

UPSC CURRENT AFFAIRS NOTES 14-11-2023

Birsa Munda



The Prime Minister recently announced he will go to the native village of tribal icon Birsa Munda on his birth anniversary and launch a welfare scheme for the community.

He was a folk hero and a tribal freedom fighter hailing from the Munda tribe.

He spearheaded an Indian tribal mass movement that arose in the Bihar and Jharkhand belts in the early 19th century under British colonisation.

Munda rallied the tribals to fight against the forceful land grabbing carried out by the British government, which would turn the tribals into bonded labourers and force them to abject poverty.

He influenced his people to realise the importance of owning their land and asserting their rights over it.



As a reaction to the introduction of the Zamindari system, or Permanent settlement in tribal areas, Birsa Munda in 1894 declared “Ulgulan”, or revolt, against the British and the Dikus – the outsiders.

He created a faith called ‘Birsait’.

Known as 'Dharti Abba' or the Earth Father, Birsa Munda stressed the need for the tribals to study their own religion and not forget their cultural roots.

Birsa Munda propagated the principles of Hindu religion.

He died on June 9, 1900, at age 25.

His struggle against exploitation and discrimination against tribals led to a big hit against the British government in the form of the Chotanagpur Tenancy Act being passed in 1908. The act restricted the passing on of land from the tribal people to non-tribals.

In recognition of his impact on the national movement, the state of Jharkhand was created on his birth anniversary in 2000.

November 15, the birth anniversary of Birsa Munda, was declared ‘Janjatiya Gaurav Divas’ by the Central Government in 2021.

Vadhvan Port



The Vadhavan Port Project Ltd. (VPPL) has initiated the process for construction of the ₹76,220 crore port and public hearings are likely to begin in the next few months.

It is a proposed Rs 75,000 crore container port project at Vadhavan in Maharashtra.

The port will be developed as a joint venture by the Jawaharlal Nehru Port Authority (JNPA) and the Maharashtra Maritime Board (MMB).

The new port has a natural draft of about 20 metres close to the shore, making it possible for it to handle bigger vessels.

It will enable the call of container vessels of 16,000- 25,000 TEUs (twenty-foot equivalent units) capacity, giving advantages of economies of scale and reducing logistics cost.

It will be designed to handle around 254 million tonnes (MT) of cargo.

It will be developed as a Green Port. It is planning to provide green fuel to ships coming to the port, and the construction and operations are planned to keep in mind the environmental issues.

Jawaharlal Nehru Port:

It is also known as the largest container port in India, handling around 55% of total containers handled by all Major Ports in India.

Location: It is located east of Mumbai, in Navi Mumbai, Maharashtra.

This port on the Arabian Sea is accessed via Thane Creek.

It is also known as Nhava Sheva. Its common name derives from the names of Nhava and Sheva villages that were situated here.

This port is also the terminal of Western Dedicated Freight Corridor.

Forest Conservation Amendment Act of 2023



The Forest Conservation Amendment Act of 2023 has received limited attention and little discussion about its impact on forests and its inhabitants. From the colonial forest law in 1865 to the Forest Conservation Amendment Act, 2023, more than fifteen laws, Acts, and policies have been formulated interlinking forests with legal and policy frameworks.

However, there is little to no recognition of the rights of indigenous communities in these Acts, who are the rightful inhabitants of forest lands.

What is the new amendment?



At first glance, the amendment primarily aims to tackle the critical issues of climate change and deforestation's adverse effects, focusing on effective management and afforestation. The law further aims to determine how forests can be utilised for economic gain, and the manner in which it seeks to achieve this goal is outlined in the legislation.

The primary method used to achieve this objective involves removing forests from the law's jurisdiction, thereby facilitating various forms of economic exploitation. As per the amendment, the forest law will now apply exclusively to areas categorised under the 1927 Forest Act and those designated as such on or after October 25, 1980.

The Act will not be applicable to forests that were converted for non-forest use on or after December 12, 1996 and land which falls under 100 kilometres from the China and Pakistan border where the central government can build linear projects. To establish security infrastructure and facilities for surveillance, the central government is authorised to construct security measures in areas up to ten hectares.

