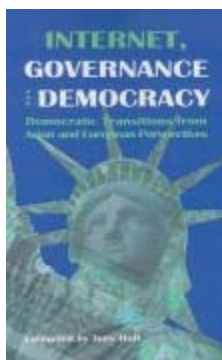


Use of Internet for Democracy, Development and Empowerment in Nepal

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Despite the adverse situation and poor telecommunication status of the country there is great enthusiasm among the youth and IT professionals who have worked to promote the development of IT in the country from the beginning. As a result, Nepal is gradually heading towards a state where IT is no more a luxury, but a necessity. Development agencies and civil societies are already utilizing it and the policy-makers, bureaucrats and politicians are realizing that poorer the nation, the greater the importance of IT. It is capable of promoting development for the rural poor in a country like Nepal.

ICT from Asian Perspective

Taiwan and Hong Kong, China have become the two of the world's top three telephone economies with more than 100 percent teledensity, and while in Nepal and Bangladesh there are only about 15 and 6 telephone lines, respectively per 1000 people in each country, the lowest in the world. Asia Pacific, the home of over half of the world's population, is the most diverse region in the world with varieties of cultures, languages, religion and people. There are dense cities and deserted areas. There are islands and the world's highest peaks. At the same time there are historic rivalries between the nations. But the diversity is most distinct in the digital divide among the countries of this continent.

According to ITU's report "Asia-Pacific Telecommunication Indicators 2002" the region emerged as the world's largest telecommunication market in 2001. It is today home to over one-third of the world's telephone subscribers. In the last 10 years there have been immense and dramatic

changes in telecommunications environment, in this continent, particularly with regard to the mobile phone. Even the least developed country like Cambodia has eight times more mobile phones than fixed-lines.

The report says that the Internet in Asia-Pacific has grown steadily. The region had some 160 million users at the end of 2001, accounting for one-third of the world total, and more than any other region. The region has more users of high-speed mobile Internet than the rest of the world put together.

Disparity among the Asian countries is not only the consequence of the physical diversity and inequality between the countries but also the result of centuries of western colonization. There is competition and also rivalry among the nations. They communicate between each other in the language and manner of their colonizers, something that is quite alien to the people of these countries. This causes misunderstanding and erodes self-confidence and self-respect; it makes them blind-followers as well.

False history, subservient education system introduced during colonial period, the world economic order and the globalization of the market put together has made most of the Asian countries dependent on western economy, culture, social values and communication system. Asian skies are crowded with the communication satellites that broadcast western programs interfering continuously the life and culture of the Asian societies. In fact 'the global media has become new missionaries of global capitalism', as Herman and Mc Chesney said. However, its role in providing opportunities of interaction, and increasing the level of understanding among various nations, races, cultures and religions is significant. Finding ways to make the media, both global and local, sustain and enhance cultural assets of the Asian countries is an important issue.

The need for regional cooperation and united action among the Asian countries is quite clear. They must discard the false pride based on religion, language, origin etc. created by the false colonial history. They should start fresh initiative to create vibrant Asian economy, culture and society with the help of new information and communication technologies.

Nepal: A Country of Diversities

Nepal is a small country of about 26 million people and an area of 147,181 square kilometer sandwiched between world's two most population giants, China and India. It is a land of different kinds of diversities because of its unique geographical and geo-political situation. With a vertical span of 200 kilometers, north south, the altitude of the land ranges from 70 meters above sea level to the highest point on earth, Mount Everest (8500 meters). 17 % of its land is covered by Snow-clad Mountains while 64% land lies in

mountain and hill area. Only 19 percent land is in the plain and fertile area, Terai, where 46% of the rural population lives.

While the country is stretched from east to west all the rivers originate from the Himalayan (snowy) mountain range in the north and flow southward making it difficult for the people to move east west, thus creating hundreds of small states, principalities and isolated, linguistic, ethnic and indigenous groups of people.

