

# A study on the behavior of rental cost of residential buildings with the increasing student population in the Bokaro Steel City

**Sweta Kumari**

Research Scholar, DOMS, IIT (ISM), Dhanbad

## **Abstract**

The rental cost of a residential place to study is an essential component of comprehending the significance of the student population in the Bokaro urban area. Because Bokaro is an industrialized city in India, it is a viable option for students to study there. Students travel from all over India to attend a highly organized and well-planned educational environment. This wide range of students directly impacts the rental margin in a residential setting. The rental value is determined by a variety of factors and market factors. This analysis demonstrates how an increasing student population affects housing rental costs. This research also considers student preferences, the educational environment, society, institutions, and connectivity. Rent prices for a large number of students from all over India are tracked every year. Here, rent margins are primarily determined by the student population or other factors. The number of students in our developing country is growing. Students are moving to cities for better education and better facilities. One of them is Bokaro Steel City. This city offers first-rate education from prestigious institutions. As a result, students from all over India come to study here, and the student population is directly affected by rental costs in Bokaro residential areas.

**Keywords:** Residential, Rental value, Students, Urban, Residential buildings

## **Introduction:**

The cost of renting a student dormitory is related to various components and different facilities. This strong choice can be justified by several political, service, and environmental considerations. Bokaro Steel City, a multi-luxury urban area, is located in the Bokaro urban area. The availability of rentable space, the quality of the infrastructure, the variety of amenities, the annual growth in the number of students, the availability of commercial space, the quality of communication, and the diversity of educational hubs all influence the cost of rent in this location. This city has excellent traffic service, clean roads and areas, high street facilities, train connectivity, power supply, minimal pollution, and educational institutions ranging from primary to multiple types. The significant number of students in this area can be attributed to the high quality of the educational system and the living facilities. A significant number of students from neighboring states travel here every year. Students who attend the university year after year typically hunt for a rented apartment.

The cost of renting a place in another city is typically relatively high, which is why the student population finds it so handy. This study looks into several different variables about the cost of renting in Bokaro based on the student population.

## **Significance of the study:**

Andriyanova et al. (2019) stated that this study is a research work, experimentation, or analysis of the behavior of rental cost in Bokaro Steel City with a high student population. This analysis covered the whole environment of the living facility in Bokaro, the rental cost in a residential place, educational facilities, society as well as good service of the health sector. Rental cost study is important in Bokaro to get clear information about living costs, living facilities, connectivity by rail and street, or another. This analysis clearly that how rental costs going to increase day by day, and how rental costs fix between the high population and the rental sector (Embaye

et al. 2021). According to Sapkota et al., this is a process of maintaining a good residential facility for a student along with rental cost fixing. This study is a planning method of understanding and fixing the rental price of a residential building or student dormitory based on the student population.

### **The objective of the study:**

Ghasemof et al. (2021) emphasized that this analysis is fundamental for knowing how the student population fixed many rental costs in urban areas like Bokaro. And how much does this study need to gather information about residential places, rental costs, and facilities for students who want to move into Bokaro ( Salkuti et al. 2019). The objective of this study is classified below-

- Understanding educational environment facilities in urban area Bokaro.
- Identifying educational culture and society in Bokaro.
- How practicable is a well-planned city for student diversity?
- How fixing rental costs in Bokaro for a residential place.
- The behavior of a huge student population for rental margin fixing.
- To analyze the impact of the increasing student population to set rental costs.

### **Literature review:**

#### **Conception about rent:**

Rent is a payment relationship that exists between the landlord and the paying guest. The landlord provides a living facility for a specific fee, or the guest uses a residential facility by paying that fee or rent.

#### **Rental value/ cost:**

This variable margin is based on several factors (Embaye et al., 2021). The market situation determines the rental cost of an area, such as urban or semi-urban. At the same time, the rental value is a conditional or payable sum determined by market competition and landlord margin. This is a reasonable cost set by the landlord for business or other purposes. Aside from that, rental costs are affected by market competition. If the paying guest/student population is high, so is the demand for housing. According to the market function, rent is fixed by the maximum value of rent ( 2021).

