



## Dato' Dr. Kamarul

天然橡胶生产国协会秘书长

自2011年7月1日起，Dato' Dr. Kamarul 开始担任天然橡胶生产国协会秘书长一职，任期为三年。此前，他曾担任马来西亚橡胶局局长。

Dato' Dr. Kamarul 本科专业是机械工程学，毕业于斯特拉斯克莱德大学，并获得了英国拉夫堡大学高分子工程专业博士学位。1976年，他开始参加工作，在马来西亚橡胶研究所担任研究员。他在橡胶行业工作拥有37年的经验，曾先后从事研发、管理、立法与执法、财经、配套服务、市场营销与培训方面的工作。他曾先后担任国际橡胶贸易协会会长、马来西亚橡胶交易所主席、英国TAR橡胶研究中心主任、国际橡胶研发委员会委员以及工程橡胶制品标准制定技术委员会主席。专著及合著的与天然橡胶科技及工程用途相关的技术论文和报告达70篇。



# **“Global Supply and Demand of Natural Rubber”**

***11<sup>th</sup> Shanghai Derivatives  
Market Forum 2013***

***29<sup>th</sup> May 2014***

***Grand Tower, Shangri-La, Pudong  
Shanghai, China***

***Dato’ Dr Kamarul Baharain Basir  
Secretary General, ANRPC  
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## **Overview of Presentation;**

- 1. Production and Supply of NR by ANRPC MGs***
- 2. Challenges and and Strategies in NR Production***
- 3. Consumptions of***
- 4. Trends in NR Prices***
- 5. Outlooks of Future Demand of NR***
- 6. Conclusions***



# ***Production and Supply of NR by ANRPC Member Countries***



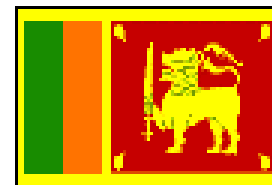
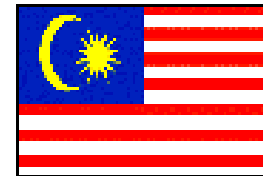
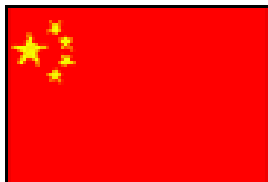
# Association of Natural Rubber Producing Countries (ANRPC) - [www.anrpc.org](http://www.anrpc.org)

