Agriculture in A changing world

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Characteristics of Agriculture in Africa

• Largest contributor to GDP (32%)

• Main source of income for 70-80% of population (80)

• Low Productivity

• Food balance sheet characterized by imports and food aid
  • 30-50% of population not receiving adequate food

• Main source of Foreign exchange (80%) (coffee, tea and pyrethrum)

• Poor average annual growth (less than the pledged 6%)

• Low investment below the Pledged 10% of the budget

• Small part of the population 25% is urban (poor purchasing power)
An agrarian economy (Rwanda)

Agricultural GDP drives over all GDP

Most important sector in terms of employment and income
Food Consumption needs higher than production

Source: MINAGRI Crop Assessment
Food balance sheet needs external support
Kcal/person/day Sept-Dec 2006
Challenges facing the Agricultural sector

• Low investment
• Rain fed Agriculture
• Land degradation and desertification
• Climate change
• Increasing population pressure
• Poor markets and market access
• Global issue - the food, financial and fuel crisis
• Governance issues
• Lack of and poor access to technology
African countries spend on average 4-5% of their budget compared to 8-14% in Asia

• Some countries have increased investments including Mali 11%, Burkina Faso 15% and Ethiopia 17%
• These are among only 13 countries on the path to the 6% annual growth rate pledge made by African leaders in 2003 under the Comprehensive African Agricultural development Program (CAADP).
• Others including Malawi and Rwanda are making huge strides
Rain fed /Low input agriculture

• Only 5% of arable land is irrigated, 3% in N Africa vs to 40% in Asia

• Lowest level of fertilizer use - world: 8kg/ha vs 100kg/ha global average

<table>
<thead>
<tr>
<th>Crop Yield very low Comparison t/ha (1999-2003 Average)</th>
<th>FAO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rwanda</td>
<td>Burundi</td>
</tr>
<tr>
<td>Maize</td>
<td>0.8</td>
</tr>
<tr>
<td>Sorghum</td>
<td>0.9</td>
</tr>
<tr>
<td>Cassava</td>
<td>6.1</td>
</tr>
<tr>
<td>Sweet Potatoes</td>
<td>5.8</td>
</tr>
<tr>
<td>Potatoes</td>
<td>8.0</td>
</tr>
<tr>
<td>Plantains</td>
<td>6.5</td>
</tr>
<tr>
<td>Beans</td>
<td>0.7</td>
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<tr>
<td>Peas</td>
<td>0.5</td>
</tr>
<tr>
<td>Coffee</td>
<td>0.7</td>
</tr>
<tr>
<td>Tea</td>
<td>1.3</td>
</tr>
</tbody>
</table>
Desertification, Land degradation and Climate change

• Yield increase seen as increasing land under cultivation. This has led to Africa having a deforestation rate that is 200% higher than the global average (IFDC).

• Land overuse and increasing population pressure is leading to soil loss and nutrient mining:
  • Rwanda alone loses 40 million Mt of soil each year
  • Africa is estimated to lose $4.5 billion of soil nutrients every year (IFDC)

• Climate change –harsh reality for rain fed agriculture
  • Predictability of seasons is important (timing and amount)
  • Impact may have on pest pressure
  • Overall, it is believed that climate change will affect agriculture yields in Africa by 35-50% in the next few decades
Subsistence agriculture on highly fragile systems

- Rwanda loses 40 million Mt of soil each year - flooded valleys
Flooded farms and valley bottoms
Poor markets and market access

• Critical to breaking the poverty trap of African farmers

• Mismatch in production increase and market access and or transformation

• Nigeria is the world cassava producer but does not export cassava

• Improving market access means lowering transaction costs: transport, storage market info etc

• Removing trade barriers regionally and increasing Africa’s share of international trade

• Investing in Agro processing e.g. staple crop processing zones
The food crisis

• Food prices hiked with the food crisis, went down a bit but have remain high and volatile

• The global food prices of some commodities doubled- stimulated agriculture locally

