# CORRECTIVE MECHANISM IN BROADBAND POLICY FOR THE MARGINALISED: AN EXPLORATORY STUDY

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### **ABSTRACT**

A fundamental argument to the study of broadband policy in a less developed nation like India is that it is much about socio-cultural issue than that of a techno-political issue, for instance in the lacking thrust on the internal mechanisms of framing policies. In the proliferation of New Media Communication and its utility for life's comforts, the demand for increased band-width, space and signals is higher than ever. There is tremendous increase in the audio-visual inputs, the text or the sound due to the spree of sharing the happenings in the society electronically translated and requiring larger cyber space. There is an increasing complexity of the problem of framing policy and abidance to it. The grassroots awareness with large marginalised sections of society is missing as the standards of techno-disciplining are significantly low. Also there is the non-availability or access and reach of technology in a nation's developing situations. Incomplete cyber-laws and very low cyber literacy are blockades to the efficient use of broadband facilities. Unregulated privatisation and extreme commercialisation make the problem more complex to resolve.

In the above scenario, to assess the policy on broadband in developing situations including the specific issue of broadband programs for the historically unserved or underserved communities, many fundamental questions arise-What is the reach and access to these communities who form a majority? Are the awareness measures effective for the communities to use the broadband driven facilities? Is the will of the governance and other agencies able to ensure effective reach and usage of broadband facility in the communities? What schemes and mechanisms are put in place for the practice and sustenance of the use of technology by the communities? Why are the invented tools to overcome linguistic barriers unable to address the problem of meaningful utility of the broadband boon? With objectives to answer these questions, this exploratory study supported with case studies as methodology has the scope of providing avenues to refreshed initiatives among the stake holders. The significance of this study is in the micro level revelations of participatory approach that is necessary to address the hurdles in policy framing for broadband utilities.

**Keywords:** Grass root awareness, technology access, adulterated agenda, the marginalised, refreshed initiatives

# INTRODUCTION

Technologies are meant for human welfare and increased comforts. Security and border issues among the nations are factors of concern while benefitting from the technologies. Telecommunication in India has recently joined the bandwagon of broadband utility and competing with other nations in the line.

Researchers describe broadband as "the great infrastructure challenge of the early 21st century," drawing parallels to connection challenges of earlier eras. They point out, "as with

electricity and telephony, ubiquitous connections are means, not ends. It is what those connections enable that matters." 1

Broadband is seen as a symbol of liberty, and is euphoria. Indian Telecom Entrepreneur Sunil Tagare (of Nynex, now Verizon) is already coming up with a new third cable project in Dubai. His was the first ever privately financed submarine optical fibre cable network in the world, now it is owned by another Indian giant Anil Ambani's *RCom*.

Among the media sectors, the share of subscription to the total Television Media industry revenue is expected to increase the achieved 65 percent in 2011 to 69 percent in 2016. The total number of TV channels in India has gone up to 623 in 2011, and many more channels are awaiting approval for broadcast.<sup>2</sup>

There has been a significant increase in demand for satellite bandwidth, with the introduction of HD channels, DTH expansion, and new channel launches. This increases the options to the consumer, who may be amenable to paying more for content in the medium to long term. With a large number of untapped advertisers who are currently using only the print platform, there is potential for further growth of TV.

### The Cost of Access

The wholesale bandwidth charges for a 2500 mbps line are Rs.1.25 crore per year. That's roughly Rs.419 per mbps per month, which is a fifth of what it cost four years ago (2008). However, cable landing station charges, over and above the bandwidth costs, are around Rs.70 lakh per year. That's roughly Rs.236 per mbps per month. This price hasn't changed in the past four years. The so-called 'access charges', paid to the cable landing station, are now 56% of total bandwidth costs, compared with 12% four years ago.<sup>3</sup>

Table 1. Countrywise Average Wholesale Bandwidth cost per month to access Internet <sup>4</sup>

Country	Cost in US \$
NY	275
Amsterdam	433
Beijing	4,793
Tokyo	1,842
Cairo	5,514
Casablanca	8,097
Mumbai	6,826
Caracas	844
Lagos, Nigeria	10,620
Singapore	2,341
Indonesia	8,363
Sydney	3,208
Lagos, Nigeria Singapore Indonesia	2,341 8,363

<sup>&</sup>lt;sup>1</sup> National Broadband Plan, Federal Communications Commission, USA, 2010

