

Anti-Tank missile systems Helina and Dhruvastra

Why in the news?

- Recently, the **helicopter-launched version** of the **Nag anti-tank guided missile**, '**Helina**', and its Air Force variant '**Dhruvastra**' underwent a joint user trial in the desert ranges.
- The missile systems have been designed and developed indigenously by the **Defence Research and Development Organisation (DRDO)**.



About Helina and Dhruvastra

- The Helina (the Army version) and Dhruvastra (Indian Airforce version) are helicopter-launched versions of third-generation anti-tank guided missiles (the Nag missile system).
- These are the third-generation fire and forget class anti-tank guided missile (ATGM) system.
- The system has all-weather day and night operational capabilities and can defeat battle tanks with a conventional armour and explosive reactive armour (ERA).



Related Information About Anti-tank guided missile (ATGM) system

- These are missile systems that can strike and neutralize armoured vehicles such as tanks.
- They can pierce the armours of tanks and the material that can withstand such ammo.

About Nag Missile system

- Nag is a third-generation, fire-and-forget, anti-tank guided missile developed by DRDO to support both mechanized infantry and airborne forces of the Indian Army.
- These missiles have been developed by DRDO under the Integrated Guided Missile Development Program.
- It is an all-weather condition with day and night capabilities and a minimum range of 500m and a maximum range of 4 km.

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About the Integrated Guided Missile Development Program

- It was conceived by **Dr A.P.J. Abdul Kalam** to enable India to attain self-sufficiency in the field of missile technology.
- It was started in 1983 and completed in March 2012.
- IGMDP was sanctioned to develop **Prithvi**, **Trishul**, **Akash**, **Nag**, and a Technology Demonstrator Agni Missile.

The missiles developed under IGMDP are:

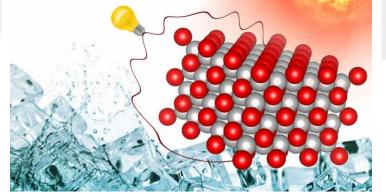
- Short-range surface-to-surface ballistic missile **Prithvi**
- Intermediate-range surface-to-surface ballistic missile Agni
- Short-range low-level surface-to-air missile **Trishul**
- Medium-range surface-to-air missile Akash
- Third-generation anti-tank missile Nag

Topic- GS Paper III-Defence Source-The Hindu

Silver Antimony Telluride (AgSbTe2)

Why in the news?

- Recently, the **Bengaluru-based Jawaharlal Nehru Centre for Advanced Scientific Research** has developed a new material called **Silver Antimony Telluride (AgSbTe2)** to **help in tapping waste heat produced** by all kinds of **domestic and industrial appliances** and use it to accomplish other useful work.
- The heat from the laptop, for example, can be **used to charge a mobile phone** or that from the phone can be **used to charge a small watch**.



About Silver Antimony Telluride (AgSbTe2)

- It is a compound of Silver, Copper and Tellurium, also called Silver Copper Telluride.
- It is a crystalline solid, which had free electrons that helped conduct electricity, but its lattices were rather inflexible and vibrated quite slowly, thereby inhibiting heat propagation.
- The **Silver Copper Telluride** offered lesser efficiency than Lead Telluride in converting heat into electrical energy, but it was considered an important breakthrough because **it was environmentally benign**.

Topic- GS Paper III-Science and Technology Source-Indian Express

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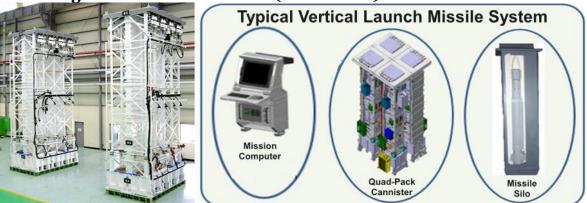
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Vertical Launch Short Range Surface to Air Missile (VL-SRSAM)

Why in the news?

• The **Defence Research & Development Organisation (DRDO)** has recently conducted **two successful launches of Vertical Launch Short Range Surface to Air Missile (VL-SRSAM).**



About VL-SRSAM

- It is an **indigenously designed** missile for the **Indian Navy**.
- It has been jointly developed by DRDO facilities like Defence Research & Development Laboratory (DRDL) and Research Centre Imarat (RCI), and the Pune-based Research and Development Establishment (Engineers)
- It is designed to neutralise various aerial threats at close ranges, including sea-skimming targets, to avoid detection by radar or infrared sensors.
- It is an advanced air defence system that provides a single integrated solution for multiple aerial threats from different ranges.
- It is based on the Astra missile.

