

Commuters in Aligarh City: A Socio-Economic and Structural Analysis

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ABSTRACT: *Commuting has become an issue of much concern not only in developed countries but also in developing countries like India as a result of increasing volume of commuters posing a number of problems in cities. Therefore, in the present study an attempt has been made to study the various facets of commuting with special emphasis on the socio-economic characteristics of commuters, causes of commuting, problems faced by them and impacts of this regular journey on their lives. The study is based on primary data generated through the field survey in Aligarh city carried out during the months of August and September, 2015. For data collection, 170 commuters were randomly selected from various places in the Aligarh city. For the collection of data the selected commuters were interviewed on the basis of detailed questionnaire prepared for the purpose. The overall analysis of the study shows that most of commuters belong to working age-group (19-49) and the proportion of male commuters (83.75 percent) is higher as compared to female commuters (16.25). The 72.75 percent of the commuters were from rural areas whereas only 27.25 percent from urban areas. The main socio-economic causes of commuting are lack of job opportunities, small size of land holdings, low wages, seasonal and arduous nature of work, arduous nature of work, and services at the place of origin while high cost of land, rising house rent and unaffordable living in Aligarh city (destination) compelled them to return at their place of origin on daily basis.*

Keywords: *Commuters, Commuting, Socio-Economic, Unemployment, poverty, Aligarh City*

I. INTRODUCTION

Out of various types of movements, commuting is a short-term and reversible form of movement and repetitive in nature. It is a circular movement over a day. Simply it can be defined as the regular travel between one's place of residence and place of work. In this way, a commuter is a person who travels on regular basis to work. According to **Heritage Dictionary (2003)** "A commuter is a one that travels regularly from one place to another as from suburbs to city back." while in words of **Colling English Dictionary (2009)** "Commuter is a person who travels to work over and appreciable distance, usually from the suburb to the centre of city."

Commuting is a new dimension of research in the geography of mobility. With the improvement of accessibility and connectivity, the volume of commuting is increasing rapidly mainly in the cities of developing countries of the world consequently, the number of commuters is increasing day by day. There are numerous reasons behind this rapid growth of commuters starting from joblessness and lack of employment opportunities at the place of origin to the unaffordable housing and price rising land at the place of destination. Although, now days India's economy is improving and the number of people living below poverty line is declining day by day but still there is acute problem of unemployment and poverty due to large size of population. The condition of people especially living in rural areas is more pathetic, where they are suffering from many difficulties, such as lack of employment opportunities, low per capita income, decreasing size of landholdings under the law of inheritance, poor medical and health facilities, these poor people are least able to meet basic requirements of their dependents. In order to get rid of such difficulties, thus, these rural poor people start moving towards the cities in search of earning sources. But with the continued growth of migrants in cities, housing becomes unaffordable for the low and middle income working people. It becomes difficult for them to adjust in cities on account of high cost residence and living. Therefore they prefer regular travelling between the place of dwelling and place of work, instead of staying permanently in the cities. With increase in the rate of industrialization and urbanization, the connectivity of cities with their hinterland has improved and the volume of commuting to the cities is increasing day by day.

Commuting is a complex phenomenon. The act of commuting is governed by not only one element but there are a number of factors that determine the pattern of commuting such as demographic (age, sex, household size), socio-cultural (level of education, level of urbanization, cultural background, technical knowledge, etc.) economic (nature of work, occupation, level of income), infrastructure (accessibility and connectivity) and geographic (distance, topography, season, etc.) (**B.Mondal and G.Samant, 2015**). Age is a significant parameter of commuting. It is almost universal that most of commuters belong to working age group. It is because aged people stay at home and look after families and on-farm activities. (**Mahbub, 1991**). Men commute more than that of women. Among women commuters the probability of long distance commuting of single women with

dependent child is lowered by 20 percent than other women (**Champion et al, 2009**). A job characteristic is another important determinant. In developed countries, people with high salaried job commute long distance as they do not get jobs locally as per their qualification (**Champion et al; 2009**). Rural people commute to urban areas even for low skill elementary jobs as the rural economy is highly pressurized with over population and low per capita income.

Although, geographers and social scientists have started research on mobility from very early days but the focus was more on large scale and irreversible forms of movement. The major thrusts of their research were migration, transhumance and diaspora. But the short-term, local and reversible movements such as commuting were neglected. But recently, the increasing volume of commuting in the cities caused by enhancement in connectivity and accessibility and compulsion of rural jobless people to face the cities for work, emerged a topic of much concern and it has added new dimension of research in studies of mobility. Therefore, it is the need of the hour to make micro level research work about commuters for studying various facts by analyzing the socio-economic characteristics of commuters, causes of commuting, problems faced by commuters and impacts of commuting on the overall life of commuters and its repercussions at the places of origin and destination of commuters.

