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| **Chapter-28**  **Information and Communication Technology Division** |

**1.0 Introduction**

1.1 Nothing in today's world can be imagined without the use of technology. Government has given special emphasis on the use of information technology in all sectors including empowerment of women/women development, business, education, agriculture, development, social and political activities throughout Bangladesh. Government and people want to see Bangladesh as an information-technology-rich digital Bangladesh. The concerned organizations and departments are working relentlessly for the development of technology; especially the Information and Communication Technology Division (ICTD). In order to promote Bangladesh to a middle-income country by materializing Bangladesh's declared Vision 2021, ICTD is implementing various activities including setting up internet connectivity across the country, establishment of human resources development, e-governance and development of ICT industry. Through the use of advanced and improved technology, ICTD is working on achieving sustainable development by 2030, implementing the 7th Five Year Plan, upgrading Bangladesh to a middle-income country by 2020, and establishing 'Vision-2021: Digital Bangladesh'.

1.2 To save the use of social media and internet by women, Digital Security Act 2018, Bangladesh High-Tech related SRO, Bangladesh Computer Council (BCC) Act 1990, Bangladesh High-Tech Park Authority (Amendment) Act 2014, Information and Communication Technology (Amendment) Act 2013, National Information and Communication Technology Policy 2018, Government e-mail Policy 2018, Fellowship/scholarships and innovation grants policy (amended) 2016 for research in the field of ICT, National Information and Communication Technology Policy 2015, Information Security Policy and Guidelines (Bengali and English Version), Cyber ​​Security Strategy, Digital Security Agency etc. have been formulated.

**2.0 Major Functions of ICT Division**

* Support 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;
* Create a guideline (roadmap) for the benefit of ICT services in commercial purpose;
* Coordinate among various ministries and organizations regarding ICT related issues;
* Implement the recommendations of Digital Bangladesh Task Force;
* Promote and update various IT activities through survey, design and research etc.; and
* Take initiatives to engage 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**: In order to strengthen e-governance structure, internet networking and broadband facilities are provided to different ministries/divisions, establishing e-centers to provide internet facilities and flow of information at District and Upazila level are being ensured. Women are getting free and easy access to information world and getting benefited direct and indirectly.

**3.2 Expansion and awareness acceleration on ICT education for human resource development:** ICT skilled manpower are being made by imparting IT training up to the root level through establishment of IT training institutions at District and Upazila level. Simultaneously training is also being conducted for the skill development of IT professionals making them fit for local and international ICT markets. Initiatives have been taken for introducing digital signature and creating public awareness. As a result, women are encouraged to be self-employed. Therefore, empowerment, skill development and participation of women in income generating activities are increasing.

**3.3 Development of ICT infrastructure:** Arrangingdifferent events like Digital World, BPO Summit, High School Programming, ICT Expo and Job Fair for physically challenged people for developing ICT industry which lead to create women entrepreneurs through training with a view to improve socio-economic condition of women. Infrastructure facilities such as hi-tech parks, IT villages, software technology parks, etc. are being created to expand the use of information technology for commercial use. Due to the infrastructure development activities, job opportunities are being created for the poor people as well as women.]

**3.4** **Development of ICT industry:** The well-educated female young, upon making them IT knowledgeable and employed them in information and communications sector, affecting the development of IT industry directly and indirectly. Financial and technical assistance for start-up idea, providing working- space facilities for start-up and participation of women in international conference facilitate women entrepreneurs contributing in ICT industry under the innovation planning and entrepreneurship development academy. Therefore, it helps to attract domestic and foreign investment as well as boost up our export income which leads to create huge job opportunities and reduce poverty especially for indigenous women. It facilitates women entrepreneurs to participate and contribute in ICT industry as well.

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

4.1 Though the economic growth rate of Bangladesh is high but, many people are still living below the poverty line and almost half of them are women. The goal of the 7th Five-Year Plan is to achieve growth through partnership in poverty reduction and social empowerment. About 7 million people are working in ICT sector, our of them only 30% are women. High educated and skilled manpower on ICT, encouraging research work, innovation of local and sustainable ideas, applying ICT based knowledge for the development of the country which lead to reduce poverty and create job opportunity especially for women with a view to ensure more participation of women in ICT sector. These also facilitate the supporting agenda of development as well. ICT division is implementing various activities to full- fill this goal.

4.2 Enhancing women's empowerment through training, motivating women to use IT, creating women entrepreneurs in ICT, ensuring women's working environment and ensuring gender equality at workplace etc.

4.3 Ensuring information security through job creation, diversification of export items and providing e-services by making 34000 skilled manpower under Leveraging Information and Communication Technologies (ICT) for Growth, Employment and Governance in the Information Technology (IT) and Information Technology Enabled Service (ITES) sectors. It also ensures the appropriate women’s participation as half of the total population of the country is women.

4.4 Under the IT Engineers Examination (ITEE) program, 795 persons including women have participated and 99 persons have achieved the ITEE certification till the financial year 2017-18. Under the project titled "Skills improvement of IT engineers suitable for Japanese IT sector" with the help of JICA proposed by BCC, 20 people were given 3 months training and 17 people have already been employed in Japan; of which 3 are women.