This provision also applies to areas (up to five hectares) which are designated as vulnerable. Within these regions, the government, with the necessary approvals, can implement security protocols as described above.

Initiatives like ecotourism, safari, environmental entertainment, and more may be implemented in these areas. The main objective of these initiatives is to improve the livelihoods of those reliant on forest resources, a goal that has drawn criticism from tribal communities and human rights activists.

Why was the amendment brought in?

The Godavarman Thirumulkpad case, a prominent legal dispute that came before the Supreme Court in 1996, led to an interpretation of forest land in accordance with its 'dictionary meaning'. Subsequently, all private forests were brought under the ambit of the 1980 law. This has been a subject of debate as it was argued that the legislation primarily aims to restrict forest land from being used for various non-forest purposes, including the conversion of land for large-scale industries.



The law has faced significant opposition, especially from private landowners, individuals, and organisations involved in forest conservation, for its perceived adverse impact on the country's industrial progress.

In other words, the need to exclude forest land from the legal framework was mainly driven by the requirements of the industrial classes in the country. It is in this context that concerns regarding the Forest Conservation Act tend to resurface periodically, echoing the apprehensions of indigenous communities and human rights activists. These factors came to the forefront again when the Forest (Conservation) Amendment Bill was introduced in Parliament in March, triggering extensive discussions and debates. The Parliament then referred the Bill to a 31-member Joint Parliamentary Committee (JPC).

What did the JPC recommend?

Of the 31-member JPC addressing the issue, only six individuals were from the opposition. The JPC submitted its report to Parliament on July 20, within three months. The critical comments from the committee members and public appear to have been largely disregarded; reduced to dissenting notes, holding a minority viewpoint on the Bill.

Therefore, the Bill successfully passed in both houses of Parliament without any substantial debates or discussions. There have been no collaborative discussions with the southern States concerning matters related to their specific geographical locations.

A few days after the Act was enacted, the Odisha government revoked the “deemed forest” status in the State but had to later cancel the order due to public outrage and cited that it is waiting for detailed rules and guidelines from the concerned Central Ministry. If the government were to remove the forests from the purview of the Forest Conservation Act, it would effectively obstruct indigenous communities from asserting their rights.

What happened to the stipulation of ‘prior consent’?

The Forest Conservation Act underwent important amendments in 2016 and 2017, which stipulated that prior consent from the tribal grama sabha was



mandatory for any alterations to forests for non-forest purposes. However, the recent revisions to the legislation have removed the necessity for such consent.

Nevertheless, in this situation, State governments can proactively engage in specific activities within this framework through the inclusion of grama sabhas, particularly in matters of land acquisition for various purposes, by establishing State-level steering committees.

But numerous State governments might hesitate on this aspect, as they hold a preconceived notion that Adivasi grama sabhas are ‘anti-development,’ and they fear that their decisions could hinder economically lucrative afforestation initiatives.

What is compensatory afforestation?

Compensatory afforestation, as outlined in the new legislation, encompasses various projects and schemes that can be undertaken by both private individuals and organisations (including large corporations) for afforestation or reforestation purposes.

The Compensatory Afforestation Act encountered significant challenges in the past, primarily due to ambiguities in the original legislation and shortage of available land.

The goal of the new amendment is to streamline the process. However, there is apprehension regarding the potential environmental implications of this amendment.

The law mandates that for every parcel of land that is lost due to afforestation efforts, an equivalent amount of land must be afforested elsewhere. It does not specify the type of trees that should be planted, leaving room for discretion.

How does this affect the Forest Rights Act (FRA)?

The FRA has had notable impacts in various regions, such as the Mendha-Lekha in Maharashtra, Loyendi in Odisha, and Malakkappara in Kerala.

Despite the initial enthusiasm, it appears that both the Central and State governments have become less enthusiastic about implementing the FRA in



their States. Many consider the Act as an impediment to convert forest land for non-forest purposes.

The State government and its bureaucracy hold the view that granting community rights under the FRA could weaken the State's authority over the forest. They anticipate potential legal challenges to any such endeavours.