II. AIMS AND OBJECTIVE

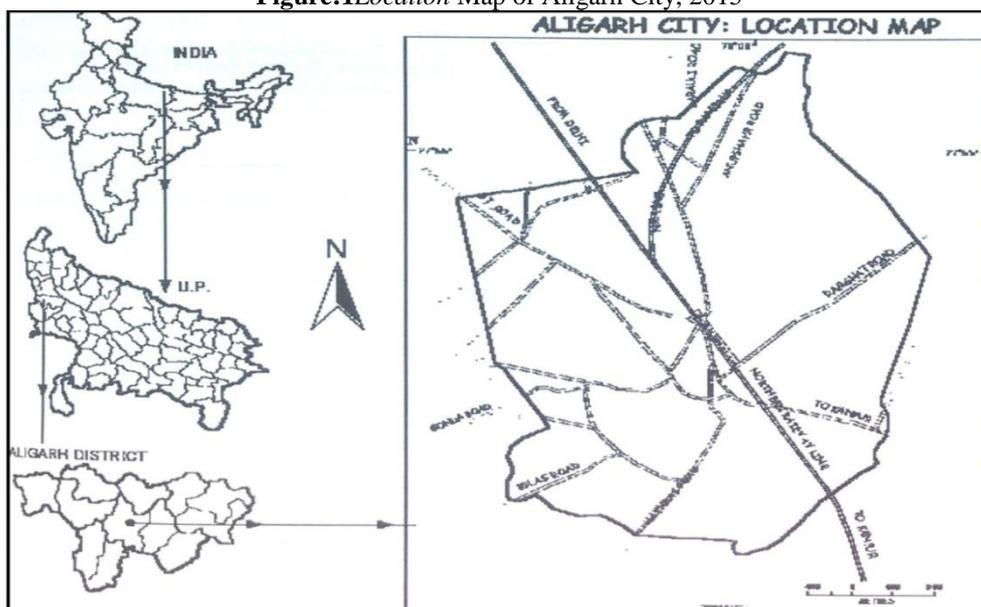
The study aims to accomplish the following objectives:

- (i) To analysis the socio-economic characteristics of commuters in Aligarh City.
- (ii) To inspect the main causes of commuting.
- (iii) To investigate the problems faced by commuters.
- (iv) To suggest some probable suggestions to overcome their problems.

III. THE STUDY AREA

Aligarh, a medium size city of western Uttar Pradesh, has been selected for present study. The geographical location of Aligarh city lies between 27°52'N to 27°56'N latitudes and 78°3'E to 78°6'E longitudes. Aligarh city covers an area of 36.10 square km. Total population of Aligarh city as per census 2011 is 8,74,408 out of which, 52.80 percent are males while 47.19 percent are females. The sex ratio of city is 894 females per 1000 males, whereas, the child sex ratio is 885. The literacy rate in the city is 68.52percent. While literacy of male and female is 73.53 percent and 62.93 percent respectively. The area selected for the present study is well connected with its hinterland by both road and rail ways. The famous Grand Trunk passes through the city and many of Highways are well connected to Aligarh such as- NH91, NH93 and Yamuna Expressway. Besides, Aligarh is an important center of Uttar Pradesh and is mostly famous for its lock industry. The famous Aligarh Muslim University is also situated here. Thus, being an industrial educational and administrative city of Uttar Pradesh it provides the sources of employment for the people particularly belonging to its surroundings rural areas. As the level of industrialization, urbanization and education and infrastructural facilities is improving, in the city the rate of commuting is also increasing very fast in the city.

Figure:1 Location Map of Aligarh City, 2015



Source: Nagar Nigam Aligarh, 2015.

