

Equality, Inclusion and Empowerment through E-Governance: Leveraging and Repositioning Libraries to Support National Digital Programmes

Dr. Tariq Ashraf

University of Delhi South Campus, India

Email:tariq@south.du.ac.in



Copyright © 2017 by Tariq Ashraf. This work is made available under the terms of the Creative Commons Attribution 4.0 International License:

<http://creativecommons.org/licenses/by/4.0>

Abstract:

The overall purpose of paper is to examine as to whether libraries can reposition themselves as nerve centres of E-Governance & Digital programmes towards building capacities of common masses so as to partner with India's public policy programme for building an inclusive and equal society. Massive socio-political changes around the globe are increasingly leading to questioning the exclusion of marginalized groups and ways of redressing this imbalance through public policies based on e-governance. It is argued that despite enormous economic growth, India largely remains one of the world's the most unequal societies revolving around the axis of class, caste, tribal status, religion and gender. It further argues that e-governance initiatives are slowly altering the ecology of India's governance structure substantially but its reach is still confined to upper strata of society and needs to percolate down far and deep for truly empowering the vast number of marginalized Indian masses. Paper broaches that e-governance initiatives promote inclusiveness & empowerment of poor when traditional governance channels perpetuate exclusiveness, inequality and injustice. It is concluded that in view of massive digital divide, libraries can play a pivotal role by transforming and repositioning themselves as capacity building hubs.

Keywords: Public policy, Social inclusion, Corruption, E-governance, Libraries

1. Introduction

Socio-political changes around the globe have stirred reflection and discussion on questions of exclusion of marginalized groups and ways of redressing this imbalance through public policies. Due to increasing social unrest, quest for understanding patterns of social representation and strategies for inclusive public policies have exploded widely both in India and around the world marked by an upsurge of interest in strategies of inclusion ranging from different kind affirmative action, more inclusive representations and creating a institutionalized mechanism that addresses the needs of various marginalized groups on the basis of race, religion and ethnic backgrounds.

According to Zoya Hasan (Hasan, 2009) “India is one of the few countries in the post colonial world that took up the challenge of building an inclusive democracy in a highly diverse, multicultural, multilingual and multi-religious society”. India which is marked by overwhelming patriarchic and hierarchical values and suffers from extensive social inequality, deprivation and oppression, the establishment of democratic polity was undoubtedly a defining change. However nearly seventy years after independence, impressive economic growth, and primacy given to equality and social justice as the cardinal principals, India largely remains one of the world’s the most unequal societies revolving around the axis of class, caste, tribal status, religion and gender, sharply marked, with major contrast of income, employment, education, health and so on.

According to a report, *Regional Geography of South Asia and the Himalayas Inequality and Poverty in India*, “after 70 years of Independence, with unprecedented access to goods and opportunities, inequality is still very much a fact of life in India, largely a result of deep-rooted social and economic structures that perpetuate privilege and limit opportunities for the poor”. (<http://www.st-andrews.ac.uk/~dib2/asia/inequality.html>)

The findings of 68th report of National Sample Survey Organization's (NSSO) 2011, the highest official surveyor of government of India, seem to reaffirm that the benefits from this spurt in the economy have been mostly cornered by the upper strata, while the poor continue to languish in deprivation.

According to a recent World Bank report, “social exclusion has its roots in India’s historical divisions along lines of caste, tribe, and the excluded sex, that is, women. inequalities being more structural in nature and have kept entire groups trapped, unable to take advantage of opportunities that economic growth offers”. (<http://elibrary.worldbank.org/content/book/9780821386903>)

2.1 Poverty, corruption and social exclusion

According to United Nation's Millennium Development Goals (MDG) programme “270 millions or 21.9% people out of 1.2 billion of Indians lived below poverty line of \$1.25 in 2011-2012”. (<http://www.un.org/millenniumgoals/>)

