



Opportunities & Challenges in Certification of Natural Rubber in India

NCCF: PEFC Forest/ToF Certification Standards

*Arun K. Bansal, Chairperson,
Promotions, Communication and Advocacy Group NCCF*



Presentation Outline

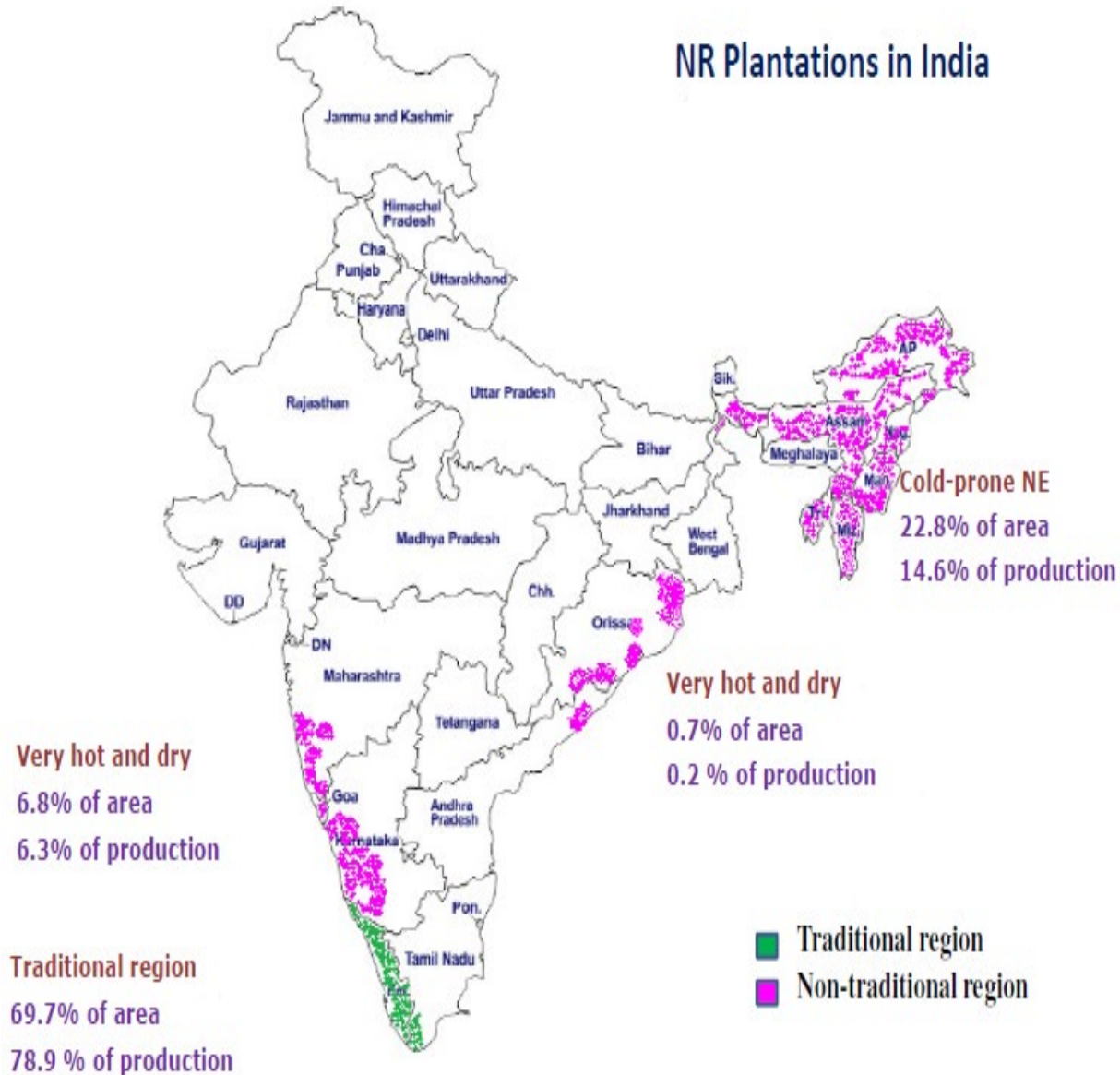
- Rubber Sector – importance in India
- Sustainable Rubber Value Chain & Certification
- Case studies in certification of Rubber plantations
- Way Forward

Global Natural Rubber Scenario

- ✓ Natural Rubber – produced from *Hevea brasiliensis* trees grown in tropical humid climatic conditions.
- ✓ Current NR world production: 12.40 MT
- ✓ **Major NR producer countries:** Thailand, Indonesia, Malaysia, Vietnam, China and **India**
- ✓ **Main NR consumer countries:** China, **India**, USA, Japan, Thailand, Indonesia and Malaysia.
- ✓ 85 % of NR is used by TYRE industry & 75 % produced by large number of small holders
- ✓ Due to unique properties of NR over Synthetic Rubber higher demand of NR for medical and many other products - airplane tyres, automotive parts/tyres, footwear etc.

