IMPACT OF TECHNOLOGICAL DEVELOPMENT ON THE TRIBAL PEOPLE: A CASE STUDY OF SELECTED TRIBAL VILLAGE IN JHARGRAM DISTRICT IN WEST BENGAL

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Abstract: The importance of information technology in the present age is incommensurate. Computer education is currently connected to all types of work. In this information technology, human life has become increasingly dynamic. On 4th April 2017 is recognized as the new district of Jhargram. The use of this information technology is one of the most important means of development of any place. Jhargram is originally a tribal-rich district (Total population -1074426 out of which 327771 are ST population, based on district census report 2011). Almost all areas are rural in nature in Jhargram district except the Silda of the Binpur-II block and main city area of the Jhargram block. The main concern of the present study is the impact of technological development (mainly computer education and smart phone use) on the tribal people in Jhargram district of West Bengal. The result depicts that people of Santal, Lodha, Kora, Lohara etc. communities are living here. Use of smart phones and computer education are the companions of children in the city area. In this era of modernization, this information technology has little effect in the lives of poor indigenous people. The way, in which digital India, smart city and smart village is being expanded, it is a modern example. Despite this, tribal people of Jhargram village could not enjoy the benefits of too much information technology.

Index Terms: Tribe, ICT, Development, PVTG.

INTRODUCTION:

Development level of a society is a measure of how efficiently the society is harnessing the benefits of different developmental and welfare programs initiated by the government of the day. Tribal in India have been deprived of opportunities because of many factors. One of the important factors is unavailability of suitable infrastructure for the development plan to reach to them. It is widely acknowledged that Information and Communication Technologies have potential to play a vital role in social development. Several projects have attempted to adopt these technologies to improve the reach, enhance the coverage base by minimizing the processing costs and reducing the traditional cycles of output deliverables. ICTs can be used to strengthen and develop the information systems of development plans exclusively for tribal and thereby improving effective monitoring of implementation. The paper attempts to highlight the effectiveness of ICT in improving livelihood of tribals in India. ICT may help in filling this gap and therefore our discussion is restricted in this paper to the use of ICT for the improvement of livelihood of tribal in India.

Nowadays, Information and Communication Technology (ICT) has an important role in the world since we are now in the information age era. Information and Communications Technology (ICT), is an umbrella term which contains both Information Technology (IT) as well as Communications Technology under its fold. In fact, it is a very broad term used to refer to the literally infinite areas of scientific studies and techniques used in the handling of telecommunications; media management and broadcast; intelligent systems; data handling, processing, storage and transmission; network based solutions; as well as audio visual monitoring processes. The term is generally accepted to mean all devices, networking components, applications and systems that combined allow people and to interact in the digital world. ICT encompasses both the internet-enabled sphere as well as the mobile phone powered by wireless networks. It also includes antiquated technologies, such as landline telephones, radio and television broadcast -- all of which are still widely used today .ICT is sometimes used synonymously with IT (for information technology); however, ICT is generally used to represent a broader, more comprehensive list of all components related to computer and digital technologies than IT. The list of ICT components is exhaustive, and it continues to grow. Some components, such as computers and telephones, have existed for decades. Others, such as smart phones, digital TVs are more recent entries.

STUDY AREA:

Field selection is an important factor in any study. To properly point out the objectives of the study, it is important to see which areas will work on it. The impact of technology on tribal people is seen in the current study. So, two blocks of Jhargram district (formed on 4th April, 2017) was brought under the current topic such as Jhargram (ST population-39.95%) and Binpur-II (ST population- 22.71%). Under each block two tribal concentrated villages [Kamarbandhi (literacy-73.27%), Kurchiboni (literacy-59.26%), Jarulia (literacy-69.46%) and Jualvanga (literacy-51.32%)] have been selected according to the requirement. Besides, In addition to the Village Surveys, computer centers

have also been taken to see how indigenous people, especially tribal student have been able to add themselves to the computer education. In this case, various government and private computer training centers were considered as a study area such as- Youth computer training centre, Disastudy, Datavision and BCW Department etc. In order to give priority to the special [1]PTG (primitive tribal group) community, the village of Lodha community in Jhargram has been selected.

