

Keynote Address

227th Experiments and Extension Forum

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Tea Production (Mn kg) : 2012/2013 Jan-Jun

Elevation	2013	2012	Difference
	Qty (Mn kg)	Qty (Mn kg)	%
High	40.62 (24%)	39.30 (24%)	3.36
Medium	28.83 (17%)	27.72 (17%)	3.98
Low	102.80 (59%)	97.22 (59%)	5.74
Total	172.25	164.24	4.88

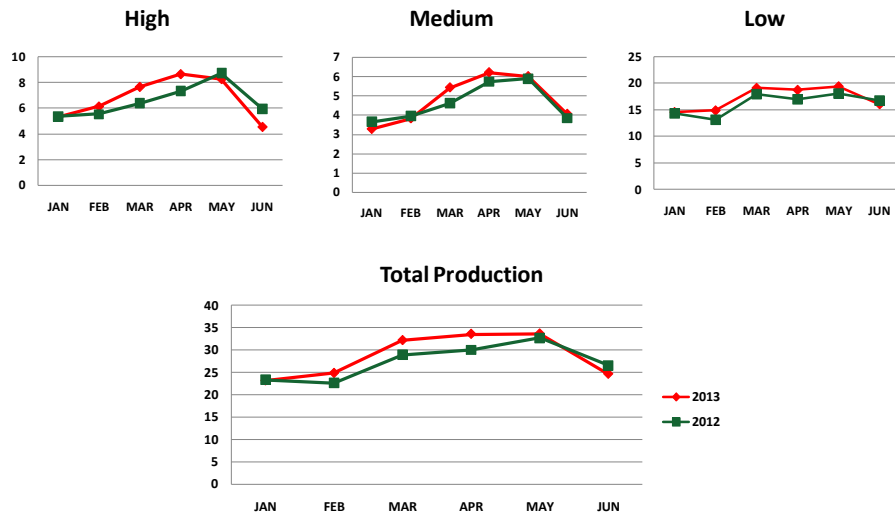
Source: Sri Lanka Tea Board



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Tea Production (Mn kg) 2012/2013 Jan-Jun



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Tea Production 2012/13 According to the Agro-Climatic Regions

Agro-Climatic Region	Qty (Mn kg)		Change (%)
	2013	2012	
(A) Nuwara Eliya	2.32	1.95	18.76
(B) Westerns	27.96	26.50	5.52
(C) Mediums	23.46	22.14	5.95
(D) Uda Pussallawa	4.61	4.68	(1.50)
(E) Uva	15.41	15.62	(1.35)
(F) Low Grown	98.49	93.35	5.51
Grand Total	172.25	164.24	

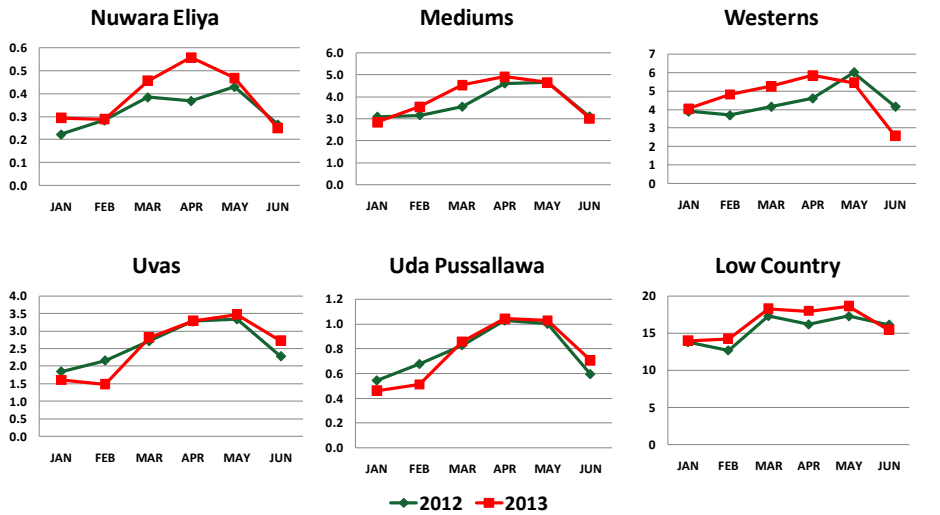
Source: Sri Lanka Tea Board



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Tea Production 2012/13 (Mn kg) According to the Agro-Climatic Regions



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Comparison of weather parameters 2012/ 2013 St.Coombs

