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The Rubber Economy of Kerala

Issues and Challenges

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A Policy Brief

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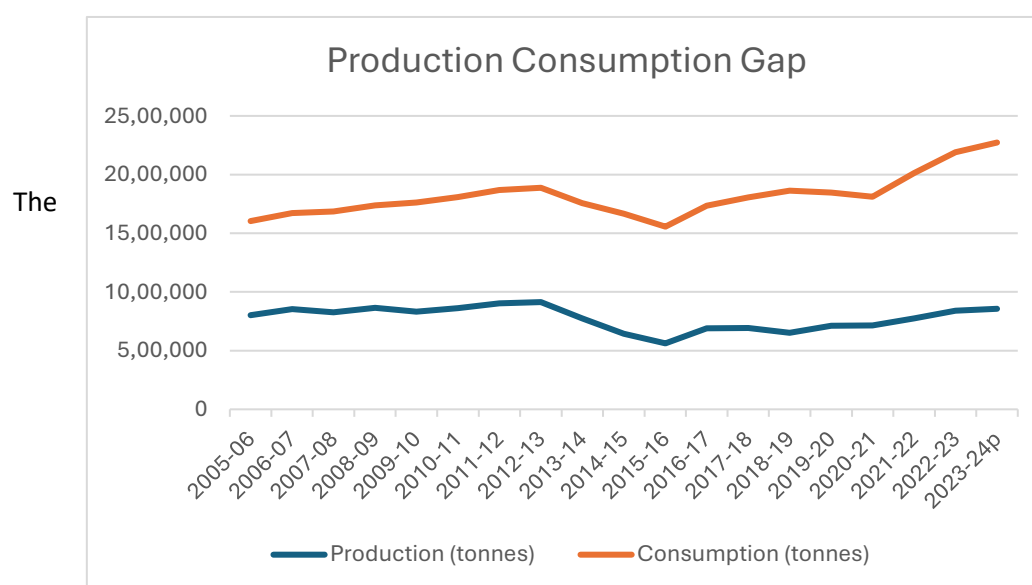
The Rubber Economy of Kerala

Issues and Challenges

The rubber industry is one of Kerala's most significant economic sectors, accounting for nearly 75% of India's total natural rubber production and serving as the primary agricultural commodity of the state. Once considered a reliable cash crop that significantly contributed to rural livelihoods and the state's economy, rubber cultivation is now facing a period of deep uncertainty. Over the past decade, the sector has been hit by a combination of declining yields, inconsistent prices, labor shortages, and environmental pressures. The once-thriving rubber plantations now reflect a sector grappling with stagnation and disinterest, especially among small and marginal farmers who form the backbone of this industry. Global market shifts, climate variability, and lack of innovation have further complicated the picture, making it imperative to reassess the challenges and explore sustainable solutions for Kerala's rubber economy.

Production Consumption Gap: The production of NR has remained stagnant at around 8.5 lakh tonnes throughout the period 2005-06 to 2023-24 while the demand for NR has increased from about 8.0 lakh tonnes to around 14 lakh tonnes. The stagnation in production, along with the increasing consumption demand for NR has created a widening gap between the two. What has led to the stagnation in production needs to be explored.

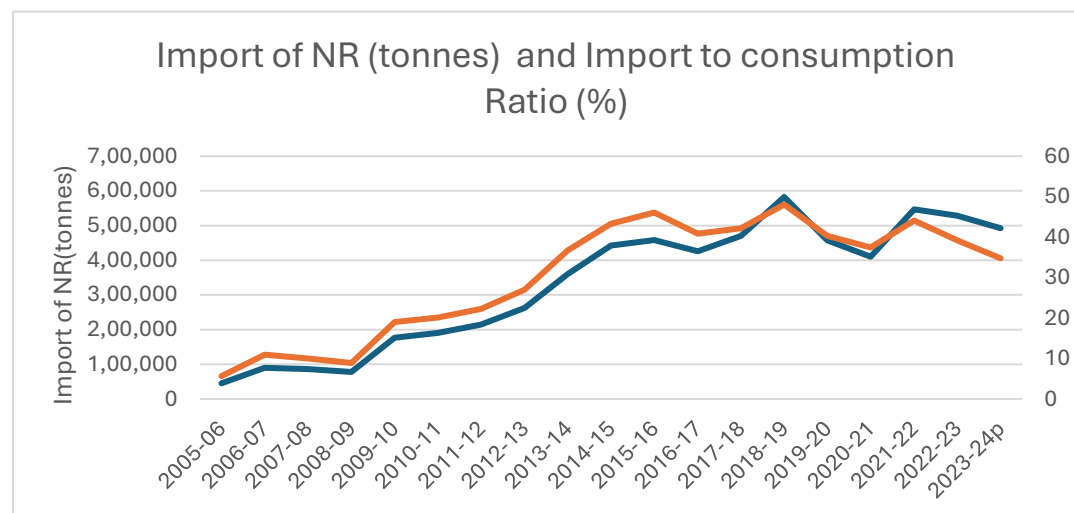
Fig 1



widening gap between production and consumption is filled up by import of Rubber. During the same period as above, the total NR import increased from about a 1 lakh tonnes in 2005-06 to more than 5 lakh tonnes by 2023-24. The import dependence ratio or the ratio of import

