

234th Experiments & Extension Forum

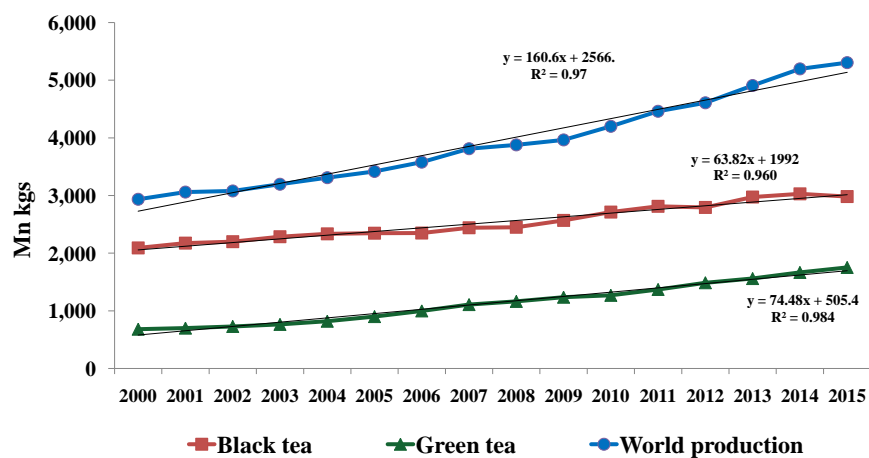
Keynote Address

I Sarath B Abeysinghe
Director, Tea Research Institute

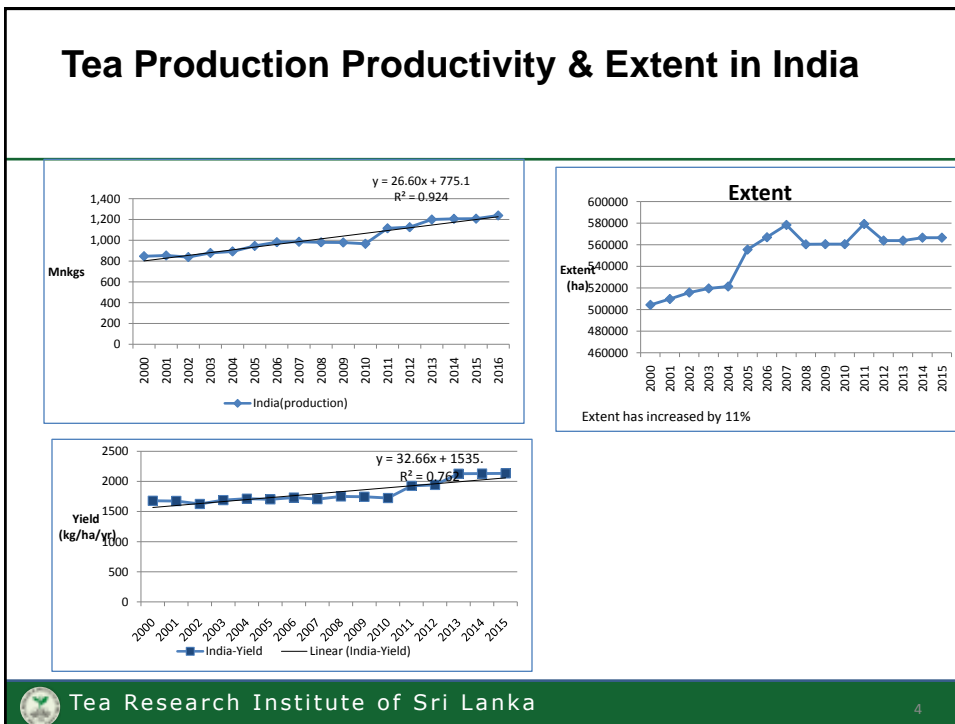
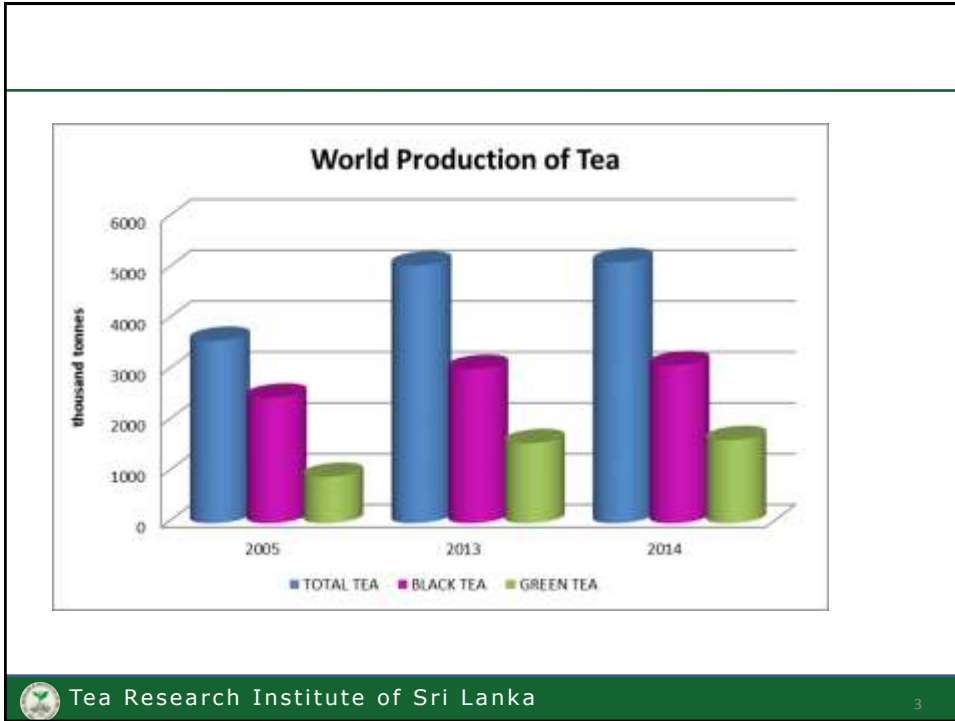