#### **Rental value basis on high student population:**

According to Hu et al. (2019), the rental rate is the value of the amount that is payable, and various factors determine it. The rental value is based on the high student population, which means the basis of location or environment can be determined. Landlords set rent based on various factors, including the location of the rental area, the facilities, the level of market competition, the rental unit, and other factors. For all these reasons, a high or high student population is one of the major causes of determining rental margin. According to Cui (2018), the presence of a sizable student population in an urban or semi-urban area can influence the cost of the rent. Students renting housing from private landlords is a lucrative industry for certain property owners. The high population of students results in a good return on investment for the landlord. In all seriousness, urban areas see an enormous influx of new students every year to further their education. By providing proper educational facilities, landlords give house rent to students with a high margin. Student populations are becoming more diverse daily, which typically results in a premium being placed on the rent values of student housing on the market.

#### **Rental cost in Bokaro:**

Bokaro is a multi-functional city with a major educational center. Jharkhand's commercial center, where a wide range of educational institutions has sprung up. Every academic level is represented, from pre-kindergarten to post-baccalaureate. With this attractive education system and calm study atmosphere, students from all over the world come to Bokaro each year to complete their education. Students are pursuing degrees from all around

India. It's a big struggle to find housing for students from such a wide range of backgrounds in Bokaro. This open market competition fixes the value of student rental housing. Analysis of rental costs for a residential property can be a difficult task.

However, landlords can set rental values by providing amenities such as a room, electricity, food, and so on. Landlords in Bokaro can set their profit margins through this method. The student population is also a significant factor in determining the cost of renting a home. Because of the high demand for student housing, a decent location, and other factors, the rent for a Bokaro apartment tends to be quite expensive in the city.

### **Methodology:**

The location of this study is in one of India's most industrialized regions, the state of Jharkhand, at Bokaro steel city, 23.6693° north, 86.1511° east. A large student population or student variety can impact the cost of renting a home in the industrial region of Bokaro, according to this study (Vrbka et al. 2019). The student populations impact the rental market in several ways. What is the primary driver of student diversity, and what factors are critical to maintaining a well-organized student environment? It is clear from the preceding analysis that the impact of student population or variety on the rental cost of a residential palace in Bokaro Steel City is well understood. The study's methodology was comprised of several components (Astrakhantseva et al 2019). These are described below:

### **Design of the sample:**

Sampling design is one of the most important aspects of the methodology. Essentially, it's like a presentation or a strategy the researchers put together. Taking two separate samples of the design in different places.

- (1) Non-probability sampling design
- (2) Probability sampling design

Probability sampling designs parted into four types are as follows

- (1) Systematic sampling
- (2) Cluster sampling
- (3) Stratified sampling
- (4) Simple random sampling.

### **Data collection techniques:**

Another component of the methodology is the collection of data. A researcher's use of data and where it came from can be seen in this component of the technique. There are two parts to data collection as well.

- (1) Primary data
- (2) Secondary data

Primary data is data that originates from a direct source, such as a company. Information gleaned from one's experiments, surveys, interviews, or other sources could also be considered. This is the most useful raw data for the specific analysis or identification of research validity. Secondary data is an important part of an investigation. Journals, magazines, newspapers, books and any other records or study material can be used as secondary data sources. Research and analysis benefit from the inclusion of both primary and secondary data. It aids in the improvement of research methods and analysis processes.

### **Results of Data**

Bokaro, formerly known as an industrial center, has slowly evolved into a center for higher learning. Every year, the student population grows by around ten percent. There are therefore a large number of rooms or shared rooms with multiple beds in a single facility available on the local house rental market for paying guests to choose from. There isn't much of an alternative for the students. As a result, a monopoly was easily established in that particular industry (Apurva 2020). In certain cases, families have combined two bedrooms to generate more revenue. Hostel systems are being offered by private organizations to meet the increased demand for

rooms. These hostels are established close to the colleges to draw in more students. Free Wi-Fi, coffee shops, stationery shops, and shopping malls are just some of the additional amenities available at these hostels.

