Shri guru Prasad Katiyar

- Government recently issued postal stamp of Katiyar
- Gaya Prasad Katiyar was one of the most dedicated soldiers of India’s freedom struggle
- Gaya Prasad Katiyar was born at Jagadishpur (UP). He joined Hindustan Socialist Republican Association in 1925 and got connected with Chandra Shekhar Azad and Bhagat Singh.
- Later he participated in Lahore Conspiracy Case and was arrested from Saharanpur in 1929. He joined the hunger strike at Lahore Jail with his co-prisoners.
- Later he was transported to Cellular Jail in Andaman and again he participated on hunger strike there. He was repatriated in 1937 but again arrested and transported to cellular jail from where he was released in 1946.

Earthquake prone area in India

- Earthquake prone areas of the country have been identified on the basis of scientific inputs relating to seismicity, earthquakes occurred in the past and tectonic setup of the region.
- Based on these inputs, Bureau of Indian Standards has grouped the country into four seismic zones, viz. Zone II, III, IV and V. Of these, Zone V is seismically the most active region, while zone II is the least.
- Following are the main area earthquake zone viz.
2. Zone IV covers remaining parts of Jammu and Kashmir and Himachal Pradesh, National Capital Territory (NCT) of Delhi, Sikkim, Northern Parts of Uttar Pradesh, Bihar and West Bengal, parts of Gujarat and small portions of Maharashtra near the west coast and Rajasthan.


4. Zone II covers remaining parts of country.

- National seismological network work by using data from VSAT that help in disaster management
- Causes of earthquake occurrence
  1. tectonic main force
  2. volcanism
  3. anthropogenic like dam building and ground water depletion

sat guru ram Singh

- Satguru Ram Singh was a great leader of Kuka Movement and Namdhari Sikh Sect, a Spiritual Teacher, Social Reformer and a prominent Freedom fighter.
- He was born in the year 1816. The current year is his 200th Birth Anniversary year. The decision to commemorate his 200th birth anniversary has been taken keeping in view the contributions made by him towards the cause of the Society.
New passport policy
- In order to streamline, liberalize and ease the process of issue of passport, the Ministry of External Affairs has taken a number of steps in the realm of passport policy which is expected to benefit the citizens of India applying for a passport.
- Now only one parent name is sufficient and widow and separated women also get passport with ease of the governance.
- Date of birth can be proved by school leaving certificate also.

FSSAI
- Works under ministry of consumer affairs
- FSSAI IS responsible for making regulations and setting standards, import of food, notifying labs and coordination to ensure cooperation between FSSAI and States.
- Regular surveillance, monitoring and inspection is undertaken by State/UT Governments to check compliance with the provisions of the Food Safety and Standards Act, 2006, and regulations there under. However, separate information in respect of inspection of food packaging industries carried out by State/UT authorities is not maintained centrally by FSSAI.

Improve education quality in government school
- RMSA, RUSA, PBBB, SSA like scheme and RTE like constitutional amendment has been made.
- the Rashtriya Madhyamik Shiksha Abhiyan (RMSA), a Centrally Sponsored Scheme. These include provision for:
  (i) additional teachers to improve Pupil Teacher Ratio,
(ii) induction and inservice training for Principals, Teachers, Master Trainers and Key Resource Persons,
(iii) Maths and Science kits,
(iv) Lab equipments,
(v) Special teaching for learning enhancement,
(vi) ICT facilities in schools,
(vii) introduction of vocational education component at the secondary level.

G.S.-03

Renewable energy in India

- India’s INDC under CoP 21 stat about 40% of energy to be produced from non-conventional or renewable sources
- This include goal of decreasing target by solar energy > wind energy > hydro power > bio power
- Surya mitra and sujala yojana start to provide solar pump for irrigation in agriculture

Fertilizer availability in India

- In recent year lack of fertilizer or supply bottle neck led to crisis in agriculture so government take following step.
  1. Analyze situation before sowing
  2. Demand based supply system
  3. Monitoring of subsiding fertilizer by GPS
  4. State government cooperate manufacture
  5. Regular video conference
  6. Gap filling between supply and demand.
**Advanced heavy water reactor technology**
- Use thorium based fuel
- DRDO and BARC developing this program
- Thorium found in monazite sand of the Kerala
- Nuclear fuel also found in rajsthan, Jharkhand also.

