

ASTA ANNUAL MEETING
APRIL 17-20, 2005



Dehydrated Capsicums
Current World Patterns

CLIFFORD RANNEY

PUNGENCY LEVELS

Non-Pungent

< 500 Scoville

Low Pungency

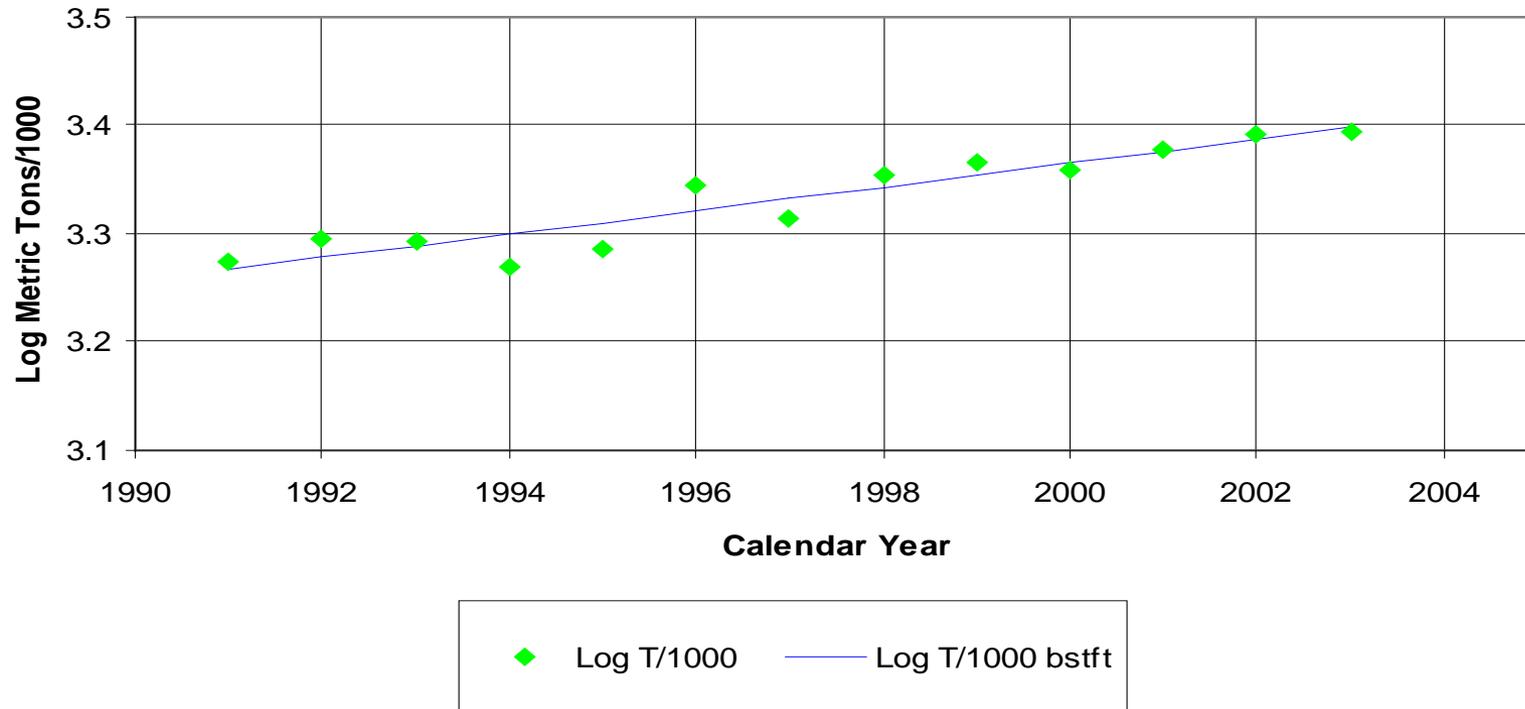
>500 <10,000 Scoville

High Pungency

> 10,000 to 100,000+ Scoville

WORLD PRODUCTION

FAO WORLD PRODUCTION Dehydrated Capsicums



- ❑ 2003 World Production = 2,349,780 metric tons
- ❑ Compound annual growth = 2.5%
- ❑ Compound annual population growth 1993-2003 = 1.3%
- ❑ Compound Annual population growth 2003-2013 = 1.0%

WORLD CONSUMPTION ESTIMATE

- **Using:**
 - **Census Bureau 2003 population by country (227)**
 - **FAO 2003 country production data (67)**
 - **UN Comtrade 2003 Import/Export data by country (98 & 85)**
- **Arranged by**
Country-Population-Production-Imports-Exports-Consumption-Paprika factor

TYPICAL PER CAPITA CONUNPTION

Korea	4000	grams/person
Ethiopia	1700	
India	1000	
Malaysia	800	
Mexico	550	
USA	250	
United Kingdom	100	
France	50	

CLUSTERED CONSUMPTION RATES

Cambodia 762 grams/per

Indonesia 9

Laos 792

Malaysia 834

Thailand 879

Vietnam 941

Bangladesh 0 grams/per

India 966

Pakistan 1022

Sri Lanka 1399

CALCULATED RESULTS

2003

□ Population	6,299.8	millions
□ Production	2,641.1	MT x 1000
□ Imports	341.3	MT x 1000
□ Exports	370.9	MT x 1000
□ Consumption	2,611.6	MT x 1000
□ Consumption	415	grams/person
□ Non pungent consumption	137.8	MT x 1000

COUNTRY GROUPINGS

- PRODUCING - IMPORTING – EXPORTING (5)
Hungary–Israel- Mexico–Spain-USA
- PRODUCING – EXPORTING (16)
Brazil–Chile–China–India–Morocco-Peru–South Africa-
Zimbabwe
- IMPORTING (25)
Australia-Canada-Japan-Malaysia-Sri Lanka-EU15
- IMPORTING – EXPORTING (4)
Germany-Hong Kong-Netherlands-Singapore
- PRODUCING (35)
Algeria-Cambodia-Egypt-Ethiopia-Nepal-Nigeria-Thailand-
Ukraine

WORLD TRADE

Country Group	Total Consumption	Internal Production	Required Imports
Producing-Importing-Exporting	138.0	96.7	41.3
Importing	100.4	8.9	91.5
Importing-Exporting	18.1	0.0	18.1
Other	44.9	30.5	14.4
Producing-Exporting	Imports only		22.2
Producing	Imports only		79.3

Total **266.8**

Country Group	Exports
Producing-Exporting (China, India, Pakistan, Turkey)	211.5
(Malawi, South Africa, Zambia, Zimbabwe)	20.0
(Argentina, Brazil, Chile, Colombia, Costa Rica, Peru)	32.5
(Morocco)	1.5

Total **265.5**

MAJOR IMPORTER REQUIREMENTS 2003

Country	Total	f Paprika	Non Pungent	Pungent
USA	50.3	0.3	15.1	35.2
Mexico	13.1	0.1	1.3	11.8
Japan	11.2	0.2	2.2	9.0
Malaysia	26.7	0.0	0.0	26.7
Sri Lanka	27.7	0.0	0.0	27.7
Indonesia	50.0	0.0	0.0	50.0
Thailand	19.0	0.0	0.0	19.0
Korea	12.1	0.0	0.0	12.1
Canada	4.8	0.4	1.9	2.9
EU15(extra)	49.5	by country	36.1	13.4
Poland	3.6	0.4	1.4	2.2
Russia	3.9	0.6	2.3	1.6
Total	<u>271.9</u>		<u>60.3</u>	<u>211.6</u>

DERIVED ESTIMATES

- World Production/Consumption = 2,500 MTx1000
Growing at 2 to 3 percent per year
- Non Pungent Consumption = 130,000 metric tons
- World Trade (re-export free) = 270,000 metric tons
of which:
 - non pungent = 60,000 metric tons
 - other pungent = 210,000 metric tons