Respondent	Problems
Warden	Financial aid received is not sufficient
Warden	Inverter not working, Broken fridge door, funds not sufficient and no sufficient water supply
Warden	No sufficient water supply The rented hostel building is too small
Warden	Sickness among the hostellers Hostel building is rented and has less capacity
Warden	Lack of fire wood /cooking gas , insufficient water improper toilet and insufficient fund to purchase rice
Warden	Hostel building is bad, doors, windows cannot be closed properly, during rain comes in ,the beds and mattress are very old and needs to be replaced
Warden	Security
Warden	Sickness among the hostellers/Health issues the kitchen,bathroom and visitors room needs renovation

Table 1: Despite high rent problems faced by the students in hostels

(Source: Apurva 2020)

Consequently, rents in residential buildings are steadily rising in this situation. According to Rath (2018), when the number of students in the Bokaro Steel City area grows, rent for single room occupants rises by 5% annually, while rent for shared room occupants rises by 3% annually. Private colleges are now partnering with residential franchises to house their students in the latter's private hostels. However, they charge the latter's students a higher hostel price due to this (Naveen et al.2018).

	<i>Academic Proximity</i>	<i>Students Discipline</i>	<i>Maintenance Cost</i>	<i>Security</i>
<i>Traditional On campus</i>	Student can easily reach academic facilities and services	Can be controlled by the school	High maintenance cost	Adequate security to the students is guaranteed
<i>Off-campus school managed</i>	Students may not be easily assessable to academic facilities and services	May be control by the school	Very high maintenance cost	Security to the students may be guaranteed
<i>Off campus leased</i>	Students may not be easily assessable to academic facilities and services	May be control by the school	Very low, maintenance cost	Security to the students may somehow be guaranteed
<i>Off-campus Private</i>	Students cannot be assessable to academic facilities and service	Cannot be control by the school	No maintenance cost	Student security cannot be guaranteed

Table 2: Students in various campuses to get their academic facilities and maintenance cost varieties

(Source: Naveen et al.2018)

In other circumstances, the universities have also offered top students the opportunity to be enabled with better-staying chances with additional advantages in the same package to improve their overall performance. Similarly, the entire student body is deprived of a substantial amount of resources because the location is not normally stocked with them.

Number of students in room hostel	Frequency	Percent	Cumulative Percent
2 students per room	67	37.2	37.2
3-4 students per room	112	62.2	99.4
5-6 students per room	1	0.6	100.0
7-8 students per room	-	-	
More than 8 students per room	-	-	
Total	180	100.0	

Table 3: Percentage count of Students staying in a single room in hostels.

(Source: Author’s fieldwork, 2017)

Satisfaction Criteria	SS	S	N	D	SD	Mean	Level
Electricity/Power supply	101	93	35	11	13	4.02	Satisfied
Fees paid for accommodation	49	109	49	27	19	3.56	Satisfied
Transport system from hostel to classrooms	60	95	49	22	27	3.55	Satisfied
Water supply	38	84	71	27	33	3.26	Neutral
Privacy of the hostel	22	57	76	60	38	2.86	Neutral
Number of occupants in a room	35	66	35	57	60	2.84	Neutral
Cleanliness of the hostels	25	68	38	46	76	2.68	Neutral
Noise levels of the hostel	22	54	54	63	60	2.66	Neutral
Availability of facilities serving the hostel	8	46	46	101	52	2.43	Dissatisfied
Internet facility	16	44	52	63	78	2.43	Dissatisfied
State of the hostel facilities	16	33	54	76	74	2.37	Dissatisfied
Response time to repairs and maintenance	2	38	63	76	74	2.28	Dissatisfied
Average Satisfaction level						2.91	Neutral

The scale used for rating is represented as follows: SS, strongly satisfied, (5); S, satisfied, (4); N, neutral, (3); D, dissatisfied, (2); SD, strongly dissatisfied, (1)

Table 4: Satisfaction Criteria of students provided by the hostels.