Topic- GS Paper III-Defence

Source-The Hindu

NITI Aayog governing council

Why in the news?

• The **Centre** has **reconstituted the governing council** of the **NITI Aayog with Prime Minister** as its chairperson.

About the Governing Council of NITI Aayog

• It is the premier body tasked with evolving a shared vision of national development priorities, sectors, and strategies with States' active involvement in shaping the development narrative.

Composition

- Chairperson: Prime Minister
- **Full-Time Members:** The full-time members of the council are Chief ministers of all states and the Union Territories of Jammu and Kashmir, Delhi and Puducherry
- **Special Invitees**: The Lieutenant Governors of Andaman and Nicobar Islands, Ladakh, and the administrators of Chandigarh, Dadra and Nagar Haveli, Daman and Diu and Lakshadweep are the special invitees of the governing council.

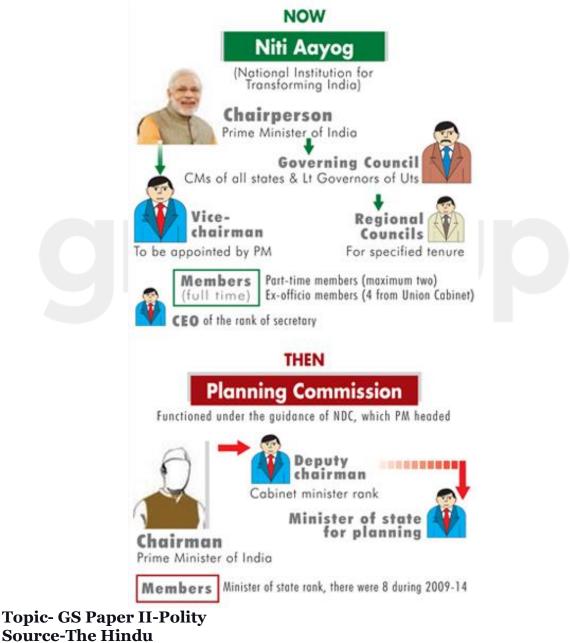
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Need of the Governing Council

- NITI Aayog has been mandated with fostering Cooperative Federalism through structured support initiatives and mechanisms with the States continuously, recognizing that strong States make a strong nation on the principles of 'SabkaSaath, Sabka Vikas, Sabka Vishwas'.
- It also provides a platform to discuss inter-sectoral, inter-departmental and federal issues to accelerate the implementation of the national development agenda.
- It seeks to design and assist in implementing strategic, long-term policy frameworks and programme initiatives while monitoring their progress and efficacy.



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Asia Environmental Enforcement Award-2020

Why in the news?

- The Wildlife Crime Control Bureau (WCCB) has recently received the Asia Environmental Enforcement Award-2020 awarded by the United Nations Environment Programme (UNEP).
- Wildlife Crime Control Bureau (WCCB) has been awarded this year under the Innovation category. Earlier, the Bureau had received the award in 2018 under the same category.



Asia Environmental Enforcement Award

- The Asia Environment Enforcement Awards publicly recognize and celebrate excellence in enforcement by government officials and institutions/teams combating transboundary environmental crime in Asia.
- The awards are given to outstanding individuals and/or government organizations/teams that demonstrate excellence and leadership in the enforcement of national laws to combat transboundary environmental crime in one of the following eligibility criteria areas:
 - a. Collaboration
 - b. Impact
 - c. Innovation
 - d. Integrity
 - e. Gender leadership

About the Wildlife Crime Control Bureau

- It is a statutory multi-disciplinary body established by the Government of India under the Ministry of Environment and Forests to combat organized wildlife crime in the country.
- The Bureau has it is **headquartered in New Delhi**.
- It has five regional offices in **Delhi**, **Kolkata**, **Mumbai**, **Chennai**, and **Jabalpur**.
- Under Section 38 (Z) of the Wild Life (Protection) Act, 1972, it is mandated to:
 - collect and collate intelligence related to organized wildlife crime activities and to disseminate the same to the State and other enforcement agencies for immediate action to apprehend the criminals.
 - establish a centralized wildlife crime data bank.
 - assist foreign authorities and international organization concerned to facilitate coordination and universal action for wildlife crime control.
 - build the capacity of the wildlife crime enforcement agencies for a scientific and professional investigation into wildlife crimes.

