

# SATELLITES



What are satellites ??

Objects that explore mighty heights...

Or do they soar high in the sky as kites...

Are they the objects that alert us for blizzards or tides..

Or do they help us watch TV serials till night..

: 4<sup>th</sup> October 1957 , the date from when the world changed as Soviet Union launched the first satellite – Sputnik 1 in the space..That launch ushered in new political, military, technological, and scientific developments. While the Sputnik launch was a single event, it marked the start of the space age and the U.S.-U.S.S.R space race. Humans have never imagined to lead a life without the facilities satellites provide..Till now, satellite remains one of the most integral sources of our activities.. Be it weather forecasting or broadcasting Tv channels, satellites have marked a new way of living from the day they were firstly launched in space..Other than providing prominent facilities in day to day life , they also become an important medium of exploring the universe, which has been man's one of the most aspired goals since the times of Babylonians.. Satellites are indeed a revolution into the lives of people..

We know that each thing has it's own benefits and disadvantages yet on the contrary to the relevance with satellites, it has always shown up as a boon in the working of the world.. The present scenario has led to the launch of VRS ( Virtual Reality Satellites ) that have revolutionized the space industry.

S : Space explorers

A : Add more information about the space and planet movement

T : Tracking a person is one of their strongest capabilities

E ; Establish broadcasting systems in the space

L : Last up to 15 years

L : Launching of satellites are done by Rocket

I : Identify uncommon movements of the Earth

T :Tackle with space storms by turning on the safe mode

E : Earth's natural satellite : Moon.



. Satellites are one of the most interesting aspirations for humans.. They have helped in bringing out the space enthusiast of each person .. Whenever there is a satellite launch or when they are set up in a planet's orbit successfully , people celebrate the moment wholeheartedly. It has resulted into human aspiration for being a part of the space industry and for future space enthusiasts it has set up goals to launch satellites in orbits of planets such as Neptune and Uranus .. a far goal indeed yet not impossible !

Satellites are also one of the reasons of rapid economic growth and higher revenue in nations which have space industrialization...They also result into employment of specialized and learned people at different posts in the space industry that is said to be a national profession.. Today scientists such as Dr. K Sivan and K. Radhakrishnan , who both have headed ISRO are seen as a role model for many future space enthusiasts..

??Arising Question?? :

Are satellites a boom or a boon for future s  
??

Ans: Future space enthusiasts think satellite for them

For them space is an endless exploring room

Also satellites for future space enthusiasts are a boon

Space becomes their life ; they can't realize whether it's evening or  
noon

Satellites , in many ways depict that they are a boom as well as a  
boon for the future of space technology .

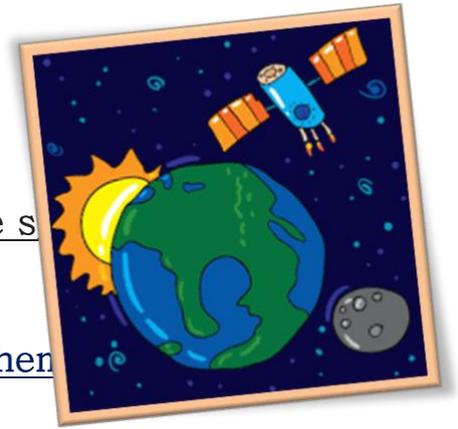
The boundless energy of space enthusiasts is the reason behind our  
brilliant future ahead. The following part of an essay explains how  
satellites are a boom as well as a boon for future space enthusiasts :

How are satellites a boon for us :

The birth of satellite@history -

Everything that exists on Earth is beneficial it's one or the other  
way.. In the same context, satellites too came as a bonus for  
humans.. Or we can say that the person who had the out-of-the-box  
idea to invent an instrument that changed lives, made a history and  
gave birth to aeronautically outstanding minds in India as well as  
worldwide is the reason behind me watching KBC everyday..

