Ms. Sheela Thomas belongs to the Indian Administrative Service and currently on deputation as full time Secretary General of the Association of Natural Rubber Producing Countries (ANRPC). The former Chairman of Rubber Board, Ms. Sheela Thomas had also held several important positions with the Government of Kerala. These include Principal Secretary to Chief Minister of Kerala; Secretary for Agriculture and Cooperation; Secretary for Food, Civil Supplies and Consumer Affairs; Secretary for Modernising Government Programmes.
WORLD NATURAL RUBBER PRODUCTION SCENARIO

Sheela Thomas
Secretary General, ANRPC

India Rubber Meet 2016, 10-11 March, Goa
Outline

- Understanding NR market scenario
- Current production scenario
- India rubber industry at a glance
- What lies ahead?
- Conclusion
Understanding NR Market Scenario
The NR economy now – price is the major determinant for industry’s direction

Since late 2013, NR price has gone down due to multiple factors

- Uncertainty in world economy
- Lower demand than forecast
- Weak global equity market
- China factor
- Lower crude oil prices
# Price movement

<table>
<thead>
<tr>
<th></th>
<th>Kuala Lumpur</th>
<th>Bangkok</th>
<th>Bangkok</th>
<th>Kottayam</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SMR 20</td>
<td>STR 20</td>
<td>RSS 3</td>
<td>RSS 4</td>
</tr>
<tr>
<td><strong>Avg Price in</strong></td>
<td><strong>218.97</strong></td>
<td><strong>235.84</strong></td>
<td><strong>224.59</strong></td>
<td><strong>249.07</strong></td>
</tr>
<tr>
<td><strong>January 2014</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Avg Price in</strong></td>
<td><strong>143.6</strong></td>
<td><strong>151.67</strong></td>
<td><strong>170.84</strong></td>
<td><strong>204.61</strong></td>
</tr>
<tr>
<td><strong>January 2015</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Avg Price in</strong></td>
<td><strong>108.83</strong></td>
<td><strong>109.82</strong></td>
<td><strong>123.09</strong></td>
<td><strong>145</strong></td>
</tr>
<tr>
<td><strong>January 2016</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percentage</strong></td>
<td><strong>-50.3%</strong></td>
<td><strong>-53.4%</strong></td>
<td><strong>-45.2%</strong></td>
<td><strong>-41.8%</strong></td>
</tr>
<tr>
<td><strong>change (Jan 16/Jan</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>14)</strong></td>
<td></td>
<td></td>
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</tbody>
</table>
Based on IMF data, NR price to see slight support next year; tracking an improvement in oil prices.
Exports

- Total exports recorded in 2015 is 8.828 million tonnes, lower than earlier ANRPC estimates by 38,400 tonnes.
- ANRPC Member Countries reported better exports in January, an increase of 6.8% compared to January 2015, amid uncertainties in global economy.
Imports

• Total imports in 2015 was 4.74 million tonnes, lower by -6.1% year-on-year

• Imports in January by ANRPC countries showed marginal increase of 0.7% year-on-year but early estimates indicate that overall import this year will be lower than 2015.
Consumption

- NR consumption within ANRPC showed a growth of 2.5% in 2015 against the previous year.

- Total consumption for 2016 is estimated at 7.95 million tonnes, an increase of 1.6% year-on-year. Better U.S. economy and the potential for China to advance infrastructure investment to ensure adequate economic activity are the keys that may provide stimulus to world economic growth this year.
Current Production Scenario
Production by ANRPC Members, 2015

- **India**: -18.4%, 0.57 m.t
- **Sri Lanka**: -7.5%, 0.09 m.t
- **Cambodia**: +30.1%, 0.13 m.t
- **Thailand**: +3.5%, 4.47 m.t
- **Vietnam**: +6.6%, 1.02 m.t
- **Philippines**: -0.2%, 0.11 m.t
- **China**: -5.5%, 0.79 m.t
- **Malaysia**: +4.4%, 0.69 m.t
- **Indonesia**: +0.7%, 3.16 m.t
Production

- Production by ANRPC inched up by 1.4% to 11.21 million tonnes in 2015

- Weather changes coupled with uncertainties in world economy that led to lower NR prices had resulted in a drop in production in January, a fall of -5.4% year-on-year.

