2. DESCRIPTION OF THE CONTEXT

2.1. PERU AT A GLANCE

Peru is the third largest country in Latin America after Brazil and Argentina, with an area of 1,285,216 km² (2.5 times the area of Spain). It is the fifth most populous country in Latin America after Brazil, Mexico, Colombia and Argentina, with a population density of 23.7 hab./Km², 4 times lower than Spain. In Peru socially deep inequalities persist. The human development index contrast between the capital and the provinces and between urban and rural areas. While in recent years the country has experienced steady economic growth, there are still major challenges in the field of social inclusion and gender equality, for example. Many social conflicts, uprisings and protests from people living in the interior of Peru have been a result of not having benefited from investment and economic boom. There are severe limitations on access to quality basic services such as education, health, water, housing and electricity; as well as poor promotion of economic opportunity and progress for much of the population.

Administratively, Peru is divided into 25 regions, 194 provinces and 1624 districts. The elections of regional and local (provincial and district) authorities are held every five years. The complex and rugged geography and the implementation of population concentration policies determined an unequal and asymmetric occupation of the territory, making it difficult to articulate the various spatial dimensions of development, social cohesion and state presence. In addition, this requires an expensive transport and communications infrastructure to ensure connectivity.

The country is experiencing a major demographic transition since the mid-60s when there was a population explosion coupled with increasing migration to the big cities and in
particular to Lima. It is estimated that the population of Peru in 2014 is 30,814,175 inhabitants, with an annual average growth rate of 1.11%, with high concentrations in urban areas (73%), especially in Lima, where more than a third of the total population lives. The World Bank report "Peru 2012" stated that 53% of the rural population lives below the national rural poverty line. Peru is characterise by a Human Development Index (HDI) of 0.741 in 2013, belonging to the group of countries with high HDI, ranking 77 of 185, below Cuba, and above Turkey and Brazil. While the Adjusted HDI (IDHI), that reflects disparities between the population in income, health and education, is 0.561, 24.3% less than the corresponding HDI.

According to the International Monetary Fund (IMF) in 2013 Peru is considered a middle-income country with a GDP per capita of € 8,132 per inhabitant (compared to € 25,222 in the European Union). Economic reforms during the nineties were the key to an impressive improvement of the Peruvian economy. Important macroeconomic developments and the liberalization of the telecommunications market favoured private investment. During the nineties the evolution of investment in utility infrastructure, especially telecommunications and energy, mainly benefited households and businesses in urban areas, neglecting investment in rural infrastructure.

2.2. TELECOMMUNICATION SECTOR

The mobile coverage in Peru, with a high annual growth rate was 82% in 2013, compared with 28.6% in fixed telephony. In Europe mobile penetration was 128% in 2013. Internet access of urban households is 20% compared with 0.9% of households in rural areas, while in Europe 73% of households are connected to the Internet. 36% of urban households in Peru has computer, compared with 5.8% of households in rural areas, while in Europe 77% of households have a computer.

Table 1 summarizes the access to telecommunications services in rural and urban areas.

Table 1: Population living in areas with telecommunications services coverage

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>URBAN</th>
<th>RURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed telephony</td>
<td>86%</td>
<td>0%</td>
</tr>
<tr>
<td>Mobile + Fixed wireless telephony</td>
<td>92%</td>
<td>53%</td>
</tr>
<tr>
<td>Fixed broadband access to the Internet (ADSL)</td>
<td>82%</td>
<td>0%</td>
</tr>
<tr>
<td>Mobile access to Internet 2.5G (EDGE)</td>
<td>92%</td>
<td>48%</td>
</tr>
<tr>
<td>Mobile broadband access to Internet (UMTS)</td>
<td>56%</td>
<td>3%</td>
</tr>
</tbody>
</table>
The use of ICT services was measured by the INEI in the census of poverty levels published on 2012, with the results shown in Figure 1.

![Figure 1: Households with ICT access by poverty level and area (Source: INEI 2011)](image)

This shows how both poverty and lack of telecommunications services coincide in rural areas.