**SDG in health sector**
- SDG adopted in place of MDG. In this there 17 goal and 169 target that to be achieved by 2030.
- 3rd goal is health and wellbeing of all at all age and this goal implemented in india by national health mission.
- Health is state subject but national health mission support state and UT by central government
- According to life expectancy india is only ahead of Pakistan from its all border nation.

**Bio toilet in indian railway**
- Indian railway have target to fit all trains with bio toilet that can enhance cleanliness in railway
- Bio toilet works on anaerobic process digestion
- Anaerobic digestion by bacteria convert human excreta into water and CH4 [methane] and C2[carbon]
- Gas are released in atmosphere while waste water used for ground water discharge
Organic farming

- the importance of organic farming, with emphasis on sustainable production, food security and soil health, Central Government is committed to promote organic farming.
- The Minister of Agriculture said that the Government is promoting organic farming across the country through the dedicated scheme of Paramparagat Krishi Vikas Yojana (PKVY) and Organic Value Chain Development for Northeast regions (OVCDNER under National Mission for Sustainable Agriculture (NMSA).
- Organic farming include following component
  1. No chemical component or less chemical component
  2. Crop rotation
  3. No GM crop
  4. Traditional farming practice
- Ministry of Commerce has implemented the National Programme for Organic Production (NPOP) since 2001.
- Objective of this plan as below
  1. Certification of organic product
  2. Accredit certification
  3. Prescribe certification standard
  4. Improve export
  5. Encourage organic farming development

Ground water exploitation

- Major area of exploitation are Punjab, Haryana and gangetic plain
- Reason for this exploitation
  1. Mechanization of irrigation
  2. Crop pattern and intensive farming
  3. Climate change and extreme weather event
  4. Lack of crop planning
• Step taken by government
  1. National water policy
  2. Formed model water bill
  3. Central ground water authority under protection of environment
  4. MNREGA in water harvesting

**Genetically modified crops**
• Introduction of GM crop made under task force of the M.S. Swaminathan
• Introduction of the GM crops come under environment protection act under which genetic engineering appraisal committee (GEAC)

**Digital payment option by government**
• Cashless economy need good tool which are understandable, accessible, and secure
• Below are the five major way to cashless drive
  1. Unified Payment Interface, UPI
     • This is smart phone based payment system that have no need to bank detail only transaction by mobile number
  2. USSD (*99#banking)
     • By this way person without smart phone without USSD code technology
  3. Adhar Enabled Systems
     • By this way person can pay using aadhar detail with biometric technique that give more secure and speedy transaction
  4. Wallets &
  5. Rupay/Debit/Credit/Prepaid Cards

**Wind power energy scheme to enhance grid management**
• MNRE given consent to interstate transmission system
Managed by solar energy corporation of India [e hui na work division and cooperation wali baat wind power ka management solar wale karege]
Online data and open bidder scheme to be start for transparency

Algal bloom
Also called harmful algal bloom occur by the utrophication process where nutrient available in vast quantity
When number of the algae increases then the harmful effect also increase because water quality decrease
Algae also can be used for biogas and bio fuel for electricity generation

Health for all
Accessible health care for all at all age is the sustainable development goal that have to be completed by 2030
Major problem to this are following
1. Ratio of population to doctor
2. Skill of doctor
3. No humanity in hospital as they become business
4. Economic access to hospital
5. More and more out of pocket expenditure
6. Patent and IPR policy
7. Medical college misadministration

India and INDC
India’s Intended Nationally Determined Contribution (INDC) is comprehensive and balanced, incorporating all its development priorities.
India’s contribution takes into account its commitment to conservation of nature, along with development challenges like poverty eradication, food security, universal access to education, health and energy etc.
• Green Climate Fund (GCF) has been set up under the United Nations Framework Convention on Climate Change (UNFCCC) as an operating entity of the financial mechanism of the Convention. India is an eligible country for accessing GCF.

