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IAS STUDY CIRCLE

CURRENT AFFAIRS(TEST-2) ANALYSIS

-By Gautam

Ministry of Health & Family Welfare Launches Mission Indradhanush

Full immunisation coverage to be expanded from 65% to at least 90% children of the country.

All vaccines are available free of cost under the Universal Immunization Programme in India

Intensification of activities will be carried out in 201 high priority districts in the country

The Universal Immunization Programme provides lifesaving vaccines to protect against 7 vaccine preventable diseases:

- Diphtheria
- Pertussis
- Tetanus
- Childhood TB
- Polio
- Hepatitis B
- Measles

** Additionally, vaccines for JE and Hib are being provided in select states*

Ministry of Health and Family Welfare

Azadi Ka Amrit Mahotsav

G20 भारत 2023 INDIA

Intensified Mission Indradhanush 5.0 (IMI 5.0) campaign with special focus on improvement of Measles and Rubella vaccination coverage, will conclude all three rounds on 14 October 2023

IMI 5.0 is being conducted across all the districts in the country and includes children up to 5 years of age

Over 34 lakh children and 6 lakh pregnant women were administered vaccine doses during the first 2 rounds of IMI 5.0 campaign across the country

A total of 5.06 crore children and 1.25 crore pregnant women have been cumulatively vaccinated till date under Mission Indradhanush since 2014

- Nationally against 9 diseases - Diphtheria, Pertussis, Tetanus, Polio, Measles, Rubella, severe form of Childhood Tuberculosis, Hepatitis B and Meningitis & Pneumonia caused by Hemophilus Influenza type B
- Sub-nationally against 3 diseases - Rotavirus diarrhoea, Pneumococcal Pneumonia and Japanese Encephalitis; of which Rotavirus vaccine and Pneumococcal Conjugate vaccine are in process of expansion while JE vaccine is provided only in endemic districts.

Contact- Immunization

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Finance Commission

First FC	Second FC	Current/Fifteenth FC
(1952–57)	(1957–62)	(2021–2026)
Chairman - KC Neogy	Chairman - K Santhanam	Chairman - NK Singh

Article 280
(Indian Constitution Part XII)

Constitution of FC as a **Quasi Judicial Body**

Constituted by

President of India **quinquennially** (or earlier)

Members

- Chairman + 4 members **(including an HC judge)** – appointed by President
- Authority to **decide qualifications – Parliament**
- Tenure – as **specified by the President**
- **Reappointment – Eligible**

Makes Recommendations to President about

- Distribution of **net tax proceeds** between Centre and States
- Principles for **grants-in-aid** to the states by the Centre
- Evaluates the rise in the **Consolidated Fund of a state** to affix the resources of Panchayats/Municipalities
- Other **financial matters referred** to it by President

Powers of a Civil Court

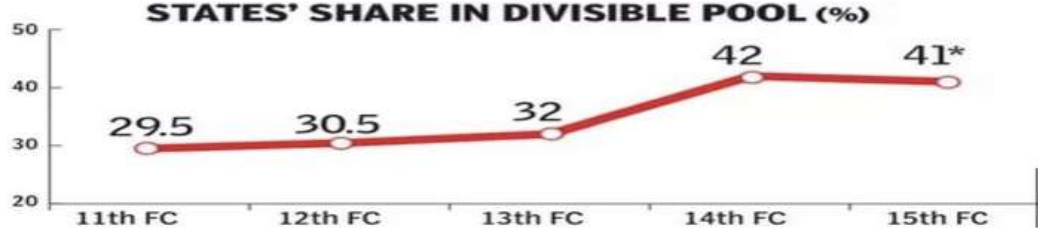
As per Code of Civil Procedure 1908

Recommendations of the FC are **only advisory and not binding on the Government*

HOW THE BOOTY IS DIVIDED

FORMULA THAT DECIDES A STATE'S SHARE

STATES' SHARE IN DIVISIBLE POOL (%)



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UNFCCC
Conference of Parties (COP)

- **Supreme decision-making body** of UNFCCC
- Meets in **Bonn**, the Secretariat (**unless a Party offers to host the session**)
- **Meets every year** (unless the Parties decide otherwise)
- First COP – held in **Berlin**, Germany (1995)

COPs and Their Major Outcomes

COP 3 (1997)
Kyoto, Japan

Adopted **Kyoto Protocol** (legally binded developed countries to **reduce emission targets**)

COP 7 (2001)
Marrakech, Morocco

Marrakech Accords signed (set stage for **ratification of Kyoto Protocol**)

COP 8 (2002)
New Delhi, India

- **Delhi Declaration** (**development needs of the poorest countries**)
- **Technology transfer** for climate change (CC) mitigation)

