.915**
Monthly Operating & Maintenance Charges per commercial dwelling (Rs.)	-.123**	.819**	1.000	.568**
Net Rental charges per commercial per commercial dwelling (Rs.)	-.169**	.915**	.568**	1.000

Note: ** $p<0.01$. Source: Calculated from the field survey data.

5.3 Trends in rent as per type of commercial dwellings

Hotels are the most demanded type of commercial dwellings as evident from the rent values given in table 5.5. Not only at the state level but across the regions, the hotels have the highest net rent. At the state level hotels are followed by paying guest services. However, paying guest services is not very relevant from the perspective making a comparison with others as we have very few observations of the same. Next most demanded commercial dwelling which attracts high rent is the hostels (Rs. 10850) and guest house (Rs. 9602.58). Region-wise comparison shows that in the Western region too to the hotel and hostels are main commercial dwellings from the perspective of rent.

However, the Western region is the only region where paying-guest services are being found common in demand. It is understandable as the Western region includes Noida region which is a hub for commerce, trade and industry along with educational institutions. Thousands of people come from across the country for job and education and prefer hostels and paying guest services. In the Bundelkhand region mainly hotel and hostels were surveyed. There is no significant difference in net rent between hotels and hostels even former is greater than the latter.

Table 5.5: Trends in rent of commercial dwellings as per type of commercial dwelling (In Rs.)

Region	Type of Commercial dwelling	Monthly Gross Rental Charges per commercial dwelling (Rs.)	Monthly Operating & Maintenance Charges per commercial dwelling (Rs.)	Net Rental charges per commercial per commercial dwelling (Rs.)
Western Region	Hotel	36788.59	10633.97	26154.62
	Guest house	13690.00	4900.00	8790.00
	Home-stay	9183.41	2348.41	6835.00
	Hostel	30960.00	6000.00	24960.00
	Paying guest services	28500.00	15300.00	13200.00
	Others	13380.00	4640.00	8740.00
Bundelkhand Region	Hotel	33401.55	14894.55	18507.01
	Hostel	26424.00	7500.00	18924.00
	Others	12600.00	4000.00	8600.00
Central Region	Hotel	35553.01	11251.81	24301.20
	Guest house	14332.35	4979.41	9352.94
	Serviced Apartments	14000.00	6000.00	8000.00
	Hostel	8916.36	1930.00	6986.36
Eastern Region	Hotel	23308.95	8797.89	14511.05
	Guest house	14053.93	3979.18	10074.75
	Home-stay	16666.67	7266.67	9400.00
	Hostel	15341.67	4630.83	10710.83
Uttar Pradesh	Hotel	32916.14	11296.81	21619.32
	Guest house	14057.00	4454.42	9602.58
	Home-stay	9430.11	2510.55	6919.56
	Serviced Apartments	14000.00	6000.00	8000.00
	Hostel	14339.22	3488.54	10850.68
	Paying guest services	24066.67	10166.67	13900.00
	Others	13250.00	4533.33	8716.67

Source: Compiled from the field survey data.

However, in the Central region hotel rent is more than twice from other categories. The rent from hostels is the least among all other categories in the Central region. In the Eastern region hotel has the highest rent (Rs. 14511.05) followed by hostel (Rs. 10710.83) and guest house (Rs. 10074.75). If we make inter-region comparison, then the Western region has the highest rent value from hotels then the Central region, Bundelkhand region and at the last the Eastern region. In the case of hostel rent, the ranking is the same except the Central region which has the least hostel rent value amongst all regions. In other categories, there is not clear trend.

5.4 Conclusion

This chapter attempts to capture the trends in gross rent and net rent in commercial dwellings like hotels, hostels, guest house, home-stay, etc. Very few studies tried to capture the trends in rent of commercial buildings which offer residential dwelling similar services, especially, at sub-national level almost absent. The studies which tried to attempt to deal such issues mainly talked about demand side mainly concentrating demand for hostels and paying-guest houses. They little talk about the rent charged by different types of such dwellings.

This analysis is of contemporary relevance as many of the hostels, paying guest services, home-stays are not registered with the concerned authority, especially, in lower urban classes therefore are not become part of overall state domestic product. As our results suggest that demand for the hostels is substantial after hotels, these are also one of the most ignored commercial activity (for the purpose counting them into the estimation of GSDP). The results provide an estimate of rent of commercial dwellings that the policy makers may utilize these estimates to crosscheck the existing official estimates and can come-up with some policy prescriptions to fill the void if the latter estimates are significantly greater than the former.

