



knowledge without boundaries

Bringing communications to farmers

Public Library No. 296

Panguipulli, Chile

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The Panguipulli Public Library took ICT training to farmers in the Andes mountains.

This case study is based on reports and information provided by the Panguipulli Public Library No. 296 in 2010 and 2011. EIFL-PLIP has edited the information to create a case study for the Public Library Innovation Programme (PLIP) replication process.

SUMMARY

INNOVATIVE IDEA

A public library and partners combining a variety of Information and Communication Technology (ICT), including radio, cell phones (text messaging), and a mobile ICT laboratory with computers and other equipment to connect farmers to sources of agricultural information and to promote exchange of knowledge and experience between farmers.

THE PROJECT

The project aims to improve farming methods, decision-making and marketing of produce through providing information and enabling exchange of information among farmers, agricultural extension workers and experts involved in sheep, cattle and vegetable farming, forestry and agro-tourism. The library acts as an intermediary and trainer, ensuring that information from partner organizations reaches farmers through a variety of channels. Through its mobile ICT laboratory, the library takes ICT to farmers' villages and homes and builds their ICT capacity.

KEY ACHIEVEMENTS

- The library has trained 200 farmers in use of ICTs. Most of the farmers are women.
- Launch of a series of radio programmes on agriculture on local community radio stations.
- Increasing visibility of the library among farmers, and with the Ministry of Agriculture.
- Increased numbers of farmers are visiting the library.
- Creation of a special space for farmers in the library, and increasing stocks of agricultural magazines and books.



Training farmers in the Panguipulli Public Library. The library has created a special space for farmers to use ICT and conduct research.

CASE STUDY – BRINGING COMMUNICATIONS TO FARMERS

INTRODUCTION

Panguipulli is a community in Valdivia Province in southern Chile. Located in the Andean mountains, the town is well known for its natural beauty, including lakes, hot springs, volcanoes and an alpine landscape. Panguipulli Public Library is to be found in the town of Panguipulli and serves the town and the surrounding villages and farms.

The harsh winter climate and broken terrain make it difficult for the public library to reach the farmers. The terrain and climate also prevent support agencies from reaching the farmers. Technical and agricultural development assistance programmes, such as INDAP and PRODESAL, only reach about 20% of farmers. According to PRODESAL's experience and a 2009 study carried out by the NGO *Fundación para la Innovación Agraria (FIA)*, small farmers need information about:

- Support programmes and deadlines for project applications and grants;
- Technical innovations for production;
- Markets – produce demands and needs;
- Prices for their products;
- Climate information;
- Local regulations and requirements about access to services such as water.

In addition, farmers need training in the use of ICT. The most important sources of information for farmers are government and NGO agriculture support agencies, other farmers, radio, TV, newspapers and magazines. Of the farmers interviewed in the 2009 FIA study, 27.1% said they used the Internet and over 50% said their children had helped them to get started using the computer. The majority of farmers interviewed (85%) said they had cell phones – however, only 50% said they were skilled in using text messaging.

PROJECT DESCRIPTION

Aims and objectives

The project aims to improve farming methods, decision-making and marketing of produce through providing information and enabling exchange of information among farmers and agricultural extension workers and experts. The farmers targeted are involved in sheep, cattle and vegetable farming, forestry and agro-tourism.

The library acts as an intermediary and trainer, ensuring that information from partner organizations reaches farmers. Through its mobile ICT laboratory, the library takes ICT to farmers' villages and homes and trains them to use ICT. Technology includes:

- A mobile ICT laboratory, with computers, modems, cameras and recording equipment needed to train farmers to access, record, store and share information.
- Social networking – using the social network platform www.prodarnet.org/profile/PanguipulliAgricultores, for farmers to exchange information, experience, knowledge and news.
- An online market for farmers to advertise their produce - www.prodarnet.org.

- Radio – in partnership with the NGO with its partner organization, the Inter-American Institute for Cooperation on Agriculture (IICA), the library is distributing ready-made radio programmes to local community radio stations.
- Podcasts – the radio programmes can also be distributed as podcasts, and kept in the library as a resource.
- SMS (cell phone text) messaging – of information to farmers.

Sources of information include government agricultural support agencies, the library's NGO partners, farmers, the Internet, books and magazines. The library has also increased its stock of books on agriculture.