**ANRPC - [www.anrpc.org](http://www.anrpc.org)**

**Inter-governmental organizations of countries producing natural rubber.**

**Establish 1970, HQ - Kuala Lumpur, MALAYSIA**

**Currently - 11 member governments**



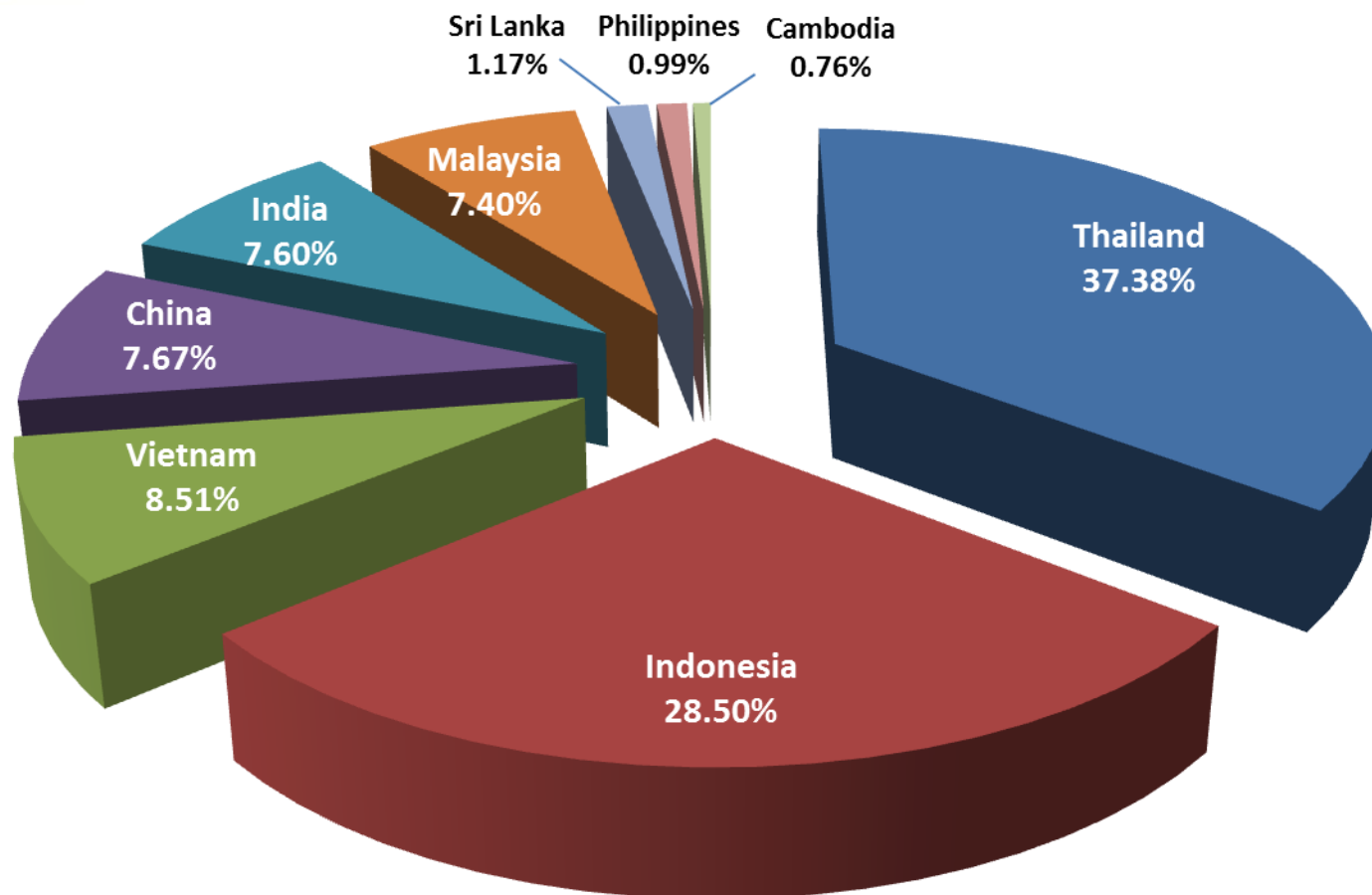


## **NR Supply by Members of ANRPC in 2013**

- ***Production – 11.157 mil ton ( Global 93%)***
- ***Yield area - 7.833 mil ha***
- ***Total area planted – 11.588 mil ha***
- ***Average yield - 1,424 kg/ha/yr***
- ***90 % production by smallholdings***