Tea Research Institute of Sri Lanka

World Tea Production



Tea Research Institute of Sri Lanka



Indian Tea Production

Major Issues

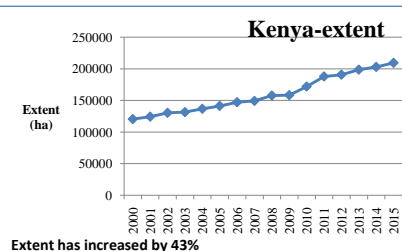
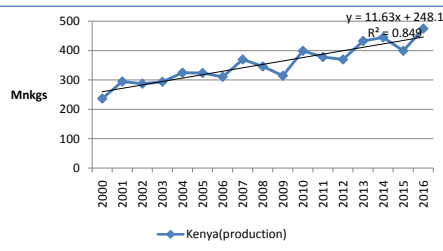
- Aging tea bushes and low replanting rate
- Commercially unproductive area has increased from 42 % in 1997 to 57 % in 2008.

Measures adopted

- Under 12th Five year plan Indian Rs.Mn14,150 was allocated for Tea Development and Promotion (2013-2017)
- Implementation of a rehabilitation and expansion programme in Assam region & Tamilnadu small & large plantations
- Supply of clonal tea plants at subsidized rate
- Educating tea small growers about the scientific technique of tea cultivation (Today tea small holders contribute 44% to the total tea production).
- The Tea Board grants financial support in the form of loan for the purchase of tea machinery and for building of cooperative tea factories



Tea Production Productivity & Extent in Kenya



Upward trend of production in Kenya 2000-2016

Reasons

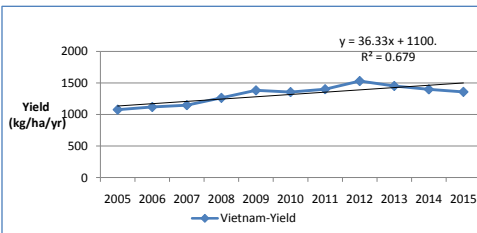
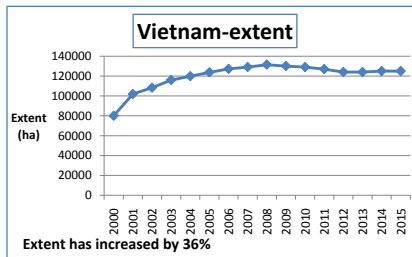
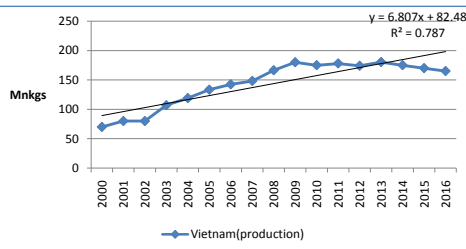
- Increase in the total area of land under cultivation
- Productivity gains associated with multinational tea companies. (Productivity of large estates is 33 per cent higher than that of smallholders)
- Favourable weather conditions
- There are only minor and sporadic outbreaks of insects pests which do not cause economic yield reductions.
- High Yielding Cultivars

