



## Diffusion and Uses of Mobile Phones among Gonds of Madhya Pradesh

### KEYWORDS

(Mobile Phone, Gond, Tribe, adoption)

**Narayan Mohanty**

Research Scholar Wing-15K, Academic Block IIM, Ahmedabad, Vastrapur

**ABSTRACT** *The adoption of mobile phone among marginalized section is adding a complementary effort to development. This paper discusses the diffusion, uses and perceived effects of mobile phone among tribal life. The study was conducted in Gonds community with using interview technique. Observation and focused group discussions were used as cross-verifying the facts. The findings of the study reflect that socio-economic exposure to non-tribals encourages them to adopt a technology. They reinvented the uses of mobile phone for getting socio-economic opportunities. The paper implies that cultural appropriation of technology is the scope for further study.*

### Introduction

Mobile communication, including mobile phone is rapidly diffusing by a complex process in India. The patterns of communication of this technology are used differently by different society (TRAI, 2011). However, mobile phone was first developed in Sweden in 1956 - following several trials and developments, in 1978 Bell Labs, Motorola created first generation of a mobile network, in considering to a thought of easy communication (Fortunati: 2002). Although this first generation network was not approved by the Federal Communication Commission (FCC) until 1982, it brought into focus the ability to create a form of communication that would allow anyone to make a phone call when it was convenient for them (Corbett, 2009). Its escalation in Indian is noticed from twenty first century and at present the country is the second largest mobile users with over 865 million subscribers by different groups (TREAI, 2011, Subba, Mandelia et al. 2013).

It is therefore plausible to observe that marginalized section of India, especially tribals whose 30 per cent people are actively using the technology despite socio-economic challenges, is required an attention to understand the diffusion and users patterns (Census 2011). The study selected Gond tribe of Madhya Pradesh for understanding the adoption process, purposes to use and perceived effects of this technology among them.

### About Gonds

Gonds are the largest tribal group in India. They constitute 35.6 per cent of total tribal population in Madhya Pradesh. The group belongs to patriarchal family life. Their gradual adoptions of modern agricultural patterns, entertainment, health and education show a progressive trend in living patterns (Census, 2011). On the other hand, diffusion of new media is also observed in the Gonds' everyday life (Census, 2011). It's accessible among them despite lack of electricity, education, network coverage prompt an investigation. The ownership of mobile phone is outnumbering than radio and television in the community (Census 2011). Reports are witnessed that Madhya Pradesh's Gonds are accessing to larger mobile phone as compared to other states (ORG, 2011).

It is therefore important to comprehend the socio-economic profile of Gonds as compared to mobile phone status; purposes to adopt mobile phone despite television and radio; and different uses and effects on everyday life of them.

The chapter consists of three sections: First section will introduce the field and the socio-economic profile of Gonds mobile phone users. Second section will deal with exposure to mobile phone and its uses on everyday life. The third section will analyze the effects of mobile phone among the Gonds of Madhya Pradesh.

### Methodology

The study was conducted in a tribal village called *Pathai* of Betul district of Madhya Pradesh. Betul district of Madhya Pradesh has 39 per cent of tribals' population. Majority of them are Gond tribals with a small number of Korku who live in small pockets. There are 10 development blocks in the district and three of community development blocks are under 5<sup>th</sup> Scheduled Area. The *Pathai* village falls under the jurisdiction of Sahapur Community development block. The *Pathai* village has 223 households with having a total population of 1174 (male 577 and female 597). The Gonds dominate with 1078 (91.8%) population to other residing Scheduled Castes and Other Backward Castes. Majority of *Pathai* villagers depends on agriculture and wage work for livelihood (Census, 2011)

To comprehend the level of diffusion, uses and effects of mobile phones on Gonds, door to door census survey was undertaken. Of total 223 households, 112 households have mobile phone facilities. All households were interviewed with a semi structured interview schedule. Informal discussions and observation method were also used to cross-validating the facts.