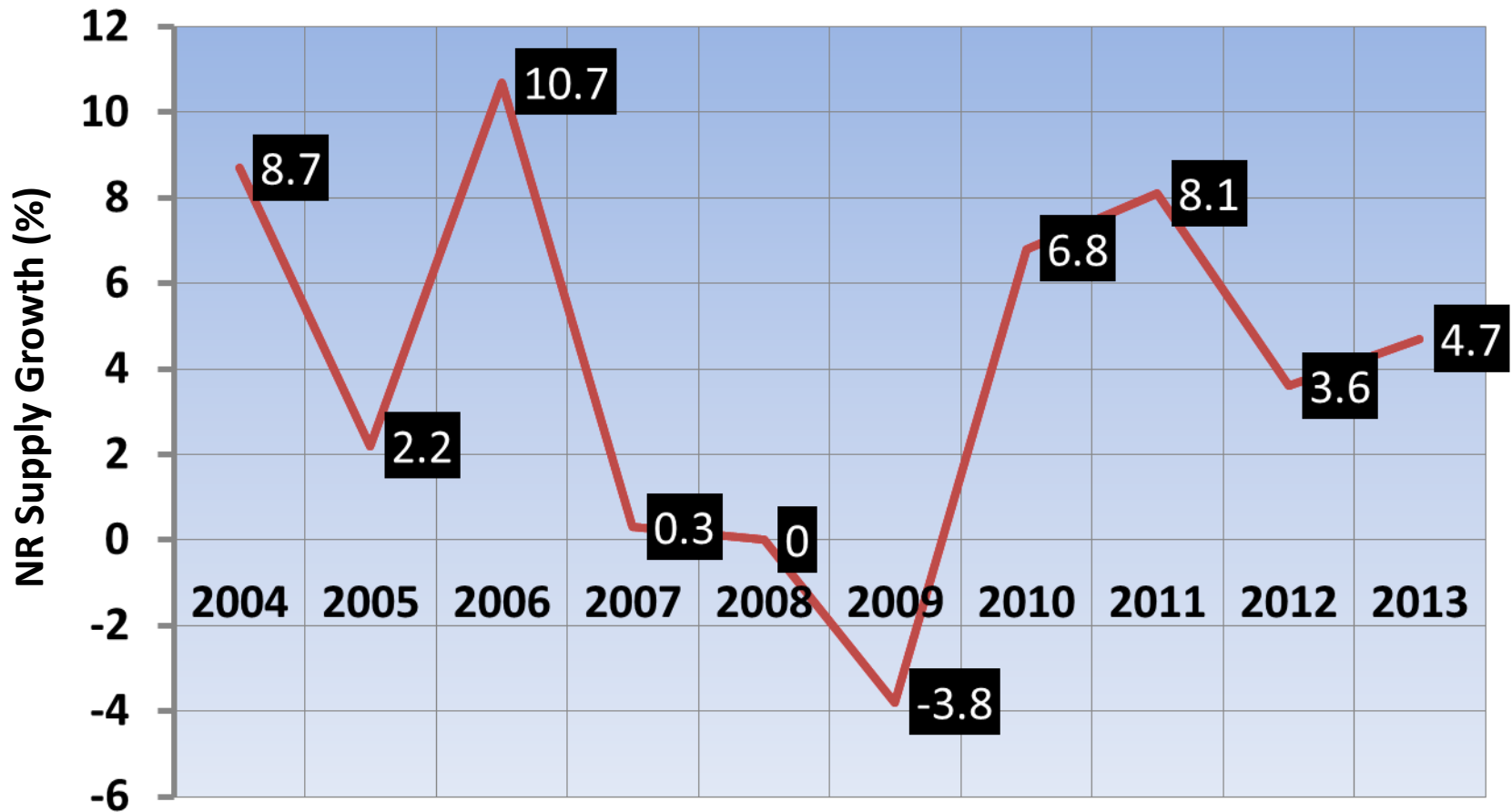


# 2013: Production 11.157 mil tons





## Annual Rate of Growth in NR Supply (%)





## Monthly Trends in Production of NR from ANRPC

Month	Production in 2011 ( ' 000 tons)	Production in 2012 ( '000 tons)	% change on year	Production in 2013 <sup>(1)</sup> ( '000 tons)	% change on year
January	945	869	-8.1	936	7.7
February	775	789	1.8	685	-13.2
March	631	708	12.2	798	12.7
Q <sub>1</sub> Total	2,351	2,366	0.6	2,419	2.2
April	599	721	20.4	735	1.9
May	762	882	15.8	779	-11.7
June	928	898	-3.2	928	3.4
Q <sub>2</sub> Total	2,289	2,501	9.3	2,442	-2.4
July	939	952	1.3	1001	5.2
August	937	968	3.4	1019	5.2
September	895	1017	13.7	1051	3.4
Q <sub>3</sub> Total	2,771	2,937	6.0	3,071	4.6
October	922	966	4.7	1008	4.4
November	994	1005	1.2	1048	4.3
December	998	870	-12.8	998	14.6
Q <sub>4</sub> Total	2,914	2,841	-2.5	3,054	7.5
Year Total	10,280	10,653	3.8	11,157	4.7



