EDUCATIONAL SUPPORT FOR CHILDREN WITH DISABILITIES AND THE UTILIZATION OF ICT

Introduction:

Bangladesh is an independent democratic country situated in the Southeast Asian region and surrounded by India, Myanmar and The Bay of Bengal. Bangladesh has a population of about 130 million in an area of 1,47,570 square kilometers with a density of 834 persons per square kilometer. World Health Organization (WHO) estimated that in developing countries 10% of the populations are affected by some sort of disabilities. It indicates that there are 13 million people with disability living in Bangladesh, 85% of them are living in the rural areas.

Unfortunately the issue of the disabled children in development initiatives still remains neglected and uncovered. But in the past recent years there has been a significant change in the policy array on disability agenda both at the governmental and non-governmental intensity. Government has approved the 'National Policy for the people with disability' in 1995 and an 'Action Plan' for implementation of provisions enunciated in the National Policy. Programs have been taken for people with disabilities in the public sectors. Inspire of limitations like scarcity of resources, lack of professionalism and intervening technology, Bangladesh has attached high priority to the disability agenda. Our efforts are in accordance with the Plan of Action of “Asian and Pacific Decade of Disabled 1993-2002”. We also follow the objectives and guidelines of the United Nation resolutions on “Rights of the Disabled”; the proclamation “Full participation and equality of people with disability in the Asia and Pacific Region” has been signed by our Government. In order to give a legal coverage or status to the issues the concerned ministry has enacted a Legal Act-known as “Bangladesh Disability Welfare Act-2001” passed by the National Parliament.

Education is the fundamental right for all people. Every government has the responsibility to provide basic education for all. But developing countries like Bangladesh is facing the problem of insufficient fund flow in the field of education. Especially the marginal people are most badly affected. In recent years, the literacy rate in Bangladesh is trying to increase rapidly towards the goal of eradicating illiteracy fully by the year 2015. Both the government and the non-government
organizations with the internal and external resources have been contributing to the growth of this national literacy rate. However, a most vulnerable section of the population, the people with disabilities has not been brought under this praiseworthy nationwide education program being carried out by the Government and NGOs in the country. In recent days, Information and communication technology (ICT) is so implicated in everyday affairs all over the world, it is regarded as obligatory for people in every affair for the development of livelihoods. In the last ten years, there has been much progress worldwide in ICT development, which has opened up many opportunities for people with disabilities especially in matters of networking, solidarity, employment and independent living. Assistive computer technology and other augmentative communications products make easy access to information and communication for people with disabilities. These assistive computer technologies can also facilitate access to increased employment opportunities.

**Education Situation of People with Disabilities in Bangladesh:**

Bangladesh is running educational programmes through two ministries namely the Ministry of Education (MOE) and the Ministry of Primary and Mass Education (MOPME) and some directorates under them. A study conducted in 2002 by Centre for Services and Information on Disability under Directorate of Primary Education titled ESTEEM STUDY II: Education children in Difficult Circumstances: Children with Disabilities reflect that only 11% of children with disabilities are receiving some sort of education in Bangladesh. Most of these numbers are enrolled in education by parental initiative in the regular educational settings and some are enrolled in the special educational programmes for the disabled run by the Ministry of Social Welfare.

**Educational Initiatives of Ministry of Social Welfare for the People with Disabilities:**

The divisional office of Social Welfare has residential seats for students of hearing impairment and visual impairment. On the other hand, each district of Bangladesh is running Integrated Education for the Children with Visual Impairment. Each disabled student under this project gets food and other expenses including education and refreshment. Budget Allocation of different development project of Ministry of Social Welfare covers some areas like development and Modernization of Maitree Shilpa for the Physically Handicapped, Training and Rehabilitation Centre for the Social Handicapped Girls etc. The ministry of Social Welfare had taken a number of new initiatives in the year 2001-2002. Among the six (6) new initiatives, four are on persons with disabilities such as Employment Rehabilitation Center for the Physically Handicapped, Bangladesh Disabled Institute, Training Centre for the Orphan and Disabled, Project of the Social, Development and Rehabilitation for the persons with disabilities etc.

