Contribution of tea production and exports to food security, rural development and smallholder welfare in selected producing countries
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and
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Trade and Markets Division
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I. THE ROLE OF TEA EXPORT EARNINGS IN FOOD SECURITY

The World Food Summit in 1996 reinforced a multidimensional approach to food security: “Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life”.

In as far as how international trade contributed to food security, the summit concluded that an important way was by accelerating national income growth. As incomes grew, the fraction spent on food declined and the chances of falling into food insecurity decreased. Trade contributed to income growth in a number of ways: enabling countries to reap the benefits of comparative advantage; provide opportunities for production expansion; and greater transfer of capital and expertise, particularly through foreign investment. Export growth allowed firms to expand beyond the respective domestic markets and reap the benefits of economies of scale. Exposure to foreign competition also helped in removing inefficiencies and gaining exposure to ideas, knowledge and new technologies.

In the case of tea, production and exports generate foreign exchange and employment and provide a material base for national economic growth. In particular, they make significant contributions to food security by helping to cover food import bills. In 2011, tea export earnings paid for 51 percent and 71 percent of Kenya and Sri Lanka’s food import bills, respectively. Therefore, monitoring and analysing international tea trade is critical for policy makers involved with food security, trade and rural development in developing countries.

The main drivers of international prices are trends and changes in per capita consumption, trade preferences, the potential effects of pests and diseases on production and changing dynamics between retailers, wholesalers and multinationals.

International tea prices, as measured by the FAO Tea Composite Price, remained firm over the past five years, despite minor declines due to market corrections in late 2011 and the third quarter of 2013. Demand continued to be robust, led by strong consumption in developing countries. The increase in tea prices resulted in an estimated 6 percent growth in export earnings in 2012 to USD 5.2 billion at the global level.

Figure 1. FAO Tea Composite Price

Source: FAO Secretariat.
II. INSTITUTIONAL SET UP AND SUPPORT FOR SMALLHOLDERS IN SELECTED COUNTRIES

While tea production by smallholders is growing worldwide, their situation is problematic because the prices they are paid for fresh tea leaves, more often than not, tend to be below the cost of production, if labour cost is factored in. Although governments of most tea producing countries are not in a position to support systems leading to higher payments for smallholders, some have created policies to promote long-term buying commitments that would enable economic stability and sustainability and, hence, retention of smallholders in the rural areas. This is certainly true for Kenya and Sri Lanka, and India has recently created a Small Grower Development Directorate (SGDD) under the Tea Board of India to implement Government policy. The following sections provide an overview of the institutional set up in the three countries. Presentations by delegates from India, Indonesia, Kenya and Sri Lanka will supplement the information provided below.

A. DEVELOPMENT OF SMALL TEA GROWERS IN INDIA

Tea production in India has been expanding in recent years, from 1.1 million tonnes in 2011 to 1.2 million tonnes in 2013 (Table 1). Although tea production is still dominated by estate plantations, the share of smallholders is increasing (Table 2).

Table 1. Production in thousand tonnes

<table>
<thead>
<tr>
<th>Year</th>
<th>Small gardens</th>
<th>Big gardens</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>316.73</td>
<td>798.99</td>
<td>1 115.72</td>
</tr>
<tr>
<td>2012</td>
<td>363.09</td>
<td>763.24</td>
<td>1 126.33</td>
</tr>
<tr>
<td>2013</td>
<td>374.91</td>
<td>825.50</td>
<td>1 200.41</td>
</tr>
</tbody>
</table>

Source: Tea Board of India.

Table 2. Share of small and big gardens in total production

<table>
<thead>
<tr>
<th>Year</th>
<th>Small gardens</th>
<th>Big gardens</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>28.39%</td>
<td>71.61%</td>
</tr>
<tr>
<td>2012</td>
<td>32.24%</td>
<td>67.76%</td>
</tr>
<tr>
<td>2013</td>
<td>31.23%</td>
<td>68.77%</td>
</tr>
</tbody>
</table>

Source: Tea Board of India.