To navigate this situation, the government has opted to reduce or dilute the extent of forest areas, rather than amend the FRA, thereby limiting the potential for additional Adivasi claims.

The amendment also fails to address the growing issue of human-animal conflicts in forest areas, particularly in the Adivasi hamlets of the Western Ghats region. This conflict not only endangers the livelihoods of the Adivasis but also poses a threat to wildlife.

What are the problems?

When examined superficially, the law appears to address issues without complications. However, once the law is put into practice, it presents substantial challenges to forest dwelling communities and

government agencies. The concept of afforestation, which offers considerable financial incentives to private individuals and institutions for afforestation projects, fundamentally clashes with the idea of forest governance.

Furthermore, it contradicts the concept of decentralised forest governance as forests in the country fall under the concurrent list. Such governance practices are against the spirit of federal norms.

Moreover, defining strategic linear projects becomes exceptionally complex and vague. Unlike external security threats like border disputes and cross-border skirmishes, internal environmental security should also be considered a significant concern, especially in States that consistently face natural disasters. Regrettably, this priority is not guaranteed.



INSURANCE SURETY BOND

The National Highways Authority of India (NHAI) adopted an innovative strategy, allowing Insurance Surety Bonds as Bank Guarantees for Toll Operate Transfer (TOT) Bundle monetization, a groundbreaking move in the road infrastructure sector.

India (NHAI) is set to utilize an innovative financial instrument, the Insurance Surety Bond, for the monetization program of the Toll Operate Transfer (TOT) Bundle.

This marks a departure from traditional Bank Guarantees (BGs) and introduces a new method of financial assurance for bidders in the road infrastructure sector.

Collaboration and Stakeholders

NHAI has collaborated with various entities to implement this initiative. These include the Highway Operators Association of India (HOAI), SBI General Insurance, and AON India Insurance.

This collaboration underscores the importance of partnerships between government bodies, insurance companies, and industry associations to bring about financial innovations in infrastructure development.

Insurance Surety Bond Details

The Insurance Surety Bond has been issued at a rate of 0.25% by the insurer without requiring any margin money from the Concessionaires.

This low rate and the absence of margin money are designed to result in significant cost savings for the entities participating in the bid process.

Cost Savings and Liquidity Enhancement

The use of Insurance Surety Bonds is expected to translate into substantial cost savings for Concessionaires.

By reducing financial burdens on bidders, this initiative aims to enhance liquidity in the market, creating a more favourable environment for the growth and development of the road sector.



Industry Benchmark and Private Participation

The adoption of Insurance Surety Bonds is positioned to set a new benchmark for the industry, emphasizing the role of innovative financial solutions in the road infrastructure development landscape.

This move is anticipated to encourage private participation in the highway sector by providing an alternative to traditional Bank Guarantees.

Scope for Insurance Companies

NHAI has received a significant volume of Bank Guarantees (BGs) since 2022, amounting to Rs. 15,000 crore.

The initiative to use Insurance Surety Bonds presents a substantial opportunity for insurance companies. The wider adoption of these bonds is expected to increase the availability of capital for road projects.

Government Recognition and 'Ease of Doing Business'

The Ministry of Finance, Government of India, has recognized e-BG and Insurance Surety Bonds at par with Bank Guarantees for all government procurements.

This official recognition is likely to instil confidence in the use of these instruments, facilitating the 'Ease of Doing Business' in the road infrastructure sector.

Positive Economic Impact

The introduction of innovative financial instruments like Insurance Surety Bonds is expected to have a positive cascading impact on the Indian economy.

Strengthening National Highway Infrastructure development is highlighted as a key outcome, emphasizing the role of such initiatives in broader economic development.

CLOUD SEEDING



The Delhi government said IIT-Kanpur could carry out the first pilot project for cloud seeding around November 20-21 to induce rain.

What is Cloud Seeding?

Clouds are made up of tiny water droplets or ice crystals that form when water vapor in the atmosphere cools and condenses around a tiny particle of dust or salt floating in the atmosphere.