IV. DATA BASE AND METHODOLOGY

The present study is exclusively based on the primary sources of data as the secondary data has not existed on commuting particularly on such a small city like Aligarh. The data has been generated through the comprehensive field survey in Aligarh city, carried out during months of October and November, 2015. For the purpose of data collection regarding commuters' socio-economic characteristics, causes of commuting and problems faced by them, an individual interview was held to the respondents through the well-structured questionnaire. In present study, through the random sampling technique 160 individuals have been interviewed on the possible places where the commuters might be found in abundant such as railway station, bus stands, roads, markets, labor markets, working places, etc. However, the sampled respondents include only those commuters who travelled to Aligarh city for work excluding the persons who came to the city for the purpose of education, shopping and household trips. A pilot survey in Aligarh was carried out during the month of July, 2015 to find out the places of entry of commuters in Aligarh city, suitable places of their interview and to know about the months when volume of commuters especially of agricultural landless laborers, marginal and small farmers from rural areas during agriculture slack seasons is the maximum. To record the number of commuters, three periods of time in a day early morning (6:00 Am to 9:00Am), evening (5:00 Pm to 8:00 Pm) and working hours (8:00 Am to 9:00 pm) were selected. After the field work was over, the data collected by using individual slips were scrutinized and processed into tabular form according to the requirement of the various aspects of the study. The places where commuters were interviewed and the number of commuters interviewed at these places have been given in Table-I.

Table I: Distribution of Places of Interview and Number of Commuters Interviewed at these Places in Aligarh City, 2015

Places of Interview	Number of Commuters interviewed	Percentage
Railway station	25	15.62
G.T road	22	13.75
Ramghat road	8	5.00
Anoopshahar road	25	15.62
Mathura road	8	5.00
Old Bus stand	15	9.38
Masoodabad Bus Stand	12	7.50
Chharra Bus Stand	15	9.37
Jamalpur	11	6.87
Dodhpur	10	6.25
Katpula Bridge	3	1.87
Amir Nisha	6	3.75
Total	160	100

Source: Based on field survey, 2015.

V. RESULT AND DISCUSSION

Sex composition

Table-II provides the information about the sex-composition of commuters. The table depicts that out of total selected commuters 83.75 percent were males whereas only 16.25 percent females. It may have been due to the stay of females at home to perform family responsibilities and their preference to work locally instead of travelling on regular basis. Moreover like the long-term and irreversible movements such as- migration, this short-term and reversible movement is also age and sex selective. It is because males travel to the cities in search of work when they become unable to find the sources of earning to meet their basic needs and to support their dependents at their places of residence. Whereas old-aged and females stay at home, they look after families and on-farm activities.

Table II:Sex-Composition of Commuters in Aligarh City, 2015

Sex-composition	Percent
Male	83.75
Female	16.25
Total	100

Source: Based on field survey, 2015

Age-Structure

Age is one of the significant factors governing the act of commuting. It is almost universal that most of the commuters belong to working age-group i.e. 25-60 years age (**champion et al, 2009; Partridge, 2010; Erickson, 2011; Chandrasekhar, 2011** ;). The data contained in Table-III on the age-structure of commuters show that the highest proportion of commuters, (67.49 percent) is in 21-40 age-group. After 40 years of age, the declining trend in proportion of commuters in various age-groups has been recorded; their percentages in age-group 41-50, 51-60 and above 60 has been registered 11.87 percent, 6.25 percent and 2.62 percent respectively.

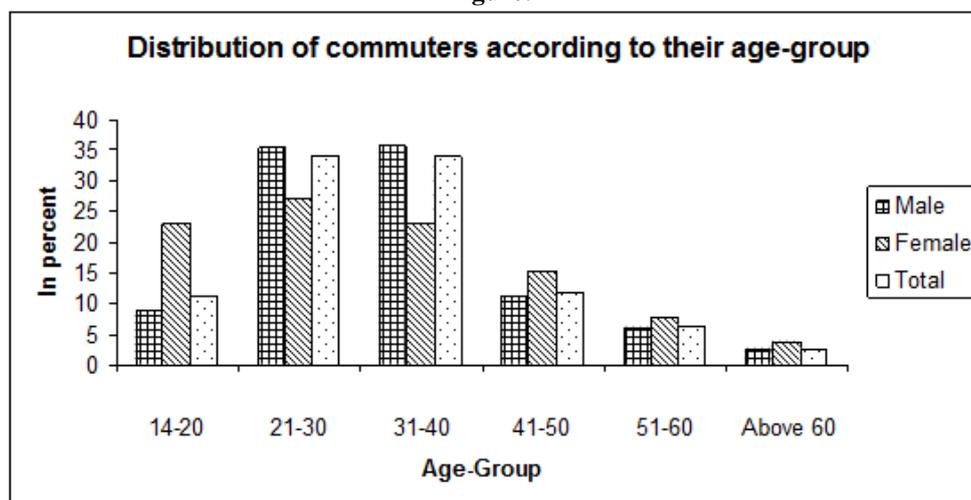
The sex-wise breakup in Table-III shows that the percent of female commuters in age-group 14-20 exceeds (23.07 percent) that of males (8.98 percent), while in the age groups 21-30 and 31-40 the reverse trend has been witnessed. The percentage of male and female population in age-group 21-30 is 35.47 percent and 26.92 percent and in the age-group of 31-40 the respective figures have been recorded 35.82 percent 23.07 percent. The proportion of females in age-groups of 41-50 and 51-60 and above 60 again exceeds that of males their places of residence.