Because of the long autocratic rule for centuries the country remained isolated from rest of the world till 1951, when a multi party democratic system was introduced that continued for a short period of ten years. Then the king introduced absolute monarchy, which continued for 30 years. A popular democratic movement ended the autocratic monarchy and established multiparty democracy within the framework of a constitutional monarchy in 1990. A Maoist insurgency, launched in 1996, has gained attraction and is threatening to bring down the regime. In 2001, the Crown Prince massacred ten members of the royal family, including the king and queen, and then killed himself.

In October 2002, the new king dismissed the elected prime minister and his cabinet for "incompetence" after they dissolved the parliament and were subsequently unable to hold elections because of the ongoing insurgency. The country is now governed by the king and his appointed cabinet, which negotiated a cease-fire with the Maoist insurgents, who claim that there are two governments and two armies in the country. However, after seven months of cease fire and, third round of talk between the government and the Maoists, the Maoist unilaterally declared the end of cease fire in September 2003. Situation of a kind of civil war and at the same time the political movement of constitutional parties to reinstall the parliament has created political limbo in the country and future of democracy seems uncertain.

Nepal is listed among the world's least developed countries. Its annual per capita income is around US\$ 250. Most of the income of the rural household (50 to 70%) is spent on food. The country is divided into 75 districts (administrative units). There are 58 towns, small and large, and around 4000 Village Development Committees, which elect local governments. However, there are no local governments elected since 2002. 85% of the total population lives in the rural area while only 15% live in urban areas.

Many Nepalese from rural areas work abroad, particularly India. Most of them work for low paid jobs. It is estimated that 25% households receive remittances.

Communication in Nepal

Padam Maya Gurung, 34, who was undergoing jail sentence in a murder case in a prison situated in a hilly district, Tehrathum, suffered imprisonment for extra six years because it took six years to deliver the court order to the prison authority. She has filed petition in the Dhankuta Appeal Court demanding compensation for excess incarceration of six years, more than the court verdict. The Supreme Court, based in Kathmandu had given verdict to release her in 1996 after the term of penalty. According to Gorkhapatra Daily (State owned newspaper), November 13, 2002 she was released from the jail only in May 2002, because it took six years to deliver the letter to this effect in the Tehrathum District Court.

Rolpa, a remote and hilly district, most affected by the Maoist rebellion, has neither electricity nor any form of print media. Battery-operated radio sets are the only source of news for the people. But, since the district administration banned the import and sale of the batteries and ready-made packed food, the people of the district are deprived of listening to radio. (Kantipur Daily, September 18, 2002).

Nepal Communist Party (Maoist) Palpa district committee has put boxes in different parts of the district to collect peoples' opinion on peace process and their problems to be raised during peace talks with the government. (Space Time Daily, March 5, 2003).

Besides ostensibly preparing for talks and sporadic exchange of fire with the army the Maoists are currently exploring ways to air their message. They recently began a 'feasibility study' for a FM radio station and party activists have set up meetings with media professionals in Kathmandu, possibly with an eye on installation and broadcast training. The group seems to have the necessary funds, but lacks the technical and professional expertise to set up and run a radio station. The Maoists may find their biggest hurdle in acquiring license for the station. However, since they are an underground party, the issue of license may not be a formality. (The Nepali Times # 158, 15-21 August, 2003).

Adverse geographical terrain; diverse culture, language and ethnic composition; lack of transportation; inadequate telecommunication infrastructure; political isolation and centuries-long feudal/autocratic administrative system, mass illiteracy (around 60%) and at the internal violence during last eight years, which has caused more than 8000 death and destruction of basic infrastructures, such as water, electricity and telecommunication, have badly effected the communication of Nepal. The postal service, which was started about two hundred years before and still carried by men on foot, is the most common and dependable form of communication for the rural people and the government offices at large.

Development of mass communication in Nepal, which started to take initial shape only after 1951, was interrupted for 30 years, during autocratic Panchayat system. Although mass communication is the only sector, which

can claim to have developed most during the last 12 years of democracy, it is highly concentrated to a few urban centers, particularly in the Kathmandu, the capital of the country.

