Mandatory to display information related to 'Legal Aid' in Police Stations

Recently, Supreme Court Judge Justice U.U. Lalit has said that every police station in the country should have display boards giving information about the rights to get 'legal aid' and the availability of 'free legal aid' services.

Justice Lalit is the acting chairman of the National Legal Services Authority (NALSA).

About National Legal Services Authority (NALSA):

National Legal Services Authority (NALSA) was formed under the 'Legal Services Authority Act', 1987 to provide free legal services to the weaker sections of the society and amicable settlement of disputes. Is.

Its objective is to ensure that opportunities for securing justice are not denied to any citizen due to economic or other disabilities.

Official information sheet is published by NALSA titled 'Nyaya Deep'.

'Lok Adalats' are organized by the 'National Legal Services Authority' for amicable settlement of disputes.

structure: According to Section 3(2) of the 'Legal Services Authorities Act', the Chief Justice of India will be the principal-custodian of the 'National Legal Services Authority' (NALSA).

The second senior-most judge of the Supreme Court is its acting-chairman.

State and District Legal Services Authorities:

'State Legal Services Authority': To give effect to the policies and directions of 'NALSA' and to provide free legal services to the people and to conduct Lok Adalats in the state, 'State Legal Services Authority' will be established in each state. has been constituted.

The 'State Legal Services Authority' is headed by the 'Chief Justice' of the concerned High Court and is also the principal-patron of the 'State Legal Services Authority'.

'District Legal Services Authority': In each district, 'District Legal Services Authority' has been constituted for implementation of 'Legal Services Programme'.

The 'District Legal Services Authority' is located in the 'District Court Complex' of each district and is headed by the District Judge of the district concerned.

Article 39A of the Indian Constitution:

According to the provisions of Article 39A, "The State shall ensure that the legal system works in such a way that justice is accessible on a basis of equal opportunity, and the State shall, in particular, ensure that due to economic or any other impossibility, Provided that no citizen should be deprived of the opportunity of obtaining justice, by suitable legislation or

scheme or in any other manner, provide free legal aid.

This article was added to the Constitution by the Constitution (Forty-second Amendment) Act, 1976.

India is the President of the United Nations Security Council

reference:

India had assumed the rotating presidency of the United Nations Security Council (UNSC) for August 21.

This was India's tenth term as the President of the United Nations Security Council.

India, at present, is also a 'non-permanent member' of the 'United Nations Security Council' for a term of 2021-22, during which India became the President of the UNSC for the first time.

About the Presidency of the United Nations Security Council:

The United Nations Security Council is presided over by the member states in the alphabetical order of their names in English alphabetical order for a month.

This sequence continues monthly among the 'Security Council' 15 member-states.

The head of the member-country delegation is known as the President of the 'United Nations Security Council'.

The President of the Security Council acts as a diplomat or mediator to coordinate the functions of the Council, to decide on policy disputes, and sometimes between conflicting groups.

About United Nations Security Council (UNSC):

Six main organs of the United Nations, including the United Nations Security Council (UNSC), have been established by the United Nations Charter.

Under the Charter, the Security Council is given decision-making power, and its decisions are binding on the member-states.

Permanent and non-permanent members: The United Nations Security Council consists of 15 members, out of which 5 are permanent and 10 are non-permanent.

Every year, five non-permanent members are elected by the United Nations General Assembly for a two-year term.

Proposed reforms in the United Nations Security Council: The United Nations Security Council (UNSC) is proposed to be reformed on five key issues: membership categories, The question of veto power given to the five permanent members,regional representation, the size of the expanded council and its functioning, and, Relations between the United Nations Security Council and the United Nations General Assembly.

Key points for India's permanent membership in the United Nations Security Council:

India is a founding member of the United Nations.

Most importantly, India's number of peacekeepers, deployed in various missions, is almost double that of the P5 countries.

India is also the world's largest democracy and second most populous country.

India received the status of a Nuclear Weapons State (NWS) in May 1998, and is as nuclear-armed as the existing permanent members, making India a natural contender for permanent membership in the Security Council. Is.

India is the undisputed leader of third world countries, and this is clearly reflected in the leadership role played by India in the 'Non-Aligned Movement' and the G-77 grouping.

'Net-zero' carbon target inadequate to tackle climate change: Oxfam

,reference:

According to Oxfam, an independent charitable organization, net-zero carbon targets may prove to be a 'dangerous distraction' rather than prioritizing reduction in carbon emissions. Be aware that net-zero carbon targets have also been declared by many countries.

Due to this:

1. In a report released by Oxfam sometime back titled 'Tightening the Net', it has been said that if the challenge of climate change can be tackled only by planting more trees, then by the year 2050 the world's excess carbon emissions will be removed. This would require the planting of new forests in an area of about 6 billion hectares.

2. Furthermore, such 'land-hungry 'net zero' schemes could increase global food prices by 80 per cent, and give rich countries and corporates an opportunity to continue "dirty business as usual". Will keep getting

Options to tackle climate change:

To limit global warming to below 1.5°C and prevent irreversible damage from climate change, the entire world must come together on the 'track' and set a target of 45 percent reduction in 2010 emissions by 2030. should be done, in which the highest emitting countries should cut the most.

Countries to declare 'net-zero' target:

1. In the year 2019, the 'Zero Carbon Act' was passed by the New Zealand government and under this the country was committed to achieve the target of 'Zero Carbon Emission' by the year 2050.

2. A law has been passed by the UK Parliament, under which the government has been entrusted with the responsibility of reducing the net emissions of greenhouse gases

in the United Kingdom by 100 percent.

3. US President Joe Biden has announced to cut the country's greenhouse gas emissions by at least 50 percent from 2005 levels by 2030.

4. 'World War Zero' was launched in the year 2019 to bring together reluctant allies on climate change and to reach the target of 'net-zero' carbon emissions in the country by the year 2050.

5. EU's 'Fit for 55' plan: Under this, the European Commission has asked all its 27 member countries to cut their emissions by 55 percent from 1990 emissions levels by 2030.

6. China has announced to achieve the target of 'net-zero' by the year 2060 and has talked about limiting its emissions to the level of 2030.

India and 'Net-Zero' target:

• India is the world's third largest emitter of greenhouse gases, after the US and China, and the only major country to fall outside the 'net-zero' target.

• India argues that instead of launching parallel discussions on net-zero targets outside the 'Paris Agreement' framework, all countries should focus on meeting the targets they have already promised.

India's concerns:

As India strives to achieve a high growth rate to lift millions of people out of poverty, India's emissions are expected to grow at the fastest rate in the world over the next two to three decades. No matter how much afforestation or reforestation will be able to compensate for this emission-growth. Furthermore, most of the technologies available for carbon-free so far are either unreliable or too expensive.

What is 'Net-Zero'?

'Net-zero', also called 'carbon-neutrality', does not mean that a country will reduce its gross emissions to zero.

• Rather, 'net-zero' is a situation in which a country's emissions are compensated by 'absorption and elimination of greenhouse gases from the atmosphere'.

• A greater number of carbon sinks, such as forests, can be created to increase the absorption of emissions, while removal or removal of gases from the atmosphere requires cutting-edge technologies such as carbon capture and storage.

Bill to amend the 'Scheduled Tribe List'

reference:

The 'Constitution (Scheduled Tribes) Order (Amendment) Bill, 2021' has been passed in Rajya Sabha.

By this bill, amendment has been made in the 'Constitution (Scheduled Tribes) Order, 1950'.

Key points of the bill:

In the Bill, a provision has been made to remove the 'Abor' tribe from the list of

Scheduled Tribes identified in Arunachal Pradesh.

Under this, in the marked list, some scheduled tribes have been included in place of other tribes.

The 'Tai Khamti', Mishmi-Kaman (Mizu Mishmi), Idu (Mishmi) and Taron (Digaru Mishmi) tribes have been included in the list.

Power to modify the list of notified Scheduled Tribes:

In the Indian Constitution, the President has been given the power to designate Scheduled Tribes in various states and union territories. In addition, the Constitution allows Parliament to modify the list of 'Notified STs'.

Definition of 'Scheduled Tribe':

In the Constitution, the criteria for recognition of 'Scheduled Tribes' have not been defined. However, in Article 366 (25) of the Constitution, only the procedure for defining Scheduled Tribes is given. Accordingly, Scheduled Tribes means such tribes or tribal communities or parts or groups of such tribes or tribal communities which for the purposes of this Constitution are deemed to be Scheduled Tribes under article 342.

