

Annual Project Reports

Virtual Resources Center Infrastructure project

Project duration: 24 months

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Audience: CIO & Projects Coordinator and C4D Team

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Executive summary

This is the second and last annual report for the project. Although at the end of the first year the project was three months behind schedule, it is now on schedule and meeting its objectives. A no cost extension of three months was approved by the CIO office to improve the work done on some of the more complex activities and tackle new ones as money is still available in the project.

The project has been realigned during 2005 considerably to accommodate the needs of content publishing, branding and marketing of CGXchange. The project Team was also flexible in accommodating the changes and supported CGIAR groups and C4D projects willing to make content available on the platform. The VRC, now called CGXchange, has been launched at AGM 2005 in Morocco and it has been improved ever since.

A lot was learnt in the process of deploying the project and major lessons are reported in this paper along with suggestions for further development of CGXchange. This is particularly relevant as the last three months of the project will constitute a bridge between the VRCI and the new project supporting the second phase of the CGXchange infrastructure development.

Leading and managing a project of this magnitude in any Enterprise is highly demanding. For the CGIAR, further complexities are the very high communication costs compared to a similar project run in a more formally organized Enterprise.

References:

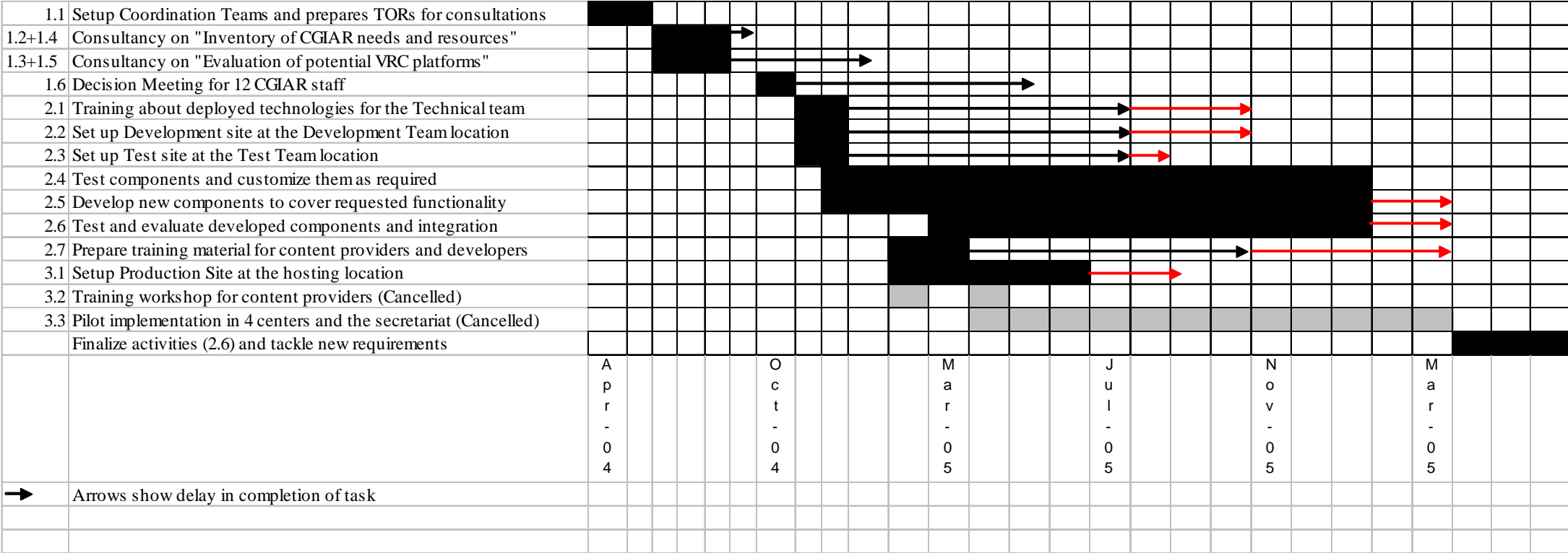
The documents referenced in this report along with additional papers created and with other resources related to the VRCI project can be found at:

[http://www.cgxchange.org/portal/server.pt?open=17&objID=297&DirMode=1&parentname=Dir&parentid=3&mode=2&in_hi_userid=8899&cached=true%20\(USR=cgxguest,PWD=cgxguest\)](http://www.cgxchange.org/portal/server.pt?open=17&objID=297&DirMode=1&parentname=Dir&parentid=3&mode=2&in_hi_userid=8899&cached=true%20(USR=cgxguest,PWD=cgxguest))

One of the papers, the "VRCI Papers index" offers a more organized and structured view of the papers produced.

