

Chapter-28

Information and Communication Technology Division

1.0 Introduction

1.1 In the modern world Information and Communication Technology is being used as the key instrument for human development. In all sectors like education, research, agriculture, business, medicine, even for personal use at home and outside, technology is of great support. Using technology is also increasing in Bangladesh. The Vision 2021 visualizes a Bangladesh where the use of technology would be the guiding force of economic development. The Information and Communication Technology (ICT) Division has been set up mainly with an aim for achieving U N declared Millennium Development Goals (MDGs), and leading Bangladesh from a least developed country to a middle income country by 2021 and also for establishing Digital Bangladesh. For this reason ICT Division is continuously working to improve socio-economic condition of the mass people of Bangladesh by ensuring universal access to free information technology, through development of ICT sector and research, successful application and the expansion of ICT based management.

1.2 To cope up with the technology based modern world, both government and non-government sector must have to rely on information and communication technology. ICT Division is using the ICT sector to achieve a balanced socio-economic development and to bring a positive change in its citizen's life pattern. Though contribution of ICT sector in the sector-wise GDP growth analysis is not directly visible, yet almost every economic sector are inseparably positively linked with the development of IT sector.

2.0 Major Functions of the Division

- ❖ Supporting various ministries and agencies through the implementation of e-governance, e-infrastructure;
- ❖ Conduct publicity to reach ICT services at people's doorstep;
- ❖ Formulate various laws, policies and strategies relating to ICT Division;
- ❖ Creating a guideline (roadmap) for the benefit of ICT services in commercial purpose;
- ❖ Coordinate between various ministries and organizations regarding ICT related issues;
- ❖ Implement the recommendations of Digital Bangladesh Task Force;
- ❖ Promote and update various IT activities through survey, designing and research; and

- ❖ Take initiatives to involve Bangladesh in all sorts of activities relating to the development of Information and Communications Technology in the international arena.

3.0 Strategic objectives of ICT Division and their Relevance with Women's Advancement and Rights

3.1 Strengthening e-Governance structure: Internet networking and broad band facilities to different ministries/divisions, e-Center establishment for providing internet facilities and flow of information at District and Upazilla level will be ensured through the initiatives taken for strengthening e-Governance structure. No direct impact of these activities lies on Women's Advancement yet women will be indirectly benefitted a lot by getting easy access to information using internet facilities.

3.2 Expansion and awareness acceleration on ICT education for human resource development: Manpower skilled on ICT will be made by the IT training imparted up to the root level through establishment of IT training institution at District and Upazilla level. Trainings will be also conducted for the skill development of local and international ICT professionals. To introduce digital signature in ICT using and application training and public awareness raising activities will be conducted. This will open up opportunities for capacity building on ICT for both men and women. Skill development will lead to enthusiasm for self-employment of women. As a result empowerment, skill development and participation of women in income generating activities will increase.

3.3 Development of ICT infrastructure: For the expansion of ICT use in commercial purpose infrastructural facilities, viz. high- tech park, IT village, software technology park etc will be create. Infrastructural development activities of ICT will produce direct employment opportunities for women including poor people.

4.0 Roles and Responsibilities of ICT Division for establishing Women's Advancement and Rights

4.1 The main objective of Information and Communication Technology (ICT) Division is to take the country to a new height of excellence, building a new "Digital Bangladesh" identity by strengthening ICT sector. "National Information and Communication Technology Policy 2015" was formulated for proper implementation of information and communication sector related activities in order to successful attainment to Digital Bangladesh Vision. The main objectives of this policy are as follows:

- ❖ Ensuring social justice, gender balance development, equal opportunity and equal participation for all including challenged and special assistance requiring persons through ICT.