<sup>&</sup>lt;sup>2</sup> FICCI-KPMG Indian Media and Entertainment Industry Report, 2012, pg.9

<sup>&</sup>lt;sup>3</sup> India's BSNL submission to regulatory authority TRAI, 2012

<sup>&</sup>lt;sup>4</sup> The Economic Times "magazine connect", India: Aug.19-25, 2012, pg.18

#### **DEFINITION OF TERMS**

### The Unserved and Underserved Communities

*Unserved:* These are communities which essentially need the broadband utility to better their living and contribute their mite to the mainstream society or welfare of their nation, however deprived of the technological facilities. For example, a host of socially deprived sections of society all over India such as those Below Poverty Line (BPL), the economically still weaker, women, children and the most backward communities, nomadic tribes, denotified tribes and as envisaged under Constitution of India are identified as these communities.

*Undeserved:* Undeserved to mean in the positive connotation, as the living patterns and lifestyles do not find a dire, primary and timely need and hence not the call for the usage of broadband facilities. Yet, as there is agenda of the governments and the conviction under the Indian constitution to bring them to mainstream society and use their aboriginal knowledge for larger welfare, there arises the need to impart the usage of broadband knowledge. For instance, the Tribes, particularly in the hilly regions called the Scheduled Tribes, and those living in the deep forest regions like in the valleys of Himalayas, the Western Ghats, Andaman and Nicobar Islands and so on, and also include those as scheduled in the Indian Constitution.

# The Marginalized in India

The structure of Indian society is the presence of a strong social hierarchy. In such a society, the status of an individual is measured by the 'caste' of which he is born. Determination of the caste depends upon the occupation of a family. Based on the profession performed by each family, their social status is decided. The so called lower strata of society and women of all castes including the upper castes are considered as the underprivileged or the marginalised groups. It is to be noted that the priestly or the knowledge class, generally affluent, is considered on the top of the hierarchy list followed by the Warriors or the royal class and the merchant class. The last in the list are seen as the menial class. It is this class that women of all castes and the underprivileged are identified with. These groups are denied fundamental opportunities including the social, economic and educational equalities, thus giving rise to a group called marginalized.

"Broadband connectivity is therefore associated with social inclusion, as it is argued under the underserved populations, including minorities – both linguistic and religious" (NBP's authors, ibid)<sup>5</sup>

In the above scenario, to assess the policy on broadband in developing situations including the specific issue of broadband programs for historically unserved or underserved communities, many fundamental questions arise.

### **Commercialisation of Broadband**

The idea of broadband communication is more applicable to the consumer society than the cultural society. The providers went beyond competition and there began the taxing of consumers in terms of deviations like billing errors, resorting to consumer courts, measuring standards, equipment access or software. The mushrooming internet cafes though apparently provided self-employment opportunities later amounted to exploitation of sentiments of teenagers, gaming and porn, etc. boiling down to mere commercialisation while damaging the social fabric.

<sup>&</sup>lt;sup>5</sup> Ibid.

Hence, the following are some of the factors that the study has analysed towards its general objective:-

- I. In developing situations, there is missing thrust on framing the policies
- II. New Media Communication added problems to frame befitting policy and also to abide by it because it demanded more band-width, space due to increase in the audio-visual inputs, text, sound and animation.
- III. For India, the order of delivery seems to be 'awareness first, technology next' which is not so now. There is also low techno-disciplining.
- IV. In complex social milieu, the estates of judiciary or the executives are less able to address the problems

There is absence of academic or field researches on broadband policy.

"How cheap is internet access across the world? In India, the consumer market is highly competitive, but there are key points along the chain, where it's less so. And in the global wholesale market, 'cheap' is relative – from a few hundred dollars in New York, to a few thousand in Mumbai, National and global monopolies play a role".

With the above fundamental constraints, the corrective mechanisms become narrow when the challenges are to be faced by the unserved or undeserved communities.

### THE STATEMENT OF THE PROBLEM

The discussion of utility of broadband should consider the larger welfare of society, the negative impacts and the long term objectives or sensitivities. For instance, allowing porn widens the ethical disconnect. Along with liberty, broadband increases the promiscuity of obscenity and vulgarity as a part of the content. Day to day, investors and producers of such sites are increasing. Many poor people, especially from the third world expose their body in front of the camera. The participants behind the screen are the socially deprived, the exploited and not even professionals. The innocent are being harassed and no law of any land is looking into it at all. Even the poor from different parts of the globe are bought as artistes and are exploited.