Measures adopted

Under the Vision 2030 objectives agriculture is expected to grow at a rate of 7%,



Tea Production Productivity & Extent in Vietnam



Tea Production in Vietnam

Major Issues

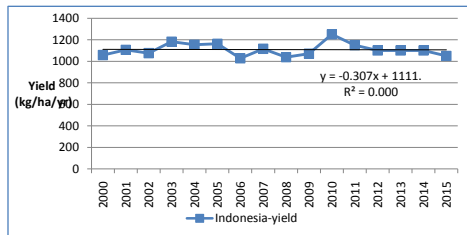
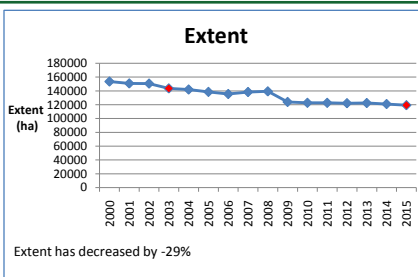
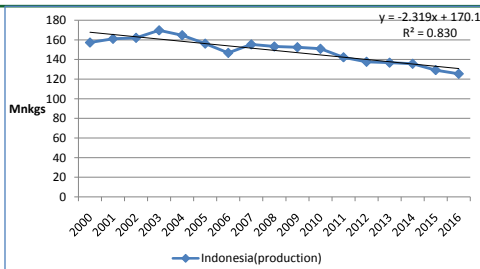
- Poor investment on tea cultivation and machine harvesting
- Control of plant protection chemicals
- Lack of planting New varieties

Measures adopted

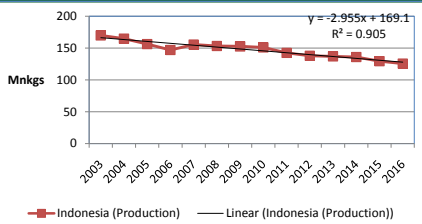
- Under the restructure master plan for agriculture expansion of tea area to 150,000 hectares in 2020.
- Increase productivity from 6500 kg / ha in 2010 to 8,000 kg / ha in 2020 through new varieties
- Establishing a State Management Agency, called "Coordinating Committee" to consistently and effectively manage the tea production industry.



Tea Production Productivity & Extent Indonesia



Production decline in Indonesia 2003-2016



Reasons

- Decreasing area under tea over the years (tea smallholders have switched to other crops such as palm oil, vegetables)
- Adverse effects of climate change (Temperatures around some tea plantations increased by 5-7 degrees Celsius)
- Lack of skills and knowledge of best agricultural practices and technology to face climate change
- Mismanagement and the lack of new investment

Measures adopted

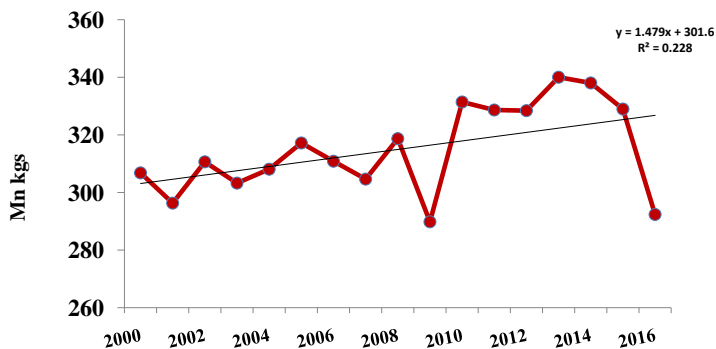
In 2014 Indonesian Agriculture Ministry double its budget to revitalize the country's tea plantations.

Intensification program (which includes the distribution of fertilizers) for 1,700 hectares and

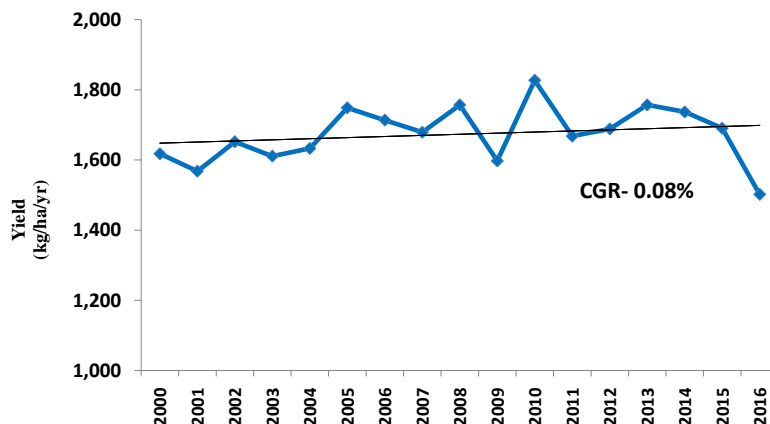
A rehabilitation program (which includes distribution of seeds and fertilizers) for 1,500 hectares of tea plantations



