



Yojna IAS

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JUNE 2023

WEEKLY CURRENT AFFAIRS

YOJNA IAS WEEKLY CURRENT AFFAIRS

5/6/2023 TO 11/6/2023

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CURRENT AFFAIRS

JUNE 2023

ASIAN DEVELOPMENT BANK (ADB)

This article covers “Daily Current Affairs” and the topic details “Asian Development bank”. The topic “Asian development bank” has relevance in the Economy section of the UPSC CSE exam.

Relevance:

For Prelims:

Facts about ADB?

For Mains:

GS 3: Economy

Objectives of ADB?

Relevance of ADB for India?

Challenges for ADB?

Why in the news?

ADB launches India strategy for 2023-27; focus on employment creation, green growth

Facts about ADB?

The Asian Development Bank (ADB) is an international financial institution headquartered in Manila, Philippines.

- **Location:** The ADB's headquarters is located in Mandaluyong City, Metro Manila, Philippines.
- **Formation:** The ADB was established on December 19, 1966. It was formed as a regional development bank to promote economic growth and cooperation in Asia and the Pacific.
- **Membership:** The ADB has 68 member countries, including both developing and developed economies. Its members include countries from Asia, the Pacific region, as well as non-regional countries.

- **Governance Structure:** The ADB has a governance structure consisting of the Board of Governors and the Board of Directors.

Objectives of ADB?

- **Operational Focus:** The ADB focuses on a wide range of development areas, including infrastructure development, energy, water supply and sanitation, education, healthcare, agriculture and rural development, finance, and private sector development. It provides financial assistance, technical expertise, and policy advice to support the development efforts of its member countries.
- **Partnerships and Collaboration:** The ADB collaborates with other international organizations, governments, non-governmental organizations (NGOs), and the private sector to promote sustainable development. It works closely with regional institutions, such as the Association of Southeast Asian Nations (ASEAN), to support regional integration and cooperation.
- **Sustainable Development Goals (SDGs):** The ADB aligns its work with the United Nations' Sustainable Development Goals (SDGs). It aims to contribute to the achievement of the SDGs by supporting its member countries in areas such as poverty reduction, gender equality, climate action, sustainable infrastructure, and inclusive economic growth.
- **Financial Resources:** The ADB raises funds through various channels, including capital contributions from member countries, borrowing from international capital markets, and partnerships with other development institutions. It provides loans, grants, and technical assistance to support projects and programs in its member countries.

Relevance of ADB for India?

- **Financial Assistance:** ADB provides financial support to India for various development projects, including infrastructure development, energy, water supply, sanitation, education, and healthcare. This assistance helps address India's developmental challenges and contributes to its economic growth and social progress.
- **Technical Expertise and Knowledge Sharing:** ADB offers technical expertise and knowledge sharing through research, capacity building, and policy advice. This helps India in improving project design, implementation, and monitoring, as well as adopting best practices and innovative solutions.
- **Regional Cooperation and Connectivity:** ADB promotes regional cooperation and connectivity in Asia. It supports regional infrastructure projects, such as transport networks and cross-border initiatives, which can enhance trade, economic integration, and cooperation among countries in the region. India benefits from these initiatives by improving connectivity with neighboring countries and enhancing its regional trade relations.

Challenges for ADB?

- **Financing Constraints:** A challenge for ADB is ensuring sufficient financial resources to meet the growing demands for development projects in member countries. To address this, ADB can explore innovative financing mechanisms, attract private sector investments, and mobilize resources through partnerships with other development institutions.
- **Balancing Priorities and Sustainability:** ADB needs to balance the priorities of economic development and poverty reduction with the imperative of environmental sustainability. This can be achieved by promoting green and sustainable infrastructure projects, integrating climate change considerations, and encouraging sustainable practices in project implementation.
- **Project Implementation and Governance:** Efficient project implementation and effective governance are crucial for successful outcomes. ADB can work closely with member countries, including India, to strengthen institutional capacity, enhance project management capabilities, and improve governance frameworks. Capacity building initiatives and knowledge sharing platforms can help address these challenges.
- **Regional Cooperation and Geopolitical Dynamics:** ADB operates in a region with diverse geopolitical dynamics. It needs to navigate political sensitivities, facilitate dialogue, and promote regional cooperation among member countries. This requires maintaining neutrality, fostering trust, and facilitating dialogue to address regional issues and conflicts.

Source:

<https://economictimes.indiatimes.com/news/india/adb-launches-india-strategy-for-2023-27-focus-on-employment-creation-green-growth/article-show/100631433.cms?from=mdr>

Q.1 Which of the following statements regarding the Asian Development Bank (ADB) is correct?

- A) ADB was established to promote economic growth and cooperation in Asia and the Pacific.
- B) ADB has 58 member countries, including only developing economies.
- C) ADB's headquarters is located in Tokyo, Japan.

Select the correct option:

- (a) A
- (b) B
- (c) C

(d) None of the above

Answer: (a)

Q.2 Which of the following is NOT a primary focus area of the Asian Development Bank (ADB)?

- A) Infrastructure development
- B) Education and healthcare
- C) Poverty reduction
- D) Defense and military expenditure

Select the correct option:

- (a) A
- (b) B
- (c) C
- (d) D

Answer: (d)

Q.3 Discuss the role and significance of the Asian Development Bank (ADB) in India's development trajectory. Examine the key areas of collaboration between ADB and India, highlighting major projects and initiatives.

INDIA-NEPAL RELATIONS

This article covers "Daily Current Affairs" and the topic details "India-Nepal Relations". The topic "India-Nepal Relations" has relevance in the International Relations section of the UPSC CSE exam.