4.5 By 2021, the Ministry of Information and Communication Technology has undertaken various types of activities to improve the socio-economic condition of women as well as creating employment opportunities for women in order to build a committed Digital Bangladesh, which provides the following direct and indirect services to the women:

* In order to develop the ICT industry, Bangladesh Hi-tech Park Authority has been offering various training of different duration on ICT related to the professional graduate/ graduate students. Of these, 6418 people have been trained under the Support to Development of Kaliakoir High Heights Park, of which 21% are women. Under the Sheikh Kamal IT Training and Incubation Center project, there are ongoing training of 3100 people, of whom 25% are women. In addition, private IT companies operating in high-tech parks are encouraged to give preference to the appointment of women employees. Meanwhile, 360 women have been specially trained under the Kaliakoir High-tech Park project and policy decisions have been taken to appoint 30% women workers in every hi-tech park and software Technology Park under Bangladesh High-tech Park Authority. Women are given preference in allocation of space in multi-tenant building and room allocation in dormitory in various parks. According to the Private Software Technology Park Guidelines, there is a provision to keep baby day-care-center in every Hi-tech Park/ Software Technology Park;
* In order to empower women through ICT, this Division has adopted a project titled 'She Power', whose main purpose is to increase the women's participation in ICT sector, increasing the skills/capacity of women by using ICT ecosystem, creating women entrepreneurship, works and to ensure sustainable empowerment of women through ICT. Presently, 10500 women trainees are being trained in different categories for two years period in three categories namely Freelancer to Entrepreneur, IT Service Provider and Call Center Agent. After successful completion of 1st level, trainees will receive grant of BDT 3000, 2nd level BTD 4000 and 3rd level BDT 20000 for laptop purchase.
* In Bangladesh, women’s rights are being abused, tortured and belittled in many ways through cyber-crime. Especially young girls who are relatively inexperienced and new to the cyber world are the main target. The cyber-criminal defamed their status, creating threatening environment which lead to loss their esteem as well. It is imperative to create awareness for the empowerment of women of cybercrime. As a result, cyber security consciousness training can strengthen women to fight against cyber-crime. Therefore, 8th to 10th grade female students of schools and colleges are being trained up throughout the country.

**5.0 Priority Spending Areas and Benefits for Women’s Advancement**

| **Serial No.** | **Priority spending Area/programms** | **Benefits for women’s advancement**  **(Direct and Indirect)** |
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| **1** | **2** | **3** |
| 1 | Development of ICT Infrastructure | Ministry, division and government agencies have been given priority to develop infrastructure in the Information and Communication Technology sector to provide faster service to the people by using more ICTs. It helps to create job opportunity and to raise awareness through various training on ICT. |
| 2 | Establishment of Digital Bangladesh | In order to build digital Bangladesh, it is necessary to expand information technology and to create skilled manpower and entrepreneurs in this sector. Besides, the information technology sector has been given priority to earn foreign currency for Bangladesh. Women are also contributing to the development of ICT industries by attracting foreign and domestic investment under the information technology. As a result, export income is increasing in the ICT industry and poverty is being reduced by creating huge job opportunities for indigenous women. For this, huge opportunities are being created for women entrepreneurs to participate in ICT industry. |

**6.0 Women’s Share in Division’s Total Expenditure**

(Taka in Crore)

| **Description** | **Budget 2021-22** | | | **Revised 2020-21** | | | **Budget 2020-21** | | | **Actual 2019-20** | | |
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| **Budget** | **Women Share** | | **Revised** | **Women Share** | | **Budget** | **Women Share** | | **Actual** | **Women Share** | |
| **Women** | **percent** | **Women** | **percent** | **Women** | **percent** | **Women** | **percent** |
| Total Budget |  |  |  |  |  |  |  |  |  |  |  |  |
| Division’s Budget |  |  |  |  |  |  |  |  |  |  |  |  |
| Development |  |  |  |  |  |  |  |  |  |  |  |  |
| Operating |  |  |  |  |  |  |  |  |  |  |  |  |

