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<td>Bhattacharji, Bhaskar</td>
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ENHANCING CITIZENSHIP SKILLS IN AN INFORMATION AGE
Presentation at 7th AMIC Annual Conference, Bangkok, 21-23 May 1998

Citizenship is the state of being vested with the rights, privileges and duties of a native or naturalized member of a state or nation who owes allegiance to its government and is entitled to its protection.

Globalisation and the Information Technology Revolution

One of the key defining features of globalisation today is the awesome pace of technological innovation. Schumpeter and others have argued that economies move through 50 year cycles driven by technological breakthroughs. There is some evidence for this: the 1780s to the 1840s saw the introduction of steam power which drove the industrial revolution, the second wave from the 1840s to the 1890s introduced the railways, the third from the 1890s to the 1930s was fuelled by electric power and the fourth from the 1930s to the 1980s by cheap oil. Now we are living through the revolution in information technology (IT).

It is too early to predict the full impact - like innovations before, great change means there will be winners and losers. But a key difference now is that IT will diminish the importance of location as a factor in influencing who are these winners and losers.

The IT revolution is essentially about the codification of knowledge - the storage of information - whether pictures, numbers or text - and the possibility of its transmission across the globe at low costs. In a world increasingly dominated by services, knowledge is increasingly a traded product. If knowledge can be disseminated more easily and more cheaply, location will be less important and if geography has dealt you a poor hand, this need not necessarily be a penalty.

The growth in India’s software industry is a good example of this. India is now a leading world centre for software services. More than 100 of the top 500 US companies now use IT services from Indian companies. The sector employs 120,000 people - an increase of 100% over five years. Off-site services are the fastest growing part of the market as more Indian companies have also found a highly profitable niche offering solutions to the millennium bug.

THE DEVELOPING COUNTRY CITIZEN’ S RIGHT TO INFORMATION

There are many intellectuals and policy makers, most of whom have access to modern information and communication technology, who question whether people, particularly ordinary, mostly poor people in developing countries, really need these technologies and warn us about its potential harmful effects. Many of them feel that drilling wells for clean water, building roads, provision of primary health care and schools for teaching people to read and write are much more important for improving poor peoples health and living conditions in general than providing them with computers and access to data networks. The information available through networks, they argue, is anyway chiefly produced in the west and for the west and computer mediated discussion groups spread western values and culture and threaten the survival of local culture.
Moreover, opponents of free access to information note that cyberspace is full of garbage and "pollutes" innocent people and children with western perversions. Worst of all, some people feel; potentially dangerous extremist groups and subversive terrorists can use the networks to spread their distorted messages and influence the ignorant masses.

And then, there are the problems of data security and copyright . . .

There is a good deal of truth in all these statements. However this presentation is built on the basic assumption that the information revolution on balance presents a significant opportunity for developing countries and their citizens. Roads are important but so is access to information and the means to communicate. Modern terrestrial and satellite radio communication systems can be provided in a relatively short time and reach very remote and isolated areas. The quality of public services, including health, education and security can be immensely improved by means of modern information and telecommunication technologies. The advantages of being able to access relevant information and "knowledge networks" in a timely way and having the possibility and right to freely communicate ones own opinions and values to the rest of the world, for the purposes of this presentation, are considered to far outweigh any potential dangers of providing access to global forums.

It is even possible to go so far as to suggest that citizens' access to information and the means to communicate are a fundamental condition for sustainable human development. In making this statement, one is fully conscious of the reality that the telecommunication infrastructure in developing countries is concentrated in the larger cities and in many countries virtually non-existent in rural and remote areas. As regards access to information and data networks, notably the Internet, the discrepancies between the rich and the poor and between urban and rural areas are even more accentuated. It is estimated that more than half of the world's population have never used a telephone. The gap between those who have access to these vital resources and those who have not is widening also in many rich countries. Even in these countries there are large pockets of socially or geographically isolated population strata which either do not have access to adequate telecommunications or cannot afford modern information and communication facilities or just lack the required skills. But we believe that this only doubly underlines the need to find ways to enable the exercising of the right to information by relatively disadvantaged citizens of our region.