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- $\circ~$ assist State Governments to ensure success in prosecutions related to wildlife crimes.
- advise the Government of India on issues relating to wildlife crimes having national and international ramifications, relevant policy, and laws.
- It also assists and advises the customs authorities in inspection of the consignments of flora & fauna as per the provisions of the Wild Life Protection Act, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and Export-Import (EXIM) Policy governing such an item

Topic- GS Paper III-Environment Source-AIR

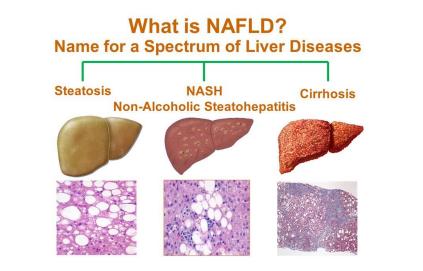
Non-Alcoholic Fatty Liver Disease (NAFLD)

Why in the news?

• Recently, the Union Ministry of Health & Family Welfare has launched the Operational Guidelines to integrate Non-Alcoholic Fatty Liver Disease (NAFLD).

About Non-Alcoholic Fatty Liver Disease

• It is the abnormal accumulation of fat in the liver in the absence of secondary causes of fatty liver, such as harmful alcohol use, viral hepatitis, or medications.



- It is a serious health concern. It encompasses a spectrum of liver abnormalities, from a simple non-alcoholic fatty liver to more advanced ones like non-alcoholic steatohepatitis (NASH), cirrhosis etc.
- It is an independent predictor of future risk of cardiovascular diseases, type 2 diabetes, and other metabolic syndromes.

Proposal of Government to tackle NAFLD

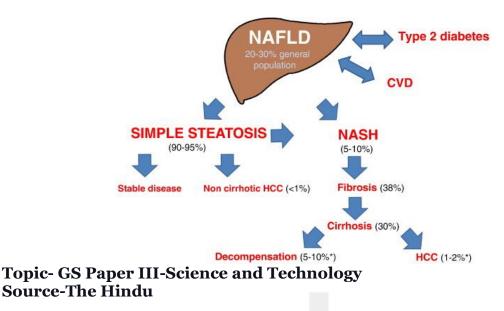
- The Government of India has realized that the existing NCD programme's strategies can now be aligned to achieve the objectives to prevent and control NAFLD with:
 - Behaviour and lifestyle changes.
 - Early diagnosis and management of NAFLD; and

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- $\circ~$ The building of capacity at various levels of healthcare for prevention, diagnosis, and treatment of NAFLD
- The government has stated that along with the focus of "Eat Right India" and "Fit India Movement", the government's entire vision is to move from Diagnostic Cure to Preventive Health.



<u>Scheme of Fund for Regeneration of Traditional Industries (SFURTI)</u> <u>Scheme</u>

Why in the news?

Recently, the **Union Minister of MSME** has said that **5,000 clusters for artisans** can be started under the **SFURTI scheme by fast-tracking** the approval processes and reducing red tape.



About SFURTI Scheme

- It is an initiative by the Ministry of MSME to promote Cluster development.
- The Khadi and Village Industries Commission (KVIC) is the Nodal Agency for promoting Cluster development for Khadi.
- The following schemes are being merged into SFURTI:
 - a. The Scheme for Enhancing Productivity and Competitiveness of Khadi Industry and Artisans
 - b. The Scheme for Product Development, Design Intervention and Packaging (PRODIP)

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- c. The Scheme for Rural Industries Service Centre (RISC)
- d. Other small interventions like Ready Warp Units, Ready to Wear Mission, etc.