Relevance:

For Prelims:

Facts about Nepal?

For Mains:

GS 2: International Relations

Importance of Nepal for India?

Challenges in India-Nepal Relations?

Measures to be Taken?

Why in the news?

Prime Minister Narendra Modi and his visiting Nepalese counterpart Pushpakamal Dahal 'Prachanda', held wide-ranging talks focusing on boosting India-Nepal cooperation in several areas including energy, connectivity and trade.

Facts about Nepal:

- **Location:** Nepal is a landlocked country located in South Asia. It shares borders with India to the east, south, and west, and with China (Tibet Autonomous Region) to the north.
- **Capital:** The capital city of Nepal is Kathmandu, which is also the largest city in the country.
- **Geography:** Nepal is known for its diverse geography, ranging from the lowland Terai plains in the south to the rugged Himalayan mountain ranges in the north. It is home to several of the world's highest peaks, including Mount Everest, the highest peak on Earth.
- **Religion:** Nepal is a predominantly Hindu country, with Hinduism being the major religion practiced by the majority of the population. Buddhism is also widely followed, particularly in areas with significant Buddhist heritage.
- **UNESCO World Heritage Sites:** Nepal is home to several UNESCO World Heritage Sites, including the Kathmandu Valley with its ancient cities of Kathmandu, Bhaktapur, and Patan, as well as Lumbini, the birthplace of Gautam Buddha.

Importance of Nepal for India?

- **Geopolitical Relations:** Nepal shares a long and porous border with India, spanning over 1,850 kilometers. This geographical proximity makes Nepal strategically important for India's security and regional stability. Both countries have historically maintained close ties, fostering cultural, economic, and political exchanges.
- **Cultural and Historical Ties:** India and Nepal have deep-rooted cultural and historical connections. The people of Nepal and India share common traditions, religious beliefs (particularly Hinduism and Buddhism), and social customs. This cultural affinity has created strong social and people-to-people bonds between the two nations.
- **Economic Cooperation:** Nepal's geographical location makes it a natural trade partner for India. The open border between the two countries facilitates bilateral trade, investment, and economic cooperation. India is one of Nepal's largest trading partners, providing essential goods, petroleum products, and transit facilities for Nepal's international trade.
- **Security Collaboration:** India and Nepal have a history of collaborating on security issues, including intelligence sharing and counter-terrorism efforts. The open border allows for joint efforts in managing cross-border crimes, controlling illegal activities, and maintaining regional security.

- **Energy and Water Resources:** Nepal is blessed with abundant water resources, including numerous rivers and potential hydropower projects. India has supported Nepal in developing its hydropower sector and the utilization of these resources. India also imports electricity from Nepal during peak demand periods, contributing to its own energy needs.
- **Strategic Connectivity:** Nepal serves as a transit country between India and other nations in the region, such as China and Bangladesh. This connectivity provides India with access to these countries, allowing for trade, transportation, and regional integration.
- **Cultural Diplomacy and Tourism:** Nepal's rich cultural heritage and natural beauty attract a significant number of Indian tourists. This tourism inflow strengthens people-to-people contacts, fosters cultural exchange, and promotes mutual understanding between the two nations.
- **Disaster Management and Humanitarian Assistance:** India has played a vital role in providing humanitarian assistance and disaster relief during natural calamities in Nepal. Proximity and historical ties enable India to respond swiftly and effectively to such crises, contributing to Nepal's post-disaster recovery.

Challenges in India-Nepal Relations?

- **Border Disputes:** The border between India and Nepal has witnessed occasional disputes and disagreements. Issues related to the delineation of the boundary, demarcation of border pillars, and encroachments have strained relations between the two countries.
Example Kalapani-Limpiyadhura Region: This region, located in the western part of Nepal, has been a longstanding area of dispute between India and Nepal. The disagreement stems from differences in interpreting historical treaties and maps regarding the exact location of the border. India has maintained a military presence in the Kalapani area, which Nepal claims as its own territory.
Susta Region: The Susta region, located in the southern part of Nepal, has also been a subject of boundary dispute. Nepal claims that the Kali River, which forms the border between the two countries in that area, has changed its course over time, resulting in encroachment by India. This issue remains unresolved, and both countries have differing perceptions of the boundary alignment in the Susta region.
- **Political Instability:** Nepal has experienced political instability and frequent changes in government over the years. These transitions have sometimes led to policy shifts, making it challenging for India to maintain consistent engagement and cooperation with Nepal.
- **Nepalese Perception of Indian Interference:** At times, Nepal has accused India of interfering in its internal affairs. There have been concerns raised by Nepal about India's influence on its politics, including issues related to constitutional amendments, federalism, and other domestic matters.
- **Cross-border Security Challenges:** The open border between India and Nepal

poses challenges in managing cross-border crimes, illegal activities, and smuggling. Both countries need to enhance cooperation in border security and law enforcement to address these challenges effectively.

- **Hydropower Projects and Water Sharing:** India and Nepal have had discussions and occasional disagreements over hydropower projects and the sharing of water resources. Nepal's potential for hydropower generation raises concerns about the impact on downstream areas in India, leading to occasional tensions.
- **Trade Imbalance:** There has been a significant trade imbalance between India and Nepal, with India being the major trading partner. Nepal has expressed concerns about the trade deficit and seeks to promote its exports to India. Addressing this imbalance is crucial to ensure equitable economic relations between the two countries.

Measures to be Taken?