However, in developing situations, whenever one accepts a new technology, the psychology of the people, socio-economic conditions of the population and understanding of the society matters a lot. Else, technology cannot see fruitful end. For example, kiosks are established as a measure of modernity at different levels such as for paying water bills, telephone or electricity bills and in using the ATMs. Above all this, it needs technicians to operate these technologies and it is evident that people will stand in the queues to achieve their chores.

When people rely on technologies, they do so with the notion that it will be 'User free technology', 'Saving Time', etc., which are the primary intentions of the consumers. In the Indian context, most technologies are let flow to the masses without prior check on compatibilities to their life styles, cultures, habits and lingual barriers. For instance, to strengthen the democratic set ups in India, the electronic voting machines are being used. However, even today, we have invalid votes, and many needing assistance for their voting, etc, ridiculing the very structure of democracy.

Then there are global issues. The right of expression is questionable where no editor exists on New Media. For instance, the Chinese wrong interventions like unlawful hacking and the royal families, dictatorial nations and communists fearing new media as weapons used to

<sup>&</sup>lt;sup>6</sup> The Economic Times "magazine connect", Bangalore edition daily, India: Aug.19-25, 2012, pgs.18–19

dethrone the set up in the name of Advocacy Journalism, hence the regulation. Else, the very purpose of new media is thus defeated.

Already, the media is in ill-health due to the dangerous and aggressive competition to increase their ratings. Journalist Kohli-Khandekar brings out the complex intricacies of TAM ratings<sup>7</sup>. Lessons need to be learnt from the slips in such competition for a better dealing of situations in framing or implementing broadband policies.

Overall, any communication model proposed for the developing situations will have to be non-linear and thus it supports the use of broadband networks and technologies. Yet, it is apprehensive whether it would be a mass communication model or a transactional model for the grass roots. Above this, the fundamental argument to the study of broadband policy is that it is much more of socio-cultural issue than that of a techno-political issue.

### SCOPE OF THE STUDY

Since broadband is the next future of the world, it occupies increased importance in the era of 'Convergence'. There is a need for continued academic studies in the area of broadband to realise practical, uniform and egalitarian implementation among the societies. This will support better harmonious existence of the nations. The significance of this study is in the micro level revelations of participatory approach that is necessary to address the hurdles in policy framing for broadband utilities.

## **GENERAL OBJECTIVE**

To study the factors obstructing the corrective measures for effective broadband usage.

### SPECIFIC OBJECTIVES

- 1. To examine the reach, access and the message by usage of broadband in India.
- 2. The analyse the reach, access and ingested messages among the marginalised who are considered as the historically unserved and undeserved communities.
- 3. To suggest the corrective mechanisms in framing and implementation of broadband policy in order to optimise and increase the utility of broadband among the marginalised.

## **METHODOLOGY**

The study here is of theoretical approach with exploratory type supported by case studies for the scope of providing avenues to refreshed initiatives among the stakeholders. The case studies are both of missed opportunities and the availed ones. The exploration is to undertake corrections from decision makers, technologists, users and propagators alike.

#### Limitations

- 1. The study is confined to developing situations and not relevant to the advanced nations or homogenous societies.
- 2. The study considers only the environment in the Asian subcontinent and particular to India, a crucial player in broadband issues and advances.

### THEORETICAL FRAMEWORK

At the outset, the study on broadband would not fit into any one of the normative theories of communication but would find meaning as an amalgamation of some theories. This is

<sup>&</sup>lt;sup>7</sup> 'The Trouble with TV Ratings', Business Standard daily, Bangalore ed., 17 Aug. 2012

because, the consumer pattern will deviate well beyond any structured operations, particular to developing situations and moreover owing to the complex, socio-cultural milieu. In this scenario, some of the theories – classical, mid-range and modern are applicable to the study.

In the above context, the order of applicability of the theories for this study are as follows:-

Table 2. Some communication theories and their domain of role in the current study

Theory positioning	The applicable Theories	Propounders or Contributors	How applicable
	Social Cognitive Theory	Albert Bandura	Cognitive Dissonance on media inputs is largely prevailing among masses in developing situation
To reflect the prevalence	Theory of Participation	A modern theory	People's participation Missing or Skewd and Distorted
To project the problem	Critical theory	majorly of Dennis McQuail's	The specific theory for the problem here in question

*Critical theory* is relevant and focussed on to this study where the marginalised are to be addressed. The Theory propounds:

- 1. A loose confederation of ideas held together by a common interest in the quality of communication and human life.
- 2. Concerned with inequality and oppression
- 3. They not only observe they also criticize
- 4. Concerned with the conflict of interest in the society and the ways communication perpetuates domination of one group over another.
- 5. Media effects a historical perspective
- 6. History of the scientific study of Media effects.