COP 15 (2009)
Copenhagen, Denmark

Developed countries pledged **up to $30 billion in fast-start finance** (for 2010-12)

COP 14 (2008)
Poznan, Poland

- **Adaptation Fund under Kyoto Protocol launched**
- Poznan Strategic Programme on Technology Transfer

COP 13 (2007)
Bali, Indonesia

Bali Road Map and Bali action plan (on shared vision, mitigation, adaptation, technology and financing)

COP 16 (2010)
Cancun, Mexico

- **Cancun Agreements** (assist developing nations in dealing with CC)
- Established: **Green Climate Fund**

COP 18 (2012)
Doha, Qatar

Doha Amendment to Kyoto Protocol (reducing **GHG emissions** by 18% compared to 1990 levels)

COP 19 (2013)
Warsaw, Poland

- **Warsaw Framework for REDD Plus**
- **Warsaw International Mechanism for Loss and Damage**

COP 24 (2018)
Katowice, Poland

Rulebook for Paris Agreement (actions to be taken as per NDCs)

COP 21 (2015)
Paris, France

- **Paris Agreement** (**global temp. well below 2°C** above pre-industrial times
- **Climate finance** by rich countries
- **yearly $100bn funding pledge** by rich countries)

COP 26 (2021)
Glasgow, UK

- India announced **Net Zero Targets 2070**
- India called for "**phase-down**" **of coal-based power**
- **Glasgow Breakthrough Agenda** (by 43 countries + India)

COP 27 (2022)
Sharm-el-Sheikh, Egypt

- **Loss & Damage Fund**
- USD 3.1bn plan for **early warning systems**
- **G7-led 'Global Shield Financing Facility'** for countries suffering climate disasters
- **African Carbon Market Initiative**
- **Action for Water Adaptation and Resilience** (AWARe) initiative
- **Mangrove Alliance** (in partnership with India)
- **India's Long-Term Low Emission Development Strategy**

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COP 28 - Important Outcomes

Major COP Outcomes Explained

- **Transition Away From Fossil-Fuel-** Nearly 200 countries agreed to "transition away from fossil fuels in energy systems" at the COP28. The agreement is the first time countries have made this pledge.
- **Global Renewables and Energy Efficiency Pledge-** Signatory countries to work together to triple the world's installed renewable energy generation capacity to at least 11,000 GW by 2030. The countries must collectively double the global average annual rate of energy efficiency improvements from around 2% to over 4% every year until 2030.
- **Loss and Damage Fund-** Operationalization of the Loss and Damage (L&D) fund aimed at compensating countries grappling with climate change impacts. Commitments worth about US$ 800 million had been made to the Fund. The World Bank will be the "interim host" of the fund for four years.
- **Global Goal on Adaptation-** The draft text on the Global Goal on Adaptation (GGA) was introduced at COP 28. It aims to enhance climate change adaptation by increasing awareness and funding towards countries' adaptation needs in the context of the 1.5/2°C goal of the Paris Agreement
- **The Global Cooling Pledge-** 66 national government signatories committed to working together to reduce cooling-related emissions across all sectors by at least 68% globally relative to 2022 levels by 2050.
- **Declaration to Triple Nuclear Energy-** The declaration launched at COP28 aims to triple global nuclear energy capacity by 2050. It was endorsed by 22 National Governments.
- **Coal Transition Accelerator-** France, in collaboration with various countries and organizations, introduced the Coal Transition Accelerator. The initiative aims to leverage best practices and lessons learned for effective coal transition policies.
- **CHAMP Initiative-** Coalition for High Ambition Multilevel Partnership (CHAMP) for Climate Action was launched at COP 28. This initiative aims at efficient planning, financing, implementation, and monitoring of climate strategies
- **Climate Finance-** Under the New Collective Quantified Goal (NCQG) for climate finance, wealthy nations owe developing countries USD 500 billion in 2025.

India Led Initiative at COP 28

- **Global River Cities Alliance (GRCA)-** The GRCA is a unique alliance covering 275+ global river-cities in 11 countries. GRCA highlights India's role in sustainable river-centric
- **Green Credit Initiative-** Global platform for exchange of innovative environmental programs related to water conservation and afforestation.

