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Recent judgment on the Right to property

Supreme Court (SC) recently said that the government cannot acquire and redistribute all privately owned properties.

- **Article 39(b) -** State shall direct its policy towards securing that the ownership and control of the material resources of the community are so distributed as best to sub serve the common good.
- SC clarifies that Article 39(b) includes privately-owned resources but not every resource owned by the individual can be considered as a material resource.
- Further it says that the term "distribution" has a wide connotation, and the court must determine whether distribution of resources in a given case sub serves common good.
- **Right to property -** SC says that the interpretation of all private property is 'material resource of community' is incompatible with the right to property.
- The right to property under ***Article 300A*** is a constitutional right.
- Article 39(b), both as a pre-cursor to the protection of Article 31C and as an aspirational Directive Principle, cannot run counter to the constitutional recognition of private property.
- To hold that all private property is "material resources of the community" and that the ultimate aim is state control of private resources would be incompatible with the constitutional protection.
- The reference to the Constitution Bench was based on petitions filed by parties including the Property Owners Association (POA).
- Private properties cannot be taken over by the state under the garb of constitutional schemes of ***Articles 39 (b) and 31 C*** of the Constitution.

References

1. Indian Express | Right to property
2. The Hindu | Supreme Court decision on Right to property
3. Live Law | Judgement on Right to property

Vaccine-derived poliovirus

A recent report says that World Health Organization's database on polio, like wild poliovirus and vaccine-derived poliovirus cases hides more than it reveals.

- VDPV stands for vaccine-derived poliovirus, a ***rare and weakened strain of poliovirus*** used in the oral polio vaccine (OPV) mutates and regains the ability to cause paralysis.

- OPV contains a live, attenuated virus that is used for immunization against the disease.
- This weakened virus triggers an immune response when administered, thus protecting people from the disease.
- **Transmission** - The attenuated virus replicates in the intestines for a limited period and is excreted in the stool.
- In rare cases, the virus can mutate enough to cause the disease again, and circulate in areas where
    - Either immunization is low, or
    - Where immunocompromised persons reside, or
    - Regions with poor sanitation and hygiene.
- If it spreads in populations that aren't immunized or in people with compromised immune systems.
- **Symptoms** - VDPV causes acute flaccid paralysis (AFP), which includes muscle pain, loss of muscle reflexes, and floppy limbs.
- **Risk** - VDPV poses a similar risk to the community as wild poliovirus, and can spread to others who aren't vaccinated.
- **Detection** - If VDPV is detected in at least two different sources that are genetically linked, it's considered "circulating".
- **Prevention** - The inactivated poliovirus vaccine (IPV) protects against VDPV and is given as an injection in the arm or leg. The United States has used IPV exclusively since 2000.

India was declared polio-free in 2014 by the World Health Organization (WHO).

Reference

Polio Virus | Vaccine-derived poliovirus

Orphan drugs

Orphan drugs have increasingly gained attention in India following the implementation of the National Policy for Rare Diseases (NPRD) in 2021.

- Orphan drugs are critical in ***treating rare (orphan) diseases.***
- A disease is considered rare if it affects fewer than 200,000 people in the U.S. and fewer than 1 in 10,000 people in the European Union.
- There is ***no formal prevalence-based*** definition in India, the NPRD of 2021 outlines a framework for diagnosing and treating rare diseases, with a low prevalence threshold expected.
- **Category** - Under India’s NPRD, rare diseases are classified into 3 categories to facilitate treatment approaches.
    - Group 1 includes disorders that are curable through one-time interventions, such as Lysosomal Storage Disorders (LSDs) requiring Hematopoietic Stem Cell Transplantation (HSCT).
    - Group 2 encompasses diseases that need long-term or lifelong management but

have relatively lower treatment costs, such as Phenylketonuria (PKU) and Maple Syrup Urine Disease (MSUD).
    - Group 3 covers conditions like Gaucher Disease and Pompe Disease, where treatment is available but complicated by high costs and the necessity for lifelong care.
- Orphan drugs are categorized ***based on the types of diseases*** they target and their regulatory status.
- Diseases such as genetic disorders, rare cancers, metabolic disorders, and autoimmune conditions frequently fall under the orphan disease category.
- **Examples** - Ivacaftor for cystic fibrosis, Alglucerase for Gaucher disease, Coagulation factor IX for hemophilia B, Imatinib for leukemia, and Rucaparib for ovarian cancer.