### The Field: Village Pathai

An average family member of *Pathai* village is 6 to 7. Female leads sex ratio as 1050 per 1000 male. The classification of age-groups of the studied village - two-fifth of youth (15 to 35 years) are the dominant age group followed by 30 per cent of adult (35 to 55 years) and 16 per cent of children (6 to 14 years age group) – is pointing that it is a young society. 66 per cent of the village people are literate of which 5 per cent students are pursuing graduation and post graduation degree. 75 per cent families have Below Poverty Line (BPL) cards and remaining is considered as Above Poverty Line (APL). Agriculture, labour work and seasonal migration is the main sources of income in village. 60 per cent of villagers' average annum income is between Rs. 7000/- to Rs. 25000/-.

### Mobile Phone Ownership

Presently mobile phone is a common devise in *Pathai* as 50 per cent of Gonds have owned the mobile phone in the village. Of 52 per cent, 77 per cent of Gonds own one mobile phone, 20 per cent of two, and 2 per cent of more than two. The entry of mobile phone in village has in 2005. Subsequently, 62 per cent have owned it since two years (2010-2012) and 23 per cent have it for more than 3 years (2009-2012). Mobile phone has 46 per cent more popular amongst young and youth (15-35) than 30 per cent of adult group. Among these groups, 25 per cent has the female users of mobile phone.

The above data clearly reflect that every 2<sup>nd</sup> household have the mobile phone facilities. It shows that accessibility communication is at the doorstep of Gonds irrespective of poverty and illiteracy. See the under Figure 2.

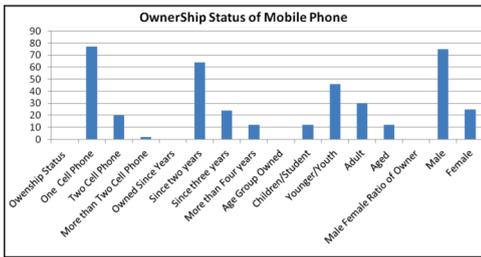


Figure 2

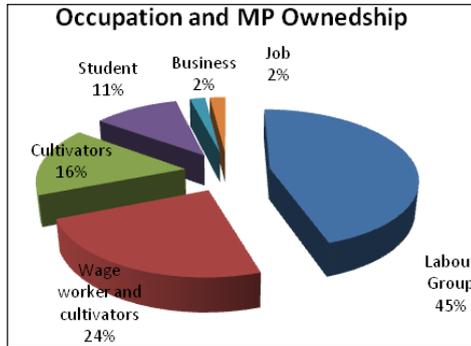


Figure 3

**Occupation and Mobile Phone Ownership**

Although significant mobile phones have bought in village in last couple of years which 45 per cent of mobile phone own by wage workers, 24 per cent by both wage workers and cultivators, 16 per cent by cultivators, 11 per cent by students, 2 per cent each by business men and job holders respectively. As figure 3 portrayed that occupation of mobile ownership refers to hold more of mobile phone among youth group who are frequently visiting out village for wage work which is one of factor on mobile than others age groups. Hence the interaction with non-tribal and few income sources in village has the means of penetration to hold mobile phone among Gond tribe which can be seen from below.

**Sources to Obtain Mobile Phone**

Multipurpose sources are considered to obtaining mobile phone. Three sources are observed in the studied villages as crop selling, wage working, firewood selling. It is evident that most of mobile handsets have owned by wage worker/seasonal migrants which is even sourced by contractors who have offered these handsets to them. As respondents narrate that those young are working in some part of hotels, shops, construction, contractors offer them a mobile phone for convenient contact between them. The cost of the handset is deducted from wages. Sometime Contractors are giving less costly mobile phone and charges more money to Gonds.

The study notice that students have owned more costly mobile phone (below 4000/-) which bought from scholarship. Wage workers have bought Rs. 3000/- mobile phone from contractors. And cultivators have bought a mobile handset of Rs. 2500/- by selling cultivation.

**Exposure to mobile phone**

As mentioned above, Gonds livelihood is depended on cultivation and wage work. Traditional patterns of cultivation and landlessness force them to migrate to near towns and cities. More than 50 per cent respondents have consented that they first saw the mobile phone during the course of visiting to towns. And 33 per cent saw it from neighbor and friend circles. Visitors/teachers/officers are the minimal source to interact with mobile phone.

