



News Analysis (12 Jun, 2021)

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Minimum Support Price

Why in News

In a bid to encourage **crop diversification**, the Central Government has hiked the **Minimum Support Price (MSP)** for **Paddy, Pulses and Oilseeds** (for all mandated **Kharif Crops**).

Key Points

- **About:**
 - The MSP is the **rate at which the government purchases crops from farmers**, and is **based on a calculation of at least one-and-a-half times the cost of production incurred by the farmers**.
 - MSP is a “minimum price” for any crop that the government considers as remunerative for farmers and hence deserving of “support”.
- **Crops under MSP:**
 - The **Commission for Agricultural Costs & Prices (CACP)** recommends **MSPs for 22 mandated crops** and **fair and remunerative price (FRP)** for sugarcane. **CACP is an attached office of the Ministry of Agriculture and Farmers Welfare.**
 - The mandated crops include **14 crops** of the **kharif season**, **6 rabi crops** and **2 other commercial crops**.
 - In addition, the MSPs of **toria and de-husked coconut** are fixed on the basis of the MSPs of rapeseed/mustard and copra, respectively.

- **Factors for Recommending the MSP:**
 - The CACP considers various factors while recommending the MSP for a commodity, including **cost of cultivation**.
 - It takes into account the **supply and demand situation** for the commodity, **market price trends** (domestic and global) and **parity vis-à-vis other crops**, and **implications for consumers** (inflation), **environment** (soil and water use) and **terms of trade between agriculture and non-agriculture sectors**.
- **Three Kinds of Production Cost:**
 - The CACP projects three kinds of production cost **for every crop, both at state and all-India** average levels.
 - **'A2':**
 - Covers all paid-out costs directly incurred by the farmer in cash and kind on seeds, fertilisers, pesticides, hired labour, leased-in land, fuel, irrigation, etc.
 - **'A2+FL'**
 - Includes A2 plus an imputed value of unpaid family labour.
 - **'C2'** It is a more comprehensive cost that factors in rentals and interest forgone on owned land and fixed capital assets, on top of A2+FL.
 - CACP **considers both A2+FL and C2 costs while recommending MSP.**
 - CACP reckons only A2+FL cost for return.
 - However, C2 costs are used by CACP primarily as benchmark reference costs (opportunity costs) to see if the MSPs recommended by them at least cover these costs in some of the major producing States.
 - The **Cabinet Committee on Economic Affairs** (CCEA) of the Union government **takes a final decision on the level of MSPs** and other recommendations made by CACP.
- **Significance of MSP Hike:**
 - The added focus on **nutri-rich nutri-cereals** is to incentivise its production in the areas where **rice-wheat cannot be grown** without long term adverse implications for groundwater table.
 - Concerted efforts have been made over the last few years **to realign the MSPs in favour of oilseeds, pulses and coarse cereals** to encourage farmers shift to larger areas under these crops and adopt best technologies and farm practices, to correct demand - supply imbalance.

- **Issues with Hike:**
 - This increase **seems modest keeping in mind the cultivation costs** - particularly on account of diesel used for powering tractors, irrigation pumps and harvester combines - **have gone up**.
 - Some increases, especially for maize, **did not even keep pace with inflation**.
 - Further, **absence of assured procurement** means farmers have no incentive to cultivate them.
 - The announcement comes at a time **when farm unions have been demanding legislation to guarantee MSP for all farmers for all crops**, and a **repeal of three contentious farm reform laws**.
- **Issues with MSP:**
 - The major problem with the MSP is **lack of government machinery for procurement for all crops** except wheat and rice, which the Food Corporation of India actively procures under the PDS.
 - As state governments procure the last mile grain, the farmers of states where the grain is procured completely by the government benefit more while **those in states that procure less are often affected**.
 - The MSP-based procurement system is also **dependent on middlemen**, commission agents and **APMC** officials, which smaller farmers find difficult to get access to.
- **Solution:**
 - The CACP, in its price policy report for the **2018-19 kharif marketing season**, had suggested enactment of a legislation conferring on farmers '**The Right to Sell at MSP**'. This, it felt, was necessary "**to instil confidence among farmers for procurement of their produce**".
 - The government **should be promoting crop and animal agriculture** that also leads to consumption of foods rich in proteins, vitamins, minerals and dietary fibre — as opposed to just calories and sugar — by the people.
 - The right way to do it is **by freezing the MSPs of paddy and wheat**, besides capping their procurement at, say, 10-15 quintal per acre per farmer.

