ANNEX 2: TEMPLATE FOR AFS RESEARCH OUTPUT TITLE AND ABSTRACT PAGE

Each research output submitted to IDRC must include a title page, abstract, and keywords. The kind of information that should be included is listed below. Items marked with an asterisk (*) are particularly important and must appear. A blank title and abstract page follows.

*Title: Food security situation in Kenya and the Greater Horn of Africa.

Subtitle:

*By: Festus M. Murithi

Report Type: Conference presentation

*Date: October 6, 2011

Published by: Fourth McGill University Global Food Security Conference,

Location: Ottawa

Series Name: 

Number of Series part:

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*IDRC Project Title: Enhancing Ecologically Resilient Food Security through Innovative Farming Systems in the Semi-Arid Midlands of Kenya

*Country/Region: country(ies) or region(s) where project was carried out; Kenya

*Full Name of Research Organizations: Kenya Agriculture Research Institute/McGill University

*Address of Research Organizations: McGill University, 21111 lakeshore Rd. Ste. Anne de Bellevue, Qc, Canada, H9X 3V9

*Name(s) of Researcher/Members of Research Team: Festus M. Murith

*Contact Information of Researcher/Research Team members fmmurithi@kari.org, fmmeme@yahoo.com

*This report is presented as received from project recipient(s). It has not been subjected to peer review or other review processes.

*Abstract: n/a

*Keywords: food security, East Africa, policy, climate change
FOOD SECURITY SITUATION IN KENYA AND THE HORN OF AFRICA

Johnson W. Irungu\textsuperscript{a}, Tom Ndienya\textsuperscript{a}, Beatrice Kingori\textsuperscript{a} and Festus Murithi\textsuperscript{b}

\textsuperscript{a} Ministry of Agriculture- Kenya
\textsuperscript{b} Kenya Agricultural Research Institute (KARI)

\textsuperscript{1}Presentation made during the Fourth McGill University Global Food Security Conference, 4-6 October 2011
Countries of the Horn of Africa

- Members of the Intergovernmental Authority on Development (IGAD)
- Combined population of 160 million people
- 70 million live in areas prone to extreme food shortages
- Threatened by severe famine at least once every 10 yrs
The Case of Kenya

- Approx 580,000 km²
- Popn estimated to be 40m
- 46% live below the poverty line of 1 US$ per capita per day
- >10m suffer from transient chronic food insecurity and poor nutrition.
- At any one time about 2.5 m suffer from chronic food insecurity and hence require food assistance.
- During periods of severe drought, heavy rains and/or floods, the number of people requiring help rise up to 3.5m.
Main food crops in Kenya

- Cereals (maize, wheat, sorghum, rice, millet);
- Pulses (beans, pigeon peas, cow peas, chick peas, green grams)
- Roots and tubers (potatoes, cassava, arrow roots and yams).
- Others include bananas, sweet potatoes, fruits and vegetables.

✓ Maize is the main staple food followed by beans, potatoes and rice
Main livestock

• Cattle for milk, meat and hides
• Sheep
• Goats
• Poultry => Local chicken important for nutrition and incomes for women
• Camels => ideal for arid areas due to resilience to drought
• Bee keeping for honey esp in ASALs
• Fish
• Pigs
<table>
<thead>
<tr>
<th>Crop</th>
<th>Strategic reserve</th>
<th>Farmers</th>
<th>Traders</th>
<th>Millers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>2.82</td>
<td>7.15</td>
<td>1.16</td>
<td>0.24</td>
<td>11.36</td>
</tr>
<tr>
<td>Beans</td>
<td>0.01</td>
<td>1.42</td>
<td>0.66</td>
<td>--</td>
<td>2.09</td>
</tr>
<tr>
<td>Rice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.50</td>
</tr>
</tbody>
</table>
# Domestic production versus consumption trends of maize in Kenya (2006-2010)

