



# Overview of TEA (Camellia sinensis) Chain in ARGENTINA

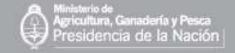


Ministry of Agriculture, Livestock and Fisheries, ARGENTINA

Infusions Chain Coordinator: Ing. Agr. Patricia A. Parra

Bandung, INDONESIA November 2014



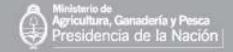




- ✓ Located in South America, and thus, in the southern hemisphere, Argentina has an area of almost 3,8 million square kilometers.
- ✓ Argentina's current population is more than 40 million inhabitants.
- ✓ Argentina is an important producer of oilseeds, such as, soybean sunflower, corn and olive. Also produces cereals, meat, citrus and other fruits, wines, yerba mate tea, rice, cotton, among other products.
- ✓ Regarding the scientific aspect, Argentina is the only Latin America country, with three Nobel Prices in biological sciences (Houssay, Milstein, Leloir)





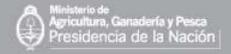




√The Argentina Republic is organized into 23 provinces and the Autonomous City of Buenos Aires, where the headquarters of the federal government are located.





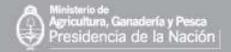




✓ The country's territory offers a wide variety of climates: subtropical in the North, temperates in the Pampas plains and cold, at the south.



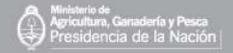






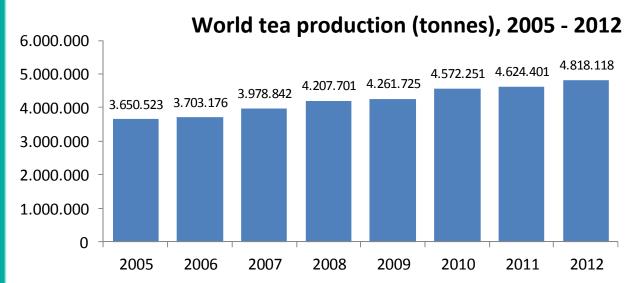








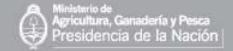
#### **TEA CHAIN – International Context**



Period	Interannual variation (%)
2006 vs 2005	1,4%
2007 vs 2006	7,4%
2008 vs 2007	5,8%
2009 vs 2008	1,3%
2010 vs 2009	7,3%
2011 vs 2010	1,1%
2012 vs 2011	4,2%
2012 vs 2005	32,0%

Source: SDR-MAGyP, based on FAO.







#### **TEA CHAIN – International Context**

World tea production in 2012 was 4.818.118 tonnes. Of these, 110,195 tonnes (2,3%) were grown in the territory of the American Continent.

#### Tea production, global rank, 2012

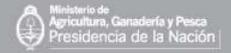
Rank	Country	Share (%)
1	China	35,3
2	India	20,8
3	Kenya	7,7
4	Sri Lanka	6,8
5	Turkey	4,7
6	Vietnam	4,5
7	Iran	3,3
8	Indonesia	3,1
9	Argentina	2,1
10	Japan	1,8
(39)	Other	10,0
(49)	Total	100,0

**Tea Production of the American Continent, 2012** 

Country	Volume (tonnes)	Share (%)
Argentina	100.000	90,7
Peru	3.434	3,1
Ecuador	2.700	2,5
Brazil	1.496	1,4
Bolivia	1.300	1,2
Guatemala	500	0,5
El Salvador	460	0,4
Panama	168	0,2
Colombia	137	0,1
Total	110.195	100,0

Source: SDR-MAGyP, based on FAO.







- ✓ Production area: Misiones and northeast of Corrientes provinces. Tea production constitutes an important regional agribusiness.
- ✓ About 92% of the volume produced is for sales to foreign markets.

American Continent

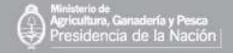






Argentina and it's tea producing area

# ARGENTINA UN PAIS CON BUENA GENTE





#### **TEA CHAIN – National Context**





## Some history:

1923 - First tea seeds were introduced in the province of Misiones.

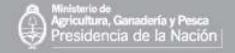
1942 - First records of tea processing.

1943 - The first tea manufacturing factory is built with a rolling machine and a drying machine.

1950 - Tea imports were restricted by government. This encouraged farmers to plant tea.

- Replacement of the imports of tea by the product of national origin.
- Advance toward the foreign markets.







1958 - First tea export

1961 - First studies on tea clones

1965 -First manual tea harvest machine and automotive harvester and electrostatic stalk separator.



1987 - Provincial Tea Commission creation.

1999 – Vertical Sniechowski Tea processing (VSTP), vertical axis rolling developed in the province of Misiones.









**2006** -Tea Cluster (1)

2007 - RAS certification.

- Bulk loading, transport and unloading machine.