Project Performance

Progress



Project success (what changed and how objectives were achieved)

What was changed from the initial plan and why

- Creation of two prototypes: In February 2005, after having received the final report from Bellanet on “Evaluation of potential VRC platforms”, the VRCI coordinator consulted with the “Content and Policy Team” and the CGIAR IT managers. All parties agreed that to take a final decision on the best commercial versus the best open source software platform a prototype of both platforms should have been developed. The preparation of the two prototypes cost around \$30000 and they were presented to the VRC workshop in May 2005 to take the final decision on the platform to be adopted. Although the prototypes preparation implied a highly useful learning process was not budgeted in the project and was one of the two main reasons for asking for an increase in budget.
- Selection of a platform: In the initial project proposal, it was foreseen that the selection would come easily as a result of the consultation “Evaluation of potential VRC platforms. This was not the case and in the new plan was to finalize this decision with the physical presence of the Teams at the May 2005 VRC meeting in Rome. At that meeting in Rome the two prototypes were presented with the help of a Plumtree technical source and a Liferay expert in conference call from Spain. Details of the meeting process are available separately. The audience finally voted at great majority to go for Plumtree.
- Request for expansion of the VRCI budget: During June, a request was sent to the CIO office to expand the budget. The request was approved and Negotiations with Plumtree started and ended early in July with a cost of \$118,000. In addition to the other software and hardware needed, the budget was not sufficient in this area and this was the second main reason to ask for an expansion of the budget for the project.
- Role of the Content and Policy Team: The team was active from the start of the project in taking several decisions mainly about how to run the consultations and deciding about which consultant should be in charge based on presented options. The team was also active in giving feedback about directions the project should have taken. At the May 2005 VRCI meeting, much of the responsibility of the Team was moved to the “Web usage and analysis project”. This is because of the upcoming AGM 2005 event during which the CIO planned a major rollout of the VRC. It was felt that responsibility about the content, branding and interaction with parties was better be concentrated for faster execution with the idea to recall the “Content and policy Team” or a similar entity after AGM 2005 was over as major work in this area was needed in the long run. Therefore, the Team met for the first time physically at the May meeting when the members manifested suggestions on how to proceed until AGM. Minutes are available separately.
- Name change: As planned, the production site went on line in early October 2005 under the name of VRC. The WUA project came out in early October with a new branding for the VRC which included the name change from VRC to CGXchange. This involved registering domain names and reconfiguring the production site to work with the new name.
- Implementing branding: The production site was running with the default Plumtree interface when in early October the WUA project came out with a new branding and navigation for the site. To implement it, the VRCI had to call in Plumtree consultants who interacted with the VRCI core Team and the WUA Team to make sure that the final product was aligned with the request. Later in November they developed and installed the new branding and navigation just in time for the launch at AGM 2005.
- New milestone required for the launch of CGXchange at AGM 2005: This was an unplanned milestone and put a lot of pressure on the VRCI core Team as the launch

required a number of effective applications and content available on the site. This required a lot of interaction and configuration with several Teams in and outside the CG.

Why objectives were achieved

Despite the several changes to the project, the objectives outlined in the Project proposal were achieved.

Following are comments to the project objectives as outlined in the initial concept proposal. Statements originally from the concept proposal are in light characters:

General Objective

Design, develop, implement and provide ongoing support to a CGIAR Virtual Resource Center that responds to CGIAR user and partner needs.

The project was renamed from VRC (Virtual Resource Center) to VRCI (Virtual Resource Center Infrastructure), to outline the realignment of the project to the specific role of setting up the infrastructure for the VRC.

