Topics - MINDS MAPS included (Daily current affairs 27th December 2024

- Target UPSC CSE Prelims 2025
- African Wild Cat: Leptailurus Serval
- The Growing Demand for Rare Earths in India.
- Legalizing Assisted Dying in the UK
- The Role of Extension Services in India's Aquaculture Revolution
- Grampians National Park Overview
- Mains





By saurabh Pandey



Target Mains -2025/26 -

Q Importance of central asia is beyond 'strategic'. Explain

(JOIN AAKLAN PLUS TO GET ANSWERS EVALUATED) Download saurabh pandey cse app

Connect with sir 9057921649

send your answer - Saurabh pandey upsc telegram channel

Q. With reference to the products of the volcanic eruptions consider the following statements. (The Hindu)

- 1) Argon Gas
- 2) Helium Gas
- 3) Sulphur compounds
- 4) Ash and dust

How many of the given are products of Volcanic Eruptions.

- A) One Only
- **B) Two Only**
- C) Three Only
- D) All four

Target UPSC CSE PRELIMS 2025

Prelims Crash course - starting - 4th JAN

Science and tech course - 10th jan

Prelims current affairs course - 15th JAN

COMPLETE CRASH COURSE ON UPSC CSE PRELIMS 2025

(SUCCESS Batch)

-->Complete coverage of all static subjects.

NCERTs + Mapping + Advance books + PYQS

--> Developing elimination Tricks.

2 yrs coverage of prelims specific current affairs

By saurabh pandey sir

Download saurabh pandey cse app

Visit - saurabhpandeyupsc.com

For Any Query Message 9057921649

EVERYTHING IN ONE COURSE!!

Download - saurabh pandey cse app

TARGET UPSC CSE PRELIMS 2025 Connect with sir 90579 21649

COMPLETE COURSE ON GENERAL

SCIENCE AND SCIENCE &

TECHNOLOGY

- ->Static topics +
 Advance topics
 ->All Noble prizes
 ->NCERT'S
- -> MIND MAPS FOR REVISION



PANDEY SIR

TARGET UPSC CSE PRELIMS 2025 Connect with sir 90579 21649

COMPLETE COURSE ON 2 YEARS PRELIMS CURRENT AFFAIRS

- Mind maps for Revision
- Focus on Newspapers , down to earth PIB and all imp sources
- Practice sets

Download - saurabh pandey cse app



BY SAURABH PANDEY SIR



SAURABH PANDEY CSE ENTER THE BRUNDOS FROM BASICS TO UPSC BRUILANCE

BSF rescues African wild cat from a 'smuggling attempt'

The South Bengal Frontier of the Border Security Force (BSF) rescued an African wild cat (*Leptailurus serval*) from an alleged wildlife smuggling attempt along the India-Bangladesh border of Nadia district of West Bengal on Wednesday. According to a statement by the BSF, personnel of 56 Battalion on the second shift duty at the Bhattupara Border Outpost on Wednesday had noticed around three to four suspected miscreants carrying a big box and approaching the Indo-Bangladesh Border Road in Indian territory.