CONSUMPTION TRENDS

- Some major importing countries with their import and population growth rates:

USA

EU15 less Spain

Spain

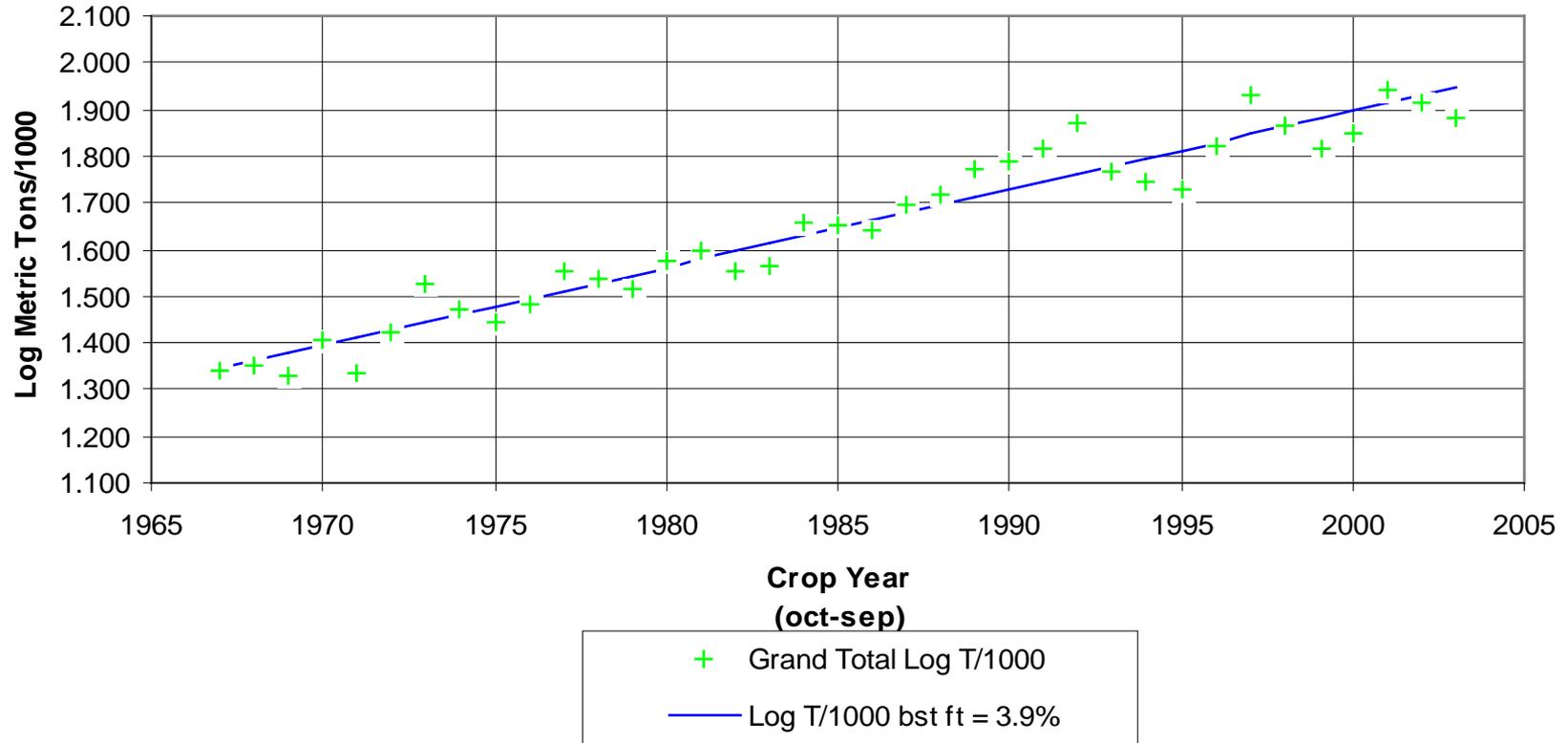
Japan

Canada

Malaysia

UNITED STATES

US PRODUCTION AND IMPORTS Dehydrated Capsicums

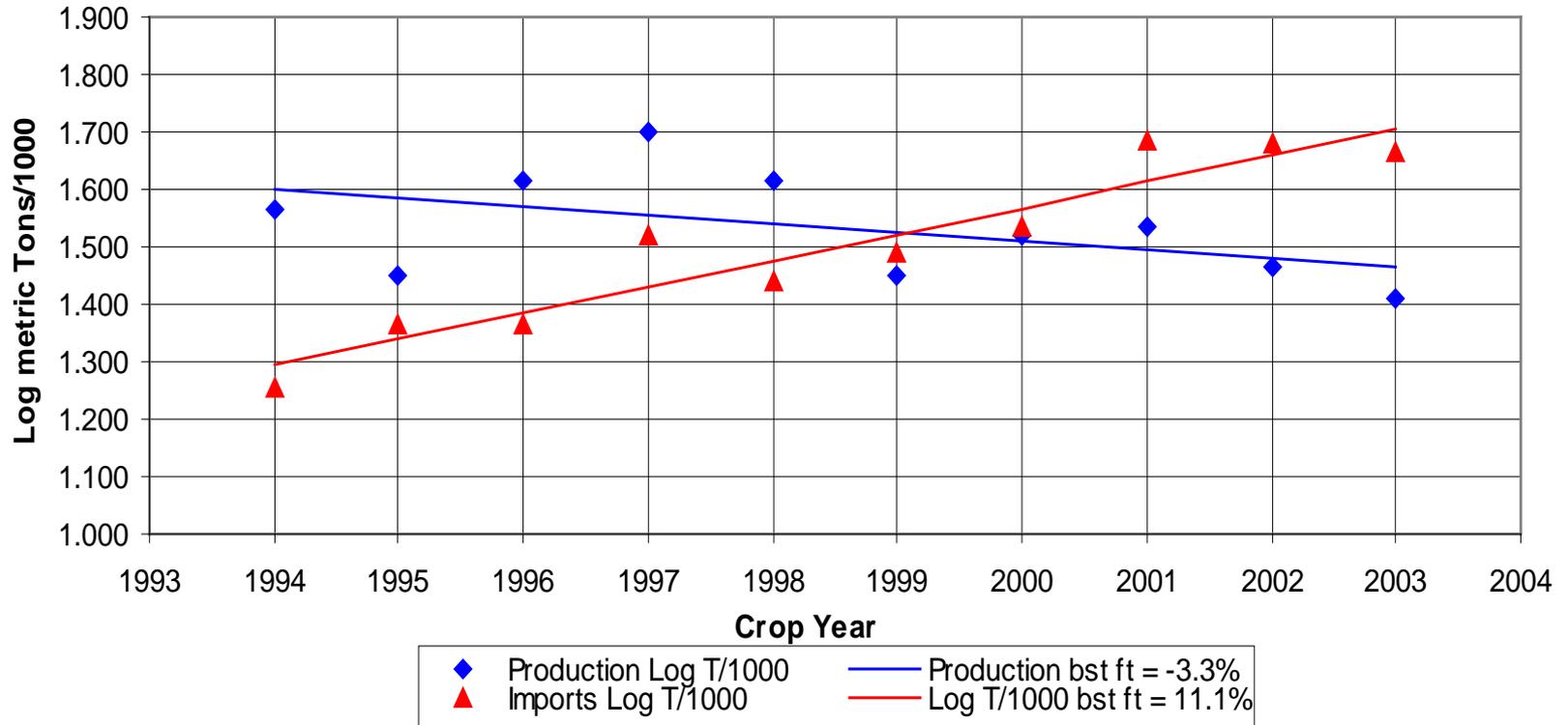


Compound annual growth = 3.9%

Compound Annual population growth 2003-2013 = 0.9%

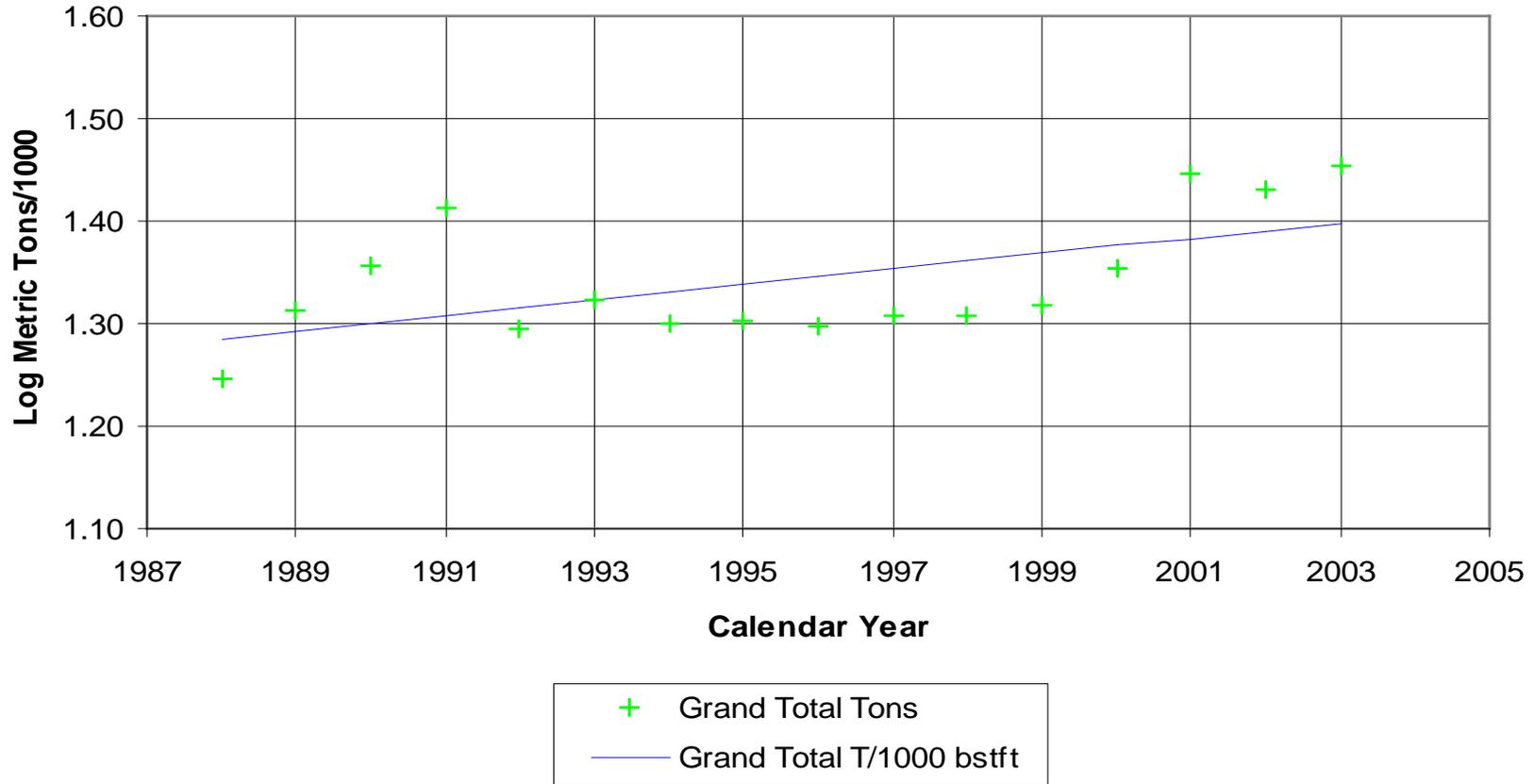