There is vast imbalance of facilities between the capital and the rest of the country in the information and communication sector. Out of 23 million people only 2 million people live in the Kathmandu valley. But about half of the newspapers are published from Kathmandu. All five TV stations are based here. Out of 25 FM stations 10 are in Kathmandu. According to the statistics of 2000 the national access to electricity, radio sets, TV sets and telephone line for households is 24.6%, 49.7%, 13.9% and 3.4% respectively. However the urban figure is 79.8%, 71%, 55.4% and 20.6% respectively and in rural area it is 16.5%, 46.6%, 7.8% and 0.9% respectively.

The mass media in Nepal is urban based, too politicized and elitist, highly polarized and sensational in character and has low circulation figures besides. As such the mass media have not been able to play an effective role in articulating the problems, reflecting the voice of the majority of the people, living particularly in rural areas, or safeguarding the citizens' rights and, in effect, strengthening democracy and enhancing development.

Significance of Community Media

The mass media has failed to play effective role in the life of the majority of the people who live in the rural and remote areas. Global media has no relevance and use for the majority of the people, who live below poverty line. Indigenous, traditional and community media are the most widely used form of information and communication system. Modern tools of communication, such as radio, television, cable network, and print media have started to play role in the communities now.

The idea of community media is to establish communication via radio, television, print and Internet of, for and by the people. These would be citizen-controlled media for non-commercial and social development purposes. Varieties of communication tools, from wall newspapers to Internet, have been tested here, and some of them have proved quite effective. Wall newspaper, community audio tower, rural newspaper run by barefoot journalists, and community/cooperative FM radio stations are some of the successful models in South Asia tested in Nepal. Now telecenters and cyber cafes have started to play the role of community media. It has a great potential in the Nepalese context.

Understanding community and teaching community members to amplify their own voices is important. Media developed in foreign places are aimed at selling products. People need to create their own media for their own uses and development. People need to be media literate so that they can help children discover the motive behind most commercial media and not just blindly succumb to its magic. Media literacy requires the analysis, critic,

deconstruction and creation of media. That is why community media initiatives are so important for communities living in rural areas as they are prone to the harmful effects of the global/satellite media.

Internet Obsession

The Nepalese media, both printed and electronic variety, were the first to cover the news of the inauguration of the first interactive religious website by the Nepalese queen on 19 May 2003. It was the first time that a royal dignitary such as the queen had inaugurated a website. (www.shripashupatinath.org)

Two more websites were also launched on the same day, this was also covered by the media. Minister of Culture, Tourism and Civil Aviation inaugurated a website of his ministry (www.tourism.gov.np) while Miss Nepal launched the website of World Wildlife Fund Nepal. (www.wwfnepal.org.np)

Dozens of websites are launched every week, but most of them remain unnoticed not only by the media but also by the people for whom they are made. In July 2003 the royal palace launched its website www.nepalmonarchy.gov.np. Almost all ministries of the government have websites. With the support of UNDP and other development organizations some of the municipalities, village committees and nongovernmental organizations have created websites. Indeed the attraction of and enthusiasm for adopting new information technology is continuously increasing in Nepal.

IT Capacity of Nepal

The number of fixed and mobile telephone lines, have reached around 400,000 in Nepal. Most significantly more than 68% of the telephone lines (including mobile phones) are distributed in the Kathmandu valley. While the national teledensity is 1.4%, it is 23% in Kathmandu and 0.14% in the rest of the country. 60% of the villages have no access to telephone.

Out of the total capacity of 70 thousand mobile phones (introduced two years ago), around 34 thousand mobile phones are distributed in the Kathmandu valley. There are about 30000 Internet account holders/customers in the country and it is estimated that about 200,000 people use email and Internet. Out of 18 Internet Service Providers (ISP) 15 are providing service. However, all of them are based in Kathmandu. Very few of them are providing service outside in some urban centers outside the valley.

Although the government has announced that the private sector should be involved in the telecommunication service, no significant change has been seen. The government has not allowed private sector to operate full-fledge telecommunication services.

IT Usage

The Nepalese used the Internet, for the first time, as a credible and easy source of information during the dreadful royal massacre on June 1, 2001 to get the news that they could not get from mainstream media. That was the first time people outside Nepal browsed the Nepalese website to its utmost capacity.

