

ICT-KM Second Level Connectivity Project

Improving Communications and Access to Internet Resources for CGIAR Regional and Country Offices

1st April 2005 to 31st March 2006

A Project of the ICT-KM Program

Annual Report

EXECUTIVE SUMMARY

The year began with carrying out the site surveys that were pending for various reasons. This is now complete apart from 4 sites that are due to be carried out by staff from IRRI and WorldFish.

Internet connections are complete on two locations, South Africa and New Delhi. Staff in both locations are satisfied and have greatly benefited from improved connectivity. The project has approved plans for upgrading the internet connections in 10 locations that are currently at various stages of completion.

The task of developing and populating the ICT Briefcase was designated to CIAT; this is well into its later stages. The briefcase will be produced on CD for distribution; an online version is also being developed to be posted on the CGxchange web site. The IRRI ICT training staff have been commissioned to develop training material on “Responsible Internet Use”

The design and implementation of the project has undergone various changes as a result of different unforeseen circumstances, the major one being the decision to obtain local individual solutions at each location as opposed to a single tender for satellite connection for the SSA region. As a result of this decision, various solutions for each site are being worked out with some of them already being implemented. This will increase the pace at which the project implementation is going. Others include change of priorities at some sites, closure of offices and relocation. This has called for the need to establish a standard transportable network configuration. Project installations are at various stages of completion in all the locations that have received approval.

Due to project delays mentioned herewith, the advisory group asked for a one year no cost extension of the project period to ensure that the project completes the work that was originally planned. This was granted and therefore the project will be expected to have carried out all the planned work by 31st March 2007.

There are many lessons learnt from the installations already carried out; and these are invaluable to all our future implementations.

PROJECT PERFORMANCE

Site Surveys and Pre-implementation process

Site surveys were completed in almost all the sites. There remains Vientiane, Beijing and the Solomon Islands; these are due to be carried out by staff from IRRI and WorldFish.

In Abidjan, site surveys were not carried out because of civil wars and eventual closure of the offices. In Thailand and Pakistan, the IWMI offices were also closed down; therefore site surveys were not carried out.

In Sub-Saharan Africa site surveys have been completed in all sites. Most of these will require a satellite connection to improve access to the internet. However, individual solutions have to be evaluated to ensure that the best solution is provided for each particular site.

With the completion of site surveys in the majority of sites, recommendations were made to the centres associated with each site. Some of these recommendations involved improving the network infrastructure at the site or negotiating new ways of working with other CG offices or NARS hosts. This part of the project always relied on the centres involved to lead and carry out the recommendations before the project can assist with implementing these recommendations and in many cases this has caused long delays.

Learning from some of the lessons of the New Delhi implementation, the advisory group has in many cases consulted with centres at a location and then assigned a centre and senior manager from the centre to lead the implementation of these recommendations. The connectivity project provides advice and support to these managers in the tasks they have to carry out. Example situations are:

- ❖ The CG offices in Kampala need to negotiate on how they will collaborate now and in the future. The connectivity project has funding for one Kampala installation and we need to decide where it will be located and if other offices will connect through it. The project has identified two key senior managers to help with the negotiations.
- ❖ The CIAT office in Arusha is located on the SARI campus. Negotiations need to take place with SARI to decide how changes can be made that will benefit both organisations in the long run.
- ❖ The CG offices in Lilongwe need to collaborate to improve the network infrastructure on the campus before an internet connection is installed.

Internet connections

Two locations have completed the upgrade of the internet connectivity; these are the CG Delhi office that hosts 9 CG Centres and the IWMI office in South Africa. Communication and evaluation documents on the Delhi implementation have been produced and those of South Africa are in the production process. Important lessons

learnt from these implementations are invaluable in the preparation for installations in other sites.

The project has approved the plans for upgrading the internet connections in 10 locations. These include Kabul, Ouagadougou, Cairo, Accra, Lilongwe, Serdang, Bamako, St. Louis, Tozeur and Ankara. Out of the 10 locations, equipment has been purchased for 4 sites, ordered for 2 sites and the other 4 are evaluating the supplier proposals.

ICT Briefcase and Training Material

The ICT Briefcase is an integral part of the project that aims to provide information and tools to help country and regional offices optimise the use of the improved connectivity and better manage and protect their data and information resources. CIAT were designated the task of developing the ICT Briefcase and collecting content to populate it. The main product will be produced on CD for distribution to the country and regional offices. An online version is also being developed that will be part of the CGxchange web site. The ICT Briefcase provides four main areas:

1. **Information:** Short but useful documents that will be particularly useful to small and medium sized offices. These will include lessons learnt from the connectivity project, Best Practice Guides, sample documents and templates and FAQs.
2. Descriptions of standard **software** used in the CGIAR, how you can obtain it and details of special pricing arrangements. Some free or CG wide licensed software will be available for download. Annotated links to software that others have found useful are provided.
3. **Help Desk** information and details. A knowledgebase of known problems that typically affect small and medium size offices. Contact details of where and how to obtain CG ICT support.
4. **Training** materials that you can work through at your own pace or see the video of how to do a particular task.