Table IIIAge-Structure of Commuters in Aligarh City, 2015

Age-Group	Male	Female	Total
14-20	8.98	23.07	11.29
21-30	35.47	26.92	33.94
31-40	35.82	23.07	33.95
41-50	11.19	15.38	11.87
51-60	5.97	7.69	6.25
Above 60	2.50	3.84	2.62
Total	100	100	100

Source: Based on field survey

Figure:2



Marital Status and Religious Composition:

The marital status of selected commuters has been given in Table-IV. An examination of data contained in **table-IV** reveals that 68.75 percent of all commuters were married and 23.75 percent unmarried while the remaining proportion of commuters (7.50 percent) comprised of widowed, separated or divorced. The further gender wise analysis of marital status of commuters depicts that among the females of 46.15 percent were married and 38.46 percent unmarried, while, among males the respective figures were found 73.13 percent and 20.89 percent. However, ratio of female commuters (15.38) in the category of widowers, separated or divorced exceeded that of male commuters (5.97 percent).

Table IV Marital Status of Commuters in Aligarh City, 2015

Marital Status	Male	Female	Total
Married	73.13	46.15	68.75
Unmarried	20.89	38.46	23.75
W/S/D	5.97	15.38	7.50
Total	100	100	100

Source: Based on field survey, 2015

*W=widowed, S=separated, D=divorced

The religious break-up of commuters is set out in Table V. The Table V shows that the three-fourth (77.50) of commuters were Hindus and one-fifth (20.00) Muslims whereas the rest (2.98 percent) belonged to other religions. However Hindu male and female population in total commuters has been registered 76.11 and 84.61 percent respectively, whereas among Muslims the respective figures have been 20.89 percent and 15.39 percent. There was not witnessed even a single woman belonging to the category of other religions.

Table V Religious Composition of Commuters in Aligarh City, 2015

Religions	Male	Female	Total
Hindu	76.11	84.61	77.50
Muslim	20.89	15.39	20.00
Others	2.98	-	2.50
Total	100	100	100

Source: Based on field survey, 2015

Educational Status:

Education is one of the significant parameters of commuting. The level of education not only determines the commuters' occupation at the place of destination but also changes the purposes of commuting. Most of adults from rural areas travel regularly to the cities only to get education due to the lack of educational facilities in their localities. Moreover, the commuters, being highly educated, move towards the cities only to seek the jobs as per their qualification. **Table-VI** provides the information about commuters' educational status. The data given in Table- 6 show that out of total commuters 34.37percentwere illiterate and 65.63 percent literate. Moreover Out of total commuters, 21.25 percent got education up to primary level, 7.49 percent up to intermediate, 14.35 percent up to graduation and 7.50 percent up to post graduation, whereas the rest (4.37percent) comprised of diploma, professional and technical degree holdersetc. It would be seen from the Table-6 that the ratio of female commuters in categories of illiterate, and those who got education up to primary and secondary levels is higher than male commuters. The reverse trend has been observed in the senior secondary and graduation level of education in which indices for males are higher than females. However, not even a single female commuter has been reported in the category of post-graduation and professional levels of education.

Table VI Educational Status of Commuters in Aligarh City, 2015

Educational Status	Male	Female	Total
Illiterate	29.85	36.36	34.37
Primary	21.64	27.27	21.25
Secondary	8.20	18.18	7.49
Senior Secondary	11.19	9.09	10.62
Graduation	16.41	9.09	14.37
Post-Graduation	7.46	-	7.50
Others*	5.22	-	4.37
Total	100	100	100

Source: Based on field survey, 2015

*It includes diploma, technical and professional degree holders.