Topic → **African Wild Cat: Leptailurus Serval**

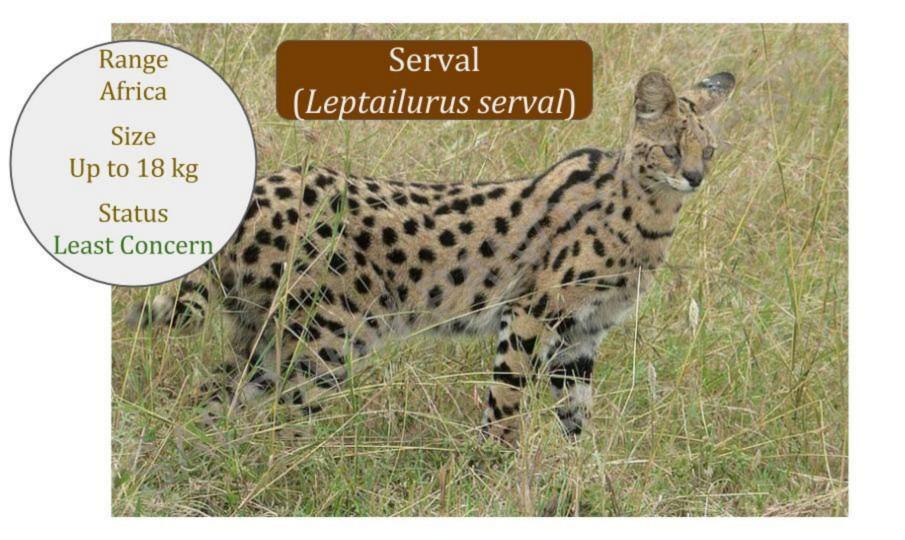
SAURABH PANDEY CSE ENDIFFICIENT TANDINGOUS FROM BASICS TO UPIC BRILLIANCE

Overview

- The African wild cat is scientifically known as Leptailurus serval.
- Native to Africa, primarily inhabiting savannas and grasslands.
- Which is the state of the state
- Preys on small mammals, birds, and insects.
- Features a distinctive coat pattern with spots and stripes for camouflage.
- Solitary and territorial, marking territory with scent.
- Faces threats from habitat loss and hunting.

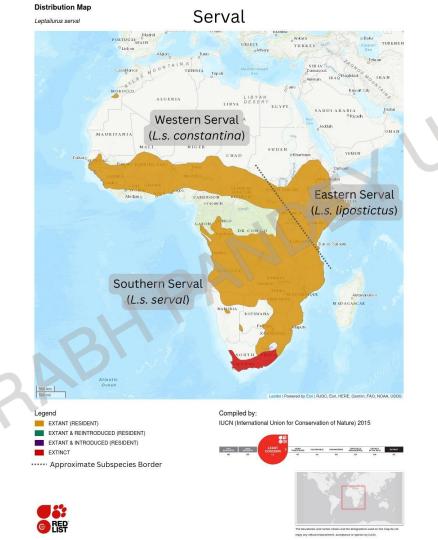
Conservation Status

The African wild cat is under threat due to habitat destruction and poaching. Conservation efforts are crucial to protect this species and its habitat.



- serval, (*Felis serval*), long-limbed <u>cat</u>, family <u>Felidae</u>, found in Africa south of the Sahara, especially in grass- and bush-covered country near water. A <u>swift</u>, agile cat, the serval climbs and leaps very well. It is a nocturnal hunter preying on birds and small mammals such as rodents and hares.
- The coat is typically long and whitish on the underparts and yellowish to reddish brown above, liberally marked with black spots and stripes. These bold markings are replaced by smaller spots or specks on some individuals, which are known as servaline cats and were once considered a distinct species (*Felis brachyura* or *servalina*).
- The Serval conservation status is Least Concern (LC) globally as the cat is widespread throughout sub-Saharan Africa. However, it is listed as Critically Endangered (CR) for the Mediterranean region due to regional extinctions in North Africa.





Tapping into Kazakhstan's rare earths potential

s the world accelerates its transition to cleaner energy through cutting-edge technology, the demand for rare earths has increased globally. India, the third-largest carbon emitter, is pivoting to renewable energy and faces a growing need for rare earths. Despite being the fifth-largest holder of rare earth elements, India relies heavily on China for imports as it lacks advanced technologies for extraction. Amid supply chain disruptions and security concerns tied to China's dominance in this sector, New Delhi is diversifying its sources through agreements with the U.S., Latin American, and African countries to mitigate dependency on China. In this context, Kazakhstan emerges as a promising and strategically closer alternative.

China's monopoly

China accounts for over one-third of the global rare earths' possession and around 70% of its production, with India sourcing around 60% of its imports from Beijing. This heavy reliance stems from India's insufficient domestic production to meet the demands of critical sectors like electronics, defence, and clean energy.

