Regional Trade in Fresh Fruits and Vegetables
Agenda

- Introduction
- Regional Trade Flows
- Understanding FFV Value Chains
- Wholesale Market Dynamics
- FFV and Food Security
- Potential Interventions
The problem

The traditional East African diet relies heavily on staple foods; grains, cereals, roots and tubers. Low levels of FFV consumption do not provide adequate micronutrients.

Kenya
Low income and lack of dietary diversity are key drivers of food insecurity in urban and rural Kenya. Kenyan households eat fruit on an average of just three days a week.

Tanzania
Diets in mainland Tanzania are cereal-based, consumed at least one day per week by 97 percent of households. Vegetables are eaten roughly four days per week. Fruits are consumed much less frequently, just three days per week.

Uganda
Over 20 percent of the Ugandan population is food insecure or moderately food insecure according to the Uganda CFSVA (2009). Ugandans typically spend 7.7 percent of their food budget on fruits and vegetables.
Survey of regional trade and end markets

• USAID conducted a study on region’s most traded fruits and vegetables to identify key production areas, quantify trade volumes, and trade routes/destinations.

Between June and September 2012, COMPETE administered a survey of value chain actors.

Interviews were conducted with 200 respondents in the following:

- 10 wholesale markets and 5 aggregator markets in Kenya
- 14 wholesale and 7 aggregator markets in Uganda
- 10 wholesale markets and 10 aggregator markets in Tanzania
What drove the study

The hypothesis “As regional markets become increasingly integrated”

- FFVs will become more widely available throughout the year
- Prices of FFV should stabilize making these products more affordable to consumers
- Reliable access to regional markets should encourage farmers to diversify production for sale in these new markets
- Year-round availability of a range of fruits and vegetables should have an impact on reducing malnutrition due to lack of FFV in diets
Peak harvest periods for Kenya, Tanzania and Uganda

- **Onions**
  - Kenya
  - Tanzania
  - Uganda

- **Tomatoes**
  - Kenya
  - Tanzania
  - Uganda

- **Pineapples**
  - Kenya
  - Tanzania
  - Uganda

- **Mangoes**
  - Kenya
  - Tanzania
  - Uganda

- **Bananas**
  - Kenya
  - Tanzania
  - Uganda

**Legend:**
- **Orange** Kenyan harvest period
- **Light Green** Tanzanian harvest period
- **Blue** Ugandan harvest period

**Months:**
- Jan
- Feb
- Mar
- Apr
- May
- Jun
- Jul
- Aug
- Sep
- Oct
- Nov
- Dec
The volume of intra-regional trade in fresh fruits and vegetables accounts for a small percentage of the total production of these crops in East Africa

### 2010 Production (MT)

<table>
<thead>
<tr>
<th></th>
<th>Kenya</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Rwanda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onions</td>
<td>89,000</td>
<td>53,000</td>
<td>195,000</td>
<td>10,100</td>
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### Destination

<table>
<thead>
<tr>
<th></th>
<th>Kenya</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Rwanda</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Exports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kenya</td>
<td>2,351</td>
<td></td>
<td></td>
<td>2,351</td>
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<tr>
<td></td>
<td>Tanzania</td>
<td>14,274</td>
<td>395</td>
<td>14,669</td>
<td></td>
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<tr>
<td></td>
<td>Uganda</td>
<td>2,234</td>
<td>3,366</td>
<td>5,600</td>
<td></td>
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<tr>
<td></td>
<td>Rwanda</td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>16,509</td>
<td>0</td>
<td>2,746</td>
<td>3,366</td>
<td>22,621</td>
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</tbody>
</table>

**Imports/Production**: 6.52%

- Trade in red onions (Red Creole) is high relative to other staple horticulture products due to their long shelf life.
- Proximity of northern TZ production zones to Nairobi and Mombasa markets drives trade.
- Product travels long distances within East Africa (and South Sudan).

### Onions

- Italian tomato varieties dominate the market, but trade is limited due to their fragile nature and perishability.
- Trade from Tanzania to Kenya is driven by proximity of key production areas to Nairobi and Mombasa markets.
- Central Uganda’s production zones satisfy pockets of demand in KE, RW and TZ.

### Tomatoes

<table>
<thead>
<tr>
<th></th>
<th>Kenya</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Rwanda</th>
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</thead>
<tbody>
<tr>
<td>2010 Production (MT)</td>
<td>539,151</td>
<td>235,000</td>
<td>31,000</td>
<td>42,800</td>
<td>847,951</td>
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**Exports**

<table>
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<th>Uganda</th>
<th>Rwanda</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2,351</td>
<td>4,694</td>
<td>2,234</td>
<td>0</td>
<td>11,22</td>
</tr>
</tbody>
</table>

**Imports/Production**

- 1.35%
While seasonal production patterns are not static, regional price data maps well to intra-regional trade flow data.