Article 342(1): The President may, with respect to any State or Union Territory, and where that State is a State, after consultation with the Governor, by public notification, specify tribal castes or tribal communities or parts or groups of tribal castes or tribal communities who, for the purposes of this Constitution, shall be deemed to be Scheduled Tribes in relation to that State or Union Territory, as the case may be.

Constitutional safeguards for 'Scheduled Tribes':

Educational and Cultural Safeguards:

Article 15(4):- Special provisions for the advancement of Other Backward Classes (including Scheduled Tribes);

Article 29:- Protection of interests of minorities (including scheduled tribes);

Article 46:- The State shall promote with special care the educational and economic interests of the weaker sections of the people and in particular the Scheduled Castes and the Scheduled Tribes and shall protect them from social injustice and all forms of social injustice and exploitation.

Article 350:- Right to the protection of a specific language, script or culture.

Article 350:- Instruction in mother tongue.

Social Security Measures:

Article 23: - Prohibition of human trafficking and begging and any other form of forced labor;

Article 24: - Prohibition of child labor.

Economic Security Safeguards:

Article 244:- Provisions (1) The provisions of the Fifth Schedule shall apply to the administration and control of the Scheduled Areas and the Scheduled Tribes in any State other than the States of Assam, Meghalaya, Tripura and Mizoram. Provision (2) The provisions of the Sixth Schedule shall apply to the administration of tribal areas in the States of Assam, Meghalaya, Tripura and Mizoram.

Article 275:- Grants-in-aid to the specified States (STs&SAs) falling under the Fifth and Sixth Schedule of the Constitution.

Political Safeguards:

Article 164(1):- Provision for Ministers of Tribal Affairs in Bihar, Madhya Pradesh and Orissa;

Article 330:- Reservation of seats for the Scheduled Tribes in the Lok Sabha;

Article 337 – Reservation of seats for Scheduled Tribes in State Legislative **Assemblies;**

Article 334:- Period of 10 years for reservation (amended several times to extend the period);

Article 243:- Reservation of seats in Panchayats.

Article 371:- Special provisions with respect to the North-Eastern States and Sikkim.

Service Safeguards:

Service related safeguards have been made for the Scheduled Tribes under Article 16(4), 16(4A), 164(B), Article 335, and Article 320(40).

Extension of the period of 'Samagra Shiksha Yojana 2.0' reference:

The Union Cabinet has approved the continuation of 'Samagra Shiksha Yojana' for school education for the next five years till March 31, 2026.

The scheme has now been revamped by incorporating new components and initiatives based on the recommendations of the National Education Policy-2020.

Components of 'Samagra Shiksha Abhiyan' (SSA) 2.0:

To increase the direct reach of the scheme, all child centric interventions will be provided directly to the students through 'Direct Benefit Transfer (DBT)' on 'Information Technology' (IT) based platform over a specified time period.

This 'Direct Benefit Transfer' will include facilities provided under the 'Right to Education' such as textbooks, uniforms and transport allowance.

In keeping with the recommendations of the NEP on Promotion of Indian Languages, a new component of language teacher appointment has been added to the scheme – teacher training component and bilingual books and teaching materials have been added in addition

to salary support to teachers .

Nipun Bharat, a National Mission on Basic Literacy and Numeracy, has earmarked Rs 500 per child per year for teaching materials, Rs 150 per teacher for manuals and resources, Rs 10-20 lakh per district for assessment .

As part of the digital initiative, provision of 'Information Interaction and Training' (ICT) laboratory, Smart Classroom with support for digital board, smart classrooms, virtual classrooms and broadcasting of DTH channels has also been made .

In this, assistance of up to Rs 2000 per class has been provided to children belonging to Scheduled Castes, Scheduled Tribes, disabled children of 16 to 19 years of age to complete their secondary / higher secondary level education through 'National Institutes of Open Schooling Education'. Will go

If at least 2 students of a school win medals in the Khelo India School Games at the national level, then a provision has been made to give an additional sports grant of up to Rs 25,000 thousand to that school.

Samagra Shiksha:

Samagra Shiksha Yojana is an integrated scheme covering all aspects from Pre-school to Class XII to ensure inclusive and equitable quality education at all levels of school education.

Samagra Shiksha consolidates three schemes of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education.

The scheme envisages 'school as a continuum' from pre-primary, primary, upper primary, secondary to senior secondary level.

It helps improve transfer rates across different grade levels of schooling and promote universal access for children to complete schooling.

The main focus of the scheme is to improve quality at all levels by integrating the two T letters of the English language – 'Teachers' and 'Technology'.

The main objective of this scheme is to assist the states in the implementation of the Right of Children to Free and Compulsory Education (RTE) Act, 2009.

This scheme is being implemented as a 'Central Sponsored Scheme'. In this, funding is done in the ratio of 60:40 between the Center and most of the states.

India's claim for a permanent seat in the United Nations Security Council

No commitment has been made so far on India's claim for a permanent seat in the United Nations Security Council (UNSC), backed by the US administration led by Biden.

However, the Obama and Trump

administrations favored a permanent seat for India on the Security Council.

America's View:

It has been proposed by the US to provide conditional support for building a consensus for the expansion of the United Nations Security Council (UNSC) - in the context of permanent and non-permanent members. The US, however, maintains that it will choose the five permanent members (P-5) – China, France, Russia, the UK and the US. Will not support extension in 'veto' given to.

Who else has opposed India's permanent membership in the Security Council?

The G-4 plan has been opposed by the Uniting for Consensus group – Pakistan, South Korea, Italy and Argentina. China, too, opposes India and Japan's claims of permanent membership in the Security Council.

The claim for permanent membership in the United Nations Security Council is made by India on the following grounds:

India is a founding member of the United Nations.

India is also the world's largest democracy and second most populous country.

While some other countries consider the United Nations as a mere store of things, India has always upheld its principles and credentials.

Influential contribution to United Nations Peacekeeping Force (UNPKF).

A rising economic power.

Which are the G4 nations?

Brazil, Germany, India and Japan are known as 'G4 nations'. These four countries support each other's claims for permanent seats on the UN Security Council.

The basis of their demands:

These four countries have been elected non-permanent members of the Security Council since the founding of the United Nations.

The economic and political influence of these countries has grown significantly over the past decades and has reached the level of permanent members of the Security Council (P5).

Which reforms of the 'United Nations SecurityCouncil' are necessary at present?

Permanent seats on the Security Council should be given to these countries.

There is a clear need for an increased role of developing countries and major contributors to the United Nations to make the Security Council more legitimate, effective and representative.

Africa needs to be given representation in both permanent and non-permanent categories in order to rectify the hitherto historical injustice in the context of underrepresentation against the continent.

There is a need for 'text-based negotiations' within a certain time frame to reform the 'United Nations Security Council'.

indirect cost of food-(Hidden costs of food)

According to a United Nations report:

The cost of the food we consume is about a third of the actual cost, including indirect costs to the environment and human health.

These are indirect costs or 'external prices', which are not reflected in the market price of harmful foods and make sustainable and healthy food costlier.

In addition, omitting external costs leads to increased environmental damage, increased food insecurity, health risks, and social ills such as low wages and inequality for workers.

What are the 'actual cost of food'?

In our current food system, there are a large number of indirect costs to the natural environment and human health, ranging from the use of petroleum-based fertilizers and pesticides to soil erosion, water pollution, climate change, and the global disease of obesity. could. These costs are in addition to the normal production costs of a food item, and together they make up the "actual cost of food".

Presently 'Actual price of food':

Current externalities are estimated to nearly double ($19.8 trillion) of global food consumption ($9 trillion).

These indirect costs can be found at $7 trillion (between 4–11) in environmental costs, $11 trillion in human costs (between 3–39) and $1 trillion (between 2–1.7) in economic costs.

Tools to fix it:

'Value of food' should be redefined to fix 'actual price of food'.

For this, the tool 'True Cost Accounting (TCA)' can be used.

In Actual Cost Accounting Method (TCA), the task of estimating, generally, begins with the identification of targets and scope, the determination of the boundaries of the analysis-unit and system. Thereafter, the various indirect costs are assessed (qualitatively or quantitatively), priced and totaled.

Use of Actual Cost Accounting Method (TCA):

According to the suggestion given by the United Nations, all classes of people can do 'real cost accounting' in the following ways.

Farmers can use TCA as a tool to calculate the cost and benefits of their farming practices.

Consumers can use TCAs to become aware of the environmental and social indirect costs involved in the food they buy.