OBJECTIVE:

This study is about the usage of Information Communication Technology among the selected tribal village of Jhargram district in West Bengal. This paper focuses on what are the ICT devices they are using and how effectively they are using the ICT. This paper focuses on both public and school students but mainly focuses in the tribal areas. Because now a day's most of the schools in urban areas have changed to smart class rooms and even a primary school students are able to access computers, mobile phones and internet.

- To infer the impact of ICT , present study conducted on the basis of computer education;
- To understand the smartness among the tribal people based on mobile phone use and their application;

METHODOLOGY:

For this study both types of data (Primary and secondary data) has been collected from various sources. Secondary data has been collected from B.D.O, Panchayat office and Computer centres. Primary information has been collected by personal interview.

- **Pre-study:** After selecting the topic, different journals and articles on this topic have been gone through from the internet.
- **During study:** On March 2018, selected village of Jhargram district has been visited. A pre-designed structured schedule was made to carry on survey among the local tribal people. Data collected by the said processes are all primary in nature.
- **Post-study:** Collected data has been tabulated. Suitable cartograms have been made in MS-Excel 2007 software. Both the tables and diagrams have been interpreted and a report has been produced.

Map Source:NRDS GIS CENTRE
Office of the District Magistrate,Paschim Medinipur
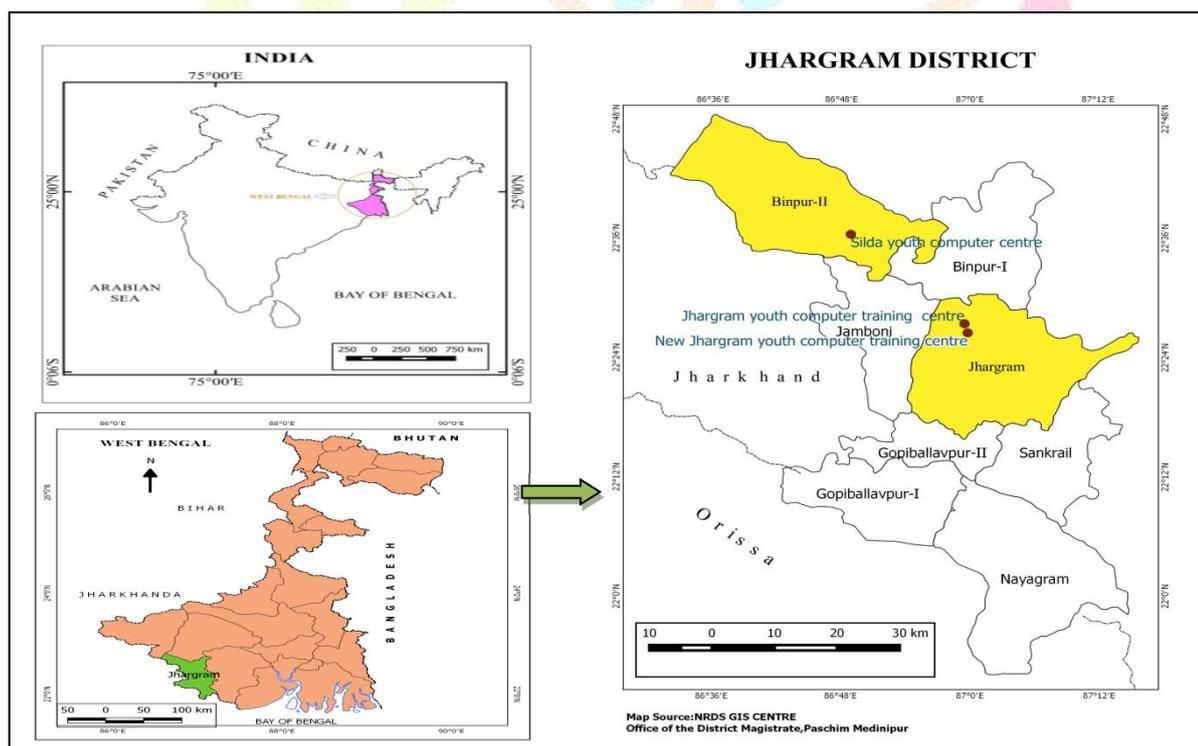
RESULT AND DISCUSSION:

Computer Education: Computer education in schools plays important role in student's career development. Computer with the internet is the most powerful device that students can use to learn new skills and more advanced version of current lessons. Schools are around the globe teaching student's basics of computers and internet. The uses of computers and internet are growing day by day at high speed. In almost all business, companies, schools using computers for various official operations. New tech tools are coming that helping students to learn better.

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[1] **Particularly vulnerable tribal group** (PVTG) (earlier: Primitive tribal group) is a government of India classification created with the purpose of enabling improvement in the conditions of certain communities with particularly low development indices. This was created based on the Dhebar Commission report and other studies during 4th five year plan and this sub-category was named "Primitive tribal group". Birhor, Lodha and Toto tribes are considered as (PTG) community in West Bengal.

Computers and the internet not only help students to explore creativity and imagination but also help to understand technologies. Students are future leaders for any nation. Current school students are future doctors, engineers, entrepreneurs. So, for the education development, it is really important to teach students in schools about computers, the internet and its benefits.

Table: 1: Community wise Computer Literacy.

Sl. No.	Community	Computer literacy (n=736)			
		No	Percentage	Yes	Percentage
1	Bhumij	76	88.37	10	11.63
2	Kora	5	83.33	1	16.67
3	Lodha	59	96.72	2	3.28
4	Lohara	3	60.00	2	40.00
5	Munda	9	52.94	8	47.06
6	Santal	401	86.98	160	13.02
	Grand Total	**553**	**75.14**	**183**	**24.86**

Source: Field survey.

It is very important for all citizens to have computer knowledge in digital society. In most cases of secondary and Tertiary sectors is computer based. Although computer education is available to the people of the city area, it is not available to tribal people. Surveys show that only 24.86% of people have computer knowledge in the study area. Most people have no computer knowledge (75.14%). Community wise computer literacy study found that Santal children are more interested in computer education (21.47% out of 24.86%). Along with this, a few of the Bhumij communities (1.36%) have learned computers. There is no idea about computers in other community's children. Most of the computer-educated children have completed schooling or have completed their studies very recently. So, computer education is not too old among tribal people.

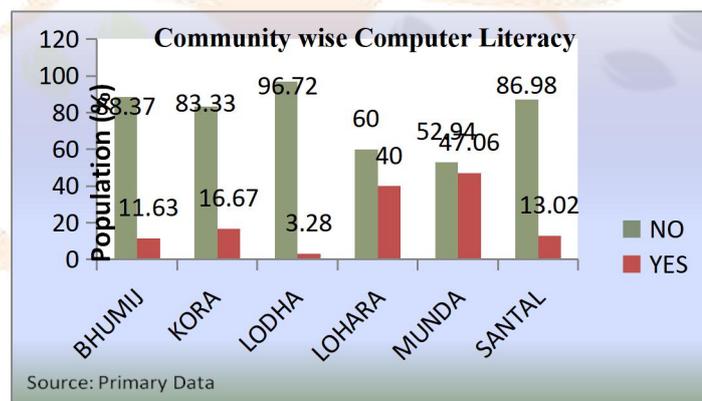**Figure 1: Community wise Computer Literacy**

Source: Primary Data

Table: 2: Community vs. Job oriented Computer Course

Community	Job oriented computer course						
	*Not applicable	%	No	%	Yes	%	Grand total
Bhumij	0	0.00	14	8.28	6	3.55	20
Kora	0	0.00	0	0.00	1	0.60	1
Lodha	11	6.51	3	1.78	2	1.18	16
Lohara	0	0.00	0	0.00	1	0.59	1
Munda	0	0.00	0	0.00	4	2.37	4
Santal	9	5.33	31	18.34	87	51.48	127
Grand total	**20**	**11.83**	**48**	**28.40**	**101**	**59.77**	**169**

