



THE NEW INDIAN EXPRESS

22nd Sept, 2019

ISRO's next high: Manned spacecraft

Chandrayaan-2 orbiter's life has increased to 7.5 years though its designed life was 1 year: Sivan

HEMANT KUMAR ROUT
@Bhubaneswar

CHANDRAYAAN-2 has achieved 98 per cent of the mission objectives and India's next space priority is launch of manned orbital spacecraft Gaganyaan by end of next year, Chairman of Indian Space Research Organisation (ISRO) K Sivan said here on Saturday.

In his inspiring address at the 8th convocation of IIT Bhubaneswar, Sivan said Gaganyaan is an extremely important mission for India as it will give the much-needed boost to science and technology besides making the country a space superpower.

"We are working on a new target and going to launch the first unmanned spacecraft by December 2020 and second by July 2021. The first manned mission is hopefully to take place in December 2021 when the first Indian will be lifted from ISRO centre to space," he informed.

Even as scientists are working hard to establish contact with lander 'Vikram', the noted space scientist said the space agency has been successful in technology demonstration as the life of orbiter has increased to 7.5 years due to the optimal mission operation though its designed life was one year.



ISRO Chairman K Sivan speaking at 8th convocation of IIT Bhubaneswar | EXPRESS

"It means that we can now receive 7.5 times data of what was expected. It will also result in mapping the entire lunar surface in great precision and detail. The bulk of the instruments to carry out the inter-planetary science is also in the orbiter. Except the soft landing part, all other new technology elements including navigation census and propulsion were validated. It is a huge success," Sivan said.

The ISRO Chairman advised IIT students to take risk and be innovative to achieve success in life. Innovation comes with a

high level of risk and failure. It may sound crazy, but initial outcomes of innovation could be imperfect. In fact, most of the successful innovations of the world come from crazy ideas, he said.

"When you roll up your sleeves to take up challenges for nation building, three things will play a major role - conquering personal fear, taking calculative risk and innovation backed by lateral thinking. If you don't take a chance, you can never achieve anything significant in life," he observed.

"I am always denied my first choice"

The ISRO chief, who is known for the success behind India's GSLV programme, said as far as his career is concerned he is always denied his first choice.

"After High School, I wanted to study engineering but ended up pursuing BSc Mathematics. Later, I got into engineering and joined the Vikram Sarabhai Space Centre (VSSC) at Thiruvananthapuram, though I wanted to join the ISRO Satellite Centre ISAC at Bengaluru. At VSSC, I wanted to join the Aerodynamics group, but was made a part of the PSLV project," Sivan said.

In every stage of life, he said, he never got what he wanted as his first choice. "But I learnt many valuable lessons. Life and career are not about making the best choices, but making the best of the opportunities available to you. If something is denied to you, something bigger is waiting for you," he said.

Quoting Dalai Lama, Sivan said, sometimes not getting what you want is a wonderful stroke of luck. "Do some fantastic mistakes in life, make sure you learn from these mistakes. Focus on innovation, success will follow you," he advised the IIT students.