<u>Background</u>



Objectives of the SFURTI Scheme

- To provide sustained employment for traditional industry artisans and rural entrepreneurs.
- To enhance the marketability of clusters' products by providing support for new products, design intervention and improved packaging, and the improvement of marketing Infrastructure.
- To equip traditional artisans of the associated clusters with improved skills and capabilities through training and exposure visits.
- To make provision for common facilities and enhanced tools and equipment for artisans
- To strengthen the cluster governance systems with the active participation of the stakeholders so that they can gauge the emerging challenges and opportunities and coherently respond to them.
- Building innovative and traditional skills improved technologies, advanced processes, market intelligence, and new models of public-private partnerships to gradually replicate similar models of the cluster-based regenerated traditional Industries.

Significance

- Its primary objective is to organize traditional industries and artisans into clusters to make them competitive and increase their income.
- It supports creating infrastructure through Common Facility Centres, procurement of new machineries, creating raw material banks and improved packaging.



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Eligibility under SFURTI Scheme

- The institutions eligible under SFURTI Scheme are Non-Government organizations (NGOs), Institutions of the Central and State Governments, Semi-Government institutions, Field functionaries of State and Central Govt and Panchayati Raj institutions.
- The Eligible agencies/organizations may submit the proposal to the State Office, KVIC. The same is scrutinized at the State Level and Zonal Level before submitting to the Scheme Steering Committee for approval.

Topic- GS Paper III- Economics (important Scheme) Source-PIB

Why does India need conclusive land titling?

Why in the news?

- In 2020, even as **farm reform and labour code reform laws** were enacted, the **government's think tank**, **NITI Aayog**, took steps to initiate land reforms.
- A Model Bill on Conclusive Land Titling was sent to States and Union Territories last June 2020 seeking their comments.



What is Conclusive Land Titling?

- In a conclusive titling system, the government provides guaranteed titles and compensation in case of any ownership disputes.
- Achieving this will require shifting to a system of registered property titles (as opposed to sale deeds) as the primary evidence of ownership and having clear and updated land records.

How does the current system work?

- India currently follows a system of presumptive land titling which means that land records are maintained, with information on possession determined through details of past transactions.
- Ownership, then, is established based on current possession.
- Registration of land is actually a registration of transactions, such as sale deeds, records of inheritance, mortgage and lease.
- Holding registration papers does not even involve the government or the legal framework guaranteeing the land's ownership title.

What will change in the new system?

- On the other hand, under a conclusive land titling system, land records designate actual ownership.
- The title is granted by the government, which takes responsibility for accuracy.
- Once a title is granted, any other claimant will have to settle disputes with the government, not the titleholder.

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Why is conclusive land titling needed?

- The main advantage is that a conclusive system will drastically lower litigation related to land.
- According to a 2007 World Bank study on 'Land Policies for growth and poverty reduction, land-related disputes accounted for two-thirds of all pending court cases in India.
- A NITI Aayog study on strengthening arbitration estimated that disputes on land or real estate take an average time of 20 years in the courts to be resolved.

Benefits

- In cities, urban local bodies depend on property taxes that can be adequately levied only if there is clear ownership data available.
- In rural areas, the need is even more acute. Access to agricultural credit is dependent on the ability to use the land as collateral.
- Without proving their ownership of land and access to formal credit from banks, small and marginal farmers are often left at the mercy of unscrupulous moneylenders.

Topic- GS Paper III- Economy (Land Reform) Source-Indian Express

Iran, IAEA reach deal on inspections

Why in the news?

• The UN nuclear watchdog, the International Atomic Energy Agency (IAEA) chief, announced a "temporary solution" to allow Iranian facility inspections to continue after days of talks with officials, giving some much-needed breathing space diplomatic negotiations.



About the International Atomic Energy Agency

- The IAEA is an **international organization** that seeks to promote nuclear energy's peaceful use and inhibit its use for any **military purpose**, **including nuclear weapons**.
- Its headquarters in Vienna, Austria. It was established as an autonomous organization on 29 July 1957.
- Though established independently of the UN through its international treaty, the IAEA reports to the UN General Assembly and UN Security Council.

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Functions

- The IAEA serves as an intergovernmental forum for scientific and technical co-operation in the peaceful use of nuclear technology and nuclear power worldwide.
- The programs of the IAEA encourage the development of the peaceful applications of nuclear energy, science, and technology, provide international safeguards against misuse of nuclear technology and nuclear materials, and promote nuclear safety (including radiation protection) and nuclear security standards and their implementation.

Topic- GS Paper II-International Organisation Source-The Hindu

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