Current Outlook of Japanese Tea

May 2017
1. Characteristics of tea production in Japan

- Tea undergoes the following processes before being sold on the market: (i) harvesting fresh leaf, (ii) processing fresh leaf into crude tea in tea-growing regions, and (iii) blending crude tea into final processed tea (refined tea) in tea consumption regions. The industrial scale of crude tea is about JPY100 billion.
- Major tea-growing regions are: (1) Shizuoka, (2) Kagoshima, (3) Mie, (4) Kyoto and (5) Fukuoka. The top-three prefectures constitute about 70% of the total tea-growing acreage in Japan.
- Tea production in each prefecture has different characteristics, for example, Shizuoka, Kagoshima and Miyazaki mainly produce "Sencha," Mie and Fukuoka "Kabusecha," Saga and Kumamoto "Tama-ryokucha," and Kyoto "Gyokuro" and "Matcha."

Change of form of tea and industrial scale

- Fresh leaf
- Steaming/rolling/Drying
- Crude tea (non-trimmed tea leaf, before removing stems)
- Blending several types of crude tea produced in different regions
- Refined tea (trimmed tea, after removing stems)
- Tea for drinking

JPY95.2 billion

Main tea-producing prefectures and characteristics of production

<table>
<thead>
<tr>
<th>Rank</th>
<th>Prefecture name</th>
<th>2016 Tea-growing Acreage (in ha)</th>
<th>Characteristics of production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shizuoka</td>
<td>17,400</td>
<td>Mainly produces Sencha (in particular, deep-steamed Sencha)</td>
</tr>
<tr>
<td>2</td>
<td>Kagoshima</td>
<td>8,520</td>
<td>Mainly produces various types of Sencha</td>
</tr>
<tr>
<td>3</td>
<td>Mie</td>
<td>3,000</td>
<td>Japan's largest producer of Kabusecha</td>
</tr>
<tr>
<td>4</td>
<td>Kyoto</td>
<td>1,580</td>
<td>Japan's largest producer of Gyokuro and Matcha</td>
</tr>
<tr>
<td>5</td>
<td>Fukuoka</td>
<td>1,550</td>
<td>Mainly produces Kabusecha</td>
</tr>
<tr>
<td>6</td>
<td>Miyazaki</td>
<td>1,420</td>
<td>Mainly produces Sencha</td>
</tr>
<tr>
<td>7</td>
<td>Kumamoto</td>
<td>1,350</td>
<td>Japan's third largest producer of Tama-ryokucha</td>
</tr>
<tr>
<td>8</td>
<td>Saitama</td>
<td>884</td>
<td>Mainly produces Sencha</td>
</tr>
<tr>
<td>9</td>
<td>Saga</td>
<td>866</td>
<td>Japan's largest producer of Tama-ryokucha</td>
</tr>
<tr>
<td>10</td>
<td>Nagasaki</td>
<td>750</td>
<td>Mainly produces Tama-ryokucha</td>
</tr>
<tr>
<td>11</td>
<td>Gifu</td>
<td>734</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Nara</td>
<td>706</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Shiga</td>
<td>614</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Aichi</td>
<td>542</td>
<td></td>
</tr>
</tbody>
</table>

Source: 2014 Statistics of Agricultural Income

Change of form of tea and industrial scale

- Fresh leaf
- Steaming/rolling/Drying
- Crude tea (non-trimmed tea leaf, before removing stems)
- Blending several types of crude tea produced in different regions
- Refined tea (trimmed tea, after removing stems)
- Tea for drinking

