

Overview Summary The Challenge Dialogue System™



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Lessons from an African Challenge Dialogue

The lessons are drawn from an online and face-to-face Dialogue which was sponsored by google.org; organized and coordinated by ILRI (International Livestock Research Institute) in collaboration with three other institutions:

- *icipe* (International Centre of Insect Physiology and Ecology)
- KEMRI (Kenya Medical Research Institute)
- ICPAC (IGAD Climate Predictions and Applications Centre)

January 21, 2009

Purpose of this Document

*“The challenges we are attempting to address, like enhancing the health of people, animals and environments all at the same time—these challenges are so grand that no **one** community dares take responsibility for them.”*

—John McDermott, Deputy-Director of ILRI

To provide a high level introduction to the Dialogue, its outputs and their potential implications for others working in this interdisciplinary field of endeavour.

Working Proposition Outlining the Challenges being Addressed in the Dialogue

Links among climate and human and animal health are significant. A changing and more variable climate poses increasing risks to human health and well-being. For example, rising temperatures are expected to lead to an expansion of the range, incidence and impact of many infectious diseases.

We expect that climate and health specialists across Africa can improve their effectiveness through better collaboration—and that collaboration across these communities can improve Africa’s capacity to predict, prevent and mitigate the impacts of climate-sensitive infectious diseases largely by dramatically improving early warning systems and response times.

Engaging Diverse Stakeholders in Exploring this Working Proposition: Organizing a Challenge Dialogue

This particular Climate / Health Dialogue, involving a flexible but comprehensive 8 step process, was carried out between June and September 2008 and involved over 200 participants globally, mostly from Africa and all with African experience. The intent was to engage these diverse stakeholders in efforts to collaborate and innovate around ideas and initiatives aimed at reducing infectious diseases in Africa.

The Dialogue was initially operated online with electronic feedback to an initial Challenge Paper provided to participants. A representative group of participants then took part in a workshop at the ILRI headquarters in Nairobi September 9 to 11, 2008.

Five main discipline areas were involved in the ongoing conversations (animal health, human health, ecosystem health, disease vectors and climate), although other areas of expertise contributed (economics, conservation, genetics, water resources, information and communication technologies).

While science and research inputs were central to this initial Dialogue, the conversations also engaged a number of health care practitioners, NGO representatives, staff of government agencies, private firms and strategic communications, Information Communications Technology (ICT) and knowledge management specialists.

The Sponsor of this Collaborative Dialogue Initiative: Google.org (represented in the Dialogue by Amy Luers, Mark Smolinski, and Frank Rijsberman)

“We have decided in the global public health field that we wanted to focus on emerging infectious diseases as a start because, as with all our initiatives at google.org, information and technology is the lens we are exploring ...it is where we can make a difference in some of these areas.”

—Mark Smolinski, describing the new “Predict and Prevent” initiative of google.org

The Coordinating / Facilitating Leaders of the Dialogue: “Innovation Works” within ILRI

The context for this entire Dialogue was set by a growing desire and commitment among the senior leadership of the International Livestock Research Institute (ILRI) to increase the institution’s capacity to engage diverse stakeholders to both collaborate and innovate in order to address complex challenges that cut across sectors, organizational types, knowledge domains and leadership styles.

The recent creation of **Innovation Works** as a catalytic support unit to help the various divisions in ILRI, and its alliance partners, to practice the above intentions, represents a major commitment of ILRI to a new style of collaborative entrepreneurial innovation. Indeed, the Deputy Director of ILRI has been challenging his colleagues and the Innovation Works in particular to recognize and act on the reality that a clear capacity for nurturing collaboration internally and externally to achieve innovative breakthroughs will be critical to ILRI’s future success.

Working with support from the Canada-based Innovation Expedition (the creators of CDS™), Innovation Works is building expertise and tools to support efforts by the different units in ILRI to collaborate with various other agencies to provide innovative solutions to major challenges related to improving agricultural and livestock practices, reducing poverty and improving health.

“We need to do these things differently than we have in the past. The impact of disease will increase if we continue to operate in silos. Our only chance at reducing the impact of deadly diseases in Africa is to increase collaboration across the disciplines of environment and health and in a way that involves local communities.”

—Patti Kristjanson, Director of Innovation Works, ILRI

The Other Champions in this Dialogue

- **icipe – International Centre of Insect Physiology and Ecology —**
<http://www.icipe.org/>

Established in Kenya in 1970, *icipe*'s founders recognised that the mainly developing countries in the tropics had special problems that were not being adequately addressed by scientists and organizations in the North. Furthermore, there was a serious lack of indigenous expertise to resolve these problems. It should come to no surprise therefore that *icipe*'s objectives for this millennium are essentially the same as they were three decades ago:

- To help ensure food security and better health for humankind and its livestock;
- To protect the environment;
- To conserve and make better use of natural resources.

(Represented in the Dialogue by Christian Borgemeister, Director General with the support of Baldwin Torto, and Peter Njagi, both with Host-vector chemical ecology, *icipe*)

“We are seeing a spread of diseases from where I am working in Eastern Africa to the west and particularly to the north [Europe] and this is bad for the north but on the other hand it creates a kind of consciousness in the rich north about the disease burden that has been present in Africa and in other tropical zones for centuries. ... I believe that this kind of democratization of diseases, if you want, through a global spread, will lead to more research and will lead to hopefully a faster cure to these problems than before.”

—Christian Borgemeister, Director General, *icipe*

- **KEMRI – Kenya Medical Research Institute** — <http://www.kemri.org/>
The Kenya Medical Research Institute (KEMRI) was established in 1979 under the Science and Technology (Amendment) Act of that year to represent the national body responsible for carrying out health science research in Kenya.