Source: TH

Beed Model of Pradhan Mantri Fasal Bima Yojana

Why in News

Recently, the Maharashtra Government asked the Prime Minister for state-wide implementation of the '**Beed model**' of the crop insurance scheme **Pradhan Mantri Fasal Bima Yojna (PMFBY)**.

Key Points

- **About Beed Model:**
 - Beed is a **district of Maharashtra** located in the **drought-prone** Marathwada region.
 - **80-110 Formula:** This model is also called 80-110 Formula.
 - Under this plan, the **insurer's potential losses are restricted**.
 - The insurance firm **does not have to entertain claims above 110% of the gross premium**. The **state government has to bear** the cost of compensation **above 110%** of the premium collected to insulate the insurer from losses (**bridge amount**).
 - However, **if the compensation is less than the premium collected**, the **insurance company would keep 20%** of the amount as handling charges and **reimburse the rest to the state government (premium surplus)**.
- **Reason for Implementing this Model:**
 - **Benefits to States:**
 - **Another Source of Fund:** In most years, the **claims-to-premium ratio is low**. In the Beed model, **the profit of the insurance company is expected to reduce** and the **state government would access another source of funds**.
 - **Reduce the Burden of Financing PMFBY:** The reimbursed amount can **lead to lower budgetary provision for PMFBY by the state** for the following year, or **help in financing the paying the bridge amount in case of a year of crop loss**.
 - **Flaws in PMFBY:**
 - **Fiscally-stressed states** have over the years **dissented to footing the premium bill** for the PMFBY, resulting in **insurers not honouring the farmers' claims on time**.
 - In 2020, **far-below-normal monsoon rainfalls** in central Maharashtra's Beed district **dissuaded insurers from covering farmers** in the district under the PMFBY for kharif 2020.
- **Challenges:**
 - Questions remain on **how the state government is going to raise the excess amount, and how the reimbursed amount would be administered**.
 - For **farmers**, this model **does not seem to have any direct benefit**.

Pradhan Mantri Fasal Bima Yojana

- **About:** PMFBY was launched in 2016.
It **provides a comprehensive insurance cover against failure of the crop** thus helping in **stabilising the income of the farmers**.
- **Scope:** All **food & oilseed crops and annual commercial/horticultural crops** for which past yield data is available.

- **Premium:** The prescribed premium is **2%** to be paid by farmers for **all Kharif** crops and **1.5% for all rabi** crops. In the case of annual commercial and **horticultural** crops, the **premium is 5%**.
 - Premium cost **over and above the farmer share is equally subsidized by States and Gol.**
 - However, **Gol shared 90% of the premium subsidy for North Eastern States** to promote the uptake in the region.
- **PMFBY 2.0** (PMFBY was **revamped in the 2020 Kharif Season**):
 - **Completely Voluntary:** Prior to 2020, the scheme was optional for farmers who did not have loans pending, but mandatory for loanee farmers. Since 2020, it has been optional for all farmers.
 - **Limit to Central Subsidy:** The Cabinet decided to cap the Centre's premium subsidy under the scheme for premium rates up to **30% for unirrigated** areas/crops and **25% for irrigated** areas/crops.
 - **More Flexibility to States:** The government has given the flexibility to states/UTs to implement PMFBY and given them the option to select any number of additional risk covers/features.
 - **Investing in ICE Activities:** Insurance companies have to spend 0.5% of the total premium collected on **information, education and communication (IEC)** activities.
- **Use of Technology under PMFBY:**
 - **Crop Insurance App:**
 - Provides for easy enrollment of farmers.
 - Facilitate easier reporting of crop loss within 72 hours of occurrence of any event.
 - **Latest Technological Tools:** To assess crop losses, satellite imagery, remote-sensing technology, **drones, artificial intelligence** and machine learning are used.
 - **PMFBY Portal:** For integration of land records.
- **Performance of the Scheme:**
 - The Scheme **covers over 5.5 crore farmer applications** on average per year.
 - **Aadhar seeding** (linking Aadhaar through Internet banking portals) has helped in speedy claim settlement directly into the farmer accounts.
 - One notable example is mid-season adversity claims of nearly Rs. 30 crore in Rajasthan during Rabi 2019-20 **Locust attack**.