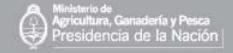
2010 - Active participation in the IGG on Tea FAO

2013 - Tea Revolving Fund (2)

- 19 % RAS certified surface, (7.889 hectares).
- 15 % surface implanted with tea clones

Although it is a relatively new production (90 years), argentine tea activity has been developing greatly in the last decade, due to the novel technology incorporated in the primary and industrial sector.



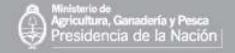




### (A) Tea Cluster

- ✓ Implementation of new technologies, proper crop management, adding value to the product, development of marketing channels and improve exports.
- ✓ Current projects
- Production: "Study of pests and diseases in crops and development of a protocol for sustainable management", "Implementation of food safety management systems and quality" and "Development of programs for access to finance for the purchase of equipment and the execution of innovations."
- Transformation: "Quality Management", "Technological innovation in existing equipment" and "Development of new prototypes."
- Marketing: "Positioning the Argentine Tea as a differentiated product."
- ✓ Funded by BID



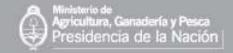




#### (B) Tea Revolving Fund

- ✓ It was implemented in Misiones in 2013 by National Government funds.
- √Through its 15 AR\$ million (around 2,7 USD million) small and medium producers and producers' cooperatives were helped directly to deal adequately the 2013/14 harvesting season.
- ✓ It was based on granting credits to finance investments and working capital.
- ✓ By means of this tool more than 1.800 tea producers were supported, helping to sustain the guarantee price of raw materials, strengthening cooperatives and promoting production for both the domestic and export market.
- ✓ The return of about 70% is recorded.



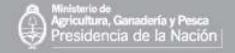




#### **General information**

- Producers: about 6.000
- Estimated area: about 41.000 hectares
- Harvesting and industrialization: mechanic
- Harvest period: October to May.
- ❖Types of Tea produced: mainly black tea. 90% orthodox + rotorvane, 8% VSTP and 2% green tea.
- ❖Presentations: external market → bulk / domestic market → tea bags.
- ❖International positioning: 9th largest producer, with 2,1% of world production and 7th largest exporter, with 4,2% of the total volume exported.
- Sales: direct contracts.







## **Evolution of planted surface**

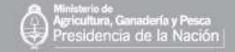
Year	Planted surface		
	(hectares)		
2005	38.210		
2006	38.610		
2007	39.010		
2008	39.410		
2009	39.810		
2010	40.210		
2011	40.610		
2012	40.680 *		
2013	40.730 *		

- ✓ It had approximately 45.000 hectares at the time of maximum expansion (1976-1977).
- √93% were in the province of Misiones and the remaining 7% in the province of Corrientes

<sup>√</sup>The tea region in Argentina is located between 26 ° and 28 ° South latitude, being the southernmost growing region of tea in the world.

<sup>\*</sup> Provisional data.

#### ARGENTINA UN PAIS CON BUENA GENTE





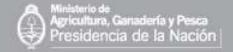
#### **TEA CHAIN – National Context**

#### **Evolution of tea production**

Year	Manufactured	Interannual
	tea (tonnes)	variation
2005	73.034,4	
2006	77.509,4	6,1%
2007	81.982,1	5,8%
2008	83.620,3	2,0%
2009	74.825,7	-10,5%
2010	92.416,9	23,5%
2011	92.892,2	0,5%
2012	82.812,9	-10,9%
2013	80.423,1	-2,9%

- In Argentina a reconversion process of production is recorded.
- •This can be checked by the surface incorporation of specially selected cultivars of high performance tea, of clonal origin.
- •Currently around 15% of production in Argentina is of clonal origin.







## **Domestic prices for Tea raw material**

Period	Guarantee price green buds AR\$/ton	Change between periods (%)
October 2003 a May 2004	150	
October 2004 a May 2005	200	33%
October 2005 a May 2006	220	10%
October 2006 a May 2007	250	14%
October 2007 a May 2008	270	8%
October 2008 a May 2009	337	25%
October 2009 a May 2010	337	0%
October 2010 a May 2011	339	1%
October 2011 a May 2012	410	21%
October 2012 a May 2013	550	34%
October 2013 a May 2014	680	24%
October 2014 a May 2015	900	32%

The guarantee or minimum price for the green buds is set at the beginning of harvest by Provincial Tea Commission

Source: SDR-MAGyP prepared based on Provincial Tea Commission.







