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# **ONE HEALTH APPROACH**

THIS ARTICLE COVERS 'DAILY CURRENT AFFAIRS' AND THE TOPIC DETAILS "ONE HEALTH APPROACH". THIS TOPIC IS RELEVANT IN THE "SOCIETY AND SOCIAL JUSTICE" SECTION OF GS1 AND GS2 THE UPSC CSE EXAM.

#### WHY IN THE NEWS?

The Union Cabinet has given the green light to establish a pivotal role at the Scientist H level, at the **National Institute of One Health** in Nagpur. This individual will play a dual role, serving not only as the Director of the institute but also as the Mission Director for the National One Health Mission.

#### NATIONAL ONE HEALTH MISSION

- The concept of One Health serves as a unifying force, **bringing together various sectors to tackle health, productivity, and conservation challenges.** In the context of India, with its rich biodiversity, vast livestock population, and dense human habitation, the importance of One Health becomes even more pronounced.
- The country faces **heightened risks of disease transmission** across different compartments. The COVID-19 pandemic, recent outbreaks like Lumpy Skin Disease in cattle, and the persistent threat of Avian Influenza underscore the need to address health issues not just from a humancentric perspective (zoonosis), but also from the angles of livestock and wildlife.
- Embracing One Health presents an opportunity to harness the complementary strengths inherent in each sector, enabling the **development of integrated**, **resilient**, **and responsive systems** to effectively combat emerging health challenges.
- As part of the mission's initiatives, a nationwide network of high-risk pathogen laboratories, categorized as **Biosafety level 3 (BSL 3) and Biosafety level 4 (BSL 4)**, has been established. This will **enhance the effectiveness of disease outbreak response** efforts across human, animal, and environmental sectors.
- By fostering better connectivity, the **network will enable more efficient responses to complex disease** scenarios, such as Nipah virus outbreaks involving bats, pigs, and humans.

#### **NEED FOR NHOM**

- **Health Interdependence:** Human, animal, plant, and environmental health are deeply interconnected. Diseases can traverse species boundaries, affecting both humans and animals, with environmental factors playing a pivotal role in disease emergence and spread.
- **Rise of Infectious Diseases:** The emergence of new infectious diseases and the resurgence of existing ones pose significant threats to public health, food security, and economic stability. Tackling these challenges necessitates a comprehensive, coordinated approach that encompasses all facets of health.
- **Zoonotic Threats:** Infectious diseases like COVID-19, Ebola, and avian influenza often originate in animals before jumping to humans. A One Health strategy is indispensable for early detection, prevention, and control of such zoonotic diseases at their source.
- **Combating Antimicrobial Resistance:** The rampant misuse and overuse of antibiotics in both humans and animals fuel the alarming rise of antimicrobial resistance. Implementing One Health interventions is critical to promoting judicious antibiotic usage and combating the threat of antimicrobial resistance.
- **Environmental Impact:** Environmental degradation, encompassing activities like deforestation, habitat destruction, and climate change, disrupts ecosystems and heightens the risk of disease transmission between animals and humans. Preserving environmental health is pivotal for safeguarding the well-being of both human and animal populations.
- **Food Safety Assurance:** Guaranteeing the safety and security of the food supply chain mandates collaborative efforts across sectors. Addressing issues such as foodborne illnesses, contamination, and unsustainable agricultural practices is essential for protecting human and animal health alike.

#### **NEED FOR GLOBAL COOPERATION**

- During India's presidency of the G-20, the 'One Health' approach took center stage, garnering widespread support from all member nations. This collaborative effort emphasized specific objectives such as enhancing surveillance capabilities, bolstering analytical capacity, and establishing an international network of 'One Health' institutes.
- 'One Health' transcends mere disease management; it **encompasses broader issues like antimicrobial resistance, food safety, plant health, and the profound impacts of climate change.**
- Interdisciplinary topics like 'One Health' **necessitate active engagement not only from diverse governmental agencies but also from non-governmental organizations**, academia, the private sector, and citizens alike.
- By adopting an actionable framework centered around this approach, we can advance towards the **shared vision of 'One Earth, One Health'** and the universal aspiration of 'Health for All'.
- Twenty first century is marred with challenges such as Climate change, pandemics that are transboundary in nature and require global cooperation. In that context, One health approach is sine qua non for countries in order to solve these problem and can enhance cooperation.

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# CLIMATE CRISIS AND GENDER NEUTRALITY

THIS ARTICLE COVERS 'DAILY CURRENT AFFAIRS' AND THE TOPIC DETAILS OF" CLIMATE CRISIS AND GENDER NEUTRALITY". THIS TOPIC IS RELEVANT IN THE "SOCIAL ISSUES" SECTION OF THE UPSC CSE EXAM.

## WHY IN THE NEWS?

• Recently, the Supreme court of India in Ranjit kumar and others v/s Union of India pronounced that people have a right to be free from the adverse impacts of climate change under Articles 14 and Article 21 of the Constitution of India. The United Nations Development Programme (UNDP) also highlighted that women and children are 14 times more likely than men to succumb to the impacts of a climate induced disaster.

## WHAT IS CLIMATE CRISIS?

• The climate crisis refers to the significant and rapid changes in Earth's climate patterns, primarily driven by human activities such as burning fossil fuels and deforestation. These changes result in rising temperatures, extreme weather events, sea-level rise, and other environmental disruptions, posing profound threats to ecosystems and human societies worldwide.

