

Gross National Happiness through ICTs for Development: A Case Study of the Jakar Community Multimedia Center

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Introduction

Three very pertinent questions form the content of this research paper. The first question is how can Information and Communication Technologies (ICT) meaningfully lead to 'development' in its truest sense? This may be possible through the Community Multimedia Center (CMC) which can turn a marginalized, secluded community suffering from information poverty into a community that may then be termed as 'Information Society'. Secondly, how can a CMC play a pivotal role in harnessing the twin philosophies of Gross National Happiness (GNH) and Development? The present paper then continues to examine the potentialities within the Jakar Community Multimedia Center (as a center for media and public culture) in preserving and promoting the unique cultural heritage of Bhutan. In conclusion, the paper lauds and supports His Royal Majesty's unique concept of GNH as a true indicator of people's development in Bhutan by settling down on its title: Gross National Happiness through ICT for Development.

This paper is focuses into an examination of these three aspects within the focal theme of "Media and Public Culture in Bhutan".

ICTs for Development: The Case of the CMC

The telegraph, telephone, radio, television, telex, facsimile, computer, microprocessor, communication satellite, optical fibre, and networking are all inventions that emerged in the

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last century and a half. Together they constitute what is commonly termed as ICT, i.e. Information and Communication Technologies. ICT are the buzzword of this decade.

Of all the technologies that constitute ICT, it is the computer which is the most predominant today. Consequently, “Have computer, will reach out”, seems to be the motto of the day. The computer has brought a new dimension into our lives: the internet. This great means of reaching out to a global audience, sharing information and messages, is probably the most important development of this century, if not of the computer era. The internet allows people from different parts of the globe to interact with each other effortlessly. The world is increasingly becoming a smaller place and the Internet is the driving force behind this change. The internet allows for an end of dominance of big over small and an end to discrimination based on race, colour, gender, and social class. The ongoing information technology revolution has opened up uncommon opportunities to developing countries in terms of providing low cost access to information. Murali Shanmugavelan and S. Senthil Kumaran have referred to UNDP *Human Development Report, 1999*, which described the internet as “the fastest-growing tool of communication ever, with the number of users expected to grow from 150 million today to more than 700 million in 2001” (Shanmugavelan, p. 28).

This perhaps explains the fact why today there is a preponderance of IT in every sphere of life—be it education, health, the preservation of culture and heritage, or in the various forms of technology itself.

Secondly, the fact remains that there have been and there continue to be rapid changes, or rather developments, in technology. And falling prices are beginning to bring the vast processing power of ICT within the relative grasp of an increasing number of people. The ICT allow for an end to the dominance of big over small and an end to discrimination based on race, colour, gender and social class. So why has it not been able to break the economic barriers which continue to exist? Further questions are: Why can it not be used to

bridge this economic barrier and be a 'true' means to development? And finally, is this economic scale the true measure of development?

To begin answering the questions raised, traditionally, maximizing economic growth had been the foundation of the philosophy of Development. Among its indicators was the Gross National Product (GNP). This is because of the belief that development will trickle down and seep to the social grassroots. How much that development has actually trickled down to the common man is really a question which requires serious consideration. Maybe, at this point, it would be pertinent to quote from the UNDP on 'Human Development':

Human development is first and foremost about allowing people to lead the kind of life they choose—and providing them with the tools and opportunities to make those choices. In recent years *Human Development Report* has argued strongly that this is as much a question of politics as economics—from protecting human rights to deepening democracy. Unless people who are poor and marginalized—who more often than not are members of religious or ethnic minorities or migrants—can influence political action at local and national levels, they are unlikely to get equitable access to jobs, schools, hospitals, justice, security and other basic services.