Indian Scenario NR

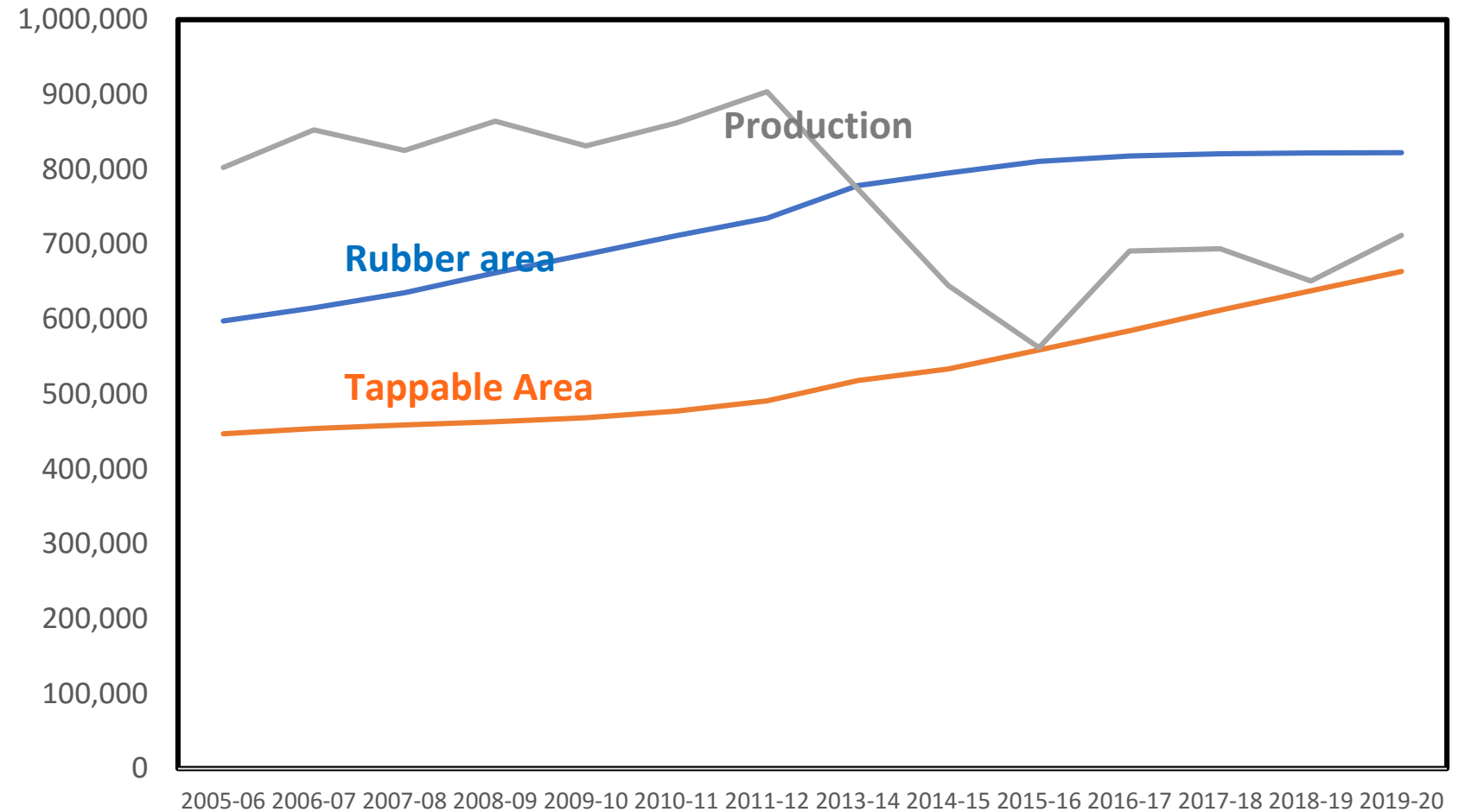
NR Plantations in India



- ✓ **Kerala and Tamil Nadu** account for 81% of the total NR production
- ✓ Other states: Tripura, Karnataka, Maharashtra, Odisha, Assam, West Bengal
- ✓ **8.2 lakh ha** rubber plantations (6.6 lakh ha tappable)
- ✓ 13 lakh small holders (area < 10 ha.) average plantation size 0.57 ha.
- ✓ Also PSUs ~ 25,000 ha.- Kerala Plantation Corporation, Arasu Rubber Corporation (TN), Karnataka State Forest Dev. Corporation, Tripura Forest Development and Plantation Corporation, Odisha Forest Dev. Corporation
- ✓ Plantation sector employs over 6 lakh workers
- ✓ Processors 207, Consumer industries 3845, Dealers 8078.
- ✓ **Rubber Board** a statutory body of Ministry of Commerce, GOI, under the Rubber Act 1947, for overall development of the rubber industry.