The project designed, developed and implemented and provided ongoing support for a CGIAR Virtual Resource Center, under the new name of CGXchange, that responds to CGIAR user needs. The support to partners was removed from the scope of CGXchange. However, the project continued setting up an infrastructure that can support partners as soon as this comes into the scope of CGXchange.

The CGIAR VRC would essentially serve as a 1-stop corporate portal to provide a common home for information and tools relevant to the entire CGIAR community and a shared workspace for carrying out joint work functions that are currently lacking. The overall effect will be to assist the organization in the decision making process. The VRC will house other components closely linked to other ICT/KM projects such as the virtual library and content management and will provide all CGIAR staff and partners with a unique point of entry to information about ongoing activities and the capability to find people with specific skills and experiences. As a further step, the CGIAR VRC will facilitate interaction among parties through hosting communities providing support and integration of a range of collaboration tools.

The direct benefits for CGIAR Users will be better access to system-wide data, information, services and applications, supporting multi-centre and multi-disciplinary research and decision-making...

The above objective has also been achieved through a long analysis process culminated with setting up a production site based on the Plumtree portal framework augmented by additional Collaboration tools and a customized staff Directory to keep track of staff skills and expertise.

Specific Objectives

Improve the efficiency and productivity of the organization, through ease of access and availability of CGIAR core business documents and other shared information of common interest.

A shared area with a specific search function for documents has been setup and is now populated with initial policies and guidelines to be shared among centers.

Contribute to and encourage a knowledge-sharing environment within the CGIAR and with partners through collaborative tools to connect People/Teams skills and experiences.

In the area of Collaboration tools the project has been dedicating considerable time and resources. The outcome is a set of valuable papers and tools made available to the CG staff through CGXchange.

Build capacity of content providers and developers to supply and support the VRC

As the project was realigned to focus on the infrastructure we have been building the capacity of administrators and developers. We have been supporting closely with tutorials and documentation groups involved with populating the content during the project. However, CG content providers will have to be trained as part of another project.

Activity Details

Detailed activities description

Tasks 1, 1.1, 1.2, 1.3, 1.4, 1.5 were completed and reported during the year 1 annual project report

Task 1.6 – Decision Meeting

The meeting took place in Rome between May 23 and 27, 2005. The scope of the meeting was expanded as the C4D (Content for development) project coordinators were attending mainly to present their progress and review their plan together with the rest of the C4D, the Content and Policy Committee. However, a great part of the meeting was dedicated to the decisions to be taken on the VRCI platform. The meeting was a success and for the purposes of the VRCI project lead to deciding to adopt Plumtree as the VRC platform.

Tasks 2.1, 2.2, 2.3, 2.4 – Set up Test and Development site and Test existing components

2.3 was completed in August 2005 with a one month delay.

2.1 and 2.2 were completed in October 2005 with a three months delay..

2.4 was completed in January 2005 as expected.

Task 2.5 Develop new components to cover requested functionality

2.5 was completed in March 2006 with a 2 months delay.

Task 2.6 Test and evaluate developed components and integration

2.6 was completed in March 2006 with a 2 months delay. Few activities will be further pursued during the three months extension of the project to improve the work already done. In particular:

- Login into CGX is too slow. This is a very high priority item. Solutions are been explored together with Plumtree. Possible options are a reconfiguration of the portal cache and changes to the user interface design. (There maybe a need for additional funding outside of the VRCI project for Plumtree professional support.)
- Finalize integration of Tikiwiki into the portal. Infotech has customized Tikiwiki for integration into the portal but we still need to finalize its configuration and documentation.
- CIAT to automate CGIAR job opportunities and CG news for sustainability. This requires an initial agreement among center web masters on how this should be accomplished in a sustainable way so that information is entered only once. In addition, we must apply improvements to the Staff directory interface after adequate tests are run. (There maybe a need for additional funding outside the VRCI project for CIAT development work.)
- Test the integration of some applications with the portal Single Sign On framework. Potential applications are: Exlibris, Sharepoint, OLR, Hyper computing. This requires running complex tests of integration as suggested by Plumtree. Documentation should be prepared to document how integration can be achieved for the tested applications or further investigations to be carried out.
- For increased security, configure the production site to run the authentication process using SSL.