(Source: Barman 2019)

Instead of supplying these necessities, the housing societies' owners strive to charge more rent to raise their revenue. Some residential buildings demand a significant maintenance fee for each student, even if it isn't essential. In particular, according to Barman (2019), paid guest service providers always charge the students a premium electricity rate. **As a result, they all have to pay an extra \$10 every month to call that place home. Students are charged additional fees or deceived by the owners in every industry.**

### Analysis of the Data

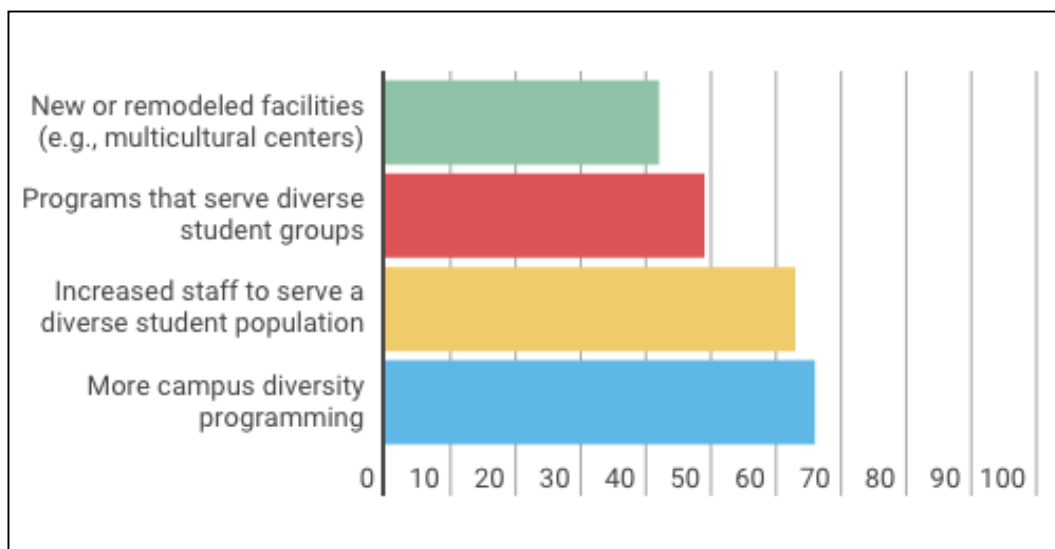
After analyzing the data, a large number of students are either residing in adjacent homes as guests or in residential complexes where certain organizations execute their activities. The percentage of those who plan to stay in both locations is 51% to 49%. (Pande. and Kumar 2021).



Graph1: Percentage of students staying in Hostels and as paying guests.

(Source: Pande. and Kumar 2021)

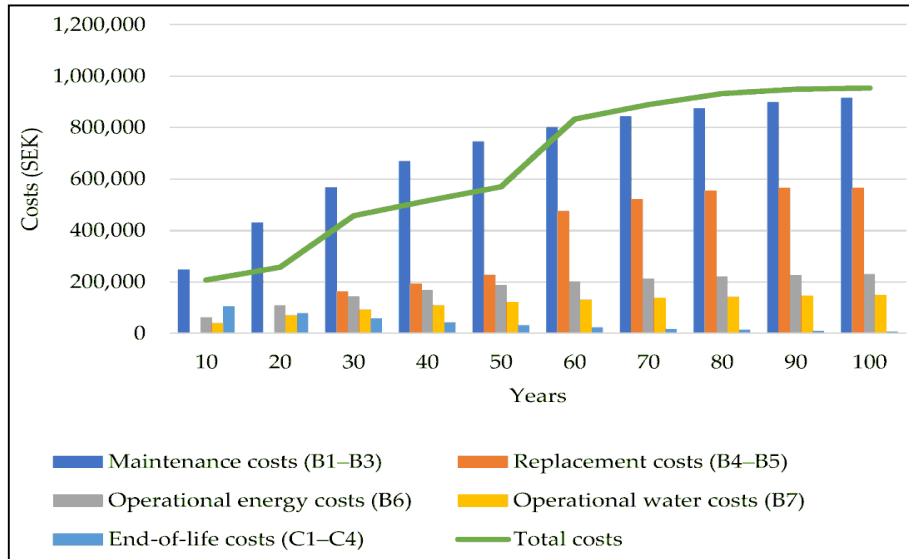
In addition, it was discovered that twenty percent of students opt to stay in a hostel because of its advantageous location (GOPIKA 2019). The majority of the hostels are found in proximity to one or more educational institutions. As a consequence of this, it is more convenient to drive to the college as opposed to staying as a paying guest at a location that is further away and requiring you to travel a distance of two to three kilometers to get there.