Sometimes this can be a matter unlinked to infrastructure or resource considerations. I would like to share the example from India of the successful RIGHT TO INFORMATION MOVEMENT of the Mazdoor Kisan Shakti Sangathan or Farmworkers Association, launched in the State of Rajasthan by a brave lady by the name of Aruna Roy and her colleagues in 1990. This is a mass organization of peasants and workers brought together on the issue of non-payment to workers on various government projects. Through a series of "public hearings" yjry organised all over Rajasthan, the group effectively mounted an information transparency challenge to the State Government of Rajasthan, but this challenge was not one which threatened the Government but rather sought to force Government to pursue its legitimate responsibilities. In time this process
moved beyond Rajasthan. In three states, Rajasthan, Madhya Pradesh and Tamil Nadu, there is now legislation on the right to public information by any citizen, regardless of social status.

However this has not been an easy process. Aruna Roy's work has moved into the villages, and has placed her in confrontation with fundamental issues of the right to life and work, the right to participate in democratic processes and, as the necessary condition for these rights to be exercised, the right to information.

The enormous significance of Aruna Roy's work is best appreciated against the background of the range of government and governmental institutions in India. The substantial responsibility rests with Government for development administration, the establishment of law and order, and the maintenance of essential supplies and services. Little responsibility for governance lies with non-governmental or civil society organizations. In this situation, access to institutions and information determines the extent to which citizens can benefit from the process of development. It is Aruna Roy's signal achievement that the campaign she leads focuses not on sectoral issues or on specific activities on the ground, but on empowering citizens across the board to demand and acquire information relevant to their position and needs.

It is not an easy in a country like India to challenge Government or the Government monopoly of institutions, or to force Government to recognize its larger democratic responsibilities; but this the campaign for the Right to Information has been able to achieve. It is also significant that the campaign is an entirely non political activity. The work of Aruna Roy and her colleagues does not have the patronage or support of any political party; at the same time the State Governments of Rajasthan, Madhya Pradesh and Tamil Nadu, currently run by three different political parties, have all introduced legislation for the Right of Information. Support to the campaign is from below, from individual members of the public who in their own way have been denied the opportunity to participate in the wider processes of governance.

In an essay written by Aruna Roy entitled "From Bureaucracy to People's Movement" she makes a clear statement of her commitment to democratic values, citizens rights and approach to development. As she says "Development is politics and there can be no development without political will...All acts of social and economic living are determined by the nature of politics. It is essential to see this before one can begin to work to mobilize people for change...Any organization for social change,..., has to derive its strength from the people it intends to benefit."

The true strength of Aruna Roy's work lies in this ability to draw strength not from established institutions or vested interests, but from the sense of values present in communities of the people.

A dynamic politician, currently Chief Minister of the southern State of Andhra Pradesh in India, is currently taking such a citizenship and governance concept further through the information technology route - with World Bank and Microsoft assistance, he is going ahead with the plan to link up all nodes of the State's communication/information system right down to villages, where "tele-kiosks" are intended to be established.
There are other promising examples of the beginnings of an information transparency approach at the highest political levels in India: anyone can look at the home-page of the ruling Bharatiya Janata Party and download enormous amounts of hitherto simply inaccessible data from the Planning Commission’s National Informatics Centre Network.

**The Dynamics of Transborder Broadcasting**

(This section is based entirely on the Indian experience and positions and draws heavily on the Sengupta Committee Report on the reform of the Indian broadcasting scenario)

Unparalleled changes have taken place in broadcasting throughout the world. The boundaries between broadcasting, telecommunications, and information technologies are becoming blurred. The conventional and rigid regulations of yesteryear have become ineffective and impractical. The new technologies have demolished the monopoly of state run electronic media and rendered redundant the regulations. Loosening of controls is a global phenomenon. On the other hand, it is recognised that the satellite revolution is not an unmixed blessing. The unfettered freedom enjoyed by global satellite channels and their periodic lack of sensitivity to Asian culture and ethos are matters of concern.

However, there is an overwhelming consensus in favour of freeing the airwaves from government monopoly thereby allowing local broadcasters the facility of uplinking from national soil. Such a consensus is absent with regard to global foreign satellite channels, although there is a body of opinion in favour of this. It must be noted however, that mere denial of permission to a foreign channel does not prevent it from broadcasting programmes directly to national homes with the help of uplinking facilities from other countries.

