# EMPOWERING PERSONS WITH DISABILITIES THROUGH IT INNOVATIONS S.N.

Goswami, V.K. Bhatia, Dr. Hemlata

Media Lab Asia, 708-723 Devika Towers

Nehru Place, New Delhi 110019

Ph .011 26443266. Fax 26288189

# INTRODUCTION

Recent years have witnessed a global shift in the perception and treatment of persons with disabilities towards a human rights perspective. This perspective view people with disabilities as not only subjects in the development process, but also partners and owners of the development process and its production.

According to census 2001 India is having 2.1% persons with disabilities. Since independence Government of India has taken several initiatives for improving the lives of persons with disabilities. Still the opportunities for persons with disabilities as compared to their population are negligible. Most of these opportunities are urban based while 70% of the persons with disabilities reside in the rural areas. Although progress has been made in the country through various provisions and policies but still they are legging behind. India is a very big country with geographical and cultural diversity therefore the efforts made by the government and other stakeholders are not able to cater the need of persons with disabilities. Our social system is inclusive by nature therefore the lack of facilities and provisions are bearable and the persons with disabilities manage to cope up with the situation with the help of community and family support.

Sharing of information is the key to success in any developing country and we should also follow the same path. The use of IT in disability sector is essential in reducing the handicapping effects of specific disabilities. When human resources are inadequate it is often easier to procure and provide technological solutions. Although economic restriction can affect access to technologies, it can represent a good investment. The area of disability can not afford to miss the opportunities at this crucial juncture. To make the life better for person with disabilities, all resources need to be mobilized and used effectively. Technology is not the substitute of human teacher but can be a most valuable tool to supplement their contribution.

Our present mission is to change the present social systems by involving all the stakeholders of the society which will help millions of persons with disabilities to make their dream come true.

## BARRIERS FOR THE SUCCESS OF PERSONS WITH DISABILITIES

Although Government of India has taken several initiatives for the benefit of persons with disabilities bur still most of the persons with disabilities do not have access to education and other facilities to participate in the social life with their fullest potentials. Inadequate education facilities, lack of community support system, lack of accessibility, lack of awareness, inadequate self advocacy skills, lack of access to technology and lack of appropriate health care systems have been the stumbling block to their mainstreaming in the society. We need to provide them access and opportunities and accept them as a productive partner for an inclusive society.

# OPTION: EFFECTIVE USE OF IT WILL CHANGE THE LIFE

Although a lot of work is done for the capacity building of NGOs however we need to take more efforts. To facilitate persons with disabilities we need to provide them cost effective technologies which can improve their lives and make them productive member of society. We need to carefully augment human resource oriented technologies so that persons with disabilities can also be employed .Research with a view to develop cost effective, user friendly and durable aids and appliances for persons with disabilities with the help of various technological institutes should be undertaken for enhanced personal mobility and verbal/nonverbal communication. Design changes in the everyday usage articles should be encouraged. To get the benefit of all the research and information availability first we need to have all the information available to us at one place then only the lack will be noticed and work will be done on those aspects.

## INITIATIVES OF MEDIA LAB ASIA FOR PERSONS WITH DISABILITIES

Media Lab Asia, a section 25 company promoted by Ministry of Communications and IT, Government of India is mandated to leverage the benefits of ICT for Empowering persons with disabilities. It has the mandate and competency to bring the persons with disabilities to mainstream as practicable by facilitating them the Education, Rehabilitation/ Inclusion and Communication augmentation. It will lead to "Intangible

Multiplier Effect" and make them self-sustainable, thus lessens Government. burden. Media Lab Asia is engaged in and supporting several projects to empower differently abled. It is implementing a Comprehensive Satellite/Internet based National Network for initiating interactive programs through Edusat for students, parents, trainee teachers and professionals associated with and engaged in different areas of disabilities like Mental Retardation, Visual Impairment, Hearing Impairment, Autism, Cerebral Palsy and Multiple Disabilities etc. Media Lab Asia is also involved in hosting a "Comprehensive Internet Portal" to provide all the related information at one platform.

Media Lab Asia is working with a growing national network of research laboratories for bringing the benefits of technologies to the common man. For empowerment of persons with disabilities, the focus has been given on the education, communication, rehabilitation tools and the capacity building of the persons with disabilities. In a continuing effort to respond to the felt and expressed needs of the Rehabilitation sector, RCI shouldered the responsibility of reaching out to hitherto un-reached areas through the use of modern interactive technologies.

