



## Use of Internet in Rural Areas of India

Nathala Manikya Rao\* and Krishnaveer Abhishek Challa  
Andhra University, India

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### ABSTRACT

Access to information and, more importantly, the internet is not evenly distributed in this world. But if they had it, would people in rural India want to use the internet? How would they use it and benefit from it? Will internet influence culture and how can communities prepare themselves when the internet comes in their village? To support the rollout of internet in more rural areas in India and to improve the effectiveness of ICT in rural environments, a clear view on the adoption and use of ICT and services was needed. This study aimed at providing this knowledge. Interviews in rural India taught us how people use the internet and the benefits they experience. We also spoke about their expectations and what they think is needed when the internet is introduced in a community. The study showed that people and communities in rural India do benefit from ICT both socially and economically. Basically, they use the internet for the same purposes as people in Western countries, such as to communicate, to search for information and to buy things. However, internet is even more important in rural areas because of lack of alternatives, such as telephone lines, libraries, newspapers, roads in good condition, and public transport. In this paper we would like to focus on the affect that Internet has on Rural India.

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### Introduction

The rollout of telecommunications and ICT in the rural areas of India would enable people to communicate both within and outside their villages, create new employment possibilities for villagers, and support rural institutions (e.g. schools and hospitals) with their communication needs (Van Stam, 2006). Furthermore, the internet enables e-learning, which has the potential to bridge the educational gap that exists in society and improve the lives of millions of people in the developing world who do not enjoy the same opportunities as those in rich, developed countries (Pais A., 2007).

Technical, practical and political hurdles are to be overcome when introducing the internet in a rural community, such as computer illiteracy, having no telecom infrastructure, huge fees for small bandwidth satellite connection, lack of electricity and equipment breaking down faster because of harsh environment. Although the authors acknowledge that a multidisciplinary approach involving the local people, technical and organizational aspects is essential to successfully introduce ICT in a sustainable way.

However, little qualitative psychological and sociological studies are done on how people use internet in rural areas in Africa and what it means in their daily lives. Only some of the findings were relevant for this study, such as Joseph, K. and Andrew, T (2006) and Kozma, R.B. (2007). Additionally studies on culture and cross cultural psychology were used to prepare for this study such as Segall M.H., Dasen P., Berry J.W., Poortinga Y.H. (1990) and Hofstede, G. (1991). This paper describes study on the usage of ICT in rural areas in India. It is a qualitative study, based on a series of interviews carried out among the people of Chintapalli, South east India. Chintapalli is a Mandal Head quarter in Visakhapatnam district. There are 238 villages in this Mandal. The codes for Chintapalli are: Chintapalli village code-101, Chintapalli Mandal code-12, Visakhapatnam district code-3, AP state, India.

The research questions in this study to be answered were:

- How do people use internet in their daily life in rural Indian areas?
- What are the specific benefits of internet people experience and expect in Chintapalli?
- Will internet help to preserve or destroy the Rural Indian culture?
- Which means can promote the use of internet?

The hypotheses were:

- People in rural areas do benefit from internet in their daily life.
- People in rural areas come up with innovative ways of using ICT and services not yet known in western and urban areas, because of their different context.

### Method:

Semi structured interviews were conducted, most of them in English and two in Telugu, the local language in Andhra Pradesh. Participants were interviewed at their homes, their workplaces or at school. A recorder was used during the interviews in order to work them out later. A number of 10 interviews took place with 20 male participants and 10 female participants. Most were individual interviews and participants were selected from different parts of the community to create a wide variety of perspectives. Students from ZP high school, Chintapalli, Visakhapatnam District were interviewed; those interviews took place in small groups to make these young people feel more comfortable.

### Results:

The results of the interviews are summarized for each topic of interest; no interpretation is done by the authors other than adding results from other studies where relevant. Quotes of participants are added to illustrate the results. All quotes in this paper are anonymous as was agreed with the participants

### Usage of Internet:

The interviews started with asking people to tell us their story about the first time they used the internet. In Indian culture where people are used to telling stories this approach worked very well. The participants who have used the internet started using it between 2006 and 2008. Most participants first surfed the internet in the internet cafe at the vision community centre in Chintapalli. Some people were helped to get started by their friends, children and other relatives; others were assisted by people working in the internet cafe. The wish of sending e-mail to relatives or friends was a strong trigger to start using the internet.

