CROP POST HARVEST PROGRAMME

Project Title:
Step Tools to Package and Deliver Information for Local Use

R 8402
(ZB 0369)

PROJECT FINAL REPORT

Start date – End date

Core Partners

Kenya Gatsby Trust (KGT), Nairobi, Kenya
Business Consult Africa (BCA), Blantyre, Malawi

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Project Final Report

Section A - Executive Summary

° The purpose of the project has been to generate and promote new tools for innovation systems that can be used to improve access, uptake and adoption of CPH knowledge for the benefit of the poor, under Theme 4 of the CPHP.

° The project has achieved its purpose by working with a coalition with core partners - Kenya Gatsby Trust (KGT) and Business Consult Africa (BCA), and collaborating partners - CPHP-EA and CPHP-SA. It has developed, demonstrated, pilot-tested and promoted new tools that can improve ways information and knowledge are managed locally on a day-to-day basis as enabling methods.

° The partners had no effective means of recording, managing, re-using or exploiting the 'intellectual capital' being generated through their activities. By using the tools developed and using information from their on-going projects for piloting, they have shown that they can improve the access, updating and adoption of information they are creating for the benefit of their stakeholders.

° The processes and methodologies involved are replicable, and given appropriate support, adaptable for other kinds of application by other organisations.

° As partners develop more experience and improve their skills, they will be able to play an increasingly important role in promoting and ‘rolling out’ systems for wider uptake.

° Innovative applications have been developed and pilot tested to meet the coalition needs for:

  - Systems for managing, coordinating and tracking farmer/producer assets and training activities.
  - Systems for handling and publishing documentation type information.

° Two Coordination and Training Workshops have been held involving all partners - in Blantyre (May 2005) and in Nairobi (October 2005) - to define, review and refine requirements as the project progressed. Working LAN systems have been installed on computer networks of three partners.

° A total of 7 Roadshows have been organised by the partners and led by Step Systems - 3 in Kenya, 2 in Malawi and 2 in Uganda. They were held during November/December 2005 to demonstrate, disseminate and promote the outputs of the project. A total of 125 people from 90 different organisations attended. As a result, various new opportunities for using the tools have been identified.

° The feedback from the Roadshows has confirmed the interest in, and need for, such innovative systems for delivering information. The Roadshows have improved awareness and have stimulated wider interest in all three countries - not only for crop post-harvest activities, but also in business development and microfinance - for new ways to manage knowledge to ultimately respond more effectively to the needs of the poor, other intermediaries and to policy-makers.
Section B - Identification and design stage

Project Identification

One of the essential problems facing many organisations in developing countries is their inability to manage information effectively in their day-to-day jobs. By making an organisation’s ‘intellectual capital’ more accessible and more exploitable, it could strengthen and enhance abilities to meet supply and demand needs of local information chains. And in doing so, help improve access, uptake and adoption of CPH knowledge for the benefit of the poor - which underlines the purpose of Theme 4 of the CPH Programme Strategy.

Undoubtedly, using databases to organise and manage data can offer many advantages. However, the complexities of setting up appropriate systems for smaller organisations frequently acts as a severe barrier - database technologies are invariably technically demanding, require specialist IT skills and support, and have associated high initial and recurring costs. There are also issues of ensuring legal usage, licensing, multi-users and fees. As a result, many use spreadsheets instead and others struggle with proprietary programmes such as ‘Access’ or have special database systems built which give rise to maintenance and other problems.

Based on the experiences gained through the earlier eToolbox Project - a database-driven informational resource package (DFID funded under the Enterprise Development Fund) - it was believed that many of these limitations could be overcome. By building on and refining the systems and tools developed for eToolbox, it was believed possible to create software systems that were ‘user-friendly’ and exploited the advantages that database technologies provide, but without users necessarily needing technical know-how about databases or database technology.

Project Design

The project thus aimed to research and develop a process (as a methodology) and a product (as a set of innovative (software) tools) that could be used for ‘managing content’ for different kinds of application, appropriate to the day-to-day needs of local organisations in Africa.