UNITED STATES

US
Production and Imports



EU15 less SPAIN

EU-extra eu IMPORTS (excluding Spain) Dehydrated Capsicums



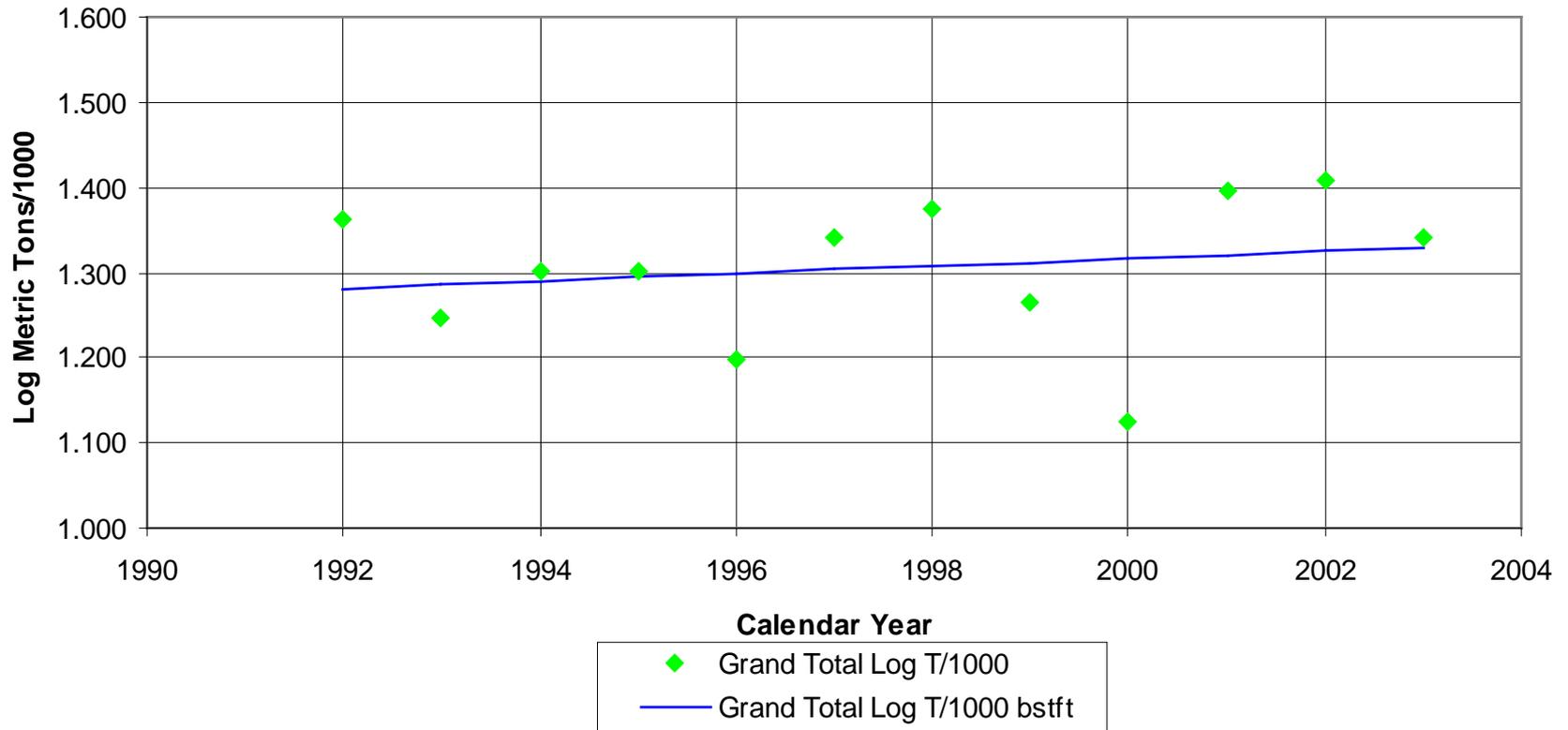
Compound annual growth = 1.8%

Compound annual population growth 1993-2003 = 0.3%

Compound Annual population growth 2003-2013 = 0.2%

SPAIN

SPANISH IMPORTS Dehydrated Capsicums



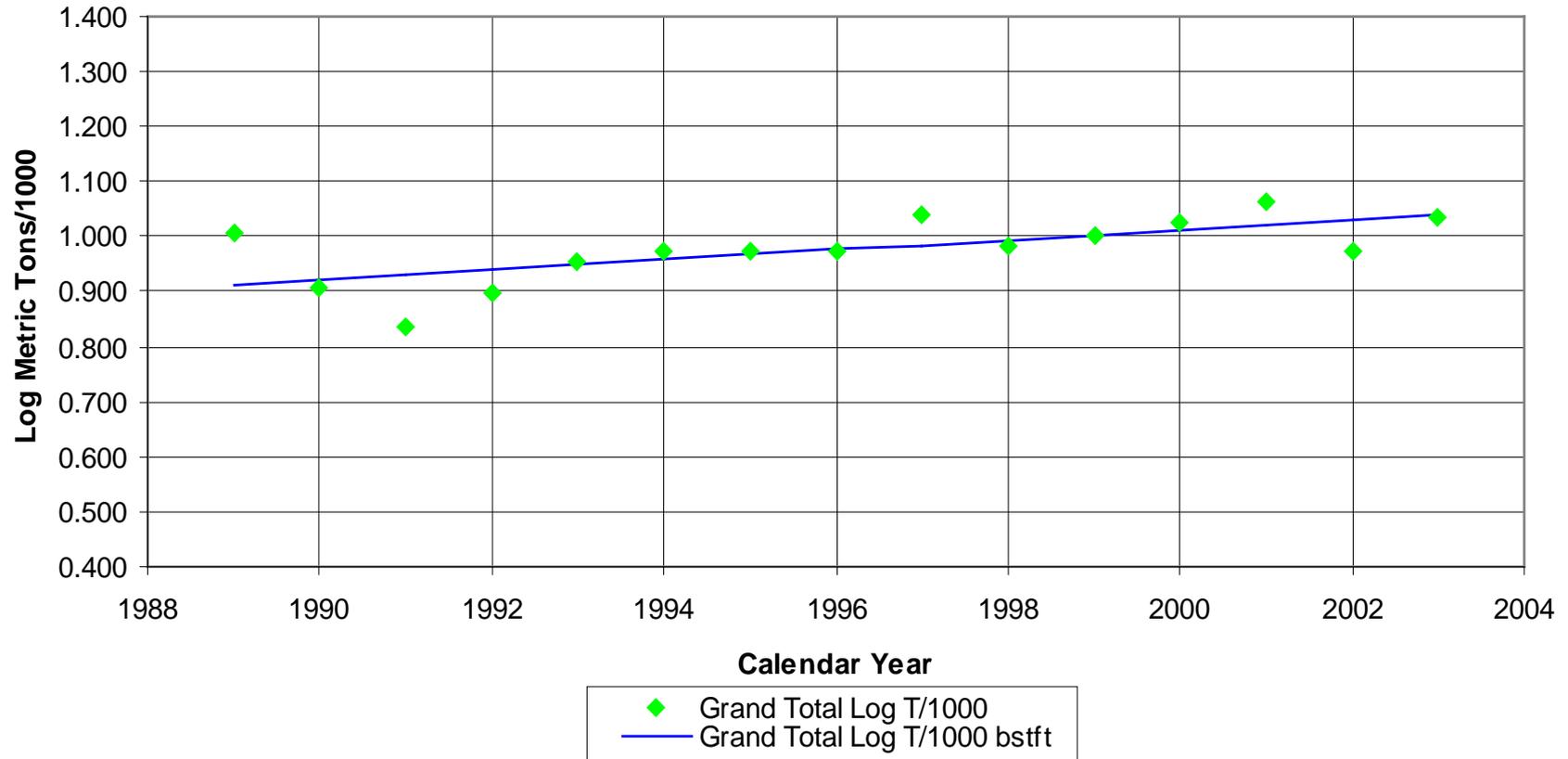
