

Shine Brighter Première

Shortfile 14 To the Moon and beyond

Document 1, Vidéo p.126 – Extrait de *Bloomberg Originals*, 2022.

Voiceover: India's space story stands apart from the space pioneering nations. In July 1980, over two decades after Sputnik, India launched its Rohini satellite, making them the newest member of an exclusive club. But the Indian Space Research Organisation was trying to do things differently. Unlike NASA or the Soviet space programme, which aimed to explore space for grand, national and scientific ambitions, the ISRO was tasked with creating an indigenous space programme solely to allow India to access the practical advantages of space.

Anurag Kotoky (reporter): India has always maintained that India wants space science to be developed for the betterment of its people. If you look at it for telecommunications, for electronics, India has used these technologies for all of that.

Susmita Mohanty (founder, Spaceport Sarabhai): I would say the first twenty-odd years, the focus was on technology independence: how do you build your own satellites, your own earth stations? How do you launch your own satellites, which means you have to build rockets?

Voiceover: By 1994, India had its own liquid stages rocket: the Polar Satellite Launch Vehicle or PSLV.

Awais Ahmed (CEO of Pixxel): Early 2000s to late 2010s is when PSLV started becoming the workhorse for the world, people could come here to be able to launch

their satellites for a much more cost-effective manner and without compromising on quality.

India Is Going to Space, on a Budget, *Bloomberg Originals*, 2022.

Document 1, Audio p. 128 – Extrait de *Firstpost*, 2024.

Voiceover: India has now joined the elite club. It's a key player in the space race, and now, it's empowering space startups to revolutionize the sector. Today, the cabinet approved a 1,000 crore rupee venture capital fund for the space sector. It's to boost the startup ecosystem. The initial plan is to help 35 to 40 startups. Each startup will receive anything between rupees 10 to rupees 60 crore. In 2020, India opened up its space sector for private firms. Since then, there have been over 250 startups. They are allowed to build rockets. They even have access to ISRO's launching facilities. And India is not alone in this. Several countries are mixing private and public sectors in the space industry. NASA collaborates with private companies such as Space X, Blue Origin and Boeing. The European Space Agency works with private companies like Airbus and Ariane Space. China is slowly opening its space economy to private firms and so is Russia. It's because space is increasingly becoming a competitive arena for geopolitical influence. Countries want to ensure that they don't fall behind in this crucial sector. Involving private companies boosts national space capabilities without putting all the responsibility on state-run organisations. So, India wants to capitalize on that. Private space startups in the country are aiming for the stars.

India Aims to Boost its Private Space Sector, *Firstpost*, 2024.

Document 3, Vidéo p. 129 – Extrait Bloomberg Originals, 2024.

Journalist: Why does India need a space programme? People often talk about how there are poor people to look after, starving people to feed, why a space programme?

Susmita Mohanty: What's important to understand is that any country that chooses to have a space programme does it because space enables things here on Earth. Whether it's agriculture, resource management, urban planning, security, defense. So I think space is an enabler. And for a subcontinent the size of India, with 1.4 billion people, having a space programme is a necessity, it's not a luxury. Let's say we have a drought this year. If our farmers have to go out and apply for insurance, we have satellite imagery to prove. It literally boils down to impacting the lives and livelihoods of people at the grassroot level.

The Rise of India's Private Space Firms, *Bloomberg Originals*, 2024.

Document 3, Vidéo p. 131 – Extrait de *Firstpost*, 2024.

Onscreen text: In the grand scheme of space exploration, how big is this day?

Neil DeGrasse Tyson (U.S. astrophysicist): I see two major milestones here. One is that there are now four countries who have safely and softly landed on the Moon, from Russia, the Soviet Union, the United States, China and now India. I like it when the whole world participates in things, and not just one country or another. So this is an important step. It's a sign to us all that space is everyone's backyard and I foresee a day when, in ten years, twenty maybe, where there are ten countries or fifty countries and so we are all then voyagers to this beautiful grand home we call our universe. So, so it's fourth out of how many in the future? I hope it's many more. So that's the first. Second, as is true for any science project, you don't want to redo what someone else has done and already been verified, you want to do something new. So I'm glad India did not land in the same place everybody else has landed on the Moon. That's not interesting.

India's Moon Landing & Its Significance, *Firstpost*, 2024.

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Anchor: An Indian rocket has begun a four-month journey towards the Sun. The rocket will study solar winds which can cause disturbances here on Earth. The mission follows India's successful Moon landing last week.

Announcer: Three, two, one zero.

Milena Veselinovic: A successful blast-off for India's first ever solar mission, on a voyage to decode the mysteries of our closest star. The craft, called Aditya L1, meaning "the Sun" in Hindi, now travelling to the observation point 1.5 million kilometers away.

Dr Anil Bharadwaj: Aditya L1 will take its journey. After some Earth manoeuvres it will start its journey to the L1 point, a very long journey of almost 125 days. So let us wish all the very best to Aditya spacecraft.

Milena Veselinovic: The craft will study solar winds, which can disturb the Earth's communication satellites, and examine just how the Sun impacts on the Earth's climate patterns. An ambitious task for an ambitious space programme. Fresh off another launch just 10 days ago, when India became the first nation ever to land a spacecraft on the Moon's southern region. A point of pride for India's Prime Minister and for those watching the launch today.

Woman 1: These 17 000 scientists are like doing their best jobs, and to lifting India.

Woman 2: Privileged to be an Indian and witness this kind of developmental activities on the Space Center for India.

Milena Veselinovic: The country spending just a fraction of what the U.S. and China invest in space exploration but punching well above its weight.

Simeon Barber: India has had a plan and a strategy that it's going to, you know, get a seat at the top table with these major spacefaring nations and they have been very successful, as you say. So they've picked key challenges and really decided where they can make a difference and really contribute on the international stage.

Milena Veselinovic: A stage that now eagerly awaits what this solar mission might uncover. Milena Veselinovic, Sky News

India launches rocket towards the sun, *Sky News Australia*, 2024.