• The fall of commodity prices following the financial crisis presents a really danger that farmers will get stuck with supplies (rice-Senegal, Tea Kenya)
Food price remain high even locally

Cereals market price 2006-2008

- Sorghum
- Maize
- Rice
- Wheat
Impact of the global financial crisis

• Agric financing has been poor, will get worse
• Climbing interest rates
• Fall of major export commodities
• Urban and rural unemployment are rising
• Foreign direct investment that had reached $53 billion in 2007 has slowed
• Promises of official development assistance are showing signs of passing unmet
• Net food importing countries suffered the most—Africa’s food import bill doubled to 15billion in 2008—Kenya

• The combination of the food and financial crisis is likely to push more people in Africa into hunger and under poverty line.
The Fuel Price crisis and fertilizers

- African countries affected the most-land locked
- Pushed fertilizer prices out of the reach of most farmers
- Made input subsidies necessary
Governance (Prioritization and accountability)

- Corruption vs accountability have resulted in denied support to Africa
- Prioritization is critical to agriculture development
- Because Agriculture in Africa touches more than 65-80% of population
- Requires public investment and putting in place the right policies
- The rights and interest of 50-70% of the farmers (women) need to be protected and defended
Prioritization and the path out of poverty
Rwanda

• Increased Agricultural financing

• Soil and water resource management

• Crop intensification through improved access to inputs

• One Cow per household-targeted nutritional improvement

• Increasing PPP for Agricultural value addition
Increase in food grains (maize, rice, and wheat) prices following the food crisis - Impact of right policies (Rwanda prices vs world market prices...)

Index of grain prices in Rwanda and world markets, July 06 - April 08
Opportunities: Short turn around- responds fast to investment

Food security evolution of three years
Increase productivity instead of cultivated land
(Agriculture growth = 19% over previous season)

- 61% increase in maize production by intensifying production on 5% of cultivated area
Move towards an African green revolution with clear lessons from Asia

• Asia doubled its cereal production between 1975 and 1995 but area under cultivation increased by only 4%

• High yielding varieties (Rwanda 2 to 6-8 ton/ha although national averages are still low)

• Increase outreach and amount of fertilizer use-bearing in mind the impact of excessive use on the environment (efficient fertilizer use technologies – IFDC)

• Exploit diverse agro ecological zones to secure food diversity and sufficiency
An African green revolution-Agro ecologies
More opportunities....

- Abundant water resources for irrigation though – high potential for water harvesting

- Current interests in formation and strengthening of regional blocks - unblock trade thus stimulate production

- Hard working population, develop a no farmer left behind approach in access to means of production: Rwanda uses vouchers and land consolidation

- Recent interest in African agricultural potential needs wisdom, transparency and inclusion

- Increasing income for farmers through value adding infrastructure (post harvest infrastructure and rural roads)
No farmer left behind - access to means of production

• Introduce and design subsidies to reach all - vouchers (Rwanda and Malawi)
• Land consolidation to reach small owner (Rwanda)
• Empowering women- favorable land and inheritance laws
• Mechanize to improve efficiency and productivity
The right political will— an opportunity too

- Identifying challenges
- Setting Priorities to match
- Building institutions-to take on the challenge
- Recognizing the role of women in family and nation
- Zero tolerance on corruption
  - Result oriented implementation
- Recognizing the central role of Agric
  - Building review and accountability mechanisms-
    national dialogue, government retreat, thematic reviews
Building the future: A shared vision and Common goals

- Africa needs to increase agriculture spending not to 10% but to 20-25% to cut poverty by half by 2015 (IFPRI) translating into about $35 billion per annum.
  
  - Of the $22 billion commitment to FAO in 2008 only $2 bn have been disbursed

- WB response to the food crisis is commendable; more recent pledges on food support by EU

- Corruption cannot be used not to honor pledges - **Demand accountability**
Thank you for your attention

With just a little bit of support --these farmers can do it!!