“My enthusiasm to use internet was driven by an American young man who stayed with me and encouraged me to open up an e-mail address so that we could communicate when he leaves for Canada. This prompted me to open an e-mail account.” Study is another important trigger to start using the internet. A lot of participants look up information for their assignments. “I am studying at Andhra University. Internet has really helped me to acquire information for my school assignments as libraries are very scarce here”

	People who are already using the internet	People who have not used the internet yet, (but are expected to do so in a short period of time)
Topics of the interview	<ul style="list-style-type: none"> <li>• How they use the internet</li> <li>• What made them start using internet</li> <li>• The benefits they experience</li> <li>• Impact of internet on Indian culture</li> </ul>	<ul style="list-style-type: none"> <li>• What they know about the internet</li> <li>• Their expectations</li> <li>• What they think is needed when the internet is introduced in their community</li> <li>• Impact of internet on Indian culture</li> </ul>
Participants	teachers (deputy) headmasters of basic and secondary schools, Chief, businesswoman, airport manager, farmer, elderly online student, head of community radio IT consultant Students of Chintapalli ZP High school	salesman police officer, employee of ministry of education Students of Chintapalli ZP High School teacher

### Chatting was another trigger:

“These guys were doing a lot of chatting with people from Australia, America, New Zealand, people from all over the world”. They would type and then click on enter and those guys would reply immediately. When I was watching I was very surprised as to how it worked. So they also opened an account for me at Yahoo and I started chatting and also sending e-mail”. After their first introduction to the internet, all participants kept using the internet. Some do so regularly. They browse websites to look up information for studies, on how to use operating systems for computers (e.g., Linux), how to repair cars, farming, news; weather reports (airport manager). People buy books, school materials and even look up prices and buy second hand Japanese cars. Next to information, they establish new contacts with people all over the world, just for fun, but also to exchange information and consult experts on certain topics such as the ones mentioned above. Also, some use the internet to send reports to donors and supporters of schools in other countries.

“Since then, I use internet twice a week; I do this after knocking off from work”. “Apart from studying on line, I also use internet to communicate with my children Based in the United States of America and friends throughout the world”. “I am still using the internet on daily basis; this gives me an opportunity to communicate with my friends in other states”.

Others don't use the internet very frequently, mainly because of the distance between the Vision Community Centre and any other area where they can use the internet. All of these participants expressed the wish to have the internet at their homes or their workplaces.

“At the moment I do not use internet regularly. ... it is a 30 minutes walking distance to the community centre where internet is accessible. My wishes are to have internet connectivity at our school but the major barrier is the absence of electrical power at our school”.

### How the Internet Changes Lives in Rural India:

Unanimously, participants state that the internet changed their lives. For some the impact is still little, but for others the internet greatly changed in their lives for the better.

“To me, internet has changed my way of life because I would not be the way I am now without it. I am now able to study on line and also communicate with friends around the world”. “Internet has changed my life in terms of communication because before internet arrived at Chintapalli, I used post messages through the post office; this took time to receive a reply if the information was urgently needed”.

What is very interesting is that the internet also has an impact on the lives of those who do not use it themselves, such as students getting better quality information from their teachers and farmers learning new things from each other:

In 2005 I was searching for conditions necessary for hibiscus flower growing. I found the information on the internet. So I went to buy the seeds and planted the hibiscus flower. Last year I had a successive harvest and this year I'm looking forward to a successive harvest as well. It changed me as an individual, but also the community. One of my friends and also a teacher started growing hibiscus flowers and others have started planting the hibiscus flower, they followed my footsteps”.

### Benefits of the Internet:

Lots of social benefits are experienced by the participants when using the internet. Being able to keep in contact with friends and relatives all over the world is a great benefit for all. Also, being able to find information you need is a very important benefit. For example reading the news and knowing what's going on in the world, find business information and find out prices of goods and also for technical information such as repairing cars.

“As a Mechanic and driver, internet has helped me to search for information on how to repair cars once I experience a breakdown”.

Next to that, sending and receiving information quickly has solved a lot of problems that people normally experience in a rural area, such as announcing weddings and funerals, knowing when salaries, people and goods arrive.

“As an individual, I have benefited from internet by getting the information much quicker than I used to do long time ago”.

The internet offers a lot of economic benefits like efficiency, but these might be mainly Western values. Would people in rural Indian areas consider them benefits as well?

According to the participants, the answer is yes, they do experience a lot of economic benefits. The most important economic benefit is that internet saves a lot of money and time

of travelling. It enables people to buy goods, like books and cars, without having to travel themselves. Furthermore it saves a lot of money on travelling and logistics because people know when to go to pick something up, instead of going and finding out it's not there and having to return, which is often the case in rural areas in India.