- ❖ Achieving higher productivity by using ICT in all sectors of economy including agriculture and micro, medium and small industrial sectors.
 - ❖ Expanding coverage and quality of education throughout the country by using ICT; ensuring computer literacy at all tiers of education and in the government sector; encouraging creativity through proper research and development; creation of intellectual resources and internalizing the ICT in all spheres of life.
 - ❖ Formation of world class professionals who will be able to access employment opportunities in local and international markets.
 - ❖ Ensuring development of a rich software industry, provide IT based service, augmentation of e-commerce, e-business and IT construction industry in order to meet the demand of local and international markets, increase foreign trade income, raise foreign investment and reduce import dependency. .
 - ❖ Ensuring quality health care services for all citizen using the ICT innovations.
 - ❖ Ensuring internet/telecom connections as an obligatory public service.
 - ❖ Innovation and internalization of environment friendly green technology, safe management of polluted wastes, reducing the preparedness in disaster and ensuring effective steps taken for management of environmental change.
- 4.2 National Information and Communication policy 2015, Bangladesh Hi-Tech Park Authority Act 2015 and to introduce digital signature Information Technology (Certification Authority) Rules 2010 has been formulated. ICT Division has been taken noteworthy activities under the medium term strategic objectives for development and expansion of ICT infrastructure, ensure the right of all for free access in country's information system, capacity building of youth in IT sector, provide e-service to all in order to establish e-government countrywide.
- 4.3 The commitment for Digital Bangladesh by 2021 is expected to be materialized through the successful implementation of vision and objectives of the National Information and Communication Policy 2012. ICT Division listed the following priority based activities which would directly and indirectly benefit the women to create employment opportunities for women along with uplifting their socio-economic condition:
- ❖ **Human Resource development/Training:** Basic ICT Skill Transfer up to Upazilla Level Project has been started to provide ICT related training. Computer training of 1,260 teachers of various educational institutions on SSC and HSC level syllabus and ICT training of 99,400 students has been completed in computer labs established by Bangladesh Computer Council during FY 2011-12 to FY 2013-14. During 2012-13 to 2013-14, 7,200 teachers have been trained for 15 days on designing and using the digital content in various institutions at the upazilla

levels. Till now 2,250 teachers have been trained in basic ICT skill and 316 have been trained as master trainers under the human resource development program through ICT training. 1,600 public officials/employees and teachers of schools and colleges obtained training on basic ICT. Considering that women constitute about 50% of the total population, the efficiency of the women as teacher and student, in ICT sector has been improved through this activity. From the FY2014-15 to the FY 2015-16, 2016-17 (March) total 3276 participants have been trained; among which 20% were women. For the development of challenged people 377 challenged persons have been trained. Bangladesh Computer council had arranged a ICT fair for handicapped people on 1 January,2015, 90 people were present in job fair and 32 people got the job. Bangladesh Hi-tech Park Authority is providing different types of ICT training to the professionals of IT/ITES Companies and graduate/ undergraduate students to promote the ICT industry. 4,564 people have already been trained under 'Support to Development of Kaliakoir Hi-Tech Park' project where 24% is women. Trained women are working in different IT organizations. Besides, Bangladesh Hi-tech Park Authority is preserving 30% women quota for job as well as space/plot allocation in Software Technology Parks (STP) and Hi-Tech Parks (HTP).

- ❖ **Setting up Computer Labs:** For providing ICT education for students, teachers and mass people 3544 computer labs have been set up in secondary and higher secondary educational institutions under "Establishment of computer labs and ICT training in educational institutions at district level" project and different programs.
- ❖ **Multimedia Class Room and Digital Content:** Initiatives have been taken to set up multimedia class rooms in the secondary level educational institutions under the concept of 'Not ICT education rather use of ICT in education'. Already 100 smart class rooms and 100 computer labs have been set up under the pilot project. Under 'Access to Information program' (A2I) of PMO office multi-media classrooms have been established in 500 schools primarily. Later on MoE till 2014 established multi-media class room in 15,200 secondary schools and in 5,300 madrasas (source: A2I website). 7,200 teachers of upazillas of the country have been trained for 15 days on preparation and use of teacher-led content under "Basic ICT Skill Transfer up to Upazilla level" project of BCC from the FY 2012-13 to the FY 2013-14. Through the portal of teachers 23,661 primary and secondary teachers have made and shared multi-media content and at primary

and secondary level more than 300 e-book have been made (source:A2I website).