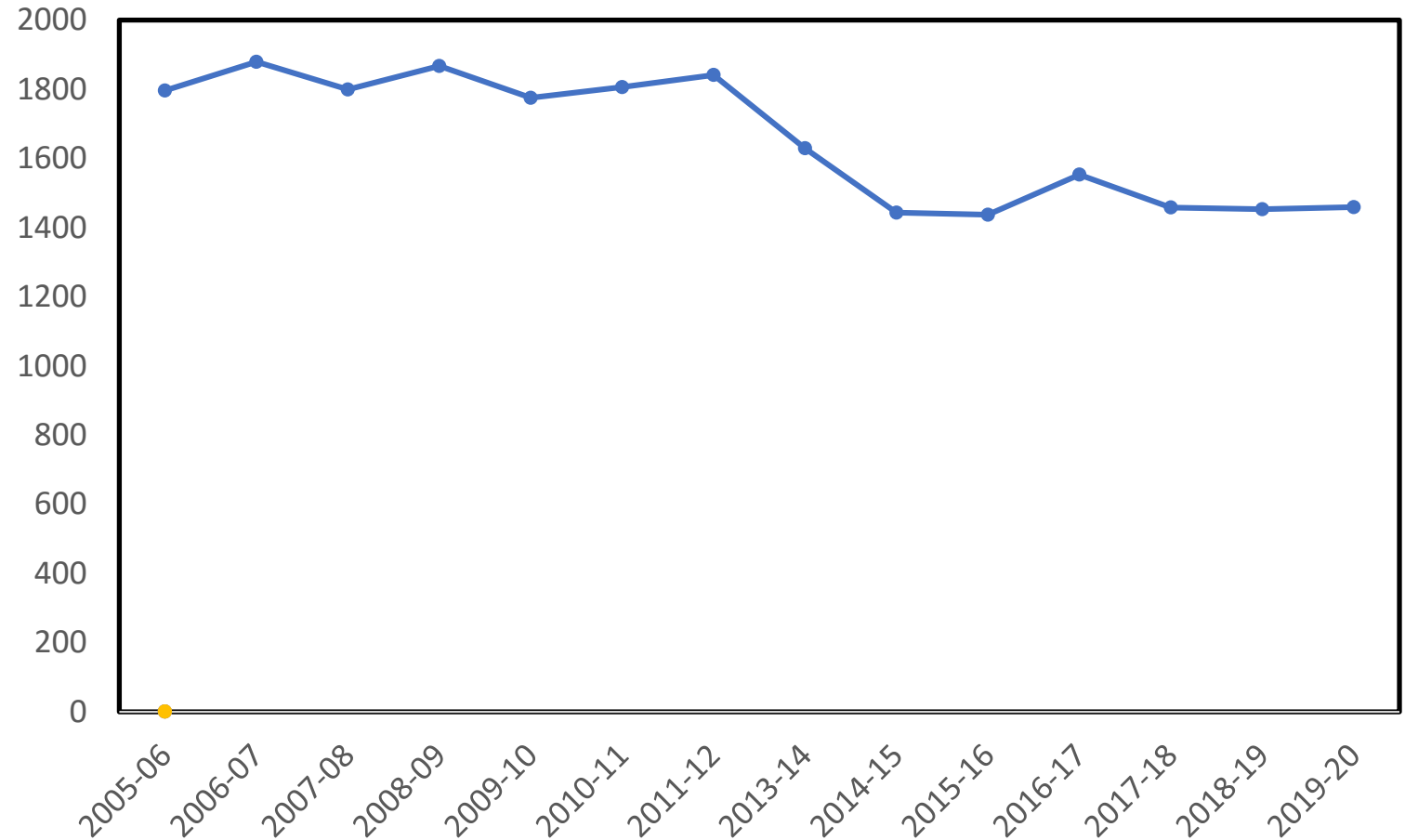
Rubber/Tappable Area (ha) vs Production (tons)

- ✓ Increase in rubber & tappable area over the years
- ✓ Production has been unsteady
- ✓ Appx 30% of RA has remained untapped



