

Sustainability in Indian Tea Industry

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Abstract

This paper will analyze how the global growth has showed a declining path in 2011-12 due to the spillover from sovereign debt crisis in Europe and United States that resulted in the downward growth in the developing countries in trading many food and non-food items including Tea Industry. This paper will put a light on how Indian Tea Market has been affected in the past years, and, climatic changes is another reason for decline in production, demand and supply of the tea. Also, the paper will go through all the economic aspects behind the downfall.

Keywords: Agribusiness; Tea; Sustainability; Economics; Demand; Supply; India; Agricultural Economics; Indian Tea Board; Tea Marketing.

1. Introduction

Anytime is a Chai (Tea) - time for Indians. From households to offices, every Indian wants a cup of tea to relax, enjoy or distress. The drink that makes you feels refreshed and rejuvenated. Well thanks to the British, who discovered Tea in India which was first cultivated in North-eastern part of India in 1934. The Indian Tea Industry has completed 172 years in the country [9]. Since then India remained the world's largest producer of tea supplying 31% of the world's demanding drink [8]. The total tea produced in India is 85% consumed by the people of the country and 15% is the export share [9]. However, the market for Indian tea is changing at very fast pace because of the changing needs and preferences of the consumers. Also tea is facing high competition from international players resulting in market failures in Indian Tea Market by oversupplying of tea from countries such as Vietnam, Indonesia and Kenya [10].

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2. Global Scenario

In the world of globalization, no country remained isolated from the impacts of happenings in the other parts of the world. The global growth has showed a declining path in 2011-12 due to the spillover from sovereign debt crisis in Europe and United States that resulted in the downward growth in the developing countries. The global economic scenario remained uncertain in 2011 because of the climatic changes due to tsunamis and earthquakes that occurred in Japan last year. Also unrest from Middle-East oil producing countries, Euro area faced financial imbalances and the US Economy is the major reasons for the slow growth rates in different countries. This depressed demand has resulted in effected the export trade. India is also affected from these fluctuations which resulted in 6.9% GDP in 2011-12 as compared to 8.4% in 2010-11. The major reason for the decline is due to the contraction in overseas demand and weakening of industrial growth in 2010-11 [1].

As India far as Indian Tea Market is concerned it has been also affected by the climatic changes which resulted in decline in production and supply of the tea.

Indian tea is appreciated world over their unique aromatic flavor. India produces three special teas which are exported world over. These are as follows:

- Darjeeling
- Assam
- Nilgris

Other tea varieties such as organic and green tea have also been produced but in minor quantities. Tea is grown majorly in Assam, Kerala, Tamil Nadu and West Bengal covering 95% of the total production. Other area includes Tripura, Himachal Pradesh, Utrakhand, Bihar and Karnataka. The new areas that entered the Tea map of India are Orissa, Sikkim, Meghalaya, Nagaland, Arunachal Pradesh, Manipur and Mizoram [1]. Tea is grown on the low-temperature hills of Darjeeling which produced world-famous Darjeeling Tea. Indian Tea Industry provides direct employment to a large size of women. The tea plantations are beyond economic production units rather social institutions [2].

3. Demand, Supply and Marketing Margin for the Tea Industry

3.1 As tea production is labor-intensive, so it is very difficult to reduce or eliminate labor input significantly and thus marketing margin. Moreover the cost of labor used in tea production in retail establishments exerts heavy pressure which has been more intensified as Tea production employ majority of women .So this creates a widening of the marketing margin and reduction of farmer's share of the consumer's money over time [4].

3.2 Secondly, as the standard of living increases people tend to divert to more sophisticated drinks such as coffee, hot chocolates, soft drinks, etc. So the increase in price of tea in market diverts the demand towards coffee and hot-drinks.

4 Even the change in demand and supply is very common in case of summers when people prefer cold-drinks

over tea or coffee. Also people are diverting towards green tea as the culture of living new healthy lifestyles. They want tea made from organic milk or soya milk. This also shifted the demand curve for the tea resulting in decrease in the overall demand of tea. These all these factors exert extra costs on farmers that decrease their share in the market hence widening of the marketing margins [5].

