



India: NR Expansion Beyond the Traditional Areas Govt.- Tyre Industry Collaborative Initiative

Presented by
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Chairman, INROAD
Fri. 23rd Feb.'24

Participating Member Companies (PMCs)



Agenda

- **NR Production and Consumption | Global Scenario vs India's Positioning**
- **Widening Gap in Medium/Long term | Continuing concern for Domestic NR Consuming Sector**
- **NR Plantation Scenario in India**
- **Governments push for Self Reliance ('Atma-nirbhar Bharat'): Evolution of INROAD Project**
- **Key Features, Timelines & Major Milestones (*First 3Y of Operations*)**
- **Challenges, Interventions and Improvements**
- **Outcomes of the INROAD Project**

India's Unique Position on NR Front

- Maintains 2nd ranking globally, after China, in NR Consumption, for the last several decades
- **High NR: SR Consumption Ratio (64:36) global average (48:52)**
- High consumption ratio by Tyre Sector (68-70%)

Year 23	India	Global
NR : SR Consumption Ratio	64:36	48:52
Consumption by Tyre Sector	70%	71%

- Consistently high growth in consumption, especially during the post-pandemic period, *vis-à-vis* global average

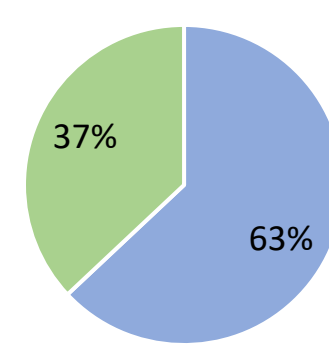
Consumption Growth (% YoY)	2021	2022	2023(p)
India	20.9	5.4	4.1
<i>World</i>	10.9	1.7	1.7

- 100% offtake of domestically produced NR. (negligible NR exports from India)

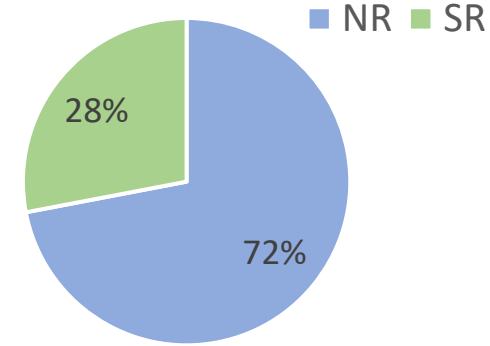
India's NR Footprint... 'greener' than other major Tyre producing countries

Share of NR in Total Rubber Consumption – HIGHEST in the world

Top NR Consuming Countries	NR Consumption in 2023(p) (000 MT)	Share (%) of NR in Rubber Consumption
India	1381	64%
China	5963	55%
Thailand	913	57%
Japan	683	48%
U.S.A.	1034	37%
WORLD	14555	48%



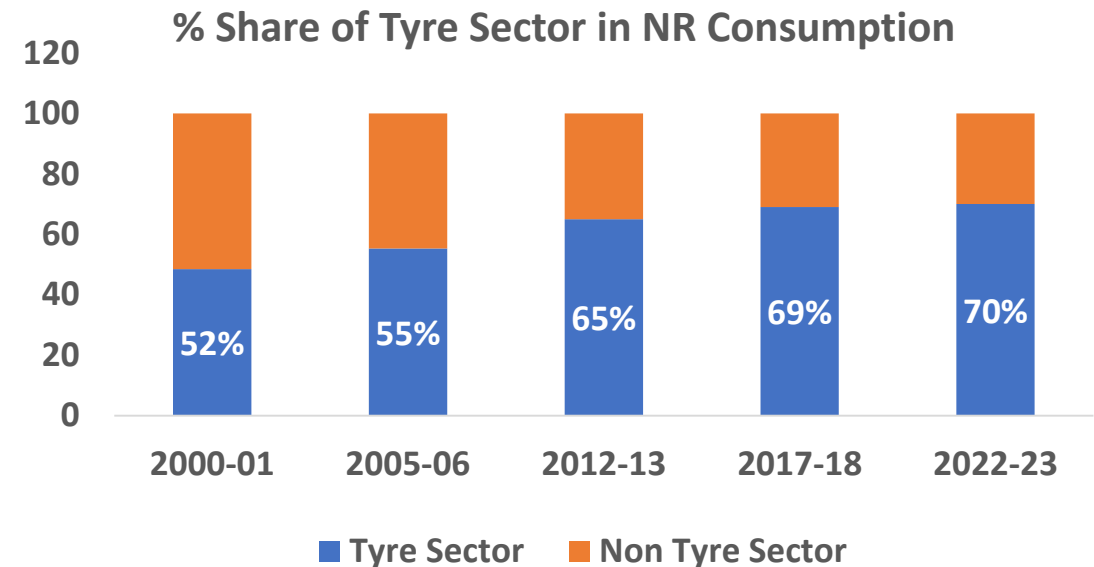
2022



2031 (P)

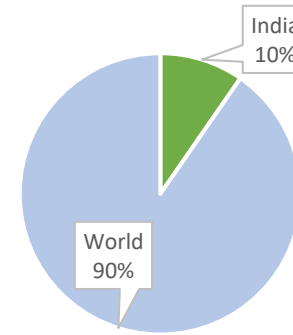
Global NR:SR Consumption Ratio (2021) =47:53

- India's NR consumption ratio (*vis-à-vis* total rubber consumption) has remained consistently high @60% + during the last 5 years.
- As per projections, India's share of **NR Consumption** in 2030 will not only **remain higher than SR** but its relative share to increase from 63% to 72%.
- **Tyre Sector's share** in NR consumption on rising spree contributing towards increased consumption trends

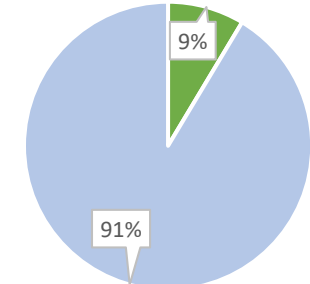


India's share in Global NR Production

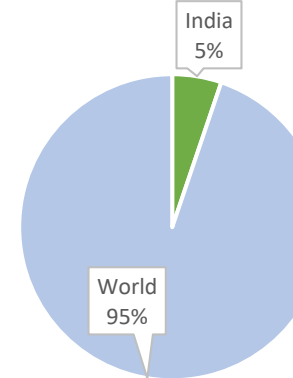
Top NR Producing Countries	NR Production in 2023 ^(p) (000 MT)	Share (%) of World Rubber Production
Thailand	5360	37%
Indonesia	2137	15%
Ivory Coast	1548	11%
Vietnam	1354	9%
India	877	6%
Top 5 (Total)	11276	77%
World Total	14575	100%



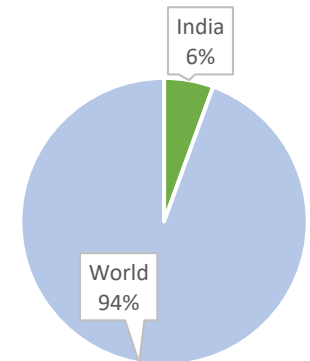
2002



2012



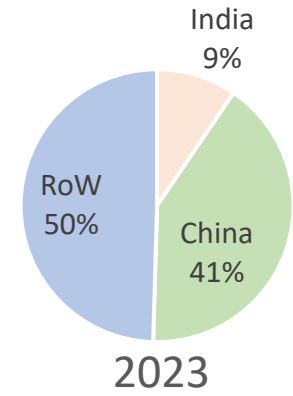
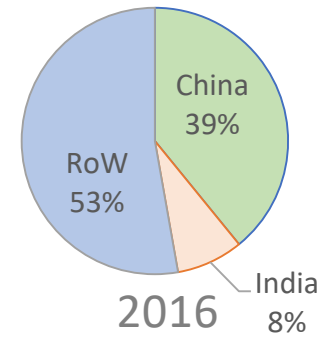
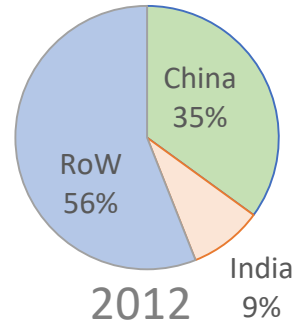
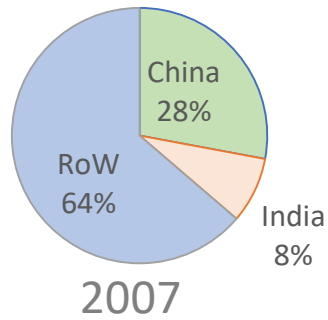
2016



2023

- India's share in Global NR Production has progressively **declined** in the last two decades... from 10% (2002) to 6% (2022)

India's share in Global NR Consumption



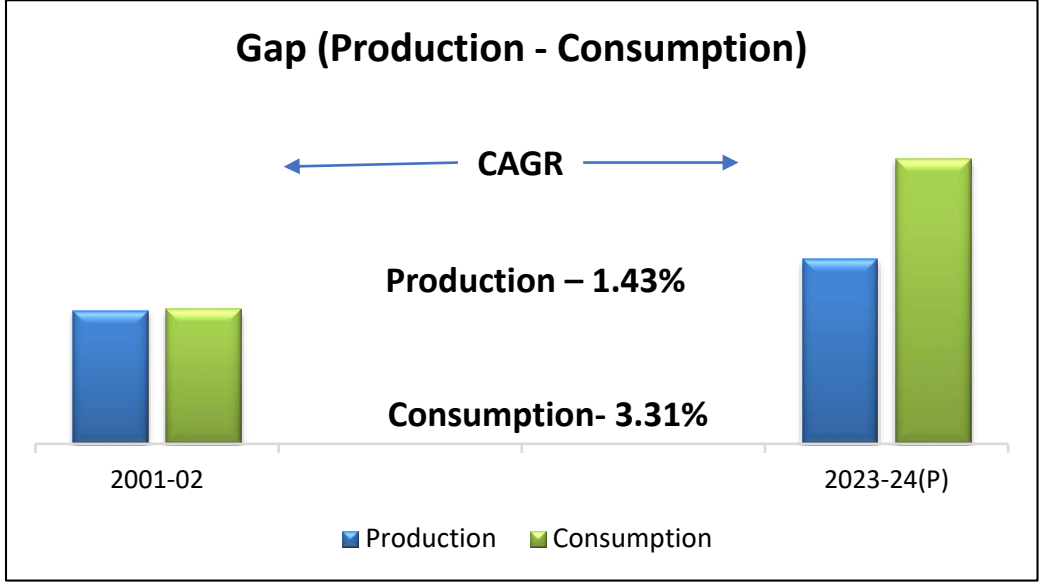
In the last two decades India has maintained global second ranking in NR Consumption (China ahead by 5x)

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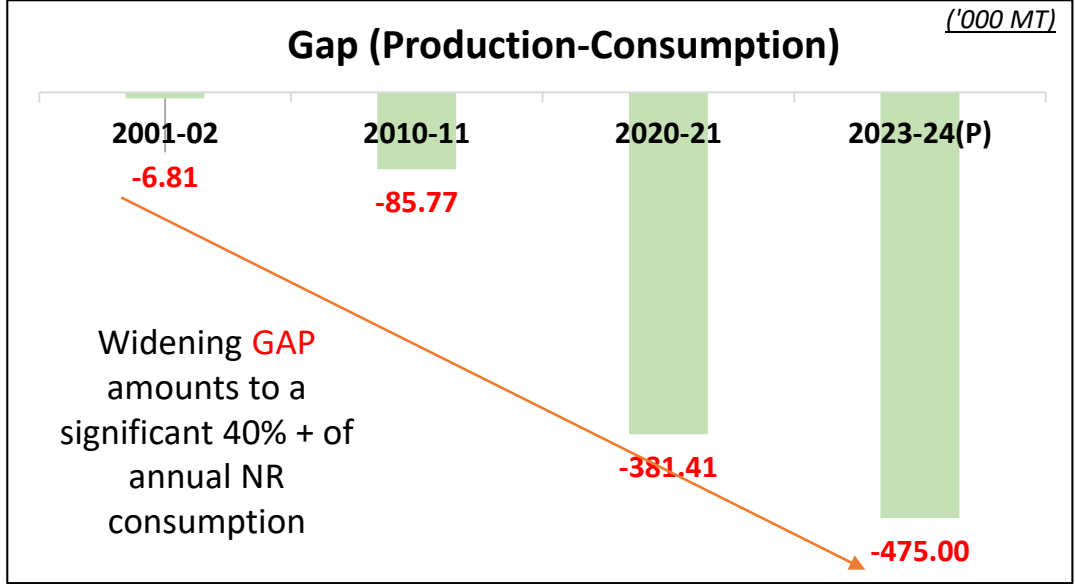
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NR Production and Consumption – Widening gap

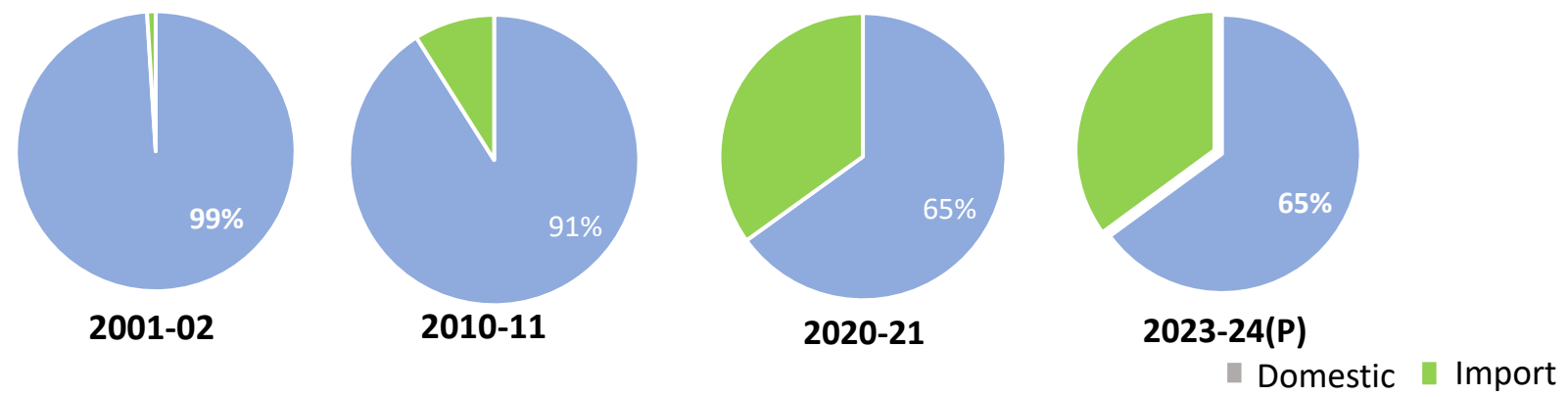
A Continuing concern



2030?
2040?



Domestic NR Production as a % of Consumption



From a position of near self sufficiency in 2001, domestic NR Production has declined in the last 2 decades

Widening Gap in Medium/Long term: A Continuing concern

Import of NR to meet the growing demand – A Continuing challenge in India

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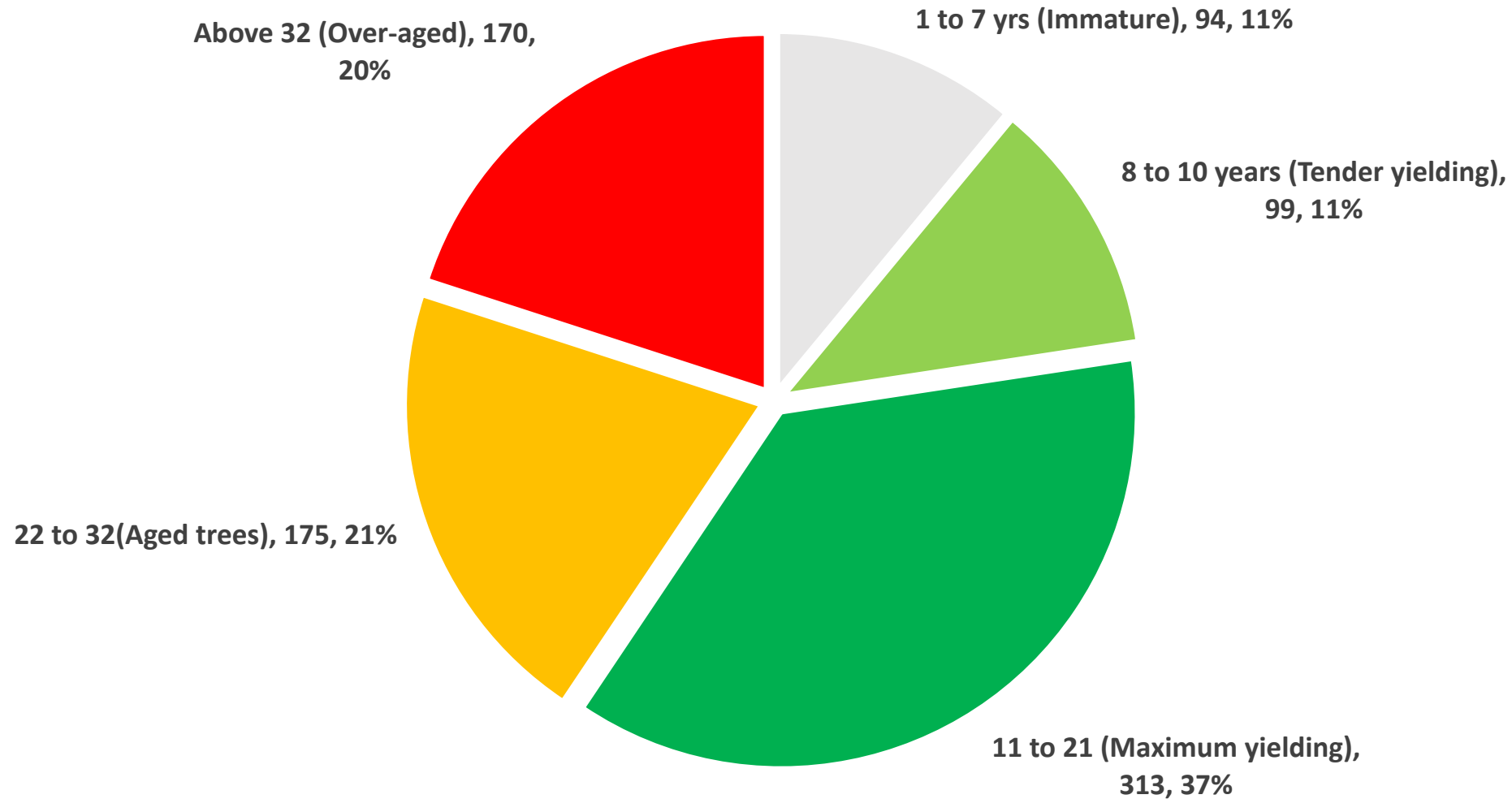
Replanting and New Planting Activity– Insufficient to bridge the Demand-Supply Gap

Replanting ('000 ha)	2012	2015	2020	2025	2030
India	11	15	6	12	14

New Planting ('000 ha)	2012	2015	2020	2025	2030
India	24	16	1	30	10

In 2020, the total new planting and replanting undertaken by the Rubber Board was **Only 7000 ha** which is negligible considering the high growth trajectory of India's NR Consumption

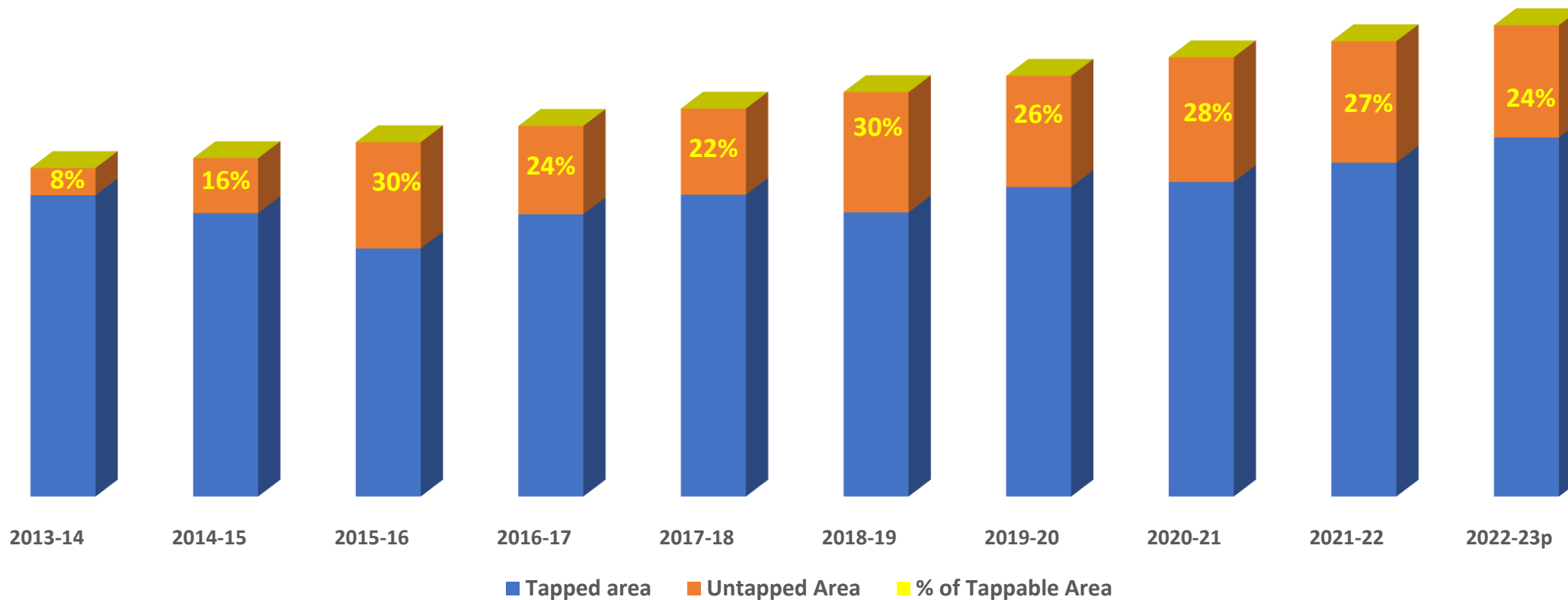
Age Profile of Existing Plantation in India (Area ('000 Ha), % Share)



52% of existing plantation is in a non/less productivity yielding stage.
This alarming trend is progressively worsening with only a limited area (37%) in maximum yielding stage.

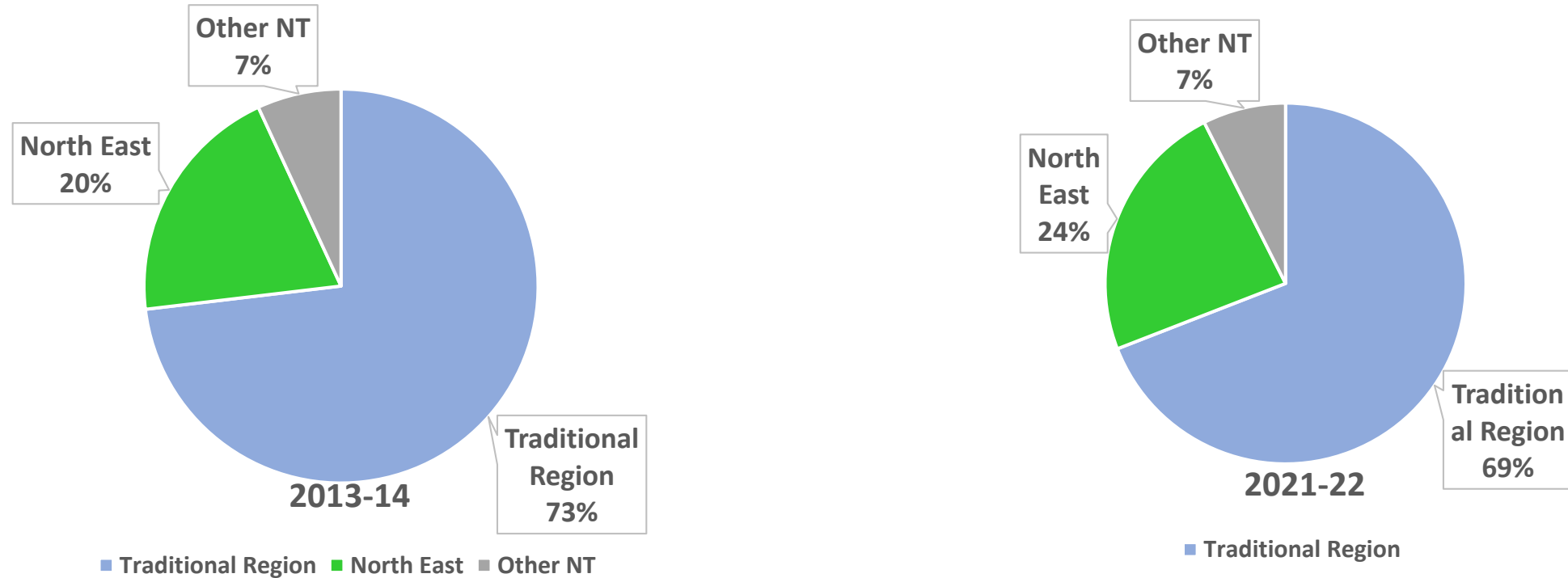
% share of Untapped Area within Tappable area (under Rubber Plantation)- The unused reservoir to be explored

% Share of Untapped Area in Tappable Area



Untapped area under rubber plantation grew from 8% to 24% over a decade, further adding up to the shortage of NR Production

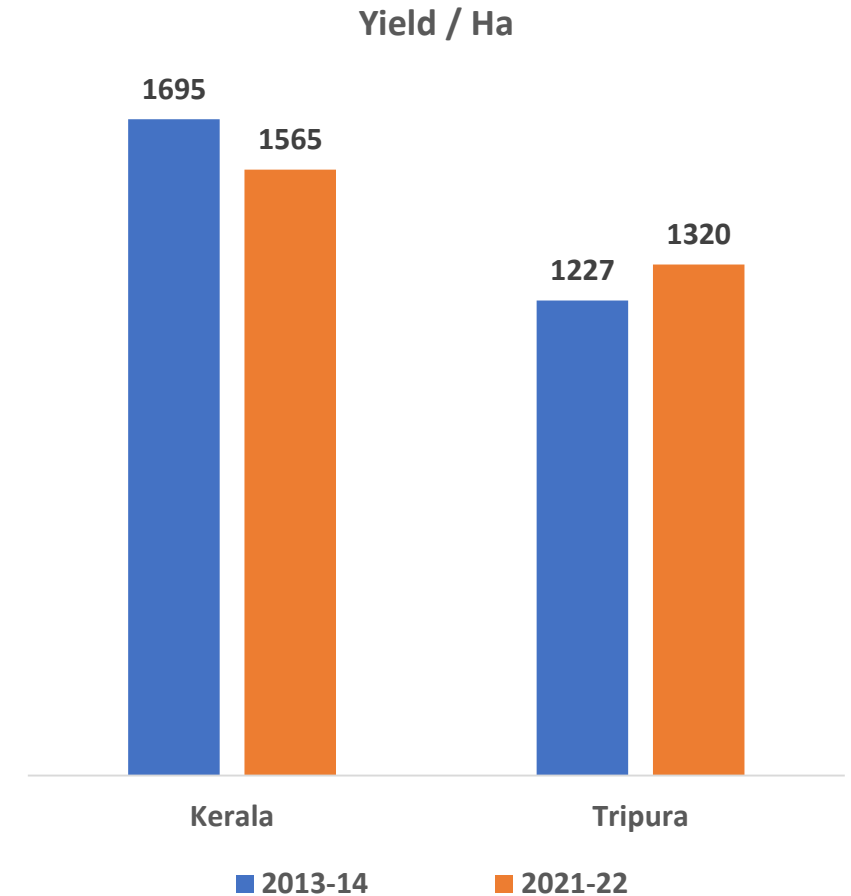
% Share of Non-Traditional Area under Rubber Plantation on the "Rise"



Showing incremental growth from 27% to 31% over a period of 10 years.
Collaborative initiative of **INROAD Project** has a major contribution towards achieving this

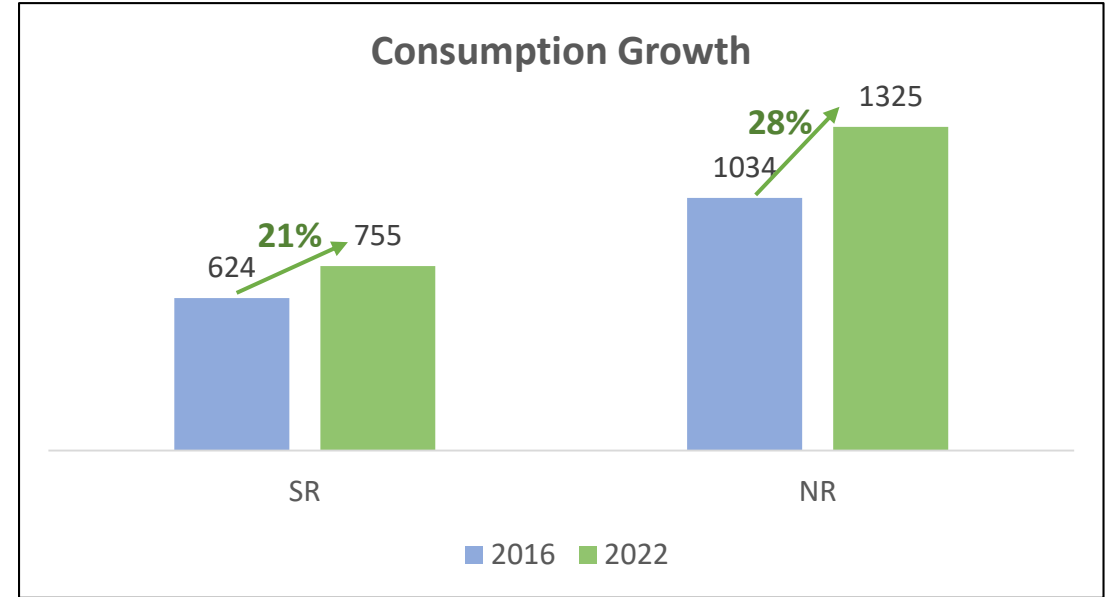
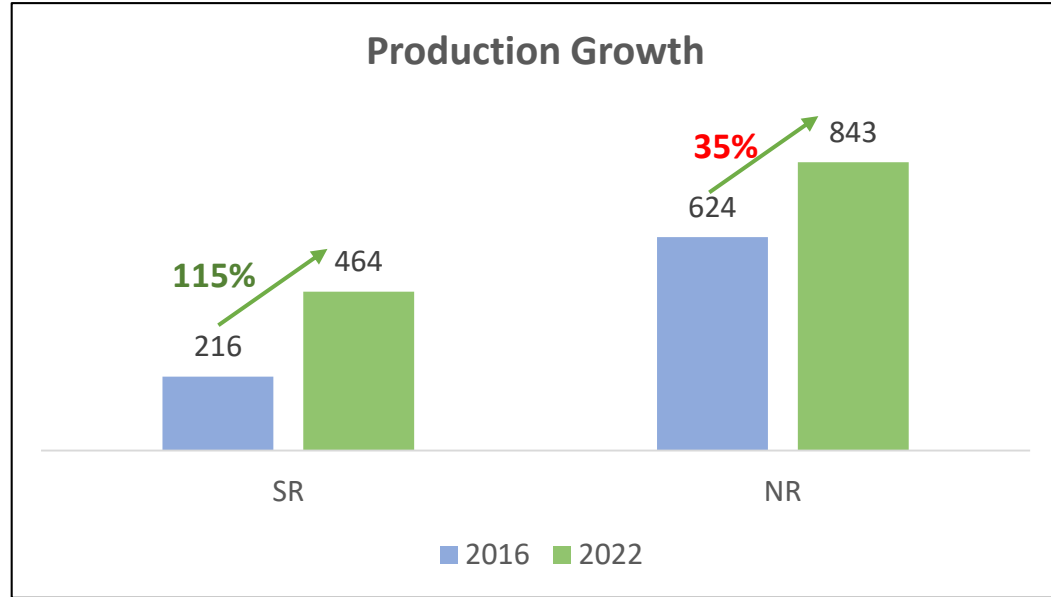
Yield of Non-Traditional Area shows a positive trend

Introduction of new generation and region specific clones in Non-Traditional Region is showing better performance in terms of girth, biomass and yield.

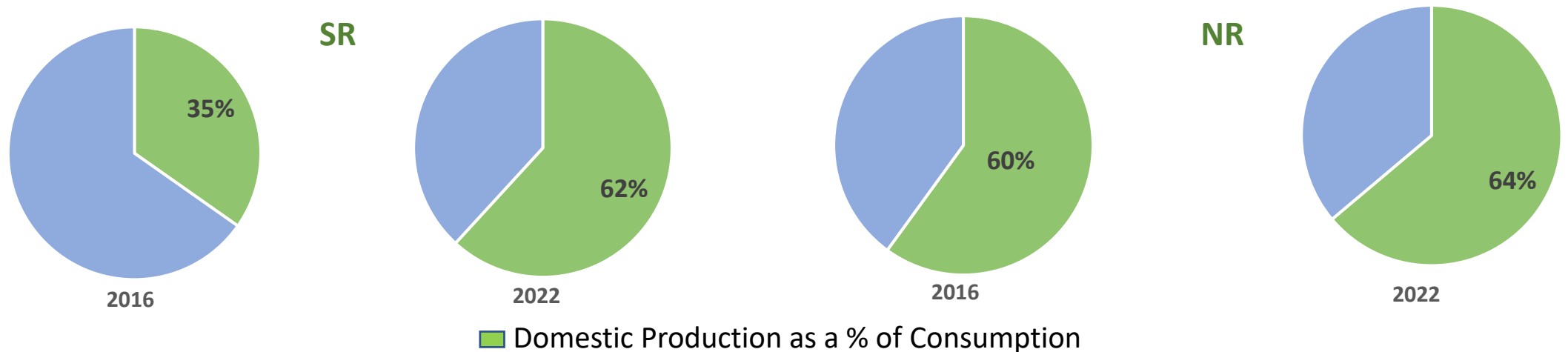


SR Capacities growing at faster pace vis-à-vis NR

- As domestic raw material supplies are not sufficient, Indian Industry is import dependent and faces the risk of raw material uncertainty (as was experienced in 2021 due to global logistics challenges)



Synthetic Rubber Production nearly doubles over a 6Y period and poised to increase further in future



NR Scenario in India

India is a major economy where Consumption of NR has outstripped the production creating a wide gap and generating scope for incremental growth in Production of NR

- Saturation in Traditional areas due to high cost and limited availability of land has led to expansion in the Non-Traditional areas as a potential source for increasing NR Production
- % Share in Production (Traditional: Non Traditional | 81:13)

Prospects of NR plantation in Non-Traditional areas is encouraging due to the following factors:

- Vast availability of land
- Socio-economic growth potential (ready acceptance for adoption of commercial plantation like NR)
- Improved availability of workforce (*via-a-vis* traditional areas)

Government's thrust on self reliance leads to take-off of INROAD Project

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Governments thrust for 'Aatmanirbhar Bharat': Evolution of the Project

Against the backdrop of Govt's thrust on 'Aatmanirbhar Bharat', NR Project for North East sees the light of the day

- Nov 2019: Ideation of the Project in a meeting Hon'ble Commerce Minister (Mr. Piyush Goyal) had with ATMA leadership;
- For the first time, in the world, NR consuming Industry join hands with Govt and its implementing agency- Rubber Board of India- to undertake a plantation programme to create 200,000 Ha new rubber plantation in a span of 5 years in non-traditional region, i.e. NE);





Founding / Host Organisation



Implementing Agency



Participating Member Companies



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Key Features of the Project

Project framework & architecture



- 4 Member Co's of ATMA (*viz.* Apollo, Ceat, JK & MRF) are financial stakeholders. Rubber Board front ends the project by way of technical support and field level connect through its NE regional offices;
- Industry commitment is as given below:

Development of New Plantations

⑩ Investment of 135 Million USD towards new plantation of 200,000 ha

Quality Improvement

⑩ Investment of 13.9 Million USD towards Improvement in Quality of Natural Rubber

Skill development and Training

⑩ Creating a sustainable eco-system of best practices, skilling & training.

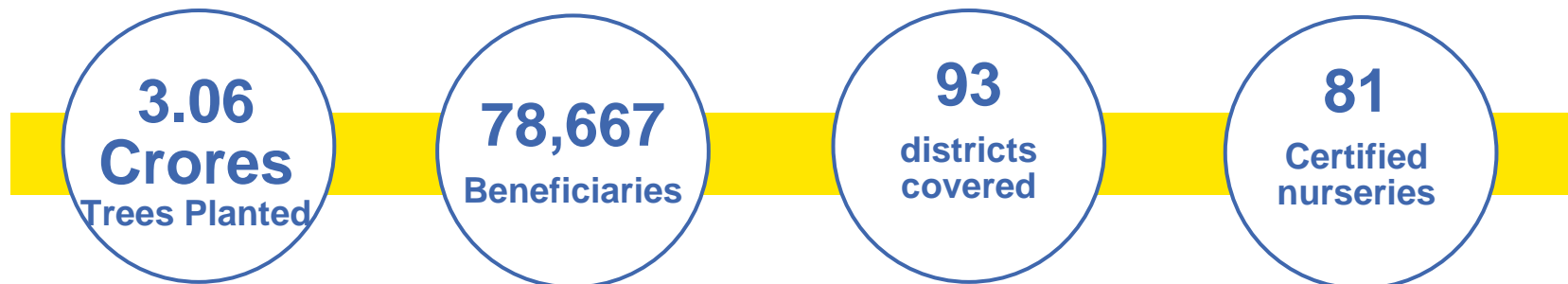


Timelines & Major Milestones | Progress Achieved

- Plantation with recommended high yielding and cold resistant clones of Hevea
- 86% of target achieved despite post COVID and logistics challenges in the initial two years

FY	Target	Achieved
Year 1 (FY 22)	5000 ha	3858 ha
Year 2 (FY 23)	25000 ha	23370 ha
Year 3 (FY 24)	50000 ha	42058 ha
Sub Total (Yr 1,2 & 3)	80000 ha	69287 ha

Key statistics – After First 3 Years of Progress of INROAD Project



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Challenges, Interventions and Improvements

Unprecedented PPP initiative of unparalleled scale...

- Project take off during peak of Covid pandemic
- Logistical challenge of transportation of millions of saplings from Kerala/TN to the NE (as nurseries in NE had closed due to absence of / limited new planting & replanting for last several years.
- Notwithstanding the challenges, millions of saplings transported by Railways covering a distance over 2500+ Kms. First time ever in the world.



Challenges, Interventions and Improvements

Timely Interventions leading to remarkable Improvements

- Survival Rate shows Incremental Growth:
 - Transportation damage resulting in low survival of Planting Material
 - Nursery revival in NE leading to minimal transportation from Traditional Region
 - Promising results of high Survival rate 86.7% (Tripura), 94% (Mizoram)
- Timely Distribution of Planting Material:
 - ~90% of Planting Material distribution within the Planting season (*1st May to 30th Sep*), further improving the Survival Rate for Yr 3 Plantations
- EUDR Compliance:
 - In view of the newly imposed EUDR (European Union Deforestation Free Regulation) all future Plantations to be planted under Deforestation Free Land ensuring EUDR compliance for Consuming Industry

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Outcomes of the Project

Opportunities, Learnings and Key Takeaways

- Historic first ever not only for India but globally;
- Revival of nurseries and supportive infra in NE
- **Direct connect with small farmers and benefits of their economic upliftment and participation in a socially relevant project;**
- **Enhanced Livelihood Opportunities for marginal farmers/ growers having small holdings**
- Industry engagement now towards capacity building leading to improvement in quality & yield
- Technology orientation & infusion by way of Geo tagging, App based connect etc..
- Unique and Collaborative partnership between Central Government, State Governments, their implementing agencies and tyre industry

Here are the four, where are the rest



You cannot change the entire world, but sure you can change that part of world where you live

Is there any value difference for the people in left to those who are on right?



Create happiness in the life of simple people. Are they less valuable than icons?

For Questions/Queries:

INROAD Project

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