By ‘managing’, we mean the capabilities to input, store, change, search for, retrieve, analyse, view, print, output and republish ‘content’ within a database environment.

By ‘content’, we mean data, information and knowledge. These can take the form of articles, documents, spreadsheets, reports, images, audio and so on (as long as they are in a digital format such as doc, xls, ppt, pdf, gif, jepg, wav) as well as raw data (such as numbers, dates, names, quantities, values, baseline data).

As a process, we employed 'object-orientated' programming techniques using ‘object models’. This not only provides an effective means for visualising content requirements and inter-relationships, but it is very flexible and enables more rapid building of the programme code needed for the database systems support structures.

For the product, we choose to use ‘open source’, dynamic web-based, metadata-driven, relational databases techniques, linked with a centralised file repository.
Overall, this enabled us to conceive a 5-step approach for providing solutions:

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Scope with the users their requirements for managing, structuring and organising content.</td>
</tr>
<tr>
<td>Step 2</td>
<td>Develop with the users a comprehensive Object Model, including the inter-relationships and the specifications for metadata.</td>
</tr>
<tr>
<td>Step 3</td>
<td>Undertake programming work and build a working prototype system and pre-test it.</td>
</tr>
<tr>
<td>Step 4</td>
<td>Set up the application with the user and provide local training on data entry and on its use. The users continue to enter data and use the system on a trial basis over a period of time.</td>
</tr>
<tr>
<td>Step 5</td>
<td>From the feedback gained, make changes and refinements to finalise the application.</td>
</tr>
</tbody>
</table>

In this way, the project design intended an organisation’s ‘intellectual capital’ to become more exploitable by:

- Organising and systematising information and information flow
- Making the management of ‘content’ straightforward
- Encouraging people to use and share information more openly
- Warehousing the organisation’s ‘institutional history’.

With the capabilities to:

- Define relationships between items of content within a framework (‘object model’)
- Structure metadata to meet the content needs of specific applications
- Store large quantities of informational content in different formats
- Link together different databases
- Control access as to who can input and change content
- Control who can see content and who can use content
- Search - wide or narrow - rapidly
- Retrieve, analyse, recompile and republish content in a variety of different ways
- Facilitate the generation of different kinds of analyse report outputting
- Control output formatting using master templates.

We planned to develop the processes and software, and to pilot test them with the project core partners KGT and BCA; also in collaboration with the other coalition partners, namely CPHP-EA and CPHP-SA. To ensure clear focus of the partners from the outset, they had all been asked to base their requirements on projects they were currently involved with so that ‘real’ object modelling and ‘real’ data would be utilised.

In order to demonstrate and promote the benefits of the tools, as well as to assess the wider potential demand for them, the partners were also asked to plan and organise a series of Roadshows in Kenya, Malawi and Uganda for selected organisations to be invited across the private, ngo and government sectors.
Project Outputs Adoption Design

The adoption of the project outputs were linked into the project from the outset by design. It was agreed that the partners would use active projects for defining their initial ‘content management’ (object model) requirements and then for the tools to be collaboratively developed with Step Systems to meet their day-to-day needs for handling information. The systems developed would then be pilot tested by them, feedback given and refinements made as an on-going reiterative process.

For the Roadshows, people invited were selected by the partner organisations. This ensured that those attending had a ‘positive’ interest in learning about innovative ways for managing knowledge and were potential conduits for providing different pathways for wider uptake.

Important Institutional Factors

The institutional factors that were most important to the project included:

- The core partners (KGT and BCA) being established BDS providers in their countries with a wide range of existing local and regional clients and contacts with:
  - sound business and financial security
  - successful previous collaboration through the eToolbox project
- The collaborating partners (CPHP-EA and CPHP-SA) being established BDS providers with a wide range of existing local and regional clients and contacts
- Positive attitudes to adopting new methods of working
- Active projects which could be used for pilot testing the process and tools
- Means to be able to adopt the tools within the organisation
- The potential to be able to promote and extend the outputs of the project.

Section C - Research Activities

The research activities undertaken against each of the milestones were as follows:

Milestone 1 - System framework specification completed.

