### Chapter 4.8

## ICT-Supported Education for Sustainable Development of South Korean Rural Communities

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#### **ABSTRACT**

The rural communities in South Korea have faced serious challenges as the country has gradually opened the agricultural market and extended the conclusion of Free Trade Agreement with more and more countries. Moreover, due to the national socio-economic and political structures, South Korea has been undergoing the technological imbalance between rural and urban areas. In order to cope with these vital social challenges, the South Korean government has exerted considerable investment and effort in establishing ICT knowledge and skills as well as infrastructure in rural areas. Thus, conceptualizing ICT in the context of adult education, this chapter addresses three ICT-supported adult education programs oriented toward developing ICT skills and competencies of people in agricultural areas of South Korea. The South Korean cases of agricultural ICT education represent the vast and concentrated national efforts in integrating ICT across rural areas in this fast changing global situation.

#### INTRODUCTION

Information and communication technology (ICT) prevails worldwide. According to Rijsenbrij (1997), ICT can be viewed as technologies that enable human beings to communicate and

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cooperate with one another in the process of creating and exchanging knowledge. A concept, ICT, has evolved from information technology (IT) into a synthesized communication method and technique. The connotation of ICT, therefore, encompasses network systems designed for collaboration with various other systems by

producing and sharing information (Herselman & Britton, 2002).

The United Nations Development Program (UNDP) built a research model that illustrates the relationship between technology and economic development in 2001. This model demonstrates that ICT plays a critical role in enhancing the capabilities of citizens in a country. Likewise, ICT has been acknowledged as a major factor in accelerating economic development (Grimes, 1992). Increased technological abilities conversely undergird the development of technological infrastructure in the society or community. In other words, technological development of a nation and skill development of the citizens contribute to each other, demonstrating a structural 'virtuous circle' (as opposed to vicious circle). However, not every part of the globe enjoys the recent technological heyday and its positive influences.

The asymmetric ICT development is observed both at the international and intra-national levels. The polarizing divide between urban and rural people, and the rich and poor, in many nations remains quite remarkable (Bridges, 2001; United Nations, 2000; World Bank, 1999). As some underdeveloped countries are undergoing worsening relative poverty, technologically undistributed areas, especially some rural communities, experience growing technological disparities in development and service. In particular, this intra-national imbalance in the realm of technology is salient in some developing countries where urbanization has accelerated in the last several decades.

In this regard, the case of South Korea adequately represents the socio-technological imbalance because its economic and structural contexts cause this societal problem to become more serious. South Korea is one of the developing countries that have experienced relatively fastest economic development in the last century. According to Statistics Korea, the gross national product (GNP) per capita of the country right after the Korean War in 1950 was merely \$67. In contrast, the Bank of Korea (2008) reported

that Gross National Income per capita in 2007 is \$20,045.

However, this striking economic growth has also generated persistent side effects within the nation. Several major sociopolitical problems of the country can be posited as an increasingly aging population, economic inequality, severe political polarization, and developmental discrepancies among regions. As noted above, ICT advancement is considered a significant driving force for economic development in this information age, but at the same time, it has widened developmental gaps between urban and rural areas (Ministry for Food, Agriculture, Forest, and Fisheries, 2008). Particularly, the rural communities in South Korea face serious challenges as the country has gradually opened the agricultural market and extended the conclusion of Free Trade Agreement with more and more countries.

In order to cope with these vital social challenges, South Korea has put several affronting schemes such as 'The Five-year Master Plan for Rural ICT Promotion' in 2001 and 'The Countermeasure to Deal with Agricultural/Rural Problems' in 2003. The focus of 'The Five-year Master Plan for Rural ICT Promotion' is on preparing rural people for adjusting new technological environments, including constructing agricultural database, building agricultural information networks, developing software for agricultural management, and reinforcing rural education to narrow the information discrepancy between rural and urban citizens. The government has invested  $\square 253,400,000,000$  (about \$220,000,000) for the establishment of this national plan. On the other hand, 'The Countermeasure to Deal with Agricultural/Rural Problems' emphasizes professionalization of agricultural skills and enhancement of farming productivity. Therefore, these two distinctive national initiatives for rural ICT development are mutually and closely interconnected.

South Korea has witnessed fast-changing agricultural circumstances in the millennium, and thus acknowledged the increasing needs for

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