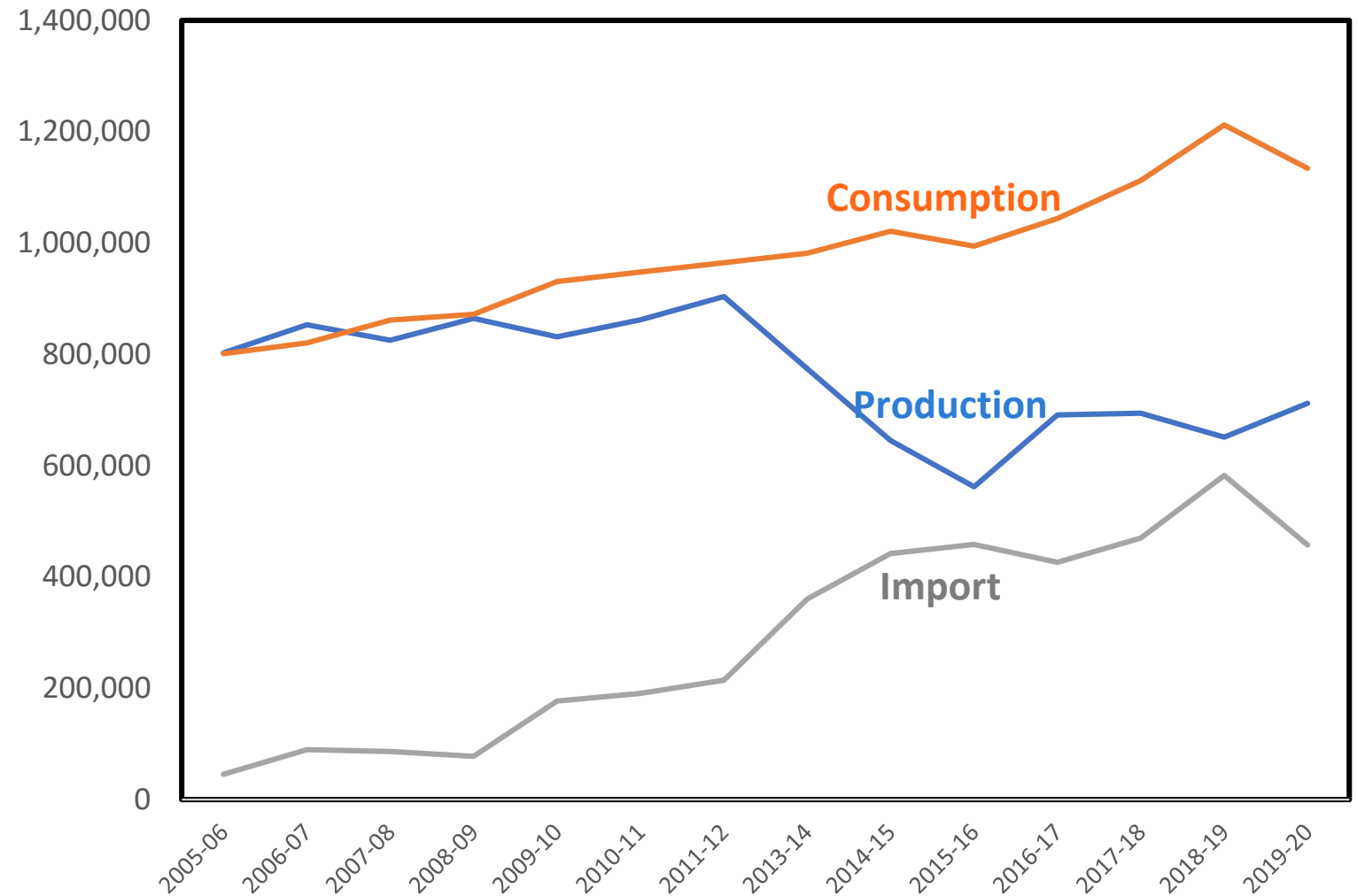
Average Yield (kg/ha)

- ✓ Reduced over years
- ✓ Remained constant recently (at a lower level)
- ✓ Decline in yield kg/ha. :
1800 in 2011-12
1453 in 2018-19