Source: RCGP database

**7.0 Success of ICT department in promoting and establishing women’s development and rights:**

* In the fiscal year 2015-2016, 2016-17 and 2017-18 (March), 23608 people were trained in BKIICT of BCC and 6 divisional headquarters of which 20% are women. From 2015 to 2018, job fairs were organized for ICT-trained persons with disabilities and about 400 people with disabilities were employed in the fairs, 31 of them are women.
* **Setting up computer labs:** Training is being provided on ICTs through the 2001 laboratories established in different educational institutions in 64 districts under "Projecting Training and Language Lab" project.
* **Multimedia classrooms and digital content:** ICT education has been made compulsory from 6th to 12th standard. 21 textbooks have been transformed into digital multimedia text books which made the classroom learning easier for 1st to 5th classes. Women are also getting benefit from these transformed textbooks.
* **Establishment of e-governance:** ICT division is implementing different activities of IT industry including internet connectivity, human resources development and establishment of e-governance across the country. At district and upazila level, 18,059 government offices were brought under fiber optic connectivity. It helps to create job opportunity as well as creating awareness regarding ICT for women.
* **Establishment of National Data Center and Cyber ​​Center:** National Data Centre at BCC and 129 specialized labs at different universities/ institutions have been set up. As a result, the number of trained women is increasing and employment opportunities are being created. The activities of establishing Tier-IV Data Center with the financial assistance of China Exim Bank are in progress.
* **Fairs and promotional activities:** In the National Information and Communication Technology Policy-2015, it has been cited that the building awareness and potential of the 'Information Technology Enabled Service (ITES)’, It has been mentioned to increase the awareness and potential of entrepreneurs with the help of TV, radio, community radio and newspapers will help citizens to understand the usefulness of IT. In addition to promoting IT related innovations in public and private enterprises every year, digital innovation fairs and internet fairs are being organized at district level which will contribute to increase creativity and innovative power in the use of IT. Potential women entrepreneurs will be benefited by participating in these programs. In the meantime, digital innovation fairs have been organized at the national level, in all divisions and districts. In this continuation, Digital World-2016 and Digital World-2017 were organized under the Digital Bangladesh Building Program where seminars, workshops and round-table talks were arranged. There was a separate arrangement for women.
* **Employment Generation:** Programs have been taken to create educated youth society by transforming skilled manpower into self-reliance. 2-days basic training and 5-days skill training programs are being provided in every district of the country to create skill to earn at home through online. Under the Learning and Earning Development Project, 25000 people have been trained in the financial year 2017-18 to achieve online outsourcing skills. To become self-reliant, outsourcing training are being provides to all the educated unemployed women in the country under Bari Bosey Barolok Prosikkhon' program has been adopted. Under this program, 14360 women have been given training on 2 days ‘online basic outsourcing training’ at district and upazila levels and out of basic outsourcing trained women; selected 2240 were given 5 days of relevant advanced training. Besides, 5 days training has been organized in public and private universities in all districts for increasing mobile application awareness and developing skill which facilitate the global participation on mobile application. ‘National Mobile Apps Competition’ has been organized in this regard. Women have the same opportunity to participate in these trainings and competitions as well as men. Through this training, 2400 App Developers have been created across the country. Under the Freelancer to Entrepreneur Development Program, 2512 people have already been trained up, out of which 2305 are men and 217 are women.
* **A case study or success story**

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| **Food at home**  Afrina Tanjin was living normal life like other women. But he had dreams in her eyes and the hope of doing something different. In addition to give a realistic view of the different thinking of her own, she had the purpose and desire to serve the society all along. Afrina applied for the realization of her dream to a2i ‘Service Innovation Fund (SIF)’. It is one of the fund of a2i’s uncountable activities. Financial and technical support is provided to implement the innovative ideas of people of different levels of the society from this fund. When Afrina knew about the SIF, having an innovative idea of Homefoodz, Afrina applied for the fund. She wanted to build a reliable platform, where it can easily be found the information of fresh food and purchase order will be given at home. Afrina noticed that generally anyone in Bangladesh is not aware of the places where healthier and fresh homemade food is available. That is why people were forced to eat unhealthy foods from nearby food shops. On the other hand, the time and skill of the housewives are not used properly. As a result, they get less chance of self-reliance. In the absence of reliable platforms, customer contact is not possible with the healthy and fresh homemade food. To solve this problem, Afrina innovated an idea which can be used a mobile application or web application, through their mobile, tab or computer to find good food shoppers nearby. Then, after ordering the food, whoever receives the order, he/she can prepare food or supply by himself/herself or get help from a delivery partner. Afrina’s idea has finally turned into a project under SIF fund in the consideration of a concerned adjudication body. Later, with financial and technical support of a2i, the project was fully inaugurated. Currently, the App is available at google play store in the name of ‘Homefoodz’ for food buyers and ‘Homefoodz Provider’ for food suppliers and a large number of users are being benefited. In this way, a2i Program of ICTD is playing a vital role in creating women entrepreneurs. |

**8.0 Recommendations for Future Activities**

* + Enacting new laws and amendment of the existing laws in ICT field to achieve targets that serve the interests of women;
  + Include women members in different project committees to increase the participation of women in the different implementation and administration stages of different projects under ICT Division;
  + Take necessary steps to provide specific opportunities for women at all types of ICT oriented activities in order to promote influence and empower women group;
  + Introduce quota system for women in IT related trainings.
  + Provide incentives specific to attract women in ICT related training and industry for the expansion of ICT based education;
  + More than 50% of the beneficiaries of social safety net related programs are women. Initiatives have been taken for the use of ICT in the administration and management level which will ensure rendering services easily.
  + Removing abusive issues of cyber world, initiatives for submitting necessary reports to the learned Court and to aware women on digital crimes;
  + Proper use of digital signatures by trained and skilled women entrepreneurs and officials, which help women managing own information and documents and financial transactions in their respective areas and encouraging them to receive training on digital signature;
  + To make arrangement for sustainable participation of women in Digital Financial Service;
  + To create Venture Capital fund for women in ICT related activities.