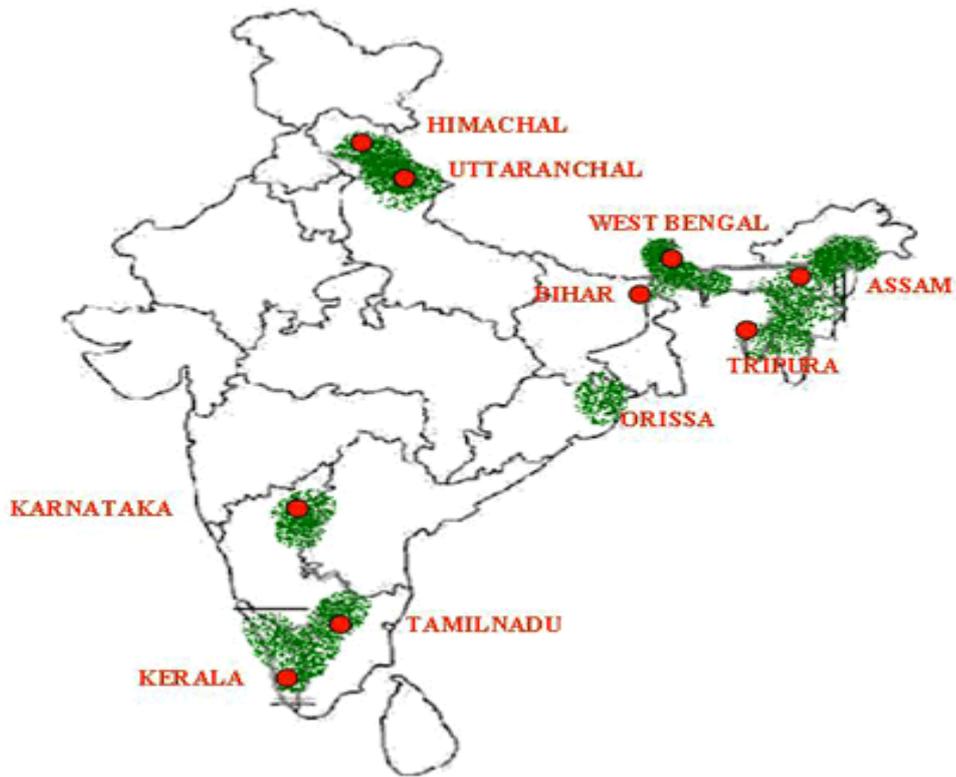


Figure 1: Major Tea growing states (Source: Tea Board of India)