- Human Development Report, 2004, p. v

Examining the very first sentence implies that to bring about this kind of positive social/economic development in society, people must be enabled to make free and informed choices. Communication plays a pivotal role in making this possible. How well we do it, what modes we use and in whose control they are, determines the effectiveness of many aspects of this struggle for development. ICT are pivotal by being the media of communication between the Government (whose basic role in development is stated in the second sentence) and the common man. It could be a very important means to bridge the gap between the State as having the means of development within it and the citizen as aspiring for a better quality of life through it (as expressed in the third sentence).

Sadly enough, the bare truth today is the fact that there

is unequal access to information and knowledge. This is a serious handicap in a world where information has become so very important for social, economic, cultural, and finally overall development. Most people acknowledge that disparities in access and use of ICT have contributed to the widening digital divide. And that is the reason for the creation of a new kind of exclusion or 'knowledge poverty'. Unless there is a human dimension in the developmental plans for the introduction of ICT, they might not be successful. The human dimension is especially crucial for the success of introducing ICT in the poorest rural and urban areas of developing countries or countries in transition. Equally important is the idea that ICT need not remain the preserve of the educated and the literate.

Coming next to a discussion of the various models available in using ICT for Development, there is no questioning the fact that the cheapest and most revolutionary is the Internet. On the other end of this axis is the humble radio. Probably, the three most important characteristics contributing to the radio's strength as a communication media for development are its pervasiveness, its local nature, and its ability to involve local communities in an interactive communication process.

And it is a Community Multimedia Center (CMC) which successfully combines the power of the Internet with the humility of the radio.

This Mixed Media model is an attractive option. At the same time it is economically viable and community-centric because of its participatory and interactive nature. Maybe, it would be appropriate to elaborate here on what exactly is the Mixed Media model for development. The Mixed Model is a practical approach to development communication in rural as well as urban areas combining radio, video, and the internet so that communities can share and access information. An example of this is the CMC. The CMC itself has the flexibility to exist in two forms: in remote, low population-density rural areas with no local suppliers or maintenance services, where the technology is as simple and robust as possible; and in urban communities, where the use of more sophisticated and

sensitive equipment is always possible.

A CMC combines community radio by local people in local languages with community tele-centre facilities such as computers with email and internet. Since 2001, when the first CMC came up, there are around 40 CMC today in over 15 developing countries in Africa, Asia, and the Caribbean. Community radio is an invaluable tool in the ongoing efforts to familiarize people with ICT use and to ensure that ICT provision is responsive to local needs.

The CMC is a further development from the community radio in the sense that apart from broadcasting capability, it has multimedia facilities for the local community. Therefore, it reaches out to the uneducated and the illiterate, and becomes an inclusive, 'info-rich' force for development in the sense elaborated by the UNDP Report above. It not only meets identified learning and information needs, but also creates a new demand for learning, information, and knowledge.

In this way the CMC becomes a truly people's media for public culture and development. The basic premise on which the CMC is based has withstood the test of time. It combines community radio and ICT access in a unique way to offer an effective gateway to the information society for marginalized communities. In fact, community radio coupled with a small tele-centre exponentially increases the outreach and impact of computer equipment and digital resources available to a given community. The CMC can play a pivotal role by bridging the digital divide and can make ICT truly belong to the grassroots community.

For development, the model of the CMC has one singularly unique and basic feature: ICT are used to meet pre-existing needs of people as citizens rather than new consumer demands which are triggered by the technology itself. Further, their introduction in the most marginalized communities of developing countries serves a more basic function: to bring these communities into the learning—and connected—world from which they were otherwise totally excluded. In this case, the aims of ICT introduction will be directly linked to local development goals such as education and health. This implies that there can be no single formula

for the multimedia centre, which can certainly never be defined by the technology. Rather, the community's own needs and their specific social, economic, and environmental circumstances will determine the profile of the centre.

