

New uses for natural rubber

CONTRARY to what some people believe, natural rubber is not a sunset industry. World demand for natural rubber remains robust, as was strongly reaffirmed at a recent Global Rubber Conference (GRC) in Sihanoukville, Cambodia.

Organised by CONFEXHUB, the conference which attracted close to 300 participants from rubber-producing and consuming countries laid bare the reasons why and how natural rubber will remain a major force in the world rubber market. The papers presented covered a range of subjects from the supply-demand situation and price discovery to futures trading, issues on sustainability certification and new exciting applications of this wonder material.

There are many applications which cannot do without natural rubber. Manufacture of aviation tyres is one. No other material can replace natural rubber in such high-performance tyres.

However, while demand for natural rubber remains strong worldwide, the industry is faced with some challenges which, unless adequately addressed, can threaten the survival of not just the producers but also the downstream manufacturers of rubber products. If natural rubber producers abandon production, these manufacturers will suffer.

One good reason why natural rubber producers may decide to stop tapping rubber is when it is no longer remunerative. Since most of the producers are small farmers, such an eventuality is not impossible. We have seen signs of this when the price of natural rubber hit very low levels in the past.

For a few years now, price of natural rubber has lingered at the low end and farmers are growing restless. At the GRC, forecasters of natural rubber prices showed pessimism over any potential increase.

How do we end this bout of low pricing? Various attempts have been made in the past to support prices, including buying at low prices and selling at high prices. Under the now defunct International Natural Rubber Organisation, this price stabilisation scheme proved ineffective as prices remained at the low end,



benefiting the consumers more than the farmers. Then the rubber producing countries together created the International Rubber Conference Organisation (IRCO), again to pursue similar market intervention mechanisms but this time minus the consumers. The outcome has been equally disappointing. According to some sources, reaching consensus appears to be the biggest challenge.

It is time for natural rubber producers to realise that we now live in a world where collaboration is the new order of big business. The market has become too complicated for a single company or producer country to manage all the challenges that global businesses are up against.

Besides the short-term stop-gap measures of market intervention planned under IRCO, natural rubber-producing countries must invest more in longer-term research and development (R&D) to expand the world demand for

the commodity. At the moment, R&D collaboration among producing countries is negligible, especially in the downstream areas. Even in the upstream yield improvement and breeding areas, collaboration is much reduced compared to the earlier years of the International Rubber Research and Development Board (IRRDB).

The worst part is that some member institutes have given notice to withdraw from the IRRDB. This would be unfortunate for the natural rubber industry. The IRRDB must be strengthened.

There are a number of demand-boosting R&D that producing countries should collaborate on. One is the use of natural rubber in roads. Through R&D, technical evidence can be generated to convince world road construction projects to incorporate natural rubber in the bitumen mix.

Another project concerns the growing demand for electric mobility and transport. A researcher

from Japan at the GRC showed that there are already signs that the use of natural rubber in tyres can lead to an increase in battery-powered vehicles.

Another big ticket R&D which can revolutionise the natural rubber sector is to explore the potential of making the commodity the natural petroleum of the world. This is possible through chemistry and biotechnology.

After all, natural rubber is a natural hydrocarbon. It can be the starting material for renewable petrochemicals. If successful, it will transform natural rubber into a truly non-fossil hydrocarbon. When that happens, the world demand for natural rubber will hit the roof and low, unnatural natural rubber prices will forever be history!

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