Hence, the broadband policy well framed should be bound well to hold together the common interests. The policy should take into count the large marginalised sections and mitigate the conflict of interest in the society. It should result in creating an egalitarian environment. The implementation of policies should learn from history of media out of the earlier negative experiences.

### THE FINDINGS

McBride's observations about the then under developed countries indicated that technology was the hurdle for inflow of information to the third world. He was pointing out to the gap between the haves and the have-nots. Though broadband seems to have mitigated such gaps, the efforts to perceive the end goals through the practices under Social Responsibility theory in India are still on, for the last five decades in two major phases – the pre-globalisation and post globalisation periods of time. The absence of technological development and training in the pre-globalisation times saw more importance in social responsibility where communicators took extra care and were more cautious in moulding the content of media keeping in view their target audience. But in post globalisation scenario, there was a major shift into strong training and updated technologies paving way for extreme competition leading to over commercialisation, sidelining the social responsibility factor. It gave rise to information explosion and later to information pollution.

Some of the communication experts point to the fact that mere presence of technology will result in their effective communication and utility. This notion is not merely so in developing situations but also in developed nations. For instance, in a most advanced country a traffic jam of many kilometres cannot be avoided in spite of many communication methodologies like AM, FM, mobile or internet. However, the facts have missed out to bear the fruits. The utilization of communication technology is final only after the treatment of the message in the communication process, successfully ensuring its fruitful reach to the target audience and if the message is properly digested.

Presence of Technology
Exploiting
Treating the message
The Reach of message
Digesting the message

# The theory of Out-Of-Reach9

Any communication process will be complete only when there is comprehensive feedback. The reach of the message to the target audience is important. There are three types of targets-

- I. Jurisdictional reach i.e., by geography such as rural or urban or a region;
- II. Reach for a particular community;
- III. Reach to an individual with a specific purpose.

Most communicators misinterpret the reach as jurisdictional reach as against a targeted person or community. In jurisdictional reach it would amount to purely one-way communication. In such one-way communication, credit can be given only to the communicator, who even does not digest the message, merely processes it and throws it to the audience. The information explosion in the media has forced to formulate a very important theory called the Theory of OOR.

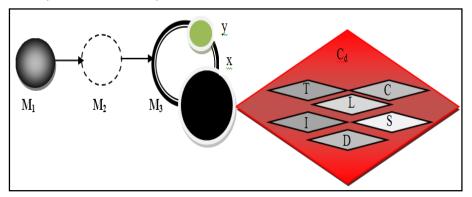


Illustration – 1. The Indian 'OOR–Hypodermic' model

<sup>&</sup>quot;Communication occurs in those situations in which a source transmits a message to a receiver with conscious intent to affect the latter's behaviour" (Miller, 1966)<sup>8</sup>

<sup>8 &</sup>lt;u>http://jefferson.library.millersville.edu/reserve/COMM301\_Paul\_What%20is%20Communication.pdf</u>, accessed Sep 8, 2012

<sup>&</sup>lt;sup>9</sup> Ravi, B K (2011). *New Media and Ethical Disconnect- Trends in India*, Journal of Academic Research, International, Pakistan: SAVAP International, V.1 - 3, pgs.321-32

#### The Essential 3 Ms In The Process Of Communication

### M1 - Media

Grey shaded as there is blur due to today's complex modes of channels of communication.

## M2 - Message

Dotted circle as the messages are unclear to ingest, for instance, due to bombardment of a same message with various kinds of treatment through various media and thus interpreted too vaguely by a same mass.

### M3 - Mass

The thin inner layer indicating the haves and the affordable with high access to media  $\mathbf{Y}$  - the Miniscule Mass (in green to show prosperity) and, the Indian mass with thick outer layer indicating the large rural and have-nots manifesting into  $\mathbf{X}$  - the OOR Mass (in black to show they are in dark).