The Government of Bangladesh, under the department of Social Services, Ministry of Social Welfare is presently running the following programmes for the persons with disabilities-P.H.T Centre, Schools for the Deaf and Dumb, Schools for the Blind, Integrated Programme for the
Blind, Rural Rehabilitation Centre for the Physically Handicapped (RRC) National Centre for the Special Education (NCSE), Employment Rehabilitation Centre for the Physically Handicapped, Employment center of Training and Rehabilitation for the Blind, Braille Press etc. National Foundation for Development of the Disabled Persons is an autonomous body under the Ministry of Social Welfare, which is established for the overall development of the lifestyle of the people with disabilities in Bangladesh. The Foundation is providing monetary support to NGOs in their programmes related to disability, education and ICT. Moreover, this body is doing the activities like supervision of development efforts in the field of disability, educational and health related project support, legal support etc. According to the Act enacted for the people with disabilities, 64 District Coordination Committees have been formed in 64 districts in Bangladesh. The Foundation is playing an important role to make a harmony among the activities of these committees. National Centre for Special Education (NCSE) under this Foundation is playing a role for the development of human resources in the field of disability. National Foundation is also distributing fund from a special allocation of the Government in the National Budget among the development initiators who are running disability related activities.

Current ICT Infrastructure:

According to the country report of the Secretary of the Ministry of Social Welfare, Government of the People's Republic of Bangladesh presented in the Interregional Seminar and Regional Demonstration Workshop on Accessible Information and Communications Technologies (ICT) for Persons with Disabilities in Philippines held in March 3-7, 2003 the Government of Bangladesh has undertaken a number of steps for ICT infra-structural joining of Bangladesh with fibre-Optic Sub-marine cable network is underway; emphasizing development of telecommunication infrastructure deemed as industrial development to support the growing demands of the ICT sector, both in Public and Private sector; taking steps to amend fiscal policy (Customs Duty and Tax etc.) towards procurement of telecommunication infrastructures as well as cellular telephone handset, encouragement for optimum utilization of MW/UHF towers, Radio Towers, Power Pylons, Cable Duct by the private sector for augmenting information infrastructure; constructing countrywide National Information Infrastructure (NII) for the use of all Telecommunication and Internet Service Providers (ISP), co-operation between BTTB with private licensed ICT service providers ensuring the use of existing facilities to be established; providing dial-up Internet access from local telephone-calls, ISP, ensuring public access to information, cyber kiosks will be set-up in all post offices, union parishad (council) complex and upazila (Sub-district) complexes. Private sector participants will be encouraged to set-up theses facilities.

ICT practices in Bangladesh for the People with Disabilities:

a. National Foundation for Development of the Disabled Persons:

National Foundation for Development of the Disabled Persons has already provided supports to many non-government organizations in their disability related activities to include ICT based
projects as well. National Centre for Special Education (NCSE) situated in the Dhaka city is going to initiate ICT based courses in their HRD activities in near future.

b. ICT Based Assessment and Assistive Devices:

Bangladesh is now providing ICT based Assessment system for identification of diversified types and degrees of disabilities. ICT based assessment system includes audiological assessment, vision test, intelligence testing etc. Selection and setting of assistive devices like hearing aids. Cochlea implant, artificial limbs etc.

c. Augmentative and Alternative Communication Devices:

Bangladesh has developed a standard alternative communication approach that is called Sign Supported Bangla Language. An Interactive CD is also available with the printed documents of the language which includes video clips of the developed signs with their photos and easy to access like a web page. This language is appropriate for the children with hearing-impairment, autism. Children with intellectual disabilities, children with multiple disabilities, children with CP and development of Augmentative Communication.

d. Training of Teachers on utilization of ICT:

Department of Special Education of the Institute of Education and Research (I.E.R.) of the University of Dhaka is providing a four years graduation and one-year master’s level programme to develop experts, special educators and teacher trainers. In this long professional curriculum there are two courses on ICT that is developing the products of the department to apply ICT in the development of people with disabilities in Bangladesh. This department has a rich library on education and disability that also disseminates information in this technical field.

e. NGO Practices on ICT:

Centre for Services and Information of Disability (CSID), a non-profit voluntary organization is disseminating information on various issues of disabilities through using-email networks. This project is known as Disability Information Dissemination Network (DID-Net) and there are more than 200 subscribers of this ICT network.

BFES has developed different education models aiming to improve quality of education in Bangladesh. These are based on knowledge assembled through international collaboration and achievements through information dissemination process. To develop and nurture an international network of committed educators, parents, and other dedicated to the development of effective uses of ICT in education, ICT for disadvantaged people of Bangladesh aiming at creating employment opportunity for rural poor.