However, China's past actions of disrupting critical technology and mineral supply due to bilateral issues give rise to fears as it tries to exert control over the critical mineral industry. China's monopoly in global and Indian rare earth demand leverages its position to dictate supply chain terms. China recently halted the supply of antimony, crucial for flame retardants, solar cells, batteries, and military gear, citing national security concerns. This move, along with a ban in December 2023 on critical technologies for extracting rare earths and producing magnets,

reinforces China's grip on the sector. Meanwhile, reduced ore supplies from Russia



Avushi Saini

Junior Research Fellow and a final year PhD candidate at JNU, specialising in Central Asia

India's over-reliance on China and possible global shifts after the U.S. regime change underscore the need for diversification.

 mainly antimony concentrates used in wind and solar energy production – have intensified China's concerns as both the largest producer and consumer of rare earths. Russia's invasion of Ukraine has further exposed the risks of concentrated supply chains, resulting in India and Western nations to seek sustainable, diversified alternatives.

Why Kazakhstan is important

In this context, Kazakhstan, a close ally of India. offers a viable alternative to meet India's rare earth demands. Kazakhstan is among the richest sources of rare earths. With New Delhi's increasing engagement with Astana through the 'Connect Central Asia' policy and connectivity initiatives such as the International North-South Transport Corridor, a rare earth partnership could unlock significant economic benefits for both nations. Kazakhstan holds 15 of the 17 known rare earth elements and, with advanced extraction technologies, could dent China's dominance in this sector. Astana already has extraction agreements with Japan and Germany, while the U.S., South Korea, and the European Union have recently joined exploration and production deals to tap its rare earth reserves.

Kazakhstan's extraction of rare earth elements like dysprosium is projected to grow significantly between 2024 and 2029. The country's President Kassym-Jomart Tokayev recently highlighted rare earths as the "new oil" for Kazakhstan's economy. The country hosts one of the world's three full-cycle beryllium and scandium factories, crucial for telecommunications, and is among the four global manufacturers of tantalum and niobium, essential for nuclear reactors and clean energy. Astana is expanding its role in rare earth and strategic mineral production with investments in tungsten, battery materials, and magnets. Its vast mining potential in rare earth

elements can complement India's efforts in this sector. The Kazakh government is prioritising advanced technologies and partnerships to strengthen its presence in emerging fields like lithium and heat-resistant alloys. Additionally, Kazakh metallurgical plants extract bismuth, antimony, selenium, and tellurium, and use imported technologies to produce gallium from alumina and indium from polymetallic ores, all of which are essential for renewable energy production.

The way forward

India's COP29 pledge to achieve 500 GW of renewable energy by 2030 highlights the importance of rare earth elements like dysprosium in advancing clean energy technologies. India lacks capacity across the rare earth supply chain but plans a 400% increase in mining output over the next decade.

India's over-reliance on China and possible global shifts after the U.S. regime change underscore the need for diversification. India-Kazakhstan collaboration can enhance India's resource security, reduce dependence on China, and support sustainability by procuring rare earth through domestic extraction and import sources through partners in closer proximity. Apart from India's direct connectivity challenges with Kazakhstan, there is a lack of necessary extraction technologies in both countries. Nevertheless, the 'India-Central Asia Rare Earths Forum', proposed by National Security Adviser Ajit Doval during the second India-Central Asia Summit in Astana, aims to boost partnerships and private sector investment, potentially combating these challenges. It could facilitate bilateral training, joint mining ventures, shared geological data and expertise, sustainable extraction practices, and create a regional market to reduce reliance on China.



Topic -The Growing Demand for Rare Earths in India



Introduction

- The global shift to cleaner energy has increased the demand for rare earth elements (REEs).
- India, a major carbon emitter, is moving towards renewable energy, increasing its need for REEs.
- Despite being a significant holder of REEs, India relies heavily on imports, especially from China.

The Shift to Cleaner Energy



Transition to renewable energy is essential due to climate change. Technologies for this transition depend on REEs. India must secure a stable supply of these materials.

Importance of Rare Earth Elements

REEs are crucial for modern technology, including batteries and electronics. India's renewable energy goals will increase the demand for these elements.

India's Current Position

India has vast reserves but struggles with domestic production. Lacks advanced extraction technologies to fully utilize its resources.

India's Rare Earth Holdings



Fifth-largest holder of REEs but faces production challenges.
Insufficient domestic output for sectors like electronics and defense.

Dependence on China

India imports 60% of its REEs from China, posing significant risks. Geopolitical tensions could disrupt supply chains.