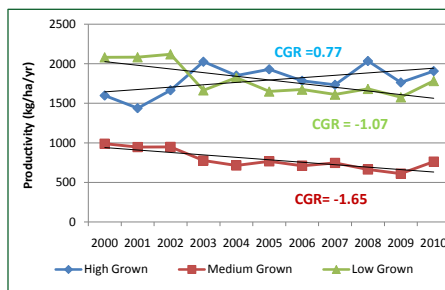
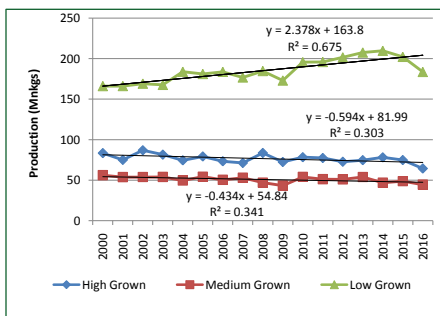
Production of Tea in Sri Lanka (2000-2016)



Productivity of Tea in Sri Lanka (2000-2016)



Tea Production in Sri Lanka by Elevation (2000 & 2016)



Tea Extent (ha)

Year	High Grown	Medium Grown	Low Grown
2000	52272	56863	79836
2010	41137	71018	109814
Change (ha)	-11135	14155	29978
Change as %	-27	20	27

Region	CGR (Percentage per annum)
High Grown	0.77
Medium Grown	-1.65
Low Grown	-1.07

Declining trend of yield in low and medium grown tea

(Source: Statistical Bulletin, SLTB)

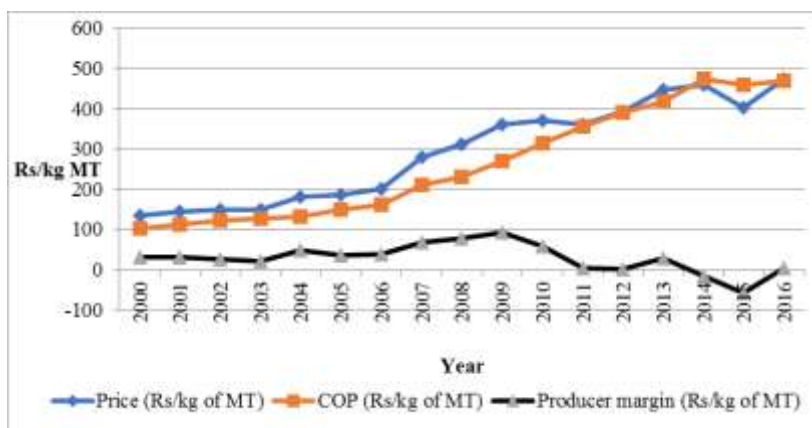


Reasons for yield decline

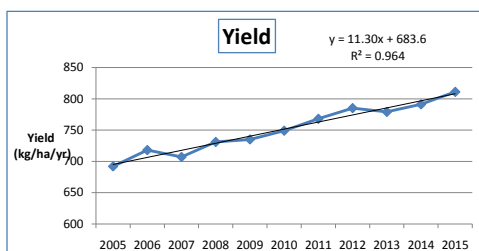
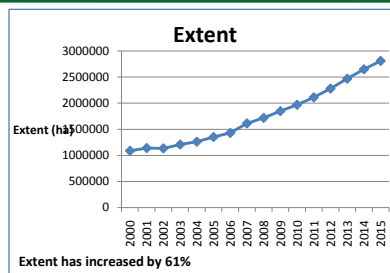
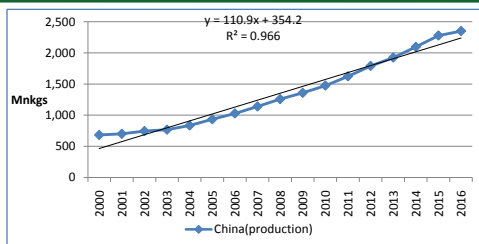
- Soil degradation
- Low rate of replanting & infilling
- Aging of tea bushes
- Under plucking due to labour scarcity
- High weed density
- Poor adoption of Good Agricultural Practices
- Adverse weather conditions (Climate Change)



