Plenary Session Speech

ICT for Sustainable Development

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Socio-economic developments will not be sustainable without proper monitoring and controlling. Such development will lead to economic losses and waste of natural resources. Monitoring and controlling requires accurate information on time. Collection of timely information, processing them and distributing among various organizations are essential. Therefore Information and Communication technology (ICT) has a significant role to play in sustainable development. However, the limitation to access to information or "digital divide" is one of the problems to be solved. Collecting required information for decision making should be highly efficient. Data should be collected from people at grass root level and information should reach them quickly too. Data collection through government organizations only will not be sufficient enough. Crowd sourcing is emerging as a promising data collection method. However, accuracy of data collected through crowd sourcing will be a problem. According to the statistics provided by the Telephone Regulatory Commission (TRC) Sri Lanka, there were 718,168 fixed Internet subscribers in Sri Lanka while Mobile Broadband subscribers reached 3,484,079 by March 2016. It is nearly 5 times than the Fixed Internet subscribers. Therefore, mobile computing should be used to reach

people in remote areas where fixed communication lines are not available. Internet of Things (IOT) is becoming popular as "the infrastructure of the information society". IOT allows devices to communicate each other. According to International Telecommunications Union, IOT is a network of physical devices, vehicles and buildings embedded with electronics, software, sensors and actuators that allows them to collect and exchange data. These sensor networks can be used for monitoring and controlling purposes as well as for data collection. Complexity of these technologies should be removed before using them in real world applications where non technical people are engaged in. These technologies help us to collect massive amounts of data within a short period of time. Analyzing and mining these data is essential for decision making where conventional techniques may fail. Big data analysis is an emerging area of study where these issues are addressed. Accordingly, ICT with other necessary analytical tools is becoming a catalyst for sustainable development.