Central Universities (Amendment) Bill 2021

The 'Central Universities (Amendment) Bill,

2021' has been approved in the Lok Sabha, which provides for the establishment of a Central University in the Union Territory of Ladakh.

Under this bill, the Central Universities Act, 2009 will be amended.

The name of this university will be 'Indus Central University'.

The establishment of the Central University will help the students in Ladakh to pursue higher studies with ease and will also fulfill the regional aspirations in the years to come.

Please note, that Central Universities or Federal Universities in India are established by an Act of Parliament, and these universities are under the Department of Higher Education in the Ministry of Education.

(Hydrogen Fuel)

Under the Mission Net Zero Carbon Emission Railway to make railways zero carbon-emitting by the year 2030, Indian Railways is all set to run trains on hydrogen fuel based technology. For this, re-combination/retrofitting of existing trains is being considered.

What is 'hydrogen fuel'?

Hydrogen is the lightest and first element in the periodic table. Since the mass of hydrogen is less than the weight of air, it is dispersed upwards in the atmosphere and that is why it is rarely found in its pure form 'H2'.

At standard temperature and pressure, hydrogen is a non-toxic, non-metallic, odourless, tasteless, colorless and highly combustible diatomic gas.

Hydrogen fuel is a 'zero-emission' fuel when combusted with oxygen. It can be used in fuel cells or internal combustion engines. Hydrogen is also used as a fuel for spacecraft propulsion.

Origin of Hydrogen:

It is the most abundant element found in the universe. The Sun and other stars are largely composed of hydrogen.

Astronomers estimate that 90% of the atoms found in the universe are hydrogen atoms. More than any other element, hydrogen is a component of most compounds.

Water is the most abundant compound of hydrogen found on Earth.

Molecular hydrogen is not found in naturally occurring water bodies on Earth.

Most of the hydrogen on Earth is coupled with water and oxygen and with carbon in living or dead or fossil biomass. Hydrogen can be made by splitting water into hydrogen and oxygen.

Storage:

Hydrogen can be stored physically or as a gas or liquid.

Storing hydrogen as a gas usually requires a high pressure tank.

Storing hydrogen as a liquid requires cryogenic

temperatures, as the boiling point of hydrogen is −8 °C at one atmospheric pressure.

Hydrogen can be stored on the surface of solids (by adsorption/adsorption) or within solids (by absorption/absorption).

Potential of clean hydrogen industries in reducing greenhouse gas emissions:

The only by-product emitted from the use of hydrogen fuel is 'water' – due to which this fuel becomes 100% clean.

Hydrogen is considered an alternative fuel because of the power of fuel cells in zero-emission electric vehicles, its potential in domestic production, and the high efficiency capabilities of fuel cells.

In fact, a fuel cell with an electric motor is two to three times more efficient than a gas-powered internal combustion engine.

A fuel cell combined with an electric motor is two to three times more efficient.

Hydrogen can also serve as a fuel for internal combustion engines.

The energy of 2 pounds (1 kilogram) of hydrogen gas is equal to the energy of 1 gallon (6.2 pounds / 2.8 kilograms) of gasoline.

Efforts being made in this regard:

Recently, the 'National Hydrogen Energy Mission' (NHM) for the year 2020-21 was formally announced by the Finance Minister in the Union Budget, which aims to produce hydrogen from green energy resources.

The Ministry of New and Renewable Energy (MNRE) has clarified that the draft rules for the 'National Hydrogen Energy Mission' will be finalized by the end of this month and after that the draft rules will be sent for cabinet approval.

Challenges before India:

The economic sustainability of the extraction of green or blue hydrogen is one of the major challenges before the industries to exploit hydrogen commercially.

Technologies used in the use and production of hydrogen, such as 'Carbon Capture and Storage (CCS), are still in their early stages and are quite expensive, making the cost of production of hydrogen very high.

The maintenance cost of fuel cells after a plant is completed can be quite expensive, as in South Korea.

The production, storage, transportation and demand generation of hydrogen requires huge investment in research and development, for commercial use of hydrogen as a fuel and in industries.

Avia Island (Island of Evia)

Also known as Euboea, it is the second largest Greek island by area.

It is separated from the mainland of Greece by Boeotia by the narrow Euripus Strait.

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Avia Island, recently, was in the news due to the fierce fire in its forests.

(Pensilungpa Glacier)

The Pensilungpa Glacier is located in the Zanskar region of Ladakh.

This glacier is retreating due to increase in temperature and less snowfall in winter.

The Zanskar Range is a mountain range located in the Union Territory of Ladakh, which separates Zanskar from Ladakh.

Geologically, the Zanskar Range is part of the Tethys Himalayas.

The 'Marble Pass' connecting Ladakh to Kashmir and many other passes are located in this region.

The 13000 ft high Zojila Pass is situated in the very north-west of the Zanskar Range.

Increase in frequency and intensity of cyclones in Arabian Sea

There has been a significant increase in the frequency and intensity of cyclones developing over the Arabian Sea during the last two decades, while the Bay of Bengal has seen a relatively decrease in frequency during the same period.

Major Changes:

Between 2001 and 2019, there was a 52% increase in the frequency of cyclones developing over the Arabian Sea, and an 8% decrease in the frequency of cyclones over the Bay of Bengal.

During the last two decades, the number of very severe cyclones in the Arabian Sea has increased by 150%.

Factors responsible for this:

During the last century, the surface temperature of the Arabian Sea has increased rapidly, due to global warming. At present, the surface temperature of the Arabian Sea is 2-1.4 °C higher than the temperature four decades ago. It contributes to warmer temperatures, intensification of convection processes, heavy rainfall and the formation of intense cyclones.

The rise in temperature supplies enough energy for the intensity of cyclones to develop in the Arabian Sea.

The Arabian Sea is also providing wind shear favorable to cyclones. For example, due to high level easterly winds, the low pressure area/trough of Cyclone Ockhi moved from the Bay of Bengal to the Arabian Sea.

Current concern:

If this trend continues for years, it will risk an increase in disasters along India's west coast.

How are cyclones formed?

Cyclones are formed over sea water in tropical regions.

These regions have the highest amount of solar light, as a result of which the upper surface of the terrestrial and aquatic parts are heated. Due

to the warming of the surface, the warm-humid air over the ocean begins to rise, after which it moves forward in a rapid swoop to fill this void, then it also heats up and rises, And this cycle continues.

Reason for creating spin:

Air always flows from high pressure areas to low pressure areas. High pressure areas are formed in cold regions, while low pressure conditions are formed in warm or hot regions. The amount of solar light in the polar regions is much less than in the tropics, so they are usually areas of high pressure. And that is why the circulation of air usually occurs from the polar regions to the tropical regions.

After this, the motion of the earth plays its role, which is from west to east. Because of the Earth's rotation on its axis, the wind blowing from both poles is deflected in the tropics, because the Earth's rotation speed is greater at the tropics than at the poles, being spherical. The air coming from the Arctic region is deflected to the right and the air from the Antarctic region is deflected to the left.

Thus, the air already flowing in definite directions, when it rises after reaching a hot spot, gets attracted towards the center to fill the gap. While moving towards the centre, the cold air continues to deflect resulting in a change in air circulation, and the process continues until it hits the site of the cyclone.

After hitting the site of the cyclone:

The cyclone, after reaching the terrestrial areas, disintegrates and ends, because due to contact with warm water, the air warms up and creates a space for cold air, but it is lacking on the land. In addition, the rising humid air causes cloud formation, which leads to intense rain accompanied by strong winds during cyclones.

(NASA Perseverance Rover)

Mars' Jezero Crater is being explored by NASA's Perseverance rover, and it is attempting to collect the first samples of rocks from the planet's surface. .

However, the Perseverance Rover failed to collect any rock samples during its first attempt.

About 'Perseverance Rover':

The Perseverance rover was launched from the United Launch Alliance Atlas V in July 2020.

Mission Importance:

The Perseverance rover is carrying a special instrument called the MOXIE or Mars Oxygen ISRU Experiment, which will create molecular oxygen for the first time using carbon dioxide from the carbon-dioxide-rich atmosphere on Mars. (ISRU- In Situ Resource Utilization, i.e. use of self-spatial resources)

A helicopter called 'Ingenuity' has also been sent on this mission, it will be the first

helicopter to fly on Mars.

The mission is the first planned attempt to bring rock samples from Mars to be analyzed in sophisticated laboratories on Earth. Its purpose is to search for astronomical evidence of ancient microbial life on Mars and to search for signs of life in the present or past.

Some of the major objectives of the mission:

Searching for astronomical evidence of ancient microbial life.