- **Dialogue and Diplomacy:** Consistent and open communication through diplomatic channels is crucial. Regular high-level meetings, diplomatic talks, and mechanisms such as Joint Commission Meetings can help address concerns, clarify positions, and find mutually acceptable solutions.
- **Boundary Dispute Resolution:** Establishing joint survey teams with technical experts from both countries can help resolve boundary disputes. Accurate mapping, historical research, and adherence to international norms and principles can guide the resolution process.
- **Mutual Respect and Non-Interference:** Both countries should emphasize mutual respect for each other's sovereignty and refrain from interference in each other's internal affairs. Strengthening bilateral ties based on principles of equality, non-interference, and shared interests is essential.
- **Economic Cooperation and Trade:** Promoting balanced and fair trade relations can help address the trade imbalance between India and Nepal. Encouraging investment, enhancing connectivity, and facilitating trade facilitation measures can boost economic cooperation and benefit both nations.
- **Development Projects and Assistance:** Collaborative efforts on development projects, particularly in areas such as infrastructure, energy, and connectivity, can foster mutual cooperation and contribute to the economic development of both countries. Ensuring transparent and inclusive development processes can address concerns and enhance cooperation.
- **Cultural and Educational Exchanges:** Strengthening people-to-people contacts through cultural and educational exchanges can promote understanding, appreciation, and harmony between the people of India and Nepal. Encouraging tourism, student exchanges, and cultural programs can build strong social bonds.
- **Security Cooperation:** Strengthening security cooperation and intelligence sharing can address common security challenges, such as cross-border crimes, terrorism,

and illegal activities. Joint exercises, capacity building, and coordinated efforts can enhance border security and ensure regional stability.

- **Disaster Management and Humanitarian Assistance:** Strengthening collaboration in disaster management, sharing best practices, and providing timely humanitarian assistance during natural calamities can build trust and goodwill between the two nations.
- **Track II Diplomacy:** Encouraging Track II diplomacy, involving academics, experts, and civil society representatives, can contribute to generating innovative ideas, fostering dialogue, and building consensus on challenging issues.

Source:

<https://www.thehindu.com/news/national/pm-modi-nepalese-counterpart-pushpakamal-dahal-prachanda-hold-talks/article66918897.ece>

Q.1 Which region has been a subject of border dispute between India and Nepal?

1. Kalapani-Limpiyadhura
2. Susta
3. Pashupatinath
4. Kailash Mansarovar

Which of the option given above is correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 2 and 3 only

Answer: (a)

Q.2 Consider the following statements regarding India-Nepal relations:

1. Nepal shares its borders with India in the east, south, and west, but not in the north.
2. The Kalapani-Limpiyadhura region has been a subject of boundary dispute between India and Nepal.
3. Nepal is a predominantly Buddhist country, with Buddhism being the major religion practiced by the majority of the population.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 2 and 3 only

Answer: (a)

Q.3 Analyzing the key dimensions of India-Nepal relations, discuss the challenges

and opportunities for fostering a cooperative and mutually beneficial relationship. Suggest measures that can be taken to address the challenges and enhance bilateral ties between the two countries.

GOLDEN TEMPLE

This article covers "Daily Current Affairs" and the topic details "Golden Temple" has relevance in the Art and Culture section of the UPSC CSE exam.

Relevance:

For Prelims:

Facts about Golden Temple?

For Mains:

GS 1: Art and Culture

Importance of Golden Temple?

What ethical inspiration can be taken from sikh philosophy?

Why in the news?

On Op Bluestar anniversary on June 6, Jathedar in Golden Temple warns of 'trend of Sikhs converting to Christianity, especially in rural Punjab.

Facts about Golden Temple?

- The Golden Temple, also known as Harmandir Sahib, is a revered Sikh Gurdwara located in Amritsar, Punjab, India.
- It was founded by Guru Ram Das, the fourth Sikh Guru, in the 16th century.
- The temple is constructed with gold-plated copper sheets, giving it its iconic appearance.
- The temple is surrounded by a sacred pool called Amrit Sarovar, which is believed to have healing properties.
- The Harmandir Sahib complex is open to people of all faiths and is a symbol of inclusivity.
- It is the holiest shrine in Sikhism and serves as the central place of worship for Sikhs around the world.
- The temple houses the Guru Granth Sahib, the central religious scripture of Sikhism.
- The Langar, a community kitchen, provides free meals to all visitors regardless of their religion or social status.
- The temple complex also includes several historical and architectural attractions, such as the Akal Takht and the Central Sikh Museum.

Importance of Golden Temple?