The Risks of Reliance

China's control over the REE market is a concern for India. Recent supply disruptions highlight vulnerabilities.

China's Monopoly on Rare Earths



China dominates the REE sector, influencing global supply and prices. This control poses challenges for countries like India.

Production and Supply Chain Control

China holds over one-third of global REEs, affecting availability. India struggles to secure necessary supplies.

Recent Supply Disruptions

Geopolitical events have complicated the supply chain. India seeks diversified sources to mitigate risks.

Kazakhstan: A Strategic Alternative

SAURABH PANDEY
CSE
FROM BASICS TO UTIC BEILLIANCE

Kazakhstan offers rich REE resources and advanced technologies. A promising partner for India to reduce dependence on China.

Rich Resources of Rare Earths

Kazakhstan has 15 of the 17 known REEs. Its mining potential and extraction capabilities are significant.

India-Kazakhstan Relations

Strengthening ties through initiatives like 'Connect Central Asia'. Potential economic benefits in the REE sector.

Economic Benefits of Collaboration

Collaboration could provide India with essential REEs.
Supports India's renewable energy goals and reduces reliance on China.

The Future of Rare Earths in India



India's renewable energy targets emphasize the need for REEs. Must address supply chain capacity issues.

India's Renewable Energy Goals

Aims for 500 GW of renewable energy by 2030. Plans to increase mining output to meet these goals.

Diversification Strategies

Diversifying REE sources through global agreements. Essential for resource security and sustainability.

Conclusion

Collaboration with Kazakhstan offers a promising path for India.

Enhances resource security and supports renewable energy ambitions.

The proposed 'India-Central Asia Rare Earths Forum' could foster beneficial partnerships.

Should assisted dying be legalised?

What concerns do opponents of the assisted dying Bill in the U.K. raise? What changes does the proposed law seek to introduce? How does India's legal stance on euthanasia compare to the U.K.'s position?



EXPLAINER

Garimella Subramaniam

The story so far:

ritain's House of Commons on November 29 voted by a majority to legalise assisted dying - a less controversial synonym for assisted suicide in England and Wales. The step signals a seismic social shift on an emotive issue. Advocates regard the new Bill as a humane and compassionate intervention that should for those who want to exercise the option - bring closure to a painful, debilitating and degrading dependence on the immediate family, Opponents, who include the head of the Church of England, are apprehensive that the severely disabled and vulnerable patients may feel forced to end their lives to relieve the burden on relatives. "It should never become easier to seek help to die than to live," they say. The debate on the Bill's merits has also brought to the fore concerns that the delivery of hospice and palliative care services could be undermined. Portraved sometimes as a "Give us our last rights" campaign, about 75% of the public has backed the liberalisation of assisted dying, as per a U.K. National Centre for Social Research

How controversial is the move?

The U.K. courts have time and again maintained that given the sensitive ethical, philosophical, and social questions involved, the subject of assisted dying was not a matter on which the judiciary could pronounce a decision based on concrete evidence. Successive British governments have similarly maintained that any change to existing law was for parliament to consider and a matter of their conscience for individual MPs and that the government would officially adopt a neutral stance. The Terminally Ill Adults (end of life) legislation was thus brought forward as a private member Bill by the Labour MP Kim Leadbeater, Among its supporters



Moral debate: Opponents are apprehensive that the severely disabled and vulnerable patients may feel forced to end their lives to relieve the burden on relatives. AP

were Prime Minister Keir Starmer, the Home Secretary, the chancellor of the exchequer, and the Opposition leader Rishi Sunak. Six Cabinet Ministers opposed the proposal.

What is the current law in this area? Suicide, (self-inflicted death), or

Suicide, (self-inflicted death), or attempted suicide are not in themselves criminal offences in England and Wales. Conversely, an act that encourages or assists a person to commit suicide or attempted suicide is a criminal offence that carries a 14-year prison sentence under the 1961 Assistive Suicide Act.

What is the proposed law?

The Bill before parliament seeks to give terminally ill, mentally competent adults who have less than six months to live – which assumes that a reliable method exists of forecasting survival – the option to end their life. Under one stipulation, any such request must be authorised by two doctors and a High Court judge.

