World Tea Economy: Trends and Opportunities

Presentation to the World Green Tea Conference 2016 by Kaison Chang

- Important to realize contribution to food security;
- Trade and foreign exchange contribute to financing food import bill;
- Vulnerable to productivity inefficiency (usually impact both tea and food crops/staples) and currency fluctuation – as per the following slide
Severe Droughts Leave Africans Hungry and Desperate  
Food crisis spreads across continent, exacerbated by diminishing foreign aid, rising prices; ‘There is nothing to harvest’
“Perfect Storm Guts African Food Stocks”

The Role of Tea

- The on-going concern on the role of tea export earnings in food security, particularly how they impact smallholders has led the FAO Secretariat to develop an analytical framework for monitoring policy development in tea producing and exporting countries; firstly at the tea sub-sector level and ultimately, smallholders in particular.
- A couple of reference documents provide background material
  - The IGG/Tea Secretariat report, *World tea production and trade: current and future development* (2015), provides a comprehensive overview of the tea industry and the major issues currently being faced by the world tea economy.
  - Updated information are contained in document CCP: TE16/Inf.2: *Current Market Situation and Medium Term Outlook*. 
Major tea producers and their productivity

<table>
<thead>
<tr>
<th></th>
<th>Argentina</th>
<th>Bangladesh</th>
<th>Burundi</th>
<th>China, mainland</th>
<th>India</th>
<th>Indonesia</th>
<th>Iran</th>
<th>Japan</th>
<th>Kenya</th>
<th>Malawi</th>
<th>Sri Lanka</th>
<th>Thailand</th>
<th>Turkey</th>
<th>Uganda</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area harvested (1000 ha)</td>
<td>1,256</td>
<td>1,141</td>
<td>880</td>
<td>779</td>
<td>1,216</td>
<td>1,231</td>
<td>636</td>
<td>1,882</td>
<td>2,191</td>
<td>2,445</td>
<td>1,882</td>
<td>1,434</td>
<td>2,907</td>
<td>2,256</td>
<td>1,445</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Tea production (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tea yield (kg/ha)</td>
<td>2,490</td>
</tr>
</tbody>
</table>

WORLD TEA PRODUCTION (thousand tonnes)

- **2006**: Total Tea 3,697, Black Tea 995, Green Tea 2,490
- **2014**: Total Tea 5,125, Black Tea 1,633, Green Tea 3,102
- **2015**: Total Tea 5,196, Black Tea 1,710, Green Tea 3,002
Production and Productivity

Reasons:
- main tea variety grown in China is *Camelia sinensis var. sinensis*,
- In India it is *Camelia sinensis var. assamica*, though some areas like Darjeeling do grow *Camelia sinensis var. sinensis*.
- Introduction of new clones and adoption of good agricultural practices.

Value of Production

- A major contribution in value terms to many national economies, and smallholders play a major role in these economies.
- In countries where smallholders dominate tea production, such as China (more than 90 percent), Viet Nam (more than 80 percent), Kenya and Sri Lanka (close to 70 percent) and India (more than 30 percent) the value of production (excludes further processing and value addition along the full value-chain) in 2014 were:
  - USD 10.1 billion in China;
  - USD 1.2 billion in Kenya;
  - USD 899 million in Sri Lanka;
  - USD 315.7 million in Viet Nam; and
  - USD 3.2 billion in India.
Policy perspective

- While the absolute current value of tea production is impressive, the change in value was even more so.
- The value of tea production as a percentage of total agriculture production is very important in sector policy formulation, particularly if the agriculture sector contributes significantly to the national economy.
- For smallholder dominated tea producing countries, the value of tea production as a percentage of total agriculture production were 28.9 percent in Sri Lanka and 16.3 percent in Kenya.
- Therefore, tea is not only important to the agriculture sector, but also to the national economies.
- By extension, the role of smallholders (who account for 70 percent of production) in contributing to the national economies. The sustainability of their livelihoods determines the future of the tea subsector and agriculture sector as a whole.

Tea Trade

- International trade in tea is complex.
- The initial commodity is blended, retail packed and branded.
- Undertaken either in producing ; an intermediate country (for economic reasons) ; or in the final destination country.
Tea trade flows from producer countries:

to largest destination country

Tea producer exporting country

Tea importing country

WORLD TEA EXPORTS
(thousand tonnes)
The main drivers of international tea prices are market access and the changing dynamics among retailers, wholesalers and multinationals.

International tea prices, as measured by the FAO Tea Composite Price, remained firm over the last decade until 2014 when there was a 5.3 percent decline.

The decline was due to weakening CTC prices as supplies exceeded demand at reigning auction prices. The decline would have been more substantial had it not been for the firmness of Orthodox tea prices.

However, the roles reversed in 2015 as CTC prices recovered and offset the substantial declines in Orthodox teas, which had fallen because of weaken demand in the main orthodox markets.

Green tea prices varied considerably so comparison was made between producer price and export unit values (fob).

Japan enjoyed the highest premium for their green tea exports at USD 20.89/kg.

Domestic green tea price in China averaged USD 4.80/kg compared to export unit value of USD 4.22 per kg – confirming the strength of its domestic market.

