## Role Of Youth In Nation Building



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Ancient India was known the world-over for its intellectual vibrancy, its culture, wisdom and learning. However, somewhere along the path, due to the intrigues of the Mughals and the colonizers, we lost our direction and distinctiveness and got mired in mediocrity for close to several hundred years. Swami Vivekananda, on the other hand, dreamt of a strong & glorious India. He firmly believed that an awakened India would be an asset to the world and mankind. Our younger generation has not only begun to realize Swami Vivekananda's dreams but is beginning to astonish the world by their mental prowess. A few examples would put this in perspective.

- Spirit and Opportunity; the two robotic vehicles that operated on Mars for several years were designed for NASA by Indian scientists. They had a life of only 10-12 weeks. However, Spirit remained functional for 6 years and opportunity for 14 years. They were maintained, sustained, retrieved and re-tasked by young Indian scientists at NASA.
- The landing of the robotic lab Curiosity on Mars in August, 2012 was an unparalleled engineering marvel. The technologies, such as the use of sky crane, were completely un-tested and had never been used before. These were provided by a young couple, Mr. and Mrs. Renjith Kumar of Kerala. The Scientists at NASA had described Curiosity's descent to the Martian surface as "seven minutes of terror", during which its speed was to be brought down from 13,000 miles per hour to Zero to ensure a soft touchdown. Technologies provided by our youthful scientists succeeded in achieving the same.



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- All the above vehicles had bio-computers. They were so small that over 100,000
  were fitted in an area equivalent to the size of one drop of water. Their hardware
  consisted of enzymes and software was the DNA itself. The technology for these
  was provided by a young Indian scientist from Hyderabad.
- Further, the successful discovery of Higg's Boson, colloquially known as the God Particle too has an intrinsic Indian connection. Satyendra Nath Bose, a contemporary of Albert Einstein had spoken of the existence of God particle in 1935. However, at that point of time technologies to prove the same were non-existent. The discovery of the God particle is therefore known as Higgs-Boson.
- Mangalyan and Chandrayan-3 are other examples of India's scientific prowess. We
  were the first country to put a satellite in Mar's orbit in the very first attempt,
  at a cost that was less than that of a Hollywood movie. Similarly, we are the first
  country to have successfully landed on the Lunar South Pole and that too in style.

The youth in India represent a well spring of energy, creativity and potential. Our Prime Minister firmly believes that they are a huge demographic dividend. Should we succeed in appropriately skilling them and increasing their efficiency and productivity by just 2 to 3 percent annually; we would become the third largest economy by 2030 and a developed nation by 2047.

Presently, the median age of an Indian is 23 years and over 65% of our population is below this age. This gives us unbelievable advantages in the global sweep-stakes. We could very soon occupy our rightful place in the comity of nations in concert with India's geographic, demographic and economic might.

Our children are relatively more focused today than ever before. They are increasingly thinking and dreaming big and are seizing emerging global opportunities for their and India's advantage. As a consequence, in the last five years one third of the Unicorns in the world are Indians. Sixty eight more start-ups have already become Unicorns this year and on an average one young Indian is becoming a Unicorn every week.

Thanks to our youth and their entrepreneurial spirit, Start-ups and technological innovations have begun to thrive in India. Filing of patents increased by 50% in the last 7 years and a five- fold increase occurred in grant of patents in 2021-22 as compared to 2014-15. Start-ups are beginning to generate job opportunities besides, fuelling economic growth.

Let's now look at the diverse roles that India's youth are playing in nation building. Some of these pertain to self-empowerment, education, rural development,



entrepreneurship, innovation, sports, medicine, space and much more. India has approximately 356 million young people between the age of 10 and 24 years. As per a UN report of 2021, this is the largest youth population globally. This young population and its dynamism, duly nurtured, constitutes the fountainhead for our nation's growth. The youth in India are increasingly recognizing the importance of self-empowerment and job creation. Thanks to the NEP, they can now acquire one or more skills along with education. Quite a few are keen on becoming self- entrepreneurs. This would ultimately go a long way in poverty alleviation and job creation.

Our govt. is laying huge emphasis on skill development as well as formal and informal education. A large section of our youth population is lapping this up. This would help in India becoming a knowledge based society.

The youth are increasingly playing a significant role in preservation, promotion and projection of India's cultural heritage, its traditions, identity and diversity through various cultural activities both nationally and internationally.

In rural areas, the youth are becoming architects of change. They are helping in community development, introduction of sustainable practices and empowerment of local economies.

They are also taking the lead in various civic movements such as advocating for social change, gender equality, environmental sustainability, habitat conservation, etc. thereby shaping India's social-fabric.

Indian youth are playing a significant role in R&D, Space and Cosmology, digital economy, oceanography, coding, computing and cryptography, Information Technology, AI, medicine and a whole range of activities that are essential to turn India around and make it a techno-scientific nation. Few illustrative examples are indicative of our successes.

- You would recall a 1000 drone show with the help of IIT Delhi during Beating the Retreat ceremony at Vijay Chowk in 2022. So far only three countries have been able to do so: US, Russia and China.
- The success of Chandrayan-3 and Aditya L-1 have revolutionised India's Space Education and Astronomy. It has generated a groundswell of enthusiasm amongst our youth. Sensing this newfound enthusiasm, the Govt, like in the US has opened the Space sector for civilian participation. Interestingly, within a very short time frame our youth have readied their launch vehicles and satellites.



- Akin to Chandrayan Mission, India is working on Samudra Manthan-23 to explore the mysteries of our vast and intricate seas. Here too, the enthusiasm shown by our Youth is electrifying. Given the requisite push by the govt, we are sure our youth will help us to exploit resources of our vast EEZ of 2.3 million square kms as well as our coastal waters along India's East coast and around Andaman and Nicobar islands, wherein we have found 1800 trillion cubic metres of methane hydrate nodules that could greatly alleviate India's energy deficiency.
- When Covid broke out, India was amongst a few countries which succeeded in developing several vaccines of our own. These were cheaper and more reliable than the US, Russian or British vaccines. The Chinese vaccine was the least successful. Not only did we succeed in vaccinating our 1.4 billion people, we also supplied vaccines to around 100 countries. Thanks to our youth India today has become a manufacturing hub in the field of pharmaceuticals.
- While the world was barely able to recover from Covid-19, the Russian-Ukraine war erupted. It had a cascading effect on food and energy security. Millions would have perished because of hunger. India provided food aid to several countries in Africa, our neighbourhood and those in dire need to overcome hunger and drought. In addition it supplied subsidized food to 810 million or two-thirds of its population. You would recall that until 1969, we were begging for food aid from America. Now, thanks to our young farmers, we are having difficulty in managing the surpluses.

In the realm of sports our youth have firmly put India as a mega contender for future laurels. Our recent performance in Asian games is indicative of their hunger to excel. And lastly in an increasingly interconnected world, India's youth are playing a pivotal role in fostering global mutual understanding and cooperation. Their openminded approach is vital for diplomacy and international relations.

India's youth are the torchbearers of the nation's future. Their dynamism, when harnessed effectively, can drive the country towards unprecedented growth and development. By addressing the challenges and empowering them with the right resources, India can ensure that its youth continue to be a formidable force in building a stronger and a more prosperous nation.