- ❖ **Establishing e-governance:** Steps have been taken to bring all the ministries/divisions/ departments/districts and upazillas under a public network. At the first phase of Bangla Govt.net project 58 ministries /division, important departments/ organizations, all Deputy Commissioner’s office and 64 offices of the Upazilla Nirbahi Officer and 114 different departments have been brought under such a network and to set up the same network in 18 offices is extended. In the second phase, under Info-Govt. project, 130 offices at Zilla and Upazilla level have been connected with fibre optic cable¹⁸. Video Conferencing System in 800 places established and in BCC building Wi-Fi network has been established. Furthermore, Wi-Fi network in Bangladesh Secretariat has been established. 24,907 Tablets have been distributed to the government officials. As a result all officers/employees working at the government offices would be benefitted. Alongside, women who work as public servants will also be benefitted from these services. This would empower women. Two mobile apps have been developed to prevent violation against women and children through Info-sarker-II Project.
- ❖ **Establishing National Data Centre and Cyber Centre:** National Data Centre in Bangladesh Computer Council and 27 Cyber Centers in different higher education institutions in the country (university, college and institutes) have already been set up. With financial help of China-Exim Bank, Tier-iv data center is going to be established.
- ❖ **Organizing Fair and Advertising Activities:** “National Information and Communication Technology Policy 2015” has proposed to increase awareness about” Information Technology Enabled Service” (ITES) among potential entrepreneurs where TV, radio, community radio and newspapers would help to make the people understand the utility of IT. Furthermore, digital innovation fair and internet fair has been proposed to be organized under government initiative at divisions, districts level to promote IT related innovations which would contribute in increasing creativity and innovation of IT uses. It would benefit potential women entrepreneurs. Digital Innovation fair has already been organized at national, divisions and districts level. Bangladesh has achieved the capability to organize international programs in information technology by organizing e-Asia for the first time. As a continuation of this, a three day long Digital World 2016 took place in Dhaka to materialize the Digital Bangladesh program – where 32 seminars, workshops and round table discussions were

organized. Separate arrangement for women was there for the first time. Upazila digital fair and internet week were held from 05.09.2015 to 11.09.2015 all over the country in which female participants were about 40%. National Hakathon-2016 was held from 6-7 April 2016 in which 2000 participants took part and about 25% of them were women. Under the initiative of this Division, National High School Programming contest 2016 was held from 10.02.2016 to 24.04.2016 in which about 20000 students (of which about 45%female students) participated. Bangladesh Computer Council & BDSO jointly arranged Hour of Code and Girls Programming Contest for girls where 187 girls attended.

- ❖ **Arrangement of Training under the unified training curriculum:** As guided by “ National Information and Communication Technology Policy 2015”, activities have to be undertaken like training of concerned government officials to encourage the use of ICT in an unified curriculum, introduction of accreditation to test and improve the efficiency of the ICT professionals; encouraging the bridging between ICT students/graduates and ICT industries and therefore establishment of incubator at the University level and at least 5 percent of the manpower has to be kept available for internships. By implementing these, women officers/ employees and students will be able to prove their competence in their own service area, along with male officers/employees and students.
- ❖ **Employment Generation:** Activities are being undertaken to make educated youth self-dependent through transforming them into efficient manpower. 3920 persons will be given basic training for 2 days in each district of the country and 7,440 persons would be given the advanced training for 5 days in each district and a few upazillas, to provide opportunities of earning from home through online. Under ‘Learning and Earning Program’ in the year 2012-13 and in the year 2013-14, 14,700 & 2014-15, 25,000 have been trained in order to achieve outsourcing working capability through online. To make the educated unemployed women self-dependant through outsourcing training “Bari Boshe Borolok training” program was taken up. Under this program 14360 women were trained for 2 days at district and upazilla level. Among them 2,240 women have come under advanced training through selection for 5 days. 5 days training program in government and non-government universities at district level have been taken place to enhance awareness in regard to mobile application development and to improve skills and to create opportunity to take part in the global market. National Mobile Apps competition has been organized. In this competition and in the training program women got opportunity to take part

equally with others. In the meantime these training programs and apps competition have turned out 2,400 apps developers. 2,512 people have been trained under Freelancer to Entrepreneur Development Program. Among them 2,305 participants were male and 217 participants were female.

