

Gender Perspective in E-governance Initiatives in Bihar-Use of ICT for Women Empowerment in Bihar State of India

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Abstract

It is commonly understood that men and women understand and use computers and Internet differently. The position is worst when it comes to women that are rural. The concept of gender equality is a common concern all over the world. The same has now acquired new dimensions with the advent of Information and Communication Technology (ICT). It can reduce trade distortions, eliminate poverty, empower weaker segments including women, etc. The same is, however, possible only if a state follows sound ICT strategies and policies. The application of ICT to government processes, e-governance in short, has a profound impact on the efficiency, responsiveness and accountability of government as well as on the quality of life and productivity of citizens on the economic output, growth and development of the country as a whole. We have to set our priorities to those areas where we are lagging far behind. One such area is the unequal access of ICT to women. The present paper is an attempt to explore answers to some of these questions with reference to Bihar state of India.

Key Words: ICT, G2C, e-governance

1. Introduction

For centuries, women in this country have been socially and economically handicapped. They have been deprived of equal participation in the socio-economic activities of the nation. ICT have dominated the beginning of the 21st century. The application of ICT to government processes, e-governance in short, has a profound impact – on the efficiency, responsiveness and accountability of government and thereby, on the quality of life and productivity of citizens and ultimately, on the economic output, growth and development of the country as a whole. Due to the patriarchal character of the society, ability to derive equal benefits from the government schemes has been a big challenge for the Indian women. It has never been easy for women to make multiple trips to far off offices, chase officials, and humor them or to network with them. When women have to depend on men to get over the intricacies and difficulties for getting these services, it does no good to gender equations. Due to the patriarchal character of the society, this process has been undoubtedly male centric, one of the major factors underlying the gender based divide in the society. What difference these emerging phenomena of e-governance will be able to make in terms of women's relations to the realm of governance is a pertinent question. What we can do and should do is to explore whether women have been able to access and to use these e-governance initiatives as equally as their male counterparts and how far these e-governance initiatives been able to address and include the needs of women.

1.1. Bihar State of India

Bihar is a state in eastern India and is the 12th largest in terms of geographical size at 38,202 sq mi (98,940 km²) and 3rd largest by population. Bihar lags behind the other Indian states in human and economic development terms. Economists and social scientists claim that this is a direct result of the skewed policies of the central government,

such as its apathy towards Bihar.¹ The current state government has however made significant strides in improving governance. At the time of independence, women's literacy in Bihar was 4.22%. With female literacy at 53.3%, Bihar is striving to climb as the government has established educational institutions¹.

Table:1.Literacy rate in Bihar from 1961 to 2011

Year	Total	Males	Females
2011	63.82	73.39	53.33
2001	47.53	60.32	33.57
1991	37.49	51.37	21.99
2001	47.53	60.32	33.57
1991	37.49	51.37	21.99
1981	32.32	47.11	16.61
1981	32.32	47.11	16.61
1961	21.95	35.85	8.11

2. IT Scenario And IT Policy of the State

Bihar introduced ICT Policy, 2011 for citizens, for education, for governance and for industries. Field surveys show that while it is generally assumed by policy makers, mainly male, that e-governance programmes will benefit men and women equally, the ground reality is that there is a vast difference in the availability, use, and access of e-governance schemes for men and women. Hence, it is necessary to examine the gender perspective in the e-governance. ICT have been the biggest drivers of growth and development ever since 20th century. It was realized that ICT could help communicate bridge the developmental gap, often referred as the 'digital divide'. The ICT policies, programmes, and schemes in Bihar seem to bypass the question of women's capacity building and empowerment. The impact of this at the user end for women may be one of exclusion due to various reasons that need to be addressed urgently to avoid the digital gender divide superimposed on the already existing gender disadvantages for women arising from socio-cultural factors. Without a gender perspective, the low participation of women in accessing and using the e-governance facilities may not be noticed. This is the case in the Bihar region where even in urban areas, as compared to men, a very low number of women use the e-governance facilities and services such as videoconferencing with public bodies, accessing Internet based services like e-shakti, e-procurement, bihar-on-line. Bihar is yet to initiate Government to Citizen (G2C) for obtaining records regarding births, deaths, or land, or using local government information kiosks for obtaining information under the epanchayat scheme. In fact, as already stated, very few women have telephones registered in their own names. Similarly, in the educational sphere, there is low enrollment, retention, and visibility of women in ICT related courses of study.

In Bihar, the population can be divided into two segments. The segment of the population, where ICT is wide spread, ranging from traditional forms of ICT like radio, TV, to most modern forms like internet, mobile phone etc., is concentrated in urban areas of the state, covering about 20% of the population. It is here that the most of the e-governance related programme are being implemented and most of the educational and training centers are also operating.