The IRRI ICT Training staff have been commissioned to develop training material on "Responsible Internet Use". This will be useful to people who have not had good access to the internet before to ensure that they are aware of the security and reputation risks.

Design and implementation

Most of the sites in Sub-Saharan Africa will require a satellite connection to improve access to the internet. In order to accelerate the installation process, it was agreed that local individual solutions at each location will be implemented. This may result in a slightly higher operating cost but would give greater flexibility in speed of implementation and reaction to future changes in the local communications environment. A tender will be made for services to the larger offices and those offices that confirm they want to be part of the tender process. The resulting solutions will include 3 or 4 configuration packages that Centres can request for implementation at any time in the future.

Four of the original priority locations are no-longer being considered for improved internet connections for a variety of reasons ranging from; the site survey showing that the existing link was good enough for the office needs e.g. at Ankara; to the closure of offices in Luang Prabang, Lahore, Bangkok and Abidjan. The project is working to establish a standard portable network configuration that will be installed in offices that need to improve the network infrastructure and in all future country offices. The transportable nature of the configuration will make it easy to move the equipment to where it is needed as offices move to larger/smaller premises or to be re-deployed as offices open and close.

Project installations are at various stages of completion in all the locations that have received approval. Equipment has already been purchased for Cairo, Kabul, Tashkent and Harare. In the rest of the locations there is need to identify senior managers and IT managers to take the lead in each location. They would be responsible for leading negotiations with all offices at the location or negotiating with the NARI hosts and ensuring that the required infrastructure improvements have been made. In SSA this is particularly important in Kampala, Lilongwe, Harare and Yaounde where several centres are located either on the same campus or the same city and should be working together.

Project Delays

The project is behind schedule, the principal reason being that most of the work is being carried out by CG staff that already have full-time jobs in their own centres. For most staff the project is considered as an addition to their normal workload and therefore we have had to wait for them to fit project activities into an already congested work plan. This is particularly true in carrying out the site surveys and implementing the recommendations from the site surveys. Although this has caused delays, in the long run it will be better for the sustainability as it encourages people to feel ownership for the work being carried out by the project.

The original project plan underestimated the amount of work required in terms of IT Support and infrastructure improvements that were required in many locations before the project could install improved internet connectivity. Most Centres had not budgeted for the improvements that they were required to make and it took time for capital budget to be approved. This was despite these locations being high priority offices for the centres concerned. There were no funds allocated by the project to assist the centres make these improvements or to facilitate them.

The time taken to negotiate a solution that is suitable to all involved was underestimated when developing the project plan. Someone with the appropriate authority needs to take the lead in these negotiations. It may require working out how offices in the same or similar location can work together to share the internet service or negotiating with NARS on how we can best assist them to improve the bandwidth and management of their internet connections. The example to follow is the Delhi office where the DG of ICRISAT took the lead in negotiations between all the centres located

on the CG Delhi ICAR campus. Once agreement was reached implementation was relatively easy.

The status of the country and regional offices seems to be in a continual state of flux. Offices that were high priority last year are no-longer such a high priority and in several cases are being closed down or relocated. The project is not in control and sometimes not even in the communication loop of these decisions which makes planning more difficult.

It has proved very difficult to prepare a Request for Proposal (RFP) document for satellite services. The constantly changing environment not only makes it difficult to prepare an accurate list of our requirements but it also makes it difficult to obtain any kind of commitment to a common contractual arrangement for all CG offices.

Project Schedule

As a result of the mentioned project delays the project wouldn't be able to complete all the work planned in the first phase of the project. The advisory group therefore requested for a one year no cost extension of the project period to ensure that the project completes the work that was originally proposed. This extension was granted and the project team has been proactive in pushing forward project implementations in various sites.

Lessons Learnt

We have learnt a lot about the CGIAR and how we can better work together through this project. Some of the main lessons learnt so far have been:

- ❖ Centres located in the same geographical location need to collaborate more in order to receive better quality services for ICT Support and internet connectivity.
- ❖ In order to achieve better collaboration the lead needs to come from those in decision making positions within a centre.
- ❖ In general the state of ICT infrastructure and IT support has been poor. The ICT managers need to provide more direction for these smaller offices and the project will produce standards and recommendations for them to follow.
- ❖ Centres have to make decisions on where they want to spend limited funds. If communication and access to the internet or intranet resources is important then the operating funds need to be found to operate an internet connection to meet their needs. In Sub-Saharan Africa costs are likely to be between \$50 and \$75 per month per computer for the level of internet connectivity required to carry out the activities being requested.
- ❖ Portable network infrastructure is an ideal situation to take care of the fluid nature of the country offices in the CGIAR. A rack containing all the critical network equipment that when closed creates a suitable transportable case can be used. When an office moves to larger premises it will be easy to move the network or if the office closes the network can be reused in a new office that opens elsewhere. These solutions were developed originally for relief agencies and the military.

- ❖ Offices hosted by NARS that are not satisfied with the quality of internet connections they are receiving need to negotiate with them to find the best way to improve the situation. This can be done in a number of ways from improving the equipment and service providers being used to providing training in the management of their networks and IT Support so that the connections are not congested by non-work related internet use (listening to internet music, downloading large files and videos) or viruses.