Before moving onto the next section, let us then sum up the features of a CMC: firstly, local people who form the community and their community-specific developmental needs constitute the starting point for establishing a CMC. Secondly, inclusion of the most marginalized or voiceless within that CMC is a key indicator of the successful use of ICT for development. Thirdly, practical and pragmatic initiatives are needed to make ICT relevant for the most marginalized so that there is actual development taking place through the activities of the CMC. Elaborated below are two such strategies commonly used in CMC:

Radio Browsing of the Internet is a type of programme in which the radio presenters gather information in response to listeners' needs and queries from reliable sites on the internet, on CD-ROM or other digital resources. During the programme, the presenter 'visits' these pages of information on the computer screen together with a local expert (for example, a doctor for a health question) and together, they describe, explain, and discuss the information directly in the languages used by the community. Radio browsing is already used in Sri Lanka, Bhutan, and Nepal. It has demonstrated radio's potential for overcoming language barriers to access, discuss, select and assimilate information available in a limited number of languages on the internet. Moreover, being a participatory radio programme, radio browsing of the internet has taken into account the desires of rural communities to assimilate knowledge collectively as against the prevailing modality of individual access to the internet.

Community databases for development utilize the capacity of the community collectively to produce knowledge and to package and disseminate it in an appropriate manner to meet the immediate needs and priorities of the community. Through the radio browsing programmes, the community becomes aware of the importance of online information and

understands that in the CMC, it remains available for them to consult whenever they feel the need. By developing a computer database, the CMC ensures that the whole community can access a pool of easily-assimilated knowledge in a language which is understandable to the community (www.communityradionetwork.org).

GNH and ICT for Development: Introducing the Jakar CMC

The catchphrase, 'Gross National Happiness', which was introduced by His Majesty the Fourth Druk Gyalpo, in the late 1980s, has rapidly evolved into the accepted label for the distinct development concept in Bhutan. But in actuality, going back further in time, it was in the late 1960s (a period during which Bhutan's development policy is generally considered to have followed conventional patterns of rapid modernization) that the third king, His Majesty the late Jigme Dorji Wangchuck, expressed his views on the goal of development as making "the people prosperous and happy" (Basu, p.106). Proceeding further, the prominence of "prosperity and happiness" was highlighted in the King's address on one of the most important events in Bhutan's recent history: the occasion of Bhutan's admission to the UN in 1971. This vision, first articulated by the late king was elaborated by His Majesty Jigme Singye Wangchuck, who declared in the first years of his reign that "our country's policy is to consolidate our sovereignty to achieve economic self-reliance, prosperity and happiness for our country and people". While the emphasis is placed on both prosperity as well as happiness, the latter is considered of more significance. For Bhutan, "Gross National Happiness is more important than Gross National Product". For the King, "Gross National Happiness is more important than Gross National Product" because "happiness takes precedence over economic prosperity in our national development process" (Kuensel, p.7).

It would be most appropriate here to also quote from another officially supported notion of GNH—the Keynote address of HE Lyonpo Jigme Y Thinley (then Chairman of the

Council of Ministers, Royal Government of Bhutan) at the Millennium Meeting for Asia and the Pacific on 30th Oct. - 1st Nov., 1998, at Seoul:

In addition to the conventional notion of development that focuses on quantifiable indicators of economic prosperity, Bhutan's vision of development stresses non-quantifiable goals such as spiritual well being and gross national happiness. We do this through a concerted policy of cultural promotion and the provision of free education, health and other social services. Cultural promotion is one of the four key objectives that we have consistently upheld, over the last four decades. The four major goals are economic self-reliance, environmental preservation, cultural promotion and good governance. Without good governance, none of the goals are achievable. These four goals are superficially antithetical, but they are fundamentally complimentary and consistent. The cost of maintaining culture and environment often makes development projects more expensive in the short run but pays in the long term. It would have been easier for us to become economically self-reliant had we not been so deeply devoted to the promotion of our culture and environment.