ניוף伊斯兰 banking window
• Reserve Bank of India (RBI) had set up an interdepartmental group on Islamic Banking.
• Entire exercise was aimed at promoting financial inclusion, accessing huge market potential to attract finance from Gulf countries for infrastructure development.
• Government has already introduced other means of financial inclusion for all citizens like Pradhan Mantri Jan Dhan Yojna, Pradhan Mantri Suraksha Bima Yojna, Pradhan Mantri Jeevan Jyoti Bima Yojna, Pradhan Mantri Mudra Yojna etc

ניוףJapanese encephalitis
• What is Japanese Encephalitis (JE)? The suffix itis means “inflammation”. Encephalitis means inflammation of the brain Meningitis inflammation of the meanings (the tissues that surround the brain or spinal cord)
• What are the symptoms? Headache and stiff neck Convulsions Weakness of the arms, legs Pain behind the eyes Raised body temperature between 38 and 41 degrees Celsius. If untreated, it can result in to Coma, paralysis Mental retardation or death. fatality rate can be as high as 60%
• Geographical Spread Flavi virus reproduces in pigs but doesn’t infect them. So, Pigs are amplifying hosts. (also water birds) Mosquitoes belonging to the Culex tritaeniorhynchus and Culex vishnui groups – they usually breed in flooded rice fields. These Culex mosquitoes are normally zoophilic, i.e. they prefer to take blood meals from animals rather than from humans. These Mosquitoes usually prefer to drink the blood of such pigs. But when
the population of such mosquitoes increases exponentially (during rainy season, around August), human biting rate increases. And thus Flavivirus gets transferred from pigs to humans and damages our brain = inflation of brain = Japanese Encephalitis.

**Ken betwa link**
- This is first of the project developed under inter linking of the river
- This project developed by PMKSY
- This project will helpful in irrigation of bundelkhand which are worst affected drought prone area with grave poverty level
- Biggest hurdle of this project is environmental clearance like panna tiger reserve

**Levitation train**
- Indian Railways have floated an expression of interest for designing, building, commissioning, operation, running and maintenance of levitation-based train system on public private partnership basis.
- The Railway route for this project has not been defined at such an early stage of the project since the initial thrust of the project is on developing and implementing a cost effective solution of such a technology.
- It has been planned to operate Maglev trains with ecofriendly fuel.

**Step for controlling malnutrition**
- The Government of India is implementing various schemes all across the country for reducing infant mortality on account of malnutrition
  1. Provision of Supplementary food to children aged 636 months under Integrated Child Development Project (ICDS).
2. Promotion of Institutional deliveries through cash incentive under Janani Suraksha Yojana (JSY) and Janani Shishu Suraksha Karyakaram (JSSK) which entitles all pregnant women delivering in public health institutions to absolutely free and no expense antenatal checkups, delivery including Caesarean section, postnatal care and treatment of sick infants till one year of age.

3. Strengthening of delivery points for providing comprehensive and quality Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A) Services, ensuring essential newborn care at all delivery points, establishment of Special Newborn Care Units (SNCU), Newborn Stabilization Units (NBSU) and Kangaroo Mother Care (KMC) units for care of sick and small babies. Home Based Newborn Care (HBNC) is being provided by ASHAs to improve child rearing practices.

4. Early initiation and exclusive breastfeeding for first six months and appropriate Infant and Young Child Feeding (IYCF) practices are promoted in convergence with Ministry of Women and Child Development.