JPY95.2 billion

Main tea-producing prefectures and characteristics of production

<table>
<thead>
<tr>
<th>Rank</th>
<th>Prefecture name</th>
<th>2016 Tea-growing Acreage (in ha)</th>
<th>Characteristics of production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shizuoka</td>
<td>17,400</td>
<td>Mainly produces Sencha (in particular, deep-steamed Sencha)</td>
</tr>
<tr>
<td>2</td>
<td>Kagoshima</td>
<td>8,520</td>
<td>Mainly produces various types of Sencha</td>
</tr>
<tr>
<td>3</td>
<td>Mie</td>
<td>3,000</td>
<td>Japan's largest producer of Kabusecha</td>
</tr>
<tr>
<td>4</td>
<td>Kyoto</td>
<td>1,580</td>
<td>Japan's largest producer of Gyokuro and Matcha</td>
</tr>
<tr>
<td>5</td>
<td>Fukuoka</td>
<td>1,550</td>
<td>Mainly produces Kabusecha</td>
</tr>
<tr>
<td>6</td>
<td>Miyazaki</td>
<td>1,420</td>
<td>Mainly produces Sencha</td>
</tr>
<tr>
<td>7</td>
<td>Kumamoto</td>
<td>1,350</td>
<td>Japan's third largest producer of Tama-ryokucha</td>
</tr>
<tr>
<td>8</td>
<td>Saitama</td>
<td>884</td>
<td>Mainly produces Sencha</td>
</tr>
<tr>
<td>9</td>
<td>Saga</td>
<td>866</td>
<td>Japan's largest producer of Tama-ryokucha</td>
</tr>
<tr>
<td>10</td>
<td>Nagasaki</td>
<td>750</td>
<td>Mainly produces Tama-ryokucha</td>
</tr>
<tr>
<td>11</td>
<td>Gifu</td>
<td>734</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Nara</td>
<td>706</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Shiga</td>
<td>614</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Aichi</td>
<td>542</td>
<td></td>
</tr>
</tbody>
</table>

Source: MAFF "Statistics on Farmland and Crop Acreage"
## (Reference) Types of tea

<table>
<thead>
<tr>
<th>Types</th>
<th>Characteristics and main producing regions</th>
<th>Percentage of crude tea production/crude tea price (2015)</th>
</tr>
</thead>
</table>
| **Sencha** | [Characteristics]  
• Most popular type of tea  
  Processed by steaming, kneading and drying new shoots.  
[Main Production Regions]  
• All regions in Japan | [Percentage of Production]  
58.6%  
[Crude Tea Price]  
JPY1,302/kg |
| **Gyokuro** | [Characteristics]  
• Cultivated under a sun-shielding covering made of straw or cheesecloth under “tana” (ceiling shelf) for about 20 days before harvesting. Processed in the same way as Sencha.  
[Main Production Regions]  
• Kyoto and Fukuoka | [Percentage of Production]  
0.3%  
[Crude Tea Price]  
JPY5,462/kg |
| **Kabusecha** | [Characteristics]  
• Cultivated under a sun-shielding covering made of straw or cheesecloth for about one week before harvesting. Processed in the same way as Sencha.  
[Main Production Regions]  
• Mie and Fukuoka | [Percentage of Production]  
5.4%  
[Crude Tea Price]  
JPY1,552/kg |
| **Tencha (Matcha)** | [Characteristics]  
• Cultivated under a sun-shielding covering from three weeks to one month before harvesting (which is longer than that of Gyokuro). Processed by drying tea leaf without kneading.  
• Matcha is a powdered tea made by grinding Tencha with a stone mill.  
[Main Production Regions]  
• Kyoto and Aichi | [Percentage of Production]  
2.8%  
[Crude Tea Price]  
JPY3,134/kg |
| **Tama-ryokucha** | [Characteristics]  
• Unlike Sencha, a trimming process is not applied to Tama-ryokucha so Tama-ryokucha leaf is round.  
[Main Production Regions]  
• Kumamoto, Saga and Nagasaki | [Percentage of Production]  
2.8%  
[Crude Tea Price]  
JPY1,644/kg |

Source: Percentage of crude tea production/crude tea price (for all crop seasons) is based on data from the Japanese Association of Tea Production.  
Reference: Gyokuro, Kabusecha and Tencha are collectively called "Ooicha."
2. Outlook of tea production

- Growing acreage is declining slowly.
- After picking up in 2004 when the production volume exceeded 0.1 mil. tons due to increased demand in green tea beverages, tea production volume has been on a decline. In recent years, production volume is around 0.08 mil. tons a year.
- Commercial tea farm are expanding the scale of tea production acreage, especially in Kagoshima Prefecture.