- **Spiritual Center:** The Golden Temple is the most sacred and revered site for Sikhs. It serves as the central place of worship and pilgrimage for Sikhs worldwide. It is believed to be the abode of God and a place where devotees can experience spiritual enlightenment and connect with their faith.
- **Historical Significance:** The Golden Temple has a rich historical background. It was founded by Guru Ram Das, the fourth Sikh Guru, in the 16th century. The temple complex witnessed significant events in Sikh history, including the martyrdom of Guru Arjan Dev, the compilation of the Guru Granth Sahib (the Sikh holy scripture), and the formation of the Khalsa Panth (the Sikh warrior community).
- **Symbol of Sikhism:** The Golden Temple is a powerful symbol of Sikhism's core values and principles. It represents equality, inclusivity, service, and devotion. The concept of langar (free community kitchen) and the practice of serving free meals to all visitors, irrespective of their background, exemplifies the spirit of seva (selfless service) and equality in Sikhism.
- **Architectural Beauty:** The Golden Temple is renowned for its magnificent architectural design. The gilded exterior, marble inlays, intricate carvings, and reflective pool (Amrit Sarovar) create a visually stunning and serene ambiance. The architectural blend of Sikh, Hindu, and Islamic styles reflects the inclusive nature of Sikhism and its respect for diverse cultural influences.
- **Humanitarian Services:** The Golden Temple complex is not only a place of worship but also a center for various humanitarian services. The langar, mentioned earlier, provides free meals to thousands of visitors every day, regardless of their socio-economic background. The temple also offers free accommodation (Sarai) for pilgrims, medical facilities, educational services, and support for those in need.
- **Cultural Heritage:** The Golden Temple is an integral part of Punjab's cultural heritage. It represents the cultural and religious identity of the Sikh community. The temple complex is a hub of Sikh arts, music, and literature, promoting the preservation and propagation of Sikh traditions and heritage.
- **Tourist Attraction:** The Golden Temple attracts millions of visitors, both Sikhs and non-Sikhs, from around the world. Its architectural beauty, spiritual ambiance, and cultural significance make it a popular tourist destination. The temple's serene atmosphere and the opportunity to witness Sikh traditions and rituals provide a unique cultural experience for visitors.

What ethical inspiration can be taken from sikh philosophy?

- **Equality and Justice:** Sikhism strongly emphasizes the equality and dignity of all human beings. Sikh teachings reject discrimination based on caste, creed, gender, or social status. The concept of "Ik Onkar" (One God) underscores the belief in the inherent equality of all individuals. This ethical principle encourages treating

everyone with respect, fairness, and justice.

- **Selfless Service (Seva):** Sikhism places great importance on selfless service to others. The practice of “seva” entails serving and helping those in need without any expectation of personal gain. This ethical principle promotes compassion, empathy, and a sense of responsibility towards the welfare of others. Seva is practiced through various means, such as volunteering, charity, and contributing to community well-being.
- **Truthfulness and Integrity:** Sikh philosophy emphasizes the importance of truthfulness and honesty. The concept of “Satnam” (True Name) reflects the belief in living a life of integrity and upholding truth in all aspects. Sikhs are encouraged to speak the truth, act honestly, and maintain ethical conduct. This principle inspires individuals to be trustworthy, transparent, and accountable in their interactions and relationships.
- **Humility and Humbleness:** Sikhism promotes the virtues of humility and humbleness. The concept of “Nimrata” encourages individuals to overcome ego, pride, and arrogance. Sikh teachings emphasize that true spirituality lies in being humble, modest, and respectful towards others. This ethical principle fosters a sense of humility, gratitude, and empathy, leading to harmonious relationships and a balanced outlook on life.
- **Compassion and Forgiveness:** Sikh philosophy encourages individuals to cultivate compassion and forgiveness. The teachings of “Daya” (Compassion) and “Kshama” (Forgiveness) emphasize the importance of showing kindness, empathy, and understanding towards others. This ethical principle promotes healing, reconciliation, and the resolution of conflicts through forgiveness rather than revenge or resentment.
- **Environmental Stewardship:** Sikhism emphasizes the responsibility of humans to care for and protect the environment. The concept of “Dharam” (Duty) includes the duty to preserve and respect nature. Sikh teachings advocate for sustainable practices, ecological balance, and living in harmony with nature. This ethical principle inspires individuals to be mindful of their impact on the environment and to strive for its conservation.

Source:

<https://indianexpress.com/article/opinion/columns/39th-anniversary-of-operation-blue-star-learn-lessons-from-history-8649022/>

Q.1 Which of the following statements about the Golden Temple (Harmandir Sahib) is/are correct?

1. It is the most revered Sikh Gurdwara located in Amritsar, Punjab.
2. The temple was founded by Guru Nanak, the first Sikh Guru.
3. The Golden Temple is surrounded by a sacred pool called Amrit Sarovar.

Select the correct answer using the codes below:

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 1,2 and 3
- (d) 2 and 3 only

Answer: (b)

Q.2 Which of the following statements regarding the Golden Temple (Harmandir Sahib) in Amritsar, Punjab, is/are correct?

1. The Golden Temple is the central place of worship for Sikhs worldwide.
2. The temple was constructed using gold-plated copper sheets.
3. The sacred pool surrounding the temple is known as Guru Sarovar.

Select the correct answer using the codes below:

- (a) 1 and 2 only
- (b) 1 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Answer: (a)

Q.3 Discuss the historical and cultural significance of the Golden Temple (Harmandir Sahib) in Amritsar, Punjab. How has it shaped Sikh identity and contributed to religious harmony in India?

ANTIMICROBIAL RESISTANCE (AMR)

This article covers “Daily Current Affairs” and the topic details “Antimicrobial Resistance”. The topic “Antimicrobial Resistance” has relevance in the Public Health of the UPSC CSE exam.

Relevance:

For Prelims:

What is AMR?

For Mains:

GS 2: Public Health

Challenges for India in dealing with AMR?

Measures to be taken to address the challenges?

Why in the news?

Since the beginning of negotiations on the Pandemic Treaty, there have been calls from civil society and leading experts to include antimicrobial resistance.

What is AMR?

Antimicrobial resistance (AMR) refers to the ability of microorganisms, such as bacteria, viruses, fungi, and parasites, to evolve and develop resistance to the drugs that are designed to kill or inhibit their growth, known as antimicrobial agents. This resistance reduces the effectiveness of these drugs and makes infections harder to treat.

