



May - 01

NATIONAL

Nutrient Based Subsidy Scheme

- ❖ Recently Union government has approved the subsidy for non-urea fertilizers this year to ₹ 22,186 crores.
- ❖ The Cabinet Committee on Economic Affairs also approved the inclusion of ammonium phosphate, under the nutrient-based subsidy scheme.
- ❖ Nutrient Based Subsidy (NBS) Scheme is being implemented, since 2010 by the Department of Fertilizers, Ministry of Chemicals & Fertilizers.
- ❖ Under NBS, a fixed amount of subsidy decided on an annual basis, is provided on each grade of subsidized Phosphatic & Potassic (P&K) fertilizers depending on its nutrient content.
- ❖ The NBS scheme was sought to deregulate subsidy on non-urea fertilizers and expected to reduce the subsidy burden substantially.
- ❖ Under the scheme, the fertilizers except urea are to be provided to the farmers at subsidized rates.
- ❖ The scheme focuses on secondary nutrients such as N, P, K and S (nitrogen, phosphorus and potassium and sulphur) and also micro nutrients.

INTERNATIONAL

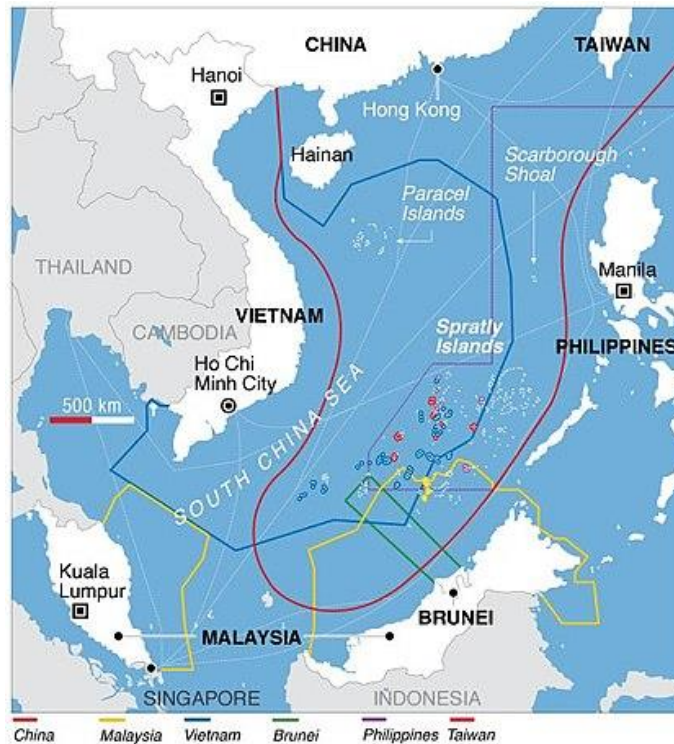
Great American Economic Revival Industry Groups

- ❖ The Great American Economic Revival Industry Groups were created by U.S. President Donald Trump to combat the economic impact of the ongoing 2019–20 coronavirus pandemic.
- ❖ Among them 6 members have been chosen from the Indian-American community for the Great American Economic Revival group by the USA President.
- ❖ These include Google's Sundar Pichai and Microsoft's Satya Nadella, IBM's Arvind Krishna, Micron's Sanjay Mehrotra, Ann Mukherjee from Pernod Ricard and Ajay Banga from Mastercard.
- ❖ Other prominent members appointed by Trump are Tim Cook, Mark Zuckerberg, Elon Musk and Bill Ford.
- ❖ It was a second task force, following the White House Coronavirus Task Force.

- ❖ The White House Coronavirus Task Force is headed by the U.S. Vice President Mike Pence.

USA ships at South China Sea

- ❖ U.S. Warships Enter Disputed Waters of South China Sea.
- ❖ An Australian warship has also joined with this.
- ❖ The area is near waters claimed by both Vietnam and Malaysia as well as China.
- ❖ China claims most of the energy-rich South China Sea, within a U-shaped "nine-dash line" on its maps.
- ❖ But that is not recognised by its neighbours.
- ❖ Vietnam recently protested after China said that China had established two administrative districts on the Paracel and Spratly islands in the disputed waters.



About

- ❖ The South China Sea is a marginal sea.
- ❖ It is a part of the Pacific Ocean, encompassing an area from the Karimata and Malacca straits to the Strait of Taiwan.
- ❖ The nine-dash line refers to the claims by China in the South China Sea.

- ❖ It includes the Paracel Islands, the Spratly Islands, the Pratas Islands, the Maccles field Bank and the Scarborough Shoal.
- ❖ The claim encompasses the area of Chinese land reclamation known as the "Great Wall of Sand".

SCIENCE AND TECHNOLOGY

19 interstellar asteroids

- ❖ The first known permanent population of asteroids has been discovered in the new study.
- ❖ The study has been published in the journal Monthly Notices of the Royal Astronomical Society.
- ❖ It was discovered between Jupiter and Neptune by the Brazilian Astronomers.
- ❖ It roams in between the giant planets of the solar system.
- ❖ The first interstellar asteroid known as 'Oumuamua was discovered in 2017.
- ❖ The asteroid has come from the star called Vega in the constellation Lyra.
- ❖ The asteroids belong to a group of objects called Centaurs.