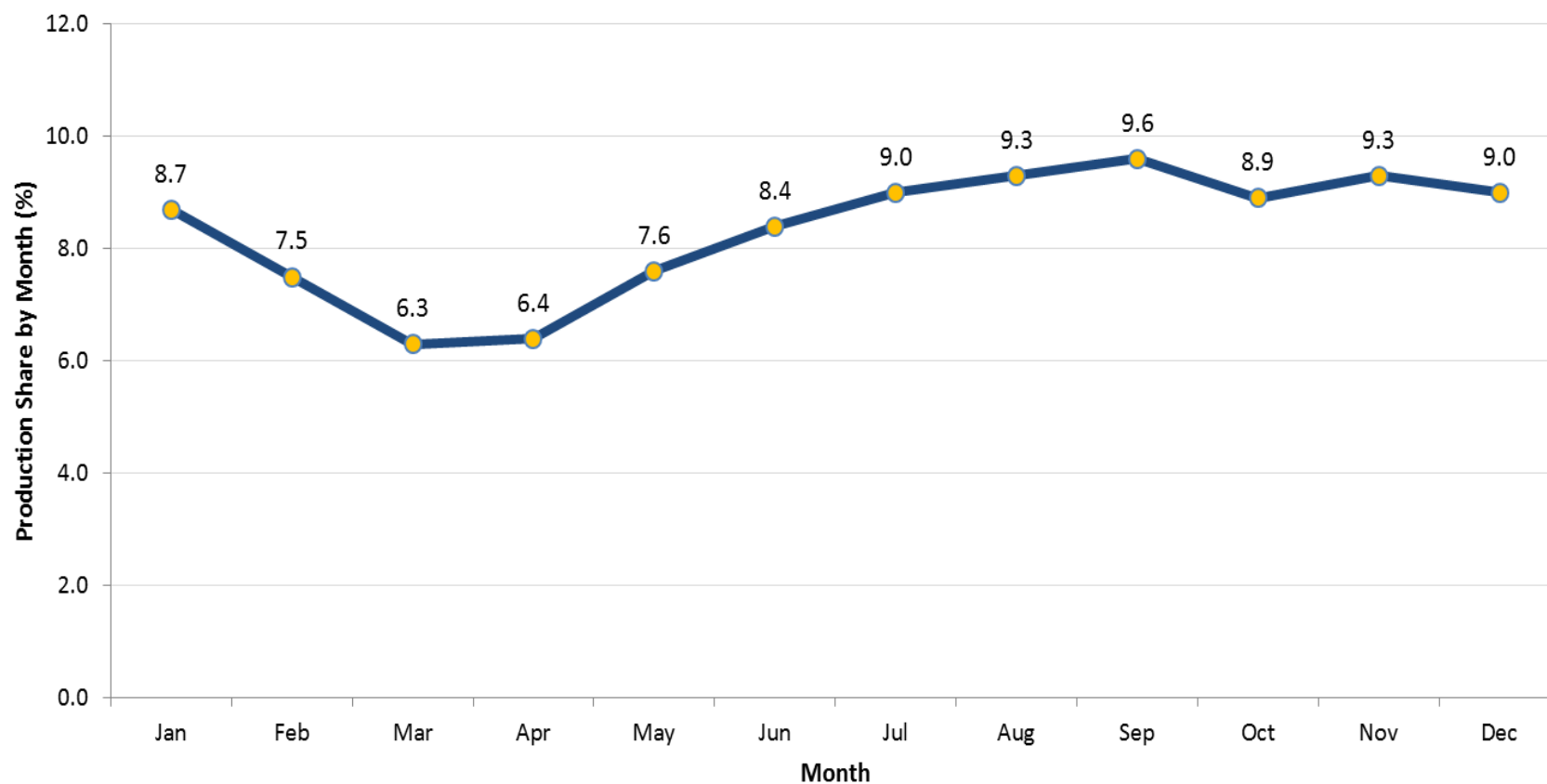
# Sources of Rise in NR Production

	2010	2011	2012	2013
<b>Tapped Area (‘000 ha)</b>	<b>7,013</b>	<b>7,255</b>	<b>7,526</b>	<b>7,833</b>
<b>Average yield (kg/ha)</b>	<b>1,356</b>	<b>1,423</b>	<b>1,414</b>	<b>1,424</b>
<b>Production (‘000 tons)</b>	<b>9,510</b>	<b>10,280</b>	<b>10,653</b>	<b>11,157</b>



## SEASONALITY IN MONTHLY NR PRODUCTION

AVERAGE MONTHLY PRODUCTION IN ANRPC MEMBER COUNTRIES (2010–2012)





## SEASONALITY IN MONTHLY NR PRODUCTION BY COUNTRIES

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Peak</b>	Thailand Malaysia		Sri Lanka				Indonesia		China		Vietnam	India Cambodia Philippines
<b>Dip</b>		Indonesia China Cambodia	Vietnam India Philippines	Thailand Malaysia	Sri Lanka							



## Global NR Production ('000 tons)

	2010	2011	2012	2013	% Change
<b>ANRPC</b>	<b>9,510</b>	<b>10,280</b>	<b>10,653</b>	<b>11,157</b>	<b>4.7</b>
<b>Non - ANRPC</b>	<b>698</b>	<b>742</b>	<b>775</b>	<b>817</b>	<b>5.4</b>
<b>Total</b>	<b>10,208</b>	<b>11,022</b>	<b>11,428</b>	<b>11,974</b>	<b>4.8</b>



# ***Challenges and Strategies in NR Production***



## ***Challenges and Strategies in NR Production***

### **5th and 6th ANRPC Annual Conferences:**

- *17th October 2012 in Medan Indonesia*
- *9th October 2013 in Colombo, Sri Lanka*

### **Members Countries identified:**

- ❖ **Challenges and Constraints**
- ❖ **Governments - Policies and Strategies**



# NR Supply Challenges

- 1. Small land size -  $0.2 < 1 > 2.3$  hectares***
- 2. Selection of planting materials***
- 3. Level of “good agriculture practices”***
- 4. High productivity, Quality material***
- 5. Bridging/narrowing technology gap***