What were the petitioners' prayers? Since 2001, severely disabled applicants have petitioned the U.K. courts that the

1961 law, as well as the prosecution's refusal to allow them to end their lives under medical assistance, was incompatible with their rights under the European Convention on Human Rights (ECHR). At issue was the right to life (Article 2), which the petitioners viewed as entailing the right to self-determination and an entitlement to end life with assistance. They have also argued that the denial of the option to die with assistance - insofar as it failed to alleviate suffering amounted to cruel and degrading treatment prescribed under Article 3. It moreover constituted an infringement of the right to privacy and freedom of conscience enshrined in Articles 8 and 9. Finally, as persons with disabilities who needed assistance to end their lives, the denial of permission by the prosecution amounted to discrimination, in breach of Article 14 of the ECHR.

What did the court rule?

The U.K. House of Lords in 2002 unanimously overruled these contentions. But, in a 2014 Supreme Court decision, the majority opined that although the 1961 law was incompatible with the rights of two incurably suffering but not terminally ill petitioners, it was for parliament to modify the law. In 2015, the European Court of Human Rights ruled that the U.K. Supreme Court was under no obligation to examine the merits of a challenge to primary legislation and that Britain's government was open to concluding that this was a matter for parliament to arrive at a suitable determination. It is thus crystal clear that only new legislation can alter the status quo in this matter.

What is the position in India?

In Common Cause vs. Union of India (2018), the Supreme Court affirmed that the "right to die with dignity" is integral to the right to life and personal liberty under Article 21 of the Constitution. The court also legalised "passive euthanasia," which involves the withdrawal of life support from terminally ill patients or those in a permanent vegetative state. This allows individuals to die a natural death in the absence of medical interventions. The top court also issued comprehensive guidelines to facilitate passive euthanasia. For instance, if a patient leaves behind a living will, it must be executed in the presence of two witnesses and attested by a Judicial Magistrate. In 2019, the Indian Society of Critical Care Medicine filed an application seeking modification of these guidelines, arguing that they were onerous and impractical. Accordingly, a five-judge Constitution Bench in 2023 simplified the process by imposing strict timelines at each stage and limiting the role of the Judicial Magistrate.

In September, the Health Ministry released draft guidelines on withdrawing medical support for terminally ill patients, addressing a regulatory gap that had left healthcare professionals in the lurch. These specify that doctors must refrain from initiating life-support measures when they offer no benefit to the patient and are likely to cause suffering and a loss of dignity. Garimella Subramaniam is Director, Strategic Initiatives, AgnoShin Technologies Pvt. Lid

(With inputs from Aaratrika Bhaumik)

THE GIST

The U.K. House of Commons recently voted to legalise assisted dying, marking a significant shift. Supporters view it as compassionate, while opponents worry about vulnerable patients feeling pressured to end their lives.

Current law criminalises assisting suicide, but the proposed Bill allows terminally ill patients with less than six months to live to choose assisted death, with strict safeguards involving doctors

and a High Court judge.

Court's ruling.

India has legalised passive euthanasia (withdrawing life support for terminally ill patients) through the Supreme

Topic →**Legalizing Assisted Dying in the UK**



Introduction

On November 29,, the House of Commons in Britain voted to legalize assisted dying. This decision reflects a significant shift in societal attitudes towards this sensitive issue. The implications for England and Wales are profound, prompting a deeper exploration of the topic.

A Major Shift in Public Opinion

The Vote in the House of Commons:

Represents not just a legislative change but a reflection of evolving public sentiment. Advocates argue it offers a humane option for those with terminal illnesses.

Public Support for Assisted Dying:

A survey by the U.K. National Centre for Social Research shows 75% support for liberalization.

Understanding Assisted Dying



What is Assisted Dying?

Involves a terminally ill person receiving help from a medical professional to end their life.

Typically involves prescribed medication for self-administration.

The Difference Between Assisted Dying and Euthanasia:

Assisted dying: Individual self-administers medication.

Euthanasia: Medical professional administers the lethal dose.

The Current Legal Landscape

Existing Laws on Assisted Suicide:

Suicide and attempted suicide are not criminal offenses in England and Wales.

