#### CABI PARTNERSHIP FACILITY 2006

## FINAL REPORT SIERRA LEONE

# Engaging Ideas

new ways to match demand and supply of technologies



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## Summary

New extension methods were introduced and some tried. We wrote four factsheets on priority pest problems and ran a plant health clinic. Instructions and guidelines for using all methods, including *Going Public*, were distributed to a group of about 20 researchers, extension agents and teaching.

Research and extension in Sierra Leone has reached an important crossroads. Funding for work is difficult to obtain and it is not immediately obvious what can be done to change this. One suggestion is to use some of the quick and inexpensive methods discussed during this project to obtain preliminary results which would encourage more investment from government and donors.

It is important to have evidence of achievements and to show initiative in trying new ideas. *Plant health clinics* and *Going Public* are partial solutions to often complex problems of production, market access and so on. They also help to increase confidence by showing what can be done with existing resources.

The cycle of project dependency should not discourage personal initiative. Showing what you can do encourages others to support your work, whether in crop protection, crop or animal production. CABI and the Global Plant Clinic will continue to work with Sierra Leone to see how long term improvements can be achieved in service delivery and technical support for millions of growers in an extremely poor country. That is surely what they deserve.



A new sweet orange disease from Makeni and to the north

#### COVER:

Kanu and Conteh in Makeni have both been affected by a new orange disease.

## 1. Background

A briefing (concept) note was prepared by Mark Holderness in March 2006 entitled Restructuring and rehabilitating research and extension institutions to meet the post-conflict agricultural development needs of Sierra Leone. Prof Edward Rhodes, head of the National Agricultural Research Coordinating Council and CABI Liaison Officer for Sierra Leone, supported the general ideas. Thomas Winnebah, a social scientist from Njala University also commented.

The intention was that a Partnership Facility (PF) project would build on Farmer Field Schools (FFS) established by FAO and focus on peri-urban agriculture. When the call for 2006 PF projects was issued in May 2006 it included a proposed project in Sierra Leone under the heading of 'post-conflict rehabilitation of innovation systems'.

I then wrote a PF project proposal entitled *Engaging Ideas* and made a two week visit to Sierra Leone in early December, the first available time for travel. The main aim was to bridge the gap between demand and supply of agricultural technologies and to try out new extension methods.

The original proposal of working through FFSs was impractical in the time available. Instead the *Engaging Ideas* project examined how new methods offered new ways of encouraging innovation and were quick, inexpensive and reached large numbers of people.

The new methods were all originally developed under the Global Plant Clinic. This project offered the opportunity to make them more widely known and to show their wider relevance to all aspects of agriculture, not just plant health.

### 2. Terms of Reference

The **purpose** was to: strengthen research response and offer of technologies by extension workers to meet farmer demands.

Three outputs were proposed. The outcomes are discussed in section 4 (Results).

Output 1

Improved awareness of how farmer demand can be met by supply of technologies.

#### Output 2

Programme of further activities based on successful outcomes of practical exercises and discussions

#### Output 3

Research and extension identify new ways of working together.

#### 3. Activities

I arrived on the 4 December and returned to the UK on the 14 December 2006. This was my first visit to Sierra Leone and the first three days were spent in meeting people and organising a two day workshop on extension methods.

A programme was outlined with Prof Rhodes and executed with the assistance of Dr Dennis Taylor of the Rice Research Station and Dr I M O Shamie of the Ministry of Agriculture and Food Security. Before the workshop we visited several peri-urban agriculture sites around Freetown (where I was based throughout my stay). We saw mainly women tending high-value, horticultural crops. These included leafy vegetables, such as jute (krain-krain) and amaranthus, lettuce, onions and cocoyam. The dry conditions signalled a period of lower production and pest incidence, though all the raised plots I saw were irrigated. Abandoned packets of pesticide and talks with several women and extension agents suggested frequent application of chemicals and persistent problems with insect pests.

These small areas of intense production have limited access to extension workers and technical support. NARCC institutes have emphasised 'mandated crops', such as rice, maize, cacao and coffee. This makes sense in deciding research priorities and allocating limited resources. But it leaves little scope for working with peri-urban horticultural crops.

The workshop set out to suggest ways in which all growers, including those in peri-urban agriculture could receive more regular advice and assistance. Details are provided in the separate workshop report. The workshop emphasised practical action: new ideas that could be tried quickly and would reveal new information

After the workshop we held a pilot plant health clinic in Waterloo, run by Jeff Momoh, Dennis Taylor, Alusaine Samura and IOM Shamie, all of whom attended the workshop.



After the clinic, I went to Makeni with Dr Shamie from MAFS to investigate a newly reported and unknown problem on sweet orange. This was a good opportunity to discuss methods from the workshop and how they might be used to deal with the problem. *Going Public* to raise awareness and gather information about distribution of the problem; factsheets to recommend control measures.

At the end of my visit I gave an invited presentation to scientists and extension agents from NARCC and MAFS. Entitled *Innovation in agriculture starts at home*, a key message was to try out methods introduced during the workshop.

## 4. Results and other observations

Research and extension in Sierra Leone has suffered from years of neglect and only now are institutes and organisations beginning to recover. Progress is slow, partly because of the paucity of new project opportunities. The only support for crop protection was through FAO Farmer Field Schools. These cannot solve all the problems facing extension and technical support and other approaches and ideas are needed to encourage closer collaborations between growers, extension and research.

The workshop sessions were warmly appreciated but this is only a small beginning in capacity building. The 'demand' from researchers is of course for more funding but that will achieve little in the short term unless delivery mechanisms and adoption of technologies are improved. That is the 'demand' from extension workers and plant health inspectors (agricultural officers with MAFS). Plant health clinics will help to define this demand more carefully while the existing capacity of extension officers should not be ignored and built upon.

The plant health clinic in Waterloo was organised on the day of our visit. This is not the best way to do things: advance warning and better organisation will attract more people. It also allows the plant doctors to be better prepared to respond to queries. Despite arriving unannounced we soon found an empty market stall and borrowed a table to set up a makeshift operation. You can't always depend on a project to do things and we showed how to improvise with limited resources (see photos).

The response to the clinic was immediate and people quickly understood what we were offering. The four plant 'doctors' were slightly bemused at the beginning, but Dennis, Shamie, Alusyne and Jeff very quickly got the hang of it. Shamie walked up and down the main market thoroughfare announcing the clinic. This attracted people who would have passed by without seeing the clinic.

#### 5. Outputs

The project explained how extension messages can be outlined and then distributed in uservalidated factsheets.

Dr Shamie will hold more plant clinics and consider writing factsheets on more topics. The factsheets we produced during the workshop still need to be validated by users.

Running regular clinics provides a focal point for both research and extension: it is an excellent method for gathering demand while offering researchers a way of promoting new and better technologies, and not just for plant health problems.

#### 6. Next

Researchers and extension workers have a range of methods available to try. The results need to be written up and the experiences shared with others. Examples are provided on the workshop CD. If methods require changing then this should be noted.

The methods introduced are meant to complement and add value to existing programmes of work. They can be adapted and used in future projects – Research into Use is one possibility. Success encourages investment and if the clinics can be run regularly then the results will speak for themselves. The GPC will provided training on 'how to become a plant doctor' later in 2007 and continue to explore wider linkages.