As sequel to the general acceptance (supported by landmark court judgments in the Indian case) that the airwaves are “public”, as distinct from “government”, property, there is acceptance of the need for establishing suitable national regulatory frameworks for the audio visual landscape of the future. It is argued that a national authority to grant frequencies and franchises and regulate the licensees, has to be created to ensure that there is no unfair or unjust treatment and unwarranted infringement of privacy or violation of accepted standards of public taste and decency.

It is suggested that the immediate fallout of allowing uplinking in respect of private broadcasters, both national and foreign, and in permitting local terrestrial stations, will be to create enormous local job opportunities and also to bring handsome revenue to the nation.

The diversion of national foreign exchange both by the satellite operators and by national companies will be prevented. In fact, there is the possibility of gaining billions of dollars in foreign exchange through the license fee and royalty payable by the national foreign satellite channels and the advertising revenue that will come from foreign companies.

Another advantage of extending uplinking facilities to domestic and foreign satellite channels will be that they can be brought under the purview of national laws and compelled to adhere to prevalent programming and advertising codes. The Sengupta Committee in India has
recommended that a radio and television authority which performs the above function as an independent body be set up. In addition a public statutory corporation whose constitution and composition ensures its impartiality in political economic and social matters and in all other public issues must be established and required by law to present news views and opinions in a balanced way ensuring pluralism and diversity and providing equal access to all citizens and groups to avail of the medium.

It is interesting to note how fragile this general area is, for some countries of our region - in that the future of the Prasar Bharati Corporation finally set up through the promulgation of an Ordinance by the earlier ruling coalition in India, drawing upon the Sengupta Committee Report, is currently considered uncertain under the new regime which has a more orthodox stance on many points.

However, there can be no doubt that it is extremely important to give emphasis to public services broadcasting in its broadest sense, which is a vital part of life of life in Asian countries. Such broadcasting both educates and entertains and provides extensive news coverage while seeking to cater to the interests of the few as well as of the many. In the wake of the deluge of entertainment directed to the top crust, the minority with growing purchasing power and propensity to spend, the significance of public service broadcasting cannot be over-emphasised. Broadcasting must have a higher purpose than merely reaching out to the largest possible number of people, flattening out in the process disparate audiences into a homogenous mass of buyers. Crass commercialization hinders variety and approach and style, resulting in mere variations on the same theme.

We can be sure that without statutory protection public service broadcasting will be far too vulnerable, especially in a multi-channel scenario. It needs to be structurally embedded into the broadcasting corporation to become a source of enrichment and empowerment of citizens. Countries need to have at least one TV channel and one radio wavelength dedicated to this purpose and addressing issues of population control, promotion of literacy, agriculture, public health, sanitation, and environment. But because such channels, in the “free airwaves” regime under discussion, will have to compete with private channels or frequencies, they must innovatively use elements of entertainment geared towards raising commercial revenue through advertising or sponsored programmes, supplemented by government grant-in-aid.

In Asia few will contest the view that broadcasting needs to observe a greater degree of responsibility and sensibility to our culture and ethos and cater to the individual development requirements of our countries. So when we talk of public service broadcasting we must not remain fettered only to the state interest in and execution of this role but also find ways to give access to a wide spectrum of programme makers affording an arena for a plurality of views and modes of expression. It is possible to prescribe that private licensees should also put out a certain quantum of development oriented programmes. Satellite channels including open universities and institutions of higher learning can be encouraged to earmark chunks if not operate separate channels devoted to education etc, in the same way as the Discovery Channel, universally acknowledged as a remarkable success of commercial public service broadcasting.
Returning to the subject of the Satellite Channel Revolution, it is important to reiterate that there is simply no way by which we can prevent the transmission of programmes directly to Asian homes with uplinking facilities to centres in some locations, notably Hong Kong. It is also a fact that technologically it is very difficult and much too costly to prevent such direct transmission. The banning of dish antennae involves gigantic enforcement machinery at best wasteful and of limited effectiveness and at worst repugnant to democratic societies believing in the freedom of media. It would therefore seem to make best sense to adopt liberal national policies with respect to promoting satellite channels with national uplinking facilities and radio frequencies.