There are lots of inconsistencies and contradictions in the development of Nepal. People of hill and mountain areas of Nepal used airplanes and helicopters before they saw vehicles. Similarly people who had never read newspapers or listened to radios are enjoying satellite television powered by solar energy. This leapfrog development can be experienced in the Information Technology (IT) sector too. People who until recently barely had made a telephone call or seen a computer are now benefiting from the Internet.

It seems that people have suddenly found a miraculous pot in the form of Internet to fulfill their all kinds of wishes. Students, researchers and intellectuals have found that there is no better alternative to IT for increasing the dimensions of their knowledge. Human right activists, development workers and social advocates have been using it for increasing numbers of supporters and raising funds. Businessmen have realized that they can increase their profits through IT. Professionals have been benefiting from wide rang of contacts. Even the farmers and craftsmen, who live in rural areas, have got new opportunities by selling products in international market. Local products are thus getting global markets. Political leaders, decision makers and bureaucrats have realized that IT is the most effective tool for empowering people, delivering services, promoting good governance and strengthening democracy.

Despite the adverse situation and poor telecommunication status of the country there is great enthusiasm among the youth and IT professionals who have worked to promote the development of IT in the country from the beginning. As a result, Nepal is gradually heading towards a state where IT is no more a luxury, but a necessity. Development agencies and civil societies are already utilizing it and the policy-makers, bureaucrats and politicians are realizing that poorer the nation, the greater the importance of IT. It is capable of promoting development forthe rural poor in a country like Nepal.

The major role of IT in Nepal is mainly as a communication technology rather than as an information processing or production technology, particularly in the rural and remote communities.

Areas where the Internet can be used are increasing every day. INGOs and NGOs are at the forefront in benefiting from the Internet. Within a short period, the use of ICT has increased in many sectors including government,

civil societies and economic sector. Other sectors such as health, education, business, tourism, governance and mass communication are also using the Internet. It has increased the efficiency and capacity of the organizations and benefited the people in various ways.

Media and Online Journalism

Dialogue within and among people, communities and different institutions, which is so important for strengthening democracy, enhancing development and empowering people, is increasing rapidly with the increase of communication tools such as telephone, fax, FM radio, email, and the Internet. Nepalese mass media is using IT in various ways for accessing and increasing sources of information, speeding up the flow of information and getting feed back. Online journalism has made it quite easy for people abroad to get online news about Nepal and vice versa. The overall meaning of journalism is changing since anybody with a computer and a telephone line can be a journalist and produce his/her own media or broadcast voice and video through the Internet. Press Council Nepal, which monitors the code of conduct of journalists, is documenting all the newspapers digitally.

Democracy and Governance

For a strong democracy demands a constant and vibrant interaction between the government and civil society, between the administration and the common people. The Internet provides opportunity for two way dialogue between the state and the citizens. It affects the decisions of the peoples' elected representatives and policy makers makes the local and central governments, and public organizations accountable, transparent, and more sensible, and it reduces corruption. It also makes government services and other organizations services more effective and responsible.

All the government ministries, departments, corporations and district offices are going to have their own websites and their databases are going to be linked by national network within five years. Other organs of the state, such as Judiciary, Parliament, Election Commission, the Human Rights Commission, and Bureau of Statistics etc. have their websites and databases in the computer. Any body can send email anpit corruption by public servants or the peoples' representatives to the Commission for Investigation of Abuse of Authority. (See www.akhtiyar.org.np)

There are many websites dealing with the human rights situation of the country which give updated information on violation of human rights to the human right activists around the world. (See: www.insec.org.np, www.cvict.org.np, www.cehurdes.org.np, www.cwin-nepal.org)

Internet Facility for the MPs

Free Internet and telephone facilities were provided to the members of the parliament with the objectives of popularizing new information technology and increase the dimensions of knowledge. Since the majority of constituencies did not have telephone and Internet connections it was unthinkable that the MPs would use Internet as a tool to interact with their voters and get their consensus on any bill tabled in the parliament. However, as far as the interaction between the MPs and their voters is concerned the radio program "Phone in with the Parliamentarians" was quite popular and successful to some extent for making the peoples' representative realize their responsibilities and empowering the voters.

