‘Private sector needs to spend more on R&D’

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Jaipur: A country that makes nuclear reactors doesn’t manufacture mobile phones or solar energy panels, and depends on imports for almost all of their requirements. It may sound baffling but Baldeb Raj, president of the Indian National Academy of Engineering (INAE), said that innovations in engineering, science, and technology can only flourish if there is a supportive policy environment.

“India became competent in atomic energy and space science because policies were there to do things indigenously. Engineering and technology can make a product or provide a service only in a framework of policies. We already have the scope for economy of scale but what India needs is facilitation at the policy level,” said Raj who was here to attend the annual convention of INAE.

Drawing attention to the need of achieving breakthrough technologies in areas of healthcare, energy, and clean water, Raj said that the country spends a mere 0.8% of its GDP on research and development (R&D) against China’s 3%. But he said instead of expecting the government to increase its R&D budget, the industry should be encouraged to spend more on innovation and developing new technologies.

“Even the developed countries and the multinationals there keenly pursue the development of affordable technologies that can be accessed by masses in the world. For example, GE, which runs the biggest R&D centre outside the US in Bengaluru, has said that 40% its affordable healthcare technology would come from their India centre. They would not allow us to take the intellectual property rights even though they will use the best of the brains here. In that context, our industry should also spend more on R&D and rope in leading institutes like IITs and IISc. The government needs to spend on far-reaching research which the industry will not do,” added Raj.

Experts have often cited the lack of collaboration between industry and academia as one of the key roadblocks hurting India’s rise to prominence as a global centre for innovations. They feel both the critical organs work as silos, which have deprived the nation of new technologies compared to its potential.

“There is integration between academy and industry, but it is not enough to make us leaders. The collaboration that we currently have will help us survive only. But if we want to be frontrunners, then the silos need to be smashed,” added Raj.

Purnendu Ghosh, executive director at Birla Institute of Scientific Research, Jaipur and council member of INAE, said that the academy with 50 eminent Fellows who include the likes of Infosys founder Narayana Murthy, former president of India APJ Abdul Kalam, and former CEO and MD of TCS S Ramadorai, has exceptional capabilities in framing, developing and advising the government on implementation of policies related to engineering, science and technology.