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How Innovation Became the Serum Institute's Defining Legacy

Every day, millions of children around the world are protected by vaccines made in Pune, India – all by a company most people have never heard of. Founded in 1966 by Cyrus Poonawalla and now led by his son Adar, the Serum Institute of India is the world's largest vaccine manufacturer by volume, shipping doses to more than 170 countries with a focus on underprivileged communities in the Global South.

But SII is not just about scale. The company continues to innovate, producing cheaper alternatives and next-generation vaccines. Last month, it partnered with CEPI to develop a bird flu shot that could be rapidly adapted if an outbreak like H5N1 spreads among humans. In the past two years, SII delivered a WHO-backed low-cost malaria vaccine and is racing to make dengue treatment affordable. Even during COVID-19, when the world depended on its vaccines, SII resisted pricing pressure. The company estimates that Covishield could have sold for five times the amount, yet SII kept the dose around \$3 for low and middle-income countries, reflecting its founding principle: innovation should serve humanity.

How It All Started

With no formal training in science or medicine, Cyrus Poonawalla launched Serum from the unlikely roots of his family's horse-breeding business. Nearly 59 years ago, a conversation with a veterinarian revealed that imported vaccines were priced far beyond what the government could afford. Seeing the gap, Cyrus sold some of his family's horses and, with his brother Zavary, began producing antitetanus vaccines directly from horse serum to keep doses affordable. Their first big expansion came with the

DTP vaccine, followed by measles – moves that allowed them to scale and become India's largest vaccine manufacturer.

Breaking into global markets meant upgrading facilities and meeting strict international standards. Once WHO prequalification was secured, Serum began to supply UNICEF and the Pan American Health Organization, cementing its role in global public health. Today, roughly 80% of SII's sales go to global partners, providing resources to continue producing affordable vaccines and invest in innovation.

Innovation As a Company Pillar

At SII, innovation permeates beyond novel vaccines to process, culture, and infrastructure. Vials once inspected manually are monitored by nine cameras, reducing human contact while increasing accuracy. Measles vaccines once produced in small batches are now made in cell factories, letting SII scale without compromising quality. The company built a manufacturing plant in Africa to expand production responsibly and joined CEPI's network of Global South vaccine makers to ensure rapid response during health emergencies.

Innovating India's Place in Global Culture

In 2018, when Natasha Poonawalla, Executive Director at SII, stepped onto the Met Gala carpet in a sculptural gold Prabal Gurung gown, everyone was asking the same question: who is that? Since then, Natasha has consistently championed Indian craft at fashion's most exclusive stages.

Her husband, Adar Poonawalla, brings that same influence to India's cultural storytelling. He recently produced *Homebound*, India's official 2026 Oscars entry, and acquired a 50% stake in Dharma Productions, the studio behind cult-classic Bollywood films, helping shape narratives that resonate with Indians and the diaspora.

Only time will tell which stories he champions next, but it's clear the Poonawallas are using culture, as much as vaccines, to push the boundaries of innovation and redefine India's global impact.