Orphanet is a resource that allows users to search for orphan drugs by disease name or substance name.

- **Criteria** - For a drug to receive orphan drug designation, it must meet certain criteria that vary across countries. Typically, the disease in question must have a ***low prevalence.***
- Additionally, the condition must lack approved treatments, or the orphan drug must provide significant benefits over current treatment options.
- **Approval** - Developers of orphan drugs must also provide scientific evidence that the drug has the potential to treat or alleviate the condition.
- This evidence can be presented at any stage of drug development, from preclinical research to late-phase clinical trials.
- **Incentives -** Once designated, it receive several incentives to encourage their development, including market exclusivity, tax credits for research and development expenses, and fee waivers for regulatory applications.

Reference

The Hindu | Orphan Drugs

Yanadi tribe

3 children of Yanadi tribe who went missing from their homes at Kalekhanpeta in Machilipatnam were traced recently.

- The Yanadi are a scheduled tribe in ***Andhra Pradesh***.
- **Name** - The name may come from the Sanskrit word anadi, which means "of unknown origin".
- **Language** - Their mother tongue is Telugu.
- **Lifestyle** - They are nomadic and live in symbiosis with non-tribals.
- **Occupation** - They traditionally hunted, gathered, and farmed.
- **Health** - They have traditional knowledge of herbal remedies for a variety of ailments.
- **Religion** - They celebrate Hindu festivals and worship their household deities in

houses called ***"Devuru Indlu".***

- **Dance** - They perform the ***Dhimsa Dance*** during festivals and special occasions.
- **Groups** – There are 4 endogamous groups like
  - Manchi Yanadis or Reddi Yanadis (Cultivators and servants)
  - Adivi Yanadis (those living in forests)
  - Paki Yanadis (Scavengers) and
  - Challa Yanadis (those who collect left out food from leaf plates in the dust bins).
- **Vulnerability** - They are among the most vulnerable tribal groups in India, living in extreme poverty and social exclusion.
- In 2001, an Integrated Tribal Development Agency (IITD) was established in Nellore to help with the socio-economic development of the Yanadi people.

Reference

The Hindu | Yanadi tribe

Alstonia Scholaris

Cyclone Dana's heavy showers led to Chhatim trees (Alstonia Scholaris) shedding the flowers that have a strong fragrance recently.

- **Family Name** - Apocynaceae.
- **Synonyms** - Echites scholaris, Alstonia kurzii, Tabernaemontana alternifolia, Acokanthera scholaris, Echites pala.
- **Common Name -** Indian Pulai, White Cheesewood, Devil Tree, Blackboard Tree, Milkwood Pine, Dita Bark, Bitter Bark.
- **Size -** It is a medium-sized evergreen tree, usually 12–18 m high, sometimes up to 27 m high, with close-set canopy.
- **Appearance** - Bark is rough, greyish white, yellowish inside, and exudes bitter latex when injured.
- Leaves are 4 to 7 in a whorl, and are thick, oblong, with a blunt tip. They are dark green on the top, and pale and covered with brownish pubescence on the dorsal surface.
- **Floral characteristics -** Flowers are ***fragrant,*** greenish-white or greyish-yellow in umbrella-shaped cymes.
- Follicles (fruits) are narrowly cylindrical, 30 cm × 3 cm, fascicled, with seeds possessing brown hair.
- **Climate** - The species can be grown in a variety of climatic conditions in India, ranging from ***dry tropical to sub-temperate.***
- However, it thrives well in areas where annual rainfall is about 100–150 cm, as it prefers a fairly moist habitat.
- The species grows well in the ***red alluvial soil*** having proper aeration. It can thrive in black cotton soils as well, but the growth is slow due to prevailing moist soil conditions during rainy season.
- **Therapeutic uses -** It is used as a substitute for cinchona and quinine for the treatment of intermittent periodic fever.

- An infusion of bark is given in fever, dyspepsia, skin diseases, liver complaints, chronic diarrhoea, and dysentery.

Reference

Times of India | "Chhatim" trees (Alstonia Scholaris)