- Lyonpo Jigmi Y. Thinley, 1998 (emphasis added)

In the quoted extract, one observes that the Bhutanese concept of development has an explicit concern with preservation and propagation of their unique cultural heritage. This runs almost parallel to the debate on what truly constitutes 'human development' from the *HDR, 2004*. The following quote from Prof. Amartya Sen—the doyen of Indian Economics—almost echoes the sentiments of Lyonpo Jigme Y Thinley:

Human development requires more than health, education, a decent standard of living and political freedom. People's cultural identities must be recognized and accommodated by the state, and people must be free to express these identities without being discriminated against in other aspects of their lives. In short: cultural liberty is a human right and an important aspect of human development—and thus worthy of state action and

attention.

- Sen, p.6 (emphasis added)

This particular extract emphasizes the importance of maintaining and preserving cultural identity. It also implies that what we ideally mean by 'development' in its truest sense is a question of the 'quality of life' of a group of people. It should mean meeting the basic needs of the marginalized. Therefore, if we agree that 'true development' implies empowerment, security, and opportunities for a broader segment of society than just the middle-classes, it should also imply that we should ensure an equal distribution of the fruits of growth or development. In other words, ICT should be freely accessible to the marginalized communities and not be the domain of a few. They should lead to an active participation of the people in their own development rather than overdependence on government or any other machinery meant for that. This idea of people's participation and interactivity in their own development can be actualized by the Community Multimedia Center as discussed further.

Running almost chronologically parallel to the above-mentioned debate (on GNH and development) was the international discussion on the ways and means of blending independent local radio or community radio with the internet. These were presented and discussed at an International Conference, "Converging Responsibility: Broadcasting and the Internet in Developing Countries", held in Kuala Lumpur in September 1999. Next, there was the "ICT for Development Platform" co-organized by the Swiss Agency for Development and Cooperation (SDC) and Global Knowledge Partnership (GKP) as a key element of the World Summit for Information Societies Series of networked events. This was scheduled 9 – 13 December 2003, at Geneva Palexpo, Switzerland (www.ict-4d.org). These two gatherings (coming within a span of five years) emphasize once again how important a role ICTs, especially convergence of the old technology with the new (the radio with the internet), can play in development.

Coming now to the crux of this research paper, as already stated, a CMC is the means by which the vast

uninhibited power of the internet could be made available to the largest possible population. The concept of extending 'internet radio' to rural regions in developing countries was devised in 1996 during discussions between UNESCO and community radio broadcasters. The idea was that the two mediums—radio and the internet—could be integrated to lower user connectivity costs and to make the Internet accessible to a wider audience. Perhaps the best and most successful example of this is the Kothmale FM Community Radio Station in Sri Lanka (see www.worldbank.org/publicsector/egov/Kothmale_cs.htm). It sought to provide collective access to the knowledge resources available on the internet by using the radio as a sort of people's gateway to the knowledge infrastructure. This it does by trying to address the problem of growing gap between the info-rich and info-poor by using the radio as the entry point to make the internet's resources available to several marginalized communities. This is exactly the basis for the Kothmale CMC. The project was established as a pilot project to assess the prospects for converging community radio and the internet to serve rural information needs and to assess its possible impact in rural communities.

In what ways the Kothmale CRIP has been instrumental in proving that ICT can lead to development is illustrated thus:

Radio-web-browsing programmes helped people to learn about the benefits of ICT, specifically the utility of internet. In these programmes, resource people sit with programme presenters, select appropriate websites and visualize and describe the contents in local languages. Listeners direct their questions to the station and receive answers on the air. The daily programme received an average of five to six requests per day, which provided the basis for discussions on internet content. Some of these requests were hand delivered, the majority were post cards, a few came by telephone. Volunteer resource people such as the local doctor, teachers, lawyers and extension officers present the radio-browsing programmes. In time, visitors had to make advance booking to browse due to the high demand to use the computers - (www.ictpr.nic.in)

It is significant to note here that the Kothmale CMC was the first experiment of its kind which successfully combined traditional and new media to bring the benefits of ICTs to a marginalized community. Following this example, the Jakar CMC can take a leaf out of the Kothmale experience and be the means of harnessing the twin philosophies of GNH and ICTs for development. This will be the focus of attention in the concluding section of this research paper.