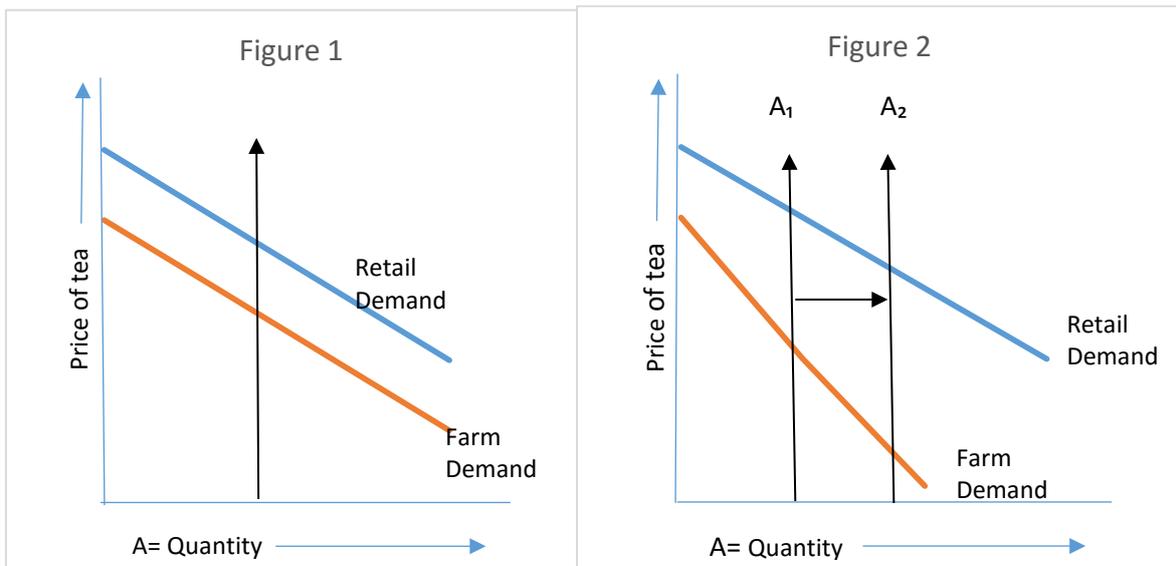


Figure 2: The distribution of increase in marketing charges under different elasticities of demand

4. Demand Shifters

Market works properly when demand equals supply as shown

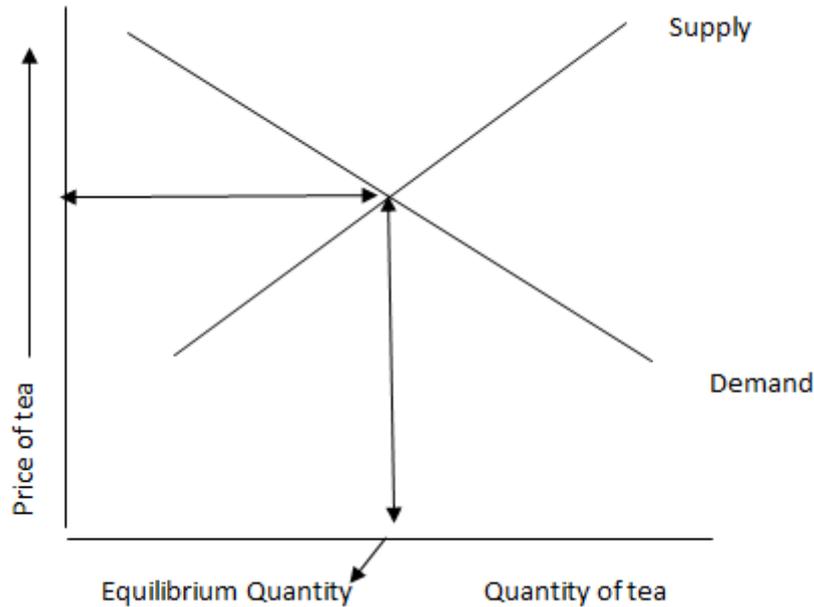


Figure 3: Showing Equilibrium when demand equals supply

- Tastes and Preferences
- Income
- Fashion

The demand shifters as we already discussed is the change in the tastes and preferences of consumers that resulted in change in the demand for tea. Also the price of a cup of tea got expensive by 2.5 % released by National Statistics in 2009 as the living standards of the people has upgraded and income has risen as resulted in the increase of demand of tea world-over. This exerted a high pressure on Indian tea market Industry to fulfill the demand of the global consumers Moreover there is an increasing trend of people in India to serve tea on various occasions at houses, offices, families or friends get-together, weddings, temples and other places. It became a fashion symbol for Indians to drink tea at any- time. Even there is a trend of small vendors to serve tea in shops and offices .The shifts in the demand curve for Tea in the importing countries exerted irrelevant effects on export earnings from Tea in India.This resulted in decline of international market price \$2.09 to \$ 2.03 in 2010-11 .However countries such as Kenya, Sri-Lanka are giving high competition Indian Tea Industry [9].

5. Supply Shifters

- Weather

The changes in supply can occur during summers when people in India and overseas prefer soft-drinks, lemon

water, sugarcane water, lassi (yoghurt water), boost, crushers over hot drinks such as tea or coffee.