Chapter VI

Conclusion and Policy Suggestions

6.0 Introduction

Most of the policy discussion about social upliftment, inclusive and sustainable growth, poverty eradication (especially multidimensional poverty) essentially highlights the importance of the housing. Despite this, the estimation of demand and rental value of residential dwellings has not attracted the desired attention and effort of the academia and policy makers in India, especially, at sub-national level. Tiwari and Parikh (1997) rightly argued two decades back thatthere is non-availabilityof the minimumnecessary data required to undertake a meaningfulstudy on this account for housing in India.

The estimation of the state domestic product has its own issues. The current mechanism is based on the use of multiple sources like the Census, the NSS and the All India Debt and Investment Surveys. In many cases, approximation of values as percent of GSDP or some other base is being undertaken to arrive the rental estimates. The current mechanism leads gross under-reporting of the sector in the overall household consumption expenditure and therefore in the estimation of state domestic product.

The present study attempted to fill this void. The study conducts a large scale field survey to gather rental value of residential dwellings covering all regions of Uttar Pradesh. It does not only capture residential dwellings rental value but also makes an attempt to capture the trends in rent of commercial dwellings. The study also presents a comparison between the estimates based on the secondary data and based on our field survey data.

6.1 Major findings

The major findings of the data are discussed as under:

1. The state economy is caught up in the low-equilibrium trap. The state is experiencing poor pace of urbanisation along with pressure of high incidence of poverty and unemployment. The process of structural transformation is also very slow. The economy is still predominantly agrarian and services-led.

2. However, the growth in population is still a big cause of concern for the state. The growing population not only generates absolute increase in demand for housing but also for the rentable residential dwellings.
3. The average monthly per residential dwelling expenditure on rent in rural areas is Rs. 2.90 in 2004-05 which increased to Rs. 7.96 in 2011-12 in Uttar Pradesh. The corresponding values for India are Rs. 14.08 and Rs. 30.21 respectively.
4. In urban Uttar Pradesh, the average monthly per residential dwelling expenditure on rent increased from Rs. 132.64 to Rs. 494.03 during 61^{st} to 68^{th} round. In the case of India, the rent increased from Rs. 270.77 to Rs. 712.65 during the same period.
5. In rural areas during 2004-05, only the Western (Rs. 7.11) and the Central region (Rs. 1.32) records rent values and the Bundelkhand region shows zero collections as rent. However, the situation entirely changes in 2011-12. The Bundelkhandregion emerges (Rs. 13.42) as the region with the highest rent collections among all regions followed by the Western regions (Rs. 8.44 and Rs. 11.81), the Eastern region (Rs. 6.91) and the Central region (Rs. 2.90) in the rural areas.
6. In the case of urban areas during 2004-05, the Central region (Rs. 222.27) has the highest rent followed by the Eastern (Rs. 123.50) and the Western region (Rs. 107.32). Again the Bundelkhand region has the least rent (Rs. 23.13). However, here the things have changed in some other manner in 2011-12. The Western region (Rs. 1211.64) has the highest rent followed by the Eastern region (Rs. 382.95), the Central region (Rs. 375.31) and the Bundelkhand region (Rs. 181.86). The rent and development level seems to be poorly correlated as reflected from the secondary data.
7. All the social groups recorded rent in rural areas in 2011-12 as compared to 2004-05. In urban areas during 2004-05, monthly per residential dwelling rent expenditure was Rs. 63.62 for the Others, Rs. 59.93 for SCs, Rs. 37.65 for OBCs and Rs. 24.51 for STs. There has been more than 4 times jump in rent values from 2004-05 to 2011-12 for almost all social groups in urban areas. The difference between SCs and Others monthly per residential dwelling rent in urban area is

marginal in 2011-12. Surprisingly, the urban rent of the OBCs is one-third of the Others and SCs. This is a significant gap.