- 6. Governments incentives***
- 7. Enticing industry into production***
- 8. NR Prices***
- 9. Climatic constraints***
- 10. Sustainability***
- 11. Other sources of NR***



# Policies and Strategies

- Enhance production and productivity
  - Governments subsidy for planting materials ( > 30 % cost)
  - Governments introduction of regulatory measures on clonal materials
  - Governments effort to intensify effective extension programmes
  - Increase numbers of demonstration plots
  - Encourage smallholders to form and adopt cooperative system
  - Productivity target  $\geq 2000\text{kg/ha/yr}$
- Replanting implementation programmes
  - Restructure and monitor cooperation among governments agencies
  - Governments support during gestation period
  - Define policy on replanting (hectares/yr., financial aids)
  - Targets hectarage for replanting ( 20,000 – 40,000) ha/yr
- Advancement of R & D
  - Plant breeding, biotechnology, technology of harvesting
  - Development of new materials



# Policies and Strategies

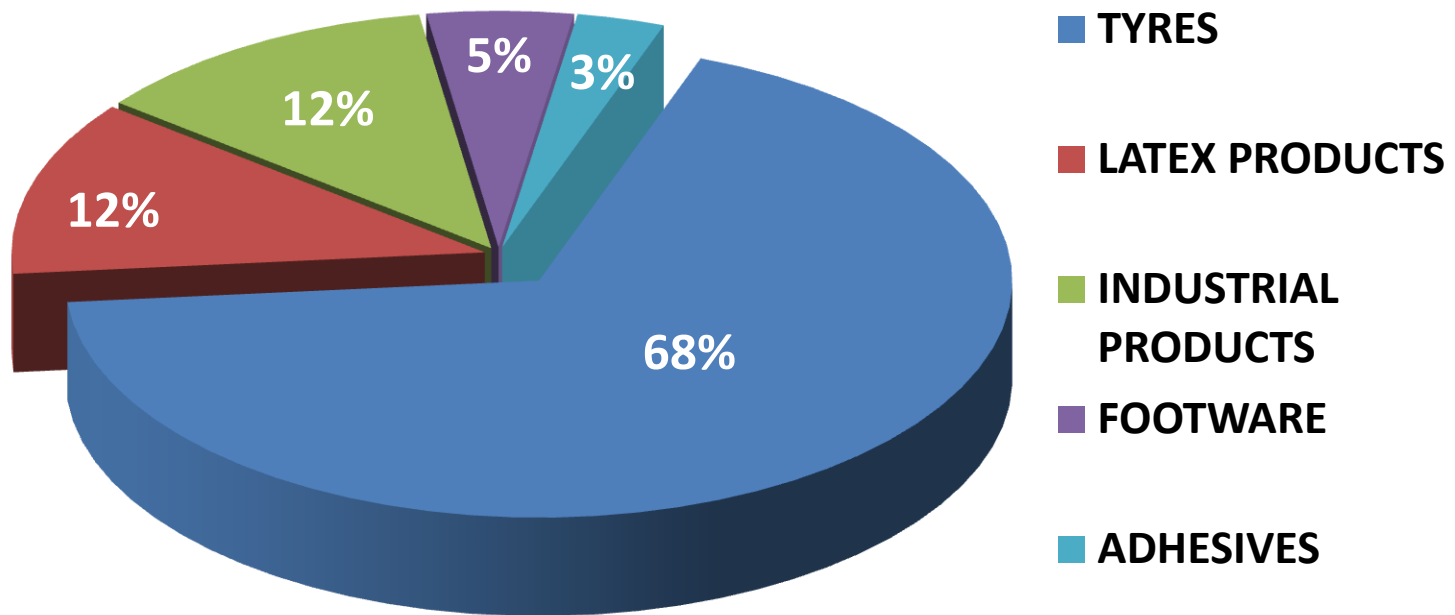
- Expansion of planting hectarage in suitable areas
  - In non-traditional areas
  - Farmers and private sector for joint development (SOC and farmers)
  - Entice private sectors to invest in rubber sectors(Tax incentives..)
- Labour Shortage
  - Improve working conditions in rubber production (LITS)
  - Higher income to discourage urban migration
  - Create business and enterprise opportunities in rubber sector
  - Formalized training
  - Encourage mechanization
- Quality awareness programmes
  - Educating farmers on importance of quality
  - Reform to acceptance and receptive culture by farmers