In addition to massive poverty and inequality, corruption is another malfeasance which is eating into India’s social cohesion as it is resulting into more deprivation and exclusion. Transparency International's Corruption Perception Index (CPI) placed India at 76th rank out of 193 nations in year 2016. “India is ranked below neighbouring countries like Sri Lanka and China, while Afghanistan, Iran, Nepal, Pakistan and Bangladesh fared much worse than India when it came to corruption in public sector undertakings”. (<http://www.indianexpress.com/news/india-ranked-94th-in-corruption-perception-index-ratings-says-transparency-international/1040857>)

A recent study by Neela Mukherjee *Political corruption in India's below the poverty line exercise: grassroots perspectives on BPL in perpetuating poverty and social exclusion*, argues that “such exercises have contributed to the perpetuation of poverty and social exclusion with both mis-targeting and non-targeting of poor households essentially due to weaknesses of the governance in practice”. (<http://www.eldis.org/go/home&id=21738&type=Document#.UT16PNZHJ5o>)

To ameliorate the deep impact of poverty, social exclusion, Indian government has launched host of social welfare schemes from time to time which can be classified as “schemes for poverty alleviation and employment generation, social protection, rural infrastructure and development, urban infrastructure, education and skill development, health, women and child development, and welfare and development of weaker sections”. These schemes involves massive investment and have the capacity to uplift a large number of poor and disadvantaged people from the morass of inequality and corruption if implemented honestly.

2.2 E-Governance : A gateway to social inclusion and transparency

In the face of wide spread economic inequalities and widening social gaps, it befalls the governments to create a variety of conditions for the growth of citizens through good governance, a prerequisite for the human well being and development. Good governance manifests itself in creating conditions for upliftment of all concerned particularly the weaker sections of the society by fixing accountability more sharply.

According to Citizens' Report on Governance and Development 2015, “there is an urgent need to make the policy process participatory starting from formulation right upto the implementation. “The state has to reorient its policy direction in order to fulfill the aspirations of a large number of deprived sections of the society”.

2.3 ICT & e-Governance:

Essentially comprising of “processes and structures involved in deliverance of electronic services to citizens, e-governance enables the general public to interact with government through electronic means for getting the desired services resulting in simplifying and improvement of governance and enabling people’s participation in governance through information and communication technologies”.

An important objective of e-governance is lowering governance cost and simplifying procedures by direct access. The visible benefit is empowerment of marginalized people through disintermediation i.e., eliminating the middleman.

Several studies have suggested that ICT has the ability to bring dramatic changes and transform government institutions profoundly. The introduction of e-Governance can contribute positively towards administrative reform by improving internal processes, better connectivity to citizens and services, and by enhancing interactions with the society (Heeks, 2001).

Some authors suggest that, Information and Communication Technologies could contribute positively towards achieving better governance by making them more efficient, transparent and effective (Bhatnagar, 2004; Fountain,2001) and they have a crucial role in reducing poverty by improving information and communication flow (Marker, McNamara & Wallace, 2002). Fountain (Fountain, 2001) suggested in her book that, networked organisations resulted in reducing red tape, leveling of hierarchies and significantly reducing bureaucracy. Bellamy & Taylor (1998:34) suggested that “de-layering of hierarchies and new organisational control techniques will be encouraged with the introduction of new ways for organisational control”. In a study published in 2001, Heeks provided three main change potentials for improving efficiency and effectiveness of government services by introducing e-Governance. This is achieved by introducing ICT tools which results in reduced investment and marketing, lesser delivery time, increased quality of the services, reduced cost, innovative outputs and an increased quantity of outputs.

The UN 2030 Agenda for sustainable development acknowledges, “that the spread and spawning of ICT and global connectivity has great power to accelerate and accentuate human progress and to develop knowledge societies”. It sets out “ambitious ICT developments targets in the goals agreed for education, gender and infrastructure, with ICTs recognized as a means of implementation for all Sustainable Development Goals”.

It is, thus, concurred that e-governance initiatives provide a gateway to inclusion of poor and marginalized sections when traditional governance channels perpetuate exclusiveness and elitism.