Without these particles, known as condensation or ice nuclei, raindrops or snowflakes cannot form and precipitation will not occur.

Cloud seeding is a weather modification technique that improves a cloud's ability to produce rain or snow by introducing tiny ice nuclei into certain types of subfreezing clouds.

These nuclei provide a base for snowflakes to form. After cloud seeding takes place, the newly formed snowflakes quickly grow and fall from the clouds back to the surface of the Earth, increasing snowpack and streamflow.

Pros of Cloud Seeding

Rain Creation

In the event that the amount of rain experienced in an area is inadequate, cloud seeding is the best way to consider to improve rainfall quantity. In many areas where precipitation hardly comes by, silver iodide can be introduced to induce rain formation.

Rain is essential when it comes to keeping areas fertile and hydrated for farming purposes. Before cloud seeding, only a small portion of the moisture available in clouds was changed into precipitation that managed to reach the earth's surface, this motivated engineers and scientists to avail options and possibilities of cloud seeding.

Boosting of the Economy

Agricultural production is important to the local economies of many regions around the world. Rain is important in achieving a proper harvest.



With the right amount of rain, the local economy will benefit financially and there will be enough food to feed both the people and animals.

Cloud seeding is also used in the betterment of living standards in an area with poor or dry climates.

Weather Regulation

Some weather conditions could be dangerous to the environment if not properly managed.

Cloud seeding provides an avenue for controlling prevailing weather conditions in different areas, although it is primarily used to improve the amount of rain; it can also limit precipitation which could develop into storms that cause mass destruction.

Cloud seeding is utilized in keeping areas dry by increasing the precipitation. This reduces the cloud cover through evaporating the fog, reducing pollution and making it rain.

Makes Dry Places More Liveable

Water plays a vital role in the sustenance of human life as it is one of the most basic needs in the environment. Arid areas usually have conditions that may be harsh in terms of food security and a conducive environment for living.

Cloud seeding can bring rain, which makes the natural environment flourish and becomes more habitable. It could also lead to an increase in tourist attractions.

Reduction of crop damage

Precipitation could present itself in an unwanted form. It could bring about a hailstorm that could damage or completely wipe out the crops. Cloud seeding changes the formation of storm clouds and makes them less of a threat to the crops.

Variety of methods of practice



Cloud seeding can be done in three effective ways depending on the area that is being focused on. Static cloud seeding introduces silver iodide into the clouds in order to create a medium for the moisture to condense, dynamic cloud seeding is more compound than static as it aims to enhance vertical air currents and make more moisture to be produced by the clouds.

The last one is hygroscopic cloud seeding, which introduces salts to the clouds at the base in blazes so that they can lead to high precipitation when water starts pouring from the clouds above them.

Use of ground-based machines

With decent advancements in technology, cloud seeding in the modern-day does not only depend on airplanes but can also use independently operational machines. Several states have employed the use of machines that are strategically placed in high altitude areas where clouds potentially form. It brings about the same results as airplanes that drop silver iodide.

Geographically oriented

Cloud seeding is primarily done to create certain conditions in specific areas, also termed as microclimates. Places like airports, for instance, often use cloud seeding to create a stable condition for their runway. This is to ensure that planes are not restricted from taking off or landing. Depending on the region and its conditions, cloud seeding can be employed to create a stable micro-climate that works for the locally needed temperatures.

Cloud seeding helps to reduce the impact of drought

Most of the sources of water such as rivers, lakes, and groundwater supply among other traditional sources are not sufficient or are under increasing threat of extinction due to the ever-increasing demand of water in vast lands and the increasing rate of pollution in many regions around the globe.

Since arid areas lack the moisture required for proper rainfall, droplets usually evaporate before they get to the ground. When nuclei are brought to the clouds, it boosts the probability of moisture getting to the ground before it evaporates.



The more condensation takes place, the higher the chances of getting favorable weather patterns in such areas.

Creation of employment opportunities

Cloud seeding creates a good environment for agriculture to take place. More agricultural practices create more employment opportunities for the unemployed. The increase in these practices could spread to arid areas where cloud seeding has been successful and continue to create more agro-economic opportunities. Cloud seeding also requires skilled workers to make it successful, making it a perfect avenue for professional skills.