○ Change in growing acreage per commercial tea farm in major tea-producing prefectures

<table>
<thead>
<tr>
<th>Year</th>
<th>Shizuoka</th>
<th>Kagoshima</th>
<th>Mie</th>
<th>Kyoto</th>
<th>Fukuoka</th>
<th>Miyazaki</th>
<th>Kumamoto</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>0.7</td>
<td>1.5</td>
<td>0.5</td>
<td>0.9</td>
<td>0.5</td>
<td>1.2</td>
<td>0.6</td>
</tr>
<tr>
<td>2005</td>
<td>0.8</td>
<td>2.1</td>
<td>0.9</td>
<td>1.1</td>
<td>0.8</td>
<td>1.7</td>
<td>0.8</td>
</tr>
<tr>
<td>2010</td>
<td>1.0</td>
<td>3.0</td>
<td>1.3</td>
<td>1.3</td>
<td>0.9</td>
<td>2.2</td>
<td>1.1</td>
</tr>
<tr>
<td>2015</td>
<td>1.3</td>
<td>4.7</td>
<td>1.7</td>
<td>1.7</td>
<td>1.2</td>
<td>3.0</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Source: Census of Agriculture and Forestry; the growing acreage of commercial tea farm in 2010 is an estimate.

○ Change in number of commercial tea farm in major tea-producing prefectures

<table>
<thead>
<tr>
<th>Year</th>
<th>Shizuoka</th>
<th>Kagoshima</th>
<th>Mie</th>
<th>Kyoto</th>
<th>Fukuoka</th>
<th>Miyazaki</th>
<th>Kumamoto</th>
<th>All prefecture total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>24,019</td>
<td>4,309</td>
<td>4,598</td>
<td>1,330</td>
<td>2,217</td>
<td>820</td>
<td>1,277</td>
<td>53,687</td>
</tr>
<tr>
<td>2005</td>
<td>17,731</td>
<td>3,072</td>
<td>2,294</td>
<td>1,035</td>
<td>1,629</td>
<td>642</td>
<td>973</td>
<td>37,617</td>
</tr>
<tr>
<td>2010</td>
<td>13,933</td>
<td>2,216</td>
<td>1,455</td>
<td>825</td>
<td>1,385</td>
<td>513</td>
<td>695</td>
<td>28,116</td>
</tr>
<tr>
<td>2015</td>
<td>9,504</td>
<td>1,599</td>
<td>941</td>
<td>631</td>
<td>962</td>
<td>373</td>
<td>512</td>
<td>19,603</td>
</tr>
</tbody>
</table>

Source: Census of Agriculture and Forestry
3. Outlook of crude tea price

- Tea price was on an upward trend until 2004 due to increased demand in PET-bottle green tea beverages; however, after 2004, slowdown in demand is pushing the crude tea price downward.
- Tea price significantly differs depending on (i) price differences between types of tea and (ii) price differences between crop seasons, in addition to tea quality, significant affecting tea farmers.

○ Change in tea price (crude tea and regular Sencha)

- Change in tea price per crop season (Crude tea produced in 2015)
  
<table>
<thead>
<tr>
<th></th>
<th>Ichibancha</th>
<th>Nibancha</th>
<th>Sanbancha</th>
<th>Average for all tea harvesting season</th>
</tr>
</thead>
<tbody>
<tr>
<td>First crop of tea</td>
<td>5,462</td>
<td>1,900</td>
<td>3,995</td>
<td>1,994</td>
</tr>
<tr>
<td>Second crop of tea</td>
<td></td>
<td>845</td>
<td>1,921</td>
<td>671</td>
</tr>
<tr>
<td>Third crop of tea</td>
<td></td>
<td>683</td>
<td></td>
<td>405</td>
</tr>
<tr>
<td>Autumn-winter Bancha</td>
<td></td>
<td></td>
<td></td>
<td>342</td>
</tr>
<tr>
<td>Average for all crop season</td>
<td>5,462</td>
<td>1,552</td>
<td>3,134</td>
<td>1,302</td>
</tr>
</tbody>
</table>

Source: Data from the Japanese Association of Tea Production

(Reference) Change in price of import Chinese green tea

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>245</td>
<td>252</td>
<td>261</td>
<td>285</td>
<td>382</td>
<td>476</td>
<td>582</td>
<td>520</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance, Trade Statistics (CIF price)
4. Outlook of consumption/demand of tea

- Consumption volume of green tea (leaf tea), which had been on a declining trend, has recently remained unchanged. PET-bottle green tea beverage product is on an increase.
- The total of annual expenditure per household of green tea (leaf tea) and tea beverage product is about JPY10,000; however, the amount of expenditure of tea beverage product has come to exceed that of tea leaf, showing a consumer shift to a more convenient style of tea consumption.
- On the other hand, the consumption volume of soda and mineral water has been increasing.