The emergence of internet has resulted in rapid automation of basic administrative services, boosted up the delivery of services and promotion of transparency and accountability. According to World Development Report, 2016, “by 2014 all 193 member-states of United Nations had national websites, 101 enabled citizens to create personal online accounts, 73 to file income tax online, and 60 to register a business, 100 have digital identification system”.

In recent years India has launched major initiatives in this direction.

3. Governance: Indian Perspective

E-Governance in India was conceptualized with the “launching of NICNET in 1987 – the national satellite-based computer network, followed by the launch of the District Information System of the National Informatics Centre (DISNIC) programme to computerise all district offices in the country for which free hardware and software was offered to the State Governments”. NICNET was expanded via the State capitals to all district headquarters by 1990 leading to a large number of initiatives both at the Union and State levels. (<http://www.nic.in/services/SATCOM>)

As lynchpin of e-governance concept, “the *National e-Governance Plan (NeGP)* was formulated by the *Department of Electronics and Information Technology (DEITY)* and *Department of Administrative Reforms and Public Grievances (DARPG)*. The Union Government approved the NeGP, comprising of 27 Mission Mode Projects (MMPs) and 10 components on May 18, 2006 to improve delivery of Government services to citizens and businesses”.

(<http://india.gov.in/e-governance/national-e-governance-plan>)

3. 1 Implementation strategy, approach and methodology of NeGP

NeGP implementation “involves setting up of common and support IT infrastructure such as: State Wide Area Networks (SWANs), State Data Centres (SDCs), Common Services Centres (CSCs) and Electronic Service Delivery Gateways, suitable arrangements for monitoring and coordinating the implementation of NeGP under the direction of the competent authorities with a decentralised implementation model consisting of *Public-Private Partnerships (PPP)*, *Integrative Elements* like adoption of unique identification codes for citizens, businesses and property is to be promoted to facilitate integration and avoid ambiguity and finally owned and spearheaded by the concerned line Ministries”. (<http://india.gov.in/e-governance/national-e-governance-plan>)

The National e-Governance Plan (NeGP), is a holistic E-Governance initiative which forms into a collective vision and a shared covering areas and services like , Central excise, E-office ,

Income tax, Insurance, Immigration, Visa and Foreigner's Registration & Tracking (IVFRT) Ministry of Corporate Affairs -MCA21, UID and National Population Register, Passport, Posts, Pension, Banking, Employment exchange, Education, Agriculture, Police, National Land Records Modernization Programme (NLRMP), Road transport, e-District, Commercial taxes, Municipalities, e-panchayat¹, Health, Public distribution system, Common services centers, Electronic Data interchange (EDI) for e-Trade, e-procurement, National e-Governance Service Delivery Gateway (NSDG), e-Biz, e-Courts etc.

3.2 Digital India Programme & Digital Identification:

In August 2014, the Government of India approved yet another initiative, namely, Digital India, "aiming at making government services more efficient and available to all citizens electronically". Over the next three years, the "program envisioned a national optical fiber network to connect thousands of India's most distant *gram panchayats*¹ — village-level governments — with a total population of more than 800 million".

With near completion of Unique Digital Identification Registry called *Aadhar*, *the e-governance programme is definite way forward in curtailing corruption massively facilitating Direct Benefit Transfer of Subsidies, Wages to the bank account of the workers linked with *aadhar* card number, efficient management of Monthly Pension and Provident Fund; opening new bank account replacing bunch of documents to the banks and finally payment of scholarship to students which would completely remove corruption and delays particularly in rural and remote parts of the country.*

3.4 . Impact of Digital Technologies on Livelihood

Application of digital technologies can help in sustaining livelihood in agriculture sector by providing accurate information about weather conditions, prices and market logistics, facilitate market transparency, improve supply chain and promote co-operatives and aggregation.

Digital technologies promote access to financial services and digital payment system, help overcome barriers for women, poor and small businesses and lead to financial inclusion. Yet another powerful contribution of digital technologies has been promotion of employment through off-shoring, out sourcing and online work and countries like India, China and Philippines are reaping the benefits by hosting BPO services related to banking, finance, insurance and medical transcriptions. Online technologies connect labour markets to potential employers and addresses several fractions by matching workers with their jobs.