## REHABILITATION COUNCIL OF INDIA

Rehabilitation council of India is a statutory body of Ministry of Social Justice and Empowerment, Government of India. It has been entrusted with the task of regulating training policies and programmes, standardization and development of training courses, recognition of institutions and courses, promotion of research, collection and dissemination of information to improve the quality of special education and rehabilitation. More than 100 training programmes of different levels have been developed according to the need & resources available by Rehabilitation Council of India in last decade. At present there are more than 300 institutes running around 50 courses all over India. Every year approximately 5000 students are undergoing these training courses in 300 batches in regular mode. RCI is also running training programmes through distance mode in collaboration with a number of Universities and 3000 students are undergoing the programmes each year through distance mode. The vision of RCI is to enhance the standard and quality of special education and rehabilitation for the betterment of persons with disability in the country.

# THE PROPOSAL

NGOs in disability section needs to have access to database. Suitable policies need to be evolved for an effective social development & human resource development. To build the skills and updating the knowledge of the parents & professionals short terms courses needs to be developed. The professionals, students, parents, community workers, person with disabilities and all the other stakeholder needs to be involved in the creation and maintenance of a comprehensive data base and they all should contribute to expand the database.

The utilization of modern information and interaction system can play a vital role in improving the quality of rehabilitation professionals and also play an important role in reaching the un-reached. With two powerful communication mediums i.e. Satellite & Internet no part of the country will be left out. All such schools in India and abroad, able system will be having computer-based to access repository text/audio/multimedia for their education. Through networking teaching can be reached even to small groups of persons with disability at remotest part in the country. Once the EDUSAT network and web portal is ready it is expected that adding a school or an NGO in the hitherto uncovered area of the country or to bring remaining left out persons with disabilities to the fold of this network will be simple and modular.

RCI and Media Lab Asia has realized the immense need of availability of disability related information at one place. To provide the authentic information from all the government bodies and other stakeholders is not an easy task it requires the support and cooperation from all. RCI has provided that platform where all stakeholders are at the same footing. The provision of Web Court in the portal is a unique example of inter ministerial convergence. The live teleconference programmes are providing the experts at the doorstep of the learners and enhancing their skills. The support and cooperation of Chief Commissioner for Persons with Disabilities, National Trust and the overall handholding of Ministry of Social Justice and Empowerment and Ministry of Information and Communication Technology is praiseworthy. Media Lab Asia and RCI have taken the responsibility of bringing all the stakeholders together and joined hands for this innovative and Herculean task.

The basic components of EDUSAT uplink and internet portals are as following:

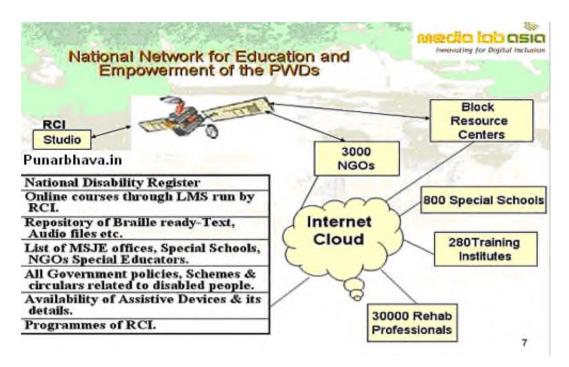
## A. EDUSAT UPLINK

RCI initiated this new mode of telecommunication to reach the remotest areas. Earlier they started a series of live Tele-conference on disability issues in collaboration with Electronic Media Production Centre (EMPC), IGNOU with the use of one-way video two-way audio interactions since March 2005 on weekly basis. The target audience includes parents, teacher trainees, counselors, professionals, personnel etc. Tele-conferencing programmes gave an overwhelming response from all part of the country. The limited expertise and very few institutions having all the resources in the area of disability have resulted in the demand of the information and availability.

Now RCI has got the satellite connectivity through ISRO in Extended C- Band which will work as a disability channel. This initiative will lead to an independent disability channel through which total information on disability rehabilitation can be shared by the Government as well as professionals across the country. Therefore RCI has taken the lead in providing up to date information on disability related issues, with the financial support from Media Lab Asia they have built a studio at their campus and are linking all the training institutions of the country. Various programmes would be conducted through this network for the benefit of various stakeholders.

## **B. INTERNET PORTAL**

Although certain efforts have been taken by Government and some likeminded people but still there is a lack of availability of all the information at one place. Media Lab Asia and RCI have proposed to setup a comprehensive Internet portal providing all the related information regarding different disability issues. Internet is a very strong medium and now it is spreading its wings in the remote parts of the country. The motive is to provide the information at affordable cost to the doorstep of people. The various subsections for the web portal have been carefully selected to meet the entire lifecycle needs of persons with disability. The information will be as follows:



#### Grievance redressal

- a. National Disability Register Will provide information for receiving the disability certificates, those who do not have a disability certificate can download the application and apply their applications will be forwarded to the appropriate authorities.
- b. Web court will provide opportunities to persons with disabilities and other stakeholders to get help from The office of Chief Commissioner for Persons with Disabilities, RCI, National Trust and other affiliated parts of the ministry of social justice and empowerment.