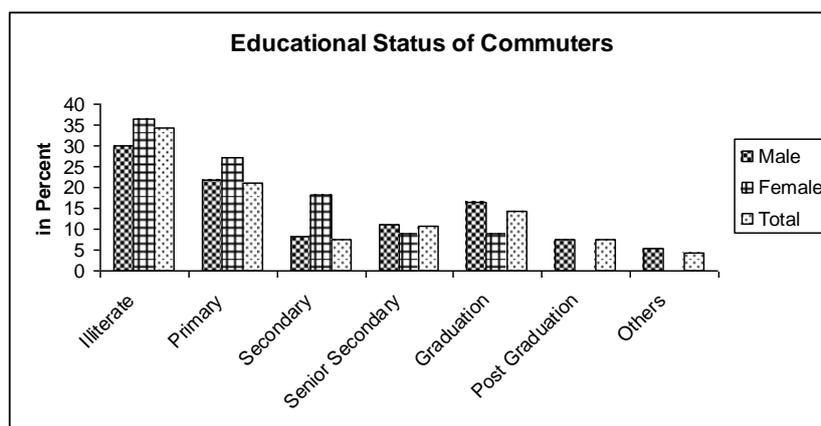


Figure: 3

Settlement Status by Place of Origin:

Location of settlement is also an important factor in case of commuting. Those who live in rural areas surrounding the big cities commute more than those from the interior villages (Champion et al, 2009). In India it has been observed that in the states adjoining National Capital Region (NCR) i.e. Punjab, Haryana, Rajasthan and Uttar Pradesh have sizable number of rural-urban commuting. They account for 35 percent of the total workers commuting from rural to urban areas in India (Chandrasekhar, 2011). Rural-urban commuting increases with the increasing rate of unemployment. Small size of land holdings, low wages and income, excessive pressure of population on agricultural land and mechanization of agriculture are the major factors that causes rural-urban commuting. Table-VII gives an account of rural-urban distribution of commuters. An analysis of Table-7 shows that out of total commuters in Aligarh city, 72.75 percent were from rural areas while remaining 27.25 percent of commuters were from urban areas.

Table VII: Percent Distribution of Commuters on the Basis of their Place of Origin, 2015

Place of Origin	Percent
Rural	72.75
Urban	27.25
Total	100

Sources: Based on field survey, 2015

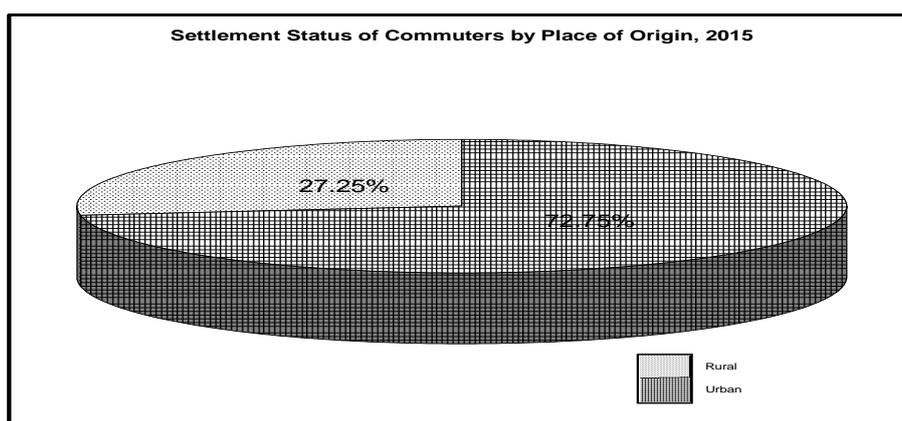


Figure-4

Commuters by Distance:

Commuting is a reversible movement, a movement of shortest duration that may occur even over a day. Therefore, the trend of distance in commuting is not found longer as compared to migration and other irreversible and long-term movements. The probability of commuters is lowered when the distance becomes longer to be covered. Percent distribution of distance moved by commuters is given in Table-VIII. It would be seen from the data that ratio of males is much higher than females in long distances whereas in short distances commuting the trend gets reversed. Up to 25km the proportion of female commuters is 76.91 percent while the share of male commuters is only 67.90 percent. But for the distance of 26-75 Km the proportion of male and female commuters has been recorded 31.07 percent and 23.07 percent respectively. The distance above 75 Km

covered by male commuters has been registered 4.47 percent the people on regular basis included only 1 percent male. There was not witnessed even a single woman in the study area covering the distance above of 75 Km.