The Jakar CMC: A Possible Synergy between GNH and ICTs for Development

As already pointed out, the CMC provides a real opportunity for bridging the gap between the information-rich and the information-poor. But in spite of that, a word of caution needs to be mentioned here. The CMC has some limitations when it comes to be in the direct hands of the socially underprivileged or being utilized by the marginalized sections of society. Modern information technologies might end up widening the gap between information-haves and have-nots instead of the other way around. This opinion is voiced by C. Rammanohar Reddy thus:

There are four sets of major challenges—or even hurdles if one prefers to call them that—that need to be addressed before the Internet can become a tool in even the remotest parts of developing countries. These relate to ICT hardware, software, language of communication and basic literacy. Without addressing each of these challenges, the internet, in particular, will remain what it has been the world over—a powerful form of communication that is used by a very large number of people from mainly the advanced economics and which will grow with little discernible effect on the majority of the world's population. (Reddy, p.4)

This is very much possible because Bhutan is a land with diverse cultural aspects and dialects. The communication needs of the Bhutanese—intrapersonal, interpersonal, and communal, particularly at the grassroots level, cannot be met without taking these important facts into account. It is necessary, therefore, to promote technologies which are best

suited to deal with the socio-economic diversity of the Bhutanese rural or urban marginalized society. In this context, given the rich oral tradition that characterizes the Bhutanese cultural society, radio more than the Internet, might prove a better medium of communication. And therefore, the Jakar CMC is a virtual treasury of resources for insuring the preservation and promotion of Bhutan's rich cultural heritage.

But first the facts on the Jakar CMC: located at Bumthang, Jakar District of Bhutan: the number of staff engaged is 3, along with 5 volunteers; the number of computers are 8; and the radio station belongs to Bhutan Broadcasting Service– Regional Bureau. Jakar CMC was formally opened in May 2003 and has a transmitter with an Internet link to BBS National Service in Thimphu. The partners are Bhutan Broadcasting Service and Bhutan Telecom and the funding is from Switzerland. The CMC Website is at: www.bbs.com.bt.

Coming now to the title of this ultimate section in the research paper, we build upon what has already been said in the previous Section II: that the Jakar CMC has enough within its limitations for realizing HM's dream of seeing every common Bhutanese blossom and flower in his/her artistic capabilities. This may be done through showcasing rural talents and local capacity building.

The Jakar CMC could well develop as a Community Cultural Centre. The grassroots facilities already exist. Not only during festive times or other cultural occasions, even otherwise the local community could be mobilized into cultural activities with the support and within the framework of the CMC. Then would accrue benefits from the cultural approach to development as mentioned in the previous section. For example, the Jakar CMC could organize development activities around events—shows, gatherings, exhibitions, and competitions. These would draw on the traditional arts, crafts, and creative skills of the local community and would be participation-centered. Such practices transfer very easily to radio. And with sufficient resources and training, it can also be transferred to the

digital media. If actualized, this would be an excellent base for the fusion of GNH and development—especially in the sense of capacity-building of the local community.

Secondly, the Jakar CMC could organize computer training with a strong focus on improving people's employment opportunities. It should make a serious effort to obtain official recognition by delivering certified qualifications. In all regions of the world, there is a current trend of CMC delivering recognized qualifications that improve people's job prospects. Since CMC do offer basic computer training, one possibility for the Jakar CMC would be to deliver recognized courses such as the "computer drivers' license course". In an ideal situation, as soon as the Jakar CMC attains more and better facilities, services, and staff competency, it would be able to deliver recognized educational and training courses.

