Regional Forum on ICT Capacity Building:
Where are we, where are we going and what will it take to fill the gap?
5-6 March 2007
Incheon, Republic of Korea

CONCLUSION AND RECOMMENDATIONS

Conclusion

The participation of all citizens in the Information Society represents the foundation for maximizing the benefits of information and communication technology (ICT) for sustainable social and economic development and achieving internationally agreed development goals, including the Millennium Development Goals (MDGs). The Declaration of Principles of the World Summit on the Information Society stressed that "each person should have the opportunity to acquire the necessary skills and knowledge in order to understand, participate actively in, and benefit fully from, the Information Society and the knowledge economy". Indeed, the related Plan of Action calls for international and regional cooperation in the field of capacity-building, with an emphasis on creating a critical mass of qualified and skilled ICT professionals and experts.

While it is generally recognized that the globalization phenomena is bringing countries closer together and creating new opportunities for socio-economic development and collaboration, these rapid changes have also caused countries that lack trained and skilled human resources to fall further behind and face difficulties in catching up in the use of emerging technologies and cope with the related technological trends. In an increasingly information and knowledge intensive society, these countries also face difficult challenges by lagging behind in their ability to access information and knowledge. At the same time, the appropriate use of ICT can offer a way to leapfrog over a number of intermediate stages of development so as to create a level playing field for countries suffering the most from the development and digital divide. In this regard, building capacity in ICT for development, particularly ICT human resource capacity, will create new socio-economic opportunities, improve knowledge acquisition and application, thus enhancing sustainable development.

The participants from the 48 countries and delegates from diplomatic missions in the Republic of Korea, as well as representatives from international, regional and national organizations, the private sector, academia and civil society who attended the Regional Forum on "ICT Capacity Building: Where are we, where are we going and what will it take to fill the gap?" noted that the meeting was most useful and timely in providing a greater understanding of the all important role of ICT in the context of a knowledge based global economy and for taking stock of the capacity-building initiatives and ICT human resource situation in the Asia-Pacific region. Furthermore, the participants were apprised of current developments in the design of ICT human resource capacity indicators as well as strategies to synergize and integrate capacity-building efforts through a broad base of stakeholders. The participants agreed that the Forum was effective in addressing the following areas:

- Reviewing the current status, needs, and challenges of ICT capacity building at the regional and national levels.
- Sharing experiences and good practices in ICT capacity building at the national and regional level involving all stakeholders especially the government, private sector and NGOs.
- Developing the key elements for a plan of action to be implemented by all stakeholders, including APCICT, to close the gap in human resources development in ICT for development.
- Discussing a means of monitoring progress in capacity-building including the implementation of the Forum's recommendations.

Session 1: Where Are We?

The first session discussed the overall status of global activities in terms of achieving the goals stated in the WSIS plans of action and Millennium Declaration which was followed by a presentation on the current status and challenges of ICT capacity building for development, including updates on ICT capacity building at the regional level, Pacific Island ICT human resource development initiatives, and national perspectives at the country level. The session also explored specific issues such as gender aspects of ICT capacity building, capacity building for persons with disabilities, and efforts to bring ICT capacity building to remote rural areas.

Session 2: Where Are We Going?

The second session provided an assessment of gaps in ICT capacity building efforts. This included a discussion of current trends in ICT from the technology perspective, the use of ICT for development from a variety of sector-specific application perspectives such as e-government, telemedicine, and e-business, and the ICT work force requirements for a modern information society.

The final session examined the enabling environment to plot a way forward in ICT human resource capacity building for development. Specifically, this session examined the role of governments and the private sector in ICT capacity building for development, as well as potential collaborative efforts that could involve other international organizations, as well as NGOs and academic institutions. Discussions also centered on how synergies could be realized by integrating those activities for more effective results. Finally, the session concluded with the formulation of a set of ICT human resource capacity indicators, and a strategy for data collection to create an online database for use for future programme development, to cover strategic directions towards filling the gaps identified in earlier sessions.

Recommendations

- **Bridging the digital divide requires cooperation from many stakeholders. APCICT as an information hub can be an important facilitator for collaboration.**

While taking note of the existing gap between ICT human resources demand and supply, the Forum felt that a concerted effort of all stakeholders including government, the private sector, NGOs, and the international community were required to fill the gap. In this regard the Forum felt that APCICT could focus its activities on capacity building of senior government officials and policy makers to increase their understanding in current trends in ICT advances, ICT applications for sustainable development, role of ICT in empowerment of disadvantaged groups such as women, people with disabilities, and the elderly. In its training, consultancy services and analytical activities, APCICT should undertake close cooperation with regional and international organizations, bilateral donors, the private sector, and NGOs to explore complementarities and provide synergy.

- **A better understanding is needed of the different types of ICT human resource capacity that is required. APCICT can take a leading role in promoting this understanding.**

The Forum held the view that for maximizing the benefits of ICT for development, ICT human resources were required at all levels including policy makers, technicians, and educational units, both at the ICT development and application sites. However, there has not been a common understanding in the region of the terms of ICT human resources. The Forum further noted that demand for ICT human resources may considerably vary depending on the level of social and economic development. Therefore, the Forum suggests that APCICT undertake appropriate research on the above issues taking into account the fast advances in ICT and disseminate the findings among the region.