Telecenters in Rural Areas

A pilot project to install 15 rural telecenters in 15 different VDCs in 9 Districts is already under way, under the joint management of Ministry Of Science and Technology and National Information Technology Centre and the UNDP-funded ICTs for Development programme. Each telecenter will provide telephony and Internet access, plus specialised local content which is being developed for the purpose. The aim of the project is to establish 1500 such sponsored telecenters within next five years.

District Information and Documentation Centres

The UNDP-funded Local Governance Programme is setting up 30 District Information and Documentation Centres (DIDC), each with a networked computer. These will be linked to the Ministry of Local Government. The project is closely linked with the new development approach of social mobilisation to form Community Based Organisations. The DIDCs will be both a resource and an outlet for the CBOs, providing a channel whereby they can express their needs. A different UNDP-funded programme, PDDP (Participatory District Development Programme), is providing similar facilities to a similar number of other Districts.

A current proposal, awaiting approval, is for Japanese support for NTC to install pilot multipurpose community telecenters (MCT) in 10 VDCs in the Kathmandu Valley, each are 2-3 hours' drive from Kathmandu and with population of over 4,000 people. The purpose is to develop a sustainable model for MCTs, trying out different approaches of charging and comparing MCTs with simple public call offices. Each MCT will have 2 phones, 1 computer with modem, one fax machine, one printer and uninterruptible power supply.

Nepal is also using geographical information system (GIS) in 66 districts to assist planning in various sectors. It has also started using global positioning

system (GPS). The Internet is also used for environmental conservation initiatives within and outside the country.

A District Treasury Control project has linked computers in 64 Districts and major municipalities to central government. This has made cash management faster and more transparent.

Education

Educational institutions are using IT, and an initiative to start distance learning has begun recently. Some of the books and documents, including text books, in the Nepalese language are available on the Internet. People are using e-libraries. Students browse websites to seek appropriate college with the right syllabus, scholarships and jobs. Thousands of students and their guardians outside the capital have started browsing school and college examination result on the Internet, which were not possible to see three years ago.

Health

The HealthNet provides online access for doctors and nurses to international health databases and Nepalese health information. A Local Area Network connects more than 70 terminals on and near the Tribhuvan University Teaching Hospital campus, providing direct access for on-site staff. Doctors who are further away can access HealthNet using a secure dial-up method. HealthNet provides week-long training for doctors who are not yet familiar with computers, the Internet and search methods. People can donate blood and request for blood donation through website, www.bloodmembers.com . Telemedicine has a vast scope and utility in Nepal.

Commerce

e-commerce has started up in Nepal but it has not been able to develop in comparison to other countries because of the lack of cyber laws, which is in the offing now. The tourism industry is using the Internet to expand its business around the world. Some websites are demonstrating handicrafts of the rural craftsmen, thus helping them sell their product in international market.

Agriculture

There are websites which provide information about agricultural products and on the market price of produce in different towns of the country.

AgriPriceNepal.com is a pioneer Nepali website on agricultural market information for Nepal, jointly hosted by the Rural-Urban Partnership Programme, the Agro Enterprise Centre and the Federation of Nepalese Chambers of Commerce and Industry. Subscribers can get the latest price and source information for more than 150 agricultural commodities of 18 major markets in Nepal.

IT based businesses such as call centers, cyber cafes, medical transcription, digitization of maps and documents, software production etc. have started up during the last five years. Consequently considerable numbers of youth are attracted to train for and join the IT based professions.

Art and Literature

There are some websites, such as www.spinybabbler.org, www.aarohantheatre.org, www.mpp.org.np, www.thopathopa.com, www.kasajoo.com, which provide art and literature and news on literary activities. Some of them are in Nepali and different national languages. There are Nepali literary magazines originating from Nepal and abroad in Nepali language.