Task 2.7 Prepare training material for content providers and developers

This task was completed. A lot of material is now available through CGXchange either as being taken from vendor sites or created from scratch. Much has been created ad hoc for supporting specific communities.

3.1 Setup Production Site at the hosting location

This task was completed with a 2 months delay.

3.2 Training workshop for content providers (Cancelled)

3.3 Pilot implementation in 4 centers and the secretariat (Cancelled)

Finalize activities (2.6) and tackle new requirements

Full list of project activities to be carried out during the three months extension:

- Login into CGX is too slow. This is a very high priority item. Solutions are been explored together with Plumtree. Possible options are a reconfiguration of the portal cache and changes to the user interface design. (There maybe a need for additional funding outside of the VRCl project for Plumtree professional support.)
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- Migrate CGX production site to CGNET (This is a possible upcoming task) or alternatively improve the Disaster recovery procedures at the current hosting site.
- Enable using Plumtree extension to access CG Exchange servers for users. This is the Plumtree implementation of Outlook which integrates completely into the portal. It is currently working for 4 centers. The main issue in enabling the remaining centers is to push them to implement the right naming conventions and some configuration needed on CGX by the CGX team.
- Support communities and CG centers in their increased involvement with using CGX components. This is a very demanding task as it requires configuring community workspaces and providing basic instructions on their use.
- Test the integration of some applications with the portal Single Sign On framework. Potential applications are: Exlibris, Sharepoint, OLR, Hyper computing. This requires running complex tests of integration as suggested by Plumtree. Documentation should be prepared to document how integration can be achieved for the tested applications or further investigations to be carried out.
- For increased security, configure the production site to run the authentication process using SSL.
- IPGRI CS support, for the remainder of the project, until the end of June 2006, administration of the CGIAR outpost staff. Outpost staff, are located in several sites with no direct support from any specific center; examples are the CG secretariat, AIARC and the future alliance secretary; all users that need access to CGX.
- Preparation of additional tutorials for CG staff as required for the continuation of the project and push usage of services ready for consumption.
- Prepare documentation for the installation of development sites at centers to produce components compatible with the CGX production site.
- Test Plumtree email integration capabilities in support of communities.
- Run basic usability tests on the current interface.

To help the project coordinator in the remainder of the project an extension of three months will be offered to the two junior consultants working in Rome: Andrea Notarnicola and Silvia Ticconi.

Monitoring and Evaluation

The audience for this exercise was identified and reported in the previous PAR in the C4D project coordinators, the Content and Policy committee and the CIO office

Due to the consistent realignment of the project, judging performance based on the initially foreseen activities is rather difficult. Therefore, it is certainly difficult to assess how stakeholders see the project performance. However, the stakeholders were kept constantly updated as explained in the Newsletter paragraph. In addition, marketing activities that were occasions to get input into the project process were run at various occasions during the project as quickly listed in the Presentations given in paragraph below.

We feel that the monitoring and evaluation exercise is a learning process and as such we collected our thinking in the Lessons Learnt in paragraph below hoping that this would inform the next stages of the CGXchange development.

A great amount of work has been put into the project by the project Core Team but not only. In the paragraph Teams and Organizations that participated to the VRCI project we list the groups that participated at various stages and levels to the success of the project.

The experience and learning acquired during the project has been very consistent. As such we compiled a paragraph below containing Phase II suggested tasks for the next phase of CGXchange.

Presentations given

Marketing activities with the project stakeholders were carried out by the project coordinator at various events during the course of the project. Presentations are available as part of the papers produced by the project.

- 2004/11 IT Managers meeting at Worldfish – audience IT Managers, CIO office
- 2005/5 VRC Decision meeting at IPGRI – audience C4D (Content for development) project coordinators + CIO officer + Content and Policy Committee
- 2005/6 IT Managers meeting at ICARDA – audience IT Managers
- 2006/2 CGX workshop at IPGRI – some IT Managers + some Web Masters + CIO officer + some other ICT-KM stakeholders

Newsletter

A newsletter with updates on what was taking place in the project was sent to the “VRC core Team”, “VRC Content and policy Team” and “VRC close observers”. The last group was composed of CG staff interested to keep updated about the project; a list maintained by the project coordinator in the process of his marketing and disseminating information about the project and CGX. The full compilation of newsletters is available as a separate document called “VRCI project periodic reports”.