Compound annual growth = 1.0%

Compound annual population growth 1993-2003 = 0.2%

Compound Annual population growth 2003-2013 = 0.1%

JAPAN

JAPANESE IMPORTS Dehydrated Capsicums



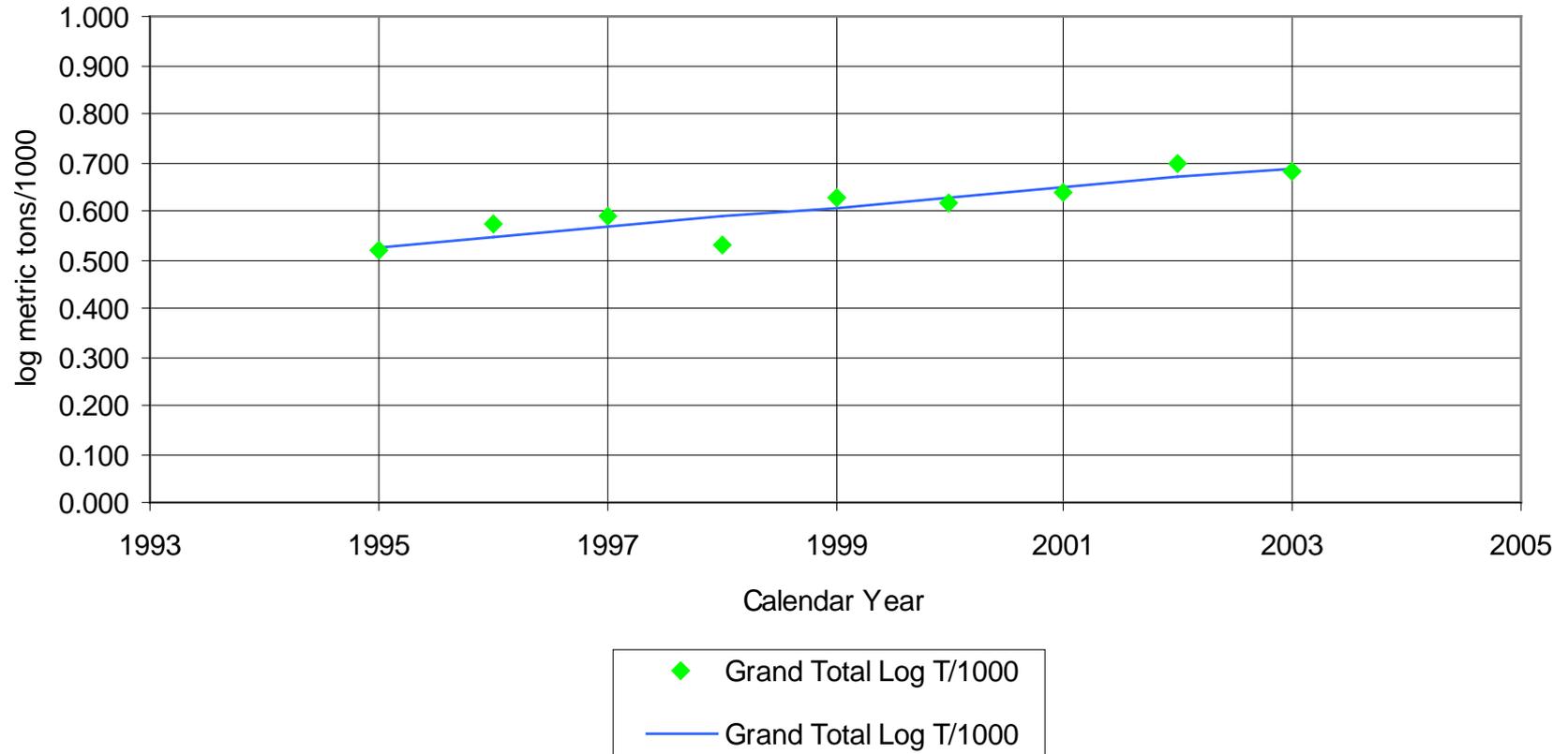
Compound annual growth = 2.1%

Compound annual population growth 1993-2003 = 0.2%

Compound Annual population growth 2003-2013 = -0.1%

CANADA

CANADIAN IMPORTS Dehydrated Capsicums