- Initial estimate this year projects an annual production growth of 1.4% from ANRPC countries
## Smallholding sector

### Profile of rubber smallholdings in ANRPC countries (2014)

<table>
<thead>
<tr>
<th>Country</th>
<th>Definition of smallholding. Holding size of less than: (in ha)</th>
<th>Total size of area under smallholding in the country: (in ha)</th>
<th>% of rubber area under smallholding:</th>
<th>Number of smallholders in the country: (no. of people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>&lt;4.5</td>
<td>100,587</td>
<td>45</td>
<td>27,000</td>
</tr>
<tr>
<td>China</td>
<td>n.a</td>
<td>698,233</td>
<td>61</td>
<td>595,000</td>
</tr>
<tr>
<td>India</td>
<td>&lt;10</td>
<td>686,000</td>
<td>90</td>
<td>1.25 million</td>
</tr>
<tr>
<td>Indonesia</td>
<td>n.a</td>
<td>n.a</td>
<td>80</td>
<td>n.a</td>
</tr>
<tr>
<td>Malaysia</td>
<td>40.47</td>
<td>697,000</td>
<td>94</td>
<td>283,000</td>
</tr>
<tr>
<td>PNG</td>
<td>n.a</td>
<td>n.a</td>
<td>80</td>
<td>20,000</td>
</tr>
<tr>
<td>Philippines</td>
<td>15</td>
<td>130,779</td>
<td>n.a</td>
<td>56,908</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>&lt;4</td>
<td>56,446</td>
<td>n.a</td>
<td>133,000</td>
</tr>
<tr>
<td>Thailand</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>1.0 million</td>
</tr>
<tr>
<td>Vietnam</td>
<td>3.1 in southeast 2.1 in other region</td>
<td>429,100</td>
<td>49.4</td>
<td>472,115</td>
</tr>
</tbody>
</table>
Impact of drop in NR price

Rubber industry has grown over recent years and now holds strategic importance to producing countries’ economy with smallholding sector becoming back bone of the industry.

The price of NR, once a major driving force in exploitation of rubber has now become the disincentive to tapping turnout. With price sustaining at a low level, the livelihood of rubber farmers had been hardly hit for a long period and makes their future uncertain.

Many of the rubber farmers have left the industry looking for greener pastures. Those who stayed back demand a solution for the predicament they are facing.
Replanting or diversion of rubber area to other economic activities are being promoted

- *During the low price period, replanting or diversion of plantations to other economic activities need to be intensified*
Planting materials

- High quality planting materials are the prerequisite for good yield return. Farmers should be encouraged to replace the old and less productive clones with high yielding clones.
More TOT on Harvesting

• Rubber-related agencies need to stress to farmers that management and maintenance of tapping operations are important in determining maximum yield.
• Higher productivity may compensate loss in sale of rubber
Improving Marketing Chain

- Understanding the fundamental structure of each market is core to the commercial strategy of buyers and sellers as price discovery mechanisms differ in each country.

- Although fundamental factors play an important role, NR spot transactions are largely based on Singapore or Tokyo mirroring the locations of the major international rubber exchanges.

- At ex-farm level, from the moment rubber is obtained from the tree, it has to go through layers of marketing channels before reaching the processing factory.
(A) Latex collection at Yunnan, China. Field latex, normally with 30% DRC is purer than cuplump and fetch better price

(B) A typical one-day crop of cuplump in Malaysia with DRC normally not more than 50%, hence lower price offered to farmer

(C) Cuplumps from smallholders to processing factory in Zamboanga Sibugay, Philippines. High level of adulteration to rubber leads to lower price received by farmers
Rubber auction for RSS grade in Rayong, Thailand eliminated the function of middleman in rubber marketing chain. At the same time buyers are assured of quality of the rubber sheet since the auction centre itself implements quality control measures for rubber traded.

Thin and untainted quality of rubber crepe in Sri Lanka is high in demand from the industry in the country esp. for shoe outer-sole.
## Price References for FOB & Ex-farm in Various Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Price references</th>
</tr>
</thead>
</table>
| Cambodia  | • FOB prices refer to MRE and regional market  
  • Farm gate reference depends to a large extent on price offer from middleman                   |
| China     | • FOB prices refer to Shanghai Future Exchange and direct deal between seller and buyer.                                                            |
| India     | • RSS 4 is the benchmark grade. FOB prices refer to price in Kerala state.  
  • Rubber dealers, Rubber Producers’ Society and farmers report daily transaction price via phone/SMS to Rubber Board of India which then publish official Kottayam prices at 5 pm.  
  • For farm gate price, farmers receive around 92 – 95% of quoted FOB                                |
| Indonesia | • SIR 20 serves as a benchmark grade  
  • Price of SIR 20 traded at SICOM rubber futures is the main reference  
  • Farm gate reference depends largely on price offer by middleman.                                     |
| Malaysia  | • SMR 20 is the benchmark grade  
  • Official prices are published by Malaysian Rubber Exchange (MRE) and consider domestic supply-demand fundamentals and price direction from regional rubber markets  
  • Farmers receive around 77-80% of quoted FOB (for cuplump grade)                                      |
<table>
<thead>
<tr>
<th>Country</th>
<th>Price references</th>
</tr>
</thead>
</table>
| Philippines | • SPR 20 is the benchmark grade  
• Price references to MRE, TOCOM, SICOM and Shanghai  
• Farm gate reference depends largely on price offered by middleman |
| Sri Lanka  | • FOB prices trail international market movement and domestic supply – demand  
• Weekly Colombo rubber auction also provide price reference |
| Thailand   | • RSS 3 is the benchmark grade.  
• FOB prices refer to auction price at Central Rubber Markets (CRM) located at Songkhla, Suratthani, Nakorn Srithammarat, Yala, Burirum and Nongkhai.  
• There are also private-owned rubber auction centres i.e in Rayong province |
| Vietnam    | • SVR 3L is the benchmark grade  
• FOB price reference to TOCOM, SICOM, MRE, Hat Yai, Shanghai and also looking at the stock & production under VRG |
Improving Marketing Chain