* **NOT APPLICABLE**= those who are child (< 5 years), still not going to school.   Source: Field Survey

Different government and private computer training centers spread across the main city area of Jhargram district and the surrounding area. Such as-Data vision, Disha Study, JNCSM- Silda, Rajib Gandhi National Youth Computer Training Centre, Jhargram Youth Computer Training Centre, New Jhargram Youth Computer Training Centre, Silda Rural Youth Computer Training Centre and

Computer training was provided from SDO office for the backward classes' children. 100 people were given computer training, out of which 80 were scheduled tribe. Such public attempts to improve the Indigenous community's children are commendable.

Survey shows that 101 informants out of 169 informants have job oriented computer courses. On the other hand, 40% of the informant did not have any job oriented computer course. As already mentioned, Santal and Bhumij family children are ahead in computer education and they are doing different types of computer courses. It is 50.89% of the children of Santal community and 3.55% in Lodha. They have taken computer education as a qualification to get jobs opportunity. Really it is evident today's computer-based social system.

Photo: 1.1 Students of Silda Youth Computer Training Centre

Photo 1.2 Sanatan Mandi and Nawa sakam Soren have completed diploma courses and are still continuing other computer courses

Table: 3: Computer Course vs. no. of Informant.

Computer course	No. Of informant	Percentage (%)
Certificate course	28	27.72
Dita	35	34.65
Dita, tally	2	1.98
Doc	1	0.99
Dtp	1	0.99
Abta	1	0.99
Dca	1	0.99
Cat	1	0.99
Dic	31	30.69
Grand total	**101**	100.00

Source: Field survey.

59.77% of the people here have different types of job oriented computer course and some of them are now learning. Job oriented course such as- certificate course, DITA, Tally, DTP, CAT, DOC, DIC etc. Tribal people are doing their development through this course. Certificate courses are the first phase of computer education and 27% tribal people are seen doing this course. The demand of DITA course is high; about 34 percent people are associated with it. Only 1.98% people are doing Tally courses for Business Purpose and Accounting. DTP course have been done by 0.99% tribal people.

Computer education promotion and expansion can't be seen in rural areas like urban areas. Most tribal children can learn about different computer courses from friends, family members or relatives. In some cases, students are aware of this when they hear or see (in the way of school or college or market etc.) the announcement or poster in the town area. 37.62% of respondents hear from friends, 25.74% from family members, and know from relatives 7.92% about the computer course. These three media play an important role in the campaigning (71.28%). The role of the announcement and poster media is as small as 3.96% and 0.99% respectively.

Table: 4: Reason Behind Joining the Course.

Reason behind joining the course	No. Of student (n=101)	Percentage (%)
Educational purpose	22	21.78218
Family advice	4	3.960396
Inspired by other	3	2.970297
Free course	4	3.960396
To get a certificate	31	30.69307

To get a job	47	46.53465
To know about computer	3	2.970297
To get knowledge	2	1.980198

Source: Field survey.

Students are required to learn computers in compulsory computer education in school education. But there are several reasons behind getting computer training from a government or private organization such as- To get a certificate, to get a job, to know about computer, to get computer knowledge, Education purpose, Family advice and inspired by others etc. Most boys and girls come to learn computers hoping to get certificates (30.69%) and jobs (46.53%). Again, the parents of the boys and girls are admitted to the computer center to educate their children (3.96%). Computer education is an important part of education. So, 21.78% students have been admitted to the computer center for study.

Like the General Education system, there is no scholarship to computer education system. In the absence of money, many children cannot afford computer education. The only free computer training that was provided from Jhargram SDO office was the government scholarship. After the completion of the course, all the participants were paid 1000 scholarships with the certificate.