At the beginning of the project, all four partners were asked to review their informational handling requirements and compile a list of requirements. The results were used to develop a common platform for the System framework (‘object models’) and specification for developing database structures which were appropriate to their needs and their potential clients.

The eToolbox About Foods in Africa database system (developed through an earlier DFID-funded project) was used as an initial model for all partners to try out, to experiment with and to learn about the importance of metadata parameters. From the specification details given, Step Systems then developed and tested initial systems and tools back in the UK.

Milestone 2 - All coordination workshops completed.

Two 3-day coordination/training participatory workshops were held with all four partners of the coalition (Malawi in May 2005 and Kenya in October 2005) to review and refine the framework specifications and for training. Requirements were collectively agreed.
Milestone 3 - Systems and tools developed and tested; Roadshows completed.

Developing and Testing

In the intervening period, all four partners were encouraged to use the systems and tools on their computers and to enter data using 'real' information from projects in which they were actively involved so as to ensure effort was appropriately focussed and for pilot testing.

During the visits to Kenya and Malawi, LAN versions of the systems were installed on the KGT and BCA local computer networks. Training was given to familiarise all partners with using the tools. During this time, they established initial dataset systems for their projects on:

- Farmer production, assets and training activities - Chia Watershed Management Project.
- Group training activities - Grassroot Market Access Project.
- Surveys of farmer group assets and training - Coastal Mango Project.
- Surveys of group assets and training - Good Wood Training Project.

A LAN version was subsequently installed on the computer network at the CPHP-EA/NIDA offices in Kampala, where training was also given in support.

As no visits had been planned to Zimbabwe, a LAN version was not installed on the network at the CPHP-SA office in Harare.

From the feedback gained from the partners, programme debugging and modifications, progress were made to improve the 'ease of use', 'system robustness' and 'system flexibility' of the tools being developed as a reiterative process.

Roadshows

From 21 November to 10 December 2005, a series of seven Roadshows were held - three in Kenya, two in Malawi, two in Uganda - to disseminate and promote the outputs of the project. These were planned and organised by the local partners (KGT, BCA and CPHP-EA/NIDA) who invited selected people from the private sector, BDS providers, NGOs and government departments. A total of 125 people from 90 different organisations attended.

It was decided not to hold these as open events where participants paid to attend. It was felt more appropriate to organise them along the lines of 'focus group' workshops with people invited by the partners with whom they already had relationships. In this way, it was possible to target the content of the Roadshows and demonstrations of the systems more specifically to the backgrounds of the audiences.

Section D - Outputs

Physical Outputs

The research outputs were all achieved as defined by the respective OVIs, with the addition of four extra Roadshows, as follows:

Framework Specifications

Two framework specifications were agreed between the partners, with priority to the first:
Agricultural Assets Information System for tracking, tracing and linking farmers, groups, assets, activities, production, products, partners, projects.

Document Management System for holding articles, publications, academic and research papers linking authors, profiles, titles, categories, regions.

The framework specifications are represented as ‘object models’. They are the key elements on which the applications have been developed and piloted-tested. Copies of these are included below for reference.

Object Model for the Agricultural Assets Information System
It can be seen that each of the 'objects' contain 'metadata' (or fields). These are used for indexing the particular item of content. The metadata varies from application to application, depending the informational needs as specified by the users.

**Summary of Outputs**

<table>
<thead>
<tr>
<th>Output</th>
<th>Number Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framework specifications ('object models')</td>
<td>2 systems</td>
</tr>
<tr>
<td>Overseas coordination/training workshops</td>
<td>2</td>
</tr>
<tr>
<td>Set up of Initial Datasets</td>
<td>4</td>
</tr>
<tr>
<td>Step Systems and Tools</td>
<td>2 applications developed, pilot-tested and installed on 3 computer networks</td>
</tr>
<tr>
<td>Instruction eManual</td>
<td>1</td>
</tr>
<tr>
<td>Training of local personnel</td>
<td>8</td>
</tr>
<tr>
<td>Roadshows</td>
<td>7 in 3 countries</td>
</tr>
<tr>
<td>People familiarised with the Step Systems</td>
<td>125 from 90 different organisations</td>
</tr>
<tr>
<td>Reports:Quarterly reports</td>
<td>3</td>
</tr>
<tr>
<td>Overseas visit reports</td>
<td>2</td>
</tr>
<tr>
<td>Roadshow report</td>
<td>1</td>
</tr>
<tr>
<td>PCSS</td>
<td>1</td>
</tr>
<tr>
<td>PC report</td>
<td>1</td>
</tr>
</tbody>
</table>
Assessment of Outputs