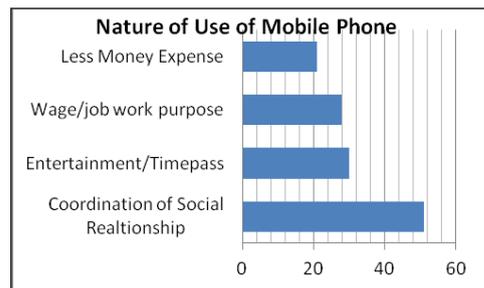
**Reasons for owning Mobile Phone**

Seasonal migrate wage workers are temporarily dwelled to out village. It motivates them to kinship relationship with family members and relatives. Those stay at village are required wage working in out village. Frequent visit to near place for wage work purpose is time consuming. This is also wasteful of time if work is not available. Therefore second reason comes out for convenient contacts as a result of 40 per cent have bought the mobile phone. Family members are now gifting these handsets for maintaining social relations with friends, family and beloved. Social Influence is mattered for 20 per cent of Gonds who bought mobile phone by influencing from social circles. It is more to entertainment purposes as listening to songs, capturing pictures, contacting friends etc. However, about 10 per cent Gonds own it for information, emergency assistance, and contact on occasion ceremonies/festivals.

**Uses of mobile phone**

Although the reasons and uses are more or less terming as same to owning the mobile phone but the analysis is cross validating with call made status. The call status is also varied based on age, sex, income and occupation. The frequency of per day calls on mobile phone among young and youth are made 3 times or more (38 per cent) in a day. While adult are made less than 2 calls (25 per cent). 16 per cent of them are made call occasionally as they feel necessary.

The study correlates with the above that one-half of mobile phone owners use for coordination of social relationships between family members, relatives, friend circle etc. They are taking care of children from outside of the village. Spouse and beloved are contacted frequently for family discussion. Secondly more than 30 per cent of Gonds use the mobile phone on multipurpose cases i.e. music, passing time, accessing information etc. They are listening to songs, capturing pictures, watching and recording videos, playing games, sending funny and birthday message. These can be put into a bracket of entertainment. The other type of category is for network for getting wage work. About 30 per cent are using the handsets for contacting contractors to seek information on wage work, find job locations, get-together for wage-work etc.



More than one-fifth are narrated that mobile phone is a cost-saving device. It is noticed that Gonds use the device for connecting with distant relative for avoiding frequent visit. They even use it for inviting relatives to attend marriage, festival, cremation etc. It is therefore apparent from the above description that Gonds use the mobile phones differently either for economic and non-economic proposes which are mentioned as below.

**Effects of Mobile Phone**

The mobile phone effects is instantaneous helpful to Gonds regardless of where they are in the country. In addition to keeping up with social relationships, individuals have also been able to increase productivity with their work because they can be hundreds of miles away from the working, yet still have instant access to contacts wherever they are (Tully, 2003). However, both sides of the effects can be observed in the studied villages. The discussions are as below.

**Perceived Usefulness: Easy and Convenient Contact**

It enhances the reliable contacts to family and relatives. Contact can be done at any time either from working or travelling. The reliable accessibility to contact person in ceremonies, festivals, cremation have also more importance because of usefulness of the connection.

#### **Maintaining good relationship**

The use of technology has not only proved as convenient contact but also maintained affectionate relationship with joint family, balance between work and personal life and take care of children. Many Gonds are considering it as a telepathic connection to share feeling from miles. Especially it is observed among beloved and new married couple.

#### **Use for wage and other income works**

The wage worker uses it a multiple purposes for earning money. On the one hand they are getting wage work at their doorsteps. They are directly contacted to contractor on wage work and payment. The arrangement of wage work from miles away saves their costs. On the other hand, local businessmen and job holders are accessed to business or job information for manipulation of business activities.

#### **Means of Entertainment**

The modern entertainment media devices i.e. TV, Radio and mobile phone have been notably used by Gonds. Young likes its features of music, picture, video, FM, game and message facilities. They are usually listening to music while walking or travelling. It is included cycling, bicycling and walking. They upload these music and videos in every 15 days. Youth are contacted to beloved for late night conversation.