Graph 2: Initiatives taken by hostels for the betterment of students.

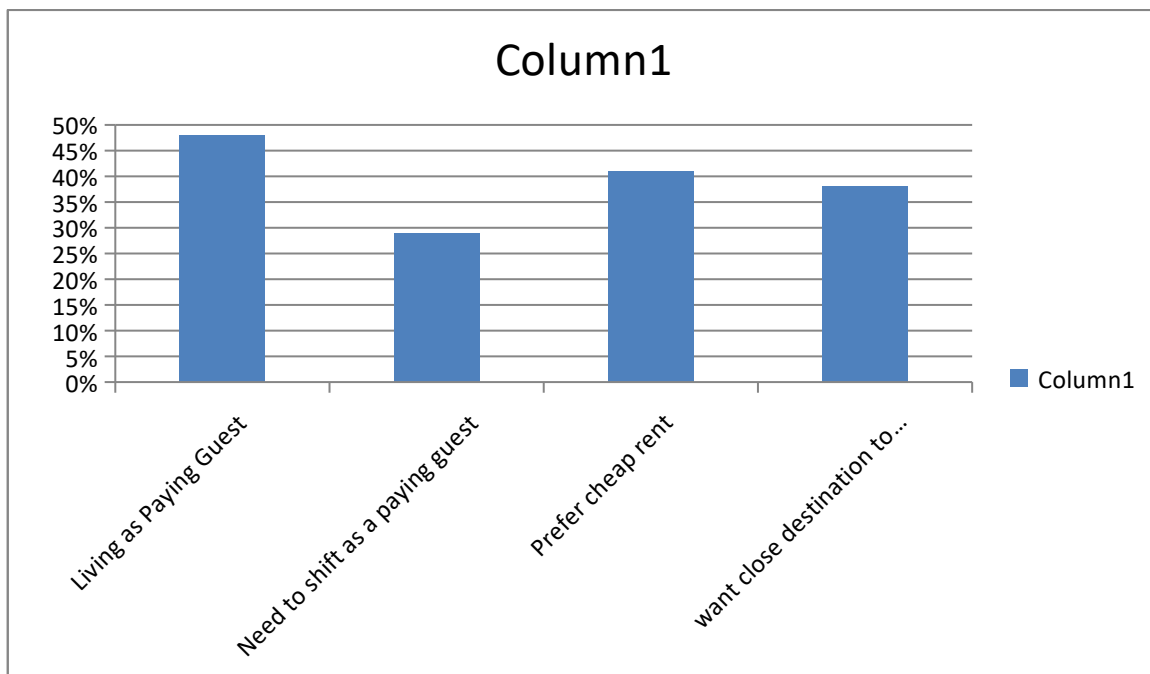
(Source: GOPIKA 2019)

According to RATH ( 2018) that, 48% of students live as paying guests, and 29% of hostel stayers need to shift as paying guests due to the cheap rate of paying guest stays. While the maximum percentages of students prefer to stay balanced between the cost of staying and distance from the educational institution. Approximate 41 % of students prefer cheap rent, whereas 38% prefer a close destination to the educational institution. Although the more affordable rate is much preferred rather 88% of students prefer single rooms to stay independently (Bhushan et al.2020). As this is costly, they compromise to stay with one more individual by sharing the rent close to the college to get close access.