- **Community e-centers are an important mechanism for taking ICTs to remote locations. APCICT can promote this in its training and advisory services.**

The Forum stressed the view that community e-centers were effective tools in promoting ICTs to social and remote areas. Along with some failures, there were many successful models of ICT applications in rural areas. Therefore, the Forum suggested that in its capacity building and advisory activities, APCICT promote the concept of community e-centers as a vital tool for development and poverty alleviation.

- **Governments must integrate ICT policy into its overall development plans and policies. APCICT should promote such integration in its training and advisory roles.**

The Forum emphasized that the commitment of the leaders at the highest levels were vital for the creation of an inclusive and people-oriented Information Society. The Forum further felt that leadership at the highest level was indispensable for creating enabling policy and a regulatory environment for ICT for development that is well integrated into the overall development process. Therefore, the Forum felt that creation of understanding and awareness of the national leadership in the vital role of ICT for development and the need for national integrated and holistic approaches should be one of APCICT priorities.

- **Developed countries should share expertise and best practices with developing countries in human resource capacity development. APCICT can facilitate such transfer of knowledge.**

The Forum felt that many less advanced countries in the region may face difficulties in ICT human resources development or achieving critical mass of human resources activities such at ICT training and R&D. Therefore, the Forum stressed the importance of regional cooperation in capacity building for ICT. In this regard, the Forum suggested that APCICT play a coordinating role in regional ICT capacity building initiatives in close consultation with other international and regional organizations.

- **Government policy makers need to understand ICT and its role in development. APCICT should promote this understanding in its activities.**

The Forum felt that the governments play a vital leading role in many aspects of the creation of the Information Society. Therefore, their decision and policy makers require in-depth understanding in such issues as infrastructure development, financing ICT for development, public policy of Internet governance, ICT education, etc. Therefore, the Forum recommended that APCICT fully take into account the above issues in their training, analytical and advisory service activities.

- **ICT usage needs to be promoted among women, people with disabilities, and other underserved groups. APCICT can play a leading role in such training.**

The Forum was informed that there were gender disparities in ICT application and development even in the most advanced regional counties, often reflecting social and economic inequalities. The Forum also believed that ICT had become a major instrument in empowering social disadvantaged groups such as people with disabilities. In this respect, the Forum recommended that in its activities, APCICT make its best efforts in promoting ICT "engendering" and ICT applications for empowerment of socially disadvantaged groups.

- **ICT needs to be integrated into basic education. APCICT can facilitate training of primary and secondary educators.**

The Forum felt that the primary and secondary educators created the foundation for further ICT capacity building. Therefore, in its training activities, APCICT should promote the best practices including developing appropriate ICT curriculum, early use of Internet at schools, and the use of distance education.

- **Governments must develop policies that build various types of ICT skills within their population, including those skills required to take advantage of free and open source software.**

Governments have an important role to set policies that build ICT specialist skills, ICT advanced user skills, and ICT basic skills. These policies can include promotion of ICT professional educational opportunities, facilitate making ICT career paths attractive, collaboration with foreign professionals that promote learning, provide incentives to firms and private training institutes to train workers, and promote skills among teachers and infrastructure in schools. Governments in developed countries should provide this type of assistance to developing countries and share their best practices on developing ICT human resource capacity.

- **APCICT can act as a clearinghouse of development activities that governments, agencies, and other organizations are doing to encourage collaboration and cooperation.**

Governments, international agencies, and other NGOs that offer development programmes should make these programmes available via APCICT. In this way, the APCICT web site can act as a match making mechanism to bring together those seeking aid and funding groups that offer incentives, funding, and personnel for development activities.

- **APCICT can act as a facilitator of developing curricula and certification programs that meets country's needs.**

Countries that are seeking to develop their tertiary curricula and certification programmes need a place where they can go to find best practices and other information on ICT-based curricula. APCICT can act as a facilitator of country's seeking to develop such curricula and as a clearinghouse of best practice programmes in other countries and universities. This might include promotion of open courseware from universities around the world and Asia Pacific specifically that can be immediately used free of charge. Further, APCICT can provide a centralized hub where people could go to find such educational resources.

- **APCICT can act as a hub for online learning materials related to ICT capacity building.**

Many of the programmes offered by APCICT, such as the Regional Forum on ICT Capacity Building and the e-Government Training, can be later made available online via streaming video of the recordings that have been made during the training. Rather than simply posting notes about what took place at the Forum or Training, APCICT can digitize the video recordings of the events and allow people to view the videos after the event. Further, APCICT can work with other groups that are offering similar training to encourage them to allow APCICT to host videos of those events on the Web site as well.

- **International efforts to develop ICT indicators need to consider ICT human resource capacity development.**

While there has been considerable international effort to develop ICT indicators, there needs to be more emphasis on the use of ICT indicators that focus on ICT human resource capacity development. APCICT should work with existing ICT indicator development committees to adapt existing metrics where feasible to create a multi-factored set of ICT human resource capacity indictors. This should include human resource capacity building at various levels including among policy makers, government infrastructure builders developing tools for the Information Society, primary and secondary educators, ICT professional, advanced ICT users, basic ICT users, management professionals, and ICT thought leaders. Further, APCICT should work with national statistics offices (NSOs) where possible and international indicator committees to encourage and aid individual countries in the collection of such indicator data.