Month	Sunshine (hrs/day)		Rainfall (mm/month)		Average T _{max} (°C)		Average T _{min} (°C)	
	2012	2013	2012	2013	2012	2013	2012	2013
January	8.49	6.36	13.5	126.2	25.6	23.3	9.0	13.1
February	5.96	6.03	96.9	56.5	25.7	24.9	11.5	12.1
March	8.63	6.29	77.4	173.7	26.5	25.5	9.4	13.3
April	5.00	7.09	250.4	103.7	24.6	25.8	13.6	13.7
May	7.24	3.31	36.5	271.1	25.3	24.1	13.2	16.3
June	3.18	0.43	99.7	631.8	22.9	20.3	15.8	16.3



Comparison of sunshine hours/day: 2012/2013 January to June

Month	Sunshine (hrs/day)		Change %	Zero Sunshine days	
	2012	2013		2012	2013
January	8.49	6.36	(25)	0	7
February	5.96	6.03	05	1	4
March	8.63	6.29	(27)	0	1
April	5.00	7.09	42	0	0
May	7.24	3.31	(54)	0	5
June	3.18	0.43	(86)	3	19
Average	6.42	4.92	23.4	4	38



Monthly Rainfall (mm): 2012/2013 (January to June)

Month	Rainfall (mm/month)		% Increase
	2012	2013	
January	13.5	126.2	835
February	96.9	56.5	(-42)
March	77.4	173.7	124
April	250.4	103.7	(-59)
May	36.5	271.1	643
June	99.7	631.8	532
Total	574.4	1363.0	137



Wet Days/ Month: 2012/2013 (Jan-June)

Month	Wet Days (>3mm)		% Change
	2012	2013	
January	2	9	350
February	6	5	(-17)
March	4	10	150
April	15	8	(-47)
May	2	10	400
June	9	25	178
Total	38	67	76.3

Wet day is considered as a day receiving >3mm Rainfall



Update on MRL Issue



TRI Recommended Pesticide List – 22 Chemicals PU1 Circular – Revised in June 2012

Fungicides	Weedicides	Insecticides
Bitertanol	2,4-D	Carbofuran(N)
Copper Hydroxide	Diuron	<i>Chlorfluazuron</i>
Copper oxide	Glufosinate Ammonium	Diazinon
Copper Oxychloride	Glyphosate	Dazomet (N) - Use in nurseries
Hexaconazole	MCPA	Imidachloprid
Propiconazole	Oxyfluorfen	<i>Fipronil</i>
Tebuconazole	<i>Paraquat</i>	Metam Sodium(N) - Use in nurseries
		Sulphur(A)

Chemicals Removed

Azadiractin, Carbosulfan, Fenthion, Phenamiphos, Propagite, Tebufenozide



Issues on TRI Recommended Pesticides

Type	Active Ingredient	Technical Issues	Market Restrictions
Fungicides	Copper Hydroxide	Quality Standards (As)	-
	Copper Oxide		
	Copper Oxychloride		
Weedicides	Paraquat	Banned	
Insecticides	Carbofuran	Presently restricted, will be banned in 2014	
	Chlorfluazuron		Taken out from the market
	Imidachloprid		Taken out from the market
	Metam Sodium		
	Dazomet (Basamid)		



Recent Pesticide Residue detections in the Industry

No.	Chemical	Estate	Year	Country of Detection
1	Chlorfluazuron	Up country Estates	Oct 2012	EU
2	Chlorfluazuron	Up country Estates	Oct 2012	EU
3	Diuron	Up country Estates	Oct 2012	EU
4	Diuron	Up country Estates	Oct 2012	EU
5	Anthroquinon	Low country Estate	Dec 2012	EU
6	Anthroquinon	Uva Estates	May 2013	Japan EU
7	Chlordane	SL Teas	May 2013	Japan
8	Heptachlor	SL Teas	May 2013	Japan
9	Propham	SL Teas	May 2013	Japan
10	Diuron	Mid country	Feb 2012	Germany



Status of Testing of Alternate PPPs as at July 2013

Pest	Pesticide to be replaced	Alternate PPPs	Bioefficacy trials	MRL studies	Recommendation
Shot hole borer	Fenthion	Fipronil	Completed	Dossiers and results submitted for revision of MRLs	Pending on mature tea
		Lime:Sulphur	Completed	Not required	Pending on mature tea
Mites	Propagite	Lauricacid	Completed	Not required	Pending
		Azadirachtin	Completed	Pending	Pending
		Milbemectin	In progress		
Tea Tortrix	Chlorfluazauron	Chromafenozide	In progress		
		Thiamethoxam	In progress		
		Proclaim	In progress		
Blister blight	Systemic fungicides	Pyrachlostrobin	Completed	Completed; results to be submitted for revision	Pending
	Contact fungicides	Dry Prilled Cu	Completed	Completed	Pending
Weeds	Paraquat	Glyphosate+ MCPA+ Iso propile Amine (RAPID)	Completed	Pending	
		Glyphosate+ Carpentasole Ethyl (TRIGGER)			
Weeds: Pre emergent	Oxyfluorfen	Indaziflam	In progress		
White grubs	Carbofuran	Fipronil (Granular formulation) Vertako	In progress	Not required	
Nematodes	Carbofuran	Fipronil (Granular formulation) Vertako	In progress	Not required	