To bring back to Earth, to collect samples of rocks and regolith.

Landing an experimental helicopter on Mars.

To study the climate and geology of Mars.

To demonstrate technology for future Mars missions.

Reasons for recent interest about Mars:

Mars is located very close to Earth (about 200 million km away).

It is a planet on which man may wish to visit or stay for a longer period of time.

Evidence of flowing water and atmosphere has been found on Mars in the past; And possibly even conditions suitable for life once existed on this planet.

This planet can also be suitable for business travel.

Recommendation to bring minority schools under RTE

Recently, a report has been released by the National Commission for Protection of Child Rights (NCPCR) assessing minority schools in the country. The report analyzes the impact of exemptions given to minority institutions under Article 15(5).

What is Article 15(5)?

Under this article, a provision has been made to provide reservation in respect of admission in privately run and government aided or unaided educational institutions in the country. From this rule, only institutions run by minority communities such as madrasas are exempted.

background:

Please note, minority schools are exempted from implementing the 'Right to Education Policy' and are also not covered under the Sarva Shiksha Abhiyan of the government.

How are minority schools exempted from RTE and 'Sarva Shiksha Abhiyan'?

In the year 2002, the 'right to education' was declared as a fundamental right by the 86th amendment of the constitution.

Under this amendment, Article 21A was added to the Constitution, in which the 'Right to Education' (RTE) was made a 'fundamental right' for the children of the age of 'six to 14 years'.

Following the passage of the amendment, the Sarva Shiksha Abhiyan (SSA) was launched, which aimed to provide "useful and relevant

elementary education" to all children in the age group of six to 14 years.

In the year 2006, by the 93rd Constitutional Amendment Act, clause (5) was added to Article 15 of the Constitution. Under which, the state has been empowered to make special provisions like reservation in all aided or unaided educational institutions, except minority educational institutions, for the advancement of any backward class of citizens like scheduled castes and scheduled tribes.

Recommendation of 'National Commission for Protection of Child Rights':

The Commission is of the view, in the Constitution, provision has been made for two different rules regarding education, such as 'Article 21A' guaranteeing the fundamental right to education to all children and 'Article 30' to the minorities as per their rules. Along with this permission has been given to establish their own institutions, along with this, minority schools have been exempted from 'Right to Education' (RTE) in Article 15(5). Because of these different rules, a contradiction arises between the fundamental rights of children and the rights of minority communities.

Need to bring minority schools under RTE:

According to the commission's report, many children enrolled in these institutions or schools are not able to take advantage of the rights enjoyed by other children.

For example, the missionary school is like an 'elite cocoon', in these schools only a certain class of students are admitted and these schools exclude the children of the disadvantaged class from the system. The 'National Commission for Protection of Child Rights' in its report has called these schools 'cocoons full of elites'.

Also, along with religious education to the students in madrasas, worldly courses like science are not run, due to which the students studying here

Students lag behind in education and feel a sense of isolation and "inferiority" upon leaving school.

IPCC Sixth Assessment Report (AR6)

Recently, the Intergovernmental Panel on Climate Change (IPCC) has released its 'Sixth Assessment Report (AR6)' titled 'Climate Change 2021: The Physical Science'.

Many Indian scientists have participated in preparing this report.

What is the 'Sixth Assessment Report' (AR6)?

The Sixth Assessment Report (AR6) of the United Nations Intergovernmental Panel on Climate Change (IPCC) is the sixth in a series of reports aimed at assessing scientific, technical and socio-economic information related to climate change. .

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This report assesses the physics of climate change by observing past, present and future climates.

In this report, the changes occurring in our planet due to human-caused emissions and its implications for our collective future are described.

Key Points of the Sixth Assessment Report (AR6):

Weather and Climatic Events – Due to climate change, weather and climate related events like extreme heat, heavy rainfall, fire conditions and droughts are becoming more severe and regular.

According to the report, we are already close to a global warming of 1.5 °C, and with every day emissions, the prospects of averting the most dangerous effects of climate change are dimming.

In all greenhouse gas emission scenarios, carbon dioxide has been and will be the leading cause of global warming.

Global warming can be stopped if greenhouse gas emissions are halved by 2030 and zero by 2050, the report said.

At the same time, the IPCC report reaffirms India's view that historically increasing emissions are the source of the climate crisis the world is facing today.

major concerns:

The report highlights that our climate is rapidly changing due to human-caused actions and has already caused massive changes to our planet –

Sea ice in the Arctic is at its lowest level in more than 150 years;

Sea level is rising faster than at any other time period in the past 3,000 years; And

Glaciers are currently receding at an unprecedented rate, compared to the past 2,000 years.

Need:

The most pressing need at this time is that all countries – especially major economies – play their part during this crucial decade of 2020 to keep the world on track to achieve the goal of limiting global warming to 5°C. Can you

For this reason, the United States has committed to cutting its emissions by 50–52 percent from 2005 levels by 2030 and is preparing the entire federal government to deal with the climate crisis.

As we prepare for the 26th United Nations Climate Change Conference (COP26) to be held in Glasgow, this report reminds us that we must step up to science-based actions.

Today, world leaders, the private sector and individuals, urgently, need to act together, and do whatever is necessary to protect our planet and our future, this decade and beyond. Is.

Plastic Waste Management Amendment Rules,

2021

Recently, the 'Plastic Waste Management Amendment Rules, 2021' have been notified by the Ministry of Environment. The rule prohibits 'single-use plastic' manufactured items with low utility and high potential for disintegration as waste by the year 2022.

New rules:

The manufacture, import, storage, distribution, sale and use of 'single use plastic' items will be prohibited as prescribed with effect from July 1, 2022.

This ban will not apply to items manufactured from 'compostable' plastic.

In order to ban plastic articles other than those listed in this notification, in future, the 'industries' have been given ten years by the government from the date of issue of the notification to comply with these rules.

The thickness of plastic carry bags has been increased from 50 microns to 75 microns with effect from 30th September, 2021 and to 120 microns with effect from 31st December, 2022, to check the spread of waste due to light weight plastic carry bags.

The 'Central Pollution Control Board', in collaboration with state pollution bodies, will monitor these restrictions, levying penalties already prescribed under the 'Environment Protection Act', 1986 for violations found.

Manufacturers, importers and brand owners as per the 'Plastic Waste Management Rules', 2016 for 'Plastic Packaging Wastes' which are not included in the phasing out of the prescribed 'Single Use Plastic' items. owner – PIBO) will be collected and managed in an environmentally sustainable manner through Extended Producer Responsibility (EPR).

Current Scenario and Upcoming Proposals for Amendment in Plastic Management Rules 2016:

Under the rules issued at present, the manufacture, import, storage, distribution, sale and use of carry bags and plastic sheets of thickness less than 50 microns are prohibited in the country.

The manufacturing of a range of plastic products will be banned from July next year. These include ear buds with plastic sticks, plastic sticks for balloons, plastic flags, candy sticks, ice cream sticks, polystyrene for decoration (thermocol), plates, cups, glasses, forks, spoons, knives, straws, trays. Such as cutlery, film wrapping or packing around sweet boxes, invitation cards and cigarette packets, plastic or PVC banners of less than 100 microns thickness, stirrers.

What is 'single-use plastic'?

'Single-use plastic' is a form of disposable plastic that is used only once and is thrown

away or used as a water bottle, straw, cup, etc. Like that which can be recycled.

Plastic packaging waste was not yet included in the 'Single Use Plastic Item' removal products.

Some notable facts:

The per capita plastic consumption in India is 11 kg per year, which is still one of the lowest in the world. The global average per capita plastic consumption is 28 kg per year.

Across India, about 26,000 tonnes of plastic waste is generated every day and about 10,000 tonnes of waste is not collected.

A moral dilemma:

Some intellectuals argue that if plastic is properly managed, collected and recycled for other uses, it is not harmful. On the other hand, some people are in favor of banning it outright, fearing the irreversible harmful effects of plastic.

Reasons for banning plastic bags:

According to the World Wildlife Fund (WWF), plastic is harmful to the environment because it is non-biodegradable and takes years to decompose. Other than this:

Waste plastic bags are highly polluting the land and water.

Plastic bags have become a threat to the life of the animals living in the water as well as the earth.

The chemicals released from the waste of plastic bags enter the soil and make it barren.

Plastic bags are having a negative impact on human health.

Plastic bags cause drainage problems.

Efforts being made by India:

India has won global acclaim for its "Beat Plastic Pollution" resolution announced on 'World Environment Day' last year. Under this resolution, India has pledged to eliminate single-use plastic by the year 2022.