Culture, Tradition and Religion

With the help of some websites Nepalese living in foreign countries can now perform religious, cultural and traditional rites, rituals and ceremonies.

Development Organizations

International donor communities have been using the Internet in Nepal for a long time. They have also supported national and regional non-governmental organizations to establish their own websites. Although these websites are not used so much within the country due to language and technological constraints they have been quite useful as a tool of advocacy for social change in Nepal and for raising funds for projects which help uplift the life of the people. It has been very easy for the international development organizations based outside Nepal to understand the reality of the country; evaluate the seriousness of problems; realize the need of the grassroots, identify the areas which need intervention and decide which plans and projects which address the problems. It has also helped them to monitor and evaluate projects. Similarly people from any part of the world can support vulnerable communities.

Challenges

Internet fidelity is increasing in Nepal and so are increasingly the number of networks and websites. However, it seems that the target audience of most of the websites and their promoters is not within the country. They are meant for international visitors, who can communicate in English language. For example Nepal's most used online news www.nepalnews.com is visited by around 40 thousand people daily all over the world. Out of all visitors only 15 percent are from Nepal, according to its editor. The present telecommunication infrastructure and the other facilities necessary for using the Internet are quite limited. It is estimated that less than 1% of the population use email and Internet while the total number of Internet account holders is around 30,000 (less than 0.14%).

Language is another great barrier for accessing using computer for the majority of the Nepalese. Historically, Nepal was the only country in South Asia which was not colonized by western power. It was isolated for centuries. English was and still is one of the official languages in the South Asian countries. Consequently very few Nepalese can communicate in English, which is the dominating language on the Internet. Until the software that runs computer programmes, are made in Nepali language using Nepali font it is impossible for more than 90% of the Nepalese population to operate computers and browse the Internet by themselves.

Dr. Michael L. Dertouzon, engineer, inventor, theoretician and director of the Laboratory for Computer Science at the Massachusetts Institute of Technology, has predicted many ways the information revolution would affect human lives, he may also help us understand the basic reality about the use of IT in Nepal. Indeed he stated that:

"Bill sees this expanding world of network as an opportunity for poor people to sell their wares, get educated participate in the world marketplace and pull themselves up from poverty. I see the exact same thing with a time scale of 15 years – and only, if we help.

"I learnt it from Nepal. A while ago, I had this naïve assumption that I could go to Nepal, obtain computers and training for the Nepalese and get them to have a 20 percent jolt in the G.N.P. But here is what I found out: Only 30 percent of the Nepalese are literate. Of that 30 percent only 10 percent speak English. Even if I got someone to provide every one of them with a computer with communications, what could they do with them? They have no skills to sell.

"To get people to do this, I would have to educate them, and people don't get educated overnight.

"So, 15 years. From this and other experiences, I've concluded that the information revolution, if left to its own devices, will mean that the rich are going to buy more computers, be more productive and become richer, and the poor will not be able to do that and will stand still. History teaches us that whenever the gap between rich and poor increases, we have all kinds of

troubles. (Claudia Dreifus, The Kathmandu Post, Cyberpost, September 29, 1999)

Energy is an important aspect for using computer. Electricity is available mainly in urban areas. It is very difficult to supply main line electricity to rural households which are scattered far and wide. Denmark is significantly supporting the development of alternative energy in Nepal. More than 25 thousand households belonging to 1100 Village Development Committees are using solar energy thanks to the alternative energy project. Solar energy is used mostly for watching TV and listening radio while a few of them are also used to run computers. The target is to set up 52000 solar power sets within next five years. The project has proved useful and effective for increasing communication facilities in rural and remote areas. Developed countries must increase their support to such projects, including wind power and small hydroelectricity projects, which directly benefit the rural people.

There is a great digital divide inside the country, between the urban and rural areas, and also between the Kathmandu valley and rest of the country. More than 95 percent of the websites originate from the capital city. The number of the Internet users is not increasing at same ratio as websites. The number of Internet account holders is estimated to increase 20 to 30 percent every year.