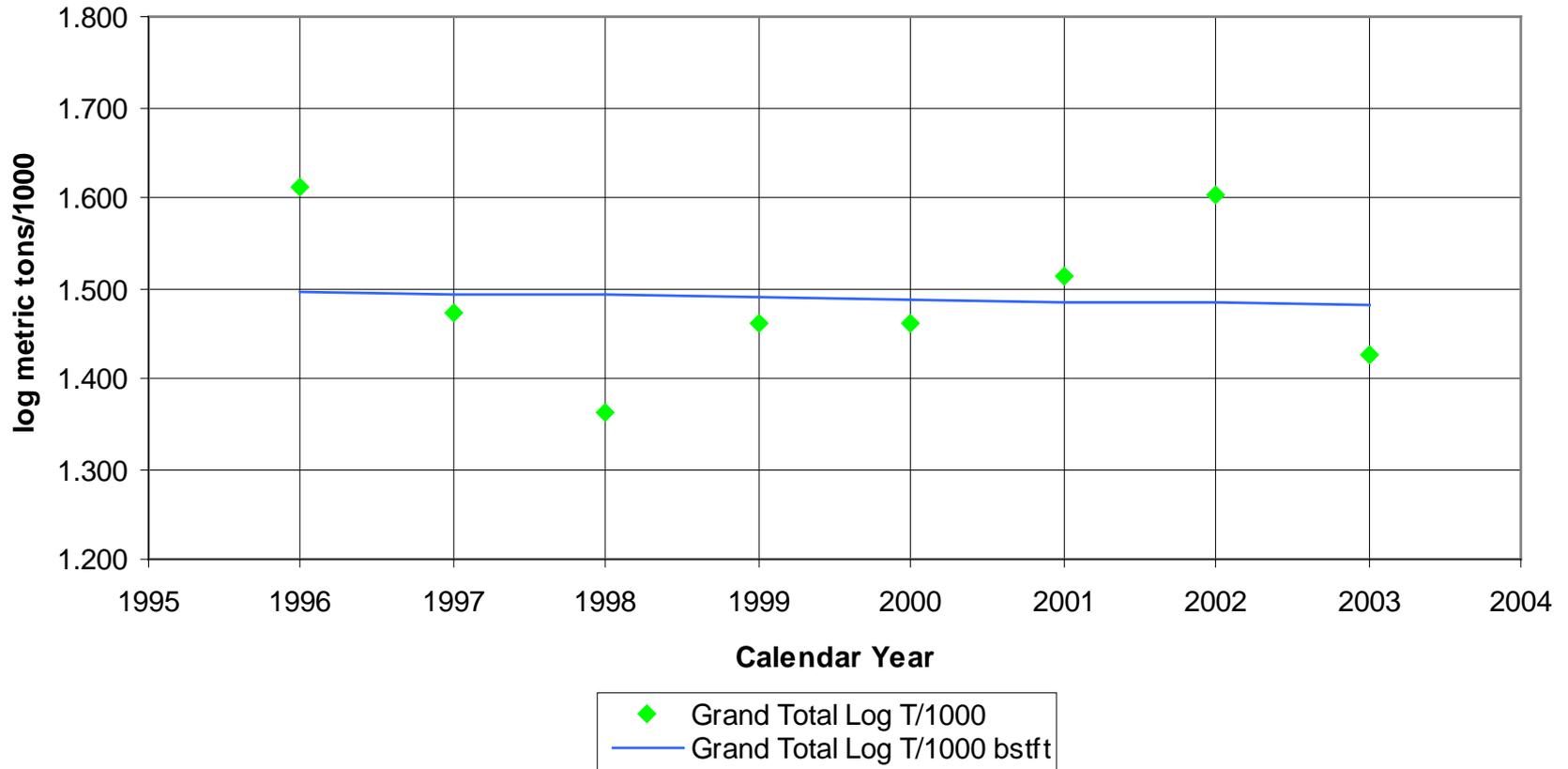
Compound annual growth = 4.8%

Compound annual population growth 1993-2003 = 1.1%

Compound Annual population growth 2003-2013 = 0.9%

MALAYSIA

MALAYSIAN IMPORTS Dehydrated Capsicums



Compound annual growth = -0.5%

Compound annual population growth 1993-2003 = 2.1%

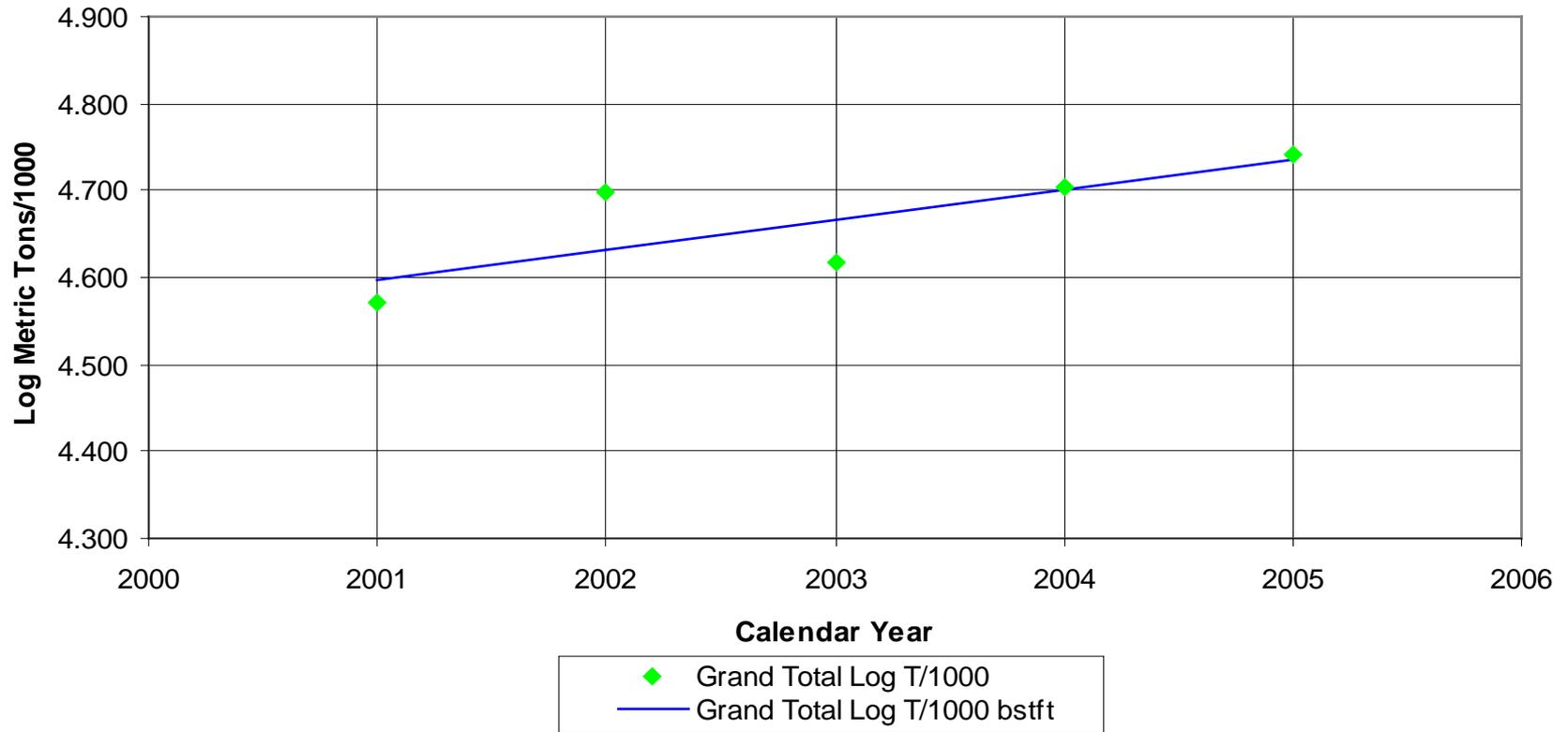
Compound Annual population growth 2003-2013 = 1.8%