Source: IE

Atlantic Charter

Why in News

Recently, the **US' President and UK's Prime Minister** signed a **new version of the 80-year old Atlantic Charter**.

Key Points

- **Atlantic Charter (1941):**
 - The Atlantic Charter was a **joint declaration released by US President Franklin D. Roosevelt and British Prime Minister Winston Churchill** on 14th August, 1941 (during **World War II**) following a meeting of the two heads of government in Newfoundland.
 - The Atlantic Charter was **subsequently incorporated** by reference in the Declaration of the **United Nations** in 1942.
 - **World War II** was a conflict that **involved virtually every part of the world during the years 1939–45**.
 - The principal belligerents were:
 - **Axis powers:** Germany, Italy, and Japan.
 - **Allies:** France, Great Britain, the United States, the Soviet Union, and, to a lesser extent, China.
 - The Atlantic Charter **provided a broad statement of US and British war aims such as:**
 - They desired **no territorial changes without the free assent of the peoples** concerned.
 - They **respected every people's right** to choose its own form of government and wanted sovereign rights and self-government restored to those forcibly deprived of them.
 - They would **try to promote equal access** for all states to trade and to raw materials.
 - They hoped to **promote worldwide collaboration** so as to improve labour standards, economic progress, and social security.
 - The destruction of "**Nazi tyranny,**" (**Germany**) they would look for a peace under which all nations could live safely within their boundaries, without fear or want.
 - Under such a peace the **seas should be free**.
 - Pending a general security through renunciation of **force, potential aggressors must be disarmed**.

- **New Atlantic Charter (2021):**

- The new charter, a 604-word declaration, is an effort to **stake out a grand vision for global relationships in the 21st century**, just as the original was a declaration of a Western commitment to democracy and territorial integrity just months before the US entered World War II.
- It is a statement of principles, a promise that the UK and the US would meet the challenges of their age together. It calls for both countries to **adhere to the rules-based international order**.
- The new charter focuses on **climate change** and the **need to protect biodiversity**. With references to **emerging technologies, cyberspace** and **sustainable global development**.
- It calls on Western allies to **oppose interference through disinformation** or other **malign influences, including in elections**.
 - It **ranks the threats to democratic nations** in a technological era.
- It vows that as long as there are nuclear weapons, **North Atlantic Treaty Organisation (NATO)** will remain a nuclear alliance.

- **Opportunity for India:**

- The **old Atlantic Charter alienated Indian nationalism from the West but the new Charter and the rebooting of western institutions should facilitate a productive phase of India's cooperation with the US** and its allies.
 - In 1941, the UK insisted that **the principle of self-determination highlighted in the charter did not apply to India**.
 - However, the presence of **India and South Africa along with Australia and South Korea (as guests) at the G-7 summit 2021** is a recognition of the **urgent imperative to widen the basis of the West** in dealing with global challenges.
- The current **Anglo-American effort to institutionalise western consultations with India is a long overdue correction**.
 - Indian Prime Minister, who is remotely joining the discussions at the **G-7 summit (2021)**, has an opportunity to signal a commitment to both address perceptions about shrinking democratic freedoms within India and **offer substantive collaboration with the western democracies on global issues**.

Source: IE

Resolution 75/260 of UNGA: HIV/AIDS

Why in News

The Union Health Minister addressed the **75th session** of the **United Nations General Assembly (UNGA)** on prevention of **HIV/AIDS**.

The **Resolution 75/260 of UNGA** deals with the Implementation of the Declaration of Commitment on HIV/AIDS and the political declarations on HIV/AIDS.

Key Points

- **Important Points of Address:**

- **HIV/AIDS Prevention Model:** India's unique HIV prevention model is centered around the concept of '**Social Contracting**' through which the 'Targeted Interventions Program' is implemented with support from civil society.
The program is aimed at behaviour change, communication, outreach, service delivery, counselling & testing and ensuring linkages to HIV care.
- **Legal Framework:** The **HIV & AIDS Prevention and Control Act, 2017**, provides a legal and enabling framework to safeguard the human rights of infected and affected populations.
- **Free Treatment:** India is providing free **anti-retro-viral treatment** to close to 1.4 million people.
 - **Anti-retro-viral therapy:** It is a combination of daily medications that stop the virus from reproducing.
 - The therapy **helps in protecting CD4 cells** thus keeping the immune system strong enough to fight off the disease.
 - It, besides reducing the risk of transmission of HIV, also **helps in stopping its progression to AIDS** (a spectrum of conditions caused by infection due to HIV).
- **National AIDS Control Program:**
 - The **National AIDS Control Organization (NACO)** launched the first phase of the **National AIDS Control Programme in (1992-1999)**.
 - NACO is a division of the Ministry of Health and Family Welfare.
 - It was constituted in 1992 to provide leadership to HIV/AIDS control programmes in India through 35 HIV/AIDS Prevention and Control Societies.
 - India is gradually transitioning the people living with HIV to **Dolutegravir** (a safer and efficacious **anti-retro-viral medication** regimen).
- **The target of Elimination of Mother to Child Transmission of HIV:** For this, viral load testing facilities have been scaled up, and HIV counselling, testing and community-based screening for early diagnosis have been ramped up.