A far more interesting impact of online digital technologies has been on consumers by offering them convenience, expanded choice, better quality and more time for leisure by saving on travel time and cost.

The above e-governance schemes by interlinking development processes with a range of modern information processing and communication technologies have vastly improved the effectiveness, efficiency and service delivery while promoting inclusiveness by making them equitably available to all.

¹ Village Council

According to a study by IIM –Ahmedabad “Impact Assessment of e-Governance Projects”, “e-government initiatives have substantially reduced the cost of service delivery, and increased citizen confidence in government opening a new medium of communication with officials and between citizens like posting of contact information, legislation, agendas, tenders and policies are all preliminary steps that have made government more transparent, enabling informed participation online and offline.”. (<http://www.iimahd.ernet.in/egov/documents/impact-assessment-of-egovernance-projects.pdf>)

Another study by Stefanie Ajilian “The Economic and Social Impact of e-Governance” have found that “different applications across the states which have been designed, developed and implemented by e-governments, have notably reduced bribes, reducing brokers’ power, raising public awareness and increasing transparency and accountability, in other words they help reducing corruption”. (http://diuf.unifr.ch/main/is/sites/diuf.unifr.ch.main.is/files/documents/student-projects/eGov_2011)

Yet another study has found that “e-governance has made government systems available, around the clock, seven days a week and strengthened trust and encouraging citizens to see government as fair and ethical”. (Sinha RP, 2010)

According to analysts a far reaching impact of e-governance initiatives has been fostering social inclusion and empowerment of marginalized section who with a click of mouse can leverage several benefits from governmental agencies. This has also cut the red tape, corruption and discrimination substantially and promoted entrepreneurship through open and transparent procedures among low caste and poor masses. According to World Development Report 2016, “the BPO industry in India employs more than 3.1 million workers, 30 percent of them women. It has also increased school enrollment among young girls, by 3-5 percentage points. Similarly using 6500 kiosks provided by *e-Chapals*², nearly 4 million farmers in more than 40,000 villages are able to place orders for inputs and directly negotiate the sale of their produces. The profit of fishermen in Kerala has reported an increase of 8 percents by use of mobile phones for information on prices and also reduced waste in sardine catch”. (WDR 2016, P107)

Babajob, an online job portal have reached “the bottom of the pyramid by using text messaging and “missed calls” to connect low skilled and informal workers to vacant posts”.

The Digital Identification System, *Aadhar*, has reduced leakage in government welfare programmes. Similarly “Biometric registration, authentication and payment in India’s National Rural Employment Scheme reduced the time for paying the beneficiaries by 29 percent and leakage by 35 percent”. (WDR, 2016)

4. Digital Governance: Asian Perspective:

Being the second largest country both in terms of population, size and economy, India occupies a leading position in Asia in terms of influencing the public policies across the continent.

Already, Asian economies are in varying stages of conceiving or implementing their own “national identity” schemes. Pakistan has the National Database and Registration Authority

² Public Space

(NADRA), that for two decades has collected biometric information. Nepal, meanwhile, intends to roll out biometrics-driven “national ID cards” to its citizens soon. The Election Commission in Bangladesh began issuing such cards last year.

Alibaba’s business to business e-commerce site brought efficiency in Chinese economy.

The M-Pesa digital payment platform generates financial sector innovation and efficiency in Kenya

4.1 Asia and Oceania:

This diverse region already boasts the largest number of online buyers in the world, accounting for an estimated 28 per cent of the total sales of B2C e-commerce, and one third of the volume of international postal deliveries of small packages (Information Economy Report 2015 P26). China represents a very large share of e-commerce activities in the region accounting for more than 29,000 enterprises focusing on B2C, B2B or C2C e-commerce. Other important markets include Japan, Korea and Singapore. In 2013 digital buyers represented less than 15 per cent of the population in Asia and Oceania. Internet promotes inclusion by reducing information asymmetry. “China’s large investment in rural connectivity, more than 90% of villages have fixed broadband access. Online commerce. At the end of 2014 there were more than 70,000 merchants in 200 Taobao villages with about 1 percent being disabled and one third females”. (WDR 2016, P 10). It is reported from Pakistan that use of mobile phones by farmers has “reduced post harvest losses from most perishable crops by 21-35 percent”. (WDR, 2016)

