Impact of Mobile Phone Uses on Urban Life:
A Study at Tamluk Municipality of West Bengal, India

Balai Adhikary,
Govt. Approved Part Time Teacher
P.G. Department of Geography, Panskura Banamali College, West Bengal, India.

Dr. Nirmalya Das,
Associate Professor
P.G. Department of Geography, Panskura Banamali College, West Bengal, India.

Paramita Pramanik,
Post Graduate Student
P.G. Department of Geography, Panskura Banamali College, West Bengal, India.

ABSTRACT
Mobile phone is one of the important and essential electronic devices of twenty first century. Our modern life cannot imagine without this device which influences the daily social, economic and cultural life. The impact of this electronic gadget on society is in both positively and negatively. Main objectives of this paper are to highlight the types of mobile phone uses among the various categories of peoples and its impacts. Information from municipality published sources, latest census of India data and public opinion data have considered here for present analysis. The entire analysis is based on both statistical inference and cartographic techniques. Overuse of smart phone is adversely affecting the urban social-cultural life but the proper utilization makes easier of the daily life of the society. So, purposeful management is essential regarding the proper utilization of smart phone which is helpful for stable human society.

Keywords: Mobile phone, users, urban life, impact, management.

INTRODUCTION:
In the era of modern communication the daily life of the people is too much mobile phone oriented. Mobile phone is one of the important electronic media in the modern time. Mobile phone and smart phone produces positive and negative impact on the society (Nath & Mukherjee, 2015). Mobile phone is one of the important media for communication and sharing in the developing countries (James, 2016). Key pad, touch screen and smart phone are the different types of mobile phone and among these smart phones are the dominant devices in the process of uses. It has an impact on communication, education, access to information, occupation, social relations, human health and psychology, human behaviour and social relations, etc. and this important device is highly affect the youth and teenagers. Mainly the youth and teenagers uses the smart phone for sharing the information, access the study materials, entertaining video, transfer of money, chatting, face book, WhatsApp, twitter and Instagram, etc. Mobile addiction is the common for new generation and smart phone or mobile phone impact the social and individual life of new generation students (Ozkan & Solmaz, 2015). Both mobile and smart phone has been impacts the college and university students and teenagers. Mobile phone and smart phone uses produces the impact on social relationship among the youth and teenagers (Rajeev & Jobial, 2015). Now the social relationship is another type and the emotion, bonding, attitude is the totally different in the society by the uses of smart phone. Social media is helpful for improving for the knowledge skills among the students (Siddiqui & Singh, 2016). By the uses of internet in the smart phone students access the scientific information
and mathematical problems or any kind of academic information and problems in their smartphone in any time when they away from their computers. Social media is very significant for the everyday communication, interpersonal communication among the students (Vevere, 2015). Smartphone characters like a mini computer, so anybody browse email, face book, video call in the smartphone and communicate to anybody in any time in any place of the world. Peoples use different kind of brand and uses different kind of connections. Different apps also use in the smartphone for different purpose like paytem, bhim apps etc. Overuse of smartphone is responsible for different types of health related problems and this device emitted radiation which is very harmful for infants. It is also responsible for accidental causes of school going children to a working person who has no proper idea about the uses of the device.

**Study Area:**
Tamluk municipality comes under the Tamluk community development block of Purba Medinipur district of West Bengal in India. The said urban area consist twenty municipal wards and the municipality formed during British India. Latitudinal and longitudinal extension of the municipality is 22° 14’ 40” N to 22° 20’ N and 87° 54’ 10”E to 87° 57’ 15”E. Surrounding area of this urban area comes under the rural area and the recent municipal wards reveals the rural fringe like characteristics. River Rupnarayan flows along the eastern side of this municipality and the geographical area formed due the alluvial deposition of river Rupnarayan. Total geographical area of this area is 17.86 sq. Km. Tamluk municipality is one of the older urban area in south Bengal in India and the area socially, culturally better than the others towns of the Purba Medinipur district. The said urban area is the familiar for the contribution in the struggle of independence of our country.