In the fourth 'United Nations Environment General Assembly' held in the year 2019, India had also presented a resolution to address the pollution caused by single-use plastic products.

Challenges before eliminating single-use plastic:

Trade associations such as the All India Plastic Manufacturers Association (AIPMA) have given the government a deadline to phase out 'Single Use Plastic' (SUP) manufactured products, for a period of one year, i.e. by the year 2023, due to the challenges posed by Covid. recommended to increase.

There is no system in place for effective segregation, collection and recycling of wastes in India.

There is also no policy for recycling plastic. Challenges also arise in setting up 'recycling plants' because of the environmental issues raised by the pollution control boards of

various states.

Single-use plastics have been a great business, and are expected to remain profitable as well.

The economy favors more plastic production.

A significant amount of plastic waste is dumped in rivers, oceans and waste landfills, which cannot be recycled.

Way ahead:

Intensifying efforts to recycle plastic under the Swachh Bharat Abhiyan.

To promote the use of biodegradable plastics, khadi bags, cotton bags.

Encouraging collection.

Start charging producers for their waste, which will lead to tax collection and recycling of waste.

Certainly, we cannot leave our next generations to go on vacation to beaches where there is nothing but plastic, and the seas we speak of have plastic instead of fish.

Rice promotion scheme to tackle malnutrition

Prime Minister Narendra Modi has announced to distribute 'fortified rice' under various government schemes including Public Distribution System (PDS) and 'mid-day meals' in schools by 2024.

Significance of Declaration:

This announcement is significant in view of the high levels of malnutrition among women and children in the country.

According to the Ministry of Food, every second woman in the country is anaemic and every third child is a victim of stunted or stunted.

The Global Hunger Index (GHI), India, ranks 94th out of 107 countries and has been placed in the 'severe category' related to hunger.

Malnutrition and lack of essential nutrients in poor women and poor children are major hindrances in their development.

How many children will benefit from this scheme?

According to the 'National Food Security Act' (NFSA), 2013, more than 300 lakh tonnes of rice is distributed by the government under various schemes. For the year 2021-22, 328 lakh tonnes of rice has been allocated by the central government under NFSA for Targeted Public Distribution System (PDS) and schemes like 'Mid-day Meal' (MDM) and 'Integrated Child Development Scheme' (ICDS) .

What is 'Food-Promotion'?

According to the Food Safety and Standards Authority of India (FSSAI), the body that sets standards for food items in the country, 'Food Fortification', 'to make a food nutritious' For this there is a process of carefully increasing the amount of essential micronutrients i.e. vitamins and minerals.

Its objective is to improve the nutritional quality of the food grains supplied and to provide health benefits to the consumers with minimum risk.

Cultivated Rice':(fortified rice)

According to the Food Ministry, fortification of rice is a cost-effective and complementary strategy to increase the vitamin and mineral content in the diet.

As per the norms set by FSSAI, 1 kg of cultured rice will contain iron (28 mg-42.5 mg), folic acid (75-125 microgram) and vitamin B-12 (0.75-1.25 microgram).

In addition, rice can be supplemented with micronutrients, singly or in combination, including zinc (10 mg–15 mg), vitamin A (500–750 µg RE), vitamin B-1 (1 mg–1.5 mg), vitamin B- 2 (1.25 mg-1.75 mg), vitamin B3 (12.5 mg-20 mg) and vitamin B6 (1.5 mg-2.5 mg) per kg.

National Hydrogen Mission

Recently, Prime Minister Modi has announced the launch of 'National Hydrogen Mission'. Its objective is to make India a global hub for the production and export of green hydrogen.

background:

The National Hydrogen Energy Mission (NHM) was formally announced by the Finance Minister in the Union Budget for the year 2021, which aims to enable the country to 'Produce Hydrogen from Green Energy Resources'.

What is 'hydrogen fuel'?

Hydrogen is the lightest and first element in the periodic table. Since the mass of hydrogen is less than the weight of air, it is dispersed upwards in the atmosphere and that is why it is rarely found in its pure form 'H2'.

At standard temperature and pressure, hydrogen is a non-toxic, non-metallic, odourless, tasteless, colorless and highly combustible diatomic gas.

Hydrogen fuel is a 'zero-emission' fuel when combusted with oxygen. It can be used in fuel cells or internal combustion engines. Hydrogen is also used as a fuel for spacecraft propulsion.

Origin of Hydrogen:

It is the most abundant element found in the universe. The Sun and other stars are largely composed of hydrogen.

Astronomers estimate that 90% of the atoms found in the universe are hydrogen atoms. More than any other element, hydrogen is included as a component in most compounds.

The most abundant compound of hydrogen present on Earth is 'water'.

Molecular hydrogen is not found in naturally occurring water bodies on Earth.

Most of the hydrogen on Earth is coupled with water and oxygen and with carbon in living or

dead or fossil biomass. Hydrogen can be made by splitting water into hydrogen and oxygen.

Storage: Hydrogen can be stored physically or as a gas or liquid.

Storing hydrogen as a gas usually requires a high pressure tank.

Storing hydrogen in liquid form requires cryogenic temperatures, as the boiling point of hydrogen is −252.8 °C at one atmospheric pressure.

Hydrogen can be stored on the surface of solids (by adsorption/adsorption) or within solids (by absorption/absorption).

Potential of 'Clean Hydrogen Industry' in reducing greenhouse gas emissions:

The only by-product emitted from the use of hydrogen fuel is 'water' – due to which this fuel becomes 100% clean.

Hydrogen is considered an alternative fuel because of the power of fuel cells in zero-emission electric vehicles, its potential in domestic production, and the high efficiency capabilities of fuel cells.

In fact, a fuel cell with an electric motor is two to three times more efficient than a gas-powered internal combustion engine.

A fuel cell combined with an electric motor is two to three times more efficient.

Hydrogen can also serve as a fuel for internal combustion engines.

The energy of 2 pounds (1 kilogram) of hydrogen gas is equal to the energy of 1 gallon (6.2 pounds / 2.8 kilograms) of gasoline.

Policy Challenges:

The economic sustainability of the extraction of green or blue hydrogen is one of the major challenges before the industries to exploit hydrogen commercially.

Technologies used in the use and production of hydrogen, such as 'Carbon Capture and Storage (CCS), are still in their early stages and are quite expensive, making the cost of production of hydrogen very high.

The maintenance cost of fuel cells after a plant is completed can be quite expensive, as in South Korea.

The production, storage, transportation and demand generation of hydrogen requires huge investment in research and development, for commercial use of hydrogen as a fuel and in industries.

(Hydro-meteorological calamities)

Recently, the Union Home Ministry has released the figures of deaths due to hydro-meteorological calamities.

Note: Hydro-meteorological disasters and hazards include flash floods, cloudburst and landslides.

key points:

During the last three years, about 6,800 people

lost their lives due to hydro-meteorological disasters in the country.

Of all the states, West Bengal has recorded the highest number of deaths due to these calamities.

The causes of these disasters include extreme rainfall events or cloud bursts.

Fatal incidents of landslides in hydro-meteorological disasters occur almost every year mainly in the Himalayan states, Western Ghats and Konkan regions.

The highest amount was allocated to Maharashtra in terms of funds released by the Center under the 'State Disaster Response Fund'.

In the last three years, West Bengal faced 'four tropical cyclones' - Fani (May 2019), Bulbul (November 2019), Amphan (May 2020) and Yas (May 2021).

Roles and Responsibilities of States:

Under the 'Disaster Management Act', states have been empowered to take necessary action to prevent deaths due to natural calamities.

What is 'Disaster Management'?

Under the Disaster Management (DM) Act, 2005, 'Disaster Management' is defined as an integrated process for planning, arranging and coordinating, and implementing measures necessary for the following purposes: is defined in:

for the prevention of the danger of any disaster, To reduce the risk of any disaster or its consequences To prepare for any disaster for preparedness to deal with disaster To assess the severity of the effects of any disaster for rescue and relief for rehabilitation and reconstruction

Institutions related to the Disaster Management Framework Framework at the National Level:

National Disaster Management Authority of India (NDMA)

National Disaster Management Plan (NDMP)

State Disaster Management Authority (SDMA)

District Disaster Management Authority (DDMA)

Policies / Initiatives:

India is a signatory to the Sendai Framework for Disaster Risk Reduction.

India is a partner country of the United Nations Office for Disaster Risk Reduction (UNISDR), and works closely with it.