Gender gaps have been sizably reduced in labour participation by making working flexible and connecting women to work to online work and e-commerce. According to WDR 2016, in Elance, a digital platform, “44 percent workers are women compared to an average 25 percent in the nonagricultural economy”. Similarly, BPO industry in India employs 30 percent females. Digital payments, mobile money and Taxi ride sharing services like Ola have increased women’s control over economic resources and security.

An E-governance survey by United Nations for year 2016 has provided following comparative data about use of ICT regionally and rated each country on a comparative basis relative to all other state members and examines e-governments in South Asian countries through both the E- government Development Index .

Region Capital	EGDI Component	Online Service Infrastructure	Telecomm Component	Human Component
Africa	0.2882	0.2567	0.1724	0.4355
Americas	0.5245	0.4959	0.3844	0.6933
Asia	0.5132	0.5120	0.3730	0.6545
Europe	0.7241	0.6926	0.6438	0.8360
Oceania	0.4154	0.2966	0.2599	0.6897
World	0.4922	0.4623	0.3711	0.6433”

(<https://publicadministration.un.org/egovkb/en-us/reports/un-e-government-survey-2016>)

5. Barriers in e-Governance:

A larger overview of E-governance projects in India and most of Asian countries reflects the scenario as “a curious mix of achievements, intent and wishful narration of possibilities”. The progress has been “uneven, as there is absence of commitment and requisite action to translate policy into reality in many of the states”. The disparities are glaringly present across the social groups like poorly literate, tribal, women and minorities. “A bigger problem is of access for a large chunk common citizens, particularly those who are weaker and socially and educationally backward”.

(<https://publicadministration.un.org/egovkb/en-us/reports/un-e-government-survey-2016>)

Despite massive investment in e governance projects in India and other Asian countries, the magnitude of digital divide is glaring in terms of access to broadband internet, including the last mile access to remote rural, poor and tribal communities. According to World Development Report, 2016 more than 800 million people lack mobile access worldwide and 4.3 billion lack internet access. Illiteracy and lack of skill and crucial barriers.

Affordability is increasingly tick marked as crucial in widening access to internet in developing countries, especially LDCs with huge differences. According to data for year 2014, “fixed broadband services remain expensive, costing an average US\$ 74.5 compared with just US\$22.5 in developed countries”. Positive impacts by using digital technologies are being cornered by those already better off. (United Nations. Information Economy Report, 2015)

Internet’s contents continues to be dominated by a few major languages, largely English. According W-3 Tech’s survey of nearly 10 million websites, “55.2 percent are in English with Russian, German, Japanese and French being between 4.0 -5.9 percent to Hindi and Sawahli 0.1 percent. There is hardly any useful content in local languages and large majority of languages are without a significant online presence. Facebook (2015) measured supply for content in local languages using the number of languages with content exceeding 100,000 Wikipedia pages as a proxy variable for the availability of local contents in local languages and only 53% of world’s population has access in their primary language. Similarly 85 percent of user created content indexed by Google germinates from USA, Canada & Europe (WDR 2016, P8)”

6. Promoting e-governance through libraries

As awareness and capacity building emerges to be a major issue together with proper communication between the poor, local governance and the departments concerned for a successful public policy for effectively carrying out the policy repositioning in terms of outreach and delivery, libraries are in a unique position to experiment with creative spaces, to take up expansive roles which are confined to not only serving as information resource but much more.

As powerful social institution with sizeable presence, libraries have started repositioning themselves as capacity building institutions albeit slowly. Declining usage of libraries due to alternate means of information available to its patrons, has further spurred the repositioning and diversifying process. As “Public and community libraries are the only place in many countries where poor people can access light and electricity to read, study and fill up applications for jobs”, it would be relevant to note some of the innovative services that public libraries in some of the developing countries have introduced in recent years.