Growers holding up to 10.12 hectares of tea area are considered as smallholders in India. However, the average size of the majority of the growers is less than one hectare. Currently, there are more than 200 000 smallholders spread throughout the tea growing regions of India (Table 3). These growers supply their green leaves either directly or through a middleman, called a leaf agent, to private, standalone processing factories, without any plantations of their own, called bought leaf factories (BLFs). In order to improve productivity and the quality of the smallholder tea sub-sector, the Tea Board of India set up a new Directorate in 2013, with technical field officers posted in all the tea growing regions where smallholders are concentrated. Comparative tea productivity is presented in Table 4.
Table 3. The number of gardens and tea area in 2011

<table>
<thead>
<tr>
<th></th>
<th>Small gardens</th>
<th>Big gardens</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of gardens</td>
<td>200 000*</td>
<td>1 409**</td>
<td>201 412</td>
</tr>
<tr>
<td>Total area (hectares)</td>
<td>158 404.27</td>
<td>405 574.73</td>
<td>563 979</td>
</tr>
</tbody>
</table>

Notes: Small gardens are defined as holdings with tea areas less than 10.12 hectares, whereas big gardens are holdings with more than 10.12 hectares.
* Estimates based on enumeration carried out by the Governments of Assam, West Bengal, Tripura, Himachal Pradesh and Zonal office of the Tea Board for South India.
** Baseline survey data compiled by the Tea Board of India.
Source: Tea Board of India.

Table 4. Average productivity of small and big gardens (yield kg made tea/hectare)

<table>
<thead>
<tr>
<th>Year</th>
<th>Small gardens</th>
<th>Big gardens</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2 000</td>
<td>1 970</td>
</tr>
<tr>
<td>2012</td>
<td>2 292</td>
<td>1 882</td>
</tr>
<tr>
<td>2013</td>
<td>2 367</td>
<td>2 035</td>
</tr>
</tbody>
</table>

Source: Tea Board of India.

Through these field officers, the growers are motivated to organize themselves into self-help groups (SHGs). The number of growers required to form an SHG ranges from 30 to 50 growers, and their aggregate tea area should not be less than 50 acres (20 hectares). The SHGs are then registered under the Society Act to become legal entities to avail various benefits extended by the Small Grower Directorate of the Tea Board of India.

Through collectivization, the growers could move up the value chain as manufacturers and marketers of their teas in a branded and value-added form, so that the teas from the smallholder sub-sector could be exported at competitive prices.

Therefore, the main objective of the Small Grower Directorate is to facilitate the collectivization of smallholder tea growers in the form of Primary Producer Societies/SHGs functioning as business entities, engaging in quality leaf production and manufacture and marketing of teas for better price realization. It also envisages building their capacities in organizational management and bookkeeping and in agronomy. Towards this end, technical assistance and financial support by way of grant/subsidy are being extended for the following activities:

- Revolving fund for field inputs such as fertilizers, pesticides, weedicides, sprayers;
- Capital cost for input storage and office;
- Leaf collection shed: 1 shed for every 5 000 kg of leaves harvested in a day;
- Two weighing scales per SHG;
- Plastic crates and nylon carry bags at subsidized prices for carrying green leaves from the leaf collection shed to the tea factory;
- Pruning machines: one pruning machine for every 10 hectares of tea area owned by the members of the SHG;
- Transport vehicle at 50 percent subsidy;
- Harvesting machines at 50 percent subsidy: one machine for every 10 hectares owned by the members of SHG;
- Subsidy for setting up of a tea processing factory;
- Tea nursery grant;
- Micro irrigation; and
- Training.
B. KENYA TEA DEVELOPMENT AGENCY (KTDA)

Kenya is the third largest producer of tea in the world, with output hitting an all-time high of 432 400 tonnes in 2013 (Figure 2). Export earnings from the 494 300 tonnes shipped in 2013 totalled Kshs 114.4 billion, or about USD 1.33 billion (Figure 3). Over 60 percent of tea in Kenya is grown by smallholders, who almost exclusively belong to the Kenya Tea Development Agency (KTDA). The KTDA is an agent for Kenyan tea smallholders, and it was created upon privatization of the Kenya Tea Development Authority in June 2000. It is a private company and the leading tea management agency of Kenya.

Figure 2. Kenya: production, consumption and exports of tea (tonnes)

Source: FAO Secretariat.

Figure 3. Kenya: tea export values (million USD)

Source: FAO Secretariat.
The KTDA is mandated to provide services to smallholder tea farmers on production, processing and marketing of high quality tea, including:

- Supplying farm inputs, materials and extension services;
- Inspecting and collecting green leaf tea; and
- Processing and marketing.

The KTDA purchases fertilizers for the smallholders, who buy the fertilizers from the KTDA on credit. Smallholders pay back their credits through deductions on their tea deliveries on a monthly basis for a period of 12 months.