5. Universal Immunization Program (UIP) is being supported to provide vaccination to children against many life threatening diseases such as Diphtheria, Peruses, Tetanus, Poliomyelitis, Tuberculosis, Measles, Hepatitis B, Meningitis and Pneumonia due to Homophiles Influenza type B.

6. Rashtriya Bal Swasthya Karyakram (RBSK) for health screening, early detection of birth defects, diseases, deficiencies, development delays including disability and early intervention services has been operationalized to provide comprehensive care to all the children in the age group of 0-18 years in the community.

- The National Food Security Act, 2013 is being implemented in all the States/Union Territories (UTs). State/UT wise detail of coverage determined under the Act for receiving highly subsidized food grains and the current coverage, based on identification of eligible households reported by States/UTs.
MDG in health sector

- Millennium Development Goals (MDGs) 4, 5 and 6 pertain to health sector. Progress on MDGs 4, 5 and 6 are given below.

1. **MDG 4: Reduce Child mortality**
   The target is to reduce the Under Five Mortality Rate (U5MR) among children by two-thirds between 1990 and 2015. In case of India, it translates into a goal of reducing U5MR from 126 per 1000 live births in 1990 to 42 in 2015. India has achieved U5MR of 45 per 1000 live births during 2014 as per the latest Sample Registration System (SRS) estimates released by the office of Registrar General & Census Commissioner, India (ORGI).

2. **MDG5: Improve Maternal Health**
   The target is to reduce Maternal Mortality Ratio (MMR) by three-quarters between 1990 and 2015. In case of India, it translates into a goal of reducing MMR from 556 per 1,00,000 live births (as reworked by UN Inter Agency Expert Group) for the year 1990 to 139 in 2015. India has achieved MMR of 167 per 1,00,000 live births during 2011-13 as per the latest SRS estimates released by ORGI.

3. **MDG6: Combat HIV / AIDS, Malaria and Other Diseases**
   The target is to halt by 2015 and begin to reverse the spread of HIV / AIDS and the incidence of malaria and other major diseases. Malaria Incidence has reduced by about 56% (from 2.09 in 2000 to 0.92 cases per 1000 population in 2015). The Global Tuberculosis Report, 2015 published by the World Health Organization mentions India having attained the Millennium Development Goal regarding Tuberculosis.

Measure to meet target for nuclear energy

- The Government has taken measures to ensure availability of fuel in required quantity (from both domestic and imported sources) and to expedite ongoing projects.

  1. In principle approval of sites to locate nuclear power plants in future
2. Creation of India Nuclear Insurance Pool to cover the Operator’s Liability as prescribed under the provisions of the Civil Liability for Nuclear Damage (CLND) Act, 2010
3. Amendment to the Atomic Energy Act, 1962 to facilitate establishment of Joint Venture Companies (JVC) by Nuclear Power Corporation of India Limited (NPCIL) with other Central Public Sector Undertakings to set up nuclear power plants.
4. Budget speech announcement (2016-17) on augmenting investment in nuclear power.

- A focused approach directed towards research and development with identified goals are being carried out in various fields like advanced reactor development, nuclear fuel cycle, thorium fuel utilization, reactor safety studies, life cycle & ageing management studies, electronics and instrumentation, high efficiency energy conversion, advanced materials and remote handling and robotics.

**Step to prevent train accident**
- The measures announced to prevent accidents and ensure safety in the last two Railway Budgets were, Train Collision Avoidance System (TCAS) on High Density Network, elimination of unmanned level crossings in a phased manner and review the recommendations of High Level Safety Review Committee headed by Dr. Kakodkar.
- Following steps have been taken to avoid collisions due to Signal Passing at Danger (SPAD) or over speeding and ensure safety:
1. Train Collision Avoidance System (TCAS) is a radio communication based system with continuous update of movement authority. This system is aimed at providing capability of preventing train accidents caused due to Signal Passing at Danger (SPAD) or non observance of speed restrictions by train drivers.
2. Train Protection and Warning System (TPWS) is a proven Automatic Train Protection System to avoid train accidents on account of human error of Signal Passing at Danger (SPAD) or over speeding.