## **Agroindustrial system model of Argentine Tea**

## **Primary sector**

-Tea production



## **Processing**

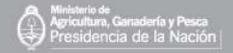
- 0. Harvesting
- 1. Withering
- 2. Rolling
- 3. Fermentation (enzymatic oxidation)
- 4. Drying
- 5. Classification
- 6. Packing



## **Trading**

- -Domestic market
- -Exports



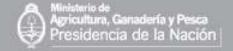




#### **General Information external trade**

- ✓ Historically, between 92 95% of the national Tea production is destined for sale to external markets.
- ✓ Export companies: about 50, this is variable; Tea exports in 2013 were reported by 61 companies.
- ✓ Exporting block main features : concentration (5 companies account for over 60% of total export volume).
- ✓ Main competitors in Argentina traditional markets: Vietnam, Malawi.
- ✓ Main competitors in all markets: China, India, Sri Lanka, Kenya.



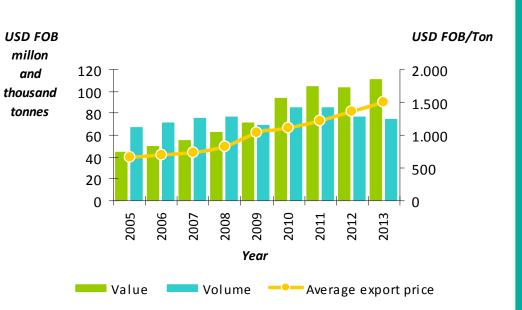




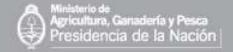
## **Exports**

## **Evolution of volume, value and average export price of Tea**

Year	Value (USD FOB	Volume (Thousands	Average export price
	Million)	Tonnes)	(USD FOB/ton)
2005	45,2	67,6	668,7
2006	50,6	71,8	704,9
2007	56,0	75,9	738,1
2008	63,5	77,4	820,3
2009	72,0	69,3	1.039,4
2010	94,4	85,6	1.102,7
2011	104,6	86,0	1.216,2
2012	104,0	76,7	1.357,0
2013	111,7	74,5	1.500,1







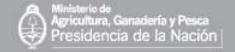


## **Exports**

## Volume, value and average export price annual changes

Comparison period	Change in value	Change in volume	Change in average export price
periou	III value	iii voiuille	export price
2006 vs 2005	11,9%	6,1%	5,4%
2007 vs 2006	10,7%	5,8%	4,7%
2008 vs 2007	13,4%	2,0%	11,1%
2009 vs 2008	13,4%	-10,5%	26,7%
2010 vs 2009	31,0%	23,5%	6,1%
2011 vs 2010	10,9%	0,5%	10,3%
2012 vs 2011	-0,5%	-10,9%	11,6%
2013 vs 2012	7,4%	-2,9%	10,6%





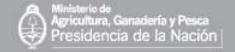


#### **Exports**

#### Some data on exports composition, 2013

- ▶97% black tea, 3 % green tea
- Less than 0,5% of fractionated black tea
- >86,4% is sold at a average price of 1,4 USD/kg
- ▶9,1 % is sold at a average price of 1,3 USD/kg
- ≥1,6% is sold at an average price of 4,8 USD FOB/kg







## **Exports**

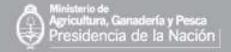
## Export destination, volume and value share (%), 2013

Destination	Volume	Share (%)	Destination	Value	Share (%)
country	(tonnes)		country	(USD FOB million)	
USA	48.278,0	64,8	USA	81,1	72,6
Chile	11.352,9	15,2	Chile	10,4	9,3
Netherlands	2.221,6	3,0	Germany	3,5	3,1
Germany	2.145,0	2,9	Netherlands	3,3	2,9
United Kingdom	1.776,0	2,4	United Kingdom	1,7	1,5
Poland	1.163,7	1,6	India	1,6	1,4
Others	7.528,7	10,1	Others	10,2	9,1
Total	74.465,9	100,0	Total	111,7	100,0

Destination country	Average export price
country	(USD FOB/ton)
USA	1.679,4
Chile	917,9
Netherlands	1.477,3
Germany	1.626,5
United Kingdom	952,7
Poland	1.341,0
India	1.516,7
Total	1.500,1

-Destinations 2013: a total of 36, on the five continents.







#### **Exports**

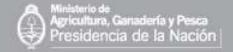
USA has traditionally been our main export destination. There, between 80 – 85% of tea is consumed as Iced Tea.



Argentine tea is suitable for this product because of its good color and its characteristic to stay clear and translucent in cold infusions.