The KTDA also provides loans to smallholders for purchasing equipment and tools required to cultivate and market high quality tea, as well as planting material accessible through nurseries established by the KTDA. The Agency also supervises land preparation and crop management and provides extension services. Smallholder tea from Kenya is harvested manually, and fine plucking (i.e. two leaves and a bud) is the gateway to achieving high quality tea production. The tea leaves are delivered to KTDA buying centres, where the tea is weighed, graded and valued. In order to protect the plucked leaves from heat, they are transported in specially designed carriers that allow air to circulate, thereby safeguarding the quality of the tea. From the buying centres, the teas are taken to one of the 66 KTDA processing tea plants (54 tea factories), where they are processed. One of the most effective ways of increasing value to smallholders is through factory ownership, and smallholders have increasingly been included in the value chain. They are also receiving higher returns on their tea, obtaining 75 percent of their tea's selling price at the Mombasa auction.

In a nutshell, the Kenyan tea value chain can be explained as follows. After plucking, small tea farmers take their tea to the KTDA's buying centres, where their tea is weighed. From there, the tea is transported to the KTDA's factories for processing and transporting to packaging factories or for auctioning. The packaged teas are sold to wholesalers or to the supermarkets, where domestic and international consumers purchase the tea. The tea sold to wholesalers is resold to retailers and finally to domestic and international consumers. In this process, the smallholders receive 75 percent of the selling price of the tea that was auctioned in Mombasa.
Figure 4. KTDA Value Chain

Source: KTDA.
In Kenya, smallholders are further included in the value chain through the Kenya Tea Packers Limited (Kepeta). It is a private company that is owned inter alia by the Kenyan tea smallholders through the KTDA and the Kenya Tea Growers Association. The company’s objective is to increase returns to its shareholders through packed value added tea in the domestic and export markets. It aims to curtail the distribution chain.

Table 5. Structure of the KTDA business model

<table>
<thead>
<tr>
<th>Smallholders</th>
<th>Own buying centres</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organized by buying centres</td>
</tr>
<tr>
<td></td>
<td>Elect members to committees in each buying centre</td>
</tr>
<tr>
<td>KTDA tea factories</td>
<td>Over 60 factories are owned directly by shareholders, who are the smallholders</td>
</tr>
<tr>
<td>KTDA and branches</td>
<td>Factory companies are owned by the KTDA</td>
</tr>
<tr>
<td></td>
<td>Manage factories</td>
</tr>
<tr>
<td></td>
<td>Corporate shareholders appoint the directors</td>
</tr>
</tbody>
</table>


C. TEA SMALL HOLDINGS DEVELOPMENT AUTHORITY (TSHDA) OF SRI LANKA

Sri Lanka is the fourth major tea producer in the world. In 2013, Sri Lanka produced 340,200 tonnes of tea (Figure 4); the 2013 export earnings amounted to USD 1.46 billion (Figure 5).

Figure 4. Sri Lanka: production, consumption and exports of tea (tonnes)

Source: FAO Secretariat.
Approximately 76 percent of tea in Sri Lanka is grown by over 400,000 tea smallholders, who are organized into tea smallholder development societies (TSDS). The Tea Small Holdings Development Authority (TSHDA) was established in 1977 to promote and develop the tea smallholdings in Sri Lanka. The Authority is also assigned to increase tea production, marketing activities and improve productivity, with the aim to improve the livelihood of Sri Lankan tea smallholders. Its functions include extension interventions; land development interventions; and social development interventions. Specifically these are:

- to improve the productivity and quality of tea grown by the smallholders;
- provide fertilizer on credit with easy payment terms; assist smallholders in obtaining quality planting material through tea nurseries and/or through improved tea cultivars from mother bush areas that are institutionally maintained by the TSHD; and
- for a nominal fee provide soil testing and advice to correct the soil for tea.

III. CONCLUSIONS

Generally, the situation of tea smallholders continues to be problematic because their cost of production tends to be higher than the prices they receive for fresh tea leaves, if the cost of their labour is factored in. Governments of most tea producing countries have formulated policies to promote long-term buying commitments that would enable economic stability and sustainability and, hence, retention of smallholders in the rural areas.

To better analyse the sub-sector, member countries are requested to complete the questionnaire to assist the Secretariat in identifying the level of smallholder integration in the tea value chain, and analyse in greater depth the developments from farm gate to retail to have a better insight into the contribution of tea production and exports to smallholder producer welfare.
Data received from the three countries which responded to the Secretariat's questionnaire of June 2014 were incomplete. The sample number of households surveyed in Indonesia (4) and Kenya (10) were also insufficient. India, Indonesia and Kenya are requested to complete the questionnaire and fill in the missing information, while countries which did not respond are requested to do so accordingly so that the Secretariat could present its findings at the next session of the IGG on Tea.
References