Developing and implementing the systems has involved more effort than was anticipated. Nonetheless, the planned outputs with the core partners have been achieved and with CPHP-EA/NIDA. And we believe that the process approach adopted and tools developed have high potential for replication and for wider uptake for providing solutions for 'managing knowledge'.

The Roadshows proved to be highly successful. From the feedback received, there is a clear need for systems to package and deliver information in this way, not only in the CPH sector, but in other sectors also, and across different business types (private, ngos and government).

However, it is evident that partners could have benefited from longer periods of training to consolidate their experience and to deepen their skills. They have not reached the stage yet where they could confidently train other users to use the systems. It is for this reason that, in Section G on Project Effectiveness, we have given an overall project score of 2 on Project Output 6 (ie as 'largely achieved'). Also, as CHP-SA are in the process of pilot-testing, for which we are giving continuing support, we have similarly given an overall score of 2 on Project Output 3.

Intended Use of Outputs by Partners

The partners have used the project outputs to create initial datasets as explained in Section C above. They are continuing to add data to those over the life-time of the projects. Furthermore, both KGT and BCA have expressed their wish to expand the use of the tools to all project and business activities as have CPHP-EA.

Further Stages

Partners

Having developed the systems and tools and carried out pilot-testing with our core partners KGT and BCA, and also with CPHP-EA, we need to be able to consolidate their positions by:

1. supplying additional training
2. expanding the use of the tools on other projects across the respective organisations
3. bringing the organisations up to a situation whereby they are able to locally promote and supply standard systems for other clients and provide local training in support
4. creating a network of local users.

The aim is ultimately to bring the partners to a level where they can effectively customise their own systems and to produce solutions using the Systems and Tools developed, without the need for on-going technical support from us. They should be in a position to be able to undertake replication activities on a locally commercial basis and generate income to further develop their own business interests without further intervention.

A number of different initiatives are being prepared by the partners themselves to seek local funding and to follow up initial discussions with potential clients arising from the Roadshows, including:

- **In Kenya**: Pride Africa, Kenya Gatsby Trust, BIOP, Honey Care and CropAfrica
- **In Malawi**: Demat, DFID, OVOP, Oxfam, PSI
- **In Uganda**: Kilimo Trust, BUDS, AT (Uganda).
We intend supporting partners as appropriate in bringing any initiatives together.

**Step Systems**

Given the wider interest in the tools developed, as evidenced from feedback from the partners and particularly from the Roadshows, we believe that developing generic type object models for a range of different types of applications and producing pre-packaged, low cost, non-technical, open-source solutions is the most important way forward. In other words, using Step Systems and Tools as a platform for ‘managing knowledge’ across a series of themes. And using the partners as a means of rolling out packages and providing local training support for users.

For instance, increasingly, producers, processors and others involved in chain activities are needing to face up to certification, auditing and traceability issues in some way or other. Step Systems and Step Tools could play a key role in producing practical, integrated software solutions that are locally appropriate and low in cost.

There are a number of compelling reasons to do this. For example, as most countries are signatories to WTO Agreements, there is now an automatic legal requirement that local food businesses must comply with Codex (as well as with local regulations), which in turn means compliance with HACCP as a methodology for food safety.

Arising from WTO, supply chains will become under growing pressure to be able to prove compliance and to verify the safety and quality of their products. In fact, supermarkets in the region are progressively demanding this. And the need for exporters to Europe to comply, and to be able to demonstrate compliance, is already embedded - for instance, with 'Fair Trade' or 'Organic' requirements (if they are supplying those kinds of product, or with 'Eurepgap' for fresh produce.