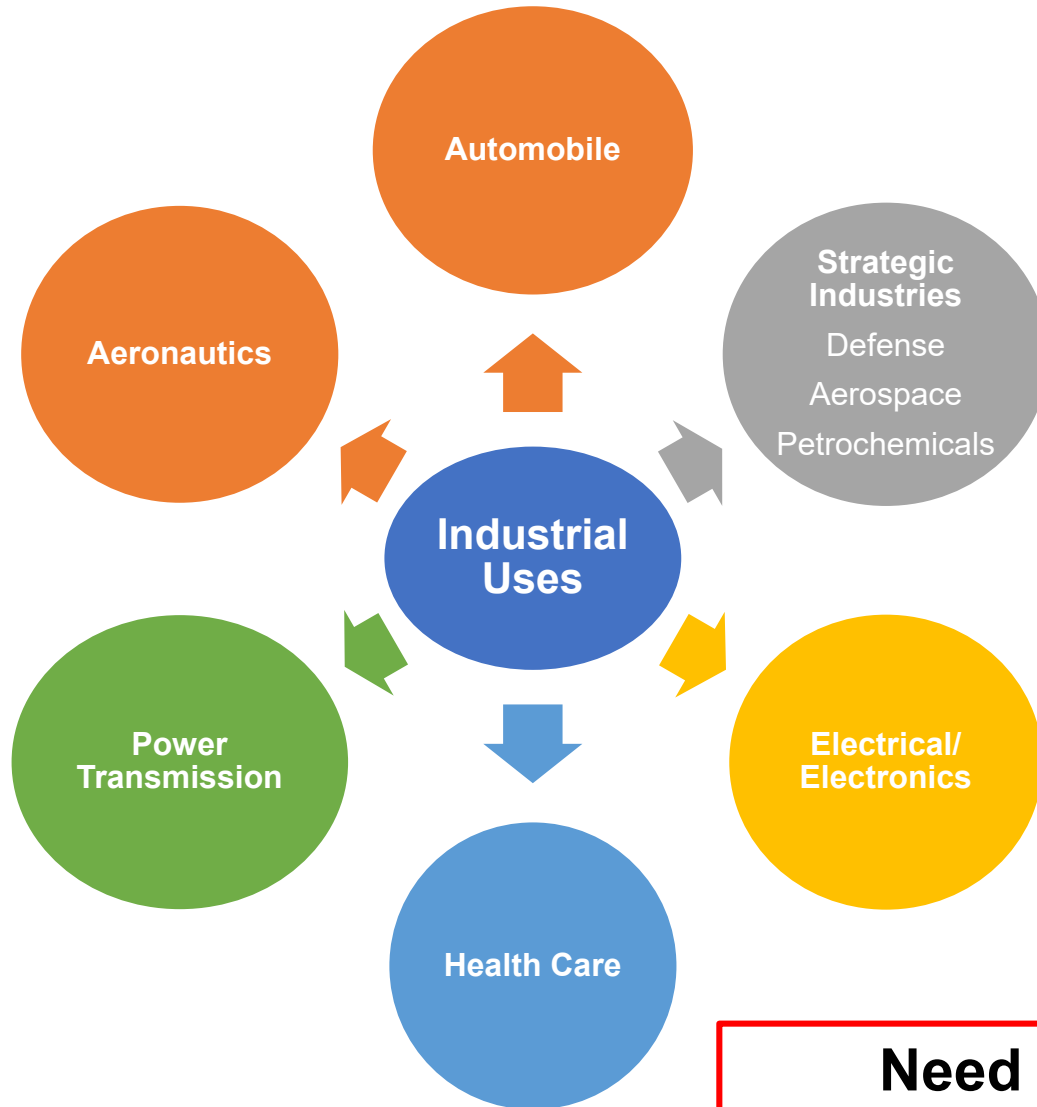


Annual Production – Consumption - Import (tons)

- ✓ Consumption has remained higher than production
- ✓ Production has remained unsteady;
- ✓ Production has started to increase recently (from 2015-16)
- ✓ To meet demand, imports play important role



USP of Indian Natural Rubber



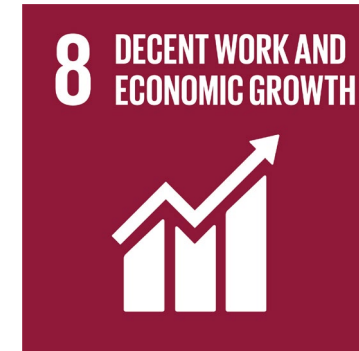
- Quality
- Indian farmers are equipped to process world class rubber.
- In-house quality control systems with advanced analytical and monitoring equipment are installed in all rubber processing industries in India to meet stringent national and international standards like ASTM, ISO and BIS.
- Ribbed Smoked Sheet (RSS) grades produced in India conform to International Green Book Standards.

Need for policy and operational interventions for sustainable development of the domestic Rubber Industry

Rubber Value Chain and SDGs

Natural rubber value chain is an important land user in several states, a producer of **renewable material rubber**, required by several economic sectors: *automobiles, aeronautics, healthcare, electrical & electronics, materials handling, power transmission*, and also **rubber wood**, sequestering atmospheric carbon – reducing pressure on forests, while supporting livelihood of millions of smallholders and other workers. It has a role to play for both **adaptation and mitigation of climate change**.

Rubber value chain interacts with all 17 SDGs, but has great potential to lead, influence and accelerate action to make progress on:



Key Challenges in sustainable production of NR in India & opportunities

- ✓ Production potential ~ 1 million tons of NR/per annum
 - ✓ Actual production 0.7 million tons (2019-20)
- ✓ Increase in untapped area i.e. 30% of rubber plantations remain untapped.
- ✓ Decline in avg. yield - 1800 kg/ha to 1453 kg/ha (2018-19) – Need for Root Cause Analysis
- ✓ Increasing imports ~ 40% of total NR consumption is met through imports
- ✓ Replanting old/mature plantations – optimal utilization of rubber wood
- ✓ Need for expanding rubber plantations beyond traditional regions without contributing to deforestation.
- ✓ Huge export potential for NR products
- ✓ Carbon offset potential of Rubber Plantations – sequestered carbon continues to remain locked - use of rubber wood processed adopting appropriate processing technologies

Sustainability standards

buyers are increasingly wanting to have proof of sustainable and legal origin of rubber to demonstrate their commitment to sourcing materials from sustainable sources and sustainable supply chains

NCCF/PEFC certification is one of the ways to prepare for sustainability of rubber plantations and supply chain



Accelerate outcomes of SDG's, climate resilience, land restoration and biodiversity conservation while ensuring community rights, livelihoods, health and labour welfare, community rights, traceability, quality, value chains and export promotion.

Meeting the objectives of various international commitments under the UNFCCC, UNCCD and UNCBD etc.

Help the country in increasing the manufacturing of certified products and boost environmentally conscious consumerism.

Credible Certification System to ensure sustainability

Certifications are market-based mechanisms to promote sustainable use of forest resources and also to establish the link from the forest to the market, tracking forest/tree-based products from the sources to the final product.

A credible certification system relies upon three separate functions, performed by **independent organisations**:

Standard Setting:

process of defining certification requirements in collaboration with stakeholders (eg: NCCF)