The Indian Library Association has recently approached the Indian government “seeking thrust on the public library system under 'Digital India' mission and to select libraries as partners in the digitisation of knowledge and heritage”. (www.ilaindia.net)

In a significant step, NASSCOM Foundation, India's largest IT association, has launched “the Indian Public Library Movement to revitalise and transform public libraries into inclusive knowledge and information centres catering to the needs of communities across India”. Towards this end, “the Bill and Melinda Gates Foundation has provided a \$4.78 million grant to provide support towards repositioning of the libraries across India with ongoing support for public access to technology through the government's Digital India initiative”. (<http://economictimes.indiatimes.com/industry/services/education/nasscom-foundation>)

As an important spin-off of Digital India programme of government, Indian National Digital Library has been launched in year 2016 under which more than 60 types of learning resources are available ranging from primary to post-graduate levels in more than 70 languages. The repository integrates contents from multiple subject domains like Technology, Science, Humanities, Agriculture and others from different Indian institutional repositories. (<https://ndl.iitkgp.ac.in/>)

Looking beyond India, there are several interesting and ground breaking examples of libraries reaching out to common people in their quest for empowering people through digital means.

Sri Lanka based, e-Library Nenasala Programme, has been designed to provide digital literacy and facilitate access to digital technologies too poor living in remote rural areas, “offering modules in basic computers, accessing information through the Internet for a wide variety of locally relevant knowledge”. (www.nenasala.lk/liblist.php)

Romanian librarians trained by Biblionet helped “100,000 farmers get US \$187 million in subsidies via new Internet and computer services in 2011-2012 by helping them how to use the technology in libraries to access financial forms and submit them to the government, saving time and money”. (<http://www.irex.org/news/librarians-internet-improve-farmers%E2%80%99-livelihoods-romania>)

According to a report, “81% of local library in England provide access to e-information on health issues and general wellbeing to the residents which has a direct bearing on improving health”. (http://www.artscouncil.org.uk/media/uploads/pdf/Evidence_review_economic_contribution_libraries.pdf)

In Cuba, an electronic information network facilitates the exchange of electronic information between a group of libraries, information centres and other organizations as part of Cuban National Information System of Medical Sciences in the Ministry of Health.

http://www.itu.int/net4/wsis/sdg/Content/wsis-sdg_draftbooklet.pdf

Botswana Library Association contributes to policy initiative called Botswana Vision 2016 “by empowering communities through knowledge and the ability to access information for themselves”.

(<http://library.ifla.org/258/1/201-radijeng-en.pdf>)

In a highly acclaimed programme, the National Library of Uganda runs an information & communication training program for women farmers “providing access to weather forecasts, crop prices, and support to set up online markets in Ugandan languages”. (http://beyondaccess.net/wp-content/uploads/2013/07/Beyond-Access_GirlsandICT-Issue-Brief.pdf)

Boekstart (Bookstart) in the Netherlands collaborates with “healthcare centres, public libraries and the primary school to provide books and literacy training to 75,000 children per year”. (Boekstart Netherlands www.boekstart.nl)

San Juan Planes Community Library (Honduras) in a remarkable feat have established a water purifying project in the main square of the town and provide safe drinking water to the entire community (http://beyondaccess.net/wp-content/uploads/2013/07/Beyond-Access_MDG-Report_EN.pdf)

To promote ICT access, the Katatura public library of Namibia provides study rooms, and classes on using mobile phones.

According to an estimate “around 250,000 people find jobs through their public library in the European Union each year by providing public access to ICT and skills, enabling people to apply for jobs online”. (Public Libraries 2020 (2014) <http://www.publiclibraries2020.eu/content/see-numbers>)

In Kenya and Uganda, Kisumu Public Library’s smart phone, laptop and video conferencing project, connects geographically dispersed and remotely located schools, enabling them to engage in debates, quizzes and spelling competitions through the online network. (<http://www.ifla.org/files/assets/hq/topics/libraries-development/documents/public-libraries-brief.p>)

