

The Proposal of a framework for implementation of present Government's "Digital Bangladesh-2021" involving & integrating of Rural Women

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Abstract— The term "Rural women" is very significant for its successful implementation of "Digital Bangladesh-2021". Almost 50% of the total populations are women in our country. This is very important and significant that three-fourth of the total women is from rural settings, among three-fourth most of the women spent a life not only rural setting but also as aborigines. The present study of rural women made an effort to determine the present status of access to ICT by the rural women. For this purpose few selected villages were taken with representative sample through interview and question answer session. Majority of rural women have no concept and vision of digital Bangladesh and ICT network. But it is very interesting and unbelievable that each rural woman is interested about ICT use, not only use but also 95% rural women are fully interested to take ICT as a profession. This paper explores the role of ICTs in empowering Bangladesh rural women, through the implementation of Digital Bangladesh-2021.

Index Terms— Rural Women, Digital Bangladesh, ICT, Computer Literacy, Educational Level.

1 INTRODUCTION

OUR national poet Kazi Nazrul Islam wrote- "The Good done by the civilization, half created by man and rests by the women." This is an internal statement about the development of human civilization. From the dawn of the civilization women and men worked together to make the future brighter. Now it is very important the 50%, "the other half" which can perform an important role about the development of human civilization. But if we want to take our mission of ICT and fill up our vision of "Digital Bangladesh" with development of civilization the rural women play an important and actual role. But numerical speaking, these expressions are

most appropriate for the rural Bangladesh. According to census 2001 men preponderates women in the ratio of 105 but the sex ratio is 123.1 and 140.29 in the metropolitan areas and municipalities respectively.[3] Since Present Government pledged to develop a **Digital Bangladesh by 2021**, it has given a great hope to the citizens of Bangladesh.

Information and communication technologies (ICTs) can be used to close the gender gap by creating new jobs for impoverished women. ICTs can also be used to promote basic literacy and education for women and girls, provide job training and prepare women for careers in the ICT sector as well as to ensure health and safety. We know ICT has a huge amount of profession and task, lots of area for developing and earning money. So it is very easy to use ICT and makes Bangladesh as a "Digital Bangladesh". **The specific objectives of the study are:**

- How to Integrate and Involve Rural Women into ICT?**
- To determine the important for involving of Rural women to ICT for making "Digital Bangladesh".**
- To determine the interest of Rural women to ICT and ICT profession.**
- To assign rural women who are interested and what type of training need for them.**
- To specify some challenges for Rural Women to Integrate and involve to ICT.**

2 BACKGROUND STUDY

The prices of inputs (fertilizer, pesticide), outputs (agricultural products), transport (timing of trucks going to urban markets) and marketing opportunities. Examples: In Costa Rica, women

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farmers, who are small coffee growers, use telecommunications to obtain marketing information from central cooperatives in the capital that have computer links to sources. The links provide information on national and international coffee prices. In rural Mexico, cooperative offices use microcomputers to get weather updates, urban market prices for local agricultural produce, and other information that helps local farmers decide when to harvest crops and transport to the city.

The access to markets and business-related information; e-commerce: connecting small artisans to markets; support to innovation; support to small farmers Examples: In Peru, "Quipnet" helps market small-scale eco-tourism facilities run by women by e-commerce through the Internet. In India, the SATCOM program provides information by satellite to small-scale women entrepreneurs who are members of the Self-Employment Women's Association (SEWA).[3]

In our country in rural areas there is no scope to get the information about agricultural commodities, health services and business purpose through use of ICT.

3 METHODOLOGY

This paper is based on primarily data collection and personal experience has been inserted for deeper understanding. Recently we conducted a study two villages named Bolda, Vurulia Dist: Gazipur, Bangladesh for taking interview, and observing their life style and their relationship with ICT and "Digital Bangladesh". The interview was made on about ICT and "Digital Bangladesh" with their interest, opportunity and problem. Each Rural womens was very interested and gave answers of each question very nicely. At the same time we discussed with the chairman and councilor of that area.