- **Mechanisms of Resistance:** Microorganisms can develop resistance to antimicrobial agents through various mechanisms. These include genetic mutations, the transfer of resistance genes between microorganisms, and the selection pressure exerted by the misuse or overuse of antimicrobials.
- **Causes of AMR:** Several factors contribute to the emergence and spread of antimicrobial resistance. These include the inappropriate use of antibiotics in human healthcare, such as overprescribing, improper dosing, and failure to complete the full course of treatment. Inadequate infection prevention and control measures in healthcare settings also play a role. In addition, the use of antimicrobials in agriculture, animal husbandry, and aquaculture contributes to AMR, as does the improper disposal of pharmaceutical waste.
- **Consequences of AMR:** Antimicrobial resistance poses significant consequences for public health, patient outcomes, and healthcare systems. AMR leads to increased morbidity and mortality rates as infections become more difficult to treat. It can result in longer hospital stays, higher treatment costs, and increased rates of treatment failure. Moreover, AMR limits the effectiveness of critical medical procedures, such as surgeries, chemotherapy, and organ transplantation.
- **Global Impact:** AMR is a global health concern with broad implications. It affects all countries, regardless of their level of development. AMR undermines progress in achieving the United Nations' Sustainable Development Goals, including those related to health, poverty reduction, and food security. The spread of resistant infections across borders highlights the interconnectedness of the issue and the need for international collaboration.

Challenges for India in dealing with AMR?

- **High Burden of Infectious Diseases:** India has a high burden of infectious diseases, and the inappropriate use of antibiotics is prevalent. Overuse, misuse, and self-medication contribute to the development of AMR. Addressing these practices and promoting responsible antibiotic use across diverse healthcare settings, including public and private sectors, poses a significant challenge.
- **Limited Surveillance and Data:** Adequate surveillance systems are crucial for monitoring AMR patterns and trends. However, India faces challenges in establishing

comprehensive and robust surveillance systems for AMR due to resource constraints, fragmented healthcare systems, and variations in data collection and reporting. Improved data collection, harmonization, and sharing across regions and healthcare facilities are needed.

- **Lack of Awareness and Education:** There is a need to enhance awareness and knowledge about AMR among healthcare professionals, patients, and the general public. This includes promoting understanding about the appropriate use of antibiotics, the consequences of AMR, and the importance of infection prevention and control measures. Educating healthcare providers and patients about the importance of completing full antibiotic courses and avoiding self-medication is crucial.
- **Limited Access to Quality Healthcare:** India's healthcare system faces challenges of accessibility, affordability, and quality of care. Limited access to quality healthcare, especially in rural and remote areas, can contribute to inappropriate use of antibiotics, inadequate diagnosis, and ineffective treatment practices. Ensuring equitable access to quality healthcare, diagnostic facilities, and trained healthcare professionals is essential to address AMR effectively.
- **Agricultural and Veterinary Practices:** Antibiotic use in agriculture, animal husbandry, and aquaculture can contribute to the development of AMR. The challenge lies in regulating and monitoring the use of antibiotics in these sectors to promote responsible use and minimize the spread of resistance. Strengthening regulations, promoting good agricultural and veterinary practices, and raising awareness among stakeholders are necessary steps.
- **Coordination and Implementation:** Addressing AMR requires collaboration among multiple sectors, including health, agriculture, animal husbandry, and environment. Coordinating efforts and implementing policies and guidelines across sectors can be challenging due to diverse stakeholder involvement, governance issues, and the need for sustained commitment and resources.

Measures to be taken to address the challenges?

1. Strengthening Awareness and Education:

- Conduct public awareness campaigns to educate the general public about AMR, responsible antibiotic use, and the importance of completing full treatment courses.
- Develop targeted educational programs for healthcare professionals, emphasizing appropriate prescribing practices, adherence to treatment guidelines, and infection prevention and control measures.

2. Enhancing Surveillance and Data Collection:

- Establish and strengthen comprehensive surveillance systems for AMR, including the collection, analysis, and reporting of data on resistance patterns, antibiotic consumption, and treatment outcomes.

- Encourage standardized reporting of AMR data across healthcare facilities and regions to improve data harmonization and sharing.
3. Promoting Antimicrobial Stewardship:
- Implement antimicrobial stewardship programs in healthcare facilities to promote responsible antibiotic use, including antibiotic prescribing guidelines, antimicrobial use monitoring, and regular feedback to healthcare professionals.
 - Develop and implement guidelines for infection prevention and control, emphasizing the importance of hand hygiene, appropriate sterilization, and prevention of healthcare-associated infections.
4. Improving Access to Quality Healthcare:
- Strengthen healthcare infrastructure, especially in rural and remote areas, to ensure equitable access to quality healthcare services, diagnostic facilities, and trained healthcare professionals.
 - Promote rational use of antibiotics through regular training programs for healthcare providers, emphasizing appropriate diagnosis, prescription practices, and treatment guidelines.
5. Regulating Antibiotic Use in Agriculture and Animal Husbandry:
- Implement and enforce regulations on the use of antibiotics in agriculture, animal husbandry, and aquaculture to minimize the development and spread of AMR.
 - Promote alternatives to antibiotic use in animal health management, such as vaccines, probiotics, and improved animal husbandry practices.
6. Fostering Multi-Sectoral Collaboration:
- Establish inter-sectoral collaborations and coordination mechanisms involving healthcare, agriculture, animal husbandry, environment, and other relevant sectors to address AMR comprehensively.
 - Promote research collaborations and knowledge sharing between stakeholders to develop innovative solutions, including new antimicrobial agents and diagnostics.
7. International Cooperation:
- Engage in international collaborations and partnerships to share best practices, knowledge, and resources in addressing AMR.
 - Participate in global initiatives and forums to contribute to the development of international guidelines, standards, and policies on AMR.