## Resources

- c. All government orders, laws, circulars, notices and other important information will be available for download from the portal as required.
- d. Repository of books in Text, Audio & multimedia mode will be available for download on as required basis. In the schools where computer based printing system is available the text in language script (Large print) or Braille script can be printed locally. The ready to use content, which are available with the ministry, the national institutes, national trust, office of the chief commissioner of the disabilities and NGOs working on the disability sector will be acquired. The video/audio/multimedia content thus acquired will be cataloged and stored in web ready format that will be available for download from anywhere including remote/rural areas. Nominal fees will be charged for such transaction.

- e. All Block Resource Centers will be able to access through Internet and interact with different offices.
- f. A dedicated section will be available for information on professional/personnel and students being trained as specialists. Currently there are 30000 such professionals and estimated fresh registration is 5000 per year.
- g. The details of all NGOs working in the field of disability in India will be made available in the portal. The proposal for different projects on education, care giving and rehabilitation of persons with disabilities will be uploaded for sponsors to interact with NGOs for possible financing and monitoring etc in the second phase.
- h. The program generated in the studio of RCI will be converted to web ready format dubbed in major Indian languages and will be stored in the portal for downloading by the NGOs.

# Purchase of aids and appliances

i. List of Assistive Devices available in India including vendor details and ADIP schemes etc. will also be available from the portal. Links with websites of important vendors/disability centers abroad, will be provided. Persons with disabilities will be able to purchase the aids and appliances through on line transaction.

## Advocacy

- j. Closed user group will be created among the persons with disability and persons engaged in their training education, person care and rehabilitation. It is expected that persons residing in remote/rural areas will benefit much from the same by sharing the experience of other people.
- k. Case studies, success stories, role modals and innovative practices will be uploaded on the portal to motivate the persons with disabilities.
- I. Name and CVs of persons with disabilities, professionals, caregivers and volunteers will be uploaded on the portal. The employers will also be able to post the job vacancies on the portal. This will provide opportunities to them to interact with each other and benefit the persons with disabilities.
- m. Media gallery will have news from the country and national as will as international forthcoming events.

# **Learning Management System**

- n. Training courses will also be available in English in e-Leaning mode. This will be open for registration from overseas as well. The courses formulated by RCI will be offered though e-Learning. Fees will be charged for online courses.
- o. Short term programmes in disability developed by institutions and NGOs will also be available on the portal for upgrading the knowledge and skills of the professional and others.

## **EXPECTED OUTCOMES**

Media Lab Asia has joined hands with RCI to fill the gap of the availability of information and thus improving the lives of persons with disabilities. The Web portal and EDUSAT connectivity will open new horizons for persons with disabilities. This is the first ever initiative in India where three Government of India Organizations have joined hands for reaching the un reached and providing them opportunities to fully participate in the social life and become productive member of society. This project itself is a very good example of convergence of three ministries and can be followed by others also. This collaborative effort will be beneficial in the following ways:

- 1. Better training opportunities to the students, parents, professionals, personnel, etc.
- 2. To upgrade the attitude, knowledge and skills of trainees, trainers, and related professionals and stakeholders in disability prevention and rehabilitation.
- 3. Dissemination of information to persons with disabilities families, and general public.
- 4. To facilitate training through distance mode.
- 5. Sharing of resource materials.
- 6. Providing access to experts in various fields.
- 7. Experience sharing between various institutions.
- 8. IT access and other hands-on activities for all stakeholders
- 9. Self determination skill building for persons with disabilities
- 10. Career opportunities for persons with disabilities and rehabilitation professionals
- 11. Availability of all disability related authentic information at one place,
- 12. Bridging the gap of lack of trained manpower and chance to interact with the eminent experts,

- 13. Finding likeminded people to share their ideas for initiating own business or sheltered workshops.
- 14. Getting peer and mentor support,
- 15. Gap areas in infrastructure will be visible.
- 16. Gap area in support will be visible
- 17. Requirement of development of Product & Services.
- 18. Requirement of research-ICT, Psychometric, Medical etc.
- 19. Requirement of W3C compliant websites.

# **CONCLUSION**

The collaboration project with RCI will be a landmark in the area of disability. The comprehensive interaction will be available at one part. Those who can get the information through internet will be accessing information though that and these who do not have access to internet will have and option to go to the nearby training centre /kiosks to get the information. This portal will also be supported by the EDUSAT satellite uplink where the stakeholder will get live information and have a chance to interact with the eminent experts in the relevant disability area. It is planned in a way that regular updating of information & data will be done. All the information available on web portal will be validated & updated in consultation with the experts.

This collaboration will open up a whole new horizon for teachers, persons with disability and their families and all the stakeholders. This is the beginning of a new era in human resource development for the Disability/Rehabilitation sector in India. In this joint venture even the sky is not a limit.