Assisting suicide is a criminal act, punishable by up to 14 years under the 1961 Assisted Suicide Act.

The Proposed Bill:

Allows terminally ill, mentally competent adults with less than six months to live to end their lives.

Requires authorization from two doctors and a High Court judge.

The Ethical Debate



Arguments For Assisted Dying:

Emphasizes personal choice and autonomy.

Advocates argue for the right to decide how and when to die.

Arguments Against Assisted Dying:

Concerns about pressure on vulnerable individuals.

Opponents argue it should not be easier to die than to live.

The Role of the Judiciary

Court Rulings on Assisted Dying:

U.K. courts have deemed the issue too sensitive for judicial intervention.

The Supreme Court in 2014 acknowledged the law's incompatibility with certain rights but deferred to Parliament.

International Perspectives



Assisted Dying in India:

- In Common Cause vs. Union of India (2018), The Supreme Court recognized the "right to die with dignity" under Article 21.
 - Legalized passive euthanasia, allowing withdrawal of life support under guidelines.
- o In September, the Health Ministry released draft guidelines on withdrawing medical support for terminally ill patients, addressing a regulatory gap that had left healthcare professionals in the lurch. These specify that doctors must refrain from initiating life-support measures when they □offer no benefit□ to the patient and are likely to cause suffering and a loss of dignity

Conclusion

 \circ

The House of Commons vote is pivotal in the assisted dying debate.

The path forward involves balancing individual rights, healthcare responsibilities, and societal values.



Why is strengthening fisheries extension services crucial?

What support do Matsya Seva Kendras provide to fish farmers?

Abhilaksh Likhi

The story so far: ndia possesses diverse fisheries

resources that provide livelihood opportunities to approximately three crore fishers and fish farmers. The country has witnessed an 83% increase in the national fish production since 2013-14, that stands at a record 175 lakh tons in 2022-23. With 75% of this coming from inland fisheries, India is the second-largest fish and aquaculture producer globally. In this backdrop, strengthening last-mile fisheries and aquaculture extension services is of paramount importance. Experts contend that such extension should provide request-based services to fishers/fish farmers on the life cycle of improved species cultured, water quality, disease, and available rearing technologies; address issues faced by seed growers and hatcheries; and conduct need-based

training to promote sustainable practices and fisheries-based activities that have the potential to be viable business models.

What is the role of Matsya Seva Kendras?

Under the flagship Pradhan Mantri Matsya Samapada Yojana, 'Matsya Seva Kendras' (MSK) has been envisioned as one-stop solution to provide a range of extension services by trained aquaculture professionals. The governmental assistance to set up such Kendras for women and weaker sections is available to the extent of 60%. Funds have been provided to State governments and Union Territories for operationalising 102 such Kendras. For example, the MSK in Thrissur, Kerala has a well-equipped lab for water, soil, and microbial analysis to conduct request-based disease tests, while the MSK in Nasik and Sangli districts in Maharashtra focuses on capacity building for fishers/fish farmers

on varied seed/feed inputs backed with the required technology infusion.

Fostering a 'whole of government approach,' the Government of India advises MSKs to mobilise start-ups. cooperatives, fish farmers' producer organisations, joint liability groups, and self-help groups to share best practices. The latter includes regenerative and conservation management practises for both inland and marine fisheries in view of the effects of climate change.

How do Sagar Mitras support fishers?

Another innovative extension initiative by the government is the deployment of "Sagar Mitras" in coastal States and U.T.s as a vital interface between the government and sea-borne fishers. They compile information and data on daily marine catch, price fluctuations, and requisite marketing needs at fish landing centres/harbours. They disseminate information to fishers on local

regulations, weather forecasts, natural calamities, hygienic fish handling, and potential fishing zones in the seas.

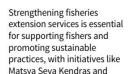
How can extension services be improved?

To make the extension and advisory services in fisheries and aquaculture more robust the need of the hour is twofold. First, the above initiatives should be institutionally converged with the already networked field extension machinery of over 700 Indian Council of Agricultural Research-driven Krishi Vigyan Kendras and the State governments and U.T.s extension services. Second, promoting digital outreach. The National Fisheries Development Board has initiated a nationwide virtual learning platform, 'AquaBazaar,' that enables experts to clarify basic concepts and provide practical demonstrations to fishers on breeding/seed production of commercially important fish.