**Location Map of the study area.**
Objectives:
The objectives of this work are as follows;
1. To analyze the pattern of mobile phone uses of various categories of people in the area.
2. To highlight the priorities and purposes of smart phone uses among the peoples.
3. To find out the impact of smart phone uses on various aspects of the society.

DATABASE AND METHODOLOGY:
The work is based on the primary opinion collected from the municipality are through questionnaire survey and secondary data from Census of India, 2011, municipality published sources and Purba Medinipur district statistical handbook. The total sample of hundred is collected from twenty wards (five samples from each ward) of the municipality. Stratified sampling methods have been considered for selecting the sample category on occupational pattern of the people. Among these samples students are 41%, service person 29%, businessman 13%, housewife 9% and others 8%. The analysis is based on the perceptions of the respondents. Both qualitative and quantitative techniques applied for proper analysis of the conditions and ArcGIS software is used for visual presentation.
RESULT AND DISCUSSION:

Table – 1: Population, area, density and literacy

| Ward No. | Total Population | Male population | Female population | Area in sq. Km. | Population Density (Person / Sq. km) | Literate population (%) | Illiterate population (%) |
|----------|------------------|-----------------|-------------------|-----------------|--------------------------------------|-------------------------|--------------------------|
| 1        | 3344             | 1784            | 1560              | 1.305           | 2562.45                              | 77.54                   | 22.46                    |
| 2        | 2364             | 1263            | 1101              | 1.1             | 2149.09                              | 74.41                   | 25.59                    |
| 3        | 3184             | 1580            | 1604              | 0.709           | 4490.83                              | 80.75                   | 19.25                    |
| 4        | 4056             | 2125            | 1931              | 1.08            | 3755.56                              | 75.94                   | 24.06                    |
| 5        | 2974             | 1483            | 1491              | 0.39            | 7625.64                              | 77.94                   | 22.06                    |
| 6        | 2681             | 1309            | 1372              | 0.35            | 7660.00                              | 91.05                   | 8.95                     |
| 7        | 1594             | 814             | 780               | 0.22            | 7245.45                              | 89.52                   | 10.48                    |
| 8        | 2666             | 1342            | 1324              | 0.2             | 13330.00                             | 87.13                   | 12.87                    |
| 9        | 3476             | 1789            | 1687              | 0.215           | 16167.44                             | 77.99                   | 22.01                    |
| 10       | 2025             | 1036            | 989               | 0.626           | 3234.82                              | 82.27                   | 17.73                    |
| 11       | 2816             | 1425            | 1391              | 0.569           | 4949.03                              | 82.56                   | 17.44                    |
| 12       | 4242             | 2087            | 2155              | 0.384           | 11046.88                             | 83.57                   | 16.43                    |
| 13       | 2264             | 1163            | 1101              | 0.212           | 10679.25                             | 90.42                   | 9.58                     |
| 14       | 3721             | 1889            | 1831              | 1.22            | 3050.00                              | 73.93                   | 26.07                    |
| 15       | 3541             | 1767            | 1782              | 0.367           | 9648.50                              | 86.28                   | 13.72                    |
| 16       | 3109             | 1572            | 1537              | 0.511           | 6084.15                              | 80.64                   | 19.36                    |
| 17       | 4303             | 2194            | 2109              | 2.077           | 2071.74                              | 88.08                   | 11.92                    |
| 18       | 4986             | 2575            | 2411              | 1.534           | 3250.33                              | 78.88                   | 21.12                    |
| 19       | 4418             | 2286            | 2132              | 1.866           | 2367.63                              | 79.67                   | 20.33                    |
| 20       | 3540             | 1808            | 1732              | 2.925           | 1210.26                              | 83.47                   | 16.53                    |
| Total    | 65312            | 33291           | 32020             | 17.86           | 3656.89                              | 81.65                   | 18.35                    |

Source: Census of India, 2011.