We are aiming to seek funding support for these activities from international donors.

We have already submitted an application for an award - for innovative ICT projects - under the Stockholm Challenge initiative on 31.12.2005.

We have also since gained a contract from NRIL (Project ZB0394) to use the tools for developing and producing an interactive system for the CPHP Compendium on CD-ROM.

**Section E - Purpose**

**Project Purpose**

The purpose was ... *New tools are generated and promoted for innovation systems that can be used to improve access, uptake and adoption of CPH knowledge for the benefit of the poor.*

The project has achieved the purpose.

By working with four intermediary organisations in Africa that have direct linkages with those involved urban and rural agricultural activities, it has aimed to contribute to poverty reduction by enabling and embedding new skills locally for managing knowledge. It has generated and pilot-tested systems and tools to help build the capacity of local business development service providers so they are better able to mobilise information locally to reach stakeholders and intermediaries involved in crop post-harvest chain activities. Systems have been installed on the computer networks of KGT, BCA and CPHP-EA.
The systems and tools have been demonstrated and promoted through a series of seven Roadshows in the region (in Kenya, Malawi and Uganda) to various private sector, ngo and government departments as well as through the Step Systems web site.

**Value Assessments by Others**

Our assessments have been based on the feedback from the 125 people from 90 different organisations attending the Roadshows as well as from the partners.

Almost without exception, it seems organisations were not using any kind of knowledge management system (other than hardcopy project files). Participants commonly reported using word documents and spreadsheets for holding data. They complained about the many problems that they encountered and the inflexibilities of these solutions, because it was invariably difficult to subsequently locate information - especially if someone was out-of-office or had left the organisation.

A few participants reported making use of a MS Access database for specific projects and highlighted the problems of the high costs hiring local IT specialists and subsequent weak technical support available.

The reasons cited for needing improved systems included:

- being unable to effectively cope with paper-based systems, because of too much paper;
- difficult to search for and find information subsequently when using ‘hard copy’;
- using spreadsheets which proved to be ineffective and inflexible, but they knew of no other methods;
- using propriety and specially developed database systems resulting in long development times and high initial and recurrent costs;
- poor skills of many local IT specialists, both in terms of providing advice and in fixing problems;
- lack of ‘know-how’ to integrate informational resources;
- losing staff with key ‘institutional history’ and knowledge of earlier projects;
- practical data (such as baseline studies) being discarded after projects have ended ..... *and more*.

The key message that came across from many organisations attending was that they all had significant problems with managing data, information and knowledge – whether it was about people, assets, activities, products, training, projects, finance, regulatory compliance or documents. And not being able to produce, as effectively as they would wish, feedback to stakeholders and funders to substantiate developmental improvements.

The participants overwhelmingly expressed the need for flexible, low cost, non technical solutions to handle different informational needs to, for instance:

- managing projects and project reports;
- managing training activities;
- tracing quality in food chain operations for national, regional and export markets;
- tracking and monitoring micro-finance activities;
- monitoring the performances of businesses and the impact of training interventions;
tracking farmer assets and livelihoods;
tracking, monitoring and evaluating the installation of water supplies as part of health programmes ..... and more.

Because of these factors, many of the participants frequently felt hindered by their lack of means to be able to provide relevant and reliable analytical evidence to partners and funding providers. Demonstrating more effectively the impacts of their activities, particularly to show how livelihoods were improving and why, was repeatedly cited as a key constraint.

Project Hypothesis

The hypothesis was ... By developing flexible data handling tools that meet the needs of local BDS providers to strengthen their capacity to package and deliver CPH information generated from different sources, this can help to enhance the accessibility of information and its uptake as knowledge by target end-users, which ultimately benefit the poor.

Although it is not conclusive, present evidence based on feedback from partners and from people attending the Roadshows is that the tools provide practical, constructive and functional means to strengthen local informational capabilities and enhance the accessibility of information. And as a result, we believe the results of the research have been validated as potentially effective.