The Gap Between Average Cost of Production & Average Auction Price



Tea Production Productivity & Extent in China



Increasing trend in tea production China 2000-2016

Reasons

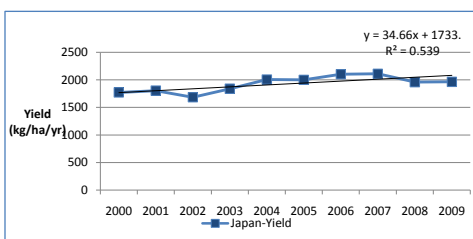
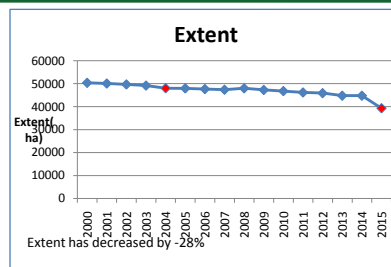
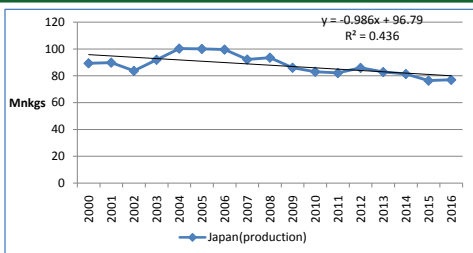
- Increase in the total area of land under cultivation
- Newly planted tea bushes reaching maturity

Measures adopted

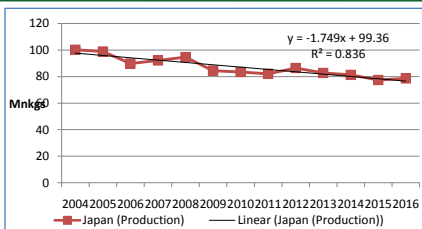
- Introduction of government policies to increase rural household incomes and major rationalization of the farming systems
- Transferring of inefficient state owned farms to output-conscious entrepreneurs
- Favourable government policies promoting tea industry growth



Tea Production Productivity & Extent in Japan



Production decline in Japan- 2004-2016



Reasons

- Low demand for orthodox tea in domestic market and increase in consumption of RTDs with cheap teas
- Unattractive prices for orthodox tea,
- Declining tea area and number of producers
- Unfavorable environmental conditions (frost damage, earthquake, tsunami etc)

Measures adopted

- Provide technical guidance to growers to increase profits by reducing COP & improving efficiency
- Promoting mechanization of agricultural practices (plucking, pest control, fertilizer management etc.)
- Increase promotional activities in various tea markets to increase export volume
- Improvement of infrastructure facilities in tea gardens
- Recommend to produce various tea & tea products



Actual and projected black tea production (Mnkg)

Country	Actual	Projected	Growth rate (%)	
	2012-2014	2024	2012-2014	2014-2024
World	3001	4295	2.6	3.7
Kenya	416	603	3.3	3.8
India	1164	1519	3.1	2.7
Bangladesh	64	79	1.3	2.2
Sri Lanka	331	402	0.8	2.0
Indonesia	112	116	-1.1	0.3
China	159	674	14.3	15.5
Vietnam	93	108	2.7	1.5



Detections of Herbicide Residues in Sri Lankan Origin Teas in 2017

1. Diuron (EU MRL 0.05 ppm, Japan MR 1 ppm)

No.	Region	Level	Country of Detection	Remarks
1	UP	0.05 ppm	Japan	
2	Uva	0.2 ppm	Japan	
3	Uva	0.01 ppm	Japan	
4	UC	0.08 ppm	Japan	
5	UC	0.2 ppm	Japan	
6	MC	0.45 ppm	Japan	Green tea in 3 garden marks
7	UC	0.270 ppm	EU	
8	UC	0.140 ppm	EU	
9	UC	0.02 ppm	Japan	



Detections of Herbicide Residues in Sri Lankan Origin Teas in 2017

2. MCPA (EU MRL 0.10 ppm, Japan 0ppm)

No.	Region	Level	Country of Detection
1	Uva	0.01 ppm	Japan
2	UC	0.01 ppm	Japan
3	Uva	0.01 ppm	Japan
4	Uva	0.05 ppm	Japan
5	Uva	0.04 ppm	Japan
6	UC	0.04 ppm	Japan
7	UC	0.02 ppm	Japan
8	UC	0.03 ppm	Japan
9	UC	0.08 ppm	Japan



Thank you