All the Internet Service Providers depend on the Nepal Telecommunication Corporation (NTC) to up connect up with the end users. Apart from the Internet charges the customers have to pay the telephone charge at the rate of the voice telephone, which is quite costly in comparison to other countries. At the same time NTC also provides Internet service.

Problems regarding the access to Internet, particularly in rural areas, are related to unreliable and variable power supply, low bandwidth leading to slow connection, lack of local software and hardware support, lack of awareness among local people of facilities offered, poor location and inadequate opening hours and inadequate dedicated management.

Lack of laws regarding electronic transaction has hindered the development of e-commerce and export of software, which has already shown vast potentiality in the country.

Various measures should be taken to overcome the barriers concerning access and use of IT, such as, adverse geographical condition, poverty, inadequate telecommunication infrastructure, high illiteracy, unfriendly Internet and telephone tariffs, domination of English language in IT, monopoly of Nepal Telecommunication Corporation (NTC), unfriendly licensing policy and high fee and taxes for Internet business (small entrepreneur), lack of electricity and diversity of language etc. It is necessary to formulate relevant policies and laws, adopt appropriate technology, utilize

external assistance and conduct training. However, the main challenge seems to be more socio-cultural than the physical.

The fear of cost and mastering new technology is not as great as the fear of losing control over the existing knowledge/information system. For example, the bureaucrats in the government offices usually dislike both the idea of keeping all the official documents on the computer and networking within the ministry, department or the office. Hence on the ministries websites we see biographies of ministers, messages from the ministers, secretaries and the head of the departments instead of the relevant data. This is true not only in the case of the government offices, but this kind of media hierarchy is prevalent in many organizations, NGOs and within the families.

Overcoming this socio-cultural or mental barrier seems to be the greatest challenge which many Asian countries including Nepal have to address. Once this mental barrier is crossed all other barriers such as policy, law, monopoly, tariff, access, rural connectivity etc. can be overcome. This is a problem for most of the Asian countries and we should find out the solution ourselves.

Recommendations

Only small parts of the societies in South Asia have access to the Internet and other new means of communication. There exist serious inequalities in these which constrain the use of ICT- based information by the majority of the people.

It is not possible to make all the citizens capable of using the Internet or quickly make them computer literate. To overcome the barriers there is a distinct role to be played by intermediaries that connect the people to the technology by providing them with IT related services and enabling them to use Internet. Therefore the intermediaries, such as community telecenters, cyber cafes, local governments with IT facilities, ISPs etc. should be given incentives and their role in the communities should be increased. At the same time it is important to increase the access for the people to use IT by implementing IT awareness programs and organizing different levels of trainings in large scale.

As technology is advancing, the gap between the information haves and have nots is also widening. Digital divide is increasing not only between the nations, and within the countries, but also within the communities and between different sexes and races and ethnic groups. IT may therefore have a greater role to play by giving voice to the deprived vulnerable sex, race and groups of people. It is important to make them information providers rather than information recipients.

Since women are the most underprivileged/ deprived class in Nepal in all sectors of society it is important to focus on increasing the communication technology capacity for women in, both traditional and new.

One of the main strategies of international community for supporting the least developed countries should be to increase the number of people getting access to the Internet and the new technologies. This may involve supporting the following measures:

- Putting pressure on national governments to create legal and economic environment in order to encourage the private sector to provide complete and independent telecommunication services.
- Development of telecommunication infrastructure in remote and rural areas.
- Support to subsidize the costs of communication satellites. This is important for land locked and mountainous countries like Nepal.
- Improving the bandwidth provided by the satellite communication technology in order to supply the necessary/apropriate bandwidth for broadband and Internet connectivity.
- Promotion of alternative/community media initiatives, both electronic and printed media.
- Subsidizing alternative energy projects.

Whether people are ready or not it is true that IT is a reality now even for a country like Nepal where the teledensity has not crossed 1.5 percent. It is also true that the poorer the nation, the greater the importance of IT. In comparison to neighboring countries the situation of landlockedness and scarcity of physical resource makes IT especially important for Nepal. IT has great potential for empowering people, and empowerment of the people is the key for strengthening democracy and enhancing development.

The End