IMPLEMENTATION CHALLENGES AND SUCCESSES

ICT training

Through the mobile laboratory, the library has trained 200 farmers, mostly women. The training course was developed with the help of a group of young IT fans. The courses are based on a digital literacy programme developed by the Chilean technical education institution, Biblioredes.

Farmers' feedback from the training has been positive. However, the library reported a small number of farmers withdrew from the training. Keeping the farmers motivated is a challenge.

Another challenge that emerged was connecting to the Internet in closed spaces in the mountains and valleys. The library was using mobile modems, and struggled to connect or to receive a strong signal. Farmers solved the problem by suggesting that the training take place in the open fields, where connections were stronger.



At times it was impossible to connect to the Internet from inside farmers' homes, so farmers suggested that training take place outside, in the fields.

Social networking

The library built farmers' capacity to communicate through the social network, Agricultores de Panguipulli www.prodarnet.org/group/AGRoPANGUIPULLI. The social network is hosted by the PRODARNET 2.0, and enables farmers to exchange ideas through blogging and other messaging. It also raises the visibility of Panguipulli farmers on the web. More than 100 farmers are following the network.

Using local radio

Agricultural professionals from IICA have created radio programmes on topics such as pest control, farming methods, environmental conservation and other important issues. These are being distributed to local radio stations. The stations broadcast the programmes as part of call-in programmes and invite agricultural experts to the studio to answer farmers' questions. One community radio owner reported being so impressed by the programmes that he is broadcasting them twice a week.

Agricultural resources

The library has increased its stock of books by 300 titles through donations from agricultural organizations and the Ministry of Agriculture. The library has also consulted agricultural professionals about further books to include.

A space for farmers

The library has created a room especially for the use of farmers, including a variety of resources and a computer with an internet connection.

SMS information service

Consultants from the University of Chile were, at the time of writing this report, working on an SMS information service for farmers.

STRATEGIES, TACTICS AND TOOLS

Going to farmers

Many farmers do not have time or cannot afford to travel to Panguipulli. The library therefore decided to transport computers, cameras and other ICT equipment to farming communities. They found this worked well – and that farmers were more comfortable learning in their own environment.

'If the farmers are not coming to the library, the library should go to the farmer.'

– Mayor Aravena of Panguipulli, speaking at a ceremony to launch the project in August 2010.

Using local expertise and volunteers to extend library capacity

The library has a small staff (four people), and must therefore draw on volunteers and officials from local government and experts from NGOs to extend their capacity to train and distribute information. The library works on the principle that their role is to act as an intermediary between agricultural experts and farmers. The librarians cannot become agricultural experts; rather, they are an information channel for the expertise and knowledge of others.

Partnerships

The main sources of expertise are the library's partners. The three main partners are:

- The Inter-American Institute for Cooperation on Agriculture (IICA), a specialist agricultural development agency. The role of the IICA is to provide expertise on information management and use of technologies.
- The Municipality of Panguipulli which provides support of agricultural extension officers and expertise.
- The local development agency, PRODESAL, which supports agricultural production.

Working with existing resources and channels

The library does not wish to create a new and isolated service, but to support organizations and channels already working with farmers. Use of existing resources – for example, the Biblioredes training resources and the expertise and web platforms of

PRODESAL – saves cost and time. More importantly, it ensures the library's value as an information service provider is recognized by other organizations.

LESSONS LEARNT

Finding expertise

The library struggled to find agricultural expertise in Panguipulli for all the topics they wanted to broadcast on radio. The library therefore drew on a series of ready-made programmes produced by their partner organization, IICA. The radio stations localized the programmes through incorporating them in phone-in programmes.

Costs of using other media

The library also found that although it is the most effective medium for reaching farmers, radio was expensive because of the cost of airtime. This meant reducing the number of programmes aired.

Keeping farmers engaged

The library found farmers to be busy, and keeping them motivated to engage in additional activities was a struggle. Strategies to demonstrate the ways in which information literacy and use of modern technology can improve farmers' lives need further thought and development.

** At the time of writing this study, the use of cell phones for text messaging was being developed. We will update this study as soon as we have further information about this important aspect of the Panguipulli Public Library's ICT service.*