- ❖ The asteroids have been originating from outside of our solar system.
- ❖ It is believed that the asteroids have been captured from other stars billions of years ago.
- ❖ As the universe began to expand, the sun was born and the gravity of the growing sun sucked these asteroids into the solar system.
- ❖ These asteroids once belonged to another star and are now orbiting between Jupiter and Neptune.
- ❖ They have been orbiting our sun and hiding in plain sight.



- ❖ The newly discovered asteroids are believed to have been present almost since the birth of our solar system, 4.5 billion years ago.
- ❖ The close proximity of the stars meant that they felt each other's gravity much more strongly in those early days than they do today.
- ❖ This enabled asteroids to be pulled from one star system to another.
- ❖ Astronomers believe the space rocks were ripped from their original location as the universe expanded and the sun grew rapidly, creating its own gravitational pull.
- ❖ The enormous force of the burgeoning star sucked the rocks into the formative solar system and they have remained here ever since.

Clinical Trials for Covid

- ❖ Germany has approved first clinical trials of a COVID-19 vaccine on humans.
- ❖ The German Biotechnology company BioNTech's vaccine program was authorized for human clinical trials.
- ❖ BioNTech and Pfizer are jointly developing BNT162.
- ❖ This is the fourth authorized clinical trial worldwide.
- ❖ In Britain, volunteers in a trial at the University of Oxford are set to be given the first dose of a potential vaccine.
- ❖ It was based on a virus found in chimpanzees.
- ❖ Aside from Biontech and Oxford, three other clinical trials on humans have been approved worldwide.
- ❖ The Chinese and US developers among the first to move.
- ❖ Beijing approved the first trial for a vaccine developed by the military-backed Academy of Military Medical Sciences and Hong Kong based CanSino Bio.
- ❖ The US drug developer Moderna already started the trial with the US National Institutes of Health.
- ❖ Another US lab, San Diego-based Inovio Pharmaceuticals, also began first phase human trials.

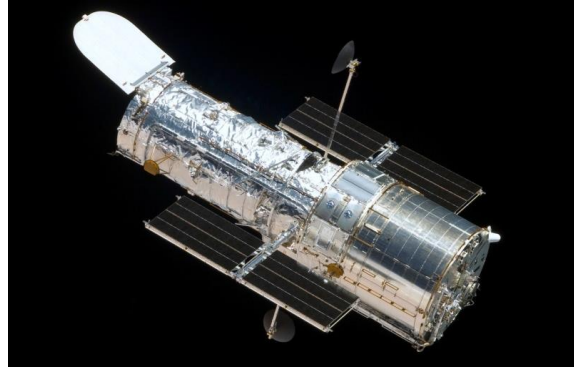
Name of Vaccine	Developer Name	Current stage of clinical Trials	Start Date
AD5-NCOV (Adenovirus Type 5 Vector)	CanSino Biological & Beijing Institute of Biotechnology	Phase 2	10 April



ChAdOx1	University of Oxford	Phase 1/2	23 April
INO-4800 DNA plasmid vaccine	Inovio Pharmaceuticals	Phase 1	3 April
Inactivated	Beijing Institute of Biological Products	Phase 1	10 April
PiCoVacc (Inactivated + alum)	Sinovac	Phase 1	13 April
BNT162 mRNA	BioNTech/Fosun Pharma/Pfizer	Phase 1/2	Approved, not started
LNP-encapsulated mRNA-1273	Moderna/NIAID	Phase 1	3 March

Hubble Space Telescope

- ❖ NASA celebrated its 30 years of launch of Hubble Space Telescope on April 24.
- ❖ It is one of the longest living Space Telescopes in the world.
- ❖ The telescope has played a crucial role in the discovery of accelerating expansion of the cosmos with the partnership of European Space Agency.
- ❖ On its 30th anniversary, the Hubble Telescope captured a Cosmic Reef.
- ❖ The Cosmic Reef is a group of stars.
- ❖ Each star in the group is ten times the size of the sun.
- ❖ The stars are in a nebula.
- ❖ Nebula is a giant cloud of gas and dust.
- ❖ The reef has red colour glowing around.
- ❖ The red colour comes due to the glowing of nitrogen and hydrogen gas.
- ❖ The blue colour in the reef is because of the presence of oxygen.



ENVIRONMENT

JNTBGRI

- ❖ The Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI) has been selected as one of the Biological Knowledge and Resource Centers of the Indian Initiative on Earth Bio Genome Sequencing (IIEBS).
- ❖ The project is planning for a nationwide project to decode the genetic information of all known species of plants and animals in the country.
- ❖ The National Institute of Plant Genome Research, New Delhi is the coordinating center for the nationwide project involving a total of 24 institutes.
- ❖ The project is part of the Earth Bio Genome Project, an international initiative which aims to sequence the genetic codes of all of earth's eukaryotic biodiversity over a period of 10 years.
- ❖ Genome sequencing is ostensibly the process of determining the complete DNA sequence of an organism's genome at a single time.