# ***Consumption of NR***



# Sectorial Use of Natural Rubber





# Use of Natural Rubber in Tyres

- **Approx. 70 % NR global supply use for tyres**
- **Tyres - OEM ( 30%) ,REM ( 70%)**
- **Global Market 20% annual growth in value for 2008 - 2011 (ERJ)**
- **Passenger Cars - Ratio of SR:NR varies**
- **Light & Heavy Vehicles - High NR**
- **Aviation - Higher NR**

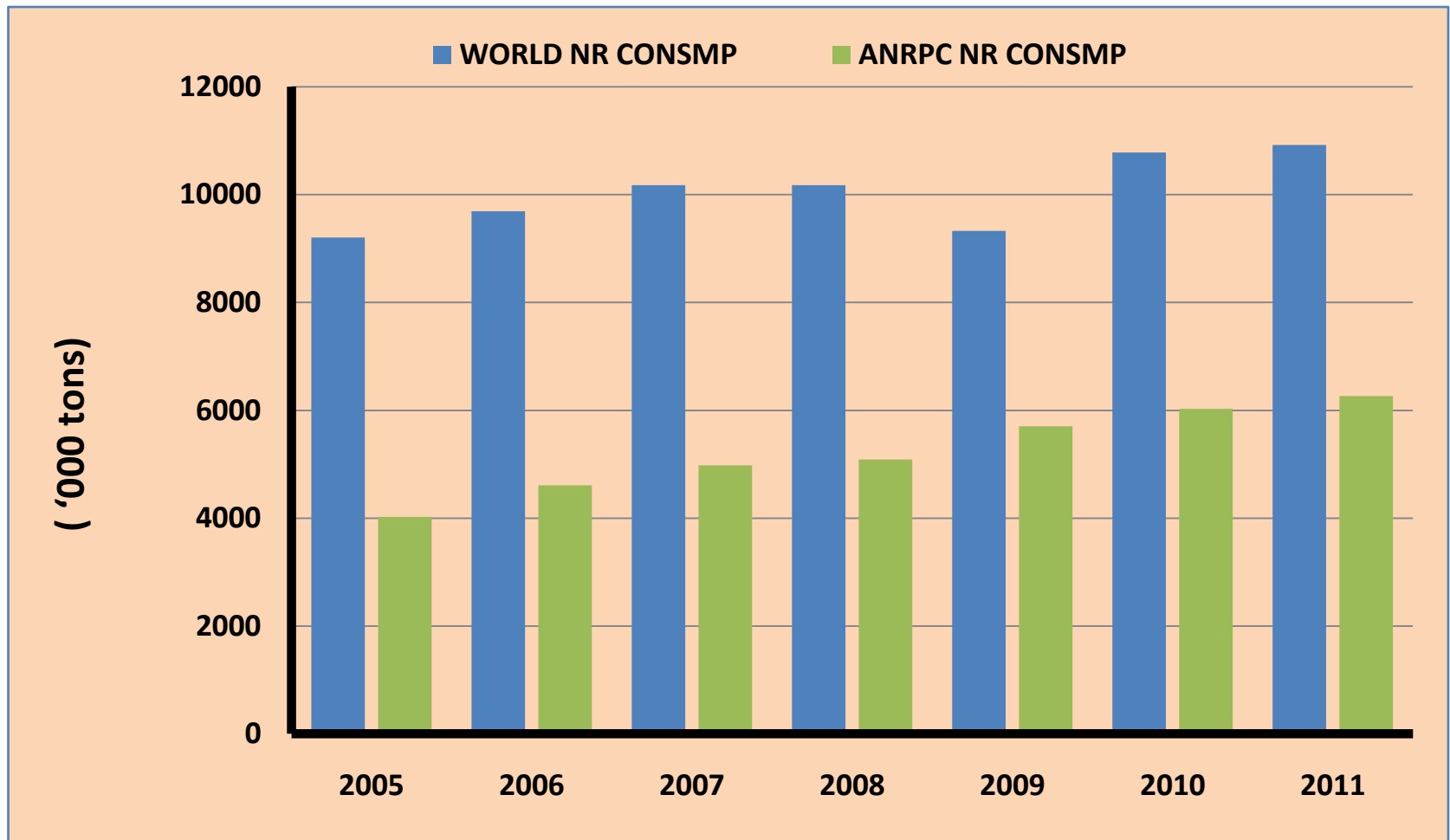


# Consumption of NR in ANRPC's Member Countries, Jan- Sept 2013

Country	Consumption				
	2011	2012	% Change On year	2013	% Change On year
	('000 tons)	('000 tons)		('000 tons)	
China	3,602	3,834	6.4	4,180	8.2
India	958	988	3.1	959	-2.9
Indonesia	474	548	15.6	603	10.0
Thailand	487	505	3.7	521	3.0
Malaysia	419	459	9.5	447	-2.5
Vietnam	145	150	3.4	155	2.7
Sri Lanka	112	110	-1.8	107	-2.6
Philippines	64	72	12.5	70	-1.9
Cambodia	0	0	-	0	-
<b>Total</b>	<b>6,261</b>	<b>6,666</b>	<b>6.5</b>	<b>7,021</b>	<b>5.3</b>