Source:

<https://www.thehindu.com/sci-tech/health/amr-pandemic-instrument-vulnerable-future-pandemics/article66936850.ece>

Q.1 Which of the following statements about antimicrobial resistance (AMR) is correct?

1. AMR refers to the ability of microorganisms to develop resistance against antibiotics and other antimicrobial agents.
2. AMR is solely caused by genetic mutations in microorganisms.
3. AMR is a problem limited to human healthcare settings and does not affect veterinary or agricultural practices.

Select the correct option:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1,2 and 3 only
- (d) None of the above

Answer: (a)

Q.2 Which of the following factors contribute to the development of antimicrobial resistance (AMR)?

1. Misuse and overuse of antibiotics in human healthcare.
2. Inadequate infection prevention and control practices.
3. Limited access to healthcare facilities in rural areas.

Select the correct option:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1,2 and 3 only
- (d) None of the above

Answer: (a)

Q.3 Discuss the issue of antimicrobial resistance (AMR), its causes, consequences, and global implications .Discuss the strategies required to combat this growing threat.

CYCLONES

This article covers "Daily Current Affairs" and the topic details "Cyclones". The topic "Cyclones" has relevance in the Geography and Disaster Management section of the UPSC CSE exam.

Relevance:

For Prelims:

- What are Cyclones?

- Conditions for Formation and Dissipation of Cyclones?

For mains:

- GS 1&3 : Geography and Disaster Management.
- Major vulnerable areas?
- Cyclone Management in India?

Why in the news?

Cyclone Biparjoy to intensify in next 36 hours, informed the IMD.

What are Cyclones?

A cyclone is a powerful and destructive weather phenomenon characterized by a low-pressure center and strong rotating winds. It typically forms over warm ocean surfaces, where the air rises and creates an area of low pressure. As the air spirals inward towards the center, it begins to rotate, generating a cyclonic circulation. Cyclones are known for their intense thunderstorms, heavy rainfall, and high wind speeds. They can cause significant damage to infrastructure, homes, and landscapes, as well as pose threats to human lives. Proper monitoring, early warning systems, and preparedness measures are crucial in managing and mitigating the impacts of cyclones.

Conditions for Formation and Dissipation of Cyclones?

Formation of a Cyclone:

- **Warm Ocean Surface:** Cyclones form over warm ocean surfaces where the sea surface temperature exceeds 26.5 degrees Celsius (79.7 degrees Fahrenheit). The warm ocean provides the necessary energy for the cyclone's development.
- **Low-Pressure System:** A disturbance, such as a tropical wave or an area of low pressure, initiates the cyclone formation. As the warm and moist air rises, it creates an area of low pressure at the surface.
- **Coriolis Effect:** The Coriolis effect, caused by the Earth's rotation, deflects the moving air to the right in the Northern Hemisphere and to the left in the Southern Hemisphere. This effect is essential for the cyclone's rotation.
- **Cyclonic Circulation:** The rotating winds around the low-pressure center start to organize, forming a cyclonic circulation. Air spirals inward toward the center in a counterclockwise direction in the Northern Hemisphere and in a clockwise direction in the Southern Hemisphere.
- **Eyewall and Eyewall Replacement Cycle:** The cyclone develops an eyewall, which is a ring of intense thunderstorms surrounding the center. This eyewall is where the strongest winds and heaviest rainfall occur. In mature cyclones, an eyewall replacement cycle may occur, where a new eyewall forms outside the original eyewall. This process temporarily weakens the cyclone but may lead to a larger and

stronger storm later.

Dissipation of a Cyclone:

- **Land Interaction:** When a cyclone moves over land, it loses its primary energy source, the warm ocean surface. Land interaction disrupts the cyclone's circulation and leads to gradual weakening.
- **Cooler Sea Surface:** If a cyclone moves over cooler ocean waters with temperatures below 26.5 degrees Celsius (79.7 degrees Fahrenheit), it lacks the necessary warmth and energy to sustain itself. The cooler sea surface causes the cyclone to weaken and eventually dissipate.
- **Wind Shear:** Strong wind shear, the change in wind direction and speed with height, can disrupt the vertical structure of a cyclone. High wind shear causes the storm to tilt and separates the upper-level and lower-level circulation, inhibiting further intensification or leading to weakening and dissipation.
- **Loss of Moisture:** As a cyclone moves away from its moisture source, such as an ocean or a tropical region, it gradually loses its moisture supply. The absence of moisture reduces the storm's ability to maintain convective activity and sustain itself.

Major vulnerable areas?

In India, cyclone-prone areas are classified into different categories based on their vulnerability to cyclonic disturbances. The classification is primarily based on historical data and the frequency of cyclone occurrences in specific regions. The cyclone-prone areas in India are classified as follows:

- **Very High-Risk Zone:** This zone includes the coastal areas along the Bay of Bengal, primarily the states of Odisha and Andhra Pradesh. These regions are highly vulnerable to cyclones, with a higher frequency of severe cyclonic storms and intense impacts.
- **High-Risk Zone:** The high-risk zone comprises the coastal regions of West Bengal, Tamil Nadu, and Puducherry. These areas experience a relatively high frequency of cyclonic disturbances, with a potential for severe impacts.
- **Moderate-Risk Zone:** This zone covers the coastal areas of Gujarat and Maharashtra, including Mumbai. While these regions have a lower frequency of cyclonic disturbances compared to the very high and high-risk zones, they still experience moderate cyclonic activity and associated impacts.
- **Low-Risk Zone:** The low-risk zone includes the remaining coastal areas of India, such as Kerala, Karnataka, Goa, and parts of Gujarat. These regions have a relatively lower vulnerability to cyclones, with a lesser frequency of cyclonic disturbances and milder impacts.