Section F - Goal

Project Goal

The goal was ... National and international crop-post harvest innovation systems respond more effectively to the needs of the poor.

The project outputs have contributed to the project goal by validating a new means to mobilise and deliver information locally. The systems and tools developed are being used by intermediary organisations involved in crop post-harvest systems in Kenya, Malawi and Uganda.

The systems are replicable and potentially exploitable for managing a wider range of information and knowledge in the private, ngo and government sectors for a variety of different needs.
Section G - Project effectiveness

<table>
<thead>
<tr>
<th>Project Output</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Goal</td>
<td>x</td>
</tr>
<tr>
<td>Project Purpose</td>
<td>1</td>
</tr>
<tr>
<td>Project Outputs 1.</td>
<td>1</td>
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<tr>
<td>Project Outputs 2.</td>
<td>1</td>
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<tr>
<td>Project Outputs 3.</td>
<td>2</td>
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<tr>
<td>Project Outputs 4.</td>
<td>1</td>
</tr>
<tr>
<td>Project Outputs 5.</td>
<td>1</td>
</tr>
<tr>
<td>Project Outputs 6.</td>
<td>2</td>
</tr>
<tr>
<td>Project Outputs 7.</td>
<td>1</td>
</tr>
</tbody>
</table>

Although Project Output 3 has been achieved with the other partners, CPH-SA are still in the process of pilot-testing. We have thus rated this as ‘largely achieved’.

Whilst the amount of training imparted was as planned for Output 6, the feedback from the partners was that it was not entirely adequate to meet their full needs. We have thus rated this as ‘largely achieved’.

Section H – Uptake and Impact

Organisational Uptake
The Step Systems and Tools are presently being used by:

- Kenya Gatsby Trust, Kenya
- Business Consult Africa, Malawi
- CPHP-EA, Uganda

It is also intended that the CPHP-SA will use them.

The Systems and Tools are also being used to produce a Compendium on CD-ROM as an interactive database of selected information and experiences of the NRIL CPHP about managing research partnerships for development.

End user uptake
Most of those attending the Roadshows confirmed the need for low cost, non-technical, database-driven systems for managing information, not only in the CPH sectors, but also in other sectors and across different clients – private sector, ngos and government.

End-users expressing specific interest in uptake, which are being followed up included:

*In Kenya*
Pride Africa (ngo), Kenya Gatsby Trust (ngo), Honey Care (ngo), BIOP (ps), and CropAfrica (ps)

*In Malawi:*
Demat (ps), OVOP (gov), Oxfam (ngo), PSI (ps)

*In Uganda:*
Kilimo Trust (ngo), AT (Uganda) (ngo), BUDS (gov).
**Knowledge**
Many of the participants at the Roadshows frequently felt hindered by their lack of means to be able to provide relevant and reliable analytical evidence to stakeholders, particularly funding providers.

Demonstrating more effectively the impacts of their activities, especially to show how livelihoods were improving and why, was repeatedly cited as a key constraint.

A number of other important issues have also been highlighted:

- practical and useful data (such as baseline studies) being discarded soon after projects have ended
- losing staff with key ‘institutional history’ and knowledge of earlier projects and the whereabouts of information
- spreadsheets are difficult tools for managing data effectively
- propriety and specially developed database systems result in long development times and high initial and recurrent costs
- local IT specialists frequently have poor skills.

**Institutional**
In round-up discussions with partners, the day-to-day advantages offered by the prototype systems and tools installed on KGT, BCA and CPHP-EA computer networks have already convinced them that they should fully implement arrangements for all projects. In addition, the ability to be able to track and monitor projects, people, activities, training, progress, reports and so on within the organisations themselves - as management tools to improve operational effectiveness - are now regarded as being indispensable for the future.

**Policy**
The project has not generated any specific impact on policy, law or regulation at this stage. However, future stages could entail the adaptation of the tools to meet regulatory requirements, for instance, for food safety schemes such as HACCP and for tracking/auditing purposes for Fair Trade or for Organic Certification.