- **Sustainable Development Goal (SDG) and HIV/AIDS:** There are a number of **SDGs** related to the HIV response:
 - **SDG 3:** Ensure healthy lives and promote wellbeing for all at all ages.
 - Target 3.3: End AIDS as a public health threat by 2030**
 - **SDG 4: Quality education**, including targets on **comprehensive sexual and reproductive health (SRH) education** and life skills.
 - **SDG 5: Gender equality**, including targets on **sexual and reproductive health and rights (SRHR)** and the elimination of violence, harmful gender norms and practices.
 - **SDG 10: Reduced inequalities**, including targets on **protection against discrimination, and the empowerment** of people to claim their rights and enhance access to HIV services.
 - **SDG 16: Peace, justice and strong institutions**, including reduced violence against key populations and **people living with HIV**.
- **Other Initiatives:**
 - **Project Sunrise:** The initiative was launched by the Ministry of Health and Family Welfare in 2016, to tackle the rising HIV prevalence in north-eastern states in India, especially among people injecting drugs.
 - **The Red Ribbon:** The red ribbon is the universal symbol of awareness and support for people living with HIV.
 - Wearing a ribbon is a great way to raise awareness on and during the run up to World AIDS Day.
 - **90-90-90:** 90% of those who are HIV positive in the country know their status, 90% of those who know their status are on treatment and 90% of those who are on treatment experience effective viral load suppression.
 - **Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM):** The Global Fund is a 21st-century partnership organization designed to accelerate the end of AIDS, tuberculosis and malaria as epidemics.

Human Immunodeficiency Virus

- HIV **attacks CD4, a type of White Blood Cell (T cells)** in the body's immune system. T cells are those cells that move around the body detecting anomalies and infections in cells.
- After entering the body, HIV multiplies itself and destroys CD4 cells, thus severely damaging the human immune system. Once this virus enters the body, it can never be removed.
 - The CD4 count of a person infected with HIV reduces significantly. In a healthy body, CD4 count is between 500- 1600, but in an infected body, it can go as low as 200.
- Weak immune system makes a person prone to opportunistic infections and cancer. It becomes difficult for a person infected with this virus to recover from even a minor injury or sickness.

- By receiving treatment, severe forms of HIV can be prevented.

Source: PIB

Online Module for Compiling Out-of-School Children's Data

Why in News

The **Ministry of Education** has developed an **online module for compiling out-of-school (due to Covid-19 pandemic) children's data** identified by each State/UT.

The collected data will be mapped with special training centres on the **PRABANDH portal of Samagra Shiksha**.

Key Points

- **About the Module:**
 - Through the module, the government will **facilitate age-appropriate admissions of children in the age group of 6-14 years** and those **belonging to socially and economically disadvantaged groups**.
 - Also, **for out of school children in the 16-18 years age group, financial assistance will be provided** for the first time in the session 2021-22, to continue their education through open/distance learning mode.
- **About PRABANDH Portal:**
 - PRABANDH (**PR**oject **A**ppraisal, **B**udgeting, **A**chievements and **D**ata **H**andling System) is **a step towards leveraging technology** to increase efficiency and manage the **implementation of a centrally sponsored integrated scheme for schooling- Samagra Shiksha**.
 - It is to have **transparency and accuracy** in the System w.r.t Approvals, Releases, Financial Status.
 - Also **streamline the Financial Management System**, to enable more accurate assessment of actual requirement of funds for implementation.

Samagra Shiksha

- **Key Provisions:**
 - Samagra Shiksha is an **integrated scheme for school education extending from pre-school to class XII** to ensure inclusive and equitable quality education at all levels of school education.
 - It subsumes the three Schemes of **Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE)**.
 - The main emphasis of the Scheme is on improving the quality of school education by focussing on the **two T's – Teacher and Technology**.