"In view of the poor functioning of the anganwadi centres, the government has initiated several measures to improve them", Social Welfare Minister Parveen Amanullah told in an interview. The department has introduced the e-dak software that will facilitate instant communication with Child Development Project Officers (CDPO) to keep a closer watch on the anganwadi centres to report the functioning of anganwadi web facility that already covers 60,603 of the state's 80,000 anganwadi centres.

In a discussion with some private and public service providers, it was clear that the density of the population and the capacity to pay for the services are the two factors that are important for taking any decision for expanding the operations to different areas. Thus as far as the implementation and application of ICT in Bihar is

concerned, an urban bias is clearly visible, due to some of the reasons cited. The other segment of population belongs to rural areas where the traditional forms of ICT, like Radio, TV, landline telephone etc. are used. And then there are also people to whom even these traditional forms of ICT are not available. At least 20% of the population come under the category that does not even have a radio. On the basis of extensive field survey it was found that as far as the access and use of traditional forms of ICT like TV, Radio, telephone etc. and the modern forms like internet are concerned, due to the following reasons women and girls do not enjoy equal access to these in the state:

- The families are male dominated and males are considered to have the first right in using whatever belongs to the family.
- In most of the families the male is considered to be the bread earner, so he automatically gets hold of everything first.
- Women are mostly busy in house hold affairs.

2.1 IT Scenario and IT Policy of the State

The sum and substance of the Policy is as following:

1. Using IT as an industry to boost the economic development of the State
2. Using ICT for providing good governance to the citizens of the State

2.2 Major E-Governance initiatives of Bihar Government

The major e-governance initiatives that have been taken is

BSWAN- Bihar e-Governance Services and Technologies (BeST) is an IT solutions company based in Patna, India. It provides high cost-effective and high quality solutions to the citizens of Bihar and it is responsible to develop and manage the e-governance projects in Bihar. Some major initiatives are:

- SWAN-A system for computerized registration with less paper use to provide G2C at all registry offices.
- VICTORY-A G2C system to unearth crores of tax evasion.
- RACE-Revenue Administration through Computerized Energy Billing

2.3 ICT Policies and E-governance Initiatives of the State through Gender Lens

Related to egovernance, there are two dimensions of the gender issue:

1. First, whether the women are able to enjoy an access to egovernance facilities as the men.
2. And second, whether the egovernance facilities are being used by women as equally as their male counterparts.

There are further questions:

1. How far have the egovernance initiatives been able to address women's needs?
2. How far are the egovernance initiatives being supported by adequate capacity building measures or measures aimed at removing the hurdles women face in using them.

To answer these questions one has to first understand the context in which these initiatives are taking place.

Bihar has currently thirty-eight administrative districts¹. In Bihar, the population can be divided into two segments. The segment of the population, where ICT is wide spread, ranging from traditional forms of ICT like radio, TV, to most modern forms like internet, mobile phone, smart phone etc., is concentrated in urban areas of the state, covering about 20% of the population. It is here that most of the e governance related programme are being implemented and most of the educational and training centers are also operating. In a discussion with some private and public service providers it was clear that the density of the population and the capacity to pay for the services are the two factors that are important for taking any decision for expanding the operations to different areas⁵.

The families are male dominated families and male are considered to have the first right in using whatever belongs to the family. In most of the families the male is considered to be the bread earner so he automatically gets of everything first. Women are mostly busy in house hold affairs and they do not have time to use these facilities.

Cyber cafes, telephone departments and all other implementation points are mostly run by men and their users are also mostly men. One has to spend money to use these facilities and money is available more to men. Even if women and men have equal monetary powers, women are less interested in spending it on mobile phones, laptops or in cyber café etc. Use of technology whether driving a car, using a camera and likewise using internet or information kiosk is considered as the male domain, especially in rural areas. So even if a woman tries using these, the male community considers it as an intrusion into the male domain. In some places in the rural areas we have observed that even if a woman is the earning member of the family, instead of spending her earning on buying a TV or a radio, she is more likely to spend it on the family needs whereas the male prefers spending it on television, radio or other things and not necessarily on the family needs. Even if the woman buys TV or a radio under the pressure of the male members of the family she herself is not interested in using these. Getting information is understood to be the responsibility of male members. So right from the childhood getting information or being informed is considered to be the duty of males, and the women remain excluded and do not take interest in it. This gender specific antecedent impedes women's access and use of e-governance technologies and initiatives.