---

**Tea Prices**

- The main drivers of international tea prices are market access and the changing dynamics among retailers, wholesalers and multinationals.
- International tea prices, as measured by the FAO Tea Composite Price, remained firm over the last decade until 2014 when there was a 5.3 percent decline.
- The decline was due to weakening CTC prices as supplies exceeded demand at reigning auction prices. The decline would have been more substantial had it not been for the firmness of Orthodox tea prices.
- However, the roles reversed in 2015 as CTC prices recovered and offset the substantial declines in Orthodox teas, which had fallen because of weaken demand in the main orthodox markets.
- Green tea prices varied considerably so comparison was made between producer price and export unit values (fob).
- Japan enjoyed the highest premium for their green tea exports at USD 20.89/kg.
- Domestic green tea price in China averaged USD 4.80/kg compared to export unit value of USD 4.22 per kg – confirming the strength of its domestic market.
Consumption

- The main determinant for growth is demand.
- The analysis of demand for tea indicates that both black and green tea are price inelastic.
- Price elasticities for black tea vary between -0.32 and -0.80, while estimates for green tea price elasticities range between -0.69 and -0.98.
- This indicates that demographic and psychographic factors, influence demand for tea more than economic factors.
- Demographics such as age, education and occupation; and overall cultural background, as well as psychographics such as the health benefits of tea consumption have an increasingly greater influence on tea consumption.
WORLD TEA CONSUMPTION
(thousand tonnes)

PROJECTED BLACK and GREEN TEA PRODUCTION
(Growth rate p.a. – black tea 3.7 %, green tea 9.1%)

Actual and Projected Black Tea Consumption (thousand tonnes)

PROJECTED BLACK and GREEN TEA EXPORTS

(Growth rate p.a. - black tea 2.4%, green tea 8.9%)
Concluding remarks

- Export earnings at the global level more than doubled over the 10 years, from USD 2.58 billion in 2005 to USD 5.61 billion in 2014, contributing to improved rural incomes and household food security in tea producing countries.
- Trade volumes decreased by 2.4 percent decrease in 2014, resulting in an estimated 4.4 percent decline in export earnings to USD 5.61 billion at the global level.
- Export earnings in Kenya and Sri of USD 1.15 billion and USD 1.63 billion, respectively, financed more than 60 percent of Kenya’s and 63.8 percent of Sri Lanka’s food import bills in 2014.

Opportunities

- Projections suggest that supply and demand of black tea will be in equilibrium in 2024 at a price of USD 2.83 per kg.
- Although projections indicate an increase in prices in nominal terms, in real terms, prices would actually decline by an annual average of 1 percent over the next decade.
Opportunities - Cont

- There is scope for increasing per capita consumption in producing countries, as they are relatively low compared to traditional import markets.
- Diversification into other segments of the market, such as organic and specialty teas, should also be encouraged and the health benefits of tea consumption should be used more extensively in promoting consumption in both producing and importing countries.
- However, in targeting potential growth markets, recognition of, and compliance with, food safety and quality standards is essential.

Opportunities - Cont

- Other factors include innovative developments from non-traditional players in the retail and service sectors, including Teavana, Ito En, Coca Cola and AriZona.
- On the supply side, expected supply response to expanding demand may not be as easy as it has been in the past, given the possible constraints to the availability of suitable land.
- Consideration of future strategies and appropriate enabling policies to maintain sustainable development of the rapidly changing global tea economy.
Agriculture value-added and employment in agriculture

- Value of tea production ($US million)
  - Argentina: 220
  - Bangladesh: 186
  - Burundi: 29
  - China mainland: 3,777
  - India: 3,354
  - Indonesia: 927
  - Iran: 74
  - Japan: 237
  - Kenya: 1,216
  - Malawi: 130
  - Sri Lanka: 49
  - Thailand: 42
  - Turkey: 684
  - Uganda: 183
  - Viet Nam: 612

- Value of tea production as percentage of total agricultural production (%)
  - Argentina: 1%
  - Bangladesh: 1%
  - Burundi: 2%
  - China mainland: 1%
  - India: 1%
  - Indonesia: 1%
  - Iran: 0%
  - Japan: 1%
  - Kenya: 10%
  - Malawi: 4%
  - Sri Lanka: 2%
  - Thailand: 0%
  - Turkey: 2%
  - Uganda: 3%
  - Viet Nam: 2%

- Agriculture, value added as a percentage of GDP
  - Argentina: 8%
  - Bangladesh: 16%
  - Burundi: 43%
  - China mainland: 9%
  - India: 17%
  - Indonesia: 14%
  - Iran: 10%
  - Japan: 30%
  - Kenya: 10%
  - Malawi: 12%
  - Sri Lanka: 8%
  - Thailand: 18%
  - Turkey: 18%
  - Uganda: 18%
  - Viet Nam: 18%

- Agricultural employment as a percentage of total employment
  - Argentina: 1%
  - Bangladesh: ...%
  - Burundi: 30%
  - China mainland: 47%
  - India: 30%
  - Indonesia: ...%
  - Iran: ...%
  - Japan: ...%
  - Kenya: ...%
  - Malawi: ...%
  - Sri Lanka: ...%
  - Thailand: ...%
  - Turkey: ...%
  - Uganda: ...%
  - Viet Nam: ...%

Rural populations

- Rural population as percentage of the total population (%)
  - Argentina: 8%
  - Bangladesh: 66%
  - Burundi: 68%
  - China mainland: 40%
  - India: 68%
  - Indonesia: 47%
  - Iran: 27%
  - Japan: 7%
  - Kenya: 75%
  - Malawi: 54%
  - Sri Lanka: 82%
  - Thailand: 51%
  - Turkey: 27%
  - Uganda: 84%
  - Viet Nam: 67%

- Percentage of rural population in poverty (%)
  - Argentina: ...%
  - Bangladesh: ...%
  - Burundi: 9%
  - China mainland: 26%
  - India: 14%
  - Indonesia: ...%
  - Iran: ...%
  - Japan: ...%
  - Kenya: ...%
  - Malawi: ...%
  - Sri Lanka: ...%
  - Thailand: ...%
  - Turkey: ...%
  - Uganda: ...%
  - Viet Nam: ...%
Sanitation facilities and potable water

Thank you!