- **Vision:**
 - It complements the **Sustainable Development Goal (SDG)** for Education , i.e. SDG 4 (Ensure inclusive and equitable quality education and promote lifelong opportunities for all).
 - It aims to support States in the implementation of the **Right of Children to Free and Compulsory Education (RTE) Act, 2009.**
 - Right to Education Act (RTE) is a fundamental right under Article 21-A of the Constitution of India.
 - The Act makes education a **fundamental right of every child between the ages of 6 and 14** and specifies minimum norms in elementary schools.
- **Funding Pattern:**

The Scheme is being implemented as a **Centrally Sponsored Scheme.**

 - The fund sharing pattern for the scheme between Centre and States is at present in the ratio of **90:10 for the North-Eastern States and the Himalayan States** and **60:40 for all other States and Union Territories with Legislature.**
 - It is **100% centrally sponsored for Union Territories without Legislature.**
- **Focus on Digital Education:**
 - Support **'Operation Digital Board'** in all secondary schools over a period of 5 years, which will revolutionize education- easy to understand, technology based learning classrooms will become flipped classrooms.
 - Digital initiatives like **UDISE+, Shagun**, to be strengthened.
 - Strengthening of ICT infrastructure in schools from upper primary to higher secondary level.

Other Important Schemes to Improve Online Education System

- **PM eVidya Programme:**

A programme for multimode access to digital/ online education.
- **Study Webs of Active Learning for Young Aspiring Minds (SWAYAM)**

The objective is to ensure that every student in the country has access to the best quality higher education at the affordable cost.
- **Integrated Online junction for School Education 'Shagun'**

It is an overarching initiative to improve the school education system by creating a junction for all online portals and websites relating to various activities of the Department of School Education and Literacy in the Government of India and all States and Union Territories.
- **Unified District Information System for Education (UDISE) and UDISE+**
 - UDISE, initiated in 2012-13 for elementary and secondary education, is one of the largest **Management Information Systems on School Education** covering more than 1.5 million schools, 9.4 million teachers and almost 250 million children.
 - UDISE+ is an updated and improved version of UDISE.

- **NISHTHA: Teachers' Training Programme**

To improve learning outcomes at the elementary level through an Integrated Teacher Training Programme.

- **Education Quality Upgradation and Inclusion Programme (EQUIP)**

- A five-year vision plan aiming at ushering transformation in India's higher education system by implementing strategic interventions in the sector over five years (2019-2024).
- Sets out to deliver further on principles of Access, Inclusion, Quality, Excellence and enhancing employability in Higher Education.

- **Rashtriya Uchchatar Shiksha Abhiyan (RUSA)**

It is a centrally sponsored scheme launched in October 2013 that aims at providing strategic funding to higher education institutions throughout the country.

Source: TH

Sub-Mission on Agricultural Mechanization Scheme

Why in News

Recently, the Government of India has released funds for various activities of **Farm Mechanization** under the **Sub-Mission on Agricultural Mechanization (SMAM) scheme.**

Key Points

- **About:**

- The **Ministry of Agriculture and Farmers Welfare** launched SMAM in **2014-15**.
- Under it, subsidy is provided for purchase of various types of **agricultural equipment and machinery** to the extent of **40-50% for States** other than NER (North Eastern Region) States and **for NER States it is 100% limited to Rs.1.25 lakhs per beneficiary.**
- The agriculture ministry has also developed a Multilingual Mobile App, '**CHC (Custom Hiring Centres)- Farm Machinery**' which connects farmers with Custom Hiring Service Centres situated in their locality.

- **Aim:**

Increasing **the reach of farm mechanization** to **small and marginal farmers** and to the regions and difficult areas where farm power availability is low.

- **Objectives:**
 - Promoting ‘**Custom Hiring Centres**’ and ‘**Hi-tech Hubs of High-Value Machines**’ to offset the adverse economies of scale arising due to small and fragmented landholding and high cost of individual ownership.
 - **Creating awareness** among stakeholders through demonstration and capacity building activities.
 - Ensuring **performance testing and certification of agricultural machines** at designated testing centres located all over the country.