#### Contributors to the Phenomenon

Technology- T, Content- C, Lingual- L, Timing- S, Duration- D, Imposition- I,

Cognitive Dissonance- C<sub>d</sub>

The hypodermic theory as per Communication Researches is silent but with significant effect due to the communication process under this theory is strong and penetrative. Here the Out-Of-Reach quantum explodes as the quantity of communication channels increase.

#### Some Instances to Establish OOR

**a. About a Web page**: By the time a web page is opened, the number of advertisements, insertions, colour photos, scrolls, flashes, animations, etc. makes the user deviate from the original message. Similarly, on a 24-hour news channel, no one is in a position to watch the moving scroll news of all kinds - on the left another icon, on the right, an animated interruption and so on. All these make any consumer go OOR of the intended message. Also, the Cognitive Dissonance theory adds on to the potentials of the OOR theory.

When the penetration, impact and the adverse effects of New Media on the large rural populace is explored, it is clear that there is no reach for the villagers to these Media, thus making them *Out-of-Reach* from the mainstream. Here, Government intentions could be honest, however, at the planning and implementation levels, most failures occur. For instance in the purchase of an equipment, the procurement of hardware seems successful from the stage of purchasing the imported gadgets to that of installing them in community centres, schools, etc. But the managing of the gadgets, the lack of supportive factors like power supply, maintenance, fixing the responsibility of operation and maintenance are simply missing. They then become mere dry boxes without use and so the OOR syndrome creeps in a developmental process.

**b.** A case hereunder throws light on the fate of things in schemes and projects mooted by administration and governance. Basically, at the Government level, the Secretariat frames a policy; the Directorates direct the grassroots to implement it down line.

**The Case:** For teaching purposes, audio-visual equipments are used at different levels in schools. The education department distributes the gadgets; however, TV sets cannot function due to lack of availability of power supply. The details of gadgets are available only on paper,

yet non-functional and gets destroyed automatically in due course. Thus, in the absence of electricity, the sets become showpiece equipment, without serving the purpose.

The Verdict: Policies are framed in the meetings of bureaucrats in air conditioned rooms without the knowledge of ground realities. It becomes very difficult to make any one level accountable - the ignorant policy making body; the Departments, the Government, or the Coordinating agencies.

There is absolute need of the role of New Media in implementing any project. But if the result is similar to the case above, not just the New Media but no media or any agency can functioning meaningfully. In this milieu, the New Media becomes a static entity with respect to the dynamics of information flow amidst the social functioning, thereby making it redundant. However, in this context, when the New Media becomes aggressive in convincing the society of its stay and utility, it rubs on the wrong end to cause more harm and less good.

## ANALYSIS & INTERPRETATIONS

#### The Corrective Mechanisms

#### Access to Communities

If we take up the ingredients of E.M.Rogers' theory of innovation <sup>10</sup> for analysis of Indian society even at the door of 21st century, it reveals a grim picture of the situation. The Innovators have increased in multi-fold making it more givers than takers. Also, there are very few early adopters, and the early majority in the current scene is too early even to perceive. Hence, the late majority are not in any vicinity. About the later added component by the researchers, the *Laggards* or the late rejecters, it is not to attribute for the large masses of India. The socio-hierarchical situation does not accept a technology however powerful it may be. The overall interpretation about Indian society as Laggards does not hold good. Yet, the State and commercial perception about receptiveness and acceptance of change by the masses remains unaltered. The State feels that access to technology should be accepted blindly and not questioned. The commercial forces are bothered about quick profits and woo people to start using technology but fail in their ventures. While the affordable form a very less percentage of people and well under 20%, the remaining 80% find the real reach farfetched, the onus of social responsibility heavily falls on either the governance or the serving communities such as with business or retail.

Though the schemes and mechanisms are put in place for the practice and sustenance of the use of technology by the communities, the problems at the implementation level are more complex. There is a need for a stronger political will to readdress the reach and access. For instance, in terms of training the youth to exploit technology, provision of resources, increase literacy and the overcoming lingual barriers.

To some extent the cost of broadband is keeping individuals and families at bay from the use of broadband or the Internet. This holds good even at the level of most advanced nations like the USA. There are adoption disparities across U.S. populations including socio-economic disparities.<sup>11</sup>

Viewing the specific mechanism at the global level, the oscillating budgetary provisions for the access of broadband has posed a challenge for effective reach.