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (m² ha)</td>
<td>1.9</td>
<td>1.6</td>
<td>1.8</td>
<td>1.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Prod (million 90kg bags)</td>
<td>36.1</td>
<td>32.5</td>
<td>26.3</td>
<td>27.1</td>
<td>38.5</td>
</tr>
<tr>
<td>Consumption (million 90 kg bags)</td>
<td>33.1</td>
<td>34.1</td>
<td>36.0</td>
<td>36.0</td>
<td>36.0</td>
</tr>
<tr>
<td>Surplus/deficit (million 90kg bags)</td>
<td>3.0</td>
<td>-1.6</td>
<td>-9.7</td>
<td>-8.9</td>
<td>2.5</td>
</tr>
</tbody>
</table>
Causes of food insecurity in Kenya and the Horn of Africa

- Unpredictable weather due to climate change
- Low-productivity agriculture
- Narrow livelihood base
- Weak infrastructure
- Reduced aid
- A lack of “pro-poor” policies
- Weak knowledge and information systems
- Weak farmer organizations due to poor governance and low participation in decision making
- Neglect of pastoralism (approx 80% of Kenya is ASALs)
- Poor health
- High insecurity esp in Somalia and its borders
Causes of low farm productivity

- High population in the agricultural production areas (approx. 20% of total land) leading to over-cultivation of small pieces of farmland
- Minimal soil nutrient replenishment resulting to poor, exhausted agricultural land
- Over-reliance on rain-fed agricultural production systems
- Limited investment in irrigation, water harvesting/conservation and low surface water use
- High fuel prices => high costs of production
- Low adoption of improved technologies (seeds, fertilizers, feeds) due to high poverty levels amongst most small scale farmers.
Causes of high and increasing food prices

- Poor food distribution mechanisms
- Unstructured and/or lack of markets
- Export bans by some countries
- Increasing cost of fuel
- Overdependence on a few food commodities
- Poor post harvest management (lack of storage facilities, storage pests and diseases, e.g. aflatoxin)
  - Losses can be >40%
Short term initiatives adopted by Kenya to mitigate current food insecurity situation

• Waiver of duty on imported maize, wheat and rice

• Provision of food aid and other humanitarian assistance

• Targeted support to agriculture, livestock, water, health/nutrition sectors under economic stimulus programme

• Support to education sector under the school feeding programme in the ASALs
Long term programmes targeted to food security

- ‘Njaa Marufuku Kenya’ (NMK) – Away with Hunger programme
- National Accelerated Agricultural Input Access Project (NAAIAP):
  - Promotion of High Value Traditional Crops
  - Water Harvesting for Crop Production
  - Rice and Potato Development
- National Agriculture and Livestock Extension Programme (NALEP)
- Kenya Agricultural Productivity and Agribusiness Programme (KAPAP)
- Bulk Fertilizer Procurement
- Agricultural Mechanization Services Revitalization
- Agriculture Sector Support Programme (ASPS)
- Cotton Development:
- Small - Scale Horticulture Development Project
- Promotion of Private Sector Development in Agriculture (PSDA)
- Small Holder Horticulture Empowerment Programme (SHEP):
- Smallholder Horticultural Marketing Project (SHoMaP)
- Support to specific irrigation projects
Long term Livestock Support Programmes

- ASAL based Livestock and Rural Livelihoods Support Project

- Small Holder Dairy Commercialization Programme (SDCP)

- Fish Farming Enterprise Productivity Programme
Research support programmes

- Importance of research recognized in generating knowledge, information and technologies to enhance agric. productivity
- Research support mainly through KARI and partners
- Several projects initiated to address food and nutrition security
  - KARI/McGill FS Research Project supported by CIFSRF/IDRC/CIDA
  - Kenya Arid and Semi-Arid Lands (KASAL) Research Programme supported by EU
  - Kenya Agricultural and Agri-business Productivity Project (KAPAP) supported by WB
  - East African Agricultural Productivity Project (EAAPP) supported by WB and implemented in Uganda, Kenya, Tanzania and Ethiopia
  - KARIUSAID Food Security project supported thro the Feed the Future Initiative
  - Other collaborative and competitive grants supported by AGRA, IDRC, Rockefeller Foundation, Ford Foundation, Bill and Melida Gates Foundation, CCIAR Centres, FAO, Regional Networks e.g. ASARECA, Universities and other institutes
Collaborative Food Security Research Project of KARI, McGill and partners approved in March 2011 after responding to 1st call for proposals by the Canadian International Food Security Research Fund (CIFSRF)