Under the National Disaster Management Plan (NDMP), the roles and responsibilities of various stakeholders including Central Ministries/Departments, State Governments, Union Territory Administrations, District Authorities and local self-governments have been defined.

National Disaster Management Services

(NDMA) by National Disaster Management Authority (NDMA) for setting up of a 'Very Small Aperture Terminal' (VSAT) network for the purpose of interconnecting MHA, NDMA, NDRF etc. during the year 2015-16. Services – NDMS) was envisioned to provide barrier-free communication infrastructure and technical support for the operation of 'Emergency Operations Centers' (EOC) across the country.

The Landslide Risk Mitigation Scheme (LRMS) envisages financial assistance for location specific landslide mitigation projects.

sonchiriya

The 'SonChiraiya' brand and logo has been launched by the Ministry of Housing and Urban Affairs for marketing of urban Self Help Group (SHG) products.

This initiative will prove to be a right step towards increased visibility and global reach for the products made by the women of urban Self Help Groups.

Four more wet sites of India included in Ramsar list

reference: Recently, four more wetlands of India have been recognized as wetlands of international importance under the 'Ramsar Convention'. With this the number of Ramsar sites in India has gone up to 46 and the surface area covered by these sites is now 1,083,322 hectares.

New wetlands include:

Sultanpur National Park, Haryana: This park provides shelter to more than 220 species of birds, winter migratory and local migratory waterfowl at critical stages of their life cycle. More than ten of these species are globally threatened, including the critically endangered lapwing and the endangered Egyptian vulture, the Saker falcon, the Palas fish eagle and the black-headed vulture. Includes bellied turns.

Bhindawas Wildlife Sanctuary, Haryana: It is a man-made freshwater wetland. It is the largest wetland of its kind in Haryana.

Thol, Gujarat: Thol Lake Wildlife Sanctuary in Gujarat is located on the Central Asian Flyway of Birds and more than 320 bird species can be found here. This wetland is home to more than 30 threatened waterfowl species such as the highly endangered white-fronted vulture and the sociable lapwing and the endangered stork heron (crane), ducks (Common pochard) and mild white-fronted goose (Lesser white-fronted goose). It is also a place of refuge.

Wadhwana, Gujarat: The Wadhwana wetland in Gujarat is internationally important for its bird life as it provides suitable winter habitat for migratory waterfowl. These include the endangered Palas fish-eagle, the vulnerable common pochard, and some threatened or near-

endangered species such as the near-endangered Dalmatian pelican, the grey-headed fish-eagle and the ferruginous duck. .

December 2020 – The Tso Kar Wetland Complex was added to the list of Ramsar sites in India. This includes the high-altitude wetland complex of two connected lakes, Startsapuk Tso and Tso Kar, in Ladakh.

November 2020 – Maharashtra – Lonar Lake

November 2020 – Agra (Uttar Pradesh) – Sur Sarovar also called, Keetham Lake

November 2020 – Uttarakhand – Asan Barrage

July 2020 – Bihar – Kanwar Lake or Kabal Taal

February 2020 – Kolkata – Sunderban Reserve Forest (Sunderban Wetlands)

Why are wetlands important to a healthy planet?

The health of people on our planet depends on the health of wetlands.

40% of the world's species live in or breed in wetlands.

Wetlands are the 'nurseries of life' – about 40% of organisms breed in wetlands.

Wetlands are the 'lungs of the earth', and they clean pollutants from the atmosphere.

Wetlands are 'critical to climate change' - they store 30% of land-based carbon.

Wetlands 'reduce disaster risk' - they block the velocity of storms.

About Ramsar Convention:

The 'Ramsar Convention' is an international agreement to promote the protection of wetlands.

This convention was signed on 2 February 1971 in the Iranian city of Ramsar on the coast of the Caspian Sea, hence it is called 'Ramsar Convention'.

About 90% of the member states of the United Nations are part of this 'convention'.

Officially it is called the 'Convention on Wetlands of International Importance especially as Waterfowl Habitat'.

'Montreux Record'

The Montreux Record is a register of wetland sites in the list of wetlands of international importance under the Ramsar Convention. It includes ecologically threatened wetlands due to human interference and pollution.

It is retained as part of the Ramsar list.

The Montreux Record was established under the recommendations of the 'Conference of the Contracting Parties', 1990.

Any site in a Montreux record may be added and removed only with the consent of the Contracting Parties concerned.

Presently, the two Indian sites in Montreux record are Loktak Lake, Manipur and Keoladeo National Park, Rajasthan.

Once Chilka Lake (Odisha) was included in

this list, but later it was removed from there.

Discovery of a 'mermaid' species of algae

(A 'mermaid' species of algae discovered)

• After nearly four decades, a new species of algae has been discovered on the Andaman and Nicobar Islands.

• Researchers have named this species 'Acetabularia jalakanyakae'.

• Plant of this species has a large cell with nucleus, which is its main feature.

• It is the first species of 'Genus Acetabularia' to be discovered in India.

• Another feature of 'Acetabularia' class is their regenerative potential.

Madur mats

These 'Madur mats', which are laid on the ground, are specially made in West Bengal.

'Madur mats' are an intrinsic part of the Bengali lifestyle and are made from natural fibres.

Also known as 'Madurkathi' for these, these mats were awarded the Geographical Indication (GI) tag by the Geographical Indications Registry in April 2018.

Madurakathi is a rhizome based plant (Cyperus tagatum or Cyperus pangorei) found in abundance in alluvial areas of East and West Medinipur.

National Monetization Pipeline (NMP)

,(National Monetization pipeline)

reference:

Recently, the National Monetization Pipeline (NMP) has been launched by the central government in an effort to list the infrastructure assets of the government to be sold over a period of four years.

key points:

Under the four-year 'National Monetization Pipeline' (NMP), the value of investments contained in 'existing brownfield assets of the public sector' will be achieved by involving the private sector, for which the 'private sector' will be given only rights in projects. will be transferred, and will not be 'owned' for them.

Components of the programme: More than 66 per cent of the 'Total Estimated Value' assets in road, railway and power sector assets will be monetised. These sectors include roads, ports, airports, railways, warehousing, gas and product pipelines, power generation, mining, telecommunications, stadiums, hospitality and housing.

Program Objective:

1. The strategic objective of the program is to

capture the value of investments in existing brownfield public sector assets by using institutional and long-term capital, which can be used for further public investment.

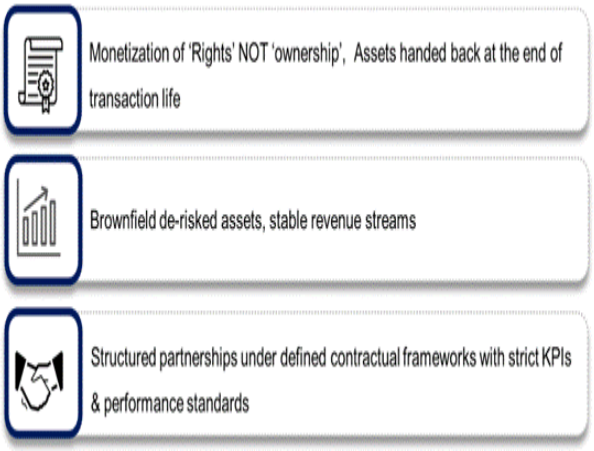
2. The main objective of this initiative is to enable 'Infrastructure Creation through Monetization', in which the best public and private sectors in their respective sectors collaborate in terms of capacity, thereby enabling socio-economic development and To improve the quality of life of citizens.

Program Structure:

• At present, only assets of central government ministries and infrastructure-related central public sector enterprises (CPSEs) are included.

• Monetization through disinvestment and monetization of non-core assets have not been included in the NMP.

There are three main conditions for monetizing key assets.