3. Use of Cyber Café by Male and Female

This view gains support from the information gathered from a sample survey:

1. Although no official data is available about the percentage of women having the ownership of telephone connections, whether it is landline connections or mobile connections, through the official directory of Bharat Sanchar Nigam Limited (the official phone line providers of Indian Government), it is clear that only 09% of total phones are in the name of women.

2. A sample survey of the use of cyber cafe shows the following trend:
Duration: 1-8-2012 to 1-9-2012

Table 2: Use of cyber café at Patna city

Name of café	Name of the owner	Total visitors	Male	Female	Hours used by male	Hours used by female
Cyber Zone, Patna	Prashant Singh	328	217	111	2 Hrs	1 Hr
Cyber Café, Patna	Manoj Rai	432	324	108	3 Hrs	1 Hr
Zenith, Begusaria	Munna Singh	220	186	34	3 Hrs	1 Hr
E-Café, Muzaffarpur	Rajnath	325	218	107	2 Hrs	1Hr

Source: Data Collected from the documents available with the owners of cyber cafes and through personal interviews.

The following factors could explain the negligible presence of women in the data indicated above:

- Lower literacy rate among women.
- Women are not as computer savvy as men. Only very few women might visit cyber cafés for occasional academic and professional needs whereas men, apart from these purposes, might visit cyber cafés for recreation and other purposes also.
- Generally the male members of the family do the cyber café related work.
- The environment in cyber café is not found to be woman friendly, except for a few cyber cafés
- The local milieu is also somewhat backward as socializing among males and females is not so common and not socially accepted.

- There are no cyber cafes exclusively for women or there are no separate arrangements for women in cyber cafés.
- Cyber cafes are assumed to be a place where women should avoid visiting. Most of the parents as well as women students and hostel wardens also hold this view.

3.1. Video Conferencing facility in Muzaffarpur and Patna Districts of Bihar

From the foregoing one could establish a clear linkage between lack of equal access to sources of information for women and consequently the lack of their equal access to e-governance services and this is supported by the findings of a field survey of one of the major e-governance initiatives which has shown the following results:

Table 3: Sample of survey to e-governance services

Name of the district	Total Cases	Cases by Women	Cases by men
Patna	377	77(20.42%)	300 (79.58%)
Muzaffarpur	126	44 (34.92%)	82 (65.08%)

Due to concentrated implementation of e-governance services in urban areas, among the rural folk it is easier for rural men to come to city and benefit from these facilities such as land records, or making complaints or taking a license etc or getting education in an institution in the urban areas rather than for rural women without proper transportation facility or a safe environment in the city³. So this urban bias is also a major contributory gender factor. Thus women do not have same access to e-governance facilities as the men and nor are the e-governance facilities being used by women as equally as men.

The question therefore needs to be addressed is:

1. How far have the e-governance initiatives been able to address women's needs both at the content level and at the implementation level?
2. How far the e-governance initiatives are being supported by adequate capacity building measures or the measures aimed at removing the hurdles women face in using them?

Content wise, while designing and implementing e-governance schemes, the dominance of the male perspective is clearly visible. All the services, which are now being brought under the umbrella of e-governance, have the male as the norm though vicariously, and hence are related to the needs and convenience of men. A close analysis of services provided in the state under e-governance reveals the fact that these services are mostly used by men. There are no efforts to identify the convenience and needs of women in relation to e-governance initiatives. One could identify some services with reference to the needs of women of Bihar that can be brought under e-governance

3.1.2 E-governance Initiatives

The health related information can be provided by using ICT through the use of the Video with instructions for reproductive health care for instance regarding small precautions that should be taken at the time of delivery for safe delivery. Though government and NGOs provide them training it does not have a wide reach. With the availability of an internet connected computer in Aganwadi Kendras (local village level women's groups) this information can be provided to a larger number of women and the information can be put online also. Even the illiterate rural women will be able to learn new designs for all the handicrafts. At the implementation/operational level, consideration for the specific problems women face in accessing or using these services is completely missing. If we analyse closely, we find that the lack of mobility has been the main factor responsible for Indian women to have less access to government services and for their dependence on males. The burden of house hold responsibilities, lack of transportation facilities, an insecure outside environment, a male dominated gender insensitive administration, lack of facilities for women in administrative offices are some of the factors due to which even the educated and aware women have hesitation in approaching the officials themselves . If government any time anywhere' through internet could be provided, women would then be able to obtain information more easily and will be able to register complaints or convey problems regarding administration to the concerned officers without facing some of the constraints mentioned above. But unfortunately even with this potential of ICT there have been no efforts to adopt