If uplink licensees are associated with fair broadcast codes or regulations this will actually provide far greater control than a restrictive national policy confronted by unbridled foreign deregulation. To benefit from the numerous advantages of domestic uplinking it can be fairly expected that most responsible broadcasters would be prepared to voluntarily submit to such regulations as prevail in other democratic countries. For instance, in UK, the universally acknowledged role model in this arena, all satellite channels are licensed and regulated by the Independent Television Commission. The ITC has permitted over one hundred non-domestic satellite service licenses. These are easily available on demand, provided that the content of proposed services do not breach the Consumer Protection Requirements of the UK Broadcasting Act 1990 and the applications are granted subject to the fulfillment of appropriate terms and conditions. All licensees have to comply with requirements relating to taste and decency and impartiality in programmes and codes on programme sponsorship and advertising. A "complaints function" and punitive authority naturally needs to be vested in the independent regulatory authority.

Harnessing the IT Revolution to Empower Communities

Using the definition of the European Telework Online, telework (a term used in Europe) or telecommuting (a term used in the U.S.) occurs when information and communications technologies (ICTs) are applied to enable work to be done at a distance from the place where the work results are needed or where the work conventionally would have been done. Although an access to Internet is essential for some forms of telework (e.g. electronic commerce, outsourcing), use of personal computers in conjunction with various forms of telecommunications is often sufficient for telecommuting. The main type of telework of relevance to the topic under discussion would be work in telecottages which provide local communities with access to skills development, high performance ICTs, and the networking and socialisation aspects of work that may be missed by a home-or-rural-community based worker.

The results of the research done on the basis of teleworking experiences in industrialised countries suggest that the benefits of teleworking include: higher productivity of employees, focus on work results rather than a process, reduced stress and better health, reduction of absenteeism, savings on direct and indirect overheads, reduction in traffic congestion, fuel consumption and environmental pollution; and additional employment for rural populations.

While the above benefits of telework might be applicable to developing country conditions as well, there is no sufficient empirical evidence available as yet, largely due to insufficient Internet
connectivity and IT infrastructure. However, there are examples of certain types of teleworking already in practice in some developing countries.

There is clearly the high-skills area of "Outsourcing" already mentioned where a large number of countries are competing, for instance, for a share of the offshore information services business - a market valued at US$ 30-US$ 40 billion. Among them are Barbados, Jamaica, the Dominican Republic, India, the Philippines and the Far East.

However, moving quickly to a more relevant area in the context of this discussion, telework opens the whole array of possibilities for rural socio-economic development. New employment opportunities can be generated through telework in rural areas. The establishment of multipurpose community information centres to enhance citizenship skills in rural areas gains importance in this context, as they can provide access to global, national, regional and local markets and much needed information on income generation. Field research in Africa has revealed that according to rural respondents there is a great need for networks that provide information such as experience from other locations in non-farm income-generation, money-saving initiatives; marketing information, information on finance and loans and how to get them, practical tips on the survival of small businesses; information for seasonal/casual employment, vocational training opportunities, agricultural expertise (e.g. soil conservation, fertility restoration, farming under drought conditions), information on government regulations and policies on rural development (health, agriculture, education, cooperatives etc.), health and sanitation (e.g. disease prevention and treatment). These networks would allow a greater environmental control resulting in better management of consequences of natural disasters and utilisation of local resources.

In India, the MS Swaminathan Research Foundation, under the visionary leadership of our most famous agricultural scientist/statesman M S Swaminathan, is one organisation which has successfully pioneered the concept of such an information and scientific-expertise-accessed-by-the-community approach in their "biovillages" in Pondicherry.

Telecentres or telecottages could also be deployed to enhance educational levels of rural communities and provide vocational training through distance education. ICTs would enable a greater number of people easier access to educational opportunities irrespective of their geographic location. Increased levels of education and knowledge combined with an increased scope of social participation might lead to empowerment of rural populations and greater grassroots participation in community affairs.