8. The study substantiates that regardless of the size classes, as per our categorisation, the highest rent−both net and total rents− for urban residential dwelling units has been registered in GautamBudh Nagar (Rs. 12556 for net and Rs. 17776 total rents respectively).
9. On the contrary, Bundelkhand being the most backward among all major regions has registered the lowest net and total rents: Rs. 2046. 27 and Rs. 2588.86 respectively, which are about seven and four times lower than that of GautamBudh Nagar and central region.
10. Furthermore, both net and total rents of dwelling units per square feet for the smallest size category in the outlier are substantially larger than any other region in the state. While the lowest average net rent per square feet (Rs. 7.70) has been found in Bundelkhand, the highest average net rent (Rs. 20.89) has been reported in GautamBudh Nagar, followed by the central region (Rs. 20.84).
11. The rent of rural residential dwellings− both net and total rents− in all major regions of UP as well as in the outlier (GautamBudh Nagar) reflects a picture that resembles the scenario of rent of urban residential dwellings to a lesser extent. The largest net and total rents per rural dwelling have been registered in GautamBudh Nagar (Rs. 4373 and Rs. 6203 respectively), followed by the western (Rs. 3141 and Rs. 3279 respectively) and central regions (Rs. 1394 and Rs. 1505 respectively).
12. In the eastern and Bundelkhand regions, we can see that the highest net rent per square feet of rural residential dwelling (Rs. 1.87 and Rs. 0.84 respectively) has been registered for those dwellings that have floor areas (size) ranging from 460.01 square feet to 700.00 square feet, followed by the second lowest size category ranging from 290.01 square feet to 460.00 square feet.
13. On the other hand, in both central and western regions, the smallest category of rural residential dwellings dwelling has produced the highest net rent per square feet (Rs. 4.20 and Rs. 10.80 respectively), followed by the largest category (Rs. 2.98 and Rs. 8.71 respectively).

14. Out of four major regions in UP, only in the Western and Bundelkhandregions, Class-I urban centres (Jhansi and Bareilly Municipal Corporations) have registered the highest rent per residential dwelling unit (net rent of Rs. 4834 and Rs. 2362 respectively) while in other two major regions (Eastern and Central regions) Class-II urban centres (BelaPratapgarh and Lucknow Cantonment Board) have reported the largest rent per residential dwelling unit. However, among all 27 sample urban centresof four major regions and the outlier (GautamBudh Nagar) across the state, the largest rent per dwelling unit− both net and total rents− has been observed in Noida (Rs. 19123 and Rs. 26697 respectively), followed by Lucknow Cantonment Board (Rs. 14534 and Rs. 15278) and Pratapgarh (Rs. Rs. 6989 and Rs. 8772 respectively).
15. Nonetheless, both net and total rents per dwelling in Noida (Class-I urban centre)have been substantially larger than its counterpart Class-I urban centres in all four major regions. Noida has also registered the largest rent differential between the net and total rents (Rs. 26696.61 – Rs. 19122.89 = Rs. 7573.72) as compared to any other urban centre chosen for drawing samples in the state.
16. This implies that the aggregate expenses on electricity, water, sewerage, garbage and maintenance per dwelling in Noida have outnumbered all other sample urban centres in the state. On the other hand, among all the Class-II urban centres, Lucknow Cantonment Board has registered the highest net (Rs. 14534) and total (Rs. 15278) rents. All urban centres of Bundelkhandregion have generated the lowest residential dwelling rents among their respective urban classes.
17. Among type of commercial dwellings, hotel comprises about 50 percent of the total sample followed by guest houses (22.2%), home-stay (16.8%), hostels (7.6%) and remaining by other categories. Region-wise distribution of total sample shows 203 samples are from the western region and 58 from the Bundelkhand region and 140 each from Central and Eastern regions.
18. The gross rent of the commercial dwellings is the highest in the Bundelkhand region followed by the Central and the Western region. The Eastern region has the least gross rent.

19. The class I urban towns have the highest net rent values (Rs. 16638.0) followed by class II towns (RS. 14202.29), class IV towns (Rs. 10066.25) and class III towns (Rs. 7865.71).
20. Thus, prima facie the size of urban class is highly correlated with the rent values. The Spearman's correlation coefficient between rent values and urban class is found to be statistically significant at $p<0.01$ between the concerned variables. It simply implies that in higher class urban centers (means more developed places) have higher demand for commercial dwellings and therefore, higher rental charges too.
21. Hotels are the most demanded type of commercial dwellings as evident from the rent values. Not only at the state level but across the regions, the hotels have the highest net rent. At the state level hotels are followed by paying guest services. However, paying guest services is not very relevant from the perspective making a comparison with others as we have very few observations of the same. Next most demanded commercial dwelling which attracts high rent is the hostels (Rs. 10850) and guest house (Rs. 9602.58).

6.2 Policy Implications

As we see there is huge difference in the estimates based on secondary data and primary data, this gives important inputs for the policy makers. Following are the major policy implications of the study:

1. The present estimates based on the present established methodology followed by the national and the state government seems to highly underestimate the rental values of residential dwellings. Therefore, the contribution of this particular sector is not truly reflected in the state domestic product.

   Thus, there is need to devise alternative methods to find better and reliable estimates of rental value of residential dwellings. We suggest that state should devise a new survey mechanism specifically designed to meet the requirement of this sector.
2. The existing methodological framework considers rental value of residential dwellings on per dwelling basis which we find has certain conceptual issues. The

residential dwellings mainly vary in terms of their area. A two BHK residential dwelling may not have same area even in the same locality leave aside about the state.