**Poverty and livelihoods**
It is too early to assess the impact of the project on poverty and livelihoods. The feedback from the partners themselves using the Step Tools is that they provide a highly positive and locally appropriate means for organising and tracking information. Within their current projects, KGT and BCA are both involved with baseline studies to track farmer assets and training given. From data collected over time from hundreds of villages, they will be able to assess improvements and changes by using Step Tools for trend analysis from data they have entered into the Step database systems.

**Environment**
The project itself is environmentally neutral. The project has not generated any adverse environmental impacts. Actions to maximise environmental benefits will be followed up by the partners through the provision of appropriate information arising on best practices as they disseminate results to stakeholders using the tools developed.

Signature          Derek Cox  
Managing Partner      12 January 2006
ANNEXES

I  Project Logical Framework
II  Partner (user) organisations workplan for adopting project outputs
III  Disseminated outputs

This publication is an output from a research project funded by the United Kingdom Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID. R8405 Crop Post-Harvest Research Programme.
## ANNEX I: Project Logical Framework

### Project LogFrame: R 8405

#### Narrative Summary

<table>
<thead>
<tr>
<th>Goal</th>
<th>Project LogFrame: R 8405</th>
</tr>
</thead>
<tbody>
<tr>
<td>National and international crop-post harvest innovation systems respond more effectively to the needs of the poor.</td>
<td>By 2005, a replicable range of different institutional arrangements which effectively and sustainably improve access to post-harvest knowledge and/or stimulate post-harvest innovation to benefit the poor have been validated in four regions.</td>
</tr>
<tr>
<td></td>
<td>Project evaluation reports.</td>
</tr>
<tr>
<td></td>
<td>Regional Coordinators’ Annual Reports.</td>
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<tr>
<td></td>
<td>CPHP Annual Reports.</td>
</tr>
<tr>
<td></td>
<td>Partners’ reports.</td>
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<tr>
<td></td>
<td>National and international crop-post harvest systems have the capacity to respond to and integrate an increased range of research outputs during and after programme completion.</td>
</tr>
<tr>
<td></td>
<td>National and international delivery systems deliver a range of services relevant to poor people in both focus and non-focus countries.</td>
</tr>
<tr>
<td></td>
<td>Livelihood analysis provides accurate identification of researchable constraints or opportunities that lead to poverty reduction.</td>
</tr>
</tbody>
</table>

