

ICT in Agriculture and Environment Projects

A pig can be a sought-after prize, and radio communications can be used to promote the competition that awards the prize. Whether on a local level or on a broader scale, ICT plays an important role in agriculture and environment projects. Volunteers have used information and communication technologies to:

- ▶ conduct a workshop on innovative technologies for NGO environment projects.
- ▶ conduct a workshop on ecotourism and information technology.
- ▶ conduct a workshop on mangrove inventory and management using information technology.
- ▶ conduct Internet-based research to improve agricultural productivity in Belize.
- ▶ increase the capacity of an agroforestry cooperative in Guatemala.



Agriculture and the Environment and Radio

In Paraguay, a Volunteer was concerned that almost nobody in his village was planting a garden so he organized a garden competition. He used his weekly radio show to advertise the event and, occasionally, to encourage community members to join the competition. He convinced a local NGO to contribute a pig as first prize, and he also threatened participants with a toad as last prize. Twenty-eight families entered the competition (in a community of 40 families). Entries were judged on quality of garden, strength of fence, use of organic pesticides



This Volunteer and counterpart host a community education program in Niger.

rather than chemicals, and other important criteria. In the end, so many of the families produced excellent gardens that the judges refused to decide. Instead, participants received a lottery ticket for each of the criteria that they had satisfied, and the pig (and toad) were raffled off at a community potluck that had lots of vegetables on the menu. Everyone received a watering can, but they realized that they had already won by having a garden full of vegetables for their families.



Agriculture and the Environment and Video

A Volunteer in southern Africa developed a regularly broadcast environment and science training program for technicians and teachers. More than 50 primary and high school teachers were trained in environmental education methods and hands-on environmental activities. To supplement the training the Volunteer produced an educational video on biodiversity that highlights freshwater biodiversity and conservation.

A Volunteer in Ghana produced a video on tree identification, tree protection, pest and diseases, nursery water source, vegetative zones of Ghana, propagation, vegetable gardening, income generation, extension, and tree nurseries. The video is being used as a tool for forestry pre-service training.

One final example of a Volunteer using video comes from the Philippines. The local government wanted to establish a marine protected area in two villages. A major step in establishing a marine sanctuary is to conduct a marine assessment. The Volunteer developed a video with coverage of the marine assessments, complete with interviews with local officials. The video played a vital role in the establishment of the marine sanctuary.



Agriculture and the Environment and Computers

In the Dominican Republic, an agroforestry Volunteer who works in a small, rural community has established a computer laboratory powered by renewable and environmentally friendly solar energy. As a direct result of the establishment of this laboratory, he teaches computer classes to rural children and youth (boys and girls); to date, he has trained 100 children and youth in basic computer skills.

In Honduras Volunteers and their counterparts at the Forest Service and other organizations have access to computer systems, including Landsat Imagery and GPS/GIS (Geographic Information System) equipment, which was donated by the German government and is available at the National Forestry School. The systems are used to digitize biophysical and socioeconomic information used to produce maps for watersheds and protected areas (boundary, watershed delimitation; potential and actual land uses; vegetation cover and forest types; soil slopes and contour lines; infrastructure such as roads, trails, communities, and other facilities; assessment of damage by Hurricane Mitch; and landslide maps). Maps are then taken to the field for ground verification and fieldwork. Also, computers are used to design and produce environmental educational materials such as manuals, booklets, posters, and leaflets.

Some ways to use computers to support sustainability of forestry include analytical processes for planning purposes, resources assessment and data collection, and on-the-ground forest management.



A PCV in Guatemala offers computer training.



Agriculture and the Environment and the Internet



A Volunteer in Honduras working on an environment project successfully used the Internet to market the local area as an ideal destination for ecotourism. The Internet also proved to be a valuable tool for farmers and local NGOs working in the agricultural extension field. Access to the Internet has allowed members of the community to investigate alternative markets as well as new production strategies for their agricultural goods.

The experience of a third-year Volunteer in Jamaica offers yet another example of how the Internet can help agriculture and environment Volunteers meet their goals. She and her supervisor obtained grants from the Canadian Green Fund, the Environmental Foundation of Jamaica, and the UNDP to establish “The Cyber Center.” The profits from the center will be used to support environmental projects.



Online Resources to Explore

- ICTs for Rural Development and Food Security
www.fao.org/sd/CDdirect/CDre0055b.html
- ICT in Agriculture
<http://agrolink.moa.my>
- Agriculture Info 21
www.undp.org/info21/sector/s-agri.html
- Agriculture and Environment Volunteers Interested in Using Radio
www.fao.org/sd/2001/radio/index_en.htm