In a remarkable outreach effort, Toronto Public Library (Canada) helps the immigrants by providing much sought after Newcomer Settlement Services consisting of legal, childcare, housing, health and citizenship information and support and other government benefits. (<http://www.torontopubliclibrary.ca/programs-and-classes/categories/newcomer-esl-programs.jsp>)

As one of the most disadvantaged communities, the suburbs of Medellín, are receiving support from Columbia’s public libraries in social and educational programs to benefit the local communities. (<http://medellin.ecocitizenworldmap.org/library-parks/>)

In an interesting and significant development, “Moldova libraries are contributing to Open Government Partnership (OGP) action plans, a platform between government, civil society and business to drive commitments to open government and accountability. Librarians attend civil society meetings to help develop the country’s national action plan, and to include the role of libraries as a supporter of access to information”.

Libraries in Burkina Faso are teaching girls to use smart phones to access health information online. In every library, “librarians and midwives are organizing girls’ health clubs where girls are learning to use smart phones to search the Internet; to create short e-books about health issues, and to set up a health blog and share information with their peers”.

Under a programme labelled as CODE Ethiopia, rural community libraries are helping to develop literacy by creating e-books for preschool children.

In Ghana the “Northern Regional Library’s Internet Access and Training Programme provides ICT and leadership training to vulnerable unemployed youth. During 2010-11 the library trained 190 youth (125 women and 65 men) and the library is now a recognized player in local development programmes; it also organizes monthly public lectures and debates to make people understand the value of ICT in addressing community needs in areas like health, empowerment and education of women”.

In Kenya Children use tablets at the “Busia Community Library to access educational content linked to the school curriculum”.

The Masiphumelele Community Library’s ICT training and employment information service has trained over 1500 beginner and intermediate ICT students, and has helped build young people’s skills, confidence and employability.

In Serbia, “a public library under a project known as Biblioteka++ project teaches children and youth in the age group 10-24 basic and advanced computer coding skills”.

There are many more examples of innovative public library programmes aimed at digital empowerment of their members. Many of the programmes mentioned in the preceding paragraph have been made possible with support from EIFL (Electronic Information for Libraries); “an international not-for-profit organization committed to enabling access to knowledge through libraries in more than 60 developing and transition countries in Africa, Asia, Latin America and Europe under its Public Library Innovation Programme” (<http://www.eifl.net/programmes/public-library-innovation-programme>).

Libraries need to tap into spirit of their user community, assess their requirements and provide customized resources fostering e-governance, impart information literacy, help content creation in native languages and life long learning to poor, deprived and marginalized sections.

They need to move beyond their traditional domains and promote e-culture on a massive scale.

As most ICT-enabled change projects involve a large set of stakeholders- libraries can adopt various initiatives to engage the public in this process. Some of the specific initiative could be as under:

- Libraries can help digitally poor with cognitive technical, and socio-emotional skills which can be further leveraged through technology.
- Libraries can help in converting connectivity into digital dividends for a large number of people by providing open access internet eco-system so that local contents can be developed
- Critical thinking , complex problem solving , creativity and expert communication are some of new skills which libraries can provide to workforce through resource persons.
- Given the speed and obsolescence of technologies, new skills require constant updating throughout their life cycles which can only be provided by modern day libraries.

7. Conclusions

Though the nature and scale of e-governance initiatives present a considerable enhancement in the aspiration level of government, nevertheless, there are tremendous social, economic and political problems yet to be tackled and solved efficiently through IT education for rural masses. Lack of infrastructure, massive digital divide and the e-government strategies adopted by municipal, district and state government tend to neglect citizen participation. Failure to engage closely with the users is a common cause of project failure. The reach of technology to cover all the sections of the society is most crucial issue and needs to be taken up in the same manner as the movement for achieving complete social transformation, inclusion and empowerment of all sections of the society. Libraries can play an important role in bridging the gap by repositioning themselves into socio-technical hubs for common citizens, particularly marginalised and poor.