Therefore, we strongly recommend that estimation of rental value of residential dwellings should be made on the basis of area (like per square feet or per square meter) rather than per residential dwelling. Thus, according to our study: Net Rent of residential dwelling = (per square feet (meter) net rent * average area in square feet (meter)).

3. The significant gap between rural-urban rent is well acknowledged and apparent. The study still emphasizes the area as the basis of rent estimation but with one change.

   We suggest that while calculating area in the rural areas only covered portion should be included for the purpose of rental estimation.

4. There are considerable inter-regional variations in rent. Therefore, adopting one mean value to derive state level figure for rent of residential dwellings is not the appropriate idea. Even, ignoring intra-regional variations also hampers the quality of the estimates.

   Therefore, we suggest that rent should be estimated on the basis of class-wise in urban areas that too for each region differently.

5. The commercial dwellings tend to vary in terms of size. Their rent does not get decided on the basis of area rather than on the basis of entity and additional facilities provided with it.

   Thus, we suggest that rent of commercial dwellings should be ascertained on the basis of type of commercial dwellings rather than area as we argued for residential dwellings.

6. **Commercial dwellings have also inter-regional variations. Therefore, in this case too, the estimation of rent of commercial dwellings should be made according to the type of commercial dwellings for each region differently.**

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[R]

Estimation of Rent of Dwellings (Residential and Commercial) in Urban and Rural areas in Uttar Pradesh

Sponsored by

Directorate of Economics and Statistics
Government of Uttar Pradesh
Government of India
Lucknow

Project Directors:

Dr. Animesh Roy
Dr. Nagendra Kumar Maurya

Giri Institute of Development Studies
Sector – O, Aliganj
Lucknow- 226024

Name of the field investigator	
Date of survey	
Household Number	

Dear Sir/Madam,

This is a primary survey for the Directorate of Economic and Statistics, Government of Uttar Pradesh Sponsored project titled **'Estimation of Rent of Dwellings (Residential and Commercial) in Rural/Urban areas in Uttar Pradesh'** conducted by the Giri Institute of Development Studies, Lucknow. This study aims to estimate the rental values of residential and commercial housing across rural and urban areas in UP.

We respectfully request you to kindly spare some minutes of your valuable time in providing the requisite information. We assure that your identity and the information collected from you will be kept confidential. Neither will we specifically disclose any individual, firm, organization or property linked to the information collected through this survey in the thesis or in any report or publication derived from it. We sincerely thank you for your cooperation and patience in providing necessary information, and for being agreed to be a part of this survey.

Sincerely,

Animesh Roy
NagendaKumarMaurya

[A] Descriptive identification of sample households

1.	District:
2.	Rural / Urban :
3.	Town / Village:
4.	If Urban, the class of the town/urban agglomeration: Class1: 1, 00,000& above -1 ☐ Class 2:50,000-99,999, ☐ Class 3: 20,000-49,999, ☐ Class4: 10,000-19,999, ☐ Class5: 5,000-9,999, ☐ Class 6: less than 5,000 ☐
5.	Block:
6.	Name of the informant :
7.	Name of the head of the household:

[B] Demographic details of the family members of the sample household

1. Serial No.	**2. Name**	**3. Age**	**4. Sex** *(Male-1, Female-2, Transgender-3)*	**5. Educational Qualification** *(codes)*	**6. Principal Activity Status** *(codes)*	**7. Principal industry of work** *(code)*	**8. Marital Status** *(Married-1, Unmarried-2, Divorced/ Separated/ Widows-3, Never Married-4)*	**9. Monthly Income**		**10. Commuting details**	
								Amount (Rs.)	**Average working days** (in months)	**Distance travelled** (Ink.m.)	**Time taken to cover the distance**
1											
2											
3											
4											
5											
6											
7											
8											

Codes for Block [B]

Item 5: ***Education of the family members:***

Not literate-*1,*

Literate: *Below Primary-2, Primary-3, Upper Primary/Middle-4, Secondary-5, Higher secondary-6 Diploma/Certificate Course (up to secondary)-7, Diploma/Certificate Course (Higher secondary)-8, Diploma/Certificate Course (Graduation & above)-10, Graduate-11, Post graduate & above-12*

*Item 6****: Principal Activity Status:***

Self employed-1, Regular salaried worker-2, Unpaid family worker-3, Casual wage labour-4, Unemployed-5, Non-Economic worker/Dependent (housewife/babies/elderly/student)-99, Others-9