this gender sensitive approach while planning and implementing the e-governance initiatives in the state. Though many small measures can be taken very easily just as the VSat based computer which is available in the office of CEO and the Janapad Panchayats (units of the local self government) and are controlled by the male officers there, computers can be given to women self help groups and can be placed in an Aganwadi Kendra (centre for women and child care), where women sit together and interact with each other very frequently and freely. One of the literate women members of the group can be trained to operate the computer. Likewise while selecting the places for the proposed Cyber Agent Scheme, locations can be selected taking care of women's needs and convenience. This could be in a residential colony or nearer a women's college etc. Though these may seem small measures, but they would make the difference. More over keeping in view the benefits that ICT can provide to women i.e. governance at finger tips any time anywhere, special subsidy schemes can be started by banks and government for women to buy computers and internet connection⁴. The NGOs can help in creating awareness and providing required training to women to use these facilities. This can be a major step towards the empowerment of women as women may be able to access the government schemes and the officials easily and as and when required. We have to keep in view the fact that the problems related to governance may be different for men and women. While women and men face many common problems, women face added problems merely being women. And we are sure that many of those problems which women face merely being women can be solved to some extent by women friendly rather than merely 'user' friendly ICT. One factor that is very important while discussing the issue of 'Women Friendly' ICT is the share of women in policy making and implementation structure. This is almost negligible in the State. One of the factors responsible for this may be the very low percentage of women in the ICT related courses.

Table 4: Internet Usage and Population Statistics in India

Year	Users	Population	%
1998	1,40000	1,094,870,677	0.1%
2000	5,500,000	1,094,870,677	.5%
2005	50,600,000	1,112,225,812	4.5%
2010	100,000,000	1,173,108,018	8.5%

Table 5: Share of Women in ICT Related Courses Table 6: Women in Workforce

Year	Percentage of girls
2006-2007	45%
2007-2008	49%
2008-2009	53%
2009-2010	55%
2010-2011	59%

Total women in workforce	31%
Women in IT workforce	19 %
Women Internet users in India	23 %

Source:

Women and IT in Bihar

The reasons for fewer shares of women in the ICT related courses could be:

- (1) Historically there has been a tendency to divide the disciplines of study as masculine and feminine, the more technical professional ones being considered as masculine and the arts, humanities and the social sciences as feminine and this has been followed up with a congealed socialization reflecting and perpetuating the patriarchal mind set of the society.
- (2) Following this and in addition, though technical education has a better chance of employability, since it is comparatively costlier in the state of Bihar and because in the Indian society the son is considered to be the bread earner, parents generally prefer to provide technical education to their sons rather than to their daughters.
- (3) In Bihar State the institutes of technical education are mostly limited to urban areas, and the village communities even today have reservations in sending their daughters to study outside their villages due to deep rooted socio cultural factors.

(4) Some of the prevailing social customs like dowry (bride price) also prevent parents to encourage their daughters to join technical education, as they assume that more educated the girl, they would have to find an equally educated bridegroom apart from spending more money in such a marriage.

(5) The uncertain social factors and the real and perceived fears of the parents about the 'unsafe' social environment including the campuses, and lack of adequate arrangements of boarding etc also make parents hesitant to send their daughters to far off places to study or work.

The question therefore remains as to how far the e-governance initiatives are being supported by adequate capacity building measures or the measures aimed at removing the hurdles women face in using them.

4. Popular Bihar Government Schemes For Girls

Some e-governance initiatives in the state are:

(1) Mukhyamantri Balika Poshak Yojana-Under this scheme, girl students would get Rs.700 every year for purchasing two pairs of uniforms.

(2) Mukhyamantri Balika Cycle Yojana- Under this scheme, all girls would get bicycles free of cost after getting admission to class IX.

(3) Mukhyamantri Kanya Surarksha Yojana- This scheme ensures girls safety and security, and to encourage registration of birth.

Other than above programme, there is no capacity building programme for women. It is obvious from the above analysis that the e-governance initiatives in the State do not have the required gender perspective which could be attributed to the following reasons:

- As the policy makers and those who implement them are males, they generally overlook or ignore women's needs either because of the lack of gender sensitivity or due to just plain patriarchal socialization.
- There is often a common tendency in India among policy makers and among those who implement them to treat some areas as gender neutral, and this is the case with the ICT policies and programmes in Bihar. This is clearly reflected in the fact that though the State has a very comprehensive Women Policy, there is no mention of ICT in this Policy and in the State IT Policy there is no mention of women. Not a single programme of Women and Child Development Department is using ICT or is being included under e-governance schemes in the State.
- Even if one tries to draw their attention towards this, they might agree to the suggestions but then since there is a limited amount of fund available for e-governance that is preferably being used in the set mould addressing the needs of the male population as they are perhaps politically more beneficial.
- Interestingly the women organizations of the region also do not assign any importance to e-governance. They feel that problems like domestic violence, water scarcity, poverty etc. are more important and fundamental arenas of struggle for women. They fail to understand that though ICT may not be the panacea to all the age old problems that women continue to face it can be used as a powerful supporting instruments to address these age old problems in one way or other. For instance if we take the cases of domestic violence, a number of women organizations are eager to help the victims but the real problem is that the victim may not want to disclose her identity or is not allowed to have any contact with these women groups.