#### **Emergency Assistance**

It is important to note that Gonds have different contact numbers for emergency networking. 40 per cent of users have kept contact numbers of relatives, friends, village nodal persons, Block officers, medical and exceptional cases ambulance and doctors. The Village Protection Samiti is distributing the emergency contact numbers for emergency assistance. Medical Community Health Center telephone numbers, maternal care assistant number is considered a good sign for user's awareness.

#### **Perceived disadvantages of Mobile Phone**

The negative impact on traditional social relationships, social dependency, entertainment, health hazards etc. have equally significant to end social functions. A recent research of WHO shows that use of mobile phone more than 10 minutes is harmful for health especially headaches and fatigue. Other way, it can affect the nerves system and also responsible for short-term memory (WHO, 2011). The times of India (2011) has also published that mobile phone provide a reasonable risk and dangers of frequent exposure to radio frequency fields which emerges health problem (TNN). A trend that is becoming more apparent is present absences; this is the concept of how an individual's presence in a social setting changes regardless of their physical presence, they are only half-present (Fortunati 2008). After a ring or buzz of their mobile phone, they are drawn away somewhere else, away from their present situation and/or conversation. Through observation, researchers have found that individuals typically will not hesitate to interrupt an ongoing conversation to answer the ringing of their cell phone. This has several repercussions. In answering the ringing cell phone, the individual who is presently being conversed with, has described feeling a sense of being left alone, which can cause social anxiety, as well as resentment/annoyance towards the individual who answered the phone call (Humphreys 2009).

Many of us have likely experienced a situation where we have been in the presence of a cell phone user who is engaging in some form of rude behavior that lacks respect for the individuals around them. Cell phones have changed the way that individuals socially interact. Individuals are communicating more via text messages and cell phones than they are face-to-

face, changing our social environment. Individuals have become enveloped in their cell phones and less aware of their social surroundings, missing out on possible new social interactions (Corbett, 2009). As these above situations universally affected the human beings of his social behaviors but specifically among Gonds are as below:

#### **Decreasing social dependency**

It impacts social behavior and relationships when they distance from village. Although tele-contact to relatives is a less costly but physical absence impede their emotional expression, body language and regeneration of new social contacts. These distinguish perceived situations by receiver or senders are negatively observed in villages. However, mobile phone helps them to regularize the contact but more confident for bamboozle in emergency situations because of technological defects.

#### **Expensive due to misuse and improper operating**

New operators have little knowledge and uses wrong functions cost their pocket. One any function is activated automatic deduction of money is a costly affairs for them. It is also noticed that Gonds misuse of mobile phone call to unknown person multiply impacts on their emotion and attitude to technology.

#### **Abuse and Mistreatment**

Young uses immoral call to girls distorts their relationships. Sometime uses of bad languages, emotional blackmailing encourages social deviances in their community. It is most of time they are doing after consuming liquor.

#### **Network Signal Problem**

The studied village has not any mobile towers. All networks are accessed from near block. It makes difficult for them to call properly. Signal problems and unstable networks is being a costly affairs for them.

#### **Time loss and work disturbance**

Respondents much time get disturbed because of unwanted calls. They trap in a situation of irritation. Sometime it gives them more burdens. Relatives ask them for extra work which the Gonds young are facing. As respondents say that daily calls for help as bicycle, money, recharge cost them multiply.

#### **Conclusion**

It is predicated that tribals are moving towards the technological world of McLuhan 'Global village' with new trends, approaches, technological management etc. It can be seen as new ideas of attitude, behavior, lifestyle, time management, and various income sources are emerged among studied groups. As the study analyzed that traditional social interactions, social dependency, interpersonal relationships, means of entertainment are negatively impacted by adoption of mobile phone, however, positive gains as social networking, social interactions, aspiration and emergency assistance are dramatically increased the opportunities for Gonds. The uses patterns in everyday life of Gonds imply that it does not only help to easy communication, maintain relationship, time management but also increase the economic opportunity. Some shortcoming as illiteracy, insufficient knowledge of mobile phone functions are creating daily problems, however, the wider uses of mobile phone direct the future study to understand the cultural appropriation and assimilation of mobile technology among Tribals. It can be also useful to understand the trends, patterns and social network analysis for address the constrained of this study.