3. Elimination of Unmanned Level Crossings through various means – It has been decided to progressively eliminate all unmanned level crossings by
   (i) closing unmanned crossings having NIL/negligible Train Vehicle Units (TVUs),
   (ii) merger of unmanned level crossing with nearby unmanned/manned gates or Road Under Bridge or Road Over Bridge or Subway by construction of diversion road,
   (iii) provision of Subways/Road Under Bridges. The Unmanned Level Crossings which cannot be eliminated by the above means will be progressively manned based on the volume of rail road traffic (TVU) and visibility conditions.

↩ Some welfare major of government
• A large number of important policies, activities, decisions and initiatives were undertaken by the Ministry of Petroleum & Natural Gas in last one year. The achievements were in downstream, midstream as well as upstream sectors. The year was declared as the year and saw launch of a number of people oriented initiatives.

1. Pradhan Mantri Ujjwala Yojana (PMUY)
   Government has approved Rs. 8000 crore under the Pradhan Mantri Ujjwala Yojana (PMUY) for release of 5 crore deposit free new LPG connections to Women of BPL families over three years, i.e. FY 201617, 201718 and 201819.

2. Direct Benefit Transfer in PDS Kerosene Scheme (DBTK)
   Jharkhand has become first State in the country to implement DBTK and others have been requested to join the Scheme. Under the Scheme, the Kerosene is being sold at nonsubsidised price and subsidy, as admissible, is being transferred to consumers directly into his/her bank account.
3. **PAHAL: World’s largest Direct Benefit Transfer Scheme**

PAHAL (Pratyaksh Hasthantarit Labh) is the world’s largest Direct Benefit Transfer Scheme. Through PAHAL, subsidy given to consumers is directly transferred to the registered account of the consumer without involving any intermediary.

4. **Hydrocarbon Exploration Licensing Policy (HELP)**

Cabinet on 10.3.2016 has approved Hydrocarbon Exploration and Licensing Policy (HELP) for award of hydrocarbon acreages. The salient features are:

(a) Single License for exploration and production of conventional as well as nonconventional hydrocarbon resources;

(b) Open Acreage Policy option to select the exploration blocks without waiting for formal bid round;

(c) Revenue Sharing Model – simple, easy to administer – no cost recovery – no micromanagement by the Government – operational freedom to the operator; and

(d) Pricing and Marketing Freedom – a major incentive for investment.

**:Nano craft**

- Indian Space Research Organisation (ISRO) is planning to send two nano satellites into space namely INS1A & INS1B, weighing 10 kg each including payload mass of 5 kg.
- These nano satellites are meant for technology demonstration. Mission life is expected to be six months to one year.

**:Angel investor**

- An angel investor means person contributing in start up means giving venture capital. SEBI have approved new provision for angel investor

i. The upper limit for number of angel investors in a scheme is increased from forty nine (49) to two hundred (200).

ii. The definition of startup for Angel Fund investments is now aligned with the
iii. The requirements of minimum investment amount by an Angel Fund in any venture capital undertaking is reduced from fifty lakh to twenty five lakh.

iv. The locking requirement of investment made by Angel Funds in the venture capital undertaking is reduced from three years to one year.

v. Angel Funds are allowed to invest in overseas venture capital undertakings up to 25% of their investible corpus in line with other AIFs.

**NSG membership**

- India is currently engaged in nuclear trade with international partners based on a waiver from Nuclear Suppliers Group (NSG) in 2008.
- The waiver is in the form of a concession without according India the status of a full member of NSG and therefore has an element of unpredictability and attendant risks in the long run for India’s long term nuclear power program.
- Full membership of the NSG would enable India to have enhanced and predictable global access to nuclear technology, fuel, materials and components required for our expanding civil nuclear programme. It would advance energy security, contribute to India’s growth strategy based on clean energy to combat climate change, and strengthen global nuclear non-proliferation.