(Represented in the Dialogue by Rosemary Sang, Human Health, KEMRI, with the support of Monique Wasunna, Acting Director, KEMRI)

“We need to move up our response times to these outbreaks. ... All of the warning signs of an [Rift Valley Fever] outbreak were there but we weren’t able to connect the dots. ... The key is predicting outbreaks before they happen and preparing high risk areas to act quickly to reduce the impact on communities.”

—Rosemary Sang, KEMRI

- **ICPAC - IGAD Climate Predictions and Applications Centre** — <http://www.icpac.net/>
The Greater Horn of Africa (GHA) is prone to extreme climate events such as droughts and floods. These extreme events have severe negative impacts on key socio-economic sectors of all the countries in the sub-region. The centre is responsible for seven member countries namely: Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan and Uganda as well as Burundi, Rwanda and Tanzania

(Represented in the Dialogue by Gilbert Ouma, Climate Change, ICPAC, with the support of Laban Ogallo, Director)

Key Assumptions Driving the Dialogue

A large number of assumptions were tested during the online Dialogue. As the conversation focused in preparation for a wind-up workshop, the following emerged as the important assumptions driving this initiative.

1. Africa and other developing regions have a wealth of infectious diseases because the climate and environment of the tropics are hospitable to many parasites and other infectious agents that have plagued people and their domestic animals for millennia.
2. The health of people, land, crops and animals are not separate from each other in poor countries: when agriculture goes wrong in a rural-based society, not much else can go right; and when the health of domestic livestock is at risk, so is human health and well-being.
3. It is estimated that some 70 percent of all human infectious diseases come from animals. A full 60 percent of the emerging diseases in the world are transmitted between animals and people. Since 1980, a new disease has emerged every seven months.
4. Because more than two billion people in developing countries still live in close proximity to animals (wild as well as domesticated), it is in these countries that disease experts expect to see new bird flu and other viruses and disease agents make the “jump” in transmission from animal–animal and animal–human to human–human, with potential to cause massive epidemics.
5. Research has largely neglected Africa’s zoonotic diseases, which fall between disciplines (veterinary and human health, entomology and ecology). The consequences of this neglect have been serious and local (Rift Valley fever) to disastrous and worldwide (HIV/AIDS) in the past. Paying special attention to these zoonotic orphan diseases by enlarging research, surveillance and preparedness work is likely to yield huge health benefits for humanity in the future.
6. An extraordinary 90 percent of Africa’s disease burden is borne by the poor, and these diseases today receive just 10 percent of research funding.
7. International, regional and national research institutions in Africa have access to the pathogen materials that cause diseases and their animal and human hosts; such ready access is essential to research to control these diseases.
8. The most important element in any disease control work is the human element, but new technical capacities and information and communication technologies, such as the ‘web crawlers’ employed in Health Map (<http://www.healthmap.org>) and the powerful visualization of Google Earth (<http://earth.google.com>) promise to help people greatly improve their detection, communication and response to infectious diseases.
9. Malaria and sleeping sickness, to name just two of Africa’s infectious disease scourges, have confounded some of the best minds of the past half century. Our new information tools represent a powerful new arsenal we could employ to stop the spread of Africa’s infectious diseases, and the untold suffering they continue to cause within the continent and the world.

Key Outcomes from the Dialogue

The Dialogue demonstrated that by utilizing disciplined processes and supporting online technologies it is possible to quickly, efficiently and effectively engage a diverse group of stakeholders to set the scene for collaborative action and gain greater alignment around some high level tasks. A number of

actions and recommendations arose from the dialogue, several of them being acted on already. The essence of these is captured in the headings below. More detail on these action-recommendations are contained in the *Dialogue Synopsis* and a *Logic Model* that lays out on a single page outlines graphically the working proposition, guiding principles, challenges, resources, activities, outcomes and impacts for a One Health approach for improving response to infectious disease in Africa.

- **Development of a shared vision and set of principles building on the One Health concept**
 - The “One World—One Health” concept and the need to take a more holistic approach emerged as a unifying concept for helping to move the challenges and opportunities forward.
 - A vision statement was not developed but many outcomes suggested and the working proposition (see page 1) contain many of the elements of a vision.
 - An initial set of guiding principles for future collaborative efforts were proposed.
- **Development of collaborative strategies and frameworks to clarify our intent, organize our knowledge and align our actions for change**
 - National (pilots) strategies for collaborative actionable change across all stakeholders including a shift toward the prevention of infectious diseases
 - Further development and refinement of common conceptual frameworks
 - Community-sensitive, collaborative, One Health research and knowledge translation initiatives involving national research and academic institutions and the work of international science centres
 - Programs to support students doing interdisciplinary One Health research
- **Application of principles, processes and tools for collaboration and innovation to harness our collective knowledge and experience creatively and efficiently**
- **Creation of informal innovative networks across the discipline areas to enhance communication, collaboration, shared learning and action**
 - New relationships were developed as a result of the dialogue interactions. Continued self-organizing networking is encouraged. ILRI will continue to provide access to all of the dialogue materials to support this continued collaboration effort.
- **Assembly, organization, assessment and management of data and information so that knowledge and research will lead to informed action**
 - Analyze decision making contexts to identify legitimacy, salience and credibility; make relevant data accessible with appropriate meta-data, enable inter-disciplinary use
 - Assemble, assess and manage the data, knowledge and capacity against the needs
 - Link / associate, map and compare data from multiple domains and areas to gain insights
 - Develop, test, integrate and document models including improvement and integration of surveillance and early warning systems
 - Analyse the data and enable inter-disciplinary use of the data
 - Support community-level developments such as Digital Villages