PRODUCTION TRENDS

- ❑ Decrease in USA production
- ❑ Decrease in Mexican production
- ❑ Decrease in Spanish production
- ❑ Decrease in Hungarian production
- ❑ Decrease in Moroccan production
- ❑ Decreasing Southern African production
- ❑ Increasing South American production
- ❑ Emergence of India as a major producer of ORP

SOUTHERN AFRICA/SOUTH AMERICA

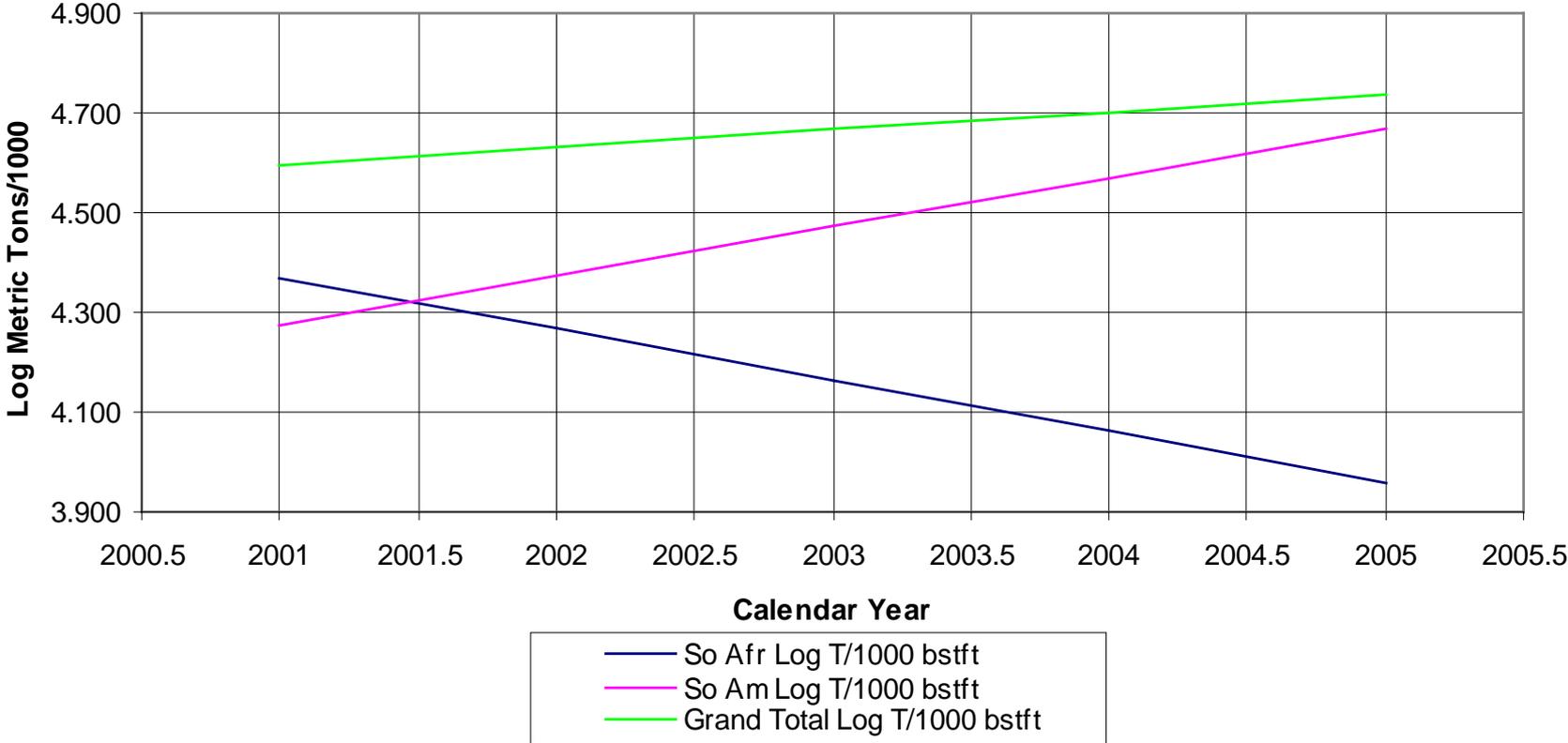
SOUTHERN AFRICA/SOUTH AMERICA EXPORTS Non Pungent Dehydrated Capsicums