**Pradhan mantri surkshit matrutva abhiyaan**

- The Pradhan Mantri Surakshit Matritva Abhiyan has been launched by the Ministry of Health & Family Welfare (MoHFW), Government of India to provide fixed day, assured, comprehensive and quality antenatal care universally to all pregnant women on the 9th of every month.
**Chandrayaan 02**

- Chandrayaan2, India’s second mission to the Moon, is a totally indigenous mission comprising of Orbiter, Lander and Rover.
- The Orbiter and Rover flight systems are in advanced stage of realisation. Payloads are under development at various ISRO Centres / laboratories. Realisation of indigenous Lander is in progress.
- The payloads will collect scientific information on lunar topography, mineralogy, elemental abundance, lunar exosphere and signatures of hydroxyl and water ice.
- ISRO is working towards the launch of Chandrayaan2 during the first quarter of 2018.

**PSLV C36**

- In its thirty eighth flight (PSLVC36), ISRO’s Polar Satellite Launch Vehicle successfully launched the 1,235 kg RESOURCESAT2A Satellite today morning (December 07, 2016) from the Satish Dhawan Space Centre SHAR, Sriharikota. This is the thirty seventh consecutively successful mission of PSLV

**RFID system at port**

- All Major Ports have been directed to implement the Radio Frequency Identification (RFID) system to track the movement of men, materials and vehicles within the port premises on real time basis.
- Implementation of RFID system will eliminate manual checking of documents at port gate and real time tracking of movement of vehicles, men and materials. This would reduce congestion and also cost of operations at Ports
**Bonded labor rehabilitation scheme**

- Bonded Labour System has been abolished by law throughout the country with effect from 25th October, 1975 under the Bonded Labour System (Abolition) Ordinance which was replaced by the Bonded Labour System (Abolition) Act, 1976. Under the Act, it is the responsibility of State governments to identify, release and rehabilitate the bonded labour.
- The salient features of the Scheme are as under:
  1. The revised scheme is a Central Sector Scheme
  2. The release of rehabilitation assistance has been linked with conviction of the accused.
  3. Scheme provides for creation of a Bonded Labour Rehabilitation Fund at District level
  4. Allotment of house site and agricultural land.
  5. Land development.
  6. Provision of low cost dwelling units.
  7. Animal husbandry, dairy, poultry, piggery etc.
  8. Wage employment, enforcement of minimum wages etc.
  9. Collection and processing of minor forest products.
  10. Supply of essential commodities under targeted public distribution system.
  11. Education for children.

**Reusable launch vehicle**

- ISRO has successfully carried out the first experimental mission of Reusable Launch Vehicle – Technology Demonstrator (RLVTD), on May 23, 2016 from Satish Dhawan Space Centre, Sriharikota. In this mission, critical technologies such as autonomous navigation, guidance & control and reusable thermal protection system have been successfully demonstrated.
- The Development of Reusable Launch Vehicle is a technical challenge and it involves the development of many cutting edge technologies. Presently, it is in the preliminary stage of total developmental process. A series of
technology demonstration missions would be required before it is made operational.

**Rights of Persons with Disabilities Bill 2016 Passed by Parliament**

- The salient features of the Bill are:
  1. Disability has been defined based on an evolving and dynamic concept.
  2. The types of disabilities have been increased from existing 7 to 21 and the Central Government will have the power to add more types of disabilities.
  3. Speech and Language Disability and Specific Learning Disability have been added for the first time. Acid Attack Victims have been included. Dwarfism, muscular dystrophy have been indicated as separate class of specified disability. The New categories of disabilities also included three blood disorders, Thalassemia, Hemophilia and Sickle Cell disease.
Use of satellite technology for farmer