In this context, the World Bank-assisted Government of India project to formalise the fisheries and aquaculture sector is a boon indeed. It aims to create work-based digital identities for all fishers and fish farmers in the country, thereby strengthening their extension, capacity building, and awareness generation needs.

Abhilaksh Likhi is Secretary, Department of Fisheries, Government of India. The views expressed are personal

THE GIST



Sagar Mitras playing key roles.



Matsya Seva Kendras and Sagar Mitras help fishers by providing critical support, training, and information to improve productivity and sustainability.

Topic → Article: Empowering Fish Farmers: The Role of Extension Services in India's Aquaculture Revolution



Introduction

- India boasts a cornucopia of fisheries resources, offering livelihoods to approximately three crore fishers and fish farmers.
- With a staggering 83% increase in national fish production since 2013-14, culminating in a record 175 lakh tons in 2022-23, the country stands as the second-largest fish and aquaculture producer globally.
- In this vibrant landscape, enhancing last-mile fisheries and aquaculture extension services is crucial.
- This article delves into the instrumental role of initiatives like Matsya Seva Kendras and Sagar Mitras, focusing on how they provide tailored support to fishers in their quest for sustainable practices.

Understanding Matsya Seva Kendras (MSKs)



Matsya Seva Kendras (MSKs) are envisioned as one-stop solutions under the Pradhan Mantri Matsya Sampada Yojana. These centers are pivotal in offering diverse extension services by trained aquaculture professionals.

Key Services Provided by MSKs:

- Request-based assistance on improved species cultivation and water quality management.
- Addressing challenges faced by seed growers and hatcheries.
- Conducting training sessions to promote sustainable aquaculture practices.

MSKs have become a beacon of hope for fishers, particularly women and marginalized groups, with government assistance covering up to 60% of the setup costs.

The Role of Sagar Mitras



Sagar Mitras serve as an innovative bridge between the government and coastal fishers, ensuring vital information flows effectively.

Functions of Sagar Mitras:

- -> Compiling daily marine catch data and price fluctuations.
- -> Disseminating crucial information on local regulations and weather forecasts.
- -> Promoting hygienic fish handling practices and identifying potential fishing zones.

This initiative not only empowers fishers with knowledge but also fosters a sense of community and cooperation among them.

Strengthening Extension Services



To fortify extension and advisory services in fisheries and aquaculture, a dual approach is necessary:

Convergence of Existing Networks:

Integrating MSKs with the Indian Council of Agricultural Research-driven Krishi Vigyan Kendras and state extension services.

Promoting Digital Outreach:

Initiatives like the AquaBazaar platform facilitate virtual learning, enabling fishers to access expert guidance on breeding and seed production.

These enhancements are vital for creating a robust framework that supports fishers in navigating the complexities of modern aquaculture.

Case Studies: Successful MSKs and Sagar Mitras



Examining specific instances, such as the MSK in Thrissur, Kerala, which features a lab for water, soil, and microbial analysis, highlights the practical benefits of these centers. Meanwhile, in Maharashtra, MSKs focus on capacity building, ensuring fishers are well-equipped with the latest technologies and practices.

Future of Fisheries Extension Services in India

Looking ahead, the future of fisheries extension services hinges on addressing current gaps and leveraging technology to enhance service delivery. Recommendations for improvement include:

Expanding training programs to cover emerging aquaculture practices. Strengthening partnerships between government, cooperatives, and fishers to foster innovation.

Out of control





A forest fire management vehicle on a road near a bushfire in the Grampians National Park in Australia's Victoria state. Victorians have been on high alert as the State faced one of its most dangerous fire in years. AFP

Topic → **Grampians National Park Overview**



Highlights of Grampians National Park

- 🌄 Location: Situated in Victoria, Australia.
- Wildlife: Home to diverse species such as kangaroos and emus.
- Hiking Trails: Offers a variety of trails for different skill levels.
- Landscapes: Features rugged mountains and lush forests.
- Cultural Heritage: Known for Aboriginal rock art sites.
- Activities: Includes rock climbing, camping, and birdwatching.
- * Climate: Mediterranean climate with hot, dry summers and cool, wet winters

Target UPSC CSE PRELIMS 2025

Prelims Crash course - starting - 4th JAN

Science and tech course - 10th jan

Prelims current affairs course - 15th JAN

COMPLETE CRASH COURSE ON UPSC CSE PRELIMS 2025

(SUCCESS Batch)

-->Complete coverage of all static subjects.