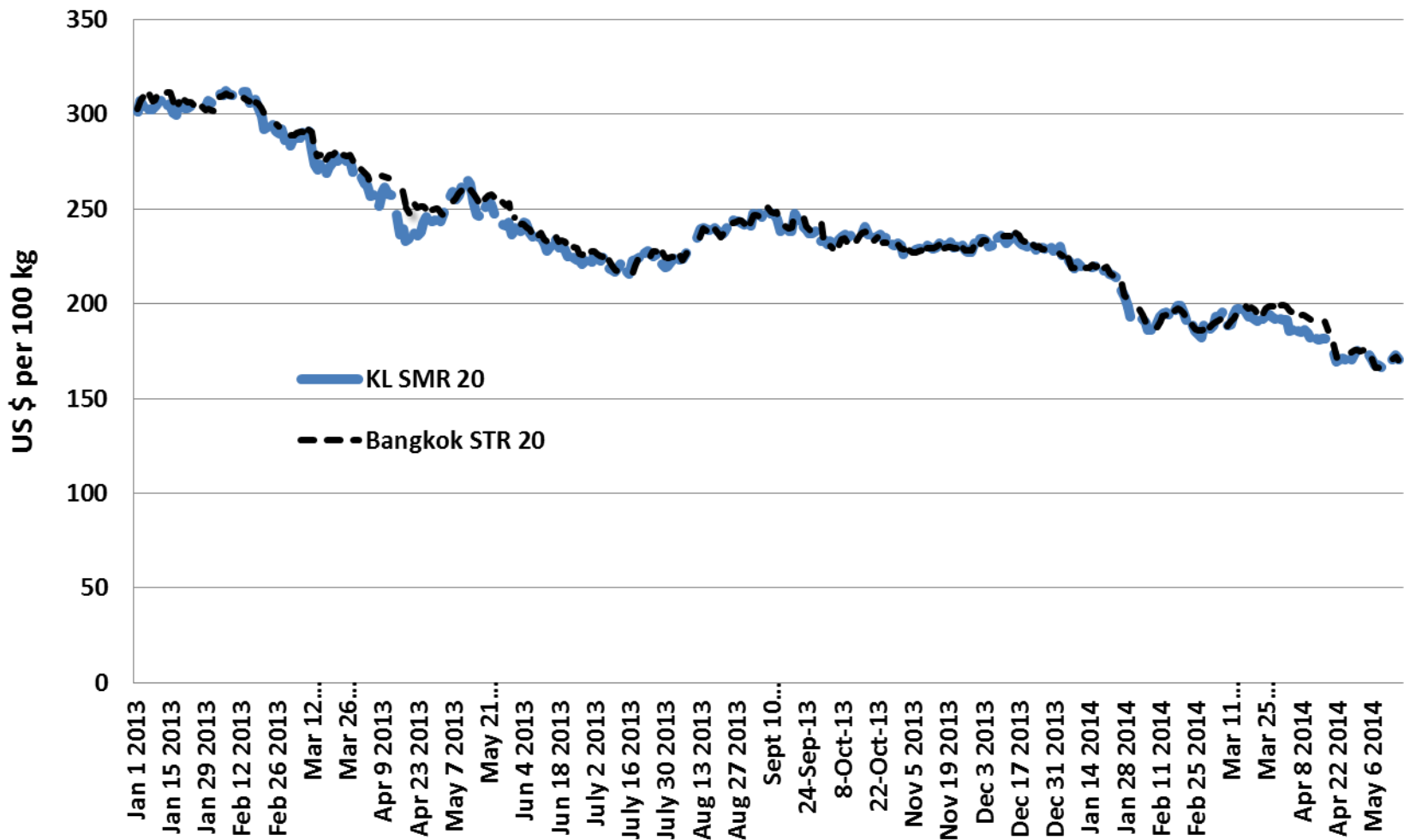
# Global NR Consumption in 2005 - 2011



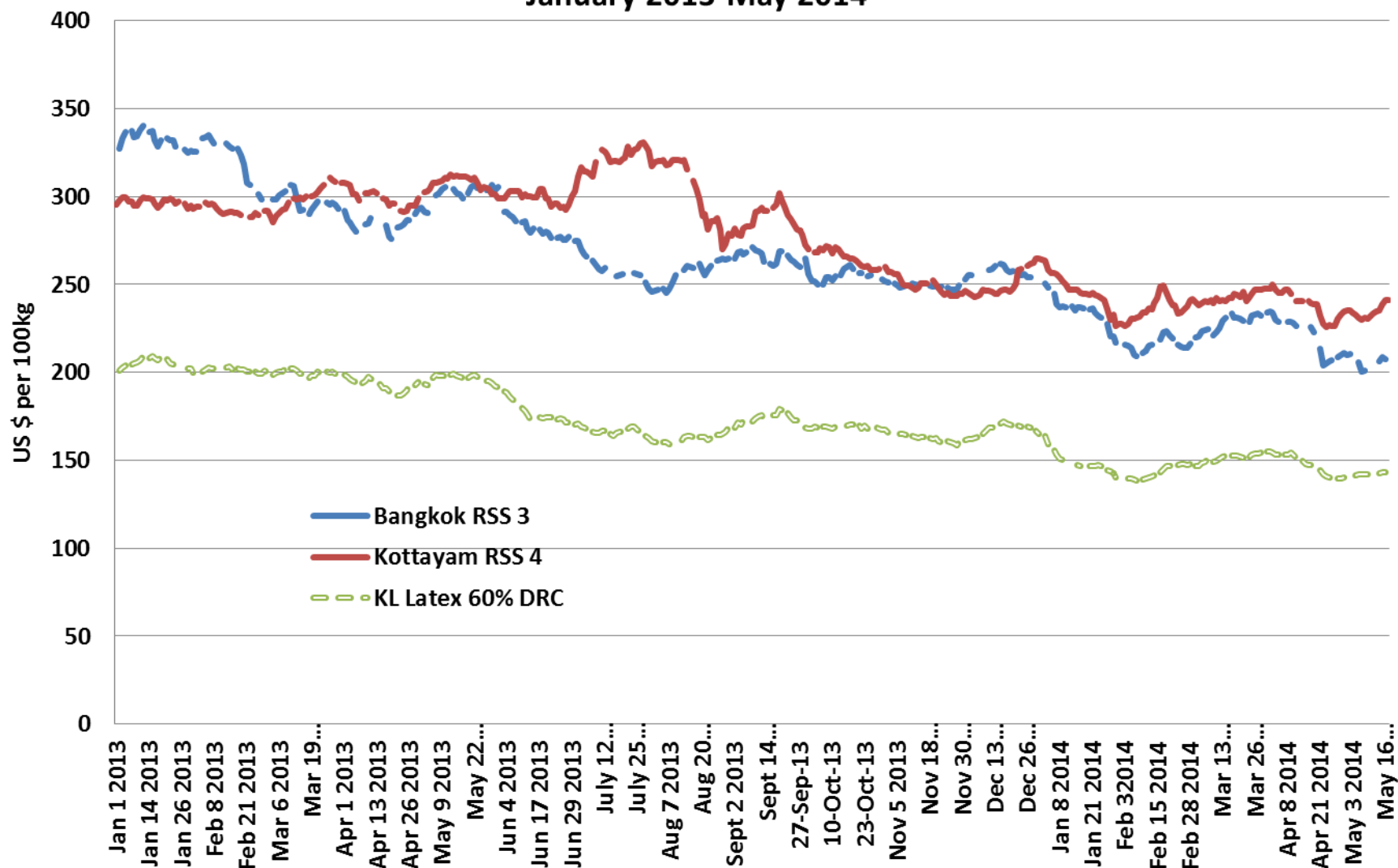


## ***Trends in Prices of NR***

## Price Movement SMR 20 and STR 20 January 2013- May 2014



**Price movement of RSS 3, RSS 4 and Latex (in bulk, 60% DRC)**  
**January 2013-May 2014**



<b>Price (USD/100kg)</b>	<b>Kuala Lumpur</b>	<b>Bangkok</b>	<b>Bangkok</b>	<b>Kottayam</b>	<b>KL Latex</b>
	<b>SMR 20</b>	<b>STR 20</b>	<b>RSS 3</b>	<b>RSS 4</b>	<b>(60% DRC)</b>
On 2 Jan 2013	301.35	302.85	327.27	297.85	201.01
On 2 Jan 2014	229.9	226.66	250.53	263.3	163.94
<b>Percentage Change Jan 2013-Jan 2014</b>	<b>-24%</b>	<b>-25%</b>	<b>-23%</b>	<b>-12%</b>	<b>-18%</b>
On 16 May 2014	170.35	170.28	207.39	241.25	142.95
<b>Percentage Change Jan 2014-May 2014</b>	<b>-26%</b>	<b>-25%</b>	<b>-17%</b>	<b>-8%</b>	<b>-13%</b>