Graph 3: Costing ratio of hostels in various liabilities within a phrase of 10 years.  
(Source: Bhushan et al.2020)

According to the findings of the study, forty-eight percent of students place a high premium on having an affordable rental value, and thirty-two percent of students desire to travel more to their designated college. The students also stated that the additional facilities given by the hostels, such as coffee shops, theatres, and restaurants (except free internet), are required but are not a decisive factor for them when selecting a place to stay.



Graph 4: Various demands by students while staying as a paying guests.  
(Source: Created by Author 2022)

## Discussions

After doing an in-depth analysis of the aforementioned research, it has become abundantly evident that the ever-increasing student population is directly responsible for the rising rents in residential buildings, which poses a risk to the students who now reside in those buildings. In many instances, different kinds of requirements are being posed by a wide range of student populations (Lunn 2018). The majority of them needed to find housing close to their schools so that they could reduce the amount of money they spent on transportation to get to class. Even if they have to commute to their schools, there is still a subset of the student population that is interested in staying as paying guests at reduced rates. There are a certain number of students who wish to move into hostels as paying guests, whereas only a very small percentage of students wish to move out of hostels as paying guests (Thomas 2021). A significant number of students have their hearts set on staying in a single room, but due to the low cost of shared accommodations, they simply cannot afford it. All of these shifts in mentality are solely attributable to the fact that the vast majority of college students are looking for affordable housing that is also situated in an area from which they can easily commute to their schools at a reduced cost, while at the same time ensuring that their rent is as low as possible. According to Priya (2020), the main reason students have to make all of these requests is that the rent in residential complexes in Bokaro is going up. Students are easily arriving to admitted to universities but the residential complexes took it as a major additional income source. As is common knowledge, Bokaro is a well-connected location because of the prominence of its steel factories. The market for student housing rentals is currently attempting to take into account the progress being made in the city (Akbar 2018). Along with the government, the institutions are demonstrating a willingness in making substantial investments in significant projects to ensure that the city of Bokaro continues to advance. Every step that is made to improve the city is geared toward attracting an ever-increasing number of people to Bokaro.

## Conclusions

Following the completion of this research and the use of many different approaches, the conclusions that have arisen are that Bokaro is steadily adding another sector. It used to be just an industrial neighborhood, but now it's also turning into an educational center. The rapid expansion of educational institutions is adding gasoline to the fire that is the intense demand for places for students to stay. The owners of houses and residential buildings that are rented to students are striving to increase their profits by increasing the amount of rent they charge on an annual basis to accommodate the continuously expanding student population. However, despite this, all of the kids are still able to remain there without having to compromise their personal space. The majority of owners of hostels and other paying guest services are providing additional amenities for their residents, which is one reason why those residents continue to stay for extended periods. The monthly rent payments are not decreasing in any way, and this continues to be the case. In many hostels, the rooms are crammed with too many students, and the hostel staff does not appear to care about the students' health, hygiene, or safety. Students, despite all of these challenges, are still attempting to make do with this expensive rent by relocating to a location that is close to the college to cut down on the cost of transportation. To attract a larger number of students, educational institutions are collaborating with the government to construct residential buildings on campus. As was indicated previously, every sector is working hard to provide the children with the necessary resources regularly.

## Recommendation

The rental housing buildings need to be gone under any regulatory authority so that students get their ideal room stay along with all the facilities. The government needs to cooperate with the local colleges to develop the area and look at the pruderies done with the students in residential buildings.

- The government should provide more and more government housing so students can get more staying places at a lower rate. Most of the students coming to Bokaro are young and non-adults, so they should get a healthy environment of study instead of a fear of giving more money to various liabilities.
- The residential buildings can be built in a public-private joint venture, where the government will provide the land at a long-term lease or an agreement of subsidized rent for the students. These projects can be devolved by the government's initiative or by private organizations with different stakes.
- One other thing that can be done is to hand over the management of a home that has a paying guest service to a particular nonprofit organization.



- It will take care of the rate charges the property owners collect from their tenants. Instead, those residences will receive a property tax credit, and they will be able to develop additional rooms to give away as rent in this manner.

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