Demographically the study area is highly populated in nature and the total population of the geographical area is 65312 and population density is 3657 person / sq. km in 2011. Literacy rate is also good and the literacy rate is 81.65 percent and illiteracy rate is 18.35 percent. This data reveals that number of mobile phone and smart users is high in all categories of people which are an important essential device for their daily life.
Table 2: Age group wise distribution of phone users

| Age group in years | Percentage of users |
|--------------------|---------------------|
| Below 20           | 24                  |
| 20-30              | 25                  |
| 30-40              | 35                  |
| After 40           | 16                  |

Source: Primary Survey, June-2018.

In the entire area maximum phone users are below forty in their age group and the most dominant categories is 30-40 years age group. People use various types of phone like key pad, touch screen, smart phone. Now the age of smart phone and smart phone users are dominant in the entire area.

Table 3: Percentage types of phone users

| Types of Phone | Smart Phone | Touch Screen | Keypad |
|----------------|-------------|--------------|--------|
| Used by People in percentage | 50 | 41 | 9 |

Source: Primary Survey, June-2018

Table 4: Type of phone users

| Ward No. | Types of phone users (%) |
|----------|--------------------------|
|          | Smart Phone | Touch Screen | Keypad |
| 1        | 60          | 40           | 0      |
| 2        | 67          | 33           | 0      |
| 3        | 40          | 40           | 20     |
| 4        | 50          | 33           | 17     |
| 5        | 50          | 33           | 17     |
| 6        | 33          | 50           | 17     |
| 7        | 29          | 57           | 14     |
| 8        | 50          | 33           | 17     |
| 9        | 33          | 50           | 17     |
| 10       | 67          | 33           | 0      |
| 11       | 67          | 33           | 0      |

Source: Primary Survey, June-2018
The recent mobile phone users use different phone for different purpose i.e. occupational, office, personal, etc. and the table-5 shows that average number of mobile phone per people is more than one and it is common in case of urban users.

### Table 5: Average rate of per head distribution of phone

| Ward No. | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| No. of mobile phone | 1   | 1.2 | 1.2 | 1   | 1.2 | 1.2 | 1.2 | 1   | 1.2 | 1   | 1.2 | 1.2 | 1.2 | 1   | 1.2 | 1   | 1.2 | 1   | 1.4 | 1   |
| Source: Primary Survey, June-2018 |

### Table 6: Duration of phone uses

| Duration in months | <6 | 6 to 12 | 12 to 24 | 24 to 36 | >36 |
|--------------------|----|---------|----------|----------|-----|
| Percentage of phone used | 20 | 24 | 28 | 13 | 14 |
| Source: Primary Survey, June-2018 |
Table 7: Brand of phone used

| Name of brand of phone | Percentage of users |
|------------------------|--------------------|
| Samsung                | 26                 |
| Nokia                  | 12                 |
| Oppo                   | 03                 |
| Redmi                  | 09                 |
| Honor                  | 05                 |
| Intex                  | 05                 |
| HTC                    | 03                 |
| Sony                   | 03                 |
| Vivo                   | 04                 |
| Blackberry             | 03                 |
| Micromax               | 06                 |
| LAVA                   | 06                 |
| Gione                  | 03                 |
| Others                 | 10                 |

Source: Primary Survey, June-2018

Table 8: Network used in the phone

| Network Brand name | Airtel | Vodafone | Jio | Idea | Others |
|--------------------|--------|----------|-----|------|--------|
| Percentage of Network users | 34 | 40 | 16 | 7 | 3 |

Source: Primary Survey, June-2018

In the study area smart phone is more popular than touch screen and key pad phone because of its easy and quick functionality and portable than notebook or laptop. The mobile phone is more common in general and personal uses for last three years. Peoples uses many brand like Samsung, Nokia, Oppo, Redmi, Honor, intex, HTC, Sony, Vivo, Blackberry, Micromax, LAVA, Gione, etc. Among these brands Samsung is dominant for its price and durability.