Compound annual growth = 8.3%

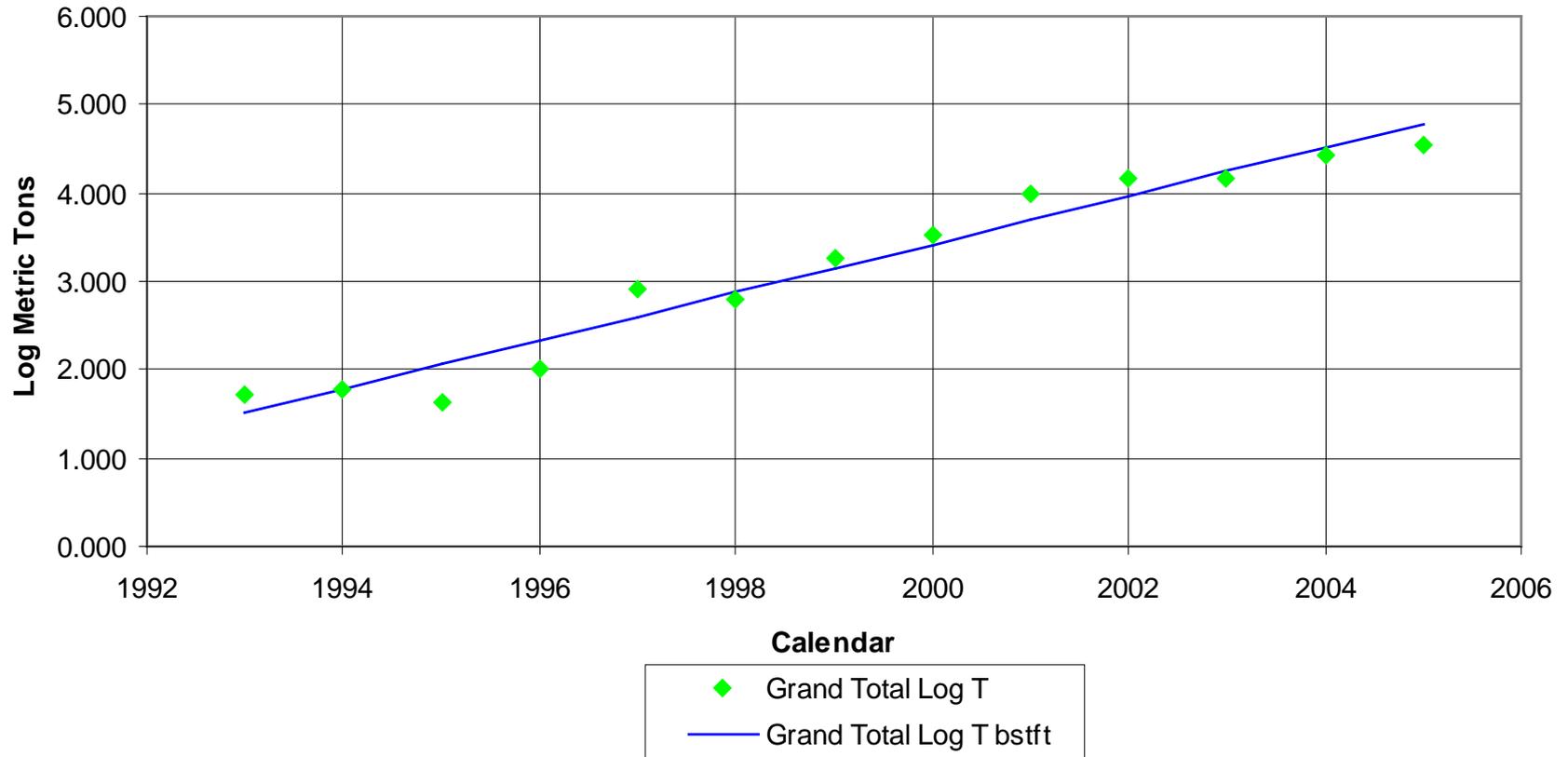
SOUTHERN AFRICA/SOUTH AMERICA

SOUTH AFRICAN & SOUTH AMERICAN EXPORTS Non Pungent Dehydrated Capsicums



PERU

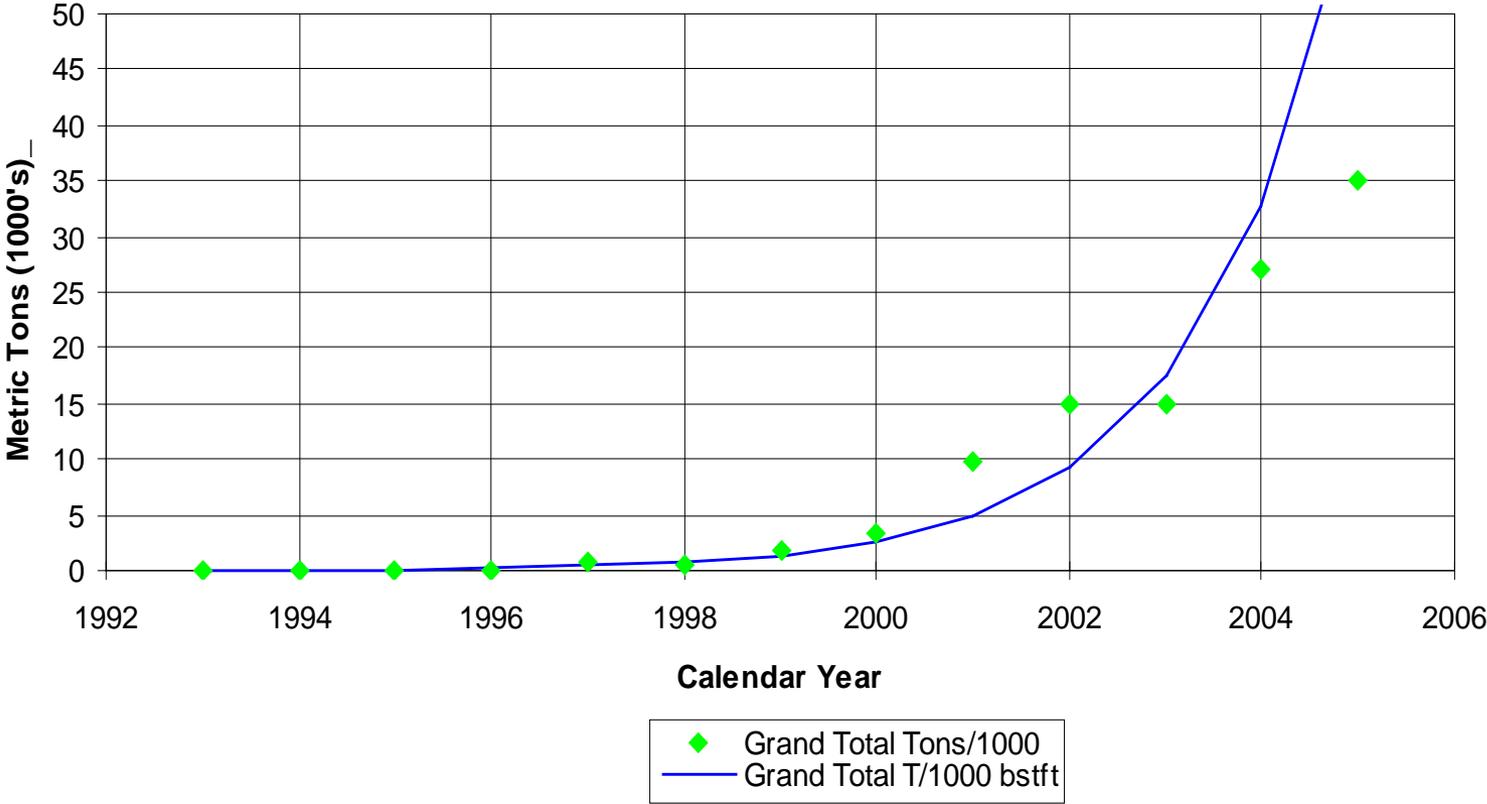
PERUVIAN EXPORTS Non Pungent Dehydrated Capsicums Dehydrated