Acknowledgement:

I acknowledge the support and encouragement received from Mr. Sanjay Bihani, Library & Information Officer, Ministry of External Affairs, New Delhi, India and Secretary Regional Standing Committee for Asia and Oceania, IFLA for writing this paper. I also thankfully acknowledge the financial support received from RSCAO for attending the IFLA WLIC 2017.

References:

1. Bellamy, C. & Taylor, J.A. (1998) 'Public Policy and Management: Governing in the Information Age' 1st ed. Buckingham: Open University Press.
2. Bhatnagar, S. (2004) 'e-government: From Vision to Implementation A practical Guide with Case Studies' 1st ed. New Delhi: Sage Publications India Pvt Ltd.
3. Fountain, J.E. (2001) 'Building the Virtual State, Information Technology and Institutional Change' 1st ed. Washington DC: Brookings Institution Press
4. Hasan, Zoya (2009) Politics of Inclusion: Caste, Minorities and Affirmative Action. New Delhi. Oxford University Press.
5. <http://www.st-andrews.ac.uk/~dib2/asia/inequality.html>
6. http://mospi.nic.in/?status=3&menu_id=31
7. (<http://www.un.org/millenniumgoals/>)
8. (<http://www.indianexpress.com/news/india-ranked-94th-in-corruption-perception-index-ratings-says-transparency-international/1040857>)
9. (<http://www.eldis.org/go/home&id=21738&type=Document#.UT16PNZHJ5o>)
10. (Heeks, R. (2001) 'Reinventing Government in the Information Age: International Practice in IT-enabled Public Sector Reform' 1st ed. Oxon: Rutledge.
11. Heeks, R. (2001b) 'Understanding e-Governance for Development' I-Government Working paper series Paper No-11, Manchester: Institute for Development Policy and Management, University of Manchester
12. Marker, P., McNamara, K., & Wallace, L. (2002) 'The significance of information and communication technologies for reducing poverty' London: DFID
13. Prabhu. (2009) 'CSR .E-Governance: Concept and Case Studies'. New Delhi: PHI.
14. Sinha, R.P. (2010) 'E-Governance in India: Initiatives and Issues'. New Delhi: Concept Publishing. P114.
15. United Nations E-Governance Survey, 2016
16. United Nations. Information Economy Report ,2015
17. World Development Report Digital Dividends. Washington, 2016
18. <https://publicadministration.un.org/egovkb/en-us/reports/un-e-government-survey-2016>
19. (www.ilaindia.net)

20. (<http://economictimes.indiatimes.com/industry/services/education/nasscom-foundation>)
21. (<https://ndl.iitkgp.ac.in/>)
22. (www.nenasala.lk/liblist.php)
23. IREX (2013), Librarians, Internet Improve Farmers' Livelihoods in Romania <http://www.irex.org/news/librarians-internet-improve-farmers%E2%80%99-livelihoods-romania>
24. Arts Council England (2014) Evidence review of the economic contribution of libraries (http://www.artscouncil.org.uk/media/uploads/pdf/Evidence_review_economic_contribution_libraries.pdf)
25. Radijeng, Kgomo (2013). The Role of public libraries in the attainment of Botswana's vision 2016.
26. <http://library.ifla.org/258/1/201-radijeng-en.pdf>
27. Beyond Access (2012) Empowering Women and Girls Through ICT at Libraries http://beyondaccess.net/wp-content/uploads/2013/07/Beyond-Access_GirlsandICT-Issue-Brief.pdf
28. (Boekstart Netherlands www.boekstart.nl)
29. (http://beyondaccess.net/wp-content/uploads/2013/07/Beyond-Access_MDG-Report_EN.pdf)
30. Public Libraries 2020 (2014) <http://www.publiclibraries2020.eu/content/see-numbers>
31. (<http://www.ifla.org/files/assets/hq/topics/libraries-development/documents/public-libraries-brief.p>)
32. <http://www.torontopubliclibrary.ca/programs-and-classes/categories/newcomer-esl-programs.jsp>
33. Library Parks (Parques Biblioteca) <http://medellin.ecocitizenworldmap.org/library-parks/>
34. <http://www.eifl.net/programmes/public-library-innovation-programme>