<table>
<thead>
<tr>
<th>SN</th>
<th>Satellite (Launch Vehicle)</th>
<th>Launch date</th>
<th>Cost incurred (in Crores)</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Resourcesat-2 (PSLV-C16)</td>
<td>20.04.2011</td>
<td>138.71</td>
<td>To provide multispectral images for inventory and management of natural resources, Crop production forecast, wasteland inventory, Land &amp; Water Resources development, and Disaster Management Support.</td>
</tr>
<tr>
<td>2.</td>
<td>Resourcesat-2A (PSLV-C36)</td>
<td>07.12.2016</td>
<td>106.11</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Cartosat-1 (PSLV-C6)</td>
<td>05.05.2005</td>
<td>248.49</td>
<td>To provide high resolution images for Cartographic mapping, Stereo data for Topographic Mapping &amp; DEM, and host of DEM Applications – Contour, Drainage network, etc.</td>
</tr>
<tr>
<td>4.</td>
<td>RISAT-1 (PSLV-C19)</td>
<td>26.04.2012</td>
<td>375.38</td>
<td>To provide all weather imaging capability useful for agriculture, particularly paddy and jute monitoring in kharif season and management of natural disasters.</td>
</tr>
<tr>
<td>5.</td>
<td>Kalpana-1 (PSLV-C4)</td>
<td>12.09.2002</td>
<td>71.30</td>
<td>To provide meteorological data to enable weather forecasting services.</td>
</tr>
<tr>
<td>6.</td>
<td>INSAT-3D (Procued launch)</td>
<td>26.07.2013</td>
<td>206.00</td>
<td>Designed for enhanced meteorological observations, including vertical profile of the atmosphere in terms of temperature and humidity for improved weather forecasting and disaster warning.</td>
</tr>
<tr>
<td>7.</td>
<td>INSAT-3DR (GSLV-F05)</td>
<td>08.09.2016</td>
<td>116.38</td>
<td></td>
</tr>
</tbody>
</table>
**Scramjet technology**
- Scramjet engine technology is a complex technology which is yet to be fully proven worldwide.
- A series of technology demonstration tests are required before inducting the engine with required thrust into future launch vehicles.
- The technology will be useful only during the atmospheric phase of the flight of launch vehicle and will benefit in bringing down the cost of access to space, by reducing the need of carrying the oxidizer along with the fuel.

**Some soil conservation techniques**
- A number of devices will be included in soil health management so as to maintain the fertility of the soil as per the instructions issued by Ministry of Agriculture & Farmers Welfare.
- Soil Health Card promotes the balanced and rationalized use of nutrition on the farm.
- The micro nutritional elements with first and secondary basis keeping in view the soil testing may be used.
- The consumption of chemical fertilizers will be reduced by motivating integrated nutrition management.
- Adopt compost, manure, rural compost, urban compost, green manure in the particular sector of farming under integrated nutrition management.
- Reduce the cost of farming by using different types of bio fertilizers.
- Arrange bio carbon in the soil
- Assimilate residuals while ploughing the fields to have improvements in soil fertility
- Get your soil card made, utilize that and enhance your income.
**Fog problem in India**

- Fog is a visible mass consisting of cloud water droplets suspended in the air or near the Earth’s surface.
- The presence of heavy and extended period fog in the northern regions of India is one of the major weather hazards, impacting aviation, road transportation, economy and public life in the world’s most densely populated region.
- Increase in frequency, persistence and intensity of fog occurrence over the northern parts of the country. Land use changes and increasing pollution in the region are responsible for growing fog occurrence.
- The objectives of the Winter Fog Experiment (WIFEX) are to develop better now casting (next 6 hours) and forecasting of winter fog on various time and spatial scales, and help reduce its adverse impact on aviation, transportation and economy, and loss of human life due to accidents.
Download Standard texts & test series
http://iastoday.in/download

If you like, Please
give feedback here:

http://iastoday.in/contact

Daily weekly monthly Gists module
http://iastoday.in/daily-current-affairs-gk-notes/
PIB,Hindu,Yojana,Kurukshetra,Quiz and more^