**Trade Pairings**

- **UG->KE**
- **UG->TZ**
- **UG->RW**
- **TZ->KE**
- **KE->UG**

**Annual Trade Flow Calendar**

While intra-regional trade is limited, production areas close to key primary and secondary wholesale markets are able to compete seasonally with domestic horticulture production.

**Regional Tomato Production/ Trade Flows**

![Map showing regional tomato production and trade flows in East Africa, with key cities labeled: Nairobi, Dar-es-Salaam, Kigali, Kampala, Bujumbura, and Mombasa.](image-url)
Regional Horticulture Value Chain

**Producers / Farmer Orgs**
- Activities: Harvesting, storage, packaging, grading
- Constraints: Insufficient / bad access roads, local taxes, roadblocks / checkpoints / corruption, transportation costs

**Aggregator Market**

**Domestic Wholesale Market**

**Regional Wholesale Market**

**Retailers**

**Regional Value Chain Work: Develop the systems, policies and structures required to improve efficiency**

**Support / Influential Institutions**
- Associations: Horticulture Producers of Uganda, TAHA, FPEAK, HORTEXA
- Municipal Councils, Ministries of Agriculture, Market Traders Associations, Market Management

**Produce / Transporter**
- Activities: Harvesting, storage, packaging, grading
- Loading, handling transporting
- Constraints: Insufficient / bad access roads, local taxes, roadblocks / checkpoints / corruption, transportation costs

**Wholesaler / Trader**
- Activities: Financing, storage, grading, repackaging, marketing, contracting transport
- Constraints: Market congestion, limited market services (e.g. sanitation, hygiene, waste management), decaying infrastructure, high market fees
The inefficiencies along East Africa’s horticultural value chains create roles for intermediaries that drive up costs and push FFVs out of the reach of those that would benefit most from increased consumption.

A large proportion of cost is added at primary wholesale / distribution markets – the main point of entry for regionally-traded horticulture.
Primary wholesale markets are non-transparent, inefficient and often dysfunctional, mainly due to weak systems and controls.

**Market Challenges**
- Management provides limited services. Wholesalers forced to pay for them individually.
- Poor hygiene and sanitation.
- Open-air or derelict facilities.
- Trader cartels control competition.
- Lack of communication among market actors.
- Rent seeking at all levels.
- Inconsistent presence of government actors.
- Weak enforcement of standards.

Lack of communication and services force wholesaler margins up. Interventions at this point in the value chain could deliver outsize returns.
Consumers: Consumption Patterns and Demand

- Consumption of fruits and vegetables is considerably low compared to other food groups both in terms of volume and value.

- Consumers in higher income quintiles enjoy more diversified diets, but FFV consumption does not differ substantially across income groups.

- Purchase of pulses, oils and sugars, are the first food items to increase as wealth increases, along with milk and animal protein.

<table>
<thead>
<tr>
<th></th>
<th>Expenditure</th>
<th>Consumption</th>
<th>Food Source</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Proportion of HH expenditure on food</td>
<td>Proportion of food budget spent on FFV</td>
<td>Avg. consumption of fruit/week</td>
</tr>
<tr>
<td>KE</td>
<td>48%</td>
<td>4%</td>
<td>6</td>
</tr>
<tr>
<td>TZ</td>
<td>54%</td>
<td>6%</td>
<td>3</td>
</tr>
<tr>
<td>UG</td>
<td>54%</td>
<td>8%</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Comprehensive Food Security and Vulnerability Analysis: Kenya, Tanzania and Uganda (2009-10), GOK, FAO, WFP
Potential Interventions

• Address Wholesale Market Inefficiencies

  ṭ Near-term: Improve communications among key wholesale market actors (municipal councils, traders, market managers, trade associations)
    o Establish Joint Market Committees to address and rectify key constraints / challenges promote collaboration

  ṭ Medium-term: Promote the outsourcing of select non-essential services to reduce costs and improve service delivery

  ṭ Long-term: Develop public-private partnerships and/or privatization of wholesale market management
Potential Interventions Continued

• Develop regionally consistent promotional materials and awareness campaigns to promote consumption of FFVS
  
  ÿ Near-term: Coordinate program design with key stakeholders and identify national-level partners to support roll out of materials

• Improve Regional Market Information
  
  ÿ Near-term: Work with existing data providers like TAHA, UBOS, HCDA to increase frequency (goal is daily) of data collection and improve dissemination