4 AN OVERVIEW OF ICT SECTION IN BANGLADESH

In the section the overall situation of Bangladesh with respect of ICT are shown-

Table 1. The Tabular Representation of overview of ICT

Total population	142.319 million
Total population Male	71.255 million
Total population Female	71.064
Rural population	106,224,900
Population Below Poverty Line	36.3% (2008 est.)
Population growth rate	1.292% (2010 est.)
Key Economics Sectors	Garments, vegetables', Medicine, ceramic product, jute etc
Internet Hosts	68,224 (2010)

Internet Users	556,000 (2008)
Telephones	1,390,000 (2009)
Cellular Telephones	45,750,000 (2009)
Airports	17 (2010)
unemployment rate	5.1% (2009 est.)
Broadband(Radio, Cable, XDSL) accounts	15,000
Cyber Café Users	25,000

5 INFORMATION GATHERING AND ANALYSIS

At the same time it describes the Present Circumstances of Bangladesh. At this stage, we have surveyed over 500 of women in two villages' situated at Gazipur by questionnaires and by our collected information to identify the quality of rural women in Bangladesh we implement the program. We've developed a software tool for simulating by ASP.NET and C #; In that case our findings are as follows:

5.1 Grafical Reprsentation of Present Situation: After collecting data the results were represented graphically.

Education Level and computer literacy of Rural Women: Education is the backbone of a nation or a nation cannot prosper without education. In ICT section education is very much important for every people. The following two tables represent the education status and computer literacy situation of rural women respectively.

Table 2. Education Level of Rural Women

Level of Education	No of Women		Percentage	
	Bolda	vurulia	Bolda	Vurulia
Illiterate	80	40	40.0%	20.0%
Able to Sign	60	60	30.0%	30.0%
Primary	40	60	20.0%	30.0%
Secondary	20	40	10.0%	20.0%
Total	200	200	100.0%	100.0%

for ICT.

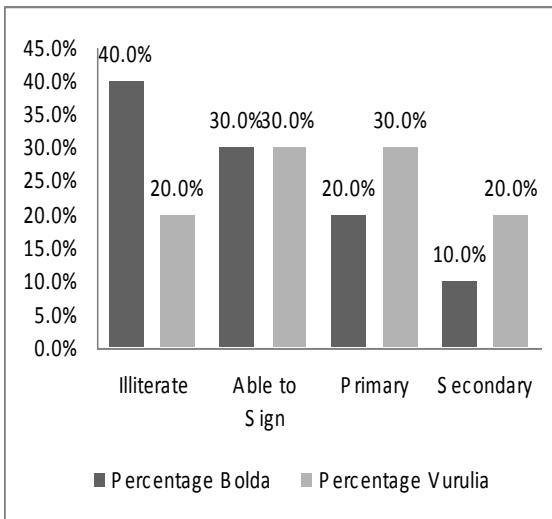
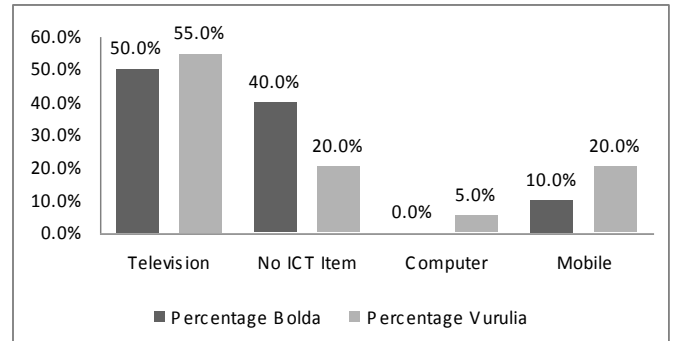


Table 3. Computer Literacy Level of Rural Women

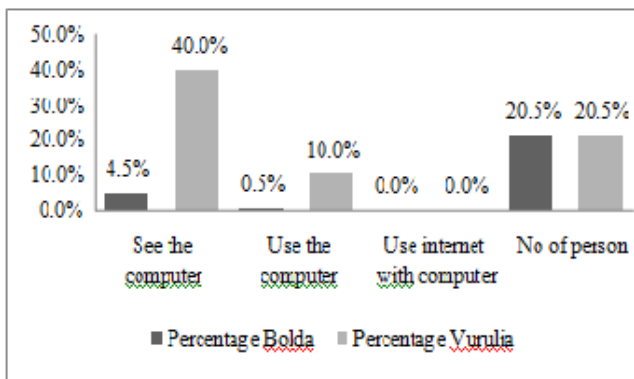
Level of Computer literacy	No of Women		Percentage	
	Bolda	vurulia	Bolda	Vurulia
Hearing of Computer Background	190	120	95.0%	60.0%
See the computer	9	80	4.5%	40.0%
Use the computer	1	20	0.5%	10.0%
Use internet with computer	0	0	0.0%	0.0%
No of person	200	200	100%	100%



6 PROJECTED RESULT

We assigned some points for every attributes and this session shows the result of the program i.e. who are the qualified women or not and which women need training or not.