Tea Seed Gardens



Tea Seed Gardens established by TRI

Estate	Type
Reucastle , Dehiowita	Bi clonal
Rabukkanda, Ratnapura	Bi clonal
Rabukkanda, Ratnapura	Polyclonal
Kiriporuwa, Yatiyantota	Polyclonal
Sapumalkanda, Deraniyagala	Polyclonal
Salawa, Hanwella	Polyclonal
Halpe, Tummodara	Polyclonal



Tea Seed Gardens Progress made during 2012/2013

- Established 01 polyclonal seed garden – TRI, Kottawa
- In Progress - 03 polyclonal seed gardens - TRI, Ratnapura, TRI, Hantana and SH Property, Mathugama
- Re-juvenation of 02 old seed gardens is in progress done - Welimada Est, Welimada and El-tab Est, Madulsima



Establishment of seed gardens in RPC Estates as a commercial venture

May 2013 – Circulation of letter to 20 RPCs

Progress to date

Responses received from:

- Kotagala Plantations PLC
- Balangoda Plantations PLC
- Watawala Plantations PLC
- Mawatte Valley Plantations PLC
- Hapugastenna & Udapusellawa PLC
- Kelanivalley Plantations PLC



Establishment of seed gardens in RPC Estates as a commercial venture

Lands offered for establishment by:

Balangoda Plantations PLC, Watawala Plantations PLC, Hapugastenna & Udapusellawa PLC (for 2014) and Kelanivalley Plantations PLC

Inspection of lands for suitability by TRI officers completed:

Ury Estate- Balangoda Plantations PLC
Waltrim Estate- Watawala Plantations PLC

June 2013 –

Submission of a project proposal for establishment of seed gardens at SH Properties to National Budget 2014 and IFAD



Alternative Worker Deployment Models



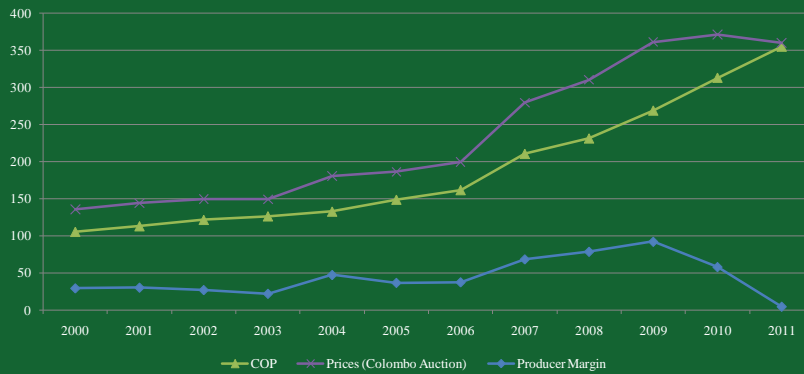
Need for an Alternative Worker Deployment Models ?

Traditional estate model is inappropriate to meet current issues in the corporate sector ?

- Worker shortage (due to out migration/ chronic absenteeism/general aversion to plantation workers, educated generation) leads to abandon productive tea fields
- Maintaining low productive tea lands
- Low productive labour force
- High cost of production due to periodical wage hikes leads to no/less profits



COP, Prices & Producer Margin



COP in Sri Lanka tea sector has increased dramatically over its competitors making tea industry less profitable.

Source: Plantation sector statistical pocket book, MPI



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Reasons for High Cost of Production

- Low land productivity
Low rate of replanting, senility of tea bushes, low density, non adoption of GAPs
- Low labour productivity
Labor productivity recorded in tea plantations is low when compared with competitive labor markets.
- Escalating energy & input prices



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Available Economically Viable Options

Improve land productivity – Replanting, *infilling*

Infilling is economically viable medium term strategy to improve land productivity at current context.

Improve worker productivity, minimize impact of wage hikes & retain workers

Introduce viable alternative worker deployment models in tea plantations



Thank you