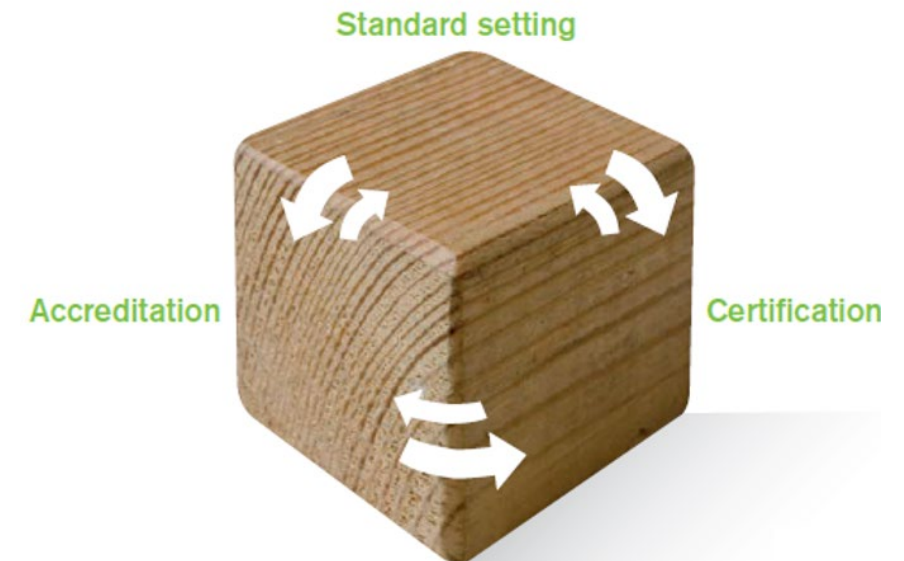
Certification:

process of checking whether an organization fulfills certification requirements; carried out by Certification Bodies

Accreditation:

process of assessing competence of CBs; carried out by an Accreditation Body.

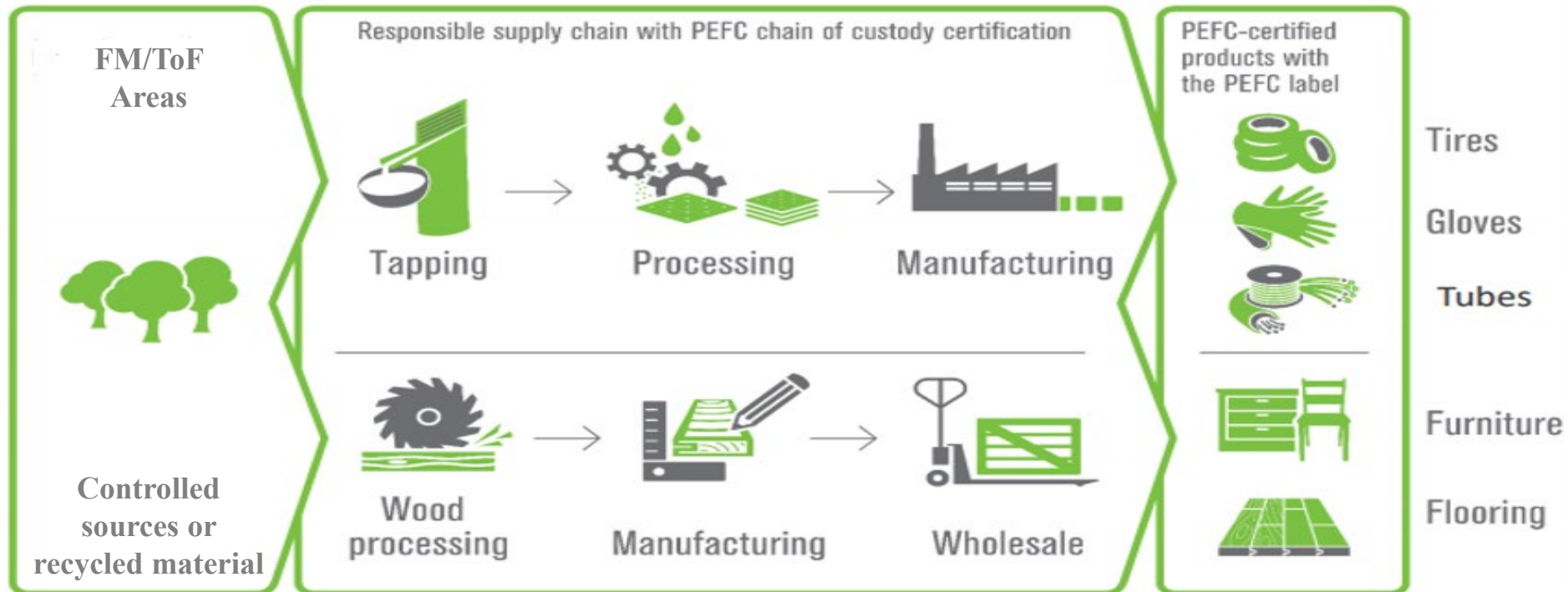
[For India: National Accreditation Board for Certification Bodies (**NABCB**) a member of International Accreditation Forum (IAF) and signatory to its Multilateral Recognition Arrangements (MLA) for ISO 17065]



Forest certifications demonstrate responsible management through independently verified compliance, by a third party, with a set of underlying principles, criteria and indicators that include ecological, social, economic and labour requirements.

Types of Forest/ToF Certification

Certification of a management unit (Forest plantations or group of small plantation areas:
 Process leading to issue of Certificate by an independent party, which assesses forest/ plantation against defined standards – Forest Managers, Private Owners



Chain of Custody certification (CoC)

Tracking of products from certified forest / plantations to point of sale to ensure that the product is obtained from a certified source

Forest – Primary & Secondary Manufacturers- Traders- Retailers

NCCF- PEFC Forest Management Certification Standard

NCCF- ToF Certification Standard



CERTIFICATE OF ENDORSEMENT



This is to certify that the

NCCF FOREST CERTIFICATION SCHEME

submitted by the PEFC National Governing Body member in India

NETWORK FOR CERTIFICATION AND CONSERVATION OF FORESTS

was verified as meeting the PEFC Sustainability Benchmarks and subsequently endorsed by the PEFC Council General Assembly on 27 February 2019.