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Largest Island: Greenland
Largest Island in a lake: Manitoulin Island
Largest Island in a river: Majuli
Largest Island in fresh water: Marajó
Largest uninhabited Island: Devon Island
Lowest Island: Franchetti Island in Lake Afrera, Ethiopia
Island shared by largest number of countries: Borneo

Ser	Category	IC
(a)	Buy (Indian-IDDM)	Indigenous design and ≥ 50%
(b)	Buy (Indian)	In case of indigenous design ≥ 50%, otherwise≥ 60%
(c)	Buy and Make (Indian)	≥ 50% of the 'Make' portion
(d)	Buy (Global - Manufacture in India)	≥ 50%
(e)	Buy (Global)	Foreign Vendor – Nil Indian Vendor ≥ 30%

uy (Indian-IDDM) category under the DPP to promote the acquisition of indigenous developed defence products (Source: www.mod.gov.in)

VoNR

- Voice and data services are transferred via NR.
- It provides fast call setup and better use experience.

EPC Fallback

- UE camps on 5G NR to implement data service while falls back to LTE to implement voice service.

RAT Fallback

- UE camps on 5G NR to implement data service while falls back to eLTE to implement voice service.

5G SRVCC

- 5G SRVCC is a topic studied by 3GPP R16.
- At the edge of NG-RAN, voice can be handedover to UTRAN CS by using 5G SRVCC technology.

VoLTE/CSFB

- In Option 3 NSA deployment mode, UE accesses the network through the LTE control channel, so it can directly implement voice service by means of VoLTE or CSFB.

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Feature	VoLTE (Voice over LTE)	VoNR (Voice over New Radio)
Network Generation	4G (LTE)	5G (NR)
Core Network Architecture	IMS (IP Multimedia Subsystem)	Cloud-native 5G Core Network/IMS
Voice Codec	AMR-WB (HD voice), (others)	AMR-WB, EVS, Opus, (others)
Latency	Higher latency compared to 5G	Lower latency in a 5G environment
QoS (Quality of Service)	Standard voice quality	Enhanced voice quality with improved reliability
Standalone Operation	No	Yes (in a 5G standalone network)
Coverage and Capacity	Limited Capacity and Coverage	Increased Capacity and improved Coverage
Deployment Status	Widespread deployment in LTE networks	Dependent on network operator and region


China Sea
Manila
Vietnam
angkok
Cambodia
Philippines
Ho Chi
Minh City
Spratly
Islands
Panay
Cebu
Negros
Palawan
Whitsun Reef
Sulu Sea
Mindanao
Davao
SABAH
Brunei
Malaysia
RIAU ISLANDS
Celebes Sea
NORTH
KALIMANTAN
Singapore
SARAWAK
Manado
EAST
KALIMANTAN


Thailand
South China Sea
Philippines
Brunei
Malaysia
Singapore
Malaysia
SANGIHE
Sumatra
Kalimantan
Sulawesi
Java Sea
EURASIAN PLATE
SUNDA
Java
Lombok
Flores
Merapi
Bali
Sumbawa
Timor
Sumba
Java trench
108 °E
7 cm/yr
124 °E


RUSSIA
50°
Kharkiv
Vorskla
Donets
UKRAINE
DNIEPER LOWLAND
Slavyans'k
Kramatorsk
DONETS BASIN
Dnipropetrovs'k
Dnieper Reservoir
48°
Donetsk
Kryvyy Rih
Nikopol
AZOV UPLAND
Mount Mohyla Belmak 324 m
Kakhovka Reservoir
Dnieper
ASKANIYA-NOVA NATURE RESERVE
SEA OF AZOV


VENEZUELA
GUAYANA ESEQUIBA
GUYANA
SURINAME

Comparison chart	Biogas-CNG	LPG
Constituents	**Methane**	**Propane and Butane**
Can it be produced by common man at home?	Yes, very easy to set up and maintain.	No. Need sanctions, permissions, huge capital, drilling, laying of kilometers of pipelines etc.
Cost	Very Cheap… cheaper than water!!!	Expensive
Energy Density	38 MJ/m3 Low. Danger of catching fire lower.	94 MJ/m3 more than double the CNG Energy. Thus highly inflammable.
Source	Can be easily created even by kids for experiments. In fact any decaying matter creates biogas in absence of oxygen. It is also obtained naturally gas-and-condensate wells, oil wells, coal bed methane wells.	Automatically generated from gas fields when natural gas is extracted from the reservoir. By-product of cracking process during crude-oil refining.
Uses	Substitute for Petrol in Auto rickshaws, Cars, Buses, Trucks, Trains, Boats, Ships.	Can be used for the same purposes as CNG but it is dangerous due to its higher energy density. Thus it is illegal to use it in Automobiles. On the other hand CNG is approved for use as fuel in Automobiles.
	Cleaner and cheaper Substitute to power Generators to produce Electricity to run anything.	
	The overflow/leftover makes excellent organic fertilizer	
Environmental effects	Releases lesser greenhouse gas.	Releases CO_2 which is a greenhouse gas but is cleaner when compared to gasoline.
Properties	It is lighter than air and hence disperses quickly in the event of spillage.	Highly inflammable. It is heavier than air and on leakage will settle to ground and accumulate in low lying areas.
Safety	Easily disperses, hence risk of ignition is minimized.	Since it is difficult to disperse risk of fire is more.


