

## **The Role of ICTs and Assistive Technologies: Promoting Self-reliance and Livelihoods for Person with Disabilities' during UNESCO's international conference**

The session on the role of ICTs and Assistive Technologies: Promoting Self-reliance and Livelihoods for Person with Disabilities' was conducted by Digital Empowerment Foundation in association with UNESCO on 24<sup>th</sup> November 2014. The session was a part of UNESCO's international conference on ICTs for people with disabilities which was conducted over a span of 3 days from 24<sup>th</sup> to 26<sup>th</sup> November, 2014. The objective of this Conference was to promote the human rights and fundamental freedoms of persons with disabilities and to encourage all stakeholders to take concrete measures for the empowerment of persons with disabilities through the use of information and communication technologies (ICTs).

There are more than 650 million persons with disabilities around the world. The world disability report published by the World Organization WHO and World Bank, states that 15% of the world population have some disability. People with disabilities usually suffer from discrimination and exclusion from the society. The session looks at elaborating on how lives for people can be made easier and better through ICT Tools and various other assistive technologies. The session will discuss issues surrounding the limitations of disabled people and how technology can make their lives easier and better.

The session tried to throw light on how Information and communication technologies and other assistive technologies can play an important role in making lives for differently abled people easier and better.

This session was kick started by Ms Sharmishtha Atreja who reported on the recent ICTS national conference organised by OKC and DEF. The topics included inclusive education, aspirations of youth, enabling art & culture for persons with disability and young innovators. Later Ms Avesta Chouhary gave statistics on disabilities on India, emphasising the rural/urban divide. She then gave examples of ICT-based assistive solutions in India which lead to the panel discussion.

Introducing the panel, Ms Shanti Raghavan, founder of EnAble India and moderator for the session, emphasised on the importance of wage employment and livelihood for inclusion. She stated, "Enable India believes that any person can do any job with solutions. That's where ICT come in." She gave the example of a person who can only move her thumb but thanks to assistance and technology is a program manager at ECM<sup>2</sup>.

Dr. Uma Tuli, founder of Amar Jyoti Trust, shared her experience of ground reality from, sharing of experience from the Amar Jyoti Trust. With a barrier-free, holistic approach the Trust's campus provides education, medical care, outreach camps and employment as

these are all interdependent. She gave examples of solutions including a tactile path for orientation.

Marcus Goddard presented examples of digital tech that could empower PWD. Although cutting-edge tech is expensive, technologies like 3D-printing and the hacker/maker movement are making many solutions more affordable. Digital innovations can also increase empathy and inclusion of PWD by raising awareness.

Ramesh C Gaur , university librarian , Jawahar Lal Nehru University, stated that making people employable is a university's goal, whether students are disabled or not. He gave the example of his university's Helen Keller unit for the visually disabled. He pointed out that access to available digital (therefore more accessible) content in the relevant language was more of a problem than technology. He has prepared a proposal to create national resources for the visually challenged.

Sudesh Mukhopadhyay, chairman of Rehabilitation council of India stated that PWD of employable age in India represented 60% of the "disabled" population. According to World Bank figures, 51% of this population is not literate and only 8% reach class 8. Unemployment is highest amongst people with mental retardation. There is a digital divide within the disabled population.

Wrapping up, Rajev Varda discussed the cost of tech, which often drove people to use unlicensed software. He announced a project to make part of a national museum accessible to PWD.

### **Following are the key Recommendations from the session :-**

#### **Government:**

- Ensure that new technologies are made accessible as they emerge
- Provide enabling grants for institutions
- Publish a blacklist of non-accessible government websites

#### **Industry:**

- Focus on changing the mindset of employers who reject PWD.
- Have a systematic roster of disabled people in every company.
- Develop ICT solutions for small farms, a huge proportion of India's rural population.
- Make websites more accessible to visually impaired.
  - more specifically, improve accessibility of captchas, not with difficult audio captchas.

## Education:

- Create a national resource centre for university's digital archives to avoid duplicating work.
- Provide training needed for university support staff to help them implement technological solutions.
- Provide career counselling & spread knowledge of opportunities for PWD.