This endorsement is subject to ongoing PEFC Council membership, continued compliance with the PEFC Sustainability Benchmarks and timely fulfillment of the endorsement milestones. Any revision of the system has to be submitted to the PEFC Council for assessment.

The image shows the handwritten signature of Peter Latham.

Peter Latham, OBE,
Chairman

The image shows the handwritten signature of Ben Gunneberg.

Ben Gunneberg,
Secretary General

PEFC Council – Programme for the Endorsement of Forest Certification Schemes, ICC Building G1, Route de Pré-Bois 20, CH-1215 Geneva 15, Switzerland – www.pefc.org

- ✓ This is the only available Indian Scheme/Standard
- ✓ Developed by NCCF through a transparent & multi-stakeholder process
- ✓ Standard endorsed by the PEFC, giving it an international recognition.
- ✓ This scheme is being used by many states for certification.

- ✓ First such standard in the world specially for Tree outside Forests
- ✓ Developed by NCCF through a transparent & multi-stakeholder process.
- ✓ In process of getting endorsement from PEFC for international recognition.
- ✓ This scheme is eminently suitable for small holder rubber plantations – certification of sustainable management of rubber plantations as also products both Rubber and Rubber Wood in conjunction with PEFC CoC.
- ✓ **Smallholders can be organised in suitable groups for Group Certification**

NCCF – FM / ToF Certification Standard

Themes	Description
A	Compliance to National/State Laws and land tenure system
B	Written Management Plan, Implementation of prescriptions & periodic reviews
C	social, economic, environmental impact of management activities
D	Economic viability
E	Social and community right and relations
F	Ecological integrity and vitality/health of management units

Criteria & Indicators

FM Standard

C: 59; I: 259

ToF Block plantations

(Agroforestry)

C: 28; I: 98

ToF Non-Block

(Linear plantations /Standalone trees)

C: 16; I: 48

Benefits of Certification (Also components of Standards)

Environmental	Social	Management & Economic
No negative impact on environment	Emphasis on workers health and safety	Third Party, Market Driven
No use of banned Chemicals/ Pesticides	Ensures social equity and livelihood opportunities to locals	Regular staff/workers training
Prevention of land degradation	Ensures legal labour wages and facilities	Regular monitoring of management activities
Conservation of water catchment and water bodies	Supports development of local communities	Ensures legality and economic viability
Safe collection and disposal of toxic waste	Capacity building for women	Potential access to new markets
	Respect for rights of tribals, local communities and workers	Brand recognition, preference and value addition due to use of certification logo
	Compliance with ratified ILO Conventions	

Group Smallholder Certification

- ✓ Achieving forest/plantation certification can be costly, in terms of both time and money.
- ✓ Individual certification is perfect option for large organisations to demonstrate their sustainable management practices.
- ✓ Smallholders can be organised in suitable groups for Smallholder Group Certification.

Benefits:

- ✓ Reduced certification costs since only a representative sample of group members are audited annually for assessing management practices against requirements of standard.
- ✓ Lower operational cost as certain activities (e.g. management planning, monitoring) can be carried out at group level.
- ✓ Group entity can provide assistance to smallholders by enhancing their capacities in bringing their operations in compliance with requirements of standard.
- ✓ Improvement in practice in timber/rubber production towards compliance to international best practices in terms of environmental and social values, market linkage and access.

Chain of Custody (CoC) Certification

- **Single-site Certification:** 
For companies that operate one facility
- **Multi-site Certification:** 
For companies that operate several facilities
- **Group Certification:** 
For small, independent businesses forming a “group” for the purpose of certification to reduce costs.

Allows to demonstrate responsible supply chain management to customers and provides a variety of benefits, like:

- ✓ Access to new markets
- ✓ Business leadership on sustainability
- ✓ Compliance with relevant laws/regulations
- ✓ Proof of traceability
- ✓ Use of the label/trademarks

Tools being developed for inclusion of small holders with certification

- Risk Assessment Tool
- DDS System for Rubber small holders

Current Status of NCCF-PEFC Certification



4.5 lakh ha. in 41 Forest Divisions of Uttar Pradesh Forest Corporation

43 Chain of Custody Certificates

✓ Pulp & Paper, Packaging, Furniture, Textile, etc.

Few Names of Industries:

- ✓ Durian Industries Ltd.
- ✓ Birla Cellulosic (A Unit of Grasim Industries Ltd)
- ✓ Eximcorp India Pvt. Ltd
- ✓ Hindustan Pencils
- ✓ BILT Graphic Paper Products Limited
- ✓ Huhtamaki Foodservice Packaging India Pvt. Ltd.
- ✓ Welspun India Limited
- ✓ and many more.....