<sup>&</sup>lt;sup>10</sup> Rogers, E M (1962). Diffusion of innovations. New York: Free Press, 5th ed.,2003, pg.14 accessed on Sep. 8, 2012

<sup>&</sup>lt;sup>11</sup> Dharma D, Amelia B, Alison P, Joe K and Jaewon C (2010). "Broadband Adoption in Low-income Communities" USA: Social Science Research Council, March.

"Since a decade till date, it has been global oversupply of bandwidth. Prices of bandwidth in past five years, in key markets like London, have fallen by an average of 31% every year! (According to *Telegeography*, a telecom consultancy). In response, prices for retail customers also have fallen across the globe, including India. But internet access can still be hugely expensive depending on where you live. In New York and London, per month, it is a few hundred Dollars while in Singapore, it is a couple of 1000 \$ and in Mumbai, 6,826 \$ (in Asia, prices are of 10 mbps VPN lines, @ Q3, 2011, for other nations, rates are of lower capacity – 1.5 -2 mbps VPN, @ Q1, 2012." <sup>12</sup>

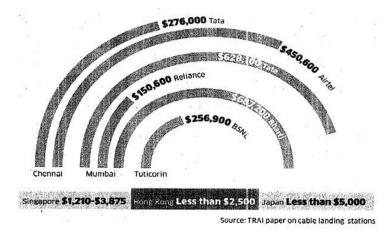


Illustration – 2. The price of Accessing Internet: Wholesale Bandwidth Costs <sup>13</sup>

Despite years of excess supply overall, the prices still remain high in many parts of the world.

## Analysis for the Above

The classical economic Law of Demand–Supply shows that the two variables are inversely proportional. Since supply is high, the demand is comparatively low and so the price is not coming down. If it were to be vice-versa, then the price would have probably come down only if the suppliers can relax for marginal profits as there would be promising demand.

Similarly, for instance, most of the Computer Systems in less advanced countries are yet to become High End and so require higher speed of bandwidth in MbPs as against those in many most developed nations. Naturally, the cost remains higher in less advanced countries.

In the above economic scenario and while the majority of marginalised groups are of lower-middle class with lower income group, the reach is farfetched.

".......(There) is a fit case for the Competition Commission of India (CCI) to investigate and take appropriate corrective action............ the CCI should lay down rates that mimic those in more competitive markets, rules that are tougher to get around than cost-plus pricing. Cheaper internet can revolutionise society by improving access to education, healthcare, rural reform and financial inclusion. Some regulation is a small price to pay for these gains." <sup>14</sup>

Hereunder is a case of optimism to observe that perhaps the next big wave of innovation in telecom markets will move from the retail end to the wholesale end, pushing bandwidth costs down even further.

<sup>14</sup> The Economic Times, 22<sup>nd</sup> Aug., 2012

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 $<sup>^{\</sup>rm 12}$  The Economic Times – magazine connect, India: Aug.19-25, 2012, pg.18

<sup>&</sup>lt;sup>13</sup> TRAI paper on cable landing stations, used in *The Economics Times*, Aug. 19-25, 2012, pg.19

#### The Three Miles

"The market for internet access in India has three parts. In the first mile, Indian Telecom Entrepreneur Sunil Tagare (of Nynex, now Verizon) argues that countries like Bangladesh effectively cross-subsidise much bigger players, with deeper pockets, in his project. That cross-subsidy extends to countries through whom the main cable passes, and who don't have to pay extra for a branch line, as the branch line cost will be borne by the branching countries. But why would any company from one of the branch countries along the route of the cable agree to be part of the agreeing deal? Because, in return, the company that connects the cable gets an effective monopoly over internet traffic between that cable and the country in question. Then they have the veto right over any proposal to induct new members.

Yet countries like Bangladesh as on date need a backup. In June, 2012, it lost internet access following a fault in the only cable which connects it to the internet.

Then there is the 'middle mile' - the point at which internet traffic enters and leaves a country. Mr. Tagare's venture is targeted at the third and final link in this chain, most distant from the end consumer, in the global network of submarine cables which lie beyond national borders. The first mile of internet access can be far less competitive than the retail end.

India is into the 'retail' or last mile part at the end of which the consumers sit now. This end of the market is highly competitive in India, but in other parts of the world, a key reason why internet access is expensive is because the retail market remains dominated by a single large player or a cartel.