#### Purpose

<p>| Purpose | New tools are generated and promoted for innovation systems that can be used to improve access, uptake and adoption of CPH knowledge for the benefit of the poor | 1. By 2006, evidence-based insights on how research innovations can be introduced sustainably into local knowledge systems are disseminated to intermediary organisations in 4 regions. |
|---------|-------------------------------------------------| 1.1 Value assessments by users of the new tools developed by the project |
| | 2. By 2006, evidence-based insights on how research innovations can be introduced sustainably into local knowledge systems are disseminated to intermediary organisations in 4 regions. | 2. Analysis of interests expressed by local organisations for different applications |
| | 3. By 2006, thematic synthesis of CPHP’s technical outputs are disseminated to intermediary organisations in 4 regions. | 2.1 Assessment of the self-sustaining contribution that the project makes to research Theme 4 |
| | | 3.1 Extent to which the project outputs feature in programme dissemination activities |
| | | BDS providers and other agencies increasing exploit ICTs for developmental activities related to pro-poor growth |</p>
<table>
<thead>
<tr>
<th>Outputs</th>
<th>Activities</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. System framework specification</td>
<td>1. Agree framework specification for the database systems &amp; tools with all 4 partner</td>
<td>Conditions exist for enhanced take-up by local organisations of computer-based systems and technologies.</td>
</tr>
<tr>
<td>2. Coordination/training workshops</td>
<td>2. Carry out in-country coordination/training workshops</td>
<td>Systems and tools developed are exploitable locally.</td>
</tr>
<tr>
<td>3. Custom systems &amp; tools</td>
<td>3. Systems and tools developed and tested to meet specification agreed</td>
<td></td>
</tr>
<tr>
<td>4. Instruction emanual</td>
<td>4. Compiling instruction emanual</td>
<td></td>
</tr>
<tr>
<td>5. Roadshows</td>
<td>5. Partners organise roadshows</td>
<td></td>
</tr>
<tr>
<td>6. Trained persons</td>
<td>6. Training of key persons at workshops</td>
<td></td>
</tr>
<tr>
<td>7. Project reports</td>
<td>7. Submitting project reports</td>
<td></td>
</tr>
<tr>
<td>1.1 Completed by April 2005 in Malawi</td>
<td>1.1 Jan-April 2005</td>
<td>Key personnel do not leave organisations</td>
</tr>
<tr>
<td>2.1 First coordination/training workshop undertaken in Malawi by April 2005</td>
<td>2.1 April and Sept 2005</td>
<td>Computer and communication systems are available and reliable</td>
</tr>
<tr>
<td>2.2 Second coordination/training workshop undertaken in Kenya by Sep 2005</td>
<td>3.1 Jan-Oct 2005</td>
<td>Roadshows recover all local costs and do not become a burden on project finances</td>
</tr>
<tr>
<td>3.1 Finalised in UK by Oct 2005</td>
<td>4.1 Aug-Oct 2005</td>
<td></td>
</tr>
<tr>
<td>4.1 Finalised in UK by Nov 2005</td>
<td>5.1 December 2005</td>
<td></td>
</tr>
<tr>
<td>5.1 Roadshows held in Uganda, Kenya &amp; Malawi by December 2005</td>
<td>6.1 By end of project</td>
<td></td>
</tr>
<tr>
<td>6.1 Training of persons completed by December 2005</td>
<td>7.1 Quarterly and annual</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEX II: Partner workplans for adoption of outputs

A number of different initiatives are being undertaken by partners post-project, during the first part of 2006, to seek local funding and to follow up initial discussions with potential clients arising from the Roadshows, including:

**KGT, Kenya**

... with Pride Africa, Kenya Gatsby Trust, BIOP, Honey Care and CropAfrica as these organisations have expressed specific interests. Pride Africa is particularly interested in using the systems and tools in connection with DrumNet, an information and financial platform. KGT will use the tools further with their datasets as well as examining ways to bring in more projects and subsequently into a knowledge-based system for the entire organisation.

**BCA, Malawi**

... with Demat, DFID, OVOP, Oxfam, PSI who have expressed specific interest in Malawi. BCA similarly will use the tools further with their datasets as well as examining ways to bring in more projects and subsequently into a knowledge-based system for the entire organisation.

**CPHP-EA/NIDA, Uganda**

... with the Kilimo Trust, AT (Uganda) and BUDS (who could provide support on a 50% cost-sharing basis). NIDA similarly will use the tools further with the development of their agricultural assets datasets, as well as examining ways to bring in more projects and subsequently into a knowledge-based system for the entire organisation.

We are also involved with NIDA in the use of Step Systems and Tools for an application - the NRIL Compendium Guide on CD - concerning the experiences and lessons learnt in managing research for development of the Crop Post-Harvest Programme by NRIL.

**CPHP-SA, Zimbabwe**

CPHP-SA are intending to use the systems for documentation systems.

In all cases, we intend supporting partners as appropriate in bringing any initiatives together.

**Step Systems**

We are aiming to seek funding support for follow-on activities from international donors over the course of the next 6 months.

An application for an award for innovative ICT projects under the “Stockholm Challenge 2006” initiative was submitted on 31.12.2005.

We have also gained a contract from NRIL (Project ZB0394) to use the tools for developing an electronic tool for the CPHP Compendium. This is led by CPHP-EA/NIDA.
ANNEX III: Outputs

Publications:
None

Internal Reports:


Other Dissemination of Results:


Development Associates (NIDA), Kampala, Uganda. 8 December 2005 [Half-Day Training Workshop for 10 NIDA staff].

**Listing and reference to key data sets generated:**


Step Tools Project
Step Systems Ltd UK
12 January 2006