Cyclone Management in India?

The management of cyclones in India involves a comprehensive approach that includes preparedness, early warning systems, evacuation plans, disaster response, and post-disaster recovery. Here are the key components of cyclone management in India:

- **Early Warning Systems:** The India Meteorological Department (IMD) plays a crucial role in monitoring and forecasting cyclones. It uses sophisticated weather prediction models, satellite imagery, and data from weather stations to issue timely cyclone alerts, warnings, and forecasts. These warnings are disseminated through various communication channels to authorities, media, and the general public.
- **Cyclone Preparedness:** Cyclone-prone states and coastal communities have developed cyclone preparedness plans that include identifying vulnerable areas, establishing cyclone shelters, pre-positioning relief materials, and training emergency response teams. Preparedness measures also involve creating awareness among the public about cyclone safety protocols and evacuation procedures.
- **Evacuation and Shelter Management:** Timely evacuation of coastal communities from high-risk areas is a critical aspect of cyclone management. State authorities, along with the National Disaster Response Force (NDRF) and local administrations, coordinate evacuation efforts, mobilize transportation, and designate cyclone shelters for people to seek refuge during cyclone events.
- **Coordination and Response:** Various agencies, including state governments, disaster management authorities, defense forces, and relief organizations, work together to coordinate response efforts during cyclones. They ensure the availability of essential supplies, medical aid, and search and rescue operations. The NDRF plays a significant role in deploying specialized teams for rescue and relief operations.
- **Post-Disaster Recovery:** After a cyclone strikes, the focus shifts to post-disaster recovery and rehabilitation. It involves assessing damages, restoring infrastructure, providing relief to affected communities, and facilitating the return of evacuated populations. Efforts are made to restore electricity, communication networks, and essential services to cyclone-affected areas.
- **Research and Development:** Continuous research and development in meteorology, disaster management, and infrastructure resilience are essential for improving cyclone management strategies. This includes enhancing forecasting models, studying climate change impacts on cyclone patterns, and implementing measures to strengthen infrastructure against cyclonic forces.
- **International Cooperation:** India actively participates in international collaborations and shares best practices in cyclone management. It collaborates with regional and international organizations such as the World Meteorological Organization (WMO) and Indian Ocean Rim Association (IORA) to enhance cyclone forecasting, data sharing, and capacity-building initiatives.

Q.1 Which of the following factors are essential for the formation of a cyclone?

1. Low-pressure system
2. High-pressure system
3. Warm ocean surface
4. Cold ocean surface

Select the correct option:

- (a) 1 and 3
- (b) 2 and 4
- (c) 1, 2, and 3
- (d) 1, 3, and 4

Answer: (a)

Q.2 Which of the following factors can contribute to the dissipation of a cyclone?

1. Landfall on a coastal area
2. Interaction with cooler sea surface temperatures
3. Intensification of convective activity
4. Presence of low wind shear

Select the correct option:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 4 only
- (d) 2 and 4 only

Answer: (a)

Q.3 “Discuss the impact of cyclones on coastal regions and the measures taken by India for cyclone management. Examine the challenges faced in effective cyclone management and suggest strategies for enhancing preparedness and resilience.”

JAL JEEVAN MISSION

This article covers "Daily Current Affairs" and the topic details "Jal Jeevan Mission". The topic "Jal Jeevan Mission" has relevance in the water management section of the UPSC CSE exam.

Relevance:

For Prelims:

What is the Jal Jeevan Mission?

Objectives of Jal Jeevan Mission?

For Mains:

GS 3: Water management.

Importance of Jal Jeevan Mission?

Challenges in providing Clean Water?

Why in the news?

The Prime Minister, Shri Narendra Modi has reiterated the commitment to strengthen Jal Jeevan Mission and has underlined the role of access to clean water in public health.

What is the Jal Jeevan Mission?

Jal Jeevan Mission (JJM) is a flagship program launched by the Government of India in 2019 with the goal of providing piped water supply to every rural household in the country by 2024. The mission aims to ensure safe and adequate drinking water for all, with a focus on improving the quality of life and reducing water-borne diseases in rural areas. The implementation of the Jal Jeevan Mission involves a decentralized approach. Gram Panchayats (village-level local self-governance institutions) play a crucial role in planning, implementing, and managing the water supply infrastructure at the village level. They are responsible for the formation of Village Water and Sanitation Committees (VWSCs) and the preparation of village-level plans.

Objectives of Jal Jeevan Mission?

- **Providing Functional Household Tap Connections (FHTCs):** The mission aims to provide tap water connections to every rural household.
- **Sustainable Water Supply:** The mission focuses on ensuring a long-term, sustainable water supply to rural areas.
- **Convergence:** The program emphasizes convergence with other government schemes to maximize the efficiency and utilization of resources.
- **Information, Education, and Communication (IEC):** JJM promotes awareness and behavioral change among the rural population through extensive IEC campaigns.

- **Capacity Building:** It focuses on capacity building at the village level by training and empowering local communities to own, operate, and maintain the water supply systems.
- **Water Quality Monitoring:** The mission aims to ensure the supply of potable water by adopting appropriate water quality testing methods and monitoring mechanisms.