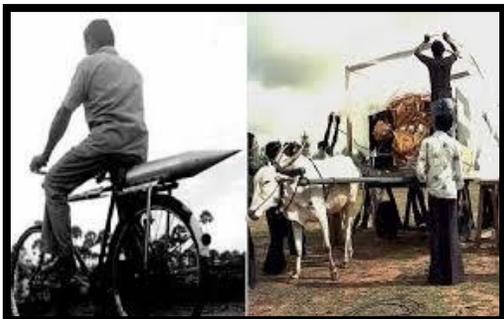
..My science books say that to launch a satellite in space we need a  
rocket that helps to create the force within to carry the satellite in  
the space where at stage 2 it gets separated from the main body..  
The invention of rocket was done by Wernher Von Braun who made



V2 satellites which were used in World War 2.. This made some learned scientists of Soviet Union [ Russia] to think about making an instrumental body that will be carried by vehicles called rockets.. Thus, a proposal for the same was made and a committee was formed which began to sow the seeds of the Sputnik satellite plant!!In Russia 'SPUTNIK' means companion.. This astronomical body was meant to serve as a travelling companion for Earth in it's orbit.. The objective behind launching Sputnik 1 was to get information about the density of Earth's atmosphere and to launch an artificial body in the space by humans.. Thus the bright day of Human history came on 4<sup>th</sup> October 1957 when the hard work of many long years came true and Spuntik 1 was launched in the space.. It led to many ideas of making Communication , Weather Forecasting or Broadcasting satellites with special features ..All of these satellites have a special position in helping humans run their lives...

# Evolution of satellites in India

On November 21, 1963 the world was taken by surprise as a remote village at the Southern Tip of India, successfully launched the subcontinent's first sounding rocket.. The rocket launch was at Thumba, a small fishing village in Kerela.. These are some of the insights from the launch where the Missile man – Dr. APJ Abdul Kalam is seen with his few colleagues carrying the instruments on a bullock :



From carrying India's first launched satellite's instruments on bullock and cycle to launching 107 satellites at once, the Indian space industry has revolutionised a lot indeed..

From the experimental satellite Aryabhata launched in 1975, to RISAT-2BR1 in 2019, India's space odyssey has spanned 44 years and over 100 satellites. RISAT-2BR1, India's 32nd earth observation satellite, was successfully launched on board the PSLV-C48 from the Satish Dhawan Space Centre in Sriharikota on December 11.

Through the Mars Orbiter Mission in 2015, India became the first nation to travel to Mars in one try.. And also the PSLV C-37 mission of 1SRO made India create a history of launching 107 satellites in the space at a time..



The Indian space industry is gifted to the nation by the Missile Man – APJ Abdul Kalam, who brought an evolution to ISRO and its satellite launching terminologies.. Many prominent satellite projects like Rohini and Agni were performed successfully under the guidance of Kalam.. To give a tribute to this extraordinary person, ISRO launched world's smallest weighing satellite – Kalamsat in 2017 after his name.