Village Name	(80 to Less than 100)	(70 to Less than 80)	(60 to Less than 70)	(50 to Less than 60)	(40 to Less than 50)	Less than 40
Bolda (Gazipur)	02%	10%	10%	15%	17%	46%
Vurulia (Gazipur)	05%	10%	10%	15%	26%	34%
Comments	Best for ICT no need to trained access higher ICT Device Best for ICT need simple training of ICT Better for ICT need simple training of ICT Better for ICT need simple training of ICT Good for ICT need hard training of ICT need a full time training session					



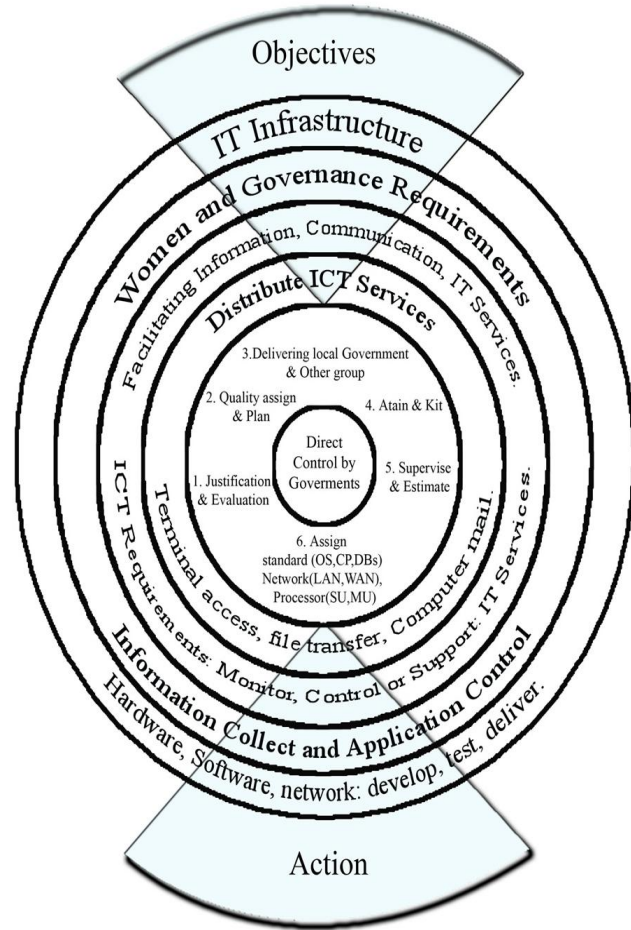
7 PROPOSED MODEL

In upper triangle indicates the objectives to implement the proposal such as (1) IT infrastructure, (2) Women and Governance requirements, (3) Facilitating information, communication, IT services and Distribute ICT Services.

The lower triangle includes the actions according to the objectives that are H/W, S/W, and Network: (1) develops, test, and deliver. (2) Information collect and application control (3) ICT requirements: Monitor, control or support IT services. (4) Terminal access, file transfer, computer mail.

Use of ICT items: The use of ICT Item is help to Rural Women

In the center circle there are six tasks which should be implemented by government directly such as (1) Justification & Evaluation (2) Quality assign & plan (3) Delivering local government & other group (4) Attain & kit (5) Supervise & Estimate and (6) Assign Standard (operating system, database), Network (Local area network, Wide area network), Processor (Single user, Multi user)



7.1 Organizational:

Framework:

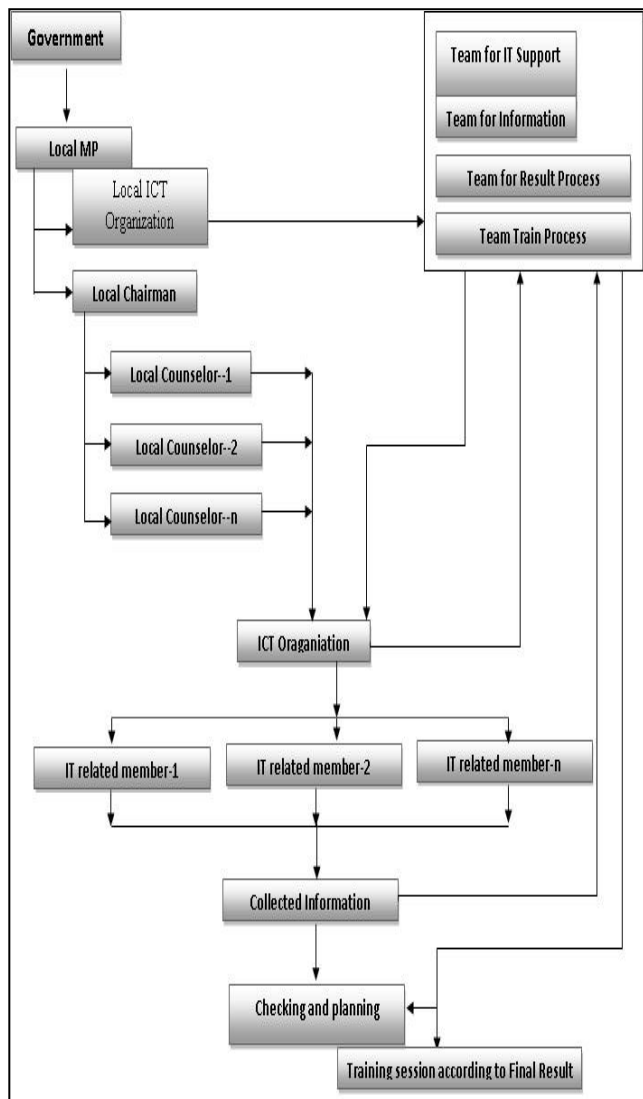
CHALLENGES OF ICT USE FOR RURAL WOMEN'S

Technical problems: According to the circumstances of Bangladesh some technical problem is occurred to integrating Rural Women in to ICT. Following are some of the key constraints:

- ✓ No proper classification and qualification of Rural for developing ICT
- ✓ Price of ICT requirements for Rural Women
- ✓ Lack of internet connectivity and electricity
- ✓ Lack of others source of Electricity
- ✓ Lack of Infrastructure facility of ICT
- ✓ Lack of Training Program Provide
- ✓ Lack of local and community- related content in local languages continues to be a major barrier in women's use of ICT for economic empowerment
- ✓ Lack of the involvement of other ICT channels (radio, television, mobile etc.)

Social problems: Integrating & Involving Rural women, it is also necessary to reduce social problems because social problems are deeply rooted in society. Some of the key social problems are as follows:

- ✓ Traditional attitude
- ✓ Lack of education and training (particularly rural and deprived women).
- ✓ Poverty and huge domestic and agricultural work.
- ✓ Rural men are not interested to involve Rural women into ICT
- ✓ Rural cannot take steps without any permission of her family



- Make proper classification and qualification of Rural women for developing ICT
- Categories all the Rural Women create point and grade and take systematic steps.
- The government should take necessary steps for creating work opportunities leading to increase per capita income of the rural women. So they can be brought to the mainstream of the information and communication technology policy of the country.
- Workshop and training centers for Rural women
- Collaboration among government, development organization, NGOs and other stakeholders need to be encouraged in finding solutions to the common problems through application of appropriate ICT services in rural areas where the govt. sector still lagging far behind.
- To make ICT more useful and meaningful, particularly for rural and poor women, relevant information and tools need to be provided to address women's needs and demands Availability of electricity, transport and security may also influence the use of ICT.
- Radio and Television programmes can be developed to educate women on various development issues, including the various uses of ICT, thus increasing awareness and knowledge of ICT's uses

In Medical Science an actual doctors at first analysis the diseases of her/his patient then he/she can able to takes a proper and logical step to prevention the diseases and this is the key of proper success of a doctor. Same as it is very important to analysis each "Rural Woman" according to her personal qualification, personal interest about ICT sectors, their personal problem and circumstances and takes a proper and logical steps to Integrate and involve them to ICT. It is very Scientific steps for the Honorable Government or any others private Organization who are interested to Integrating and involving Rural women in to ICT especially for the mission of "Digital Bangladesh-2021".

8 POLICY MAKING AND CONCLUSION

To remove technical and social problem some policy is very necessary to make a road map and it is very important to stable the road map. ICT is a core sector for making "Digital Bangladesh-2021". If you want to achieve the goal of "Digital Bangladesh-2021" it is very important to increase ICT knowledge based education, ICT based training program, developing new ICT based product etc specially for rural women at a time whole country. Based on the study some strategic recommendations for an overall strategy and discusses some specific action items for better access to ICT by rural women in Bangladesh.

- Education level is very important for Rural women without education it is fully impossible to access ICT but we have to ensure that the education is Based on ICT. So in every rural village stable an ICT education center and ICT training centre.

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