Importance of Jal Jeevan Mission?

- **Access to Safe Drinking Water:** One of the primary objectives of the mission is to provide safe and clean drinking water to every rural household in India. Access to clean water is essential for human health, as contaminated water can lead to waterborne diseases such as diarrhea, cholera, and typhoid. By ensuring access to safe drinking water, the mission contributes to the overall well-being and improved health of rural communities.
- **Reduction of Waterborne Diseases:** In rural areas where access to clean water is limited, waterborne diseases are prevalent. By providing piped water connections and promoting proper sanitation and hygiene practices, the mission helps reduce the incidence of waterborne diseases. This, in turn, reduces the burden on the healthcare system and improves the quality of life for rural populations.
- **Gender Empowerment:** In many rural areas, women and girls bear the responsibility of fetching water for their households. This often involves long and arduous journeys, which not only takes up their time but also puts them at risk of physical harm and limits their access to education and economic opportunities. By providing piped water connections directly to households, the Jal Jeevan Mission reduces the burden on women and enables them to participate in other productive activities, promoting gender empowerment.
- **Economic Development:** Access to clean water is crucial for agricultural activities, livestock rearing, and various rural industries. By ensuring a sustainable water supply, the mission contributes to agricultural productivity, promotes livelihood opportunities, and stimulates economic development in rural areas. It also helps in addressing water scarcity and promoting efficient water use, leading to improved agricultural practices and increased income for farmers.
- **Environmental Conservation:** The Jal Jeevan Mission emphasizes source sustainability and water conservation measures, such as rainwater harvesting and groundwater recharge. By promoting these practices, the mission contributes to environmental conservation and the preservation of water resources. It also encourages communities to adopt sustainable water management practices, which are crucial for long-term water security.
- **Social Inclusion and Equity:** The mission focuses on providing water connections to every rural household, irrespective of social or economic status. It aims to bridge the gaps in water access and reduce disparities, ensuring social inclusion and equity in the provision of basic services. This promotes a sense of equality and contributes

to social harmony within rural communities.

Challenges in providing Clean Water?

- **Water Scarcity:** Water scarcity is a significant challenge in many regions, particularly in arid and semi-arid areas. Population growth, urbanization, and climate change exacerbate the issue by increasing water demand and putting pressure on limited water resources. Water scarcity affects both rural and urban areas, making it difficult to meet the needs of growing populations.
- **Poor Water Quality:** Contamination of water sources is a critical challenge, especially in rural and peri-urban areas. Industrial pollution, inadequate sanitation systems, agricultural runoff, and improper waste disposal contribute to water pollution. Addressing poor water quality is essential to ensure access to safe and clean drinking water, as well as to protect ecosystems and public health.
- **Infrastructure and Service Delivery:** Developing and maintaining water infrastructure, such as pipelines, treatment plants, and distribution networks, poses significant challenges, particularly in remote and rural areas. Inadequate infrastructure leads to water supply interruptions, leakages, and inefficiencies. Ensuring proper service delivery and regular maintenance of infrastructure are essential for sustained access to clean water.
- **Financial and Institutional Constraints:** Implementing water-related projects and programs requires significant financial resources. Limited funding, especially in low-income countries, hampers the development and maintenance of water infrastructure. Additionally, institutional capacities and coordination among various stakeholders, including government agencies, community organizations, and private entities, can pose challenges to effective water management and service delivery.
- **Climate Change Impacts:** Climate change exacerbates water-related challenges. Changing rainfall patterns, increased frequency of droughts and floods, and rising temperatures affect water availability and quality. Adapting to these climate change impacts requires innovative strategies for water management, conservation, and resilience building.
- **Behavioral Change and Awareness:** Promoting behavioral change and creating awareness about the importance of water conservation and hygiene practices are critical challenges. Education and outreach programs are necessary to encourage communities to adopt sustainable water use practices, improve sanitation and hygiene behaviors, and reduce water wastage.
- **Equity and Access:** Ensuring equitable access to clean water remains a challenge, particularly for marginalized communities, remote areas, and informal settlements. Addressing disparities in access requires targeted interventions, such as prioritizing underserved areas, promoting community participation, and involving marginalized groups in decision-making processes.
- **Conflicts over Water Resources:** Water scarcity and competition for water resources

can lead to conflicts, both at the local and international levels. Disputes over water allocation, transboundary water management, and competing interests among various stakeholders can hinder effective water governance and collaboration.

Source:

<https://pib.gov.in/PressReleaseDetail.aspx?PRID=1931175>

Q.1 Which of the following objectives is associated with the Jal Jeevan Mission (JJM) ?

- (a) Providing clean water to urban households
- (b) Ensuring sustainable water supply to rural areas
- (c) Promoting rainwater harvesting in industrial sectors
- (d) Improving irrigation facilities in agricultural regions

Answer: (b)

Q.2 Which of the following statements regarding the Jal Jeevan Mission (JJM) is/ are correct?

1. The JJM aims to provide functional household tap connections (FHTCs) to every rural household in India.
 2. The mission focuses on source sustainability measures such as groundwater recharge and rainwater harvesting.
 3. The implementation of the mission is primarily centralized, with the central government overseeing all aspects of planning and execution.
- (a) 1 only
 - (b) 1 and 2 only
 - (c) 2 and 3 only
 - (d) All of the above

Answer: (b)

Q.3 Discuss the significance and challenges associated with the implementation of the Jal Jeevan Mission (JJM) in ensuring universal access to clean water in rural areas of India. Highlight the strategies adopted by the mission to address these challenges and evaluate their effectiveness.