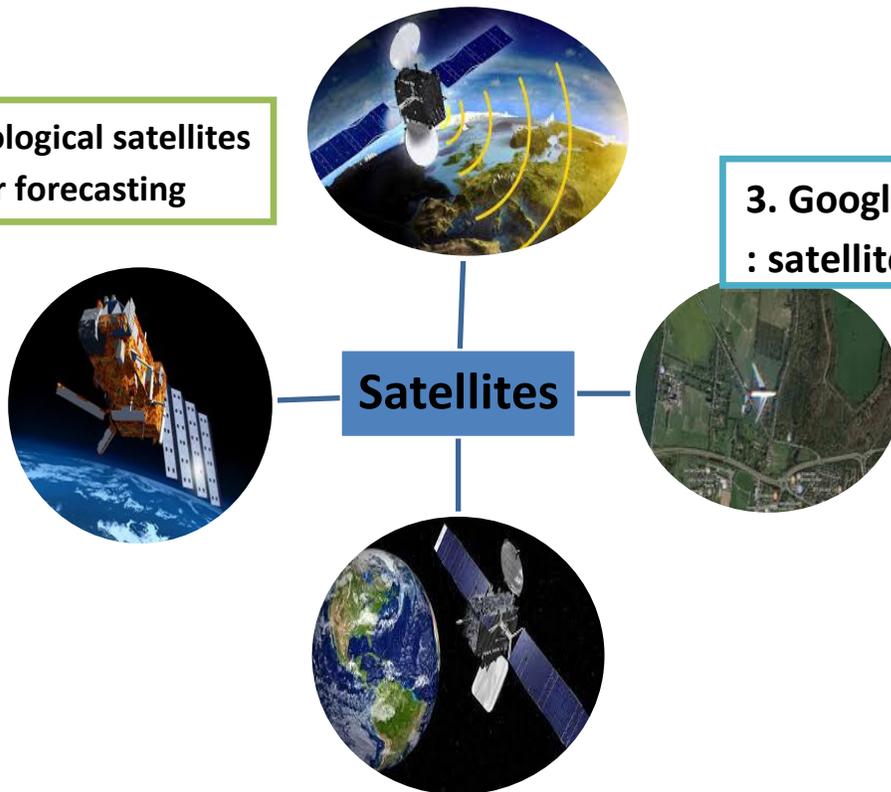
# How do satellites help us

Today satellites control the working of human life , but still some facts are unknown that have do we satellites help us have access in many facilities :

## 1 . Broadcasting TV channels

2. Meterological satellites  
: Weather forecasting

3. Google Maps  
: satellite view



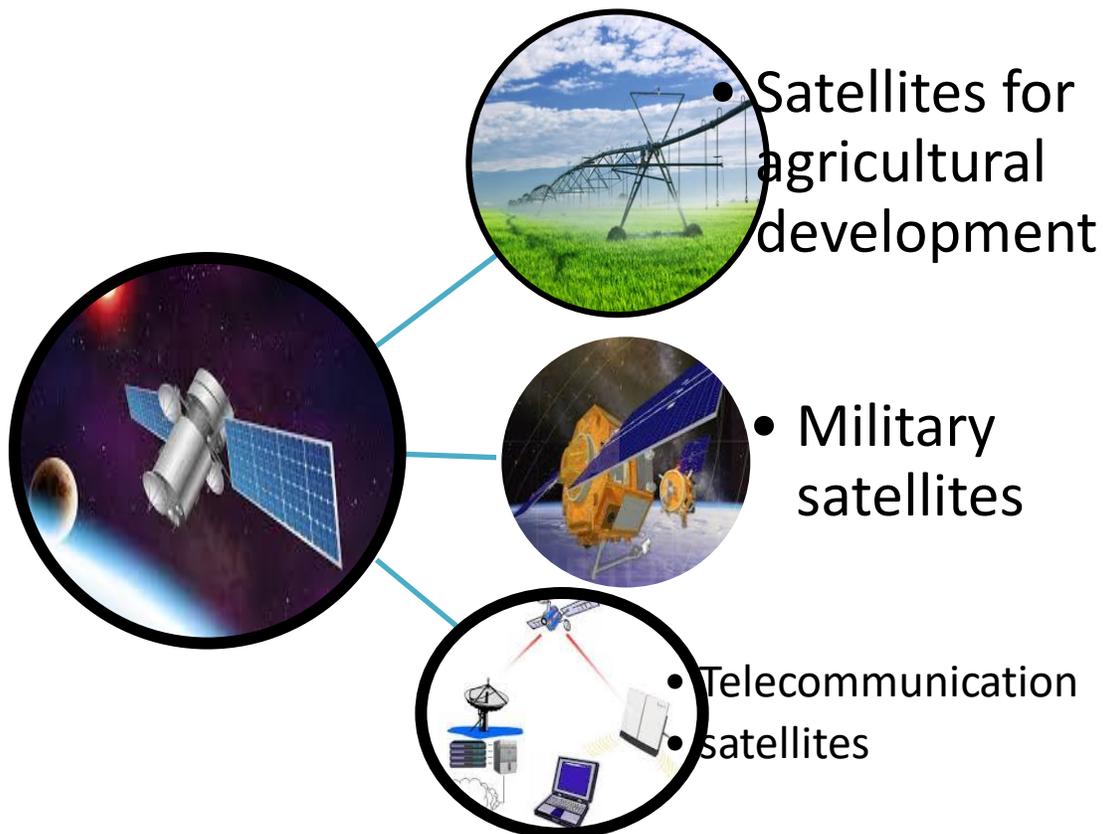
## 4. Communication satellites

Also , satellites ought to be successful in tracking military operations and in defence sector. India has a series of many military based satellites like Cartosat -2 , GSAT - 29 and RISAT -2..