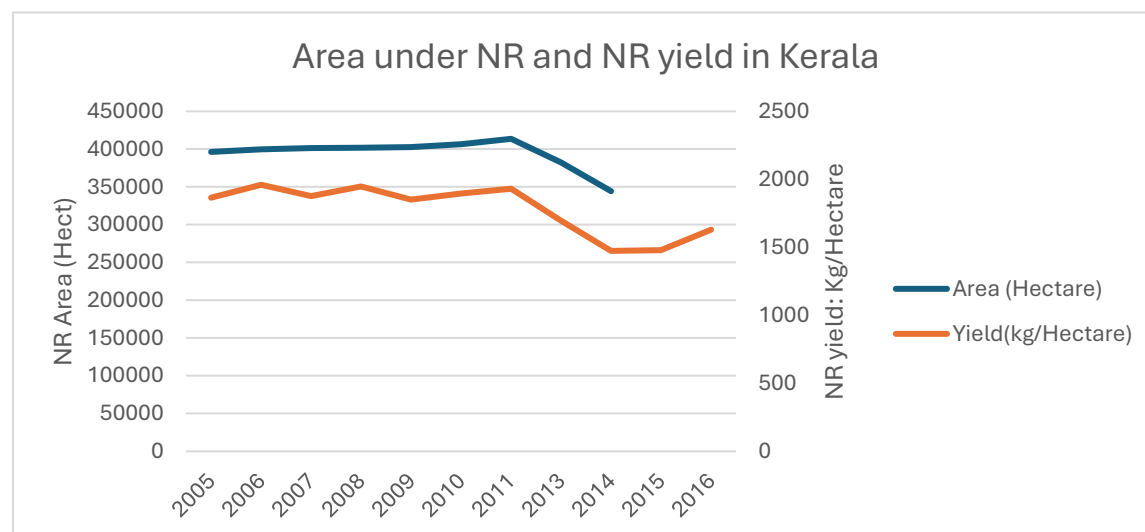
to demand increased from less than 4% in the early 2000s to about 40% currently. The rising import dependence for NR brings into picture multiple issues. Firstly, Rubber being a strategic input, for manufacturing the rising dependence on imported NR would make the manufacturing sector dependent on other economies, implying lesser self-reliance. Secondly, the dependence on NR import would also make the small growers vulnerable to price control through imports. There is need to seek ways and means to reduce import dependence and enhance self-reliance in NR in India.

Fig 2



Declining Production: Rubber production in Kerala has been experiencing a steady decline over the years. The decline in NR production has been affected by reduction in area under production and yield decline as well. The area under NR had declined from about 4 lakh hectares while the yield per hectare also steadily declined. These questions enquire further exploration as to why area and yield of NR is declining in Kerala.