However another outstanding feature is its high content of polyphenols. Almost all Argentine tea exceeds 9% specified by ISO 3720





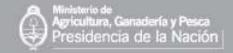


## **Evolution of the average export price of Tea in Argentina and major Tea Auctions**

Year	Average export	Colombo	Calcuta	Mombasa	Average
	price - Argentina	(Sri Lanka)	(India)	(Kenya)	3 auctions
	USD/Kg	USD/kg	USD/kg	USD/kg	USD/kg
2005	0,67	1,84	1,62	1,48	1,65
2006	0,70	1,91	1,75	1,95	1,87
2007	0,74	2,52	1,92	1,66	2,04
2008	0,82	2,79	2,25	2,22	2,42
2009	1,04	3,14	2,52	2,52	2,72
2010	1,10	3,29	2,81	2,56	2,88
2011	1,22	3,26	2,78	2,72	2,92
2012	1,36	3,06	2,75	2,88	2,90
2013	1,50	3,45	2,73	2,40	2,86
2013 vs 2012	10,6%	12,7%	-0,6%	-16,7%	-1,2%
2013 vs 2005	124,3%	87,4%	68,7%	62,4%	73,8%

Data source: SDR-MAGyP prepared based on INDEC and The World Bank



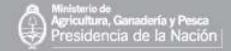




## **External factors valued by buyers**

- 1. Low health risks: primary production, processing plants and workers.
- 2. Little use of agrochemicals: Integrated Pest Management Entomology INTA, for example.
- 3. Continuous Improvement: market requirements, environmentally friendly, certified green labels, for example.





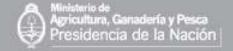


## **External factors valued by buyers**

- 4. CIF Price: the price affects the market. There are clients that pays for quality and those who wants high quantities at low prices.
- 5. Reliable product quality: the customer defines the wanted product and the company must reach and exceed these requirements.
- 6. Continuity and quantity: fulfill the volumes agreed in previous contracts or provide greater amounts every year.
- 7. Timely delivery

This items contributes to a positive perception by buyers





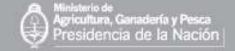


## **Imports**

## **Evolution of volume, value and average import prices of Tea**

Year	Value	Volume	Average import price
	(USD CIF Million)	(Tonnes)	(USD CIF/Ton)
2005	1,12	478,8	2.342,5
2006	1,02	319,0	3.206,0
2007	1,40	403,4	3.458,9
2008	1,59	404,0	3.945,9
2009	0,96	218,2	4.395,0
2010	1,48	294,3	5.025,3
2011	1,76	334,7	5.264,7
2012	1,70	277,8	6.130,6
2013	1,49	259,1	5.750,4







## **Imports**

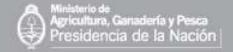
## Import destination. Volume and value share (%). Year 2013

Origin	Volume	Share (%)	Origin	Value	Share (%)
country	(tonnes)		country	(USD CIF millions)	
China	171,4	66,1	China	0,60	40,3
Sri Lanka	36,0	13,9	USA	0,26	17,2
Chile	16,7	6,4	Sri Lanka	0,18	12,2
Polond	9,4	3,6	Polond	0,17	11,6
USA	9,3	3,6	Chile	0,17	11,1
Vietnam	7,2	2,8	Vietnam	0,04	3,0
Others	9,3	3,6	Others	0,07	4,7
Total	259,1	100,0	Total	1,49	100,0

Origin	Average	
country	import price	
	(USD CIF/ton)	
China	3.501,3	
Sri Lanka	5.052,1	
Chile	9.934,0	
Poland	18.383,3	
USA	27.634,9	
Vietnam	6.152,0	
Total	5.750,4	

-Origins 2013: a total of 13, on four continents (except Oceanía)





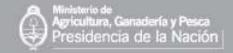


## Consumption

## **Evolution of tea apparent consumption**

Year	Apparent	Apparent consumption	
	consumption (tonnes)	per person (kg/person/year)	
2005	5.888,8	0,15	
2006	6.060,4	0,16	
2007	6.476,1	0,16	
2008	6.598,1	0,17	
2009	5.760,8	0,14	
2010	7.140,0	0,18	
2011	7.215,6	0,18	
2012	6.412,1	0,16	
2013	6.216,4	0,15	



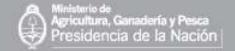




#### **Domestic consumption**

- Most population of the domestic market consumes black Tea in Tea bags.
- Niche markets that consumes tea blends and other herbal teas and all types and origins of pure loose Tea.
- Market segment consuming Tea for its health effects, highlighting the contribution in antioxidants.
- Research shows that Tea household consumption penetration exceeds 90% and not predominant time of day for consumption is recorded (morning, mid-morning, after lunch, at snack, or before bedtime).





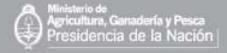


## **Teaching and strengthening of consumption**

Institutions in Argentina are currently providing training in various topics related to the world of tea.

Their programs include history, processing techniques, sensory analysis methodology, specific ceremonies, protocol and tea service, according to particular types and origins.







## **Thanks for your attention!**

Ing Agr Patricia A. Parra

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Working Team: Misiones Ministry of Agriculture and Production, IRAM Tea Sub Committee, Misiones General Industry Directorate, National Institute of Agricultural Technology, National Service for Agrifood, Health and Quality, Argentina Tea Chamber, Argentina Chamber of Tea Processors, Tea Cluster.