Internet has improved the economy in rural areas because people gained a lot of knowledge on practicing new farming methods and on how to market their produce. Internet enables small income generating activities from which women can benefit, such as making soap out of Jatrophe. Next to that, opening an internet cafe is seen as way of making money by itself.

**Also, internet is seen as an enabler for other developments:**

"I strongly feel that out of technology other developments can be born in rural areas hence through these developments people will be able to sustain their lives".

"Internet will make people masters of their own destiny. Once they are introduced to internet, they'll be able to search for information. Not me telling them what to do, but themselves doing it".

**Internet and The Indian Culture:**

Like all new things introduced in a community, internet can have an impact on culture.

It is virtually intrinsic to the concept of culture that different people will possess different values, beliefs and motives. (Segall M.H., Dasen P., Berry J.W., Poortinga Y.H. ,1990) These values, believes and motives can change once the internet is introduced in a community because people change the way they communicate, learn and do business, for example.

"I was thought that I shouldn't dream, "because there are no resources to make it anyway (...). When they introduced the internet in rural India, things started to change." (Pais A., 2006).

When asked about the impact on culture, participants mainly feel that internet has a positive impact on the culture. Being able to communicate much easier, having access to information, being able to develop one self and much more benefits are experienced.

"Internet can build our Indian culture because communication wise, our community has changed for the better, since people can communicate with each other within few minutes unlike long-time when beating drums, smoking of fire and blowing trumpets were the only means of communication".

On the other hand, some people have mixed feelings about the influence internet can have on culture, since most websites are western and Indian content is still scarce.

Especially young people are influenced by Western music, ways of dressing and dancing, which might not be appropriate in Indian culture.

"...it can destroy the indian culture because young people are exposed to western culture, which has a bad impact to daily morals. For example exposing the bellies and putting on miniskirts, which are a taboo in India."

"Internet in other ways will either, build or destroy our culture because of the powerful influence it has in people's lives. Truly speaking, most of things exposed on the internet are from the western world and very little is from India. I do not want to lose my culture".

At the moment, most content on the internet is about things happening in the West.

Internet can be a means of preserving the Indian culture but more Indian websites are needed. Most participants feel that Indian websites are needed for Indians themselves, to read about

their own culture and not just about others. And Indian websites are needed for people all over the world, to learn about the way Indians live, what they believe in and how they behave.

"We can preserve the culture by creating websites and making every information on culture available on the internet. So Indian all over the world can use the information to teach their children where they came from".

"To make sure that there is cultural information on Indian culture, I strongly feel that we have to publish some websites ... so that people from other parts of the world can see what is happening in our world".

**Conclusion:**

As for the first hypotheses: People in rural areas do benefit from internet in their daily life, we conclude that people and communities in rural India do benefit from ICT both socially and economically. Internet enables them to reach out and become masters of their own destiny.

**Base on our study, the most important social benefits are:**

- Internet enables people to keep their network and enlarge it by communicating with friends, family and others
  - Internet enlarges the world of people in rural areas by giving access to information
  - Internet brings knowledge and supports education
- The most important economic benefits are:
- Reduction of commute time
  - Saving money in a lot of different ways, such as only travelling to pick up something when you know it is actually there instead of having to return multiple times
  - Bringing new opportunities and using them, such as learning new farming methods or opening an internet café to make a living.

People that use the internet do benefit themselves but also much others in the community benefit as information is shared.

As for the second hypotheses "People in rural areas come up with innovative ways of using ICT and services not yet known in western and urban areas, because of their different context", no evidence is found in this study for new innovative ways of using the internet. People use the internet basically for the same things as people in Western countries do, such as to communicate, to search for information and to buy things.

However, the internet is even more important in rural areas because of lack of alternatives, such as telephone lines, libraries, newspapers, roads in good condition, and public transport.

Furthermore, the internet can have a positive impact on the culture in rural India; however, more Indian content should be developed and placed on the internet. For example Indian institutions, schools, universities, government and businesses should make their websites. In that way, Indians will recognize content from their own culture, country and background. This is important to ensure that the internet will not be seen as a technology for and from the West, but as something for everybody.

When introducing the internet in a new community, three steps are important:

- Sensitization should take place, by telling the community about the internet and what it can do for them.
- Then training is needed on how to use a computer and thereafter use the internet. It could be a formal training, but it can also be community members informally showing others how to use the internet. An important recommendation here is to train people about the risks of the internet, such as security and privacy, because they are unaware of them at the moment.

• Finally, having easy access to the internet at home or at work would enable a lot of people to use internet more often and benefit more from it.

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