Before going to work, aware boys and girls, consult parents or guardians. Children are admitted to computer courses after getting permission from Paramedics from families or teachers. What type of computer course will children be admitted, learn from where and why it will be learned that the counselor has to say this. 66.34% of children are enrolled in computer courses with parental permission because parents will pay computer course fees.

Table 5: Problem faced during the computer course(N=101)		
Problems	**No. Of informant**	**%**
Communication	8	7.92
Distance	24	23.76
Economic	3	2.97
Illness	5	4.95
Family prejidice	6	5.94
Criticism by neighbour	1	0.99
Education	1	0.99
No problem	61	60.40

Children of poor tribal communities can't take higher education as well as training for different types of self development. The main reason for this is financial weaknesses. Children are facing various types of problems during the course of the computer course and during the course of the course. As a result, regularity could not be maintained in the computer center. Studies have shown that 15.84% of students (out of 101 students) could not maintain regularity. The problem of paying the course fee was 2% to the student. Because the computer center is not within the village, the children come to Jhargram main town or Silda Town. As a result, 5% of the students could not attend regular classes because of distance. Some student could not come to the computer center every day due to physical illness and home work and schooling.

Table: 6: Educational Status vs. Computer Literacy.

Educational status	Computer literacy				
	No	**%**	**Yes**	**%**	**Grand total**
B.ed	0	0.00	2	0.27	2
Can not sign	95	12.91	1	0.14	96
Can sign	83	11.28	0	0.00	83
Diploma in polytechnique	0	0.00	2	0.27	2
Diploma in santal language	1	0.14	0	0.00	1
Graduation	22	2.99	40	5.43	62
Higher secondary	58	7.88	51	6.93	109
Kg	11	1.49	0	0.00	11
Mbbs	0	0.00	2	0.27	2
Post graduate	2	0.27	10	1.36	12
Primary	79	10.73	3	0.41	82
Secondary	98	13.32	19	2.58	117
Under graduation	7	0.95	45	6.11	52
Upper primary	76	10.33	8	1.09	84
Not applicable	21	2.85	0	0.00	21
Grand total	**553**	**75.14**	**183**	**24.86**	**736**

Source: Field survey.

If you want to achieve the real success of the student life as well as the education of the school-college and the education of the computer must be looked at equally. Computer knowledge is mandatory for higher education. Surveys have found that 75.16% of the students of Jhargram district (Kamardandhi, Kurchiboni, Jarulia, Jualvanga and surrounding area) have not received computer education even after taking education from school-college. Only 24.86% of tribal students have given importance to computer education as well as general education. Generally, children are asked to join computer education after giving secondary. In addition to taking education in school-college, the number of students taking computer training is respectively- secondary (2.58%), higher secondary (6.93%), under Graduation (6.11%), graduation (5.43%), post graduation (1.36%) and B.ed (0.27%). Computer training has taken 1.09% people after studying at upper primary

Application of Mobile phone: With the advent of new technology the way of communication is also changed. In very early days of history, pigeons were used as means of communication. Later, written messages are sent through letters by post. As the time passed, telephone came into existence and today is the era of wireless communication which gives rise to mobile phones. Mobiles are the latest invention and common way to communicate now-a-days.

Information technology has improved the mobile phones to a great level. Today, with the help of internet, we are able to access various social media sites and apps that help us stay connected with our friends, family and the entire world. Mobile phones have made communication easier with quick placing of calls and SMS. Mobile phones are of great help at the time of emergencies when we need to call the police, ambulance or other emergency services.

Mobiles are now every one's first choice gadget, either an elderly person or a younger one. It is like a status symbol now. Every persons hand is equipped with latest mobile models and everyone has its own reason to have this magic gadget in his hands. Every day new models of mobiles come replacing the older ones to lure the users. The interested users especially the young generation is very fond of the latest features provided in new handsets. People like the new ring tones, hello tunes and wallpapers. With this, mp3 and video recording facilities, MMS and Internet facilities are attracting the users to mobile world. Mobile users can't even imagine their world without their handset. The importance of mobiles can be imagined by the reaction of people if they are asked to leave their handset separate from them for a day. Their life got a comma if they are keeping a part of their mobiles.