Cons of Cloud Seeding

Cloud seeding requires the use of chemicals, some of which are potentially harmful to the natural environment. Mostly, this applies to the plants which depend on the contaminated rain to produce food.

Furthermore, there has been no clear study into the effects of silver iodide on the environment thereby putting people at great risk. There has been a rising situation of Iodism, which is a type of poisoning caused by iodine. It has severe effects on people such as skin rashes, headaches, and running noses among other symptoms.

In order for cloud seeding to be successful, it has to be performed on rainclouds. If introduced on other cloud formations, it does not have the intended effect. The wind is also a factor as it may push the seeded clouds to a different location from the one that required aid in the formation of precipitation. Statistically, cloud seeding has not been proven although strong claims have been made about it increasing the rate of precipitation. This puts a lot of doubt on its effectiveness.

It is expensive

Cloud seeding is essentially producing artificial rain, which makes it a very expensive process.



Planes are used to get the chemicals into the air and this is a big obstacle as some of the areas in need of this technology do not have enough financial backing to facilitate the process.

Areas, where famine and drought are rampant, cannot afford the technology and may need external help.

Poses Weather Problems

Cloud seeding could have many dire consequences to the environment if not well regulated. Dry areas are not usually well-positioned to handle certain weather conditions, and thus, may become easily flooded and cause more harm to the already struggling environment.

Dependence on atmospheric conditions

For cloud seeding to be successful, certain uncontrollable conditions have to be met. The most important one is that clouds have to be present, not just any cloud but clouds capable of producing rain. The atmospheric conditions must also suit the process as certain conditions could lead to an unwarranted result like the rain falling in a different location or not falling at all.

Unknown impact of long-term exposure to cloud seeding

The chemicals produced during cloud seeding are present in the water and soil deposits of the area where it has been practiced. The more animals and plants are exposed to it, the more they are at risk of developing health issues. Silver is present in low amounts in some of the things humans interact with regularly like medicine.

If exposed to a higher level one could develop permanent skin problems like argyria. There is no set standard for the amount of silver one can come into contact with, which even makes the impact riskier as they are unknown

Uttarakhand tunnel collapse

About 40 workers are trapped inside a tunnel after the under-construction tunnel structure collapsed in Uttarakhand on November 12.

The tunnel is a part of the Char Dham all-weather road project which commenced in 2016.



This has prompted the authorities to launch a mega search and rescue operation.

It is a highway expansion project to widen 889 km of hill roads to provide all-weather connectivity in the Char Dham circuit.

The project, envisaged in 2016, covers Uttarakhand's four major shrines — Badrinath, Kedarnath, Gangotri and Yamunotri— in the upper Himalayas.

News Summary: Uttarakhand tunnel collapse

Silkyara Tunnel Accident

About the tunnel

The total length of the tunnel, which is meant to connect Silkyara to Dandal gaon in Uttarkashi district, is 4.5 km.

The double-lane tunnel is pegged as one of the longest tunnels under the Char Dham all-weather road project and aims to reduce the journey from Uttarkashi to Yamunotri Dham by 26 kilometres.

From the Silkyara side, 2.3km of tunnel has been constructed, while 1.6km of tunneling work has been completed from the Barkot end. Approximately, a 400m stretch of the tunnel is yet to be constructed.



The accident

The workers are trapped in the Silkyara Tunnel located on the Uttarkashi-Yamnotri Road.

The collapse happened about 270m from the entrance of the Silkyara side.

The rescue operations

Agencies involved

The National Disaster Response Force (NDRF), the State Disaster Relief Force (SDRF) and the police are among the main figures in the multi-agency rescue operations.

Current situation

As per the officials, the labourers are safe, and are being provided with food, water and oxygen.

The people trapped were contacted through walkie-talkies, through which it was learned that all of those trapped were unharmed.

As per their request, food was provided through a compression pipe. The distance to reach those trapped is approximately 60 meters.