

## **Agriculture Health Research Platform Annual Meeting**

### **Relevant FAO activities**

Nairobi, 13-14 January 2009

*The list below does not pretend to be an exhaustive inventory but to provide some entry points for further collaboration.*

#### **CLIMATE CHANGE: IMPLICATIONS FOR FOOD SAFETY**

FAO has developed a comprehensive paper which aims to identify potential impacts of anticipated changes in climate on food safety and their control at all stages of the food chain. The purpose is to raise awareness of the issue and to facilitate international cooperation in better understanding the changing food safety situation and in developing and implementing strategies to address them.

The food safety issues covered include: agents of food-borne disease with specific consideration to zoonotic diseases, mycotoxin contamination, biotoxins in fishery products and environmental contaminants with significance to the food chain. The paper also highlights the need for adequate attention to food safety in ensuring preparedness for effective management of emergency situations arising from extreme weather events. There is much uncertainty about possible food safety implications of climate change. This paper discusses some expected effects that are supported by data; it also considers other issues that are largely speculative.

Some work in this regard is on-going, e.g.: building capacity of extension workers on these improved agricultural practices in order to reduce the contamination of corn by mycotoxins.

#### **HUMAN ECOLOGY: FOOD SECURITY IMPACT OF EMERGING AND RE-EMERGING DISEASES OF AGRICULTURAL IMPORTANCE IN THE TANZANIA-UGANDA INTERFACE ECOSYSTEM**

This paper examines local farmers' perspectives about emerging and re-emerging infectious diseases (EIDs) of humans, crops and livestock and their impact on household food security in the Tanzania-Uganda interface ecosystem to the west of Lake Victoria. This perspective often differs from views held by experts, which explains why strategies advocated by experts and policy makers are not often adhered to. Therefore the conclusions of this study strongly suggest that this local farmers' perspective should be taken into account in order to design efficient disease prevention and control strategies since.

#### **TRANS-BOUNDARY DISEASES, AGRICULTURE AND HEALTH: POLICY IMPLICATION AND RESEARCH PRIORITIES**

This study examines the burden of trans-boundary diseases, its causes and its impacts on the socio economic situation of developing countries. The objective of this study is to highlight the needs for further research in that field, in order to understand better the channels of transmission of trans-boundary diseases and their consequences, and to

thereby to improve the surveillance system and the actions that are needed to lower the socio economic impacts of the epidemics.

The conclusion of this study is that diseases control requires an accurate assessment of institutions capacities, a multisectoral, international and coordinated effort and that research in that field should be more policy oriented to be more easily appropriated and translated into action.

#### **EARLY WARNING AND CONTROL OF RIFT VALLEY FEVER AND OTHER CLIMATE-RELATED ZONOTIC DISEASES IN AFRICA**

FAO, WHO and research institutions are working on these issues and a build up a Regional Early Warning and Response System / regional livestock emergency task force linked to a response mechanism for RVF and other climate-related diseases could be one option.

#### **FAO BIOSECURITY WIKI**

It is intended as a place for *FAO staff, partners and colleagues to share* - and search for - materials on *biosecurity* in the food chain. The main focus is on Africa given the extent of plant pest and disease problems there, and the level of donor interest in addressing African food security and poverty issues.

The aim is to create a working space to collect outputs from FAO's programme on Biosecurity, and highlight possible synergies, so that the programme can become more than just "the sum of its parts" (different components).

This website is the result of the the work of Norway PCA, 2005-2008 on biosecurity, which also lead to the establishment of a FAO biosecurity toolkit, which aims at helping countries to assess their own capacity to deal with theats to national biosecurity such as animal diseases, plant pests outbreaks, etc.

For more information, please visit FAO biosecurity wiki : [http://km.fao.org/biosecwiki/index.php/Main\\_Page](http://km.fao.org/biosecwiki/index.php/Main_Page)

#### **PROTECTING AND IMPROVING FOOD AND NUTRITION SECURITY OF HIV/AIDS AFFECTED CHILDREN AND THEIR COMMUNITIES**

Many of the projects supported by FAO technical units have a strong – although usually not systematically articulated - operational research dimension

The above project was implemented in Lesotho and Malawi by the respective governments with technical support from FAO, UNICEF and WFP; and funded by the German Government.

The primary aim of the project was to improve both in the short and long term the overall food and nutrition security of orphans, other vulnerable children (OVC) and their communities. The project addresses the root causes of reduced care and food insecurity of OVC by employing the following strategies:

- providing support to livelihoods and improved food and nutrition security for OVC and their families through participatory community approaches,
- improving care for OVC through home-, school- and community-based care, and
- strengthening the capacity of district institutions, non-governmental organizations (NGOs), and local institutions to improve relevant skills of community-based organizations (CBOs), Support Groups (SGs), self-help organizations, and communities.

Project activities fell under the following six focus areas:

- 1) improved food and nutrition security,
- 2) improved access to education and training that is relevant and appropriate to the needs of OVC,
- 3) improved access of OVC to health services,
- 4) improved provision, quality, and access to welfare services for OVC,
- 5) capacity building for service providers and communities, and

building effective coalition and partnerships with government ministries, international and local NGOs, donors, traditional authorities, and other relevant stakeholders.

#### **USING MOBILE PHONE TECHNOLOGY FOR DISEASE SURVEILLANCE AT COMMUNITY LEVEL**

While the number, the prevalence and the virulence of human, plant and animal diseases have increases and are more and more closely interacting, the information about their co-occurrence is still scant. New tools and methodologies are being tested, in particular in Uganda. This project has a double objective:

1. To identify prevalent disease and their impact on households (study of the socioeconomic burden of diseases) in order to provide evidence about the co-occurrence of plant, animal and human diseases.
2. To establish a disease surveillance system at community level to detect and report rapidly the emergence of a plant, animal or human disease in order to avoid the transmission between species and to understand better the trends and patterns for longer planning and action.

Mobile phone has been chosen to support disease surveillance since it is a grassroots technology that is not too costly, that can be used by anyone, and that is widely available and can therefore ensure surveillance at community level. The mechanism of the surveillance system is the following:

- Data is sent by SMS
- SMS are collected by a computer which stores and archives them
- Out of these data, maps can be produced to trace the occurrence of diseases.

The pilot project, after training of the farmers, has been successful. This system provides a high speed of analysis and dissemination and an easy analysis of trends thanks to an increased archiving power.

#### **SUGGESTED PRIORITY RESEARCH AREAS**

- *Promoting improved local complementary feeding recipes and practices for addressing malnutrition:* Linking promotion and production of indigenous food crops to promoting infant and young child complementary feeding using improved practices and locally produced food crops.
- Retrieval and validation of ag-health indigenous knowledge and practices
- Link research and interventions/projects for the promotion of local foods and management of biodiversity for food and nutrition
- Provide scientific evidence for successful food security, nutrition and livelihoods interventions