*Item 7****: Principal industry of work:***

Agricultural, forestry and fishing-1, Mining and Quarrying-2, Manufacturing-3, Electricity, gas, steam and air conditioning supply-4, Water supply, sewerage waste management and remediation activity-5, Construction-6,Wholesale and retail trade; repair of motor vehicles and motorcycles-7, Transportation and Storage-8, Accommodation & food services-10, Information & communication-11, Financial &insurance activity-12, Real Estate activity-13, Professional, scientific and technical activity-14, Administrative and support services-15, Public administration, defense; social security-16, Education-17, Human health & social work-18, Non-Economic worker/Dependent (housewife/babies/elderly/student)-19, Others-9

[C] Household Characteristics

1.	Household type (Activity Based):		
	For rural areas*:*	{	Self-employed in non-agriculture -1, ☐ Rural labour: Agricultural labour -2, ☐ Other labour -3, ☐ Self-employed in agriculture -4, ☐ Others -9; ☐
	For urban areas*:*	{	Self-employed -1, ☐ Regular wage/salary earning -2, ☐ Casual labour -3, ☐ Others -9 ☐

2.	Religion:	Hinduism -1, ☐ Islam -2, ☐ Christianity -3, ☐ Sikhism -4, ☐ Jainism -5, ☐ Buddhism -6, ☐ Zoroastrianism -7, ☐ Others -9 ☐	
3.	Social group:	Scheduled Tribe -1, ☐ Scheduled Caste -2, ☐ Other backward class -3, ☐ Others –9 ☐	
4.	Tenurial status of dwelling:	Owner Occupied-1, ☐ Hired-2 ☐	
Questions (5-7) are applicable only for tenant:			
5.	Is (are) your document(s) verified by the owner through government agency (police)?	Yes-1 ☐ No-2 ☐	
6 (a)	Housing agreement:	Oral-1 ☐ Written-2 ☐	
(b)	If it is a written agreement, is it legally enforceable?	legally enforceable-1, ☐ No legally binding-2 ☐	
7.	Advance payment: (Tick (✓) in the box) *Yes* ☐ *No* ☐	If Yes in Q7, how much?	
		Advance for how many months?	
8.	Land possessed as on the date of survey: *(in sq.ft./bigha/sq.meter)*		

9.	Do you have the following facilities at home		
Item / Services	**Yes**	**No**	**Value** *(if applicable)*
9A. Durable goods			
☐ Computer			
☐ Television			
☐ Air cooler			
☐ Air Conditioner			
☐ Refrigerator			
☐ Smart Phone / Mobile			
☐ Motorcycle / Scooter			
☐ Cycle			
☐ Cable TV			
☐ Water Filter			
☐ Washing Machine			
☐ Almirah			
☐ Bed			
9B. Services			
☐ Health Insurance			
☐ LPG Connection			
☐ Bank Account			
☐ LIC Policy			

Codes for Q.no. 8:

Land possessed (area in hectares):1acre =0.4047 hectares, 1 hectare=10,000 square meter, 1 hectare =3.874 bigha

Area in hectares	***Codes***
Less than 0.005	*1*
0.005-0.02	*2*
0.02-0.21	*3*
0.21-0.41	*4*
0.41-1.01	*5*
1.01-2.01	*6*
2.01-3.01	*7*
3.01-4.01	*8*
4.01-6.01	*10*
6.01-8.01	*11*
Greater than equal to 8.01	*12*

[D] Particulars of living facilities			
1 (a)	Principle source of drinking water: *(record the two most often used sources of drinking water):*	Source 1:	
		Source 2:	
		Bottled water -1, Tap -2, Tube well/Hand pump -3, Well: protected -4, unprotected -5, Tank/Pond (reserved for drinking) -6, Other tank/pond -7, River/Canal/Lake -8, Harvested Rainwater -10, Others -19	
(b)	Whether availability of drinking water is sufficient from the first source throughout the year?	Yes-1 ☐ No-2 ☐	

2(a)	Access to principle source of drinking water:	Household exclusive use-1, ☐ common use of household in building-2, ☐ Neighbouhood sources-3, ☐ community sources: public source restricted to particular community-4, ☐ public source unrestricted-5, ☐ private source restricted to particular community-6, ☐ private source unrestricted-7, ☐ others-9 ☐
(b)	*If not household exclusive use in Q2 (a),* Distance to the principal source of drinking water	
3.	Water charges paid (payable) per month to the delivery agency/ organization/ office/ owner*(average charges)*	
4 (a)	Facility of bathroom for exclusive personal use (toilet and bathing place):	Yes-1, ☐ No-2 ☐
(b)	Access to bathroom if you don't have a personal one:	Common use of household in the building-1, ☐ Public/ Community use-2, ☐ Others- 9 ☐
5 (a)	Facility of latrine for exclusive personal use:	Yes-1, ☐ No-2 ☐
(b)	Access to latrine if you don't have a personal one:	Common use of household in the building-1, ☐ Public/ Community use with payment-2, ☐ Public/ Community use without payment-3, ☐ No Latrine-4, ☐ Others-9 ☐