Compound annual growth = 87.7%

PERU

PERUVIAN EXPORTS Dehydrated Capsicums



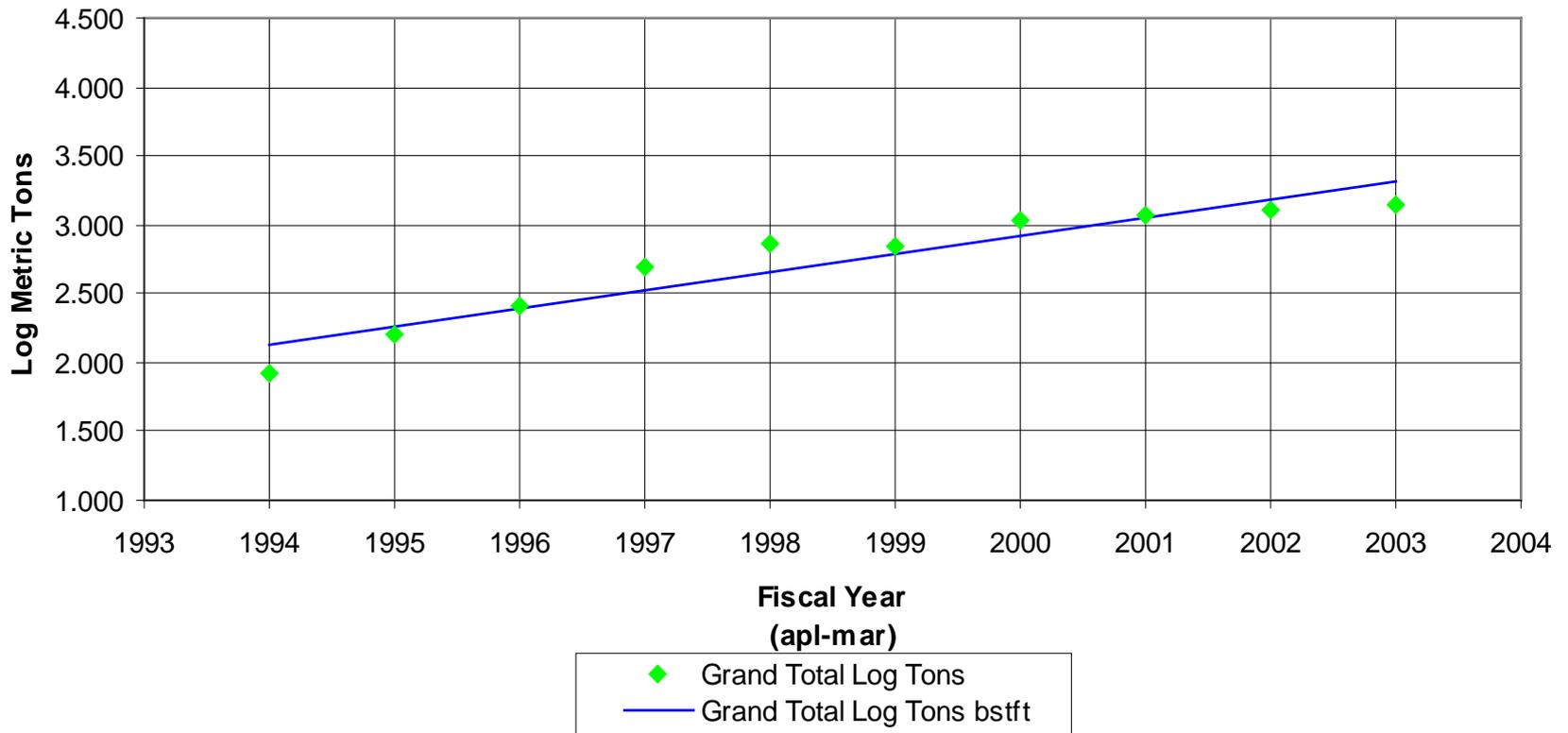
OLEORESIN

- ❑ World consumption of ORP and its growth rate is difficult to determine because of variability of color values.
- ❑ ORP consumption for food use probably about 2100 MT of 100,000 scv with a growth rate of 4 to 6 percent.
- ❑ This would consume some 30,000 MT of whole pod equivalent feed stock.
- ❑ Much of this consumption/production is included today's exercise.
- ❑ Indian ORP exports affect both pungent and non pungent flows.

INDIA

INDIAN ORP EXPORTS

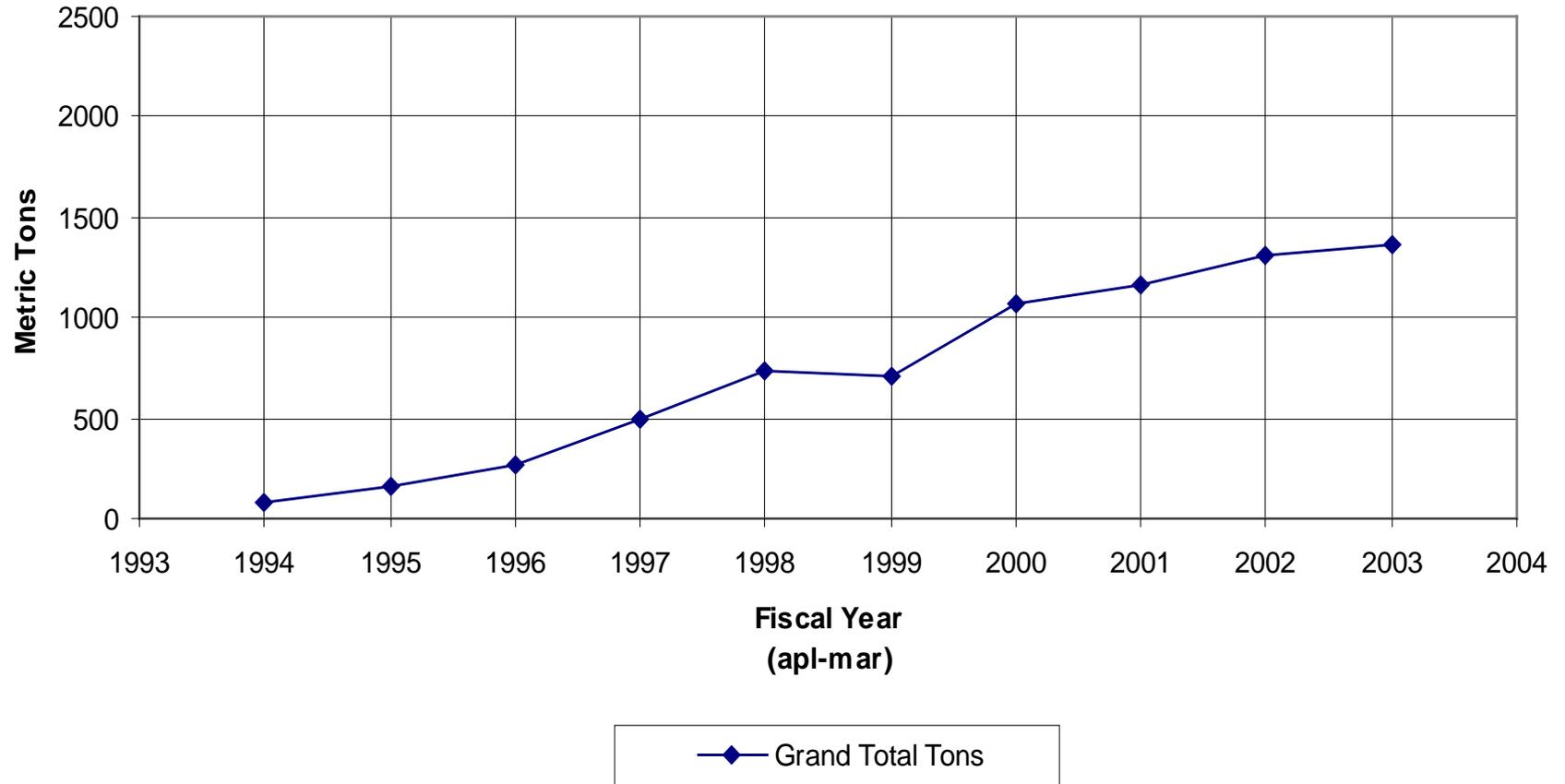
various color values



Compound annual growth = 35.3%

INDIA

INDIAN ORP EXPORTS various color values



RESEARCH

- ❑ Develop new source countries, particularly for non pungent.
- ❑ Develop better yielding higher color value varieties for the less hospitable growing areas of the world.
- ❑ Mechanical harvest varieties for areas with land and water but no labor.
- ❑ More sanitary and rapid procedures for sun drying.

SUMMARY

- ❑ World Consumption/Production all Dehydrated Capsicums 2,500,000 metric tons.
- ❑ World Consumption/Production Non-pungent Capsicums 130,000 metric tons.
- ❑ Import/Export trade all Dehydrated Capsicums 270,000 metric tons.
- ❑ Import/Export trade Non-pungent Capsicums 60,000 metric tons.
- ❑ Consumption growth approaching population growth.
- ❑ A large percent of the increased exports from South America, and India are replacements rather than consumption growth.

CONCLUSIONS

- ❑ World consumption will increase 40,000 to 50,000 metric tons per year.
- ❑ Majority consumed in producing countries.
- ❑ Import/Export world trade should increase by 6000 to 7000 metric tons.
- ❑ World trade increase will be close to evenly divided between non-pungent and pungent material.
- ❑ If current price structure holds, oleoresin paprika will continue to gain market share.
- ❑ Finished goods production will continue shifting to India, China and Peru.

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THANK YOU

CLIFFORD RANNEY

QUESTIONS

