

The Huaral Agrarian Information System (SIA) Experience

The Huaral Valley is one hundred kilometres from the city of Lima. Its inhabitants are, for the most part, small farmers that cultivate fruits (peaches and tangerines), as well as corn, cotton and grains. Most of these products are sold at the capital of Peru, Lima's, main markets. In spite of its relative proximity to the city of Huaral, the farmers neither have equal access to the markets nor to technical information useful to improve their activities. Likewise, although the rural villages of the Huaral valley are only 30 minutes away on transitable roads, their access to basic drinking water, wastewater, electricity services and Internet access is limited.

It within the area of internet access that, over the past few years, APC's Peruvian member, *CEPES*, and the *Board of Irrigation Users of the Huaral Valley* have setup a network of 12 community information centres, or telecentres. This has been accompanied by the implementation of an *Agrarian Information System* ¹ (also known as *SIA* by farmers), which contains market price data, agriculture related technical information, climate conditions and supply prices. The telecentre network takes advantage of WiFi technology and not only allows internet to reach every computer connected, but also enables the use of a voice over internet protocol (VoIP) system that has facilitated fluid communication between the locations the Board of Irrigation Users has at different populated areas in the valley.

Since 2005 farmers can freely access the telecentres to gather information on their crops, the irrigation water allotted, the volume of water sources, etc. Their children can also use the computers and internet to complete school work, run searches, write, research and surf the world wide web.

It is precisely the children who teach the farmers how to use the tools in question. Because produce is drying out, Cinthia Ruth (17 years old) teaches her dad, Manuel (49 years old), a small lettuce farmer in Boza Aucallama -a rural village in the Huaral Valley- how to research better, more resistant, vegetables that will survive strong heat like previous summers'. When his daughter goes to school, Manuel consults Gabriel, the coordinator of the Boza Aucallama telecentre, on the price of lettuce at the Lima markets. Manuel reports that he used to harvest strawberries, but the supplies needed for their care were more expensive. A relative told him that lettuce grew quickly and Manuel went to the telecentre to find out how to grow lettuce. Sometimes he goes with Cinthia Ruth, on other occasions he goes alone and asks Gabriel to help. At the beginning he thought he was going to break the computer or make it dirty. He is no longer afraid of the machine.

Like Manuel, many other farmers from the valley are also learning how to use these tools and surf the internet. They found out how to care for their crops or learn the market price of their products. The Board of Irrigation Users and CEPES have trained hundreds of young people from the valley and chosen twelve to administer the telecentres and to simultaneously help and share their knowledge with the farmers. The cost of all this staff, equipment maintenance and internet connection are covered by the farmers themselves who are aware of how important it is to have access to the information and services available at the telecentres. CEPES participates by providing assistance with knowledge management and technical activities, verifying proper equipment performance, and telecentre interconnection.

The Board of Irrigation Users compiles information on water usage and the types of crops harvested on the farming land through the sector administrators, or *sectoristas*, who are in charge of monitoring agricultural production. All the information is stored in a system called *Yacu* (which means water in Quechua). *Yacu* consists of a database and a user-friendly platform for sector administrators and members of the Board of Irrigation Users.² It was jointly designed by the Board of Irrigation Users, CEPES and the *Technical Administration of the Huaral Irrigation District*, a state entity in charge of the supervision of water usage in the area. Thanks to the collaborative work, it has been possible to satisfy the informational needs of the different organisations that participate in water management. The result of this collaboration is the main source of information for the SIA information, through which potential agricultural product buyers can learn what is being harvested in the valley and what farmer to contact. We could even affirm that *Yacu* is at the heart of SIA. At present, it is a tool that is both useful for the administration of water, as well as for researchers and others interested in the agricultural reality of the Huaral Valley.

Great challenges still lie ahead in order to improve the Huaral SIA, *Yacu* and the wireless telecentre network. The fact that the Board of Irrigation Users has assumed responsibility for the changes and decisions to be made, lays the groundwork for the sustainability of the project. Their own leaders have been promoting the implementation of similar experiences in neighbouring coastal valleys. The farmers have progressively increased the conditions for market access because they have increased knowledge of the prices of their products and they are able to take better care of their crops. With this type of expectations and commitments put into the project, we think that we can continue working to improve the living conditions of the farmers in the Huaral Valley.

Key facts:

Rural development / Agriculture / Internet / VoIP / WiFi / Water

Links:

Huaral SIA website: <http://www.huaral.org>

CEPES website: <http://www.cepes.org.pe>

About the organisations:

Peruvian Centre for Social Studies (Centro Peruano de Estudios Sociales) - *CEPES*, NGO with over 30 years of experience in communication research and projects for rural development in Peru.

Board of Irrigation Users of the Huaral Valley, an organisation that gathers over 6200 farmers from the valley and is in charge of managing irrigation water.

Association for Progressive Communications – APC, an international network of organisations that work for development through the strategic use of ICT.

¹ <http://www.huaral.org>

² *Yacu* as well as other SIA applications are based on free software tools, including APC Action Apps (APC-AA).