Table 9: Major purposes of using mobile phone

| Sl. No. of purpose | Purposes                                                      |
|-------------------|--------------------------------------------------------------|
| 1                 | Communication (parents, friends, relatives)                  |
| 2                 | Academic related internet search                             |
| 3                 | Entertainment and leisure (watching video, listening song etc.) |
| 4                 | Business purpose                                             |
| 5                 | Emergency (health)                                           |
| 6                 | To access information (internet, email, sports, political news etc.) |
| 7                 | Online shopping (food, cloth, medicine, book, etc.)          |
| 8                 | Others (calculation, dictionary, banking related etc.)       |

Table 10: Priority given by the peoples of purposes

| Sl. No. of purpose | Priority given by users (percentage of users) |
|-------------------|-----------------------------------------------|
| 1                 | 1st  | 2nd  | 3rd  | 4th  | 5th  | 6th  | 7th  | 8th  |
|                   | 58   | 39   | 3    | 0    | 0    | 0    | 0    | 0    |
| 2                 | 15   | 17   | 12   | 0    | 0    | 1    | 0    | 0    |
| 3                 | 7    | 31   | 38   | 10   | 9    | 0    | 0    | 0    |
Table 11: Social Media users categories

| Category of users | Mostly used social media (%) |  
|-------------------|-----------------------------|
|                   | Facebook | Whatsapp | Email | others |
| Student           | 35       | 40       | 37    | 15 |
| Serviceman        | 17       | 18       | 8     | 3  |
| Businessman       | 14       | 16       | 14    | 0  |
| Housewife         | 8        | 9        | 0     | 0  |
| Others            | 6        | 4        | 4     | 2  |

Source: Primary Survey, June-2018

Uses of mobile phone and smart phone influence the human social behaviour and attitude, social relations and psychological characteristics of human beings. Smart phone used in the society totally changes the pattern of social relations, process of social communications, and utilization of times. In many cases personal relations is also affected by the overuse of this pocket device.

Table 12: Having Health Problem due to over use of phone

| Problems                  | Yes (%) | No (%) |
|---------------------------|---------|--------|
| Migraine and Headache     | 9       | 91     |
| Sleeping disorder         | 18      | 82     |

Source: Primary survey, June-2018
Table 13: Impact of mobile phone on students

| Communication with                  | Mind Freshen / leisure (Reading, watching and listening) | Study (Reading, watching and listening) |
|------------------------------------|---------------------------------------------------------|----------------------------------------|
| Category                           | Yes (%) | No (%) | Yes (%) | No (%) | Yes (%) | No (%) |
| Teachers                           | 39      | 4      | 38      | 3      | 19      | 24     |
| Academic websites                  | 16      | 27     | 41      | 2      | 35      | 10     |
| Friends/Others                     | 41      | 2      | 33      | 6      | 15      | 30     |

Source: Primary Survey, June-2018

Overuse of mobile phone affected the human health like migraine and headache, sleeping disorder, irritation, anxiety, loss of memories and concentration and eye related problem. In Tamluk urban area many smart phone users of younger’s, teenagers and adult are suffering from problems of sleeping disorder. It also affects maximum to the student’s mental and social development process. In the academic purpose mainly smart phone uses like a good friend and uses as a communicative media with their teachers, friends; entertaining media for listening music, watching video, chatting with the friends; knowledge gaining media like book searching, newspaper reading, general knowledge reading, academic video watching, numerical problem solving, etc. It is also true that if the students use this device properly smart phone very helpful for their academic up gradation.