About India, in the data provided to the telecom regulator TRAI, the state-owned BSNL pointed out that bandwidth charges for a 2,500 MbPs line have fallen dramatically in the past four years (since 2008) – they are now a 1/5th of what they were. So the first mile costs for India have actually fallen sharply." <sup>15</sup>

"Such charges are about 5-13 % of the end-to-end price of bandwidth......We strongly believe that the current setup is enough to make the market competitive. There is no need for a system of regulated pricing." (Chitkara, 2012)

# Awareness Measures and Effectiveness

Consumers are charged with undue cost for not extending the real facility. Most of the time the server is down, mere plugging the gadget without actually entering into a website, the consumer is made to pay extra charges. Since, the Cyber laws are not strong, and most of the time the consumer courts cannot come to the rescue of the consumer. This helps the private companies to make more money.

Rampant obscenity has led to psychological problems in users of new media. Invasion of privacy through the net, hacking, morphing photos of women, blackmailing, working around the law twisting – all have amounted to misuse of technology to rob people of money or out of greed.

Many dubious mails fall in to the mail box with the letter head portraying the logos of Reserve Bank of India or Swiss Bank and such statutory organisations to lure the common man. The appeals of attractive money earning ventures encourage a consumer to fall prey in the conspiracy. Unfortunately, if innocently, a reply is sent to that mail, he is sure to get a reply declaring him as a winner of some Trillion Dollars! To get quick bucks, the consumers

<sup>&</sup>lt;sup>15</sup> Ibid. 8

<sup>&</sup>lt;sup>16</sup> Chitkara, Ajay (2012). (CEO - Global Voice and Data, Airtel) in The Economic Times-magazine connect, Aug.19-25, ,

are asked to despatch some money to the bank accounts. By the time, the fake background is understood the consumers would have been cheated and would have lost all the hard earned money. No national or international security agency comes to the rescue here.

The Social Networking Sites are on a fast rise. The e-communities are encroaching on the local essence of culture and the ethnic approach to living. The new media presentations are all of 2D and no 3D. The face-on interaction, discussion, brainstorming and the seeking of solutions are missing. The local heroes who are very important for the progress as the role models in vicinity are all drying out as the far off personalities are iconised or emulated by the new media users.

# The Will of the Stakeholders

A comprehensive implementation of broadband utility is still in the experiment stage. A component of it is the international companies offering attractive prices for bringing in technology. Due to the lack of farsighted consequences, there are anomalies surfacing in the form of scams like the 3G spectrum scam at government level about the purchase and allocation of bandwidth. In fact, communication experts themselves are confused about the functioning of new media due to the lack of adequate researches or absence of databases. To achieve it, a strong and sustained public-private partnership is to some extent a solution.

# Subsidising Public Media

Public broadcasting services have been increasingly scaled back so as to allow more space for additional private and commercial channels to enter the landscape. The rationale for these moves has been that increased competition will lead to better media content for all. In the aftermath of the 2008 economic recession, it is advocated for subsidising the public broadcasting so as to save taxpayers money.

### Schemes and Mechanisms

Kvasny, Kranich, and Schement describe four C's of access, namely: (1) Connectivity (access, services); (2) Capability, (to make the most of the service); (3) Content, (needy information eg:- housing, childcare, health and transportation); and (4) Context, (socioeconomic situation with disparities).<sup>17</sup> Convergence is the need of the hour. Yet at the implementation level, a complete realisation of e-governance, e- banking, e-waste management, e-paper, Internet Radio, etc. are not achieved. For instance, the New Media which requires a larger space of bandwidth for accommodating audio and video footages, text and animation. Such connections enable access to a greater range of resources, which in turn facilitate how individuals navigate their daily lives and opportunities, e.g. for employment and education.

The dependency on technology is quite high today. So if broadband technology collapses, the entire transaction comes to a stand-still. There are very little alternatives for individuals or institutions that heavily depend on technology. Even the backups would need efficient time management. So, just like global warming, the issue of broadband will be called a 'broadband Global Warning'.

## Linguistic Barriers

The study of Semiotics either in corporate training or in academics is simply missing. Though technology access is achieved, the lack of grass root awareness on digesting the meaning of

<sup>&</sup>lt;sup>17</sup> Kvasny, Nancy Kranich, and Jorge R. Schement, (2006). "Communities, Learning and Democracy in the Digital Age," Journal of Community Informatics 2, no.2 accessed on Sep 8, 2012.

symbols, signals, graphics and animations of complex electronic or new media technologies are not imparted for about 12 to 13 years in primary or secondary education.