Supply chain improvement for benefit of farmers

**Plantation**
- Rubber Latex

**Processing**
- TSR
- Latex concentrate
- Ribbed smoked sheet
- Pale crepe
- Brown crepe
- Air dried sheet

**Industrial Applications**
- General Applications

Key products
Besides the challenge from low price, the NR industry is also facing various other challenges that need to be addressed:

- Size of small holdings
- Level of GAP in producing countries
- Climate change
- Narrow usage of rubber
- Price discovery mechanism
The smallholding sector is the back bone of the industry in many rubber producing countries. Since the sector lack economies of scale, strategies and sustainable development of the NR industry must take into consideration the interest of rubber smallholders.

<table>
<thead>
<tr>
<th>Country</th>
<th>Average holding size of smallholder: (in ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>3.6</td>
</tr>
<tr>
<td>China</td>
<td>2.0</td>
</tr>
<tr>
<td>India</td>
<td>0.54</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1.4</td>
</tr>
<tr>
<td>Philippines</td>
<td>2.0</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>0.5</td>
</tr>
<tr>
<td>Vietnam</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Source: ANRPC 2014
Level of “Good Agriculture Practices” and Bridging/narrowing technology gap

The level of GAP and technology adoption differ from one country to another.
Climate change continues to be matter of concern to rubber sector. Initiatives to be taken to come out with programmes that help farmers to manage this challenge.
Narrow usage of rubber

Tyre sector holds lion share in NR usage and demand for tyre is highly dependent on economic growth. Hence, the health of world economy has a huge bearing on NR price. There is an urgent need to diversify usage of NR.
Revisiting price discovery mechanism

Rubber futures markets due to their price discovery and risk minimization functions are considered to be highly beneficial but not without flaws:
- futures lead to price volatilities.
- opportunities for large traders to monopolise & speculate

Volatility of NR prices is considered undesirable in the context of end users’ procurement planning. The proposed regional spot market can address volatility issue.
India Rubber Industry at a Glance
Rubber Industry in India

- Based on 2015 figures, India ranked as the 6th largest producer from 5th in 2014, overtaken by Malaysia (575,000 tonnes vs 698,300 tonnes)

- Rubber supplies from both countries are known to be price-sensitive

- Unlike Malaysia where plantations are scattered throughout the country, rubber area in India is highly concentrated, approximately 80% in Kerala. Therefore, production is exposed to narrow demographic and geographical factors

- Expansion of rubber area to non-traditional region is a strategically important move for the industry
Rubber Industry in India (2)

- India is among the few producing countries that introduced incentives and measures for rubber growers to mitigate impact of prolonged low prices.

- India subsidy scheme envisages payment of Rs 150 per kg for rubber for farmers having up to two hectares, with the difference between the current price and the government fixed price as subsidy.

- As comparison, Thai government initiated procurement of 100,000 tonnes of rubber sheets from planters at THB 45 per kilogram which was above the market price. Rubber Production Incentive in Malaysia has been triggered after the SMR 20 FOB price dropped below MYR 5.10.
Rubber Industry in India (3)

- Significant price spread between domestic and overseas markets saw a huge increase in import that raised concerns among growers. As a safeguard measure to protect domestic producers, imports of natural rubber of all varieties/forms are limited to two sea ports of Chennai and Mumbai.

- Increase in import of NR was expected. India's economy grew at an average rate of 7.5% in 2015, outpacing the 6.9% growth in China.

- At the same time, the automotive industry, accounting for around 40% of overall Indian manufacturing sector, is steadily growing with an 11% growth during the last fiscal year.

- Initial estimates by Rubber Board of India as published by ANRPC, indicate that imports in 2016 to increase by 5.2% to 440,000 tonnes and consumption to increase by 3% to 1.03 million tonnes.
What lies ahead?
**Increase Usage of NR (1)**

*To be led by the top three producers which are also top three net exporters*

<table>
<thead>
<tr>
<th>Country</th>
<th>Prod/ cons ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>7.99 : 1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>5.44 : 1</td>
</tr>
<tr>
<td>Vietnam</td>
<td>6.06 : 1</td>
</tr>
<tr>
<td>China</td>
<td>0.18 : 1</td>
</tr>
<tr>
<td>India</td>
<td>0.7 : 1</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1.46 : 1</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>0.88 : 1</td>
</tr>
<tr>
<td>PNG</td>
<td>n.a</td>
</tr>
<tr>
<td>Philippines</td>
<td>3.36 : 1</td>
</tr>
<tr>
<td>Cambodia</td>
<td>n.a</td>
</tr>
<tr>
<td><strong>Total ANRPC</strong></td>
<td><strong>1.44 : 1</strong></td>
</tr>
</tbody>
</table>
Increase Usage of NR (2)

- NR producing countries may initiate steps to increase local consumption and product development using NR. Rubberising roads is a comparatively easy option as manufacturing other rubber products involve testing, specifications, technological know-how etc.

- Countries like Thailand and Malaysia are willing to share rubberised road technology with other rubber producers to promote more applications of NR usage

Rubberised road project at Chachoengsao, Thailand

Photo taken January 2016
Increase Quality & Specification of NR

• The tyre producers, especially those manufacturing high-performance tyres are willing to pay premium for rubber that meets their in-house approval specifications over rubber with only normal commercial specifications like the TSR grade

• The TSR grade as well as sheet grades, must be technically upgraded

• This is to meet the requirement and technology advancement in tyre production for NR of *hevea brasiliensis* to stay competitive and relevant

Photo: credit to owner
NR of Hevea to raise up the game, otherwise…

• Current threat is from synthetic rubber whereby tyre manufacturers may switch the NR:SR ratio to SR advantage, if NR properties could not meet requirement of their high-tech end products

• Threat from other natural rubber from different species is also prevalent. Guayule and Russian dandelion are subject to extensive development work today.

• The question is can they perform the same functions at a lower cost or perform better than NR of hevea at the same cost

Pic: From the net. Credit to owner

Guayule

Russian dandelion
Managing NR Supply: Short-term Measure

AGREED EXPORT TONNAGE SCHEME (AETS)

- Announcement by ITRC members (Thailand, Indonesia, Malaysia) to holdback export of 615,000 tonnes of NR for the period of six months from 1 March 2016 may lead to better balancing of current supply –demand

- The total cut account for nearly 6% of global natural rubber output
Overview of Past AETS

1st AETS
1 Jan – 31 Dec 2002

2nd AETS
1 Jan – 31 Dec 2009

3rd AETS
1 Oct 2012 – 31 Mar 2013

MYR cent/Kg

Source: Malaysian Rubber Board
Managing NR Supply: Long-term Measure

- To address the current situation in the rubber industry, ANRPC countries are planning to take collective efforts towards long term stability of NR prices.

- Work on formulation of rubber “Production Management Scheme” for ANRPC countries is under way. This aims to ensure an orderly growth of rubber supply that must match with emerging trends in world demand.

- NR price is aim to be at desired band; that is remunerative and sustainable to producers and fair to consumers.
Managing Market Sentiment: Large Stock Overhang

- Stock overhang, reportedly as high as one quarter of world annual rubber production, was recently published by renowned NR statistical providers.

- NR exporters and producers are sceptical on world rubber stock position as no indication is given about storage locations/countries.

- Moreover, exporters could find steady market for their rubber worldwide, though at lower prices. This confirms that reported NR stock situation is found only on paper.
Managing Consumers’ Concerns of Future Supply of Natural Rubber

- Tyre makers have become increasingly worried about the future supply of natural rubber. Current low prices lead to slowdown in new plantations and replanting that could tighten supplies from 2020 onwards.

- Some tyre companies like Cooper Tire & Rubber Co and Bridgestone are trying to develop tyre grade rubber from guayule, which is native to Mexico and south-eastern United States. They aim to ensure a stable natural rubber supply, reduce price volatility and lessen dependence on foreign suppliers.

- Sustainability of hevea rubber industry and assurance of future supplies must be highlighted by producing countries.
Conclusions
Conclusions

- Rubber market in 2016 continues to be driven by moves in other commodity prices and fluctuation in currencies

- Livelihood of rubber farmers is hit hardly and makes their future uncertain as price is sustaining at a low level for a long period

- NR producing countries are working on short to long term measures to ensure an orderly growth of rubber supply that matches emerging trends in world demand

- Production of hevea rubber is sustainable if supported by continuous improvement in productivity, efficiency and quality
Thank You

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