Fig 3

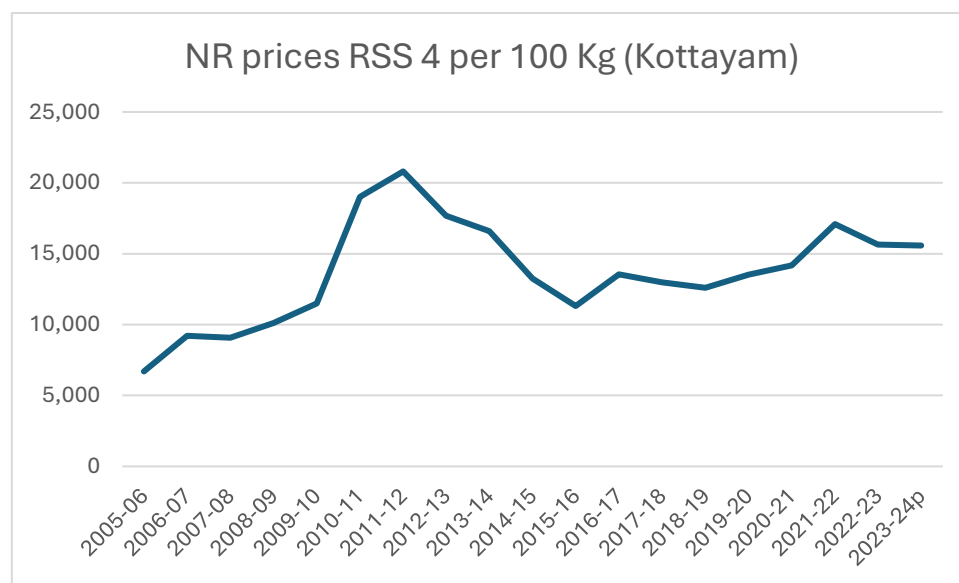


One major contributor is the ageing of rubber plantations, with a significant portion of trees exceeding the productive age limit. As older trees yield less latex, replanting is crucial, but often delayed due to cost, lack of awareness, or low returns.

The lack of technology adoption is another impediment. Many growers still use traditional methods, resulting in inefficiencies and reduced productivity. Innovations in tapping techniques, processing, and disease management remain underutilized, mainly due to limited access to training and financial resources. There is also weak interest among growers, particularly smallholders, due to declining profitability. Many have started exploring alternate sources of income, including more lucrative crops or non-agricultural jobs, leading to widespread neglect of rubber cultivation.

Price Stagnation and Volatility : Another concern is the stagnation and volatility in NR prices. The NR prices had peaked at about Rs 200 per KG in 2011-12. Since then the prices have remained subdued. During 2011-12 to 2015-16 in fact the prices declined to 110 per KG by 2015-16. The price have shown some increase to Rs about Rs 156 per KG by 2023-24. The fall in NR prices have reduced incentive for the grower to continue in NR cultivation. Further, the unpredictability in prices, have made NR as a less reliable agriproduct in generating income stability. Rubber prices are highly volatile and influenced by a variety of factors. The supply and demand dynamics of both domestic and international markets play a critical role. When global supply exceeds demand, prices plummet, affecting the income stability of farmers.

Fig 4



Global economic conditions such as changes in manufacturing sector, especially in tire and automobile industries, directly impact rubber demand. Additionally, currency fluctuations, particularly the value of the Indian rupee against the dollar, affect export competitiveness and input costs. Market sentiment and speculative trading also cause unpredictable price movements. As a result, farmers and traders often find it difficult to make informed decisions, leading to uncertainty and hesitancy in investment.

Scarcity of Natural Rubber Tappers: The rubber sector also faces a shortage of skilled tappers, largely due to an aging workforce and a lack of younger replacements. The physically demanding nature of the job, combined with poor wages, has deterred the younger generation. Moreover, there is migration to other sectors, especially in urban areas and abroad, where employment opportunities are perceived as more stable and lucrative. This labour shortage directly affects tapping frequency and latex output.

Climate and Environmental Considerations: Kerala's rubber production is also being impacted by environmental changes. Climate change, marked by irregular monsoons, prolonged dry spells, and unseasonal rains, disrupts tapping schedules and affects tree health. Soil degradation due to continuous monoculture and overuse of chemical inputs has reduced land productivity. Additionally, extensive rubber cultivation has contributed to biodiversity loss, as diverse ecosystems are replaced with single-crop plantations. To combat these challenges, promoting sustainable practices such as agroforestry, organic farming, and better soil management is essential. These not only protect the environment but can enhance long-term productivity.

Small and Marginal Growers and Marketing: The majority of rubber producers in Kerala are small and marginal growers, who face constraints in accessing markets, credit, and technology. Institutions like Rubber Producers' Societies (RPSs) and Rubber Producer Companies (RPCs) can play a transformative role through value addition, branding, certification, and export promotion. However, the performance of RPSs has been mixed. While some have succeeded in empowering farmers and enhancing incomes, others struggle due to poor management, inadequate funding, and lack of technical expertise.

Standards and Quality Control: Maintaining quality standards is vital for domestic use and international trade. Inconsistent tapping practices and poor processing methods often lead to inferior-grade rubber, impacting market reputation. A focus on sustainability and compliance with environmental norms is also gaining importance globally. Certification mechanisms and traceability systems are increasingly being demanded by buyers. Investment in research and development can address many of these quality and sustainability issues. Innovations in disease-resistant clones, improved processing techniques, and better agronomic practices are key to rejuvenating the sector.

Conclusion

The rubber economy of Kerala stands at a critical juncture. While the challenges are significant—ranging from declining production and price instability to labor shortages and environmental degradation—there are also opportunities for revival. By embracing technology, promoting sustainability, strengthening farmer organizations, and ensuring better market access, Kerala need to reinvigorate its rubber sector and secure a resilient future for its growers. There is need to discuss and debate on these critical issues for strengthening the rubber sector and enhance life chances of rubber growers in Kerala.