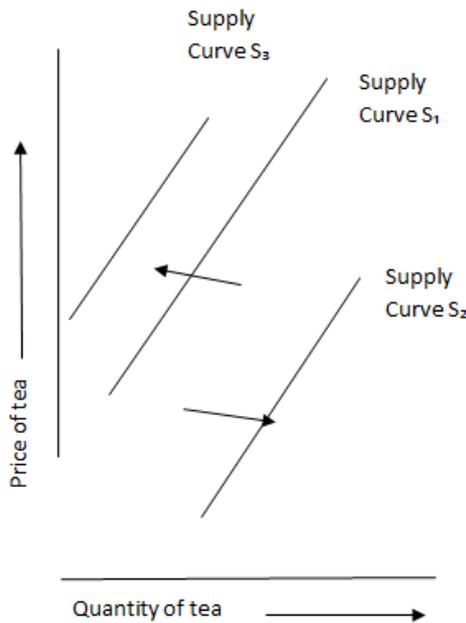


Figure 4- a: Shift in the Supply Curve

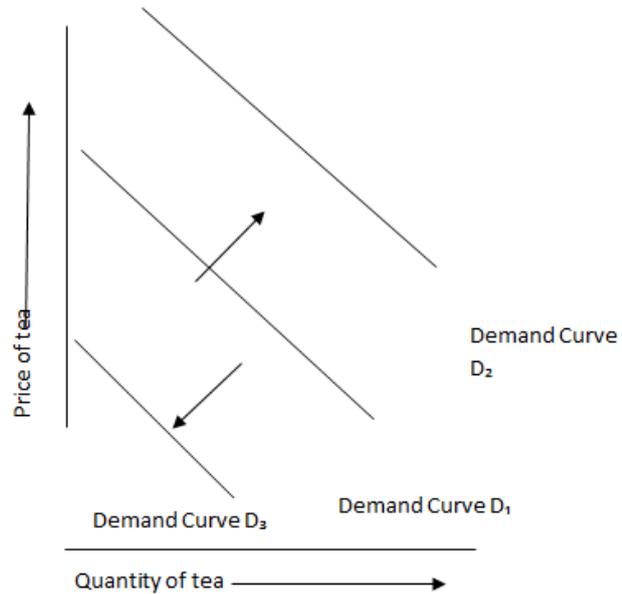


Figure 4- b: Shift in the Demand Curve

6. Tea Production and Export

The global tea consumption has increased by 5.6 % in 2010 due to the rapid growth in per capita income levels especially in China, India and other emerging economies. The Asian countries contributed 45% of world tea-export (Sri Lanka, China and India).The prices remained firm because of the improved demand and supply of tea resulting in fluctuations of market fundamentals as for the first time tea consumption exceeded production in 2009 and this remained continued through 2010 and 2011.This well plotted in the chart below [6].

Tea industry is one of the major industries of the country. In global scenario; Indian tea is losing the charm and position due to high price and quality. Also domestic market is facing high competitions from alternate drinks such as coffee, soft drinks and other beverages such as Horlicks, bornvita, etc. Below is the trend sowing the country produced 090.3 thousand tonnes of tea in 2010 of which 76 % was produced by North-eastern states [6].

Below is the chart for tea-exports by Indian tea industry which clearly showed a declining share because of the lower production, particularly of the premium Assam variety, and subdued demand from major importing countries. The tea board has set 200 million kg export target for 2010 but it was not actually achieved declined by 13%.The fall in exports indicates the part played by global competitors such as Sri-Lanka and Kenya. Even Pakistan is a new entrant in the list [6].

7. Marketing of Tea

The tea produced has to be sold through public auctions (55%), 4% was directly exported through forward

contract and 41% remaining was sold through ex-garden private sale. This can be better illustrated in the table below [9].

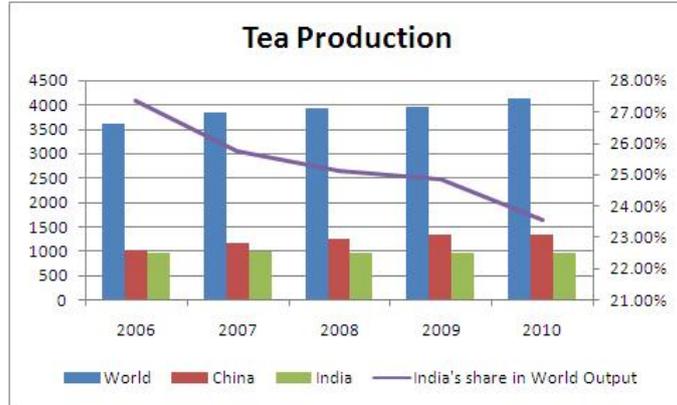


Figure 5: (Source: http://www.indiabulls.com/securities/market/Useful_Information/budget/budget12-13/BudgetHeiglhts.aspx?strTitle=Tea%20Industry%20ourges%20for%20auction%20reforms)