6	(a)	Drainage arrangement:	Underground-1, ☐ Covered pucca-2, ☐ Open pucca-3, ☐ Open katcha-4, ☐ No drainage-5 ☐
	(b)	Who is responsible for drainage cleaning:	Panchayat / Municipality / Corporation -1, ☐ Residents-2, ☐ No arrangement-3, ☐ Others-9 ☐
	(c)	If not done by Panchayat / Municipality / Corporation, Charges paid for drainage cleaning:	
7(a)		Garbage collection arrangement:	Panchayat / Municipality / Corporation -1, ☐ Residents-2, ☐ No arrangement-3, ☐ Others-9 ☐
(b)		If not done by Panchayat / Municipality / Corporation, Charges for garbage collection (if any):	
8	(a)	Facility of electricity:	Yes-1, ☐ No-2 ☐
	(b)	If yes, whether you have the electricity meter:	Yes-1, ☐ No-2 ☐
	(c)	If yes, What kind:	Personal-1, ☐ Joint-2 ☐
	(d)	Charges paid for electricity: (30 days recall period)	

[E] Particulars of the dwelling unit

1.	Type of the dwelling unit:		Independent house -1, Flat -2, Others-3
2.	Type of structure of the dwelling unit:		Pucca-1, ☐ Semi-pucca-2, ☐ Katcha-3. ☐
3.	Use of house:		Residential only-1, ☐ Commercial -2, ☐ Residential cum commercial -3. ☐ Others -9 ☐
4.	Period since rented (in years):		
5.	Condition of structure of the house:		Good -1, ☐ Livable -2, ☐ Dilapidated -3 ☐
6.	Number of rooms in the dwelling	Living rooms:	
		Other rooms:	
7.	Floor area of the dwelling *(in square feet and in whole numbers)*	Living rooms:	
		Other rooms:	
		Covered Veranda:	
		Uncovered Veranda:	
		Total:*(sum of above 4 items)*	
8.	Ventilation of the dwelling unit:		Good -1, ☐ Satisfactory -2, ☐ Bad -3 ☐
9.	Number of floors:		
10.	Type of Kitchen facilities:		Separate kitchen with water tap -1, ☐ Separate kitchen without water tap -2, ☐ No separate kitchen -3, ☐ Others-9 ☐
11.	Type of floor:		Brick/lime stone/stone -1, ☐ Cement -2, ☐ Mosaic/tiles -3, ☐ Others -9 ☐

12.	Type of wall:	Mud (with/without bamboo)/unburnt brick -1, ☐ Other katcha -2, ☐ Timber -3, ☐ Brunt brick/stone/lime stone -4, ☐ Iron or other metal sheet -5, ☐ Cement/RBC/RCC -6, ☐ Other pucca -7, ☐ Others -9 ☐
13.	Type of roof:	Mud (with/without bamboo)/unburnt brick -1, ☐ Other katcha -2, ☐ Timber -3, ☐ Brunt brick/stone/lime stone -4, ☐ Iron or other metal sheet -5, ☐ Cement/RBC/RCC -6, ☐ Other puccaa -7, ☐ Others -9 ☐
14.	Housing Charges (monthly)	
	Electricity charges (monthly)	
	Water charges (monthly)	
	Drainage charges (monthly)	
	Garbage charges (monthly)	
	Others/Maintenance charges (monthly)	
	Total Monthly Rent: *(sum of above 6 items)*	

[F]Neighborhood details

Items	Distance to the nearest facilities	
	Time taken	Distance travelled (In k.m.)
Markets		
Banks/ATMs		
Bus Stops		
Hospitals		
Schools		
Colleges		
Motorable/ Main/ Metallic road (nearest)		

[G] Particulars of Repair and Maintenance for residential purposes (for the last 1 year)

Nature of Repair and Maintenance	Annual Cost (Material + Labour) Cost of maintenance during the last 365 days (Rs.)
Painting	
Plumbing	
Carpentry	
Electrical	
Mason	
Others	
Total Cost (in Rs.)	