Table: 7: Distribution of Mobile Phone Users on the basis of Household.

Community	Mobile phone use				
	No	Percentage	Yes	Percentage	No of indivisual
Bhumij	55	7.47	31	4.21	86
Kora	2	0.27	4	0.54	6
Lodha	44	5.98	17	2.31	61
Lohara	2	0.27	3	0.41	5
Munda	8	1.09	9	1.22	17
Santal	275	37.37	286	38.86	561
Grand total	386	52.45	350	47.55	736

Source: Field survey.

Standing in the age of information technology, the importance of mobile phones is immense. It is possible to communicate easily with people from far away. As a result of this discovery, time consuming is less as well as economic benefits. Many indigenous people do not use mobile phones even in the present modern society. It has been found that 52.45% (out of 736 people) of the people have not yet been using mobile phones. Less than half of people are using mobile phones till now. There is more use of mobile phones in the Santals (38.45% out of 47.55%). The people of Bhumij and the Lodha community are using 4.21% and 2.31% of mobile phones respectively.

Table: 8: Type of Phone vs. no. of Phone holder

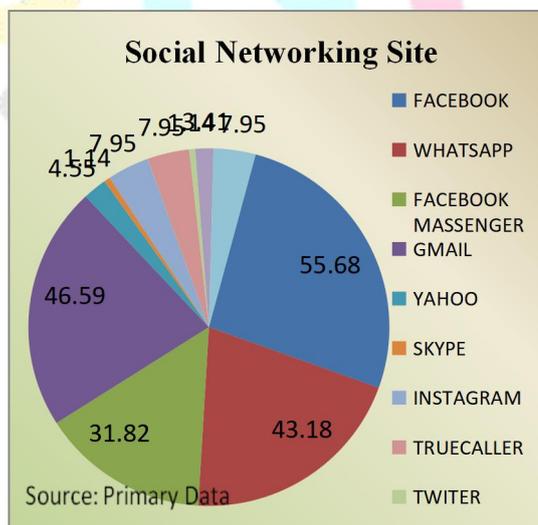| Type of phone	No. Of phone holder	Percentage
Anlg	54	38.03
Anlg,smart	2	1.41
Multi	32	22.54
Smart	54	38.03
Grand total	142	100.00

Source: Field survey.

Figure 2: Social Networking Site

Table: 9: Social Networking Site And Communication App

Social networking site & communication app		
Appli Cation	No.of informant(n=88)	Percentage
Facebook	49	55.68
Whatsapp	38	43.18
Fb massenger	27	31.82
Gmail	41	46.59
Yahoo	4	4.55
Skype	1	**1.14**
Instagram	7	7.95
Truecaller	7	7.95
Twiter	1	1.14
Hike	3	3.41
Imo	7	7.95

Source: Field survey.

Table: 10: Use of Various Entertainment Apps

Entertainment apps (n=88)		
Application	No.of informant	%
Youtube	48	54.55
Hotstar	28	31.82
Jio tv	9	10.23
VLC	5	5.68
Vidmate	8	9.09
Voot	2	2.27
Mx player	2	2.27

Source: Field survey
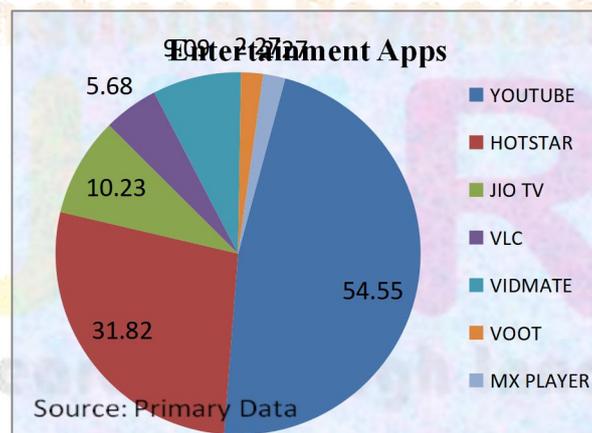
Figure 3: Entertainment Apps

Table: 11: Use of Others Mobile Apps.