NCERTs + Mapping + Advance books + PYQS

--> Developing elimination Tricks.

2 yrs coverage of prelims specific current affairs

By saurabh pandey sir

Download saurabh pandey cse app

Visit - saurabhpandeyupsc.com

For Any Query Message 9057921649

EVERYTHING IN ONE COURSE!!

Download - saurabh pandey cse app

TARGET UPSC CSE PRELIMS 2025 Connect with sir 90579 21649

COMPLETE COURSE ON GENERAL

SCIENCE AND SCIENCE &

TECHNOLOGY

- ->Static topics +
 Advance topics
 ->All Noble prizes
 ->NCERT'S
- -> MIND MAPS FOR REVISION



PANDEY SIR

TARGET UPSC CSE PRELIMS 2025 Connect with sir 90579 21649

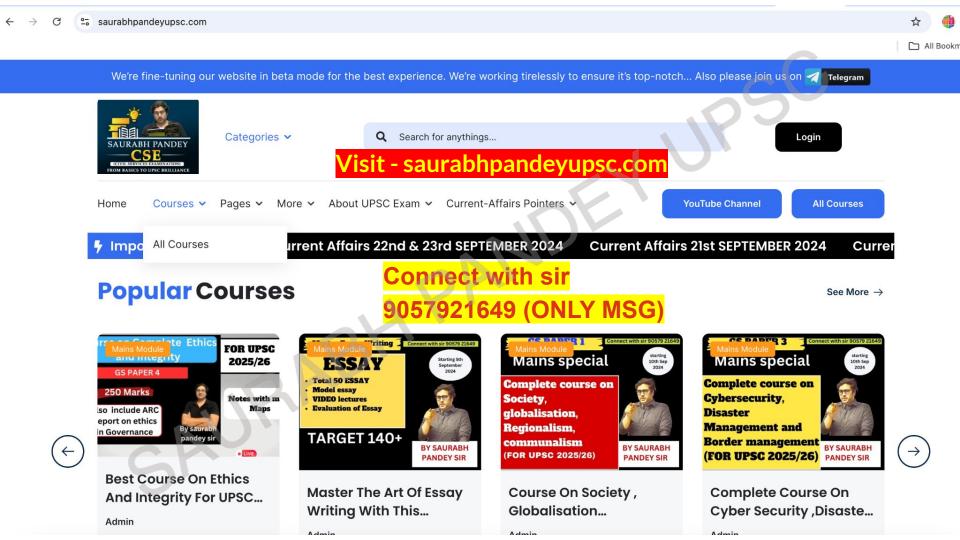
COMPLETE COURSE ON 2 YEARS PRELIMS CURRENT AFFAIRS

- Mind maps for Revision
- Focus on Newspapers , down to earth PIB and all imp sources
- Practice sets

Download - saurabh pandey cse app



BY SAURABH PANDEY SIR



Movies









Saurabh Pandey CSE

Saurabh Pandey CSE

3+ 4.8★ 77 reviews Downloads Rated for 3+ ①

Install



Add to wishlist

This app is available for your device











App support Y



PDF Download → https://t.me/gesreporter





Q. With reference to the products of the volcanic eruptions consider the following statements. (The Hindu)

- 1) Argon Gas
- 2) Helium Gas
- 3) Sulphur compounds
- 4) Ash and dust

How many of the given are products of Volcanic Eruptions.

- A) One Only
- **B) Two Only**
- C) Three Only
- D) All four

Target Mains -2025/26 -

Q Importance of central asia is beyond 'strategic'. Explain

(JOIN AAKLAN PLUS TO GET ANSWERS EVALUATED) Download saurabh pandey cse app

Connect with sir 9057921649

send your answer - Saurabh pandey upsc telegram channel