#### **References**

1. Aker, J. C. (2008). "Does Digital Divide or Provide? The Impact of Mobile Phones on Grain Markets in Niger", Working Paper Number 154, Centre for Global Development, Washington, USA, <http://www.cgdev.org/content/publications/detail/894410/>.
2. Chandramauli, C. (2011). Census of India 2011: provisional population totals paper 1 of 2011 India Series 1, Chapter 6. New Delhi, India: Office of the Registrar General & Census Commissioner.
3. Chaudhary, S.N. (2010). In Search of Sustainable Development: Scenario in a

- Tribal Village of Madhya Pradesh, Bhopal: Rajiv Gandhi Chair of Contemporary Studies, Barkatullah University.
4. Chaudhuri, B.D. (1979). *Technology and Society*, Simla: Indian Institute of Advanced Study, Dhawan Printing Works, p.2.
  5. Clark. Neil. (2003). "Great thinkers of our time – Noam Chomsky", *New Statesman*.
  6. Corbett, Alexia. (2009): "Mobileular Phones Influence(S) and Impact(S) on Social Interactions and Interpersonal Relationships" [www.unh.edu/sociology/media/pdfsjournal2009/Corbett2009.pdf](http://www.unh.edu/sociology/media/pdfsjournal2009/Corbett2009.pdf).
  7. Fortunati, L. (2008). "The Mobile Phone: Towards New Categories and Social Relations.", *Information, Communication & Society*, p.513.
  8. Humphreys, Lee. (2009). "Cellphones in public: social interactions in a wireless era." *New Media & Society* 7(6):810-833.
  9. *Infrastructure for Human Development* (2007). Madhya Pradesh Human Development Report, New Delhi: Oxford University Press.
  10. Jensen, Robert. (2007). "The Digital Provide: Information (Technology), Market Performance, and Welfare in the South Indian Fisheries Sector", *Quarterly Journal of Economics*, Vol. CXXII, Issue 3: 879-924.
  11. Kumar, Praduman and Surabhi Mittal. (2006). "Agricultural productivity trends in India: Sustainability issues", *Agricultural Economic Research Review*, Vol. No. 19, No. 3 P.71-88
  12. McLuhan, M. (1962). *The Gutenberg Galaxy: The Making of Typographic Man*, University of Toronto Press, p.1,8.
  13. Mittal, S., Sanjay Gandhi and Gourav Tripathi (2010). "Socio-Economic Impact of Mobile Phones on Indian Agriculture" Working paper No. 246, New Delhi: Indian Council for Research on International Economic Relations, [www.icrier.org](http://www.icrier.org).
  14. Office of the Registrar General, India (2001). *Madhya Pradesh Data highlights: The Scheduled Tribes*, Delhi: Census of India 2001.
  15. Subba, S. H., Mandelia, C., Pathak, V., Reddy, D., Goel, A., Tayal, A., ... & Nagaraj, K. (2013). Ringxiety and the mobile phone usage pattern among the students of a medical college in South India. *J Clin Diagn Res*, 7(2), 205-209.
  16. *The Times of India* (2011). [http://articles.timesofindia.indiatimes.com/2011-06-02/india/29612668\\_1\\_kurt-straif-iarc-mobilephone-radiation](http://articles.timesofindia.indiatimes.com/2011-06-02/india/29612668_1_kurt-straif-iarc-mobilephone-radiation).
  17. TRAI. (2011). *A Market Pulse Research Report, TRAI (QoS) Customer Satisfaction Survey Report*, Madhya Pradesh Circle, Noida.
  18. Tully, Claus J. (2003). "Growing Up in Technological Worlds: How Modern Technologies Shape the Everyday Lives of Young People." *Bulletin of Science, Technology and Society* 23(6):444-456.
  19. UNDP. (2009). *Migration and Human Development in India*, Human Development Reports, New Delhi: united Nations Development Programme, p.8,11.
  20. WHO (2011). <http://www.who.int/mediacentre/factsheets/fs193/en/>.