Mobile APPS (N=88)					
Application	No. of informant	%	Application	No. of informant	%
FLIPCART	4	4.55	OPERA MINI	17	19.32
AMAZON	13	14.77	UC BROWSER	30	34.09
MYNTRA	1	1.14	MOZILA	4	4.55
SNAPDEAL	1	1.14	JIO MONEY	1	1.14
GOOGLE MAP	33	37.50	MY AIRTEL APP	7	7.95
NTES	1	1.14	NY VODAPHONE	1	1.14

RTT	1	1.14	PAYTM	3	3.41
IRCTC	1	1.14	SHAREIT	39	44.32
MAKE MY TRIP	1	1.14	XENDER	47	53.41
GOOGLE	53	60.23	BLUETOOTH	1	1.14

Source: Field survey.

The importance of an analog phone is seen among the poor indigenous people. 38.03% informants are using the analog phone. The number of multimedia and smart phone users is 22.54% and 38.03% respectively. Both analog and smart phone are using only 1% of the informant.

Young people use most of the smart phones. Young generation children are more attracted to smart phones due to the huge benefits of smart phones. With the help of smart phones, it can be called on one side and on the other hand it can be collected in many theories of the world using different types of applications. It is possible only with the help of smart phones and multimedia phones. The most popular social networking site is Facebook, Whatsapp, Twitter, Hike, IMO etc. The survey found that 55% of the informant has a Facebook account. Using Whatsapp is 43% Informant, Facebook Messenger is using 31% and Gmail account has 46% Informant's. Yahoo mail, Skype, Instagram, True caller, Twitter, Hike and IMO have been used by the 4.55%, 1.14%, 7.95%, 1.14%, 3.41% and 7.95% informant respectively.

Mobile apps for entertainment are YouTube, Hotstar, Jio TV, VLC, Vidmate, and MX Player. 54% of the informant is using YouTube to listen to various types of movie and songs. The number of Hotstar users is 31 percent. JIO Connection is fast expanding in the market; its demand is also increasing. 10% informant has been watched JIOTV. Using VLC and MX player has seen 5% and 2% of the informant.

Online shopping is currently being used by many people. Customers are getting the necessary materials at home while the online shopping system is available. Some are buying essential things using the online shopping apps. Just as Flipcart users are 4.55% and Amazon, Myntra, Snapdeal are using 14.77%, 1.14% and 1.14% informant respectively.

Different types of transport apps are used in urban areas. Only some people who are out of Home for study, they have used NTES, IRCTC, make my trip etc. A smart phone connected to the Internet connection means that the world is in hand. Some of the unknown information comes to the screen when you search by typing. Most popular app is Google in browser apps.60.23% informant has been used Google for Browsing. In case of document transfer, Xender, SHAREit and Bluetooth are available on every smart phone.

Table: 12: Purpose of Mobile Phone Use.

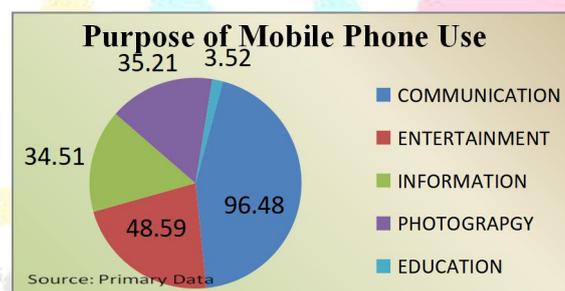| Purpose of mobile phone use(n=142)		
Purpose	**No. Of phone**	**%**
Communication	137	96.48
Entertainment	69	48.59
Information	49	34.51
Photograpgy	50	35.21
Education	5	3.52

Source: Field survey.