Thirdly, the Jakar CMC could teach literacy in the local community through CDs. A possibility that may be emulated in the Bhutanese context and in the national language Dzongkha is elaborated here:

In India, the Tata Consultancy Services software group has created a CD to teach adult illiterates how to read and write with basic skills, even in the absence of a skilled teacher. The CD uses animated graphics and a voice-over to explain how individual alphabets combine to give structure and meaning to various words, using puppets as the motif in the teaching process. Lessons are tailored to fit different languages and even dialects. They focus on reading, and are based on the theories of cognition, language and communication. Accompanying voiceover reinforces the learner's ability to grasp the lessons easily, and repetition strengthens what is learned. The multimedia format ensures that the pronunciation of the words/letters is taught accurately through the system, rather than being left to individual teachers. This is particularly useful for languages (like Tamil in South India) where the same letter can be pronounced differently, based on the context.

- http://www.tataliteracy.com/how_it_works.htm

Lastly, the Jakar CMC has the option to adopt eNRICH—

a software for rural communities. eNRICH is a customizable browser that enables communities to quickly build their own gateway and provides interactivity with and among communities. It enables easy access to authentic information and encourages local content production. This generic ICT web browser, developed by National Informatics Centre in India, can facilitate the following:

- Act as a one stop solution for the information and communication needs of communities;
 - Be easily customized in local languages and content;
 - Encourage community members to produce their own local content;
 - Allow easy access to relevant and authenticated information;
 - Enable efficient communication within and among communities.
- <http://enrich.nic.in/>

Conclusion

On making the oral presentation of the present research paper on the 27th of June, 2006, at the Second International Seminar on Bhutan Studies, at Thimphu, the present paper received a wide range of comments. Especially important were the comments received from the representatives of the BBS and Bhutan Telecom, coincidentally the two partners of the Jakar CMC. The author of this research paper is advised of the following facts, rather ground realities, regarding the Jakar CMC:

Basically and initially, the Jakar CMC was set up only to serve as a link between the National center of the BBS at Thimphu and the (listeners of) Bumthang Dzongkhag. In this connection (and especially as elaborated in the previous section) the author of the present paper proposes that the Jakar CMC could be made more beneficial, effective as well as productive by adopting a series of steps within the existing set-up—thus, in effect harnessing the twin philosophies of GNH and ICTs for development.

At times, some of the local (computer literate) people do

visit the CMC for Internet Browsing. But not for the purpose(s) outlined by the author of this paper. It is generally a handful of school teachers or students who come to check their email, etc. So, in essence, radio-internet browsing as an effective measure to spread information and an empowering tool for people who're 'information-poor', still remains new to the Jakar CMC.

The Jakar CMC did conduct some training courses on computer literacy targeted at the local youth. And they were well received too. The author of this paper repeats the point made in the previous section—that if the computer courses were offered in tie-up with certified institutions they would attract more local youth, at least from the employment point of view.

No comments were made regarding the author's suggestions number one, three and four: firstly, that the Jakar CMC could function as a community cultural centre; secondly, that the CMC could teach literacy and; thirdly, that it could adopt the eNRICH—a software for rural communities.

Another pertinent and basic comment came from a fellow participant regarding the very effectiveness of using ICTs for development when people don't have the basic means of survival. Although in agreement with the basic idea that indicators like the GDP and the GNP are basic to the idea of 'development', the author of the present paper supports the unique concept of His Majesty—GNH—as an indicator of people's development in consonance with the title of this paper. Apart from the case presented in this paper, the answer can be strengthened further by citing the many other instances of ICTs being used for development elsewhere.

So much more could be achieved at the Jakar CMC, that the list could be almost inexhaustible. But to conclude this research paper, only a few more points. The CMC is presently a very viable option for using ICTs for development in third world countries. Given Bhutan's overarching philosophy of the GNH, the Jakar CMC is a good enough case where both ICTs and GNH converge to bring happiness as well as development in its best sense and spirit.

Under the vision of Bhutan's unique development

concept of the GNH, special importance and priority can be given to the goals of 'cultural promotion' and 'good governance' by expanding the present activities of the Jakar CMC. The Jakar CMC may thus successfully combine the concept of GNH with ICTs for development in a complementary and mutually reinforcing relationship within the ambit of "Media and Public Culture in Bhutan".

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