# How are satellites a 'boom' for us :

How can satellites be a boom for us : By acquiring most of the scientific technological advancements of tomorrow and as a centre of aspiration for future space enthusiasts..

Today , most of our life is dedicated to technology..This human period is totally based on technological advancements that is the access for our future.. Among the services that satellites can provide for disaster risk management and emergency response are weather forecasting, remote sensing, geo-positioning , navigation and telecommunication..



Nowadays , everything is possible with the help of technology..And as we all know that after the birth of satellites, our lives have drastically changed into simpler form.. So what will happen when the confluence of satellite and technological development takes place.. Our life's working would be SIMPLEST...

### WEATHER FORECASTING :

Satellite information is very essential for tracking and determining calamity alerts and evacuate victims from areas under dangers..

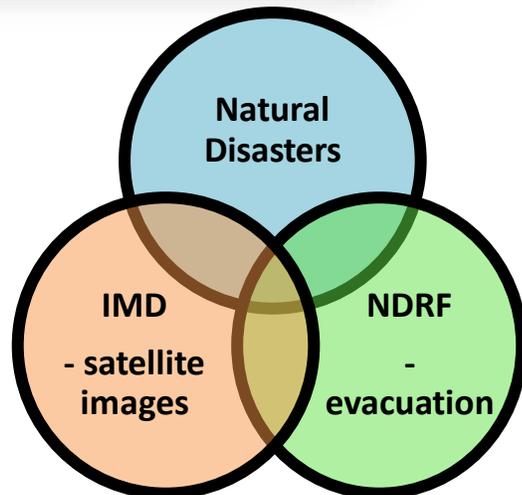
Last year in India , Bulbul cyclone which struck the shoars of West Bengal and Bangladesh and resulted into massive destruction of property and kaccha houses. Before this cyclone hit these states.. the weather forecasting satellites alerted the IMD ( Indian Meteorological Department ) by updating the red , orange and yellow zones of area under danger through satellite images..These led to the evacuation of many fishermen who lived near the banks of rivers by NDRF teams.....



**BULBUL AFTER EFFECTS**

NISARG CYCLONE : Cyclone Nisarg hit the shoars of Maharashtra with the speed of 140 km/h on 1<sup>st</sup> June this year.. INSAT alerted the IMD with satellite view images of the cyclones' trajectory from the Arabian Sea to Gujarat and Maharashtra.. The evacuation of workers

near Alibag in South Mumbai was only possible after the satellite images were released by IMD in public ..



A note on Indian Weather forecasting satellites :

1. INSAT - 3D : Launched on 26 July 2013 by ISRO for meteorological and rescue purposes...
2. Kalpana - 1 : first dedicated meteorological satellite launched by ISRO on 12 September 2002
3. SCATSAT - 1 : Launched mainly for cyclone prediction and tracking

A note on Indian communication satellites :

**ISRO has launched a series of G-SAT communication satellites .. Also**

**INSAT 3 A : Launched by ISRO at Ariane on 9 April 2003..**

**INSAT 4 A : First of INSAT 4 satellite series..launched by ISRO on 21 December 2005**



A note on ISRO :

Full form : Indian Space Research Organization

Founding date : 15 August 1969

Founder : Vikram Sarabhai

Headquarter : Bengaluru, IT City

Director : K Sivan

ISRO 's future agenda is to launch more human spaceflight programmes, deep space missions and build new technologies..  
Future prospects of ISRO are : Aditya L 1 mission to the Sun and human spaceflight programme – Gaganyaan..

# CONCLUSION :

The concluding statement of this essay is :

Satellites seem to be a boom as well as a boon for future space enthusiasts.. The answer of the question – ‘Why it is so ?’ has been given in the above part of essay.. Anything can exist into two or many forms with beneficial aspects... In the same way, satellites can be a boon for us , with the change they bring in our lives.. From watching TV to finding tourist destinations near Goa , satellites remain to be a very integral part of the working of human life .. Also , in many ways satellites result to be a boom as they result in technological advancements for our brilliant future ahead..I can't imagine of a world without satellite !!!



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