**World Perspective of ICT Application for the people with disabilities:**

People with disabilities in the Asia and Pacific region, however, still face multiple barriers
in accessing ICT and the skills and knowledge that are required to benefit from it. The basic problem for many is the absence or the lack of the infrastructure to support ICT development, access and use-electricity, telecommunications, hardware and software. The problem is especially acute in rural areas in the region where a majority of people with disabilities live. Even in industrialized countries, Internet accessibility for people with disabilities is significantly lower than for non-disabled people. The transformation of the Internet from a text-based medium to multimedia environment is also causing problems for people with disabilities. With a text-based medium, people with visual disabilities could use screen readers to access the internet but the predominantly graphical web pages that characterize current Internet traffic poses a barrier.

People with learning, cognitive or hearing disabilities are also experiencing difficulties with assistive computer technology that cannot help them conduct web transactions because the new Internet environment does not accommodate the functionality needs of accessible design. Moreover, people with disabilities still face many obstacles in the job market of an increasing digitalized economy due to lack of the skills and the understanding in ICT applications, reflecting the general low-level educational attainment.

**MANILA DECLARATION ON ACCESSIBLE ICT:**

In the Interregional Seminar and Demonstration Workshop on Accessible ICT and Persons with Disabilities, held at Manila from 3 to 7 March 2003, representing the countries of Bangladesh, Brunei Darussalam, Cambodia, Canada, Indonesia, Laos People's Democratic Republic, Myanmar, Pakistan, the Philippines, Thailand, Vietnam, and the United States of America, declared to develop scopes of possibilities to access the virtual world and knowledge-based economies by means of the global Internet and related information and communications technologies remain limited to many people in countries, persons with disabilities in particular.

**Suggested Elements of Empowerment Strategies:**

ICT training should be initiated at different levels for different target groups to meet the demand of skilled human resources in this field. Trainings should be accessible for people with disabilities. Ministry of Social Welfare and Ministry of Education or MOPME in collaboration with the NGO initiatives working with the people with disabilities, should play the key role in implementing this programme. Educational institutions at different levels of higher studies, both in the public and private sectors, should provide courses to produce ICT graduates of International standard. Special arrangements should be made for the people with disabilities in those institutions.

It should be encouraged by the government to promote computer-aided education at all level. People with disabilities will have to be provided special incentives to have maximum access to these facilities.

Maximum use of telecommunication system and other communication devices should be
ensured by the government to ensure the up growing course of ICT movements.

Internet, talking website and signing facilities should be provided in the country to make the ICT field usable for the people with disabilities. Number of schools for the children with disabilities should be increased and those schools should have computer facilities.

It is important to reform existing national policies of different sectors related to disability issues. It is also necessary to develop rules and required procedural policies in support of inclusion of children with special needs through MOE and MOSW.

Coordination is essential within the ministry, inter-ministries and inter-departments for systematic and coordinated interventions towards promotion of education for children with special needs. School management policy should include issues of education of children with special needs into their existing regulations.

NGOs dealing with the PWDs should be encouraged to establish centers at the village level for providing hard ware/soft ware or other support services. At the same time concerned agencies of the government will use both the formal and non-formal channels to disseminate information about the application, advantages to the PWDs of the use of ICT.

It is necessary to develop a learner-oriented curriculum for better quality learning, especially for the children with special needs. This requires curriculum modification and simplification and development of appropriate teaching materials to make lessons attractive. Screening and assessment of disability is a precondition to provide accurate education and other support services.

Assistive and educational devices help the learning process; psychosocial development, communication and mobility of children with disabilities, help them to participate in classroom activities independently and efficiently. So, these services should be ensured for better quality education.

Accessibility to any educational set up is one of the major factors for children with disabilities. Besides, other special need services like occupational therapy, speech therapy etc. are required to allow learners with disabilities to get in touch with education.

Referral is required for assessment and management of special needs of people with disabilities. Proper counseling and guidance by school authority can facilitate children with disabilities, families, peers and community people to get access to the services and enable them to get in touch with the inclusion process.

**Conclusion**

ICT and its wide area of application have explored a new prospect towards expansion of
business like many countries in the Southeast and South Asian region. Bangladesh, as well as other developing countries, may also take the opportunity to eradicate poverty enhancing the income of the people equitably through the optimum exploitation of the potential ICT based education in a very short time. To accelerate the process of economic development through export of software and data processing, expansion of infra-structural facilities (Establishment of the Connectivity by Fibre Optic Marine Cable Network with International communication backbone), development of human resources on ICT, with special emphasis to people with disabilities, allocation of more resources in the national budgetary provision for development of ICT based education and ICT related activities are essential pre-requisites. As a developing country, Bangladesh should utilize this reward of new era for the development of people with disabilities.

References: