



# **A STUDY ON DIGITAL DIVIDE AND THE USE OF TECHNOLOGY AMONG TRIBES IN KERALA WITH SPECIAL REFERENCE TO PANIYATRIBE OF KANNUR DISTRICT**

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## **Abstract**

Tribe is a unique community in our society which needs a special attention in the process of growth and development. Kerala stands first in terms of human development index, but the tribal development proceeds at a slower pace. Since technology is an important input and indicator of growth and development the ongoing process of globalization and technological development favors the forces of market and excludes the marginalized sections of the society. It accelerates the extend of digital divide among the tribes. The tribal community has very limited wants. Food, shelter and clothing are the only important wants of tribes. The technology linked living system and development is still far away from majority of the tribal communities. Even though both the government and non- government agencies are working for the technological advancement of tribals, a large number of tribal families in Kerala are not yet been benefitted by these agencies. Kerala holds a unique position in the

tribal map of India. According to 2011 census tribal population in Kerala is 4.84,8391. There are about 36 tribal communities are existing in Kerala including Kurumbar, Kadar, Koragar, Kattunaykar, Cholanaykar and Paniyar. Among the 36 tribal communities the Paniya community is the most backward community and also the largest community in terms of population. So this study is trying to examine the extend of digital divide the use of technology among the Paniya tribal community of Kannur district.

**Key words:** *Tribe, Technological development, Digital divide*

## INTRODUCTION

Since technology is an important input and indicator of growth and development the ongoing process of globalization and technological development favors the forces of market and excludes the marginalized sections of the society. The tribal's of Kerala, even though they form a very small proportion of the total population deserves special attention not only as the early inhabitants of the land but as a group which remain separated from the main stream of economic and social development. This separation can be considered as the main. The digital divide is mainly visible within urban and rural people, educated and uneducated and developed and developing nations. In a mainstream society or urban areas we can not see the gap. The real disparity can be observed in the remote areas and the areas where uneducated and illiterate people are more. The digital divide trend has emerged with the advent of Information and communication Technology.

The tribal community has very limited wants. Food, shelter and clothing are the only important wants of tribes. The technology linked living system and development is still far away from majority of the tribal communities. Even though both the government and non- government agencies are working for the technological advancement of tribals, a large number of tribal families in Kerala are not yet been benefitted by these agencies. There are about 36 tribal communities are existing in Kerala including Kurumbar, Kadar, Koragar, Kattunaykar, Cholanaykar and Paniyar. Among the 36 tribal communities the Paniya community is the most backward community and also the largest community in terms of population. So this study is trying to examine the extend of digital divide and the use of technology among the Paniya tribal community of Kannur district.

## STATEMENT OF THE PROBLEM

Tribe is a unique community in our society which needs a special attention in the process of growth and development. Kerala stands first in terms of human development index, but the tribal development proceeds at a slower pace. Since technology is an important input and indicator of growth and development the ongoing process of globalization and technological development favors the forces of market and excludes the marginalized sections of the society. It accelerates the growth of digital divide among the tribes. In this context the present study aims to understand the extent and causes of digital divide and the attitude towards the use of modern technology among the Paniya tribal community of Kannur district.

## OBJECTIVES

The objectives of the study are:

- To find out the existence of digital divide among the Paniya tribal community of Kannur district.
- To understand the causes of digital divide among the Paniya Tribal community of Kannur district.
- To find out the policies and programmes to reduce the digital divide among the tribal community of Kerala.

## METHODOLOGY AND DATA SOURCE

The Study is intended to examine the existence of digital divide among the Paniya Tribal community, the major tribal community in Kannur district. The researcher took Ayyankunnu village of Kannur district for the study. From the Ayyankunnu village, Moonnamkutty Paniya tribal colony has selected for the primary data collection. The work is based on primary and secondary data. The researcher took 40 sample households by employing purposive random sampling method from the selected colony. From the 40 sample households the researcher took 120 members within the age group of 10 and 60. The data was collected with the help of a well structured schedule. The secondary data has obtained from the various published sources of Tribal Welfare Department and online sources.

## CHARACTERISICS OF THE PANIYA TRIBAL COMMUNITY

Paniya tribes are said to be the major tribal communities residing in different parts of the Kerala. It is the community which stands first in terms of population and last in terms of growth and development. Various districts where these Paniya tribes have built their settlements include Kozhikode, Malappuram, and Wayanad and Kannur district. The word Paniyan is derived from “Pani” which is a Malayalam word meaning work. The people of this tribal community are majorly labors and their past history also suggests the same. In fact these are amongst those tribal people who have worked as bonded labors in the ancient period. The Paniya community has very limited wants. Food, shelter and clothing are the only important wants of Paniyas. Better education facility, modern health system and variety of commodities in the market are not familiar to this community.

Majority of the tribals live in very remote areas, where transport and communication facilities are inadequate. As a result the social awareness of the tribals is very low. The chief occupation of this Paniyan tribe is to work as farmers in the field of rich land owners. In the ancient period they have worked as bonded laborers. The low wage and seasonal employment pave the way for poverty and deprivation.

Even now Paniyan tribal community has a negative attitude towards saving. They are primarily spending their entire income for consumption. They never save anything in cash or in other assets. Tribes have only less awareness regarding the banking services. Just like the saving pattern the consumption pattern among the tribes is also unique. Consumption and expenditure pattern of the tribals gives a dismal picture regarding the standard of living of the tribes. It is found that they are not in a position to consume nutritious and different varieties of food. Major portion of their income is spent for food items, liquor, pack and entertainment. Electronic equipment, motor vehicles and basic furniture items are rarely included in the consumption baskets of the tribes. Paniyas give very little importance to education. Most of them are not yet conscious about the benefits of education and consequent economic gains. And also they believed that the educated children are reluctant to take up their traditional occupations. It is found that the problem of illiteracy is acute among the Paniya community. This low literacy is considering as the root cause of their socio-

economic backwardness Since very few among the tribals make use of any kind of media, their general awareness is limited and most of them are ignorant about the day to day socio economic and political development around them.

## **EXISTENCE OF DIGITAL DIVIDE AMONG THE PANIYA TRIBAL COMMUNITY OF KANNUR DISTRICT**

The existence of digital divide can be identified by the indicators like basic education, digital literacy, telephone or mobile phone density, personal laptop or computer, number of internet users and accessibility to internet etc. Since tribe is a marginalized community we should first analyze the basic social infrastructure, ie, their education to understand their digital knowledge. . The following table shows the distribution of the sample respondents on the basis of their education. Total number of sample respondents in the study area is 120.

**Table 1.1**

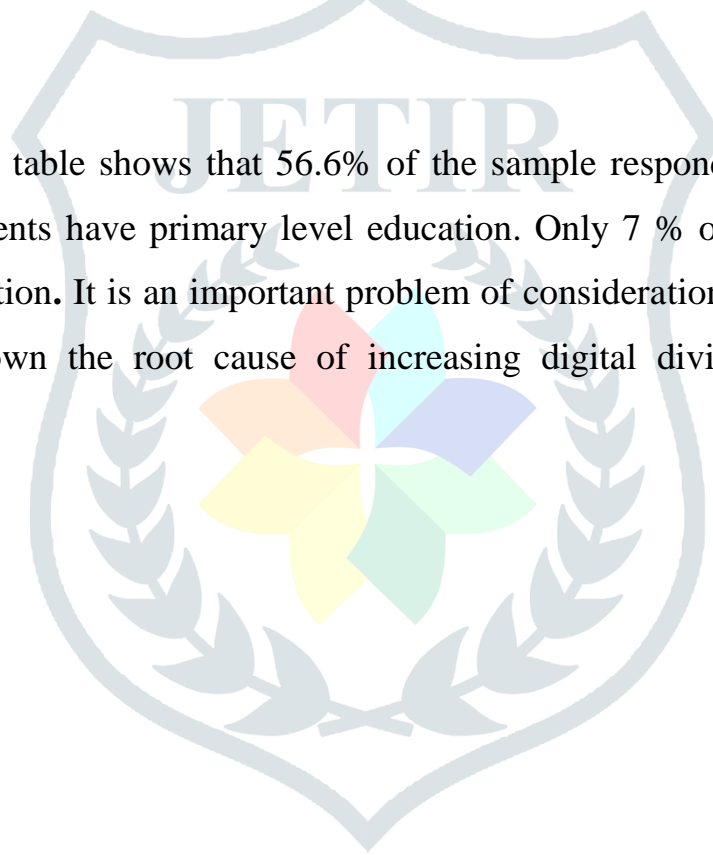
### **Distribution of the sample respondents on the basis of their education**

Education level	Number of respondents	Percentage of respondents
Not Educated	68	56.6%
Primary level	45	37.5%

Secondary level	7	5.8%
Higher secondary and above	0	0%
Total	120	100%

SOURCE: PRIMARY DATA

The table shows that 56.6% of the sample respondents are not educated. 37.5% of the respondents have primary level education. Only 7 % of the respondents have secondary level education. It is an important problem of consideration. 56.6% of uneducated respondents have shown the root cause of increasing digital divide among the sample respondents.