## **Broadband Diffusion**

In developing situations, if the vernacular media support is agreed upon, then the following studies that were taken up in the USA should be the indicators for one of the proactive corrective mechanisms in India too.

Researchers Kvasny, Kranich, and Schement further specify that, "Outreach and awareness campaign...... messaging should communicate to audiences and their families, in a culturally relevant way, (and that is) why broadband matters."

Drawing parallel to Napoli's findings of suggestions for the residents who are not yet connected to broadband, for India, ethnic media should be a key partner in encouraging adoption. If non-adopters already depend primarily on ethnic media as their resources for health and local community information, then these media are well-positioned to understand the goals for which broadband may be most helpful to their audiences. These media can therefore help explain the utilities of broadband in appropriately tailored ways.

Unlike mainstream media that are focused on garnering as wide an audience as possible, ethnic media can cover issues and news that are particularly important to their specific constituencies, such as how to enrol your children in schools, find low cost health care alternatives, and so on. Ethnic media can act as intermediaries in a number of ways. First, ethnic media can explain broadband's utility to residents for achieving their goals. Ethnic media can disseminate local information about broadband connectivity in language that community members can readily understand and use. Ethnic media can partner with community organizations and institutions to alert residents to local places that provide broadband access. So, Ethnic media can *provide*, *connect and can* be a *partner*.

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On a larger canvas, the aggressive usage of technologies by ignoring the legalities and Intellectual Property Rights (IPR) are taken casually and overlooked as it would help proliferation of users for those technologies and would increase market demand sooner or later. Here, it has to be observed that though Communication process can fundamentally fit into a transactional model, the technologies underlying it cannot and so will slant towards profit or loss.

There is the missing thrust on the internal mechanisms of framing policies about broadband, more so in developing situation where any traces of policy is lacking. It is evident that the proliferation of New Media Communication and its utility for life's comforts is the significant addition to the increasing complexity of the problem of framing policy and abidance to it.

New Media is demanding more and more of the band-width, space and signals around the globe than any other means of communication today. This is because there is tremendous increase in the audio-visual inputs, the text or the sound due to the urge to share the reflections of the happenings in the society which demands translation of it in turn requiring larger cyber space.

 $<sup>^{18}</sup>$ jip.vmhost.psu.edu/ojs/index.php/jip/article/download/85/51, accessed on Sep. 8, 2012

Adding to the issue is the grossly missing grassroots awareness, that too in large Democratic situations like India. The standards of techno-disciplining are significantly low. The interventionists among the law enforcing agencies and the judiciary have proved incompetent to address the issues associated with the utilities under the broadband, for instance the New Media. The conflict between TRAI, the I&B Ministry and multinational broadband players who behave beyond the law of the land. A wider problem such as non-availability or access and reach of technology in developing situations adds up to the system being simply dysfunctional.

Novice cyber-laws and very low cyber literacy adds to the problem of smooth utility of the broadband facilities. Drafting cyber laws! A host of experts from legal, media, technical and intellectual backgrounds are struggling hard to frame the Cyber Laws in India. The number of cases filed by the people under Cyber laws is also very meagre; however the law breakers are large in number. The violators in print and electronic media however do not see light under Cyber law with any kind of follow up by any of the monitoring agencies. In the grass roots, the Cyber Literacy likes the knowledge of IP address,

Video and audio clippings, photographs attachable to e-mails do not stand the test of the law of the land when brought into scrutiny under judiciary. Anonymous blogs are more of bragging which being highly opinionated and to the tip of the nose, have less credibility. They only spread rumours and tend to dismantle the system established by law, while definitely harm the peace and tranquillity of the society. The conflict of ad-hoc policies between the Telecom Regulatory Authority of India and the Information and Broadcasting Ministry of the Government of India has only made the multinational broadband players seep through the law and grab increased profits in less time.

## **CONCLUSION**

The summary statement is that most developing situation including India lacks a larger index of Comprehensive Communication Policy, so it is a long drawing conclusion to debate about broadband policy.

It calls to develop a roadmap for connecting Indians in the digital age. Proactive policy will enhance ethnic media producers' capabilities to act as intermediaries for the communities they serve. Attuned to the needs, tastes, and apprehensions of their consumers, these producers can play essential roles in translating the national goals into the locally-tailored, relevant content most likely to increase broadband adoption rates. Future research should engage ethnic media producers in efforts to understand the contextual features of their communities that can influence broadband adoption rates in that particular locality.

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