Table 14: Management steps to reduce overuse of phone

| Step may be taken likes          | Agree (%) | Disagree (%) | Agree but not possible to them (%) | No comment (%) |
|----------------------------------|-----------|--------------|------------------------------------|----------------|
| Time reducing                    | 43        | 18           | 35                                 | 4              |
| Keep life-work balance in mind   | 68        | 0            | 26                                 | 6              |

Source: Primary Survey, June-2018

Overuse of mobile phone affected the human health like migraine and headache, sleeping disorder, irritation, anxiety, loss of memories and concentration and eye related problem. In Tamluk urban area many smart phone users of younger’s, teenagers and adult are suffering from problems of sleeping disorder. It also affects maximum to the student’s mental and social development process. In the academic purpose mainly smart phone uses like a good friend and uses as a communicative media with their teachers, friends; entertaining media for listening music, watching video, chatting with the friends; knowledge gaining media like book searching, newspaper reading, general knowledge reading, academic video watching, numerical problem solving, etc. It is also true that if the students use this device properly smart phone very helpful for their academic up gradation.
### Step may be taken likes

| Step may be taken likes                      | Agree (%) | Disagree (%) | Agree but not possible to them (%) | No comment (%) |
|---------------------------------------------|-----------|--------------|-----------------------------------|----------------|
| Become more friendly of parents with their child | 60        | 0            | 2                                 | 8              |
| Don't give phone to child                    | 57        | 3            | 22                                | 18             |
| Maintain age to provide phone to the students | 22        | 8            | 14                                | 9              |

*Source:* Primary Survey, June-2018

### MAJOR FINDINGS:

Major findings of this work are as follows-

a. Mobile phone and smart phone is one of the important and demandable devices of all categories of people in the society.

b. Teenagers, adult and students are the mostly users groups of mobile and smart phone.

c. Many people’s uses more than one connection for their usable device.

d. Mobile phone and smart phone is one of the device that control human behaviour, attitude, social relations, emotions and individuality of the urban society.

e. This device tremendously changes the communication systems and teenagers, adults, students, spend their huge time for whatsapp, facebook, etc.

f. Teenagers, young’s and adults adversely affected due to misuse of smart phone.

g. Overuse of smart phone produces different health related problems like sleeping disorder, anxiety, migraine and headache, irritation, etc.

h. Peoples mainly teenagers, younger’s and students has no idea of time management regarding the utilization of mobile and smart phone.

### CONCLUSION:

Technology is always for the mankind but it is essential to use the technological devices properly. Mobile phone is an important invention of science and technology in the twenty first century of the world. But due to lack of proper uses, many peoples in the society wrongly use this device. Proper time management is essential for the students, teenagers regarding the utilization of smart phone. Parents monitoring is essential during the time of browsing internet by the students and teenagers in their personal devices.

### REFERENCES:

Census of India (2011), www.census2011.co.in

James, J. (2016). The Impact of Mobile Phones on Poverty and Inequality in Developing Countries, *Springer*, Netherlands

Nath, A., & Mukharjee, S. (2015). The impact of Mobile Phone / Smartphone: A pilot study on positive and Negative effects. *International Journal of Advance Research in Computer Science and Management studies*, 3(5), 294-302.

Ozkan, M., & Solmaz, B. (2015). Mobile Addiction of Generation Z and its Effects on their social Lifes (An application among university students in the 18-23 age groups). Procedia-Social and Behavioral Sciences 205 (2015), *ELSEVIER*, 92-98.

Pramanik, P. (2018). Usage of mobile phone and its impact on the people of Tamluk municipality in Purba Medinipur district of West Bengal. Masters Dissertation

Rajeev, M.M., & Jobilal (2015). Effects of Social Media on Social Relationships: A Descriptive Study on the Impact of Mobile Phones among Youth Population. *International Research Journal of Social Sciences*, 4 (2), 11 – 16.

Siddiqui, S., & Singh, T. (2016). Social Media its Impact with Positive and Negative Aspects. *International Journal of Computer Applications Technology and Research*, 5(2), 71-75.

Veverse, V. (2015). Impact of Social Media on Interpersonal Communication Patterns. *Socialinii mokslu studijos*, 7 (1), 124–138.

---