[H] Remarks / Comments by Investigator

[C]

Estimation of Rent of Dwellings (Residential and Commercial) in Urban and Rural areas in Uttar Pradesh

Sponsored by

Directorate of Economics and Statistics
Government of Uttar Pradesh
Government of India
Lucknow

Project Directors:

Dr. Animesh Roy
Dr. Nagendra Kumar Maurya

Giri Institute of Development Studies
Sector – O, Aliganj
Lucknow- 226024

Name of the field investigator	
Date of survey	
Sample Unit Number	

Dear Sir/Madam,

This is a primary survey for the Directorate of Economic and Statistics, Government of Uttar Pradesh Sponsored project titled **Estimation of Rent of Dwellings (Residential and Co mmercial) in Rural/Urban areas in Uttar Pradesh**' conducted by the Giri Institute of Development Studies, Lucknow. This study aims to estimate the rental values of residential and commercial housing across rural and urban areas in UP.

We respectfully request you to kindly spare some minutes of your valuable time in providing the requisite information. We assure that your identity and the information collected from you will be kept confidential. Neither will we specifically disclose any individual, firm, organization or property linked to the information collected through this survey in the thesis or in any report or publication derived from it. We sincerely thank you for your cooperation and patience in providing necessary information, and for being agreed to be a part of this survey.

Sincerely,

Animesh Roy & Nagenda Kumar Maurya

[A] Descriptive identification of sample commercial unit

1.	District:
2.	Rural / Urban :
3.	Town / Village:
4.	If Urban, the class of the town/urban agglomeration: Class1: 1, 00,000 & above -1 ☐ Class 2:50,000-99,999, ☐ Class 3: 20,000-49,999, ☐ Class4: 10,000-19,999, ☐ Class5: 5,000-9,999, ☐ Class 6: less than 5,000 ☐
5.	Block:
6.	Name of the informant :
7.	Name of the owner of commercial Dwelling:

[B] Characteristics of commercial unit

1.	Type of Commercial Dwelling:	Hotel-1, ☐ Guesthouse-2, ☐ Homestay-3, ☐ Serviced Apartments-4, ☐ Hostel-5, ☐ Paying Guest Services (PG)-6, ☐ Others-9 ☐	
2.	Type of Property: *(Freehold-1,Leasehold-2)*	Freehold-1, ☐ Leasehold-2 ☐	
	If Leasehold, type of Agreement:	Oral-1, ☐ Written-2 ☐	
	Indicate the basis of the rental / lease agreement:	Monthly-1, ☐ Yearly-2, ☐ Other-3 ☐	
	For how long is the rental agreement:		
3.	Do you check references / verify identification of your tenant(s)?	Yes-1 ☐ No-2 ☐	
6a.	Advance payment for the lease/rent: (Tick (☐) in the box)	Yes-1 ☐ No-2 ☐	
6 b.	If Yes in Q6a, the period of the advance payment:	Months	Days
7.	Period since in business: *(in years)*		

[C] Particulars of facilities provided

C (i)	**If type of commercial dwellings are hotels, guesthouse, home stays and serviced apartments in Q1 in Block [B], answer [C(i)]**

1.	Access to water:	Household exclusive use-1, ☐ common use of household in building-2, ☐ Neighbour hood sources-3, ☐ community sources: public source restricted to particular community-4, ☐ public source unrestricted-5, ☐ private source restricted to particular community-6, ☐ private source unrestricted-7, ☐ others-9 ☐
	Source of water:	Bottled water -1, ☐ Tap -2, ☐ Tube well/Hand pump -3, ☐ Well: protected -4, ☐ unprotected -5, ☐ Tank/Pond (reserved for drinking) -6, ☐ Other tank/pond -7, ☐ River/Canal/Lake -8, ☐ Harvested Rainwater -10, ☐ Others -19 ☐
2.	Is there any complementary food facility:	Yes-1 ☐ No-2 ☐
	If yes, which meal:	
	Charges for food facility:	
3.	Availability of maid service, if any:	Yes-1 ☐ No-2 ☐
	Charges exclusive for maid services:	
4.	Facility of bathroom:	Personal-1, ☐ Common-2 ☐
5.	Kitchen facilities:	Personal-1, ☐ Common-2 ☐
6.	Facilities: (Tick (✓) in the box)	
	Air Conditioner Yes | No ☐ | ☐	Geyser Yes | No ☐ | ☐
	Television Yes | No ☐ | ☐	Condition of the room allotted: *Good-1* ☐ *Bad-2* ☐ *Moderate-3* ☐
	Refrigerator Yes | No ☐ | ☐	Open Space Yes | No ☐ | ☐