### 2.3. Governance in Peru

In Peru, between 2002 and 2009 the government prioritized the improvement of good governance by putting in action several laws, regulations and national plans that determine and develop the principles of citizen participation, transparency, and accountability of local governments. The state recognized the importance of using ICTs in enhancing organizational management and performance and established the National Office of Electronic Government and Information Technology (ONGEI) along with several plans for e-government deployment in central and local public administrations. E-government tools were introduced and incorporated in the priorities of the local public entities.

### 2.4. Health

UN recognizes health as one of the key elements of human development, along with education, a minimum level of income and the ability to participate in political and social life.
of the community. At the same time, the health status of the population is also a factor that affects the development.

Poor health reduces work capacity and productivity of people and affects the physical development of children and their schooling and learning. Conversely, there is a link between the improvement in nutrition and health with the increase in productivity and school performance. In relative terms, the economic and education advantages that produce an improvement in health generate greater benefits in the poorest population. Therefore, health was one of the items more considered in the Millennium Development Goals.

According to the World Health Organization most inequalities in health are due to the conditions in which people are born, live and work, as well as the health system they have. That is, access to safe water and adequate sanitation, an adequate supply of safe food, adequate nutrition, adequate housing, healthy working conditions and environment, and adequate social protection. Improving these social determinants of health and reducing inequalities of power, money and resources helps to improve population health.

Often women and men live in different conditions regarding social determinates of health, producing gender inequality in access to health. For example, domestic tasks cause women be in contact with contaminated water, fatigue and stress of “double day” of women inside and outside the home, health problems during pregnancy, childbirth and postpartum, etc..

Health is recognized as a Human Right, so governments that have signed international covenants on human rights are obliged to create the conditions that allow all people to live as healthy as possible, including the social determinants of health. The right to health is not to be understood as the right to be healthy. International regulations on the right to health require governments to provide access to health care with quality care, non-discrimination and economic conditions that do not prevent access of the poor.

2.5. WILLAY PROGRAM

The Willay program is implemented in two distinct regions; San Pablo in Cajamarca and Acomayo in Cusco, together having a combined population of 50,000 people with majority of the population belonging to indigenous communities and farming being their main economic activity (84% of the active population).

In Acomayo, 46% of the population does not have access to electricity, 23% do not have running water, and 62% do not have sanitation. Acomayo ranked ninth of the thirteen provinces of the department of Cuzco in terms of human development index, with medium-low HDI similar to Sudan. Life expectancy is 63 years, 91% of children between 5 and 18 are in school and the illiteracy rate among women is 42%.
Government implementation of the national initiatives in using ICT that are designed based on a developed urban perspective generated unexpected results because of the lack of connectivity, capacity for management, and the use of technology at the local level. Since there were neither good connections nor qualified technical staff in rural areas, the rural municipalities opted to establish offices in the respective districts’ capitals. These satellite offices add to the municipalities’ costs and complicate the human resources management process. There is limited knowledge regarding regulations on adequate use of management tools and deficiencies in using an affordable language with the population in public entities. Regarding civil society organizations, they present organizational weaknesses; unawareness of their democratic governance rights and limitations in leadership building. Spaces for consensus exist although not properly utilized in addition to a lack of satisfaction on the citizens’ side.

The Willay program, meaning “to inform” in Quechua, proposes the use of ICTs in rural areas for democratic governance and citizen participation. The project explores how ICTs could enhance the processes of transparency, citizen participation and the accountability and the effectiveness of local governments, by building capacities in the stakeholders involved (civil society organizations and public entities like local government, health centers and schools).

44 local government institutions have been provided with a telecommunication infrastructure shared between them, based on WiFi for Long-Distance (WiLD) technology that offers Internet access and IP telephony. Besides, it has been installed information systems and software, it has been implemented a system of continuous improvement and public workers and community leaders have been trained in participatory budgeting, accountability and transparency of institutions public, citizen surveillance, education management and health management.