INDIA
Bay of Bengal
THAILAND
South China Sea
Bangkok
Kra Isthmus
PHILIPPINES
Andaman Sea
Gulf of Thailand
MALAYSIA
Strait of Malacca
A Kra Canal would allow ships to bypass the busy passage
SINGAPORE
INDONESIA
SCMP

Sunda Strait and Lombok Strait

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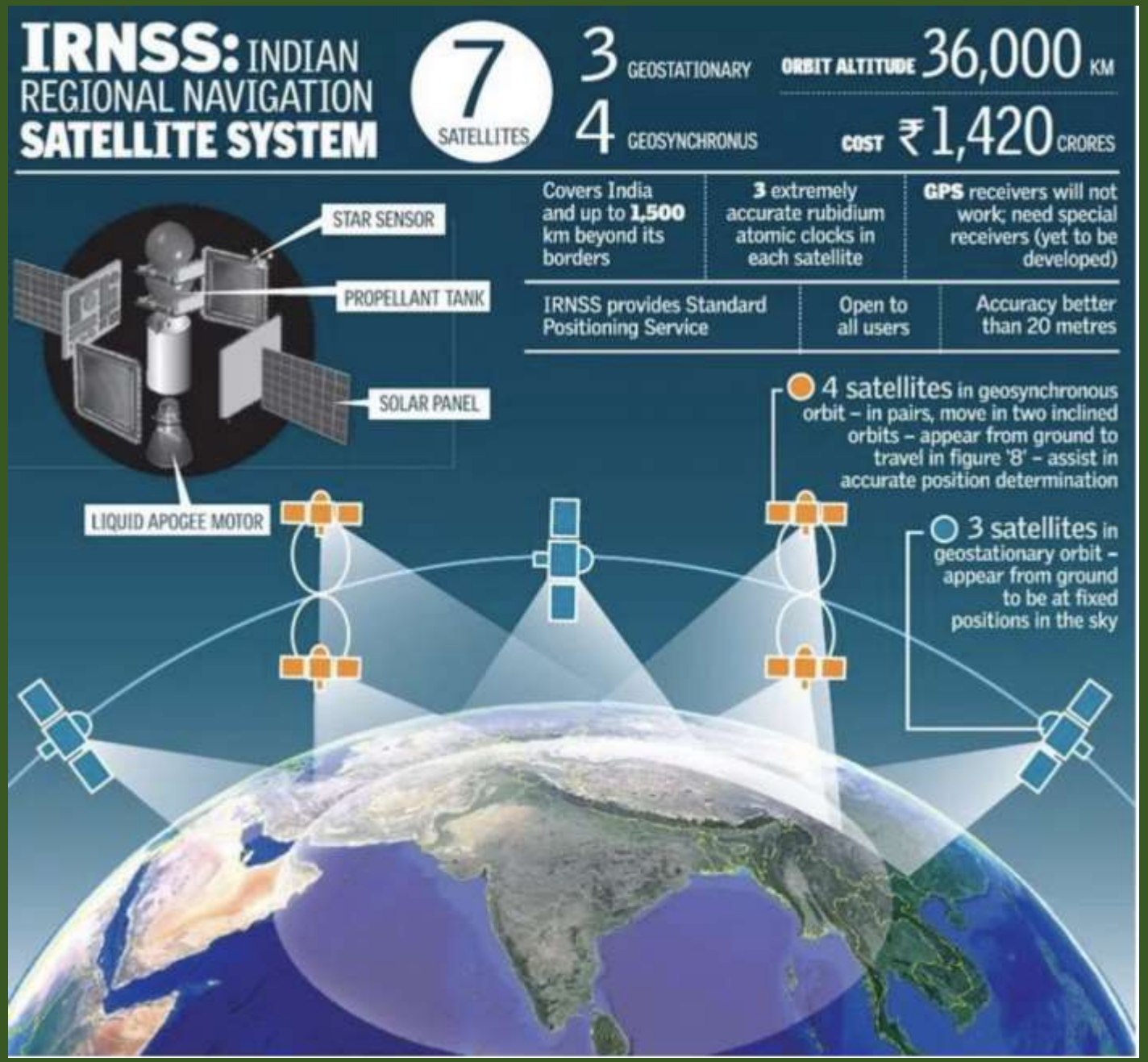

SI No	ICH Element	Year of Inscription
1	Tradition of Vedic chanting	2008
2	Ramlila, the traditional performance of the Ramayana	2008
3	Koodiyattam, Sanskrit theatre	2008
4	Ramman, religious festival and ritual theatre of the Garhwal Himalayas, India	2009
5	Mudiyettu, ritual theatre and dance drama of Kerala	2010
6	Kalbelia folk songs and dances of Rajasthan	2010
7	Chhau dance	2010
8	Buddhist chanting of Ladakh: recitation of sacred Buddhist texts in the trans-Himalayan Ladakh region, Jammu and Kashmir, India	2012
9	Sankirtana, ritual singing, drumming and dancing of Manipur	2013
10	Traditional brass and copper craft of utensil making among the Thatheras of Jandiala Guru, Punjab, India	2014
11	Yoga	2016
12	Nawrouz, Novruz, Nowrouz, Nowrouz, Nawrouz, Nauryz, Nooruz, Nowruz, Navruz, Nevruz, Nowruz, Navruz	2016
13	Kumbh Mela	2017
14	Durga Puja in Kolkata	2021

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TYPES OF ALTERNATIVE INVESTMENT FUNDS IN INDIA

Category 1

- Infrastructure Fund
- Venture Capital Fund
- Angel Fund
- Social Venture Fund

Category 2

- Private Equity Fund
- Real Estate Fund
- Debt Fund
- Fund of Funds

Category 3

- Hedge Fund
- PIPE Fund

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Solar missions launched by other countries

1960-1969

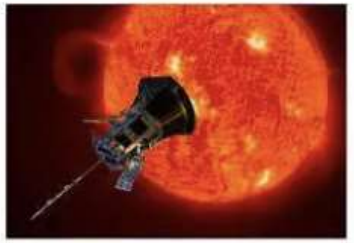
US's Nasa launched six Pioneer missions, **(5, 6A, 7B, 8C, 9D, E)** . Of 6 orbiter missions, **5 were successful, one failed**

1974-1997

Helios A (Germany-US, 1974-1982)
Helios B (Germany-US, 1976-1985)
ISEE-3 (Nasa, 1978–1982)
Ulysses (ESA-Nasa, 1994-95)
WIND (Nasa, 1994-2020)
SOHO (ESA-Nasa, 1996 extended till 2025)
ACE (Nasa, 1997 until 2024)
All missions successful

2000 to Present

Ulysses (second pass, ESA-Nasa in 2000-01)
Genesis (Nasa, from 2001-04)
STEREO A (Nasa, launched in 2006 and active till Sept 2021)
STEREO B (Nasa, 2006 to 2018)
Ulysses (third pass, Nasa-ESA, 2007-08, partial success)
DSCOVR (Nasa) February 2015 (successful)
Parker Solar Probe (launched by Nasa, 2018 – Dec 2025; en route)
Solar Orbiter (ESA February 10, 2020; en route)
CuSP (Launched Nov 16 2022 but no contact now)



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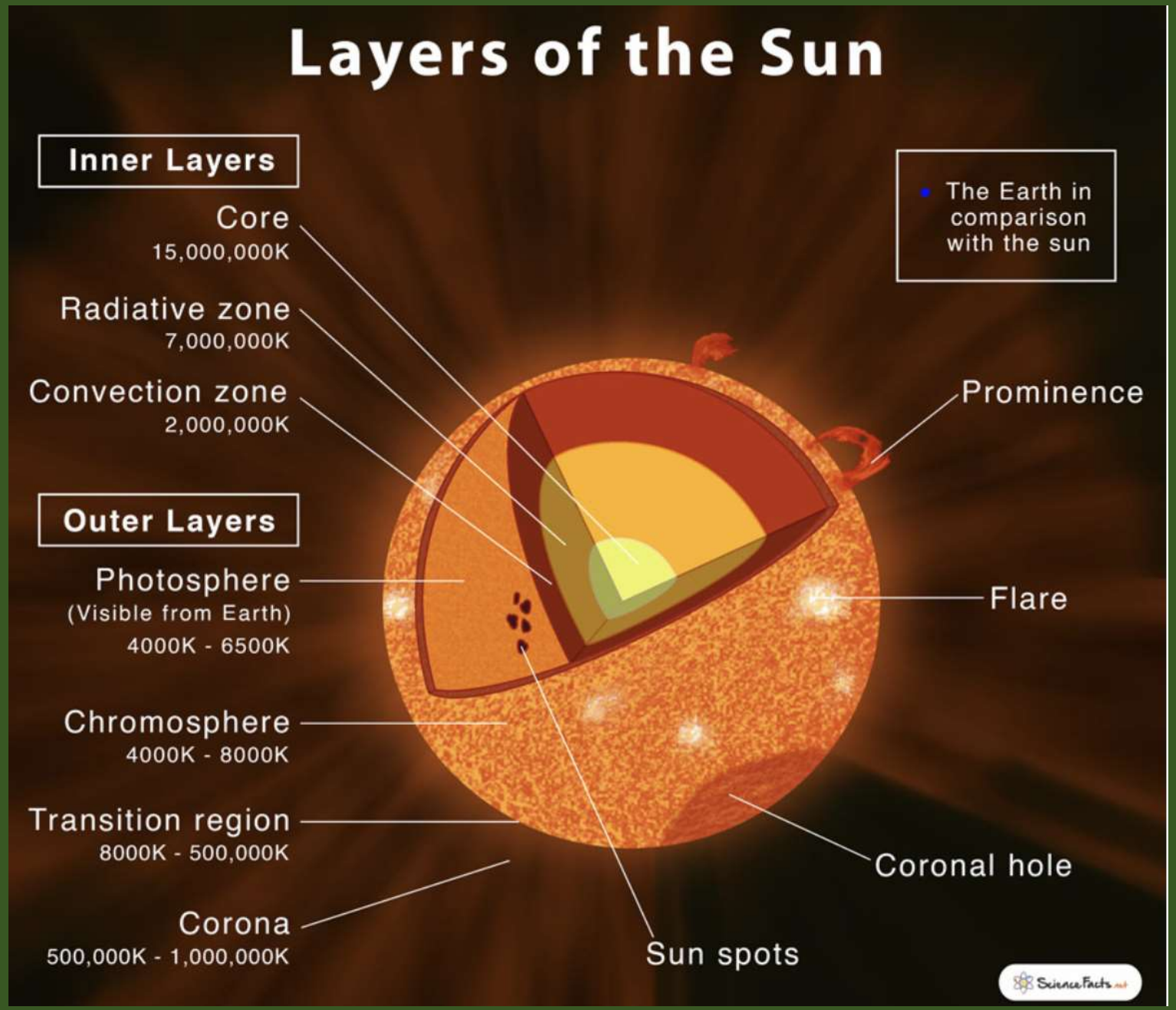

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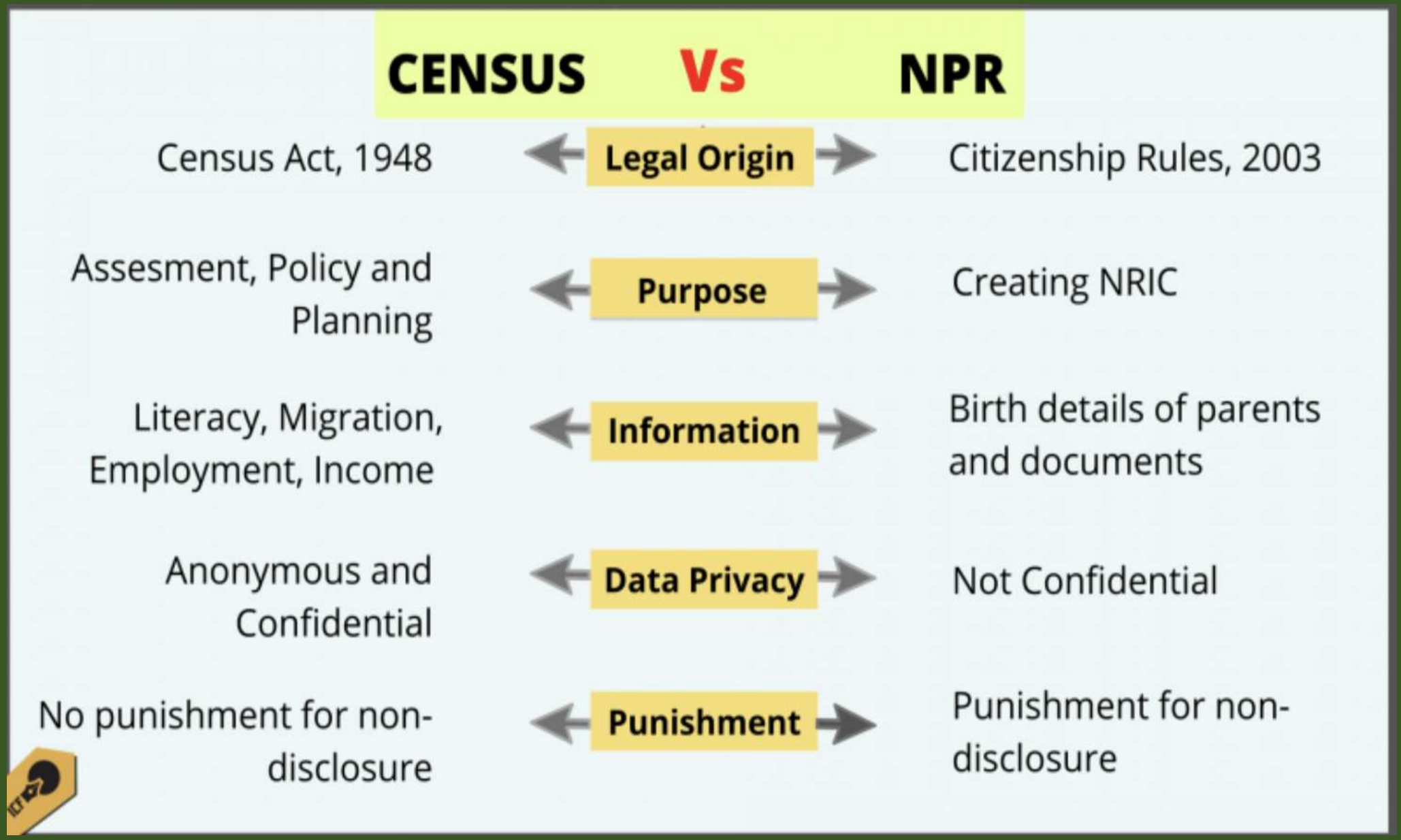

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National Population Register (NPR)	National Register of Citizens (NRC)
All people staying in India 6 months and above and who intends to reside for 6 months or more including foreigners	Indian born or Indian parents or staying in India for 11 years are eligible for Indian Citizenship
Prepared with Census 2011 and was updated in 2015. The next update is scheduled during the next census from April 1, 2020 and September 30, 2020. Only Assam would not participate in this activity	First prepared during 1951 census and it is not updated regularly. Assam is the only state in the country where the NRC is updated
NPR is not a citizenship enumeration drive as it includes foreigners as well	NRC is a citizenship enumeration drive as it includes Indian citizens only
It is compulsory for all Indian residents to register with the NPR. The main purpose of the NPR is to identify illegal migrants and identify them as foreign nationals.	NRC is a subset of NPR where only the citizens of Indian are taken into account

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CROCODILES OF INDIA

WILDLIFE SOS

GHARIALS

Gavialis gangeticus

Male gharials are easily distinguished due to the presence of a bulb on their snouts, like earthenware pots called gharas. They are used to vocalise and blow bubbles to attract females.

Habitat: They are found in clear freshwater river systems, congregating at river bends.

Threats: Illegal poaching, egg collection, fishing nets, sand mining, prey base depletion, and habitat loss and degradation.

SALTWATER CROCODILE

Crocodylus porosus

The Earth's largest living reptile, saltwater crocodiles have the greatest bite pressure of any animal. Males are much larger than females, weighing even upto 1,000 kilograms!

Habitat: They inhabit coastal brackish mangrove swamps and river deltas.

Threats: Illegal hunting and habitat loss and degradation.

MUGGER CROCODILE

Crocodylus palustris

Also called marsh crocodile, Mugger Crocodiles are one of the most adaptable crocodilian species in India. With the broadest snout of all, they are keystone species of their habitat.

Habitat: They are found in freshwater habitats including rivers, lakes, marshes, and estuarine.

Threats: Illegal poaching, egg collection, fishing nets, and habitat loss and degradation.

GLOBAL POPULATION

of mature individuals

Gharials	650
Mugger Crocodiles	5700-8700
Saltwater Crocodiles	500,000

IUCN STATUS

- LC — *Least Concern* — *Saltwater Crocodile*
- NT
- VU — *Vulnerable* — *Mugger Crocodile*
- EN
- CR — *Critically Endangered* — *Gharial*
- EW
- EX

- **Integral high-test molasses** is produced from unclarified sugarcane juice. Because it is concentrated from unclarified sugarcane juice, heavy incrustations and scum deposits lead to frequent mill interruptions and, therefore, to increased factory maintenance costs.
- **High-test molasses** is basically the same as integral high-test molasses. However, it does not raise as many problems in manufacture as integral high-test molasses does.
- **A molasses** (first molasses) is an intermediate by-product resulting from first sugar crystal extraction (A sugar), from initial processing at the sugar factory. A molasses contains 80-85% DM. If it has to be stored, it should be inverted in order to prevent crystallization.
- **B molasses** (second molasses). It has approximately the same DM content as A molasses but contains less sugar and does not spontaneously crystallize.
- **C molasses** (final molasses, blackstrap molasses, treacle) is the end by-product of the processing in the sugar factory. It still contains considerable amounts of sucrose (approximately 32 to 42%). C molasses does not crystallize and can be found in liquid or dried form as a commercial feed ingredient.
- **Syrup-off** (liquor-off, jett) is the end by-product from the centrifugation of the final refined masecuite in a raw sugar refinery. Normally, syrup-off is sent to the raw sugar section of the refinery where it is further processed in order to recover more sucrose. Due to its high content of sucrose (90-92% DM), it is an excellent energy source for monogastrics but can be an expensive ingredient.
- **Refinery final molasses** is the by-product of refined sugar extraction. It has a very similar composition to that of C molasses produced in a raw sugar factory and it is stored in the same tanks.
- In some countries the juice is extracted in a simple animal or mechanically driven press, then boiled in open vats. In this rudimentary process, pan (uncrystallized) sugar is produced and the by-product molasses is called "**melote**". It contains only 50% DM.

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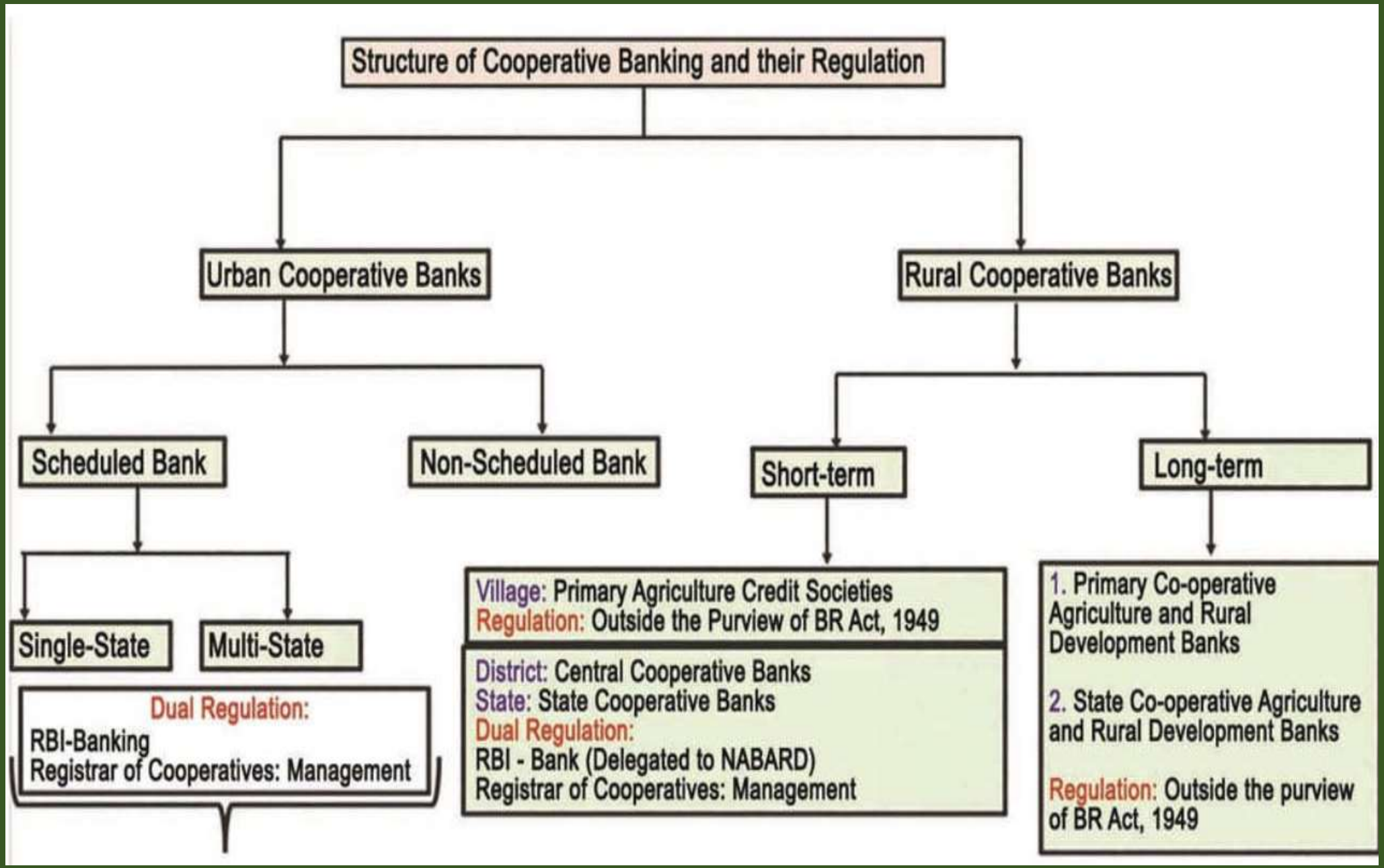

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