Agriculture/Farm Mechanization

- **About:**
 - Mechanised agriculture is the **process of using agricultural machinery** to mechanise the work of agriculture.
 - To boost up mechanization in the agriculture sector, **improved agricultural implements and machinery are essential inputs.**
- **Level of farm Mechanization:**
 - **India stands at about 40-45%** with states such as **UP, Haryana and Punjab having very high** mechanization levels, but **north-eastern states having negligible** mechanization.
 - This level of farm mechanization is still low as compared to countries such as the **US (95 %), Brazil (75%) and China (57%).**
- **Significance:**
 - It plays a **vital role in optimizing the use of land**, water energy resources, manpower and other inputs like seeds, fertilizers, pesticides etc to **maximize the productivity** of the available cultivable area and **make agriculture a more profitable and attractive profession for rural youth.**
 - It is one of the **key drivers for the sustainable development of the agriculture sector.**
- **Negative Impact:**
 - Reduce workforce hence **decreases farm employment.**
 - Use of machinery **increases pollution.**

Source: PIB

Ram Prasad Bismil

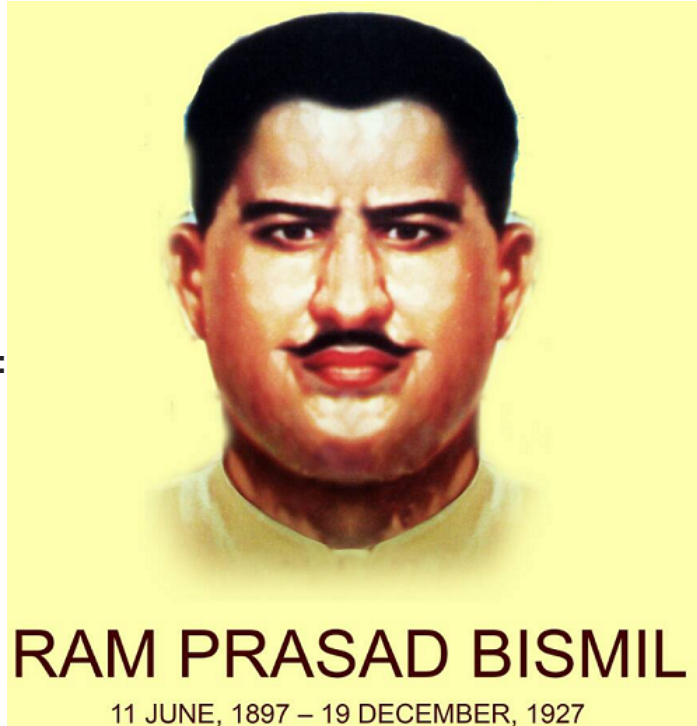
Why in News

Recently, the Ministry of Culture organised a special ceremony at Shahjahanpur, Uttar Pradesh to mark the **birth anniversary** of freedom fighter **Ram Prasad Bismil.**

Key Points

- **Birth:**

Was born on **11th June, 1897**, in a village in **Uttar Pradesh's Shahjahanpur district** to **Murlidhar and Moolmati**.



- **About:**

- Was among the most **noteworthy Indian freedom fighters** who resisted British colonial forces till his last breath.
- Joined the **Arya Samaj** founded by **Dayananda Saraswati in 1875**. This had a profound influence on him, he **often employed poetry** as his weapon of choice in the fight against the imperialist forces.
- The ideals of a revolution first took root in his mind when he read about the death sentence awarded to **Bhai Parmanand, an Indian nationalist and Arya Samaj missionary**.
He was all of 18 then and vented his anguish through his poem '**Mera Janm**'.
- Believed that **freedom cannot be achieved without violence**, bloodshed, which meant his views were in stark contrast to **Mahatma Gandhi's** ideals of 'ahimsa'.

- **Contributions:**
 - **Organizations:**
 - Formed organisation **Matrivedi** and got in touch with **Genda Lal Dixit, a school teacher.**

Both shared revolutionary ideas and wanted to organise the youth of the country to fight the British government.
 - Bismil was one of the chief founders of the **Hindustan Republican Association (HRA)** along with Sachindra Nath Sanyal and Jadugopal Mukherjee.