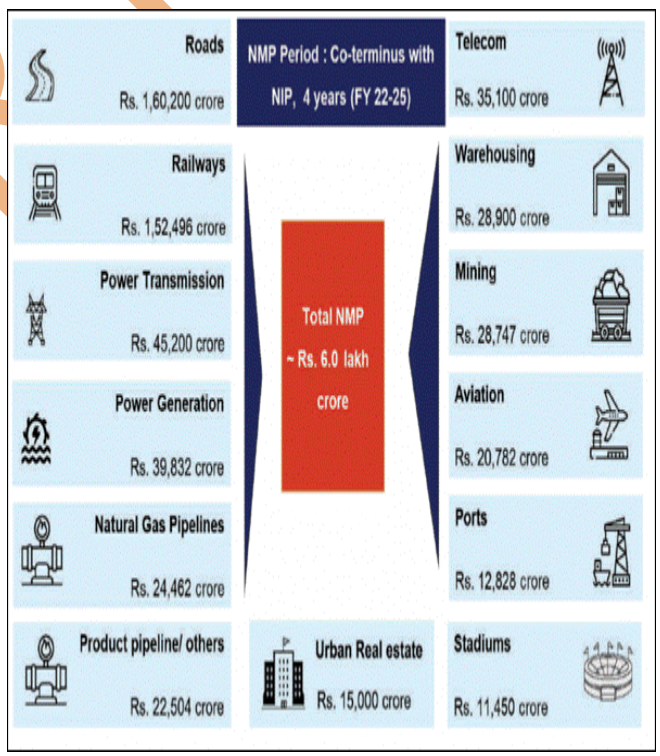


Estimated Capacity:

The creation of infrastructure is inextricably linked with monetization, keeping in mind that the timing has been fixed for the 'National Monetization Pipeline' (NMP) so that the remaining period under the 'National Infrastructure Pipeline' (NIP) ends simultaneously. Go.

The estimated value of the total assets under the 'National Monetization Pipeline' during the four-year period i.e. FY 2022-25 is Rs 6.0 lakh crore.

Sector-wise Monetization Pipeline for FY 2022-25 (in Rs. Crore):



Importance of Planning:

Asset monetization should not be viewed as a mere financing process, but should also be

viewed as a process of infrastructure development taking into account the resource capacity of the private sector and their ability to dynamically adapt themselves to the emerging global and economic realities. To be seen as a holistic change in operation, upgrade and maintenance.

• Such new models will not only enable financial and strategic investors but also the general public to participate in this asset class, thereby opening up new avenues of investment.

• Therefore, the 'National Monetization Pipeline' document is an important step towards making India's infrastructure truly world class.

Challenges before the 'National Monetization Pipeline':

1. Lack of identifiable revenue sources in various assets
2. Level of Capacity Utilization in Gas and Petroleum Pipeline Networks
3. Dispute Resolution Mechanism
4. Regulated Tariffs in Power Sector Assets
5. Low investor interest in National Highways having less than 'Four Lanes'
6. Lack of independent regional regulators

United Nations Assistance Mission in Afghanistan (UNAMA)

(UN Assistance Mission in Afghanistan)

reference:

Global leaders are planning to hold a meeting to discuss the renewal of the term of the United Nations Assistance Mission in Afghanistan (UNAMA). The term of the United Nations Assistance Mission in Afghanistan ends on 17 September.

background:

During the past few months, with the withdrawal of foreign troops by the Taliban, a massive nationwide offensive has been launched in Afghanistan.

What is the 'United Nations Assistance Mission in Afghanistan' (UNAMA)?

UNAMA was established on 28 March 2002 by resolution 1401 of the United Nations Security Council.

It was originally established to assist Afghanistan and its citizens to lay the foundation for lasting peace and development in the country.

Its basic function was to assist in the implementation of the Bonn Agreement (December 2001).

The 'United Nations Assistance Mission in Afghanistan' is reviewed annually and its mandate changes over time, keeping in mind the needs of the country.

UNAMA is an integrated mission. That is, it is a specialized political mission, in which all UN agencies, funds and programs work in a

multifaceted and integrated manner to better assist Afghanistan in accordance with nationally defined priorities.

What is the 'Bonne Agreement'?

The 'Bonn Agreement' was a closed-door negotiation; In which the partners were most isolated and their external contact during negotiations was limited, and no information was published until the signing of the agreement.

In this talks the current symbolic head of state (Rabbani) of Afghanistan was sidelined and did not participate, and the Taliban were completely excluded from the 'Bon talks'.

The United Nations and several other international agencies played a major role in moving the negotiations forward, and the Bonn Agreement was given full support by the United Nations Security Council.

An ambitious three-year political and administrative roadmap was set out by the Bonn Agreement, pursuant to which,

Transitional administration was established by the emergency 'Loya Jirga' (Greater Council) held in June 2002,

A new constitution was adopted in early 2004, and

Presidential and parliamentary elections were held in 2004 and 2005.

What are the 'Special Political Missions of the United Nations'?

In the 'Special Political Mission', 'Department of Political and Peacebuilding Affairs' like 'Office of the Special Advisor on the Prevention of Genocide' – The United Nations and many other international agencies participate, except those managed or directed by the DPPA.

'Sujalam' campaign

Recently, a 100-day 'SUJALAM' campaign has been started by the Ministry of Jal Shakti under the 'Azadi Ka Amrit Mahotsav' celebrations (from 25 August).

About the campaign:

Its campaign aims to convert more and more villages into ODF plus villages through waste water management at the village level.

This campaign will be accomplished especially through construction of one million absorbers/soak-pits and through waste water management/greywater management activities.

Major activities to be organized in villages under this campaign:

Organize community consultations, open meetings and gram sabha meetings to analyze the current situation.

To pass resolution to prepare required number of soak pits to maintain continuity of ODF and to manage greywater.

Preparation of a 100 day plan to maintain

continuity and initiate soak pit construction activities.

To construct the required number of soak pits.

Reconstruction of toilets where necessary through IEC.

To ensure toilet facilities to all the new families of the village.

Importance:

Through this campaign, not only will the desired infrastructure for greywater management i.e. soak pits be created in the villages but will also help in the sustainable management of water bodies.

In addition, this campaign will accelerate the activities of the second phase of 'Swacch Bharat Mission-Grameen' through community participation and will promote awareness about ODF-plus activities.

Need:

Disposal of waste water and disposal of water bodies in villages or on outskirts of villages remains a major problem. This campaign will help in waste water management and in turn will help in restoring the reservoirs.

What is ODF Tag?

The original ODF protocol issued in March 2016 stated that, if, at any time of the day, no person defecates in the open, that city/ward shall be notified as an ODF city/ward. "

What is ODF+ and ODF++?

ODF+ and ODF++ were announced in August 2018 to take forward and continue the work done by the cities after achieving ODF status in the first phase of Swachh Bharat Mission – Urban (Swachh Bharat Mission –Urban: SBM-U). was started.

Eligibility: Based on the ODF protocol, a city that has been notified ODF at least once can be declared as SBM-ODF+ and ODF++.

What is ODF+?

As per ODF+ protocol – 'If on any day no person is found defecating and/or urinating in the open and all community and public toilets are in functional condition and well maintained, then that city, ward or area is declared as ODF+ can be done.'

What is ODF++?

The ODF++ protocol adds a condition that "Safely manage and treat faecal sludge/septage and drains, including any untreated sludge/septage and drain effluents from any water body or Should not be in open areas."

Malabar Exercise by Quad Nations

The navies of the four member states of the Quadrilateral Security Negotiating Group i.e. 'Quad' - India, the United States, Japan and Australia - are participating in the 25th edition of the Malabar exercise. This naval exercise is starting on 26 August off the coast of 'Guam'

located in the Pacific Ocean.

Overview of the Malabar Exercise:

The Malabar Series of Maritime Naval Exercises began in the year 1992 as an exercise between the navies of India, India and the United States. In this exercise in the year 2015, Japan got

It was incorporated and thereafter it became a tripartite military exercise.

What is 'Quad Group'?

It is a quadrilateral organization consisting of Japan, India, the United States of America and Australia.

All member states of this grouping are democratic nations and share common interests related to non-disruptive maritime trade and security.

The idea was first proposed by Japanese Prime Minister Shinzo Abe in the year 2007. However, the idea did not take off as Australia did not join the group.

Significance of this organization:

The Quad is an opportunity for like-minded countries to share information and collaborate on projects of mutual interest.

Its member states share an open and open Indo-Pacific approach.

It is one of the many forums of dialogue between India, Australia, Japan and the US and should not be viewed in any particular context.

China's apprehensions about 'Quad Group':

Beijing has been opposing the alliance of these democratic countries in the Indo-Pacific region for a long time.

China sees it as an Asian-NATO quadrilateral alliance aimed at halting China's rise.

Notably, the 'Confluence of Two Seas' address by Japanese PM Shinzo Abe in the Indian Parliament has given a new thrust to the Quad concept. It has recognized the economic rise of India.

National Gold Bond Scheme

(Sovereign Gold Bond Scheme)

Recently, the Reserve Bank of India (RBI) has announced the 'National Gold Bond Scheme' / Sovereign Gold Bond Scheme 2021-22 sixth series. Under this scheme, the subscription of gold bonds can be done from August 30 to September 3, 2021.

About Sovereign Gold Bond Scheme:

The 'Rashtriya Gold Bond' (Sovereign Gold Bond) was launched by the Government of India in the year 2015.