Figure 4: Purpose of Mobile Phone Use

Mobile phones can be used on various purposes such as- communication, Entertainment, Information collects, Photography and Education purpose. The main purpose of buying the phone is communication, so almost all phones are used in this Purpose (96.59%). 48% of the informant Entertainment Purpose, 34% informant information collection, 35 percent informant photography and 3% Informant Education Purpose mobile phone, especially smart phones are used. Almost all smart phones are used to make calls as well as entertainment. In today's society, mobile phones, especially smart phones, are considered as the important wealth of entertainment.

Information technology has provided so much advantage through mobile phones that we can't continue without mobile phones. So when the mobile phone becomes bad or the Internet connection is disconnected then the mobile users face various problems such as – communication, information, entertainment, net inaccessibility problems etc. These problems are very low for poor people because the importance of mobile phones in their lives is not very much. So even if the phone is lost, 27 percent of phone users do not fall into a particular problem. Most phone users (69.72%) face communication problems. In terms of problems like entertainment, information collection and net inaccessibility have been faced by 12.68%, 16.20% and 10.56% mobile users respectively.

Table 13: problem face during inaccessibility of mobile(n=142)		
Problem	**No. Of phone**	**Percentage**
Communication	99	69.72
Entertainment	18	12.68
Information	23	16.20
Net inaccessibility	15	10.56
No problem	39	27.46
Source: Field survey		

MAJOR FINDINGS:

1. It is very important for everyone to have computer knowledge in the present society. The demand for educated people is much higher. We have now seen computer education gradually spread among tribal people. In the study area 24.86% of the tribal people have computer knowledge.
2. Mobile phone communication is an important tool in the age of information technology. 47.55% of tribal people are using mobile phones. At present, the demand for smart phones is most important because of the much important and entertaining content in the meantime. 31.03% of people have been seen using smart phones.
3. Most of the indigenous people have computer certificate courses (27.72% and also DITA course-34.65%). Only a small number of people have expressed interest in the advanced course because of its financial problems.

SUGGESTION:

1. There are computer centers in the main areas of Jhargram. As a result, children have to learn computer after coming out of village in the main city. Due to distance, many children cannot come to learn computers, but due to distance, regular classes cannot be present. For this reason, if there will establish a new computer centre then children will be more agree in computer education.
2. Media must be emphasized to reach the importance of education to the people of all levels. The importance of computer education in rural areas is to be promoted.
3. Work protection is very important among tribal people. In order to add tribal peoples to different types of work, for this purpose the government should be take some good action like different skill development training programme on behalf of the government.
4. Teaching of 14-year-old children was completely free and compulsory, but it did not work particularly in indigenous peoples. In that case all government and non-government institutions will have to play an effective role.

CONCLUSION:

Discussing the impact of information technology on the people of tribal communities residing in Jhargram and Binpur-II block of Jhargram district, one thing is clear that the sons and daughter of Santal family here are much more advanced. The life style of Santals has been much improved since before. They are more interested in computer education as well as mobile phone use. The Bhumij community has made relatively little improvement. The Lodha community is still far behind than modern society. Economic problem is one of the major reasons behind the backwardness of tribal community. Apart from this, there is less education in the tribe because the children are not encouraged to be educated. Tribal children are interested in computer courses but this is not possible due to financial problems. They demand various types of government training from which they can improve themselves. The students are very happy about the free computer courses taught for SC/ST from the government. In the end, tribals are not only involved in agriculture but they are trying to develop in different types of work. As a result, the education rate in the tribe is gradually increasing.

ACKNOWLEDGEMENT:

REFERENCE:

1. Kumar. V, Bansal. A. "Information & Communication Technology for Improving Livelihoods of Tribal Community in India", International Journal of Computer Engineering Science (IJCES) Volume 3 Issue 5 (May 2013) ISSN: 2250:3439, P13-21.

2. Jenitha. I, R. Radha. B." ICT usage among Tribals in Tamil Nadu", The Journal of Media Studies Volume - 7, Issue - 1 Jan - June 2017, P 774-777.

3. https://searchcio.techtarget.com/definition/ICT-information-andcommunications technology-or-technologies.

4. http://wwwcensusindia.gov.in (Retrieved on 22nd April,2018)