HRA was **founded in 1924** and its constitution was drafted chiefly by Bismil.
 - **Major Cases:**
 - Was involved in the **Mainpuri Conspiracy of 1918** in which police found a few young people including Bismil selling books that were not prescribed by the government.
 - Published a pamphlet titled '**Deshwasiyo ke Naam**' and distributed it along with his poem '**Mainpuri ki Pratigya**'. To **collect funds for the parties, they looted government coffers.**
 - He **escaped arrest by jumping into the Yamuna River.**
 - In 1925, Bismil and his companions **Chandrasekhar Azad** and **Ashfaqulla Khan** decided to loot a train in **Kakori** near Lucknow.
 - They were successful in their attempt but were arrested alongside a dozen other HRA members within a month of the attack and tried under the **Kakori Conspiracy Case.**
 - The legal process lasted 18 months. **Bismil, Lahiri, Khan and Thakur Roshan Singh were awarded death sentences.**
 - **Others:**
 - Attended the 1921 session of the **Indian National Congress** at Ahmedabad.
 - While lodged in Gorakhpur Central Jail, **Bismil went on a hunger strike demanding to be treated as a political prisoner.**
 - In Lucknow Central Jail, Bismil wrote his autobiography, considered as one of the finest works in Hindi literature and also the cult song "**Mera rang de Basanti chola**".
- **Death:**
 - Hanged on **19th December 1927** at Gorakhpur Jail.
 - Was **cremated on the banks of river Rapti** and the site was rechristened as Raj Ghat later.

Source: PIB

Why in News

Recently, **European Space Agency (ESA)** has announced a new mission- **EnVision mission to Venus**.

Key Points

- **About:**
 - It is an European Space Agency (ESA) led mission with contributions from the **National Aeronautics and Space Administration (NASA)**.
 - It is likely **to be launched sometime in the 2030s**. Once launched on an Ariane 6 rocket, the spacecraft will take about 15 months to reach Venus and will take 16 more months to achieve orbit circularisation.
- **Aim:**

The mission will carry a range of instruments to study the **planet's atmosphere and surface, monitor trace gases in the atmosphere and analyse its surface composition**.
- **Significance:**

EnVision will follow another ESA-led mission to Venus called '**Venus Express' (2005-2014)** that **focussed on atmospheric research and pointed to volcanic hotspots** on the planet's surface.
- **Other Missions:**
 - **US:**
 - NASA has announced two new robotic missions to Venus - **DAVINCI+ and VERITAS**. It will be launched between 2028-2030.
 - Mariner series 1962-1974, Pioneer Venus 1 and Pioneer Venus 2 in 1978, Magellan in 1989.
 - **Russia:**

Venera series of space crafts 1967-1983, **Vegas** 1 and 2 in 1985.
 - **Japan:**

Akatsuki spacecraft has been studying the planet's atmosphere since 2015.
- **Indian Initiative:**

India plans to launch a new orbiter named **Shukrayaan to Venus in 2024**.

- **Importance of Studying Venus:**

- It will help to learn **how Earth-like planets evolve** and what conditions exist on Earth-sized **exoplanets** (planets that orbit a star other than our sun).
- It will help in **modelling Earth's climate**, and serves as a cautionary tale on how dramatically a planet's climate can change.
- Scientists speculate about the existence of life on Venus in its distant past and the **possibility that life may exist** in the top layers of its clouds where temperatures are less extreme.

In 2020, scientists detected the **presence of phosphine** (a chemical produced only through biological processes) in the atmosphere of Venus.

DAVINCI+

- DAVINCI+ is short for '**Deep Atmosphere Venus Investigation of Noble gases, Chemistry, and Imaging**' and is the first US-led mission to the planet's atmosphere since 1978.
- It will try to **understand Venus' composition** to see how the planet formed and evolved.
- This mission also consists of a descent sphere that will **pass through the planet's thick atmosphere** and make observations and take measurements of noble gases and other elements.
- It will also try to return the first high resolution photographs of a geological feature- **tesserae**.

Tesserae may be comparable to Earth's continents. The presence of tesserae may suggest that Venus has tectonic plates like Earth.

VERITAS

- VERITAS is short for '**Venus Emissivity, Radio Science, InSAR, Topography, and Spectroscopy**' and will map the planet's surface to determine its geologic history and understand the reasons why it developed so differently from Earth.
- It will orbit Venus with a radar that will help to create a three dimensional reconstruction of its topography which might be able to confirm if processes such as plate tectonics and volcanism are still active there.
- This mission will also map the emissions from Venus's surface that may help in determining the type of rocks that exist on Venus.
- It will also determine if active volcanoes are releasing water vapour into the atmosphere.

Source: IE