The government introduced these bonds to help reduce India's over-reliance on gold imports.

The move was aimed at changing the habit of Indians to 'deposit gold in physical form' of their savings into 'documents of sovereign security'.

important facts:

Eligibility: The sale of Sovereign Gold Bonds shall be restricted to 'Resident Indian Individuals, Hindu Undivided Families (HUFs), Trusts, Universities, Charitable Institutions etc.

Denomination and Tenure: Sovereign Gold Bonds will be denominated in multiples of 'grams' of gold with a base unit of 1 gram. These will have a tenure of 8 years and will have an exit option after the fifth year, which can be exercised on the interest payment dates.

Minimum and Maximum Limits: Bonds are in denominations of one gram of gold and multiples thereof. The minimum investment limit is one gram and the maximum limit per year (April – March) is 4 kg for each individual / Hindu undivided family and 20 kg for trusts and similar entities notified by the Government of India from time to time.

Joint Purchase: If the bonds are purchased jointly, the maximum limit of 4 kg will be applicable to the first applicant only.

The annual ceiling will include bonds issued by the government in various series earlier and bonds purchased from the secondary market. The investment limit shall not include bonds held by banks or financial institutions as security.

Collateral: These securities can be used as collateral for taking loans from banks, financial institutions and non-banking financial institutions. The loan to value ratio will be the same as in the case of normal gold loans as directed by the Reserve Bank from time to time.

Ecological sensitive area of 'Dipore Beel Wildlife Sanctuary'

Recently, the 'Eco-Sensitive Zone' or Eco-Sensitive Zone (ESZ) of 'Deepor Beel Wildlife Sanctuary' located on the south-western edge of Guwahati has been approved by the Ministry of Environment, Forest and Climate Change.) has been notified.

An area, which may range from 294 meters to 16.32 km, has been designated as an 'Eco-Sensitive Zone' (ESZ) in the notification issued by the ministry, and has a total area of 148.9767 sq km.

Need:

The 'Deepor Beel' wetland has been under threat for decades, with 'railway tracks' running through its southern part (which is proposed to be 'dual-lined' and electrified), dumping of garbage and encroachment by human populations and commercial units.

Implications of the latest decision:

No new commercial hotels and resorts shall be permitted to be constructed within 1 km of the boundary of the protected area or to the extent of the eco-sensitive zone, whichever is nearer,

except for small temporary structures for eco-tourism activities.

In eco-sensitive areas, activities such as hydroelectric projects, brick kilns, commercial use of firewood and discharge of untreated waste into natural water bodies or land areas are prohibited.

About Dipore Beel:

Deepor Beel is one of the largest freshwater lakes in Assam and, apart from being an important bird area, is the only 'Ramsar site' in the state.

It is a permanent freshwater lake located in the south of the Brahmaputra river main stream, and an older stream of the Brahmaputra.

This wetland needs protection:

'Deepor Beel' is a unique habitat for wetlands, aquatic flora and flying fauna.

About 150 species of birds are found in the sanctuary, out of which two species are critically endangered, one endangered, five vulnerable and four near-threatened species.

The 'Deepor Beel' wetland is frequented by elephant movement from the adjacent 'Rani Reserve Forest' and the Garbhanga Reserve Forest', and this wetland is an integral part of the elephant habitat.

Apart from these, 12 species of reptiles, 50 species of fishes, six species of amphibians and 155 species of aquatic micro-fauna have been recorded in the sanctuary.

What are Ecological-Sensitive Zones (ESZ)?

Eco-sensitive zones (ESZs) or Ecologically Fragile Areas (EFAs) are areas notified by the Ministry of Environment, Forest and Climate Change (MoEFCC) around protected areas, national parks and wildlife sanctuaries.

The purpose of declaring an area as an 'Eco-Sensitive Zone' (ESZ) is to create a kind of 'shock absorbers' in the protected areas by regulating and managing the activities in these areas.

These areas also act as a transition zone between highly-protected areas and low-protected areas.

The term "eco-sensitive zone" is not mentioned in the Environment (Protection) Act, 1986.

According to the Wildlife Conservation Strategy, 2002, an area up to 10 km around a protected area can be declared an ESZ.

In addition, where sensitive corridors, connectivity and ecologically important parts of the landscape range, are located beyond an area of 10 km, these areas may also be included in the ESZ.

'Discovery of Creatures' 2020

(Animal Discoveries 2020)

'Animal Discoveries 2020' is a document recently published by 'Zoological Survey of India' / 'Zoological Survey of India' (ZSI).

According to this, 557 new entries have been added to the zoological world of India in the year 2020, which includes 407 new species and 150 new records.

Now, the number of fauna in India has increased to 1,02,718.

Important species included:

Trimeresurus Salazar, a new species of 'Green Pit Viper' discovered in Arunachal Pradesh;

Lycodon deccanensis, 'Deccan Wolf Snake' discovered from Karnataka;

Sphaerotheca Bengaluru, a new species of burrowing frog named after the city of Bengaluru.

Xyrias anjaalai, a new species of deep water snake eel discovered in Kerala;

Glyptohorax giudikyensis, a new species of catfish, discovered in Manipur;

Clyster galateansis, a new species of 'scarab beetle' from the Great Nicobar Biosphere.

Myotis cf. frater (Myotis cf. frater), a bat species previously seen in China, Taiwan and Russia, is first seen from Uttarakhand, India;

Zoothera citrina gibsonhilli, an orange-headed thrush first seen in regions from southern Myanmar to southern Thailand (central Malay Peninsula), first from India to Narcondam Island in the Andaman and Nicobar Islands has been seen in

Zoological Survey of India:

The Zoological Survey of India (ZSI), an organization under the Ministry of Environment and Forests, was established in the year 1916.

It is a 'national center' for the survey and exploration of biological resources to increase information on the country's exceptionally rich biodiversity.

It is headquartered in Kolkata and has 16 regional offices located in different parts of the country.

Bacillus Calmette-Guerin (BCG) Vaccination

Context: On July 18, 1921, 100 years have passed since the creation of the Bacillus Calmette-Guérin (BCG) vaccine to combat tuberculosis (TB).

What is 'BCG Vaccine'?

The Bacillus Calmette-Guérin (BCG) vaccine is a vaccine primarily used against tuberculosis (TB).

The BCG vaccine was developed by modifying a strain of 'Mycobacterium bovis' – the cause of TB/tuberculosis in cattle. In the year 1921, for the first time this vaccine was used on humans.

Currently, BCG is the only licensed vaccine available for the prevention of TB.

It is the most widely used vaccine in the world with an excellent safety record, and

approximately 120 million doses are administered each year to affected people.

In India, BCG was first introduced on a limited scale in the year 1948 and became a part of the 'National TB Control Programme' in the year 1962.

BCG, for children, provides strong protection against severe forms of TB/TB. It is 0-80% effective protectively for adolescents and adults.

BCG also protects newborns from diseases such as respiratory and bacterial infections, and other mycobacterial diseases such as leprosy and Buruli ulcer.

It is also used as an immunotherapy agent in bladder cancer and malignant melanoma disease.

Efficacy of BCG Vaccine:

BCG works well in some geographic locations, while not so effective in some places. Generally, the efficacy of the BCG vaccine increases with increasing distance from the equator.

Its efficacy is high in the UK, Norway, Sweden and Denmark; And in countries located on or near the equator, such as India, Kenya and Malawi, where the incidence of tuberculosis is high, its efficacy is seen to decrease. Environmental mycobacteria are also found in high abundance in these areas. These mycobacteria are believed to be able to hinder the protective effect against TB.

What is Tuberculosis (TB)?

Tuberculosis (TB) or tuberculosis is an infectious disease caused by a bacterium called Mycobacterium tuberculosis.

It usually affects the lungs (pulmonary TB), but it can also affect other parts of the human body.

This disease is spread through the air of a person suffering from pulmonary TB through coughing or any other means.

Worldwide, TB, in contrast, remains a major public health problem in the world;

According to the 'Global TB Report' of the World Health Organization, in the year 2019, about 10 million people were infected with TB, out of which 4 million patients died. The number of these cases in India is 27% of the total global cases.

Way ahead:

India is committed to eliminate TB as a public health problem by 2025. To achieve this goal, we will need not only better diagnostics and drugs, but also more effective vaccines.

We need to be prepared to build on the lessons learned from the COVID-19 pandemic, and especially to replicate the successes achieved in vaccine development, and to meet the challenges of ensuring vaccine equity.