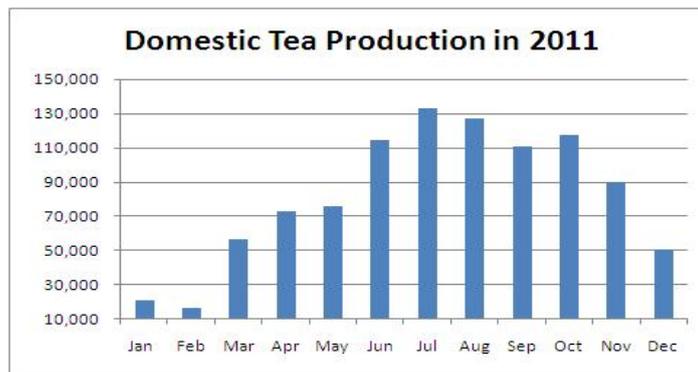


Figure 6: (Source: http://www.indiabulls.com/securities/market/Useful_Information/budget/budget12-13/BudgetHeiglhts.aspx?strTitle=Tea%20Industry%20ourges%20for%20auction%20reforms)

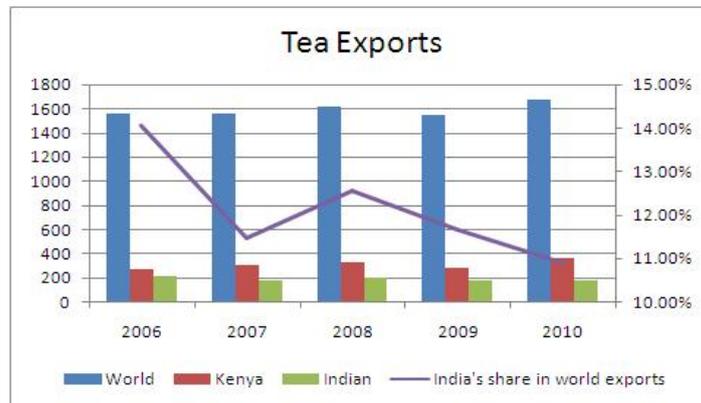


Figure 7: (Source: http://www.indiabulls.com/securities/market/Useful_Information/budget/budget12-13/BudgetHeiglhts.aspx?strTitle=Tea%20Industry%20ourges%20for%20auction%20reforms)

7.1 Domestic Consumption

The domestic consumption was estimate to be 837M.Kgs in 2010 as compared to 819 M.Kgs in 2009.The consumption has increased by 18 M.Kgs [1].

