

Natural Rubber and their Social Impacts

Sunantiga Pangchuti
e-mail: sunantiga@gmail.com

Rubber Authority of Thailand

Abstract

The global natural rubber (NR) industry has been significantly affected by the Middle East conflict — initiated by the United States and Israel against Iran on February 2026 — which rapidly emerged as one of the most consequential geopolitical disruptions to global commodity markets in recent years. The conflict has triggered an asymmetric supply shock across energy, fertilizer, and freight markets, simultaneously reshaping the global natural rubber (NR) industry in ways that are both challenging and strategically advantageous for the NR producer. First, global NR prices have risen to their highest levels in two years, driven by surging synthetic rubber (SR) costs, maritime disruptions, and a prolonged wintering season in Southeast Asia. Second, the global NR market remains in structural deficit. Third, the elevated crude oil environment — which peaked at approximately USD 138 per barrel in April 2026 — has significantly widened the cost disadvantage of synthetic rubber relative to natural rubber, creating a commercially actionable window for exporters and policymakers.

Natural rubber benchmark prices across major exchanges accelerated sharply in early April 2026 as the conflict escalated. The price rally is rooted in a confluence of factors: the Strait of Hormuz closure raised transport risks and lifted oil costs; wintering season shortages across major Southeast Asian producing countries; extreme heat disrupting tapping schedules; and surging synthetic rubber costs that diverted demand toward NR.

Global natural rubber production at 15,322 thousand tonnes in 2026, an increase of 2.2% from an estimated 14,996 thousand tonnes in 2025. This modest growth reflects gains supported by higher grower prices, partially offset by adverse weather conditions, insufficient replanting investment, and uncertainty stemming from the Middle East conflict. Thailand remains the world's largest producer at 4,790 thousand tonnes in 2025, forecast to rise to 4,857 thousand tonnes in 2026 (+1.4%), while Indonesia continues its structural decline from 2,041 to 2,025 thousand tonnes (-0.8%). Notably, the Rest of World — led by Côte d'Ivoire — is projected to expand most rapidly at +6.5% to 3,664 thousand tonnes. Moreover, a trend primarily attributable to the wintering season across major producing countries, compounded by dry weather and abnormally high temperatures across Southeast and South Asian growing regions. (ANRPC, March 2026)

However, the Key Policy Developments of some producing countries can also affect Supply-Side that two significant policy and investment signals reinforce the longer-term supply outlook. For example, In Malaysia--the government raised rubber replanting assistance incentive income for the rubber smallholders under the Malaysia Plan — targeting 33,000 smallholders and 50,000 hectares of replanting over five years, In Indonesia, established a formal international research collaboration with Bridgestone Corporation, Yokohama City University, and Maebashi Institute of Technology on elite *Hevea brasiliensis* genetics (signed 7 April 2026), aimed at identifying superior rubber tree varieties with higher and more stable productivity through marker-assisted selection. (ANRPC, March 2026).

Global NR consumption is projected to grow modestly by 1.4% year-on-year in 2026, reaching an estimated 15,602 thousand tonnes, up from 15,385 thousand tonnes in 2025. China remains by far the dominant consumer at 7,008 thousand tonnes in 2025, followed by India at

1,439 thousand tonnes. Thailand and Viet Nam are projected to see domestic consumption contract slightly, at -2.8% and -5.7% respectively, reflecting inventory adjustments and geopolitical headwinds. Malaysia stands out with a projected 9.7% increase in domestic consumption. Broader international demand remains under pressure from geopolitical uncertainties and the escalation of US trade tariffs. (ANRPC, March 2026).

Key Demand Drivers for two players such as China, India which shown that China's natural rubber consumption increased from a manufacturing PMI that rose to 50.4, Chinese total automobile exports reached 2.226 million units. The sustained expansion of EV production is structurally significant for NR: EV tyres require approximately 15–20% more natural rubber per vehicle than comparable internal-combustion-engine models, owing to the additional load demands imposed by heavier battery packs. In India, the strongest-ever retail automotive month, with total vehicle sales surging to 2.69 million units, including record passenger vehicle sales and EV penetration in the three-wheeler segment — all generating incremental NR demand.

In terms of the socioeconomic consequences in the 2026, the Middle East conflict and other related factors in the world situations extend well beyond farm-gate income, affecting employment stability, household food security, educational investment and environmental stewardship across rubber-growing communities.

Regarding regional Impact across Thailand, the severity of the conflict's social and economic impact varies considerably across Thailand's rubber-growing regions, shaped by local weather conditions, farm structure, proximity to export facilities, and the availability of industrial employment alternatives. The Key risk factors will be divided into three levels: High Risk, Medium Risk and Low Risk. High Risk Level consists of the severe drought; rainfall 69% below normal in March 2026; temperatures reaching $42-43^{\circ}\text{C}$, the Security challenges compound conflict-driven cost increases; elevated logistics costs and the Severe heat waves; younger plantations with lower yields; limited support infrastructure. By contrast, regions in the Medium Risk category face elevated logistics costs that partially offset the gains from higher rubber prices, while Low Risk regions — notably those in close proximity to major export ports and processing facilities — are best positioned to capitalise on the current market environment.

Biography (For Plenary, Keynote, and Invited Speakers)

Name: Sunantiga Pangchuti

Title:

Affiliation: Rubber Authority of Thailand (RAOT)

Country: Thailand

Phone...

E-mail: ... sunantiga@gmail.com ...



Personal History:

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