If e-governance services are provided by panchayats (Local Self Government Unit at Village Level) or if e-government services are also extended to include such complaints, women organizations and government machinery may prove to be more helpful/useful to such women. Field surveys show that while it is generally assumed by policy makers (mainly male) that e-governance programmes will benefit men and women equally, the ground reality is that there is a vast difference in the availability, use, and access of e-governance schemes for men and women. Hence, it is necessary to examine the gender perspective in the e-governance. The ICT policies, programmes, and schemes in Bihar state of India seem to bypass the question of women's capacity building and empowerment. The impact of this at the user end for women may be one of exclusion due to various reasons that need to be addressed urgently to avoid the digital gender divide superimposed on the already existing gender disadvantages for women arising from

socio cultural factors. Without a gender perspective, the low participation of women in accessing and using the e-governance facilities may not be noticed. This is the case in the Bihar region where even in urban areas, as compared to men, a very low number of women use the e-governance facilities and services such as videoconferencing with public bodies, accessing Internet based services like esangwari for obtaining records regarding births, deaths, or land, or using local government information kiosks for obtaining information under the e-panchayata scheme. In fact, as already stated, very few women have telephones registered in their own names. Similarly, in the educational sphere, there is low enrollment, retention, and visibility of women in ICT related courses of study. Thus, in the Indian context, where women are already less visible in the public spheres due to sociocultural factors and men already dominate, e-governance is more available and accessible to men. This is also because ICTs have masculine connotations due to the traditionally larger presence of men in technological disciplines. Such is the picture in even urban areas in Bihar where more women are literate, aware, and considered to face comparatively less sociocultural constraints. Even if these programmes and facilities based on ICT are made available in the rural areas, women would still find it difficult to benefit from them due to the already existing limitations of a male dominated society. This would be especially true for women in areas dominated by the scheduled castes and tribes, who have been recognized as socially disadvantaged in the Indian Constitution, and who already suffer from severe poverty, illiteracy, and backwardness, to which is added the restrictive limitations imposed by the domination of patriarchal values, traditions, and attitudes.

4.1 What can be done-

The Constitution of India recognises women as a class by itself and permits enactment of laws and reservations favouring them. Several articles in our Constitution make express provision for affirmative action in favour of women. It prohibits all types of discrimination against women and lays a carpet for securing equal opportunity to women in all walks of life, including education, employment and participation. In our society the freedom of women to seek employment outside the family is a major issue. This freedom is denied in many cultures and this attitude in itself is a serious violation of women's liberty and gender equality. We must understand that the training, use and adoption of ICT must be "gender neutral". For a gender neutral technology we have to first place the women on an equal platform. They cannot be put on an equal platform till they have equal capacity and opportunity to use ICT. They cannot also effectively use ICT till their "feedbacks and concerns" are incorporated in the National Policies including the E-governance plans. It must be appreciated that a nation that does not respect its women cannot be described as a civilised nation at all. Such a nation cannot grow and develop and will ultimately perish. Thus, the national consensus should concentrate on betterment of women by suitably empowering them. Thus, ICT can play a major role in women empowerment if they are provided employment opportunities at the village level after providing them suitable training. We have to open more village kiosks so that greater women participation can be there. This cannot happen till we first make the e-governance and ICT strategies and policies transparent and accountable and mere computerisation is not e-governance.

Conclusion

India continues to be one of the fastest growing major telecom markets in the world. One might conclude that while poverty is a gender neutral attribute affecting the access of both men and women to the gains from e-governance, there are certain gender specific antecedents that impede women's access to it where available, in ways different from that for men. Apart from literacy and education, social and cultural norms also constrain women's mobility and access to e-governance schemes. These constraints have to be identified and should be examined carefully to determine what impact this gendered exclusion from e-governance might have on women and whether a digital gap is being added to the already existing gender gap, and ways and means to address and reduce the gap. If, however, the gender dimensions of ICT in terms of access and use, capacity-building opportunities, employment and potential for empowerment are explicitly identified and addressed, ICT can be a powerful catalyst for political and social empowerment of women, and the promotion of gender equality.

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