**Total PEFC certified Forest 330 Mha (75% of total certified forest in the world)
in 55 countries , 750 000 Forest owners, CoC 20,000 Companies**

Tripura Forest Development Corporation

Once and age-old unsustainable rubber and bamboo plantation now India's only FM-CoC certified organisation dealing with rubber

✓ Resettled around 1200 tribals and forest dwellers

Positive social and environmental impacts of this intervention have been:

- ✓ rehabilitation of degraded forest areas
- ✓ improved implementation of government schemes
- ✓ improved financials of corporation
- ✓ substitution of chemical fertilizers with organic manure
- ✓ climate change adaptation,
- ✓ carbon sequestration, soil and moisture conservation

✓ Created local employment for around 3500-4000 people

Through activities like latex removal, wood harvesting, rubber processing and value addition to wood procured, and more opportunities

Attempted to diversify their business i.e. rubber, bamboo and their value added products

Certification case study – India: Coco Latex - Kerala

Coco Latex, an export-oriented subsidiary of Duroflex based in Kerala, first company in India to adopt GOLS certified by Control Union

A number of smallholders certified under Global Organic Latex Standard (GOLS), considered the world's first comprehensive standard for organic latex products.

Farmers organized through Kerala Organic Rubber Farmers Association - support for learning and sharing organic farming practices

Half of the raw latex used in production is sourced from company-owned plantations; the remainder from independent smallholders with an average plot size of 2 ha.

Raw latex produced is used in production of mattress cores and rubberized rubber coir - exported to buyers located in United States, Korea, Germany and the Middle East



Rubber Certification in Thailand

- Rubber and rubber wood production is vital income source, particularly smallholders (areas as small as .32 ha)
- Rubber growers' cooperatives are a strong institutional platform for farmers in Thailand. With more than 400 active cooperatives, rubber farmers join together to gather natural latex, harvest rubber timber, and transport it to factories.
- Sector is facing challenges, as international buyers are increasingly requesting proof of sustainability and legality.
- TFCC and PEFC have launched a group certification project supporting smallholders.
- Project supports Klongprang Cooperative in implementing group certification for 1000 ha. of forest managed by small-scale rubber growers
- Pilot project will build a group certification model (only cost-effective option) and supporting mechanisms to enable more smallholders to achieve certification in the upcoming years.



Way Forward - Intervention by Rubber Board

Piloting Rubber Small holder Group Certification

- ✓ Identification of suitable groups Rubber Producers Societies (RPS), Self Help Groups (SHGs), RPS companies and Cooperatives.
- ✓ Preparatory study of present Group Structures, SOPs, Capacity Development, Supply chain
- ✓ Identify need for additional capacity development/ documents to make groups certification ready
- ✓ 3rd party audit by accredited certification body & issuance of group certificate

NCCF can be knowledge partner of Rubber Board/Industries related to Certification of Rubber Plantations and CoC

Suggested Sustainability Roadmap coming five years

- ✓ Certification of at least 50% of total small holder rubber plantations in India
- ✓ Certification of all rubber plantations of Corporations
- ✓ 1,00,000 ha of land be under new rubber plantations
- ✓ Annual/Biennial 3-4 training programmes for Rubber Board officials and plantation owners and processing industries

Promoting use of Indian Natural Rubber Logo

- **Rubber Board has developed Indian natural rubber, a logo** and made it available to public.
- NR exporters who join the branding scheme are permitted to use the “Indian Natural Rubber Logo” on all their produce that conforms to relevant standards.
- INR brand is awarded to NR exporters on conformation of grade specifications, packing and labelling standards, as defined by the Board.
- Logo carries quality assurance of Rubber Board, it commands a strong brand call and symbolizes a seal of trust on quality of NR produced and exported from India.

Support & Opportunity for Industry

- ✓ Automotive Tyre Manufactures Association (ATMA) have announced to invest Rs 1,100 crore to undertake rubber plantation in additional 2,00,000 ha of land in North East India in coming five years
- ✓ MRF & Apollo Tyres are members of Global Platform for Sustainable Natural Rubber (GPSNR) from India
- ✓ Move towards sourcing sustainable rubber, have in place rubber sourcing polices including sustainability
- ✓ Support Pilot Certifications in India
- ✓ Tap the certified rubber wood market

More Research on Sustainability and Climate Change aspects of Rubber

- ✓ There is a need for Rubber Board and Associations in the private sector to influence intergovernmental organisations to pro-actively take up issues of :
 - a) Impact of climate change and mitigation measures
 - b) Ways of balancing the demand and supply and projections for future
 - c) Promote the ways in which NR could be used in diverse set of industries
 - d) Challenges faced by the small growers and possible roadmap for sustainable rubber production

- ✓ Carbon dioxide sequestration rate of rubber trees is very high as compared to many other plant species and even tropical forests
- ✓ Production of 1 ton of NR causes absorption of 3.24 tons of CO₂ from the atmosphere and release of 2.35 tons of Oxygen
- ✓ Under the Clean Development Mechanism (CDM), one of the three forms of carbon trading mechanisms under the Kyoto Protocol, rubber planting is theoretically eligible for carbon credits that can be obtained and sold in the CDM market

Thank You!!

Network for Certification and Conservation of Forests

Contact:

Arun K Bansal

Chairperson, NCCF PCA-WG

Email: pca.mail@nccf.in

banslka@yahoo.in