Lessons Learnt:

A key objective of the ICT-KM program is to build capacity in the CGIAR to lead the identified projects. An important part of this annual project report is therefore devoted to:

1. Getting consensus and commitment in the CG is difficult.
2. Communication is expensive.
3. Using a fully committed CG manager for coordinating the VRCI project was too heavy and leads to sub optimal performance for both jobs.
4. Professionally managing tasks needs heavy analysis. Do not just assume that one solution fits all.

For Point 1, we have relevant examples in the project attempt to build consensus over the image bank tool to be used in CGX and the architecture to be used to aggregate job opportunities and news in the CGIAR.

For the image bank, attempts were made also in the past years to get an agreement about the usage of a tool for all centers. A new attempt was made to involve the image bank community in the CG to come out with a possible solution for creating a CG level viewing of pictures available in the CGIAR distributed network. This interaction was led by Pierre Marchand and backed up by the VRCI project with no success. For the job and news aggregation, the project is still working hard to get consensus on a sustainable way of doing this as it is of great importance to the relevance of the content available through CGX.

For point 2, communicating in the CG is very expensive for a number of reasons:

- CG staff which potentially belongs to a particular community has to be contacted independently. Because only a few communities exist and are active in the CG, consulting staff in a certain area and taking decisions on the usage of tools and the aggregating of content in those areas require contacting several parties and work as an intermediate party with a very heavy work load.
- It is not known who is already active in certain areas. This makes it difficult to consult the right people that have experience and certainly would like to be heard about a decision to be taken on the adoption of a standard or tool.

It may easily be recognized that the above complexities are the ones that the CGX tries to solve. Until CGX will be mature enough to play this role, these communication complexities will still be there.

For point 3, the project coordinator has been acting as the IPGRI IT Manager and the VRCI Project Manager at the same time. Due to funding limitation and the amount of work to be performed, the Manager hired two Junior Consultants which required considerable coordination time from his side. Therefore, during the run of the project, the Manager spent 40% of his time on VRCI coordination.

For point 4, a relevant example is the initial plan of taking advantage of the Expertise directory application available through CIAT. The application is in use by around 3000 CIAT staff and partners and it was thought to be adaptable to the CG. However, in the context of the selection of Plumtree as the portal framework and the selection of a set of Collaboration tools to be integrated into Plumtree changes the scenario. A good part of the CIAT Expertise directory consists of collaboration tools to enable the users to interact with experts. As a result, we had to review the set of tools available already as part of selecting the platforms and what was available in the CIAT Expertise to evaluate gaps. In doing this the core VRCI team felt that a more comprehensive analysis should have been done to evaluate mostly used functions in these kind of systems and come out with the final set of tools required. It is true that in this we stepped further back, but the final result has been a very professional paper which has been used as the base on which to build the first phase of the implementation of the Expertise directory in CGX.

Suggestions:

- A. Nurture communities so that they take charge of an area. In the long run this will facilitate harmonization of tools and standards.
- B. Make sure that project coordination is properly accounted for in the managers PA. Alternatively, provide sufficient senior support to the project coordinator.
- C. It is strongly felt that the buy in for the usage of the collaboration tools in CGX by the CG staff should start from building capacity locally for support to such tools.
- D. Marketing is needed to encourage staff to enter their skills into the Expertise component of CGX.