**Table 1.2****Distribution of the sample respondents on the basis of basic knowledge to use digital gadget**

Digital gadget	Number of respondents	Percentage of respondents
Base model mobile phone	55	46%
Smart phone	12	10%
Computer	14	12%
Laptop	5	4%
Tablet	0	0%
ATM	0	0%

SOURCE: PRIMARY DATA

From the table 1.2 it is clear that 45% of the sample respondents have the basic knowledge to use base model mobile phone. It means that 55 respondents have the knowledge to make calls and attend calls by using base model mobile phone. Only 11% have the knowledge to use smart phones. It includes their knowledge to use phones to watch movies, videos and to use facebook and whats app etc .Only 12% have the knowledge to use computer and 4% have the knowledge to use laptops. These 19 respondents are the school going students who are learning Information technology as a subject from the school. And even if some of them have bank accounts, nobody have the knowledge to use ATM cards.



From the table it is clear that only 45% of the sample respondents have the basic digital literacy.

**Table 1.3**

**Distribution of the sample respondents on the basis of ownership of digital gadget**

Digital gadget	Number of respondents	Percentage of respondents
Base model mobile phone	24	20%
Smart phone	6	5%
Computer	0	0%
Laptop	0	0%
Tablet	0	0%
ATM	0	0%

SOURCE: PRIMARY DATA

From the table 1.3 we can understand the main reason behind the existence of digital divide among the respondents. From the 120 respondents only 24 respondents own base model mobile phones and only 6 respondents own a smart phone. None of the respondents own computer, laptop, tablet and ATM. During the primary study respondents complained



that students got laptops from the schools but they still keeping in the schools as the instructions of teachers. So they said that during the lock down period their children couldn't attend the online classes regularly. And also the smart class room which built in the colony with a television for delivering classes to their students is not working properly. And also since the colony is locating in a remote area network facility is also not available.

**Table 1.4**

**Distribution of the sample respondents on the basis of the purpose to use digital gadget**

Purpose	Number of respondents	Percentage of respondents
Making calls	67	56%
Watching videos& movies	12	10%
Reading and learning	0	0%
What's app	12	10%
Face book	12	10%
Making bank transactions	0	0%
Online shopping	0	0%
Attend online classes	14	12%

SOURCE: PRIMARY DATA

From the table 1.4 we get an idea about the usage of digital gadget among the sample respondents. The respondents who own a base model mobile phone or a smart phone mainly using it for making calls. And along with this the 10% of the respondents who own smart phone use it for watching videos and films. And this 10% of the respondents use whats app and face book in their phones. From the primary study it is clear that this 10% belongs to the age group of 15 and 35. The school going students belongs to primary and upper primary classes are occasionally using their parent's mobiles phones for attending online classes. None of the respondents use their gadgets for making bank transactions, online shopping and reading and learning.

### **Initiatives of the Government to reduce Digital Divide among the Tribal Community**

- K- FON Project ( Kerala Fiber Optic Network)

It is a mega infrastructure project of the Government of Kerala which aims to build a high speed and reliable net connection to poor sections of the society. Initially by installing 200 station in Kasargod. It was inauguraed on February 2021.

- Distribution of laptops to tribal students

On September 2021 Minister of General Education V Sivankutty inaugurated the distribution of laptops to students in the tribal belts. The laptops are being provided as the government plans to start online classes. Initially laptops will be made available to all class x students belonging to the Scheduled tribe category.

- Let's Go Digital Project

It provides special financial assistance to the young researchers in SC/ST category.

- Tech for Tribals Kerala

It is a training being implemented in Kerala through Kudumbashree associating with IIT Kanpur aims at the holistic development tribals with focus on entrepreneurship skills, soft skills and IT skills operating through SHGs Van Dhan Vikas Kendras.

- Snehanidhi to provide gadgets for tribal students

To help students from the tribal settlements get access to online learning, child line Thiruvananthapuram in association with Loyola College of Social Science, Sreekaryam has come up with Snehanidhi project. Gadgets like tablets and power banks for six children of Malapandaram tribal group in Pathanamthitta.