○ Change in consumption volume of soft drinks

- In 2015, consumption volume of green tea beverage product reached a record-high.
- From 2007, amount of expenditure for tea beverage product exceeds that of green tea leaf.

○ Amount of annual expenditure for green tea leaf/tea beverage product per household

- Source: Ministry of Internal Affairs and Communications, Household Statistics

○ Change in consumption volume of leaf tea per household

- Source: Ministry of Internal Affairs and Communications, Household Statistics
5. Outlook of tea import/export

- Surged in 2004 due to green tea beverage materials demand, tea import turned to decline as percentage of domestic tea increased, decreasing to only 20% in ten years.
- Thanks to growing enthusiasm for Japanese food and health awareness in foreign countries including the U.S., export volume saw a four-fold increase in ten years. The U.S. accounts for about 40% of Japanese tea exports.
- In 2016, green tea export value increased from 2015 by 14%.

- Change in import/export of green tea

(Source: Ministry of Finance, Trade Statistics)
About 30% of trees of tea fields are aged 30 years or older, raising concern about decline in yield and quality.

"Yabukita" accounts for more than 70% of all varieties of tea grown in Japan, resulting in concentration of the tea plucking season. In consequence, negative impacts have arisen, such as concentration of crude tea processing works, quality degradation due to delayed plucking, and damaging distinctive characteristics of tea flavor.

To address these issues, a program has been in place from FY2011 to support tea farmers in replanting tea trees.

**Significance and advantages of replanting**

- Planting young tea trees can **improve quality and productivity** (for a tea field with old trees, tea quality and yield is declining due to aging of root systems and decline in the nutrient/moisture preserving ability of soils).
- Planting good cultivar makes it possible to enhance added value and **create new demands**.
- Combining varieties with different crop seasons can **mitigate weather and natural disaster risk and avoid concentration of harvesting and processing work**.
7. Act on Promotion of Tea Industry and Tea culture

"Act on Promotion of Tea Industry and Tea culture" came into effect on April, 2011.

1. Purpose of Act
The purpose of this Act is to provide for the development of basic policies by the Minister of Agriculture, Forestry and Fisheries, and to take various measures such as securing stable business management of tea producers, expanding consumption, promoting food education using tea to contribute to such consumption, promoting export and disseminating knowledge on tea tradition, so as to contribute to the achievement of sound development of tea industry and healthy and affluent lives of nationals.

2. Summary of Act
(1) Development of basic policy (Article 2)
The Minister of Agriculture, Forestry and Fisheries shall provide for a basic policy on the following matters:
(i) significance and basic policy for tea industry and promotion of tea culture;
(ii) setting a target for production quantities according to long-term perspective on tea demands;
(iii) measures for the promoting tea industry;
(iv) measures for the promotion of tea culture; and
(v) any other matters necessary for the promotion of tea industry and tea culture.

(2) Development of promotion plans (Article 3)
Prefectures shall make an effort to develop the promotion plan in accordance with the basic policy.

(3) Assistance measures by the national and local governments (Articles 4 through 10)
The national and local governments shall make an effort to implement the assistance measures in relation to the following matters:
(i) securing stable business management of tea producers (e.g. improving environment of tea fields, assistance in replanting of tea trees and promotion of disaster prevention);
(ii) improvement of processing and distribution (assistance for projects for creating new added value through integral collaboration of agriculture, manufacturing, retail and other sectors)
(iii) promotion of quality improvement;
(iv) promotion of consumption;
(v) promotion of export;
(vi) promotion of tea culture; and
(vii) commendation of contributors to tea industry and tea culture.

(4) Assistance of national government (Article 11)
The national government must make an effort to implement necessary measures such as providing information, advice and financing to local governments.