5.0 Priority Spending Areas and Benefits for Women's Advancement

Serial No.	Priority spending Area	Benefits for women's advancement (Direct and Indirect)
1	2	3
1.	Ensuring Cyber Security	Steps have been taken to protect defamation of the women in the cyber world, i.e. facebook and others forms of social media. Necessary investigation reports are being produced before the cyber tribunal regarding the online defamation of women.
2.	Use of Digital Signature	ICT skilled and trained women entrepreneurs and officials will be able to use digital signature properly in their banking, e-Filing and e-Documentation processes.

6.0 Women's Share in Ministry's Total Expenditure

(Taka in Crore)

Description	Budget 2017-18			Revised 2016-17			Budget 2016-17		
	Budget	Women Share		Revised	Women Share		Budget	Women Share	
		Women	percent		Women	percent		Women	percent
Total Budget	400266	112019	27.99	317174	86586	27.3	340605	92781	27.24
Ministry Budget	3974	539	13.57	1819	454	24.98	1835	730	39.79
Development	3765	514	13.66	1595	432	27.07	1606	693	43.18
Non-Development	209	25	11.85	224	23	10.18	229	37	16.06

Source: RCGP database

7.0 Success in Promoting Women's Advancement

- ❖ A New era has originated in the advancement of Digital Bangladesh with the establishment of 4,516 Union Digital Center (UDC) on 11 November 2010. These centers provide services to the common rural people and create job opportunities for 9,032 entrepreneurs including 4516 women. At present, more than 40 lakh rural people on an average are getting different types of information and services from those centers. Till now more than 4 crore services have been provided and 3 crore and 20 lakh births have been registered through online. The entrepreneurs of UDCs earned Tk. 128 crore by rendering those services. On an average, more than 15 crore taka is being transacted through mobile banking from 2,773 centers. Fifty percent of total entrepreneurs; 4,516 women are being benefited by providing services to others in this arena. At the

same time as fifty percent of total rural people by taking these services rural women are getting benefit.

- ❖ By implementing "Leveraging ICT for Growth, Employment and Governance Project", 34,000 skill manpower will be created in Information Technology Enabled Service (ITES) sector. It will ensure new job creation and diversification of export. Besides, necessary security of information will be ensured through e-services. Appropriate representation of women will be ensured, who consist about fifty percent of our total workforce.
- ❖ 167 participants have been awarded internationally standardized IT Engineers Examination (ITEE) certificates under "Capacity Building on ITEE (IT Engineers Examination) Management Project"; among them 15 were women.

7.0 Recommendations for Future Activities

- ❖ Enacting new law and amendment of the existing law in ICT field to achieve targets that serve interest of women;
- ❖ Provisions can be made to include women members in different project committees to increase the participation of women in the implementation and administration of different projects implemented by the ICT Division;
- ❖ In different projects, arrangements can be made to provide specific opportunity/benefit for women. Women can be included in all types of ICT oriented activities in order to promote impact and capacity of women group;
- ❖ Quota system can be introduced for women in all IT related trainings;
- ❖ Incentives can be arranged to attract women in ICT related training and in ICT industry (as trainees and entrepreneurs) for expansion of ICT based education;
- ❖ On average, more than fifty percent of the beneficiaries of social safety net related programmes are women. The use of ICT in the administration and management of those activities will be more advantageous for easy release of those services. This will directly bring advantage for women by reducing hassle in getting social safety net related benefits.