Table VIII:Percent Distribution of Commuters by Distance Category, 2015

Distance in Km	Male	Female	Total
Within 10	36.56	42.30	37.50
11-25	31.34	34.61	31.87
26-50	19.40	15.38	18.75
51-75	8.20	7.69	8.12
76-100	2.98	-	2.50
Above 100	1.49	-	1.25
Total	100	100	100

Source: Based on field survey, 2015

Occupational structure:

Since the sampled respondents include only those commuters who reported their main motive to get work in Aligarh city, it would be useful to make an analysis of type of occupations pursued by them at the destination. The Table-IX provides information about the occupations in which the commuters have got jobs in Aligarh city. The data shows that construction is the most dominated occupation in which 15.71 percent of commuters found their job. The percentage of the commuters engaged in the manufacturing activities has been recorded 9.28 percent followed by rickshaw pulling (8.75 %), loading and unloading (7.71%), white washing and painting (6.87%). The type of occupations/professions in which the proportion of commuters engaged in each category has been recorded less than 5 percent are managers/supervisors, maid servants, drivers, teachers, carpenters, milkmen, motor mechanics, clerks, engineers, doctors, lawyers, etc.

Table IX:Percent distribution of occupations of commuters, 2015

Occupations	Percent
Construction	15.71
Manufacturing	9.28
Rickshaw pulling	8.57
Loading and unloading	7.71
white washing and painting	6.57
Street vendors	5.00
managers/supervisors	4.71
maid servants	3.57
Drivers	3.57
Teachers	3.57
Carpenters	2.85
Milkmen	2.85
Motor Mechanics	2.14
Clerks	2.14
Bank employees	2.14
Businessmen	2.14
Policemen	2.14
Engineers	2.14
Doctors	1.42
Lawyers	1.42
Others	10.27
Total	100

Sources: Based on field Survey, 2015

Income Level:

The percent distribution of commuters' average daily income has been given in **table-X**. The data shows that 5.71 percent commuters earned rupees less than 100 per day, 31.71 percent gained between 101-200 rupees in a day and 27.85 percent earned between 201-300 rupees. Moreover, 17.14 percent commuters were recorded getting the rupees between 301-400 per day and 10.71 percent earned between rupees 401-500 while only 7.85 percent of commuters were registered earning the rupees above of 500 in a day.

Table X Percentage Distribution of Average Daily Income of Commuters in Aligarh City, 2015

Daily Income (Rupees)	Percent
Less than 100	5.71
101-200	30.71
201-300	27.85
301-400	17.14
401-500	10.71
Above 500	7.85
Total	100

Source: Based on field survey, 2015

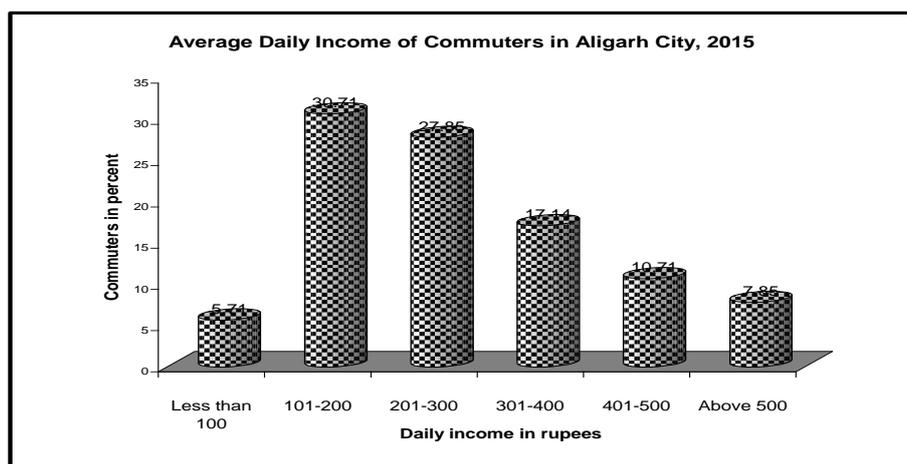


Figure-5

Socio-Economic Causes of Commuting:

Table XI provides the information about the socio-economic causes of commuting which have compelled the people to travel regularly for employment purpose. Unemployment, Poverty, low wages, arduous nature of work, small size of land holding, agricultural landless, services and to get more income were the major economic causes which forced to **71.23 percent** commuters to involve in this circular movement, whereas among the social factors; large size of family, liked of rural environment, to look after families, official transfer were the main social causes which compelled **28.77 percent** people to be engaged in this regular journey to work. Moreover, unaffordable housing, high cost residence, disliked of urban environment were other causes that increased the rate of commuting.