	Washing Machine Yes | No ☐ | ☐	Parking space Yes | No ☐ | ☐
	Car Pick and Drop Yes | No ☐ | ☐	Security services-Guard Yes | No ☐ | ☐
7.	Neighbourhood Conditions: (Tick (☐) in the box)	
	Nearness to famous tourist spots Yes | No ☐ | ☐	Availability of ATM/ Banks Yes | No ☐ | ☐
	Location close to the main city Yes | No ☐ | ☐	Hospitals Yes | No ☐ | ☐
	Availability of transport facilities Yes | No ☐ | ☐	Market place Yes | No ☐ | ☐
C(ii)	**If type of commercial dwellings are hostels and paying guest services in Q1 in Block [B], answer [C(ii)]**	
1.	Charges for electricity, if charged separately:	
2.	Access to water:	Household exclusive use-1, ☐ common use of household in building-2, ☐ Neighbouhood sources-3, ☐ community sources: public source restricted to particular community-4, ☐ public source unrestricted-5, ☐ private source restricted to particular community-6, ☐ private source unrestricted-7, ☐ others-9 ☐
	Source of water:	Bottled water -1, ☐ Tap -2, ☐ Tube well/Hand pump -3, ☐ Well: protected -4, ☐ unprotected -5, ☐ Tank/Pond (reserved for drinking) -6, ☐ Other tank/pond -7, ☐ River/Canal/Lake -8, ☐ Harvested Rainwater -10, ☐ Others -19 ☐
3.	Provision of food facility:	(Yes-1, ☐ No-2) ☐
	Charges for food facility:	
4.	Facility of bathroom:	Personal-1, ☐ Common-2 ☐
5.	Kitchen facilities:	Personal-1, ☐ Common-2 ☐

6.	Facilities: (Tick (✓) in the box)	
	Refrigerator Yes | No	Condition of the room allotted: *Good-1* ☐ *Bad-2* ☐ *Moderate-3* ☐
	Washing Machine Yes | No	Open Space Yes | No
	Geyser Yes | No	Security services-Guard Yes | No
7.	Neighbourhood Conditions: (Tick (✓) in the box)	
	Nearness to work place or educational institute Yes | No	Availability of ATM/ Banks Yes | No
	Location close to the main city Yes | No	Hospitals Yes | No
	Availability of transport facilities Yes | No	Market place Yes | No

[D] Particulars of the dwelling units

1.	Condition of structure of the commercial dwelling:	Good -1, ☐ Livable -2, ☐ Dilapidated -3 ☐
2.	How many rental units (i.e. single family units) are there in the dwelling?	
	Do any of the units share any common areas? *(Like Kitchen and/or washroom?)*	Yes -1, ☐ No-2 ☐
3.	Area occupied for commercial activity: *(in sq. ft./ sq.m.)*	
4.	Ventilation of the dwelling unit:	Good -1, ☐ Satisfactory -2, ☐ Bad -3 ☐
5.	Number of floors:	
6.	Wall type:	Mud (with/without bamboo)/unburnt brick -1, ☐ Other katcha -2, ☐ Timber -3, ☐ Brunt brick/stone/lime stone -4, ☐ Iron or other metal sheet -5, ☐ Cement/RBC/RCC -6, ☐ Other pucca -7, ☐ Others -9 ☐

7.	Roof type:	Mud (with/without bamboo)/unburnt brick -1, ☐ Other katcha -2, ☐ Timber -3, ☐ Brunt brick/stone/lime stone -4, ☐ Iron or other metal sheet -5, ☐ Cement/RBC/RCC -6, ☐ Other pucca -7, ☐ Others -9 ☐
8.	Floor type:	rick/lime stone/stone -1, ☐ Cement -2, ☐ Mosaic/tiles -3, ☐ others -9 ☐
9.	Person responsible for dwelling maintenance:	Tenant-1, ☐ Landlord-2 ☐
10.	**Total Charges/Rent:** *(30 days)*	
11.	Management Costs: *(Advertising, legal, accounting, etc.)*	
	Gas:	
	Electricity charges:	
	Water charges:	
	Total Supplies & Material charges : *(maintenance & repair, janitor, garbage pickup)*	
	Salary: *(including benefits)*	
	Net Income:	

[E] Particulars of Repair & Maintenance

Nature of Repair and Maintenance	**Annual Cost (Material + Labour)** **Cost of maintenance during the last 365 days (Rs.)**
Painting	
Plumbing	
Carpentry	
Electrical	
Mason	
Others	
Total Cost (in Rs.)	

[F] Remarks / Comments by the Field Investigator

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