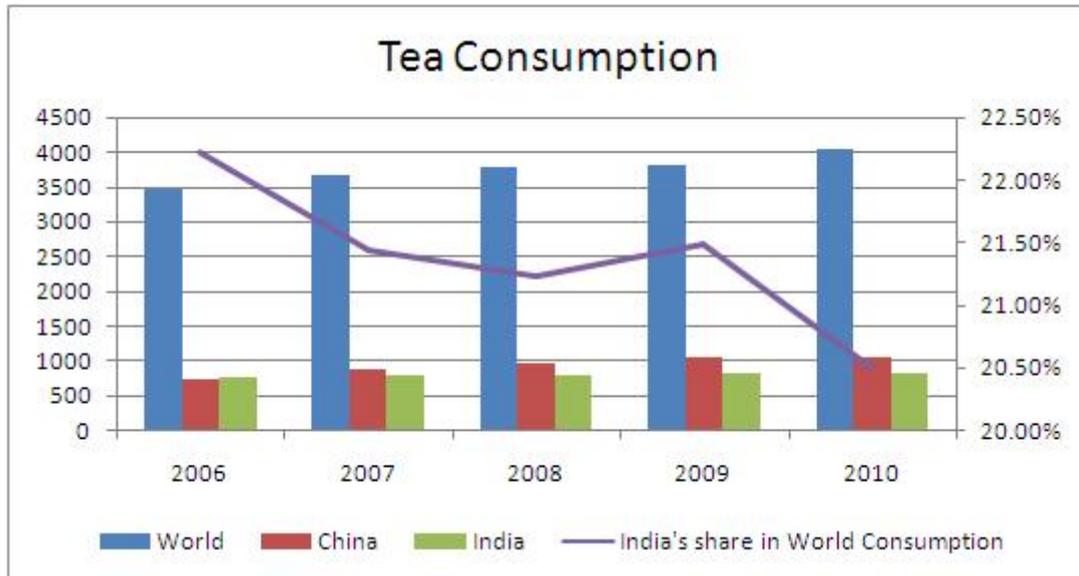


Figure 8: (Source: http://www.indiabulls.com/securities/market/Useful_Information/budget/budget12-13/BudgetHighlights.aspx?strTitle=Tea%20Industry%20urges%20for%20auction%20reforms)

8. Taxes and Duties

There are three kinds of taxes on tea imported for basic markets which includes import duty of 100% plus 10% surcharge plus additional duty of 4% on basic duty.

- Excise Duty: 10% ad-valorem on Instant Tea falling under headings 2101.20
- Export Duty: Nil
- Import Duty: Nil on teas for the purpose of re-export by Export Oriented Units (EOU) and Special Economic units (SEZ) units [6].

9. Promotion of Tea

The promotion is done by Tea Board of India which is carried out through its foreign offices in London, Dubai and Moscow.

The activities include:

- Participation in international fairs and exhibitions, particularly food and beverages events
- Field sampling of specialty stores or super markets
- Media-publicity

- Buyer-Seller meets
- Exchange of tea delegations between India and importing countries
- Provision of promotional support to Indian exporters and foreign importers of value added teas in their promotional and marketing efforts [1].

10. Major causes for market failures in Indian tea industry

Indian tea market faces major challenges despite of India's historical success with Tea industry. The main factors for market failures are as follows:

- 1) Decline in demand for tea in the global market
- 2) Defects in auction system
- 3) Poor Price realization
- 4) Defective market structures
- 5) Increase in cost of production

The worst affected from the market failures are the small growers and plantation workers which resulted in closure of many tea estates.

10.1 Decline in global demand

The major causes for decrease in demand is the changes in the global situations such as disintegration of USSR, WTO agreements, globalization of markets of the nations, etc have impacted the Indian tea market. India lost its eminent position of the largest producer of tea to China. Kenya and Sri-Lanka are giving an immense competition to Indian tea market resulting in overall decrease in the export market [9].

10.2 Defects in the Auction System

Auction houses play an important part of tea marketing structure. The main function of tea auction sale is that producers don't take part in the selling process directly. The brokers in the market sell tea on behalf of producers. As mentioned above about widening of marketing margins in Indian tea market. A 2005 REPORT FOR THE INTERNATIONAL ORGANISATION proved that the big tea companies are benefitting from fall in auction prices and rise in retail prices for tea. Further, the price paid to small tea growers and plantation workers has fallen since 1998. However, retail prices increased. An independent report by Indian Govt. in 2002 suggested that co-operation among buyers at auction prices and merging interests between broker and buyers prevented tea growers from fetching a good auction price. Also the big buying companies use their market power to push down price. They take the advantage of depressed market to low prices. For Instance- TATA TEA, HINDUSTAN LEVER, ETC are big buying companies which are in monopolistic competition always play part in market failures.