Table XI: The Percent Distribution of Socio-Economic Causes of Commuting in Aligarh City, 2015

Causes	Percent
Unemployment	13.75
Poverty	11.87
Low wages	11.25
Arduous nature of work	9.37
seasonal work	8.75
small size of land holding	8.12
To get more income	6.87
Agricultural landless	6.25
Services	4.37
Lack of infrastructural facilities	2.75
Liked of rural environment	2.75
To look after family	3.12
To look after landed property	2.50
Large size of family	2.50
official transfer	1.87
Family disintegration	1.87
Others	2.00
Total	100

Sources: Based on field survey, 2015

Modes of Transportation:

Transportation is necessary to nearly every aspect of daily life. It enhances both physical and economic mobility and is a key factor in workers’ ability and retained employment. Transportation is a significant component of commuting. Commuters always want to get a hole on any mode of transportation at any point of time to reach their destination timely. Therefore, it is very certain that without the good provision of transport, commuting is not possible. Availability and quality of modes of transportation influence the commuters’ lives greatly. However, the selection of mode varies according to their age, sex, income level, social and educational status, trip purpose, travel distance cost and time,(**Rahman, M.L., Islam, M. 2006**).

The **table-XII** provides the information about the modes of transportation taken by commuters in Aligarh city. An analysis of the data contained in Table reveals that bus was the highest selected mode to travel to the study area. Out of total sampled commuters 36.87 percent depend on bus for their regular journey. Train was the second most dominant mode of transportation to communicate outside of the study area. Out of total selected commuters 20 percent used the train because of long distance and cheap fare. In respect of availability of modes to commuters auto-rickshaw (12.50 percent) was another dominant means of transportation in city followed by motor-cycle (9.37 percent), cycle (7.50 percent), by-walk (5.62 percent) and cycle-Rickshaw (1.87 percent). Financial prosperity of commuters also influences the selection of commuters’ modes choice. The commuters who were economically prosperous used the car to reach to their destination. Out of total surveyed modes availed by commuters the share of car was only 3.12 percent.

Table XII:Percentage Distribution of Modes of Transportation Availed by Commuters in Aligarh city, 2015.

Means of Transportation	Percent
BY-walk	5.62
Cycle	7.50
Motor-cycle	9.37
Rickshaw	1.87
Auto-rickshaw	12.50
Bus	36.87
Train	20.00
Car	3.12
Others	3.12
Total	100.00

Source: Based on field survey, 2015

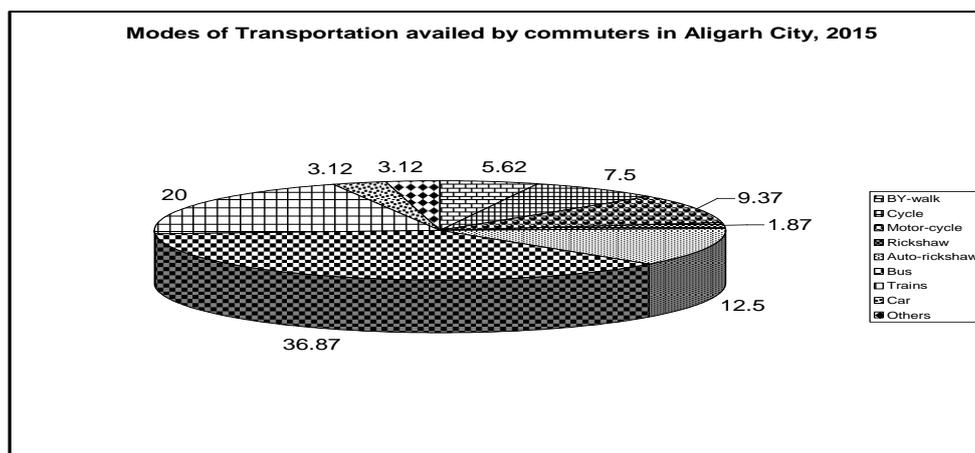


Figure-6

Problems Faced by Commuters:

The percentage distribution of problems faced by the commuters in Aligarh city has been given in Table-XIII. The Table depicts that overcrowded modes was one of the major problem faced by commuters. Out of total sampled commuters 39.37 percent complained that they faced the problem of overcrowded and congested modes. It has been observed that this problem was very seriously being faced by commuters particularly at the time of commuters’ departure (evening) when everyone was found to be in hurry to return at their places of origin/homes timely. Due to the shortage of public transport, they had to depend on private vehicles which were in good condition nor had enough space to sit comfortably. Some of them were forced to travel after sitting on the roof of vehicles which might cause the incidence of accidents and the incidence of

crushes and injuries. The second major problem which was recorded by 35.50 percent commuters was congestion and traffic jam on the roads. Other major problems reported by respondents were the bad condition of road (26.22 percent), followed by high travelling cost (21.21 percent), long travel distance (18.69%), inconvenient, insecurity and unreliability (16.06 percent), crushes and injuries (11.62 percent). The category of other type of problems includes the unpunctuality of arrival and departure, insecurity of female commuters, air and noise pollution. The repeated occurrence of such incidences may cause many of healthy problems to commuters such as anxiety, mental-stress, temporary hearing loss, fear, nervousness, high diastolic blood pressure, loss of appetite (Hodge, 1997). These daily hazards on roads reduce performance at work and tolerance level and increase the frequency of negative mood at home and less domestic peace, (Gray and Lucas, 2001).

Table XIII:Percent Distribution of Problems Faced by Commuters in Aligarh City, 2015

Problems	Percent
Overcrowded mode	38.00
Congestion on the road	35.50
Bad condition of vehicles	28.23
Bad condition of roads	26.22
High travelling cost	21.21
Long waiting time	20.19
Long travel distance	18.69
Inconvenient	16.16
Insecurity	16.06
Unreliability	15.17
Incidence of accidents	11.62
Others	11.50

Source: Based on field survey, 2015.

VI. CONCLUSION

The overall analysis of the study shows that commuting is an emerging issue to the society. If the commuting has solved a number of problem by providing the availability to employment to the workless people, Other hand, it has also created numerous problems in cities by causing air and noise pollution, traffic jam, delay on road and frequent road accident. The major findings of the study are:

- Out of total sampled commuters in Aligarh city about 80 percent of commuters are found belonging to young and working age group while about 20 percent are recorded in age group of 14-20 years as well as old age-group. The fraction of male commuters is higher (83.75 percent) as compared to female commuters (16.25 percent).
- The study reveals that 68.75 percent of total selected commuters are married and 23.75 percent unmarried while the remaining comprised of widowers and separated. The religion wise composition of commuters shows that three-fourth (77.50 percent) of them are Hindus and one-fifth (20.00 percent) Muslims and rest of them belong to other religions.
- Out of total sampled commuters 35.37 percent are illiterate while 65.63 percent literate.
- The further analysis of study shows that about three-fourth of total commuters are from rural areas out of which 46.61 percent have been registered illiterate and 53.39 percent are found to be literate, among the literate, most of them are educated only up to the level of primary and higher secondary. Consequently, they are found belonging to the categories of landless agricultural and casual labors, marginal and small farmer, engaged in city in low skill elementary jobs such as construction works, street vending, loading and unloading, rickshaw pulling whereas one-fourth share of all commuters belong to urban areas, which are registered highly educated engaged in business, commerce, education and administration services.
- Having a noticeable attention to their income level it can be concluded that low and middle income people commute more than very low and high income people.
- Having observed the distance wise distribution of commuters, this fact emerges that men commute longer distance than that of female and also depicts that the probability of commuters is lowered when the distance is longer to be covered.
- The study highlights that the major problems faced by commuters in Aligarh city are overcrowded modes, congestion on the road, old and out-dated vehicles, occurrence of accident, noise and air pollution, insecurity and unreliability, etc.
- The main causes of commuting which has compelled the people to travel regularly are unemployment, highly pressurized agriculture land, low per capita income, small size of land holding, seasonal work in fields, lack of medical and health facilities in the place of origin while in place of destination unaffordable housing, price rising land and polluted environment.

Suggestions:

- It has been observed that nearly three-fourth commuters came from rural areas in Aligarh city because of unemployment and underemployment. Therefore, the government should provide the employment opportunities to check the heavy influx of rural commuters to the city by developing small-scale, agro-based industrial units and allied agriculture activities, such as animal husbandry, poultry, dairy and fisheries, in rural areas.
- The most important commonality is India's low per capita income (**J. Pucher and Nisha Korattyswaroopam, 2004**). The poor working people coming to the city from suburbs have to spend a big share of their daily income on transportation and they are least able to save enough amounts for household expenses. Therefore, government should keep its public transport fares extremely low so that these poor people become able to save much sufficient part of their earning to spend on housing expenses.
- Most of commuters in Aligarh city have complained about the overcrowded modes, bad condition and narrow width of the roads, shortage of public transport and incidence of accidents, etc, therefore there is urgent need to increase the number of motor-vehicles, removal of polluted and old vehicles, road maintenance, and traffic management etc.

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