NR Producers - > 90%  
are smallholders



# Response of NR Supply to Price Fall

- ❖ **Farmers will reduce harvesting intensity, input application, stimulation and rain-guarding.**
- ❖ **They may abandon low-yielding and aged trees, especially in Malaysia and Indonesia**
- ❖ **Aged trees become more uneconomic, prompting farmers to replant them**

*As replanting rate goes up, yielding area comes down*



# Response of NR Supply to Price Rise

- **Usually, a high price prompts farmers to have more output**  
*This works only when the price rises after staying low for a few years.*
- **The current scenario is different**  
*Farmers have already exploited all available options for increasing output from existing trees, further space is very much limited.*
- **Wages and other input costs rose substantially in the last couple of years.**
- **Farmers profit margin is on the decline, despite high prices.**
- **Farmers enthusiasm is likely to erode even if prices continue to stay high.**



# ***Outlooks of Future Demand of NR***



# Outlook of Global GDP Growth

	2012	2014	2016	2018
<b>World Output</b>	<b>2.6</b>	<b>3.0</b>	<b>3.8</b>	<b>3.8</b>
<b>NAFTA Economies</b>	<b>2.7</b>	<b>2.4</b>	<b>3.4</b>	<b>2.8</b>
<b>Western Europe</b>	<b>-0.3</b>	<b>1.5</b>	<b>1.8</b>	<b>1.7</b>
<b>European Union</b>	<b>-0.3</b>	<b>1.5</b>	<b>2.0</b>	<b>1.9</b>
<b>Euro Zone</b>	<b>-0.6</b>	<b>1.1</b>	<b>1.7</b>	<b>1.6</b>
<b>Central Europe &amp; Balkan</b>	<b>1.2</b>	<b>2.8</b>	<b>2.6</b>	<b>2.3</b>
<b>Commwlth of Ind. States</b>	<b>3.4</b>	<b>1.4</b>	<b>3.5</b>	<b>3.7</b>
<b>Japan</b>	<b>1.4</b>	<b>1.4</b>	<b>0.9</b>	<b>1.3</b>
<b>China</b>	<b>7.7</b>	<b>7.5</b>	<b>7.4</b>	<b>7.6</b>
<b>India</b>	<b>4.7</b>	<b>5.3</b>	<b>6.5</b>	<b>7.4</b>
<b>South Korea</b>	<b>2.3</b>	<b>3.3</b>	<b>3.6</b>	<b>3.4</b>
<b>Latin America n Caribbean</b>	<b>2.4</b>	<b>2.1</b>	<b>3.6</b>	<b>4.0</b>
<b>Middle East</b>	<b>2.8</b>	<b>3.6</b>	<b>4.5</b>	<b>4.5</b>



# Use of Natural Rubber in Tyres

- **Approx. 70 % NR global supply use for tyres**
- **Tyres - OEM ( 30%) ,REM ( 70%)**
- **Global Market 20% annual growth in value for 2008 - 2011 (ERJ)**
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# Use of Natural Rubber in Tyres

- **Radialisation - Increase use of NR, PC n CV**
- **Tyre Labeling - Increase/decrease use of NR??**
- **Retreading options**
- **Single Wide load Vs Double wheel Tyres - CV**
- **Performance Tyres - > 17" diameter**
- **Expansion / Investment by Tyre Manufacturers**  
*USD10 bil in 2011 by  
Hankook, Bridgestone, Continental, Michelin,  
Pirelli, Goodyear...*



# NR Supply Opportunities

- 1. Currently total planted area of 10.62 mil ha. available lands for expansion by ANRPC members***
- 2. Improvement in productivity and farm management***
- 3. Accelerate utilization of R&D findings and advancement in NR science***
- 4. Positive strategies and policies for sustainable NR supply by member countries***
- 5. High domestic/regional consumption - China, India, Malaysia, Thailand***
- 6. Substantial GDP growth in NR producing and emerging economies countries***



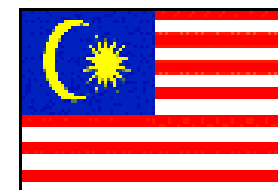
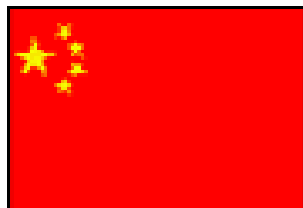
# Conclusions

- ***The NR demand growth in tandem with global GDP growth. Positive for world GDP of 3.0 % in 2014 to 3.8 % in 2018 growth.***
- ***Consumption of NR in ANRPC has shown to grow from 43% in 2005 to 63% in 2013 of total Global NR Consumption. Future increase in NR consumption is expected.***



# Conclusions ...

- ***Opportunities for positive supply growth of NR are encouraging and sustainable by ANRPC's members***
- ***ANRPC's members take position on balance between future global supply and demand of NR***
- ***NR prices have shown to decrease ranging from -24 % to -26 % from January 2013 to May 2014. Not favourable to NR producing countries.***



*Thank You*