Teleworking may also help curb rural migration as the cities lose their exclusivity as centres of employment due to the growing opportunities for income-generation locally through remote channels. In addition to the retention of rural population there is a likelihood of migration of previously urban teleworkers to rural areas. This reverse migration is already occurring in Western countries triggering eventual growth of employment in the local services sector. There is even a possibility of migration from areas of high livelihood costs in industrialised countries to cheaper and environmentally more attractive regions in developing countries.
IT and teleworking can also be harnessed to empower women and assist them to gain better employment opportunities and improve their livelihoods while preserving and distributing the gender-specific knowledge, e.g. in agriculture, environmental resource management, health etc. The number and span of electronic networks designed for women has been steadily increasing. According to the experience of the SelfEmployed Women's Association, an NGO operating in India, computer-aided small-scale management and accounting systems have been found to improve business efficiency of women working as street vendors, garment pickers and tailors in the informal sector. Home-based teleworking often appeals to women as it allows them to retain their careers while taking care of children.

However, research has shown that IT aimed at benefiting people in rural areas in developing countries appears to have benefited men's lives more than women's as science and technology programmes have not explicitly recognised the gender specific nature of development. As a result, technological changes offered to women have often been inappropriately formulated and designed. Cultural attitudes and gender stereotypes are obstacles to education and careers in science and technology and the use of IT for women. More boys than girls receive basic education. Among those who do receive education, more boys than girls study science and technology which leads to the skewed gender ratio in the science and technology careers. More ought to be done to encourage the capacity mobilisation of the female population through IT as a steadily increasing body of evidence suggests that girls' education is probably the single most effective investment that a developing country can make. Educating women reduces child and maternal mortality, improves family health, reduces fertility, increases the educational attainment of children, has important environmental benefits and increases productivity.

**Conclusion: the UNDP connection!**

Information and Communication Technologies (ICT) are not only a significant factor in the performance and growth of economies - the importance of which is continuously growing - but they also represent a novel and effective tool to help advance development that is pro-people, pro-poor, pro-women, pro-jobs and pro-nature, what we call sustainable human development (SHD).

The United Nation Development Programme's (UNDP's) Bureau for Development Policy (BDP) in New York is seeking to capture the potential of these technologies for SHD and the fight against poverty. ICTs allow faster delivery and a more adapted content of technical assistance in a variety of sectors - ranging from long-distance education, telemedicine, environmental management to strengthening of participatory approaches and the creation of new livelihoods. ICTs can involve more people, hitherto unreached or underserviced, and accomplish a deeper geographic penetration, especially to rural areas, than is the case with traditional means and modalities. ICTs allow access to information sources worldwide, promote networking transcending borders, languages and cultures, foster empowerment of communities, women, youth and socially disadvantaged groups, and help spread knowledge about "best practices" and experience. ICTs are indispensable to realise the global information society and the global knowledge society.
In its efforts, UNDP seeks to pursue the following objectives:

* Raise awareness, build vision and advise on policies to capture information and knowledge for development;
* Promote and build connectivity and necessary infrastructure for access to information and development;
* Build required human and social capacities and institutions and provide training and education to impart requisite skills;
* Empower communities and disadvantaged groups, reinforce participatory approaches and good governance and foster networking;
* Help create new livelihood and employment opportunities;
* Conduct pilot projects to demonstrate the feasibility, suitability and impact of ICTs for SHD through electronic community centres;
* Promote partnerships between the public sector, the private sector and civil society.

The UNDP INFO 21 website is intended to capture and highlight what UNDP and our partners, both within and outside the UN system, are currently doing in the ICT area, broken down by sectors and regions and a broad range of resources available through the Internet. We hope that this site can serve as a repository and resource tools not only for UNDP's country offices and its new sub-regional resource facilities (SURFs), but also for other multilateral organisations and institutions worldwide, as well as for a host of other partners in the private sector, civil society organisations, the academic community and the media.

In India, we are part of a pilot initiative launched by the British Council, in partnership with a number of development partners (including donor agencies, NGOs, researchers and Government) to set up INDEV - an Internet "gateway" to development information to India. We would love to hear from you!

N.B. This presentation has drawn heavily from materials and original articles posted on the UNDP/ INFO 21 Internet Site based in New York, since the listed speaker, Dr. Hans d'Orville, Director of UNDP's Information Technology for Development Programme in New York, was unable to attend this conference. However, this is a "personal" presentation and nothing stated here should be considered the official policy position of UNDP.

Bhaskar Bhattacharji
Asst. Resident Representative (Communications/Advocacy)
UNDP
55 Lodi Estate
New Delhi 110 003
India