

Engineering and Technology: Driving India's Growth Story

Narinder Mittal

President & Managing Director, CNH India

India's transformation into a global economic powerhouse is driven by rapid advancements in engineering and technology, reshaping industries, creating new opportunities, and enhancing self-reliance. Having been closely involved in this journey, I have witnessed firsthand how engineering excellence and digital innovation accelerate progress in manufacturing, infrastructure, and agriculture.

Government initiatives like Make in India and Atmanirbhar Bharat have significantly boosted local manufacturing and attracted global investments. Engineering goods exports are projected to surpass \$120 billion in 2024-2025, while the digital economy is expected to exceed \$1 trillion, fueled by automation, AI, and the Internet of Things (IoT). These developments position India as a formidable player in technology and manufacturing.

At CNH, we are at the forefront of this technological transformation. Our advanced agricultural machinery and precision farming solutions empower Indian farmers by enhancing productivity, optimizing resources, and improving sustainability. By integrating automation, digital connectivity, and smart technologies, we are reshaping agriculture and



construction. Our manufacturing facilities leverage green technologies and automation to enhance efficiency while minimizing environmental impact. Predictive analytics and smart equipment further reduce operational costs and improve output quality, benefiting both farmers and contractors.

A key driver of this progress is research and development (R&D). CNH has strengthened its R&D capabilities in India with the India Technology Centre (ITC) in Gurgaon SEZ (Cyber City), playing a pivotal role in supporting global technology-led projects. Satellite offices in Pune and Bangalore contribute to our innovation ecosystem, focusing on digital solutions, automation, and AI-driven advancements. With over

700 engineering and technology professionals already onboard, we have ambitious plans to expand our footprint and bring more global projects to India.

However, India's full potential can only be realized by focusing on skill development, infrastructure modernization, and industry-academia collaborations. The demand for skilled professionals in emerging technologies is rapidly increasing, and bridging this gap is essential for long-term progress. Educational institutions, industries, and policymakers must collaborate to nurture future-ready talent. Programs integrating hands-on learning, industry exposure, and technical training will be critical in preparing the workforce for tomorrow's challenges.

At CNH, we support this vision through partnerships with technical institutions, skill development programs, and investments in employee upskilling. By equipping our workforce with expertise in digital solutions, automation, and precision technologies, we aim to drive sustainable growth that benefits industries and communities alike. Our emphasis on diversity fosters an inclusive and innovative approach,



strengthening India's technological landscape.

The coming years will be defined by how we integrate engineering advancements with real-world applications. AI, IoT, and automation are transforming traditional industries. Companies embracing digital transformation will be better positioned for success. In agriculture, precision farming is maximizing yields and minimizing resource wastage. Similarly, in construction, automation-driven equipment is revolutionizing efficiency, safety, and project timelines.

Our partnership with ICAR in India represents a strategic innovation initiative. This alliance facilitates expertise exchange, with CNH leveraging ICAR's agronomic knowledge while providing ICAR exposure to advanced agricultural technologies. We are currently field-testing advanced solutions with ICAR centers in Nagpur, Srinagar, and other locations to enhance yields, accelerate harvests, and boost farmer incomes. Additionally, through our CSR initiatives, we support ICAR in establishing Centers of Excellence

(COEs) for the latest agricultural technologies, equipping students with the skills to address India's agricultural challenges.

India stands at the cusp of a technological revolution. With immense talent, robust policy support, and a thriving entrepreneurial spirit, the nation has the potential to lead in engineering and technology. At CNH, we play a crucial role by introducing world-class solutions tailored for the Indian market. Collaboration among industries, academia, and the government will be key to driving India's growth.

CNH is committed to transforming agriculture through cutting-edge technologies. In India, we are advancing harvesting and post-harvesting solutions with world-class sugarcane and combine harvesters, balers, rakes, and other advanced equipment, improving efficiency and reducing waste. Globally, we leverage AI in agriculture to optimize farming practices, offering solutions that maximize limited land and resources. Through telematics, satellite coordinate control, and auto-guidance systems, we

enable farmers to boost yields, reduce waste, and enhance productivity. Additionally, CNH is advancing mechanization and biofuels, ensuring the agricultural sector benefits from improved yields and sustainable practices. Our state-of-the-art Trem V Engine plant in Greater Noida caters to both construction and agricultural machinery, driving efficiency and sustainability.

The road ahead is filled with opportunities. Success will depend on harnessing engineering and technology for the greater good. By prioritizing skill development, digital transformation, and sustainable innovations, we can drive economic growth and contribute to a more efficient, self-reliant, and prosperous India. At CNH, we are proud to push the boundaries of technological excellence and shape the future of agriculture and construction in India and beyond.