Grant (106510-0010) of CAD 4.3 million being managed by IDRC and CIDA

Aims to identify innovative mechanisms for enhancing adoption of improved technologies for food and nutrition security, income generation, gender equity and environmental conservation

Project launched in Nairobi in May 2011 to run for 42 months

Focus is in 3 semi-arid counties of Eastern Kenya
**Innovating for Resilient Farming Systems in Semi-Arid Kenya**

**Five Project Objectives**

1. Gain a better understanding of traditional food and indigenous knowledge systems, and key drivers of food insecurity

2. Catalyze the adoption, and assess the social, economic and environmental impacts, of agricultural innovations prioritized by farmers; and assess mechanisms for scaling up identified resilient farming system practices
3. Increase household consumption of locally-produced food and improve levels of nutrition and health, especially among hunger-prone women and children

4. Strengthen links to local and external input and output markets to allow women and men to diversify household livelihoods and increase family welfare

5. Contribute to the formulation of ‘resilience-focused’ policies to enhance food security, livelihoods and environmental sustainability in the semi-arid regions; and disseminate findings
Summary of Kenya’s Strategic Responses to Food Insecurity

- Mgt of current emergency and mitigation of its effects by ensuring comprehensive and coordinated implementation of the multi-sectoral programme set out in Kenya’s Emergency Humanitarian Response Plan

- Recognition of central role played by women in agriculture and provide appropriate support.

- Re-focusing of investment in arid and semi-arid lands towards measures which support recovery in the short-to-medium term
Strategic Responses (cont’d)

• Strengthen drought resilience and adaptive capacity to climate change in the medium-to-long term thro’:
  – Investing in the foundations for development, as articulated in Kenya Vision 2030 => R4D is key
  – Putting in place a more effective institutional framework to promote ASAL development and manage drought in a more sustainable way
  – Enhancing the adaptive capacities of communities to the effects of climate variability and climate change through the application of an ecosystems management approach.
  – By focusing less on individual projects and more on ensuring that the overall environment is more conducive to building drought resilience.
Conclusions

• Food and nutrition insecurity in the Horn of Africa needs a more holistic intervention by the international community working in collaboration with the local Governments, civil society and private sector, and involving target communities in decision making

• Need for more resources targeting medium-long term interventions to mitigate effects of climate change, including droughts, environmental degradation and insecurity, esp. in Somalia

• Role of research in generating appropriate technologies and enhancing their adoption for increased productivity and socio-economic development needd more support.

• Provision of credit for input access and possible insurance products to manage risks that are common in agriculture
Conclusions (Cont’d)

- Re-consider the whole policy issue of targeted input subsidies and its implementation given high costs of production, to avail food to consumers at more affordable prices.
  - input subsidy to boost prodn vs food aid?

- More investments in infrastructure (roads, irrigation, power, ICT) and input-output markets development.

- Re-think the issue of land tenure and land sub-division especially in the medium-high rainfall areas where most of the food is produced.

- Policy support to livestock development in the arid and semi-arid area need more attention

- Need appropriate mechanisms to manage strategic food reserves at the national level for quick responses to food needs during emergencies.
China donates Sh2bn relief food for drought-stricken Kenyans

By ANTHONY KITIMO akitimo@ke.nationmedia.com

Posted Wednesday, October 5 2011 at 22:47

Kenya has received the largest food relief ever from foreign countries for more than 4.5 million hunger-stricken citizens. The government on Wednesday received the first batch of relief food worth Sh2 billion from the Chinese government at the Port of Mombasa. The food is expected to be distributed to different regions of the country, starting this week. Vice-President Kalonzo Musyoka, Special Programmes Minister Esther Murugi and other government ..........

http://www.nation.co.ke/News/regional/China+donates+Sh2bn+relief+food+for+drought+stricken+Kenyans/-/1070/1248860/-/qbf641/-/index.html

(Daily Nation, Thursday, 6 October 2011)

Possible to avoid these kind of headlines in future?
Thank you