Teams and Organizations that participated to the VRCI project

- **Core VRCI Project Team:** Dario Valori (IPGRI), Silvia Ticconi (IPGRI), Andrea Notarnicola (IPGRI), Massimo Buonaiuto (IPGRI), Juan Carlos Orozco (CIAT), Rolf Grau (CIAT). Details of what the Team has been doing through the time is available in the "VRCI project periodic reports" document.
- **Content and Policy Advisory Team:** Zaid Abdul-Hadi (ICARDA), Michael Hailu (CIFOR), Victoria Henson-Apollonio (IPGRI), Edith Hesse (CIAT), Danielle Lucca (CGIAR Sec), Jennifer Nelson (CIMMYT), Srinivas Srirangapatam (ICRISAT), Dario Valori (IPGRI), David Van-Eyck (IWMI).
- **WUA project:** The Web usage and analysis project coordinator and the VRCI project coordinator have been working very closely from the time when it was decided to move full responsibility for the

content to the WUA. A lot of information for analysis by the WUA project was collected with the help of the VRCI core Team and a input for the content came from the WUA to the VRCI project.

- **ICARDA:** A team lead by Abdul-Hadi Zaid, ran a consultancy commissioned by the VRCI project; "Inventory of CGIAR needs and resources".
- **IWMI:** A team lead by Pierre Marchand created the CGIAR flash location sites navigation and investigated a possible image bank viewer on CGX. The VRCI Core Team supported and worked closely with them.
- **Worldfish:** The WUA project commissioned marketing and branding for CGX from Worldfish staff. The VRCI core Team had strong interaction with them during the implementation phase.
- **CIO Office:** Now in charge of managing some CGX services, such as creation of groups sites.
- **CIAT:** CIAT is in charge of a project management system to be used by the centers and is continuously improving the system. In time for AGM 2005 they provided a test component showing the great long term potential of project manager integrated within CGX. In addition, CIAT has been the developing partner with IPGRI on this project.
- **Consultants**
 1. **Bellanet:** a Canadian non profit organization which ran two consultancies commissioned by the VRCI project: "Case studies of corporate intranets" and "Potential VRC platforms"
 2. **Plumtree Professional Services:** Roland Rupieper (Plumtree), Igor Polyakov (Plumtree)
 3. **BHuman**
 4. **Infotech**

Phase II suggested tasks

Some of the following suggestions came from direct experience and thinking of the VRCI project coordinator, others from feedback received during the CGX workshop held in Rome from February 28 to March 3 2006.

- Define an Information Architecture over which the CGX can grow in the next five years.
- Define an Information Strategy at the CGIAR level suggesting what tools to use depending on the task at end. For example if a generic web site needs to be created it should suggest the tool to use and who to contact for further information. For example, in the area of collaboration tools it is still unclear what is the border of usage between Plumtree community support and Windows Sharepoint services.
- Define a taxonomy and metadata sets to catalogue content and applications
- Put emphasis on training center resources specially on the use of collaboration tools
- Set in place a long term process for the creation of Policies and Guidelines
- Launch marketing initiatives in conjunction with new functionality or content made available
- Support community facilitators so that they would find it simple to:
 - Constantly improve their capacity through brainstorming in their community of facilitators
 - They would draw from a basket of ready solutions to increase energy to work on a certain topic
 - They would find and contacts experts in a field and invite them to participate to special real time sessions with their community.
- Collaboration tools should be further integrated with staff information and linkages with all relevant applications and content in an automated way.
- Put in place a mechanism for centers to share applications.
- Facilitate aggregation of people in potentially useful communities.
- Create virtual tours of CG sites.
- Review generic components to be integrated yearly to align with the industry progress for best CGIAR performance. For example, Collaboration tools.
- Integration of Live communicator within Plumtree.
- A possible killer application could be "Ask the CGIAR" to propose the CG as an expert advisor to its partners. This should be carefully thought and planned. Examples of implementations are available.

Annexes

Financial Report:

Financial Report to World Bank for the period of 1 Januar 2005 to 31 December 2005

References:

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[http://www.cgxchange.org/portal/server.pt?open=17&objID=297&DirMode=1&parentname=Dir&parentid=3&mode=2&in_hi_userid=8899&cached=true%20\(USR=cgxguest, PWD=cgxguest\)](http://www.cgxchange.org/portal/server.pt?open=17&objID=297&DirMode=1&parentname=Dir&parentid=3&mode=2&in_hi_userid=8899&cached=true%20(USR=cgxguest,%20PWD=cgxguest)).

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