- Aadhar Enabled Payment System (AEPS)

It is a bank led model which allows online financial inclusion transaction through the business correspondent of any bank using the Adhar authentication.

- Tribal Digital Divide Policy

In 2019 the American Indian Policy Institute published the Tribal Technology Assessment. This assessment find out that 33 percent depends on internet services from a smart phone at home. It recommended for the allocation of funds for the broadband infrastructure planning, deployment and maintenance in the tribal areas.

## FINDINGS

From the above study it is clear that digital divide is a growing issue among the society especially within the rural and backward communities. The term digital divide refers to the gap between individuals, households and geographic areas at different socio economic levels with their access and knowledge to use digital technologies which include smart phones, computers and the internet. It is highly evident between socio economic groups. In the present technologically advanced society digital divide is one of the factors which again widen the gap between the marginalized and mainstream population. The digital divide hinders the social progress of a society. Rural people and marginalized communities are

suffering from information poverty due to the digital divide. It should strengthen the vicious circle of poverty, deprivation and backwardness.

The study shows that 56.6% of the sample respondents are not educated. 37.5% of the respondents have primary level education. Only 7 % of the respondents have secondary level education. It is an important problem of consideration. 56.6% of uneducated respondents have shown the root cause of increasing digital divide among the sample respondents. From the study it is clear that 45% of the sample respondents have the basic knowledge to use base model mobile phone. It means that 55 respondents have the knowledge to make calls and attend calls by using base model mobile phone. Only 11% have the knowledge to use smart phones. It includes their knowledge to use phones to watch movies, videos and to use facebook and whats app etc .Only 12% have the knowledge to use computer and 4% have the knowledge to use laptops. These 19 respondents are the school going students who are learning Information technology as a subject from the school. And even if some of them have bank accounts, nobody have the knowledge to use ATM cards. From the table it is clear that only 45% of the sample respondents have the basic digital literacy. This study reveals the main reason behind the existence of digital divide among the respondents. From the 120 respondents only 24 respondents own base model mobile phones and only 6 respondents own a smart phone. None of the respondents own computer, laptop, tablet and ATM. During the primary study respondents complained that students got laptops from the schools but they still keeping in the schools as the instructions of teachers. So they said that during the lock down period their children couldn't attend the online classes regularly. And also the smart class room which built in the colony with a television for delivering classes to their students is not working properly.

And also since the colony is locating in a remote area network facility is also not available. This study gives an idea about the usage of digital gadget among the sample respondents. The respondents who own a base model mobile phone or a smart phone mainly using it for making calls. And along with this the 10% of the respondents who own smart phone use it for watching videos and films. And this 10% of the respondents use what's app and face book in their phones. From the primary study it is clear that this 10% belongs to the age group of 15 and 35. The school going students belongs to primary and upper primary

classes are occasionally using their parent's mobiles phones for attending online classes. None of the respondents use their gadgets for making bank transactions, online shopping and reading and learning.

## SUGGESTIONS

Factors such as low literacy and income levels, geographical restrictions, lack of motivation to use technology, lack of physical access to technology and digital illiteracy mainly contribute to digital divide. Since tribe is a backward community all these factors are crucial among them. So in order to reduce the digital divide among the tribes the above mentioned factors should consider. The suggestions can be recommended on the basis of this study are:

- Priority should be given to the field of education, both formal and job oriented for the empowerment of the Paniya community. This will help them to understand the technological advancements in the society.
- Government should ensure the availability of digital literacy programmes among the tribes.
- Road facility should be provided to the tribes living in very remote area.
- More awareness should be given to the tribes regarding the online based banking services.
- The government and non government agencies can take necessary steps to ensure the accessibility of internet and digital gadgets among the Tribal areas.

## CONCLUSION

The digital divide shows the gap between those who have ready access to computers and internet and those who don't. The society with high digital divide has social, financial and political instability. The digital divide is mainly visible within urban and rural people, educated and uneducated and developed and developing nations. In a mainstream society or urban areas we cannot see the gap. The real disparity can be observed in the remote areas and the areas where uneducated and illiterate people are more. The digital divide trend has emerged with the advent of Information and communication Technology. Among the tribal

community digital divide trend is very high. This is mainly due to their illiteracy, negative attitude towards education, their interest to live in remote and isolated areas etc. But this will again widens the gap between mainstream population and marginalized sections in terms of social and economic development. Even though the government and non government agencies have introduced some initiatives to reduce the digital divide among the backward communities still it is a growing issue among tribes.

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