10.3 Poor Price Realization

The production costs have been raising but the price of the tea is also declining which exerted pressure on tea-growers and laborers. The decline in prices is due to increase in production as a result of increase in demand. Low wages are given to laborers and not given them basic facilities such as food, health, education, etc. [9]. The major causes of poor price realization are due to following reasons:

- Competition among tea producing companies for a share of the world market.
- Increasing demand of tea
- Dominance of auction system
- Tea being perishable product, its quality and flavor diminishes quickly. Therefore, need to cut prices to clear stocks. [9]

10.4 Defective Market Structure

The tea value chain consists of all stages from growing of the tea leaf to processing of the finished product and finally sale to the customers. Value needs to be added to tea leaves at each stages of the supply chain, each with a specific cost. The total costs include:

- Cost of plucking
- Sorting of leaves
- Factory Packing
- Transportation
- Ware-housing
- Auction or Direct SALE
- Freight
- Interest
- Blending
- Packaging and Retailer Sales.

Tea is ready to drink item, so the downstream stages such as blending, packaging and marketing are the most profitable ones. However, this part of the value chain is controlled by multinational tea packers and brokers. As a result, MNCs influence the retail price by keeping the world-price low, which can affect the sustainability of tea industry [9]

10.5 Increase in Production Cost

The main reasons for increase in production costs are as follows:

- Changes in climate
- Changes in soil fertility
- Age of the tea bush
- High over-head costs
- Poor agricultural practices

- Demand for high wages for laborers and plantation workers [9].

11. Recommendations for improvement:

- 1) There should be proper planning of strategies to increase the share of the market globally.
- 2) There should be more attention on improving the quality of tea.
- 3) There should be encouragement on product branding and differentiation of Indian tea.
- 4) Studies done by UN Food and FAO suggested the need for reducing the production costs through productivity gains, tailoring marketing activities to individual country's demand, improving infrastructure, streamlining the marketing channels, informing healthy benefits of tea and promotion of organic tea using tea marks.
- 5) Improvement of supply chain management in India and as well global marketing network.
- 6) Bringing more transparency in auction houses. Online auction prices should be taken in order to change the current scenario of tea auctions by big players in the market [9]

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References

- [1]. P. Kumar, P. S. Badal, N. P. Singh, and R. P. Singh (2008, March) "Tea Industry in India: Problems and Prospects," *Indian Journal of Agricultural Economics*, vol. 63, no. 1, pp. 1–13. Available: <http://ageconsearch.umn.edu/bitstream/204564/2/10-Pramod.pdf>. [Jun. 4, 2016]
- [2]. "Tea price rises as tea demand exceeds supply," New to Drinks Vending..Internet: <http://www.newtodrinks vending.com/2009/04/tea-price-rises-as-tea-demand-exceeds-supply.html>. June 2010 [Jun. 4, 2016].
- [3]. J. S. Gans, S. P. King, and G. N. Mankiw. *Principles of microeconomics* (4th ed.) Australia: Cengage Learning Australia, 2011, pp. 71–88.
- [4]. B. S. Fisher & K. O. Campbell *Agricultural Marketing and Prices* (2nd ed.) Melbourne: Longman Cheshire, 1982, pp. 35–65.
- [5]. W. G. Tomek and H. M. Kaiser, *Agricultural product prices* (4th ed.). Cornell University Press, 2013.
- [6]. "Indiabulls, Securities and Markets," 2010.Internet: www.indiabulls.com/securities/market/Useful_Information/budget/budget1213/BudgetHeiglhts.aspx?strTitle=Tea%20Industry%20urges%20for%20auction%20reforms. March 2011 [Jun. 4, 2016].
- [7]. "Annual Report 2011-2012," *Govt. Of India, Ministry of Commerce & Industry, Dept Of Commerce*, Available: <http://commerce.nic.in/publications/annualreport201112.asp?id=24>, June 2011[Jun. 4, 2016]

- [8]. S. C. Srivastava, "WORLD TRADE ORGANIZATION," *WTO*. Available: http://www.wto.org/english/res_e/booksp_e/casestudies_e/case16_e.htm, Nov. 2009 [Jun. 4, 2016].
- [9]. Das Ashim Kr , *Sustainability in tea industry: An Indian perspective*: The Social Scanner; Akansha Publishing House; New Delhi, 2009.
- [10]. Kakali Hazarika (2011, August). "*Changing Market Scenario for Indian Tea*" International Journal of Trade, Economics and Finance, Vol. 2, No. 4. Available : <http://www.ijtef.org/papers/118-F536.pdf>[June 6, 2016]