## HOW THE CLIMATE CRISIS IS DISPROPORTIONATELY IMPACTING WOMEN:-

- Vulnerability in Agriculture A Gendered Perspective Women living in rural areas of India depend largely on agriculture as their main source of livelihood. Climate change-related issues like unpredictable rainfall, droughts, and floods can drastically decrease crop production, impacting these women's food availability and earnings. Furthermore, limited access to land, credit, and technology amplifies their exposure to climate-related challenges. This not only leads to physical health issues but also places additional burdens on women, contributing to mental health challenges and emotional distress.
- **Health Impacts:** The Silent Crisis– Rising temperatures and air pollution pose significant health risks, particularly for vulnerable groups such as pregnant women, children, and the elderly. Exposure to pollutants not only affects women's respiratory and cardiovascular health but also hampers the physical and cognitive development of unborn children. Urgent action is needed to mitigate these risks and protect public health.
- Linking Extreme Events with Gender-based Violence-The escalation of extreme weather events due to climate change correlates with increased incidents

of gender-based violence against women. Moreover, disruptions in water cycles further compound the issue by impeding access to safe drinking water, intensifying women's caregiving responsibilities, and limiting their opportunities for productive work and healthcare.

• **Child marriages–** In areas prone to drought, women and girls face a higher risk of malnutrition due to inadequate access to food. NFHS findings reveal that women residing in these drought-prone regions exhibit higher rates of underweight and are more susceptible to early marriages, contributing to the persistence of poverty and gender disparities.



### **THE IMPERATIVE OF GENDER-INCLUSIVE CLIMATE ACTION-**EMPOWERING WOMEN FOR RESILIENCE

Effective climate action demands the active participation of all segments of society. Empowering women with equal access to resources can enhance the effectiveness of climate solutions, as evidenced by the significant increase in agricultural yields when women receive equitable support. Moreover, women, especially in rural and tribal communities, have historically played pivotal roles in environmental conservation efforts.

### ADDRESSING IMMEDIATE CHALLENGES: HEATWAVES AND WATER SCARCITY

Immediate measures are necessary to mitigate the impact of heatwaves on vulnerable groups and ensure access to safe drinking water. Strategies such as heatwave warnings, urban planning for heat resilience, and community-based water management initiatives can significantly reduce risks and enhance resilience at the grassroots level.

# LOCAL SOLUTIONS FOR GLOBAL CHALLENGES

Community-led initiatives, driven by local knowledge and participation, are crucial for building resilience to climate change. By devolving power and resources to grassroots institutions like panchayats and self-help groups, India can pave the way for inclusive and sustainable adaptation measures.

# MAINSTREAMING GENDER IN CLIMATE POLICY

Efforts to mainstream gender considerations in climate policy are essential for addressing the specific vulnerabilities and capacities of women. State Action Plans on Climate Change must move beyond portraying women as mere victims and adopt gender-transformative strategies that empower women as agents of change.

## ENHANCING URBAN RESILIENCE TO CLIMATE IMPACTS

Cities face growing susceptibility to climate-induced risks like heatwaves, floods, and air pollution. Prioritising green infrastructure in urban planning, including parks, vegetated roofs, and tree-shaded streets, can mitigate the urban heat island effect and minimise exposure to extreme heat. Moreover, efforts to enhance air quality, such as curbing vehicle emissions and advocating for clean energy solutions, are critical for safeguarding public health, especially for vulnerable groups like women and children, who are more prone to respiratory and heart ailments.

# IMPROVED AVAILABILITY OF POTABLE WATER

Climate-induced disturbances to water reservoirs and supply networks intensify water scarcity, jeopardising public well-being. Immediate actions are imperative to enhance access to safe drinking water, especially for women and girls, who often shoulder the main burden of water retrieval in numerous societies. Allocating resources to water infrastructure, rainwater collection mechanisms, and purification technologies can alleviate the adverse effects of water scarcity on atrisk communities.

# INTERNATIONAL CONVENTIONS ON CLIMATE CRISIS AND GENDER NEUTRALITY

- The significance of women's involvement in sustainable development has been recognized in several key global events, including the International Conference on Population and Development (1994), the Beijing Declaration and Platform for Action (1995), the World Summit on Sustainable Development (2002).
- Additionally, the Convention to Combat Desertification **(UNCCD)**, which boasted 193 State Parties as of March 2008, acknowledges the crucial contribution of women, especially in rural areas of developing countries affected by desertification and drought. It calls for its Member States to promote women's

participation in decision-making policies and programmes that address desertification and drought conditions.

### **CONCLUSION: WOMEN AS LEADERS IN CLIMATE ACTION**

Rather than being passive victims of climate change, women possess valuable insights and capabilities that can drive meaningful progress in climate action. By acknowledging and addressing gender disparities, we can forge a path towards a more equitable and resilient future for all. Addressing climate change is expected to have differential impacts on various social groups, particularly those who are most vulnerable and lack empowerment. It is imperative that global and national strategies, along with sector-specific responses, integrate gender perspectives, conduct thorough analyses, and foster inclusive participation to effectively tackle this challenge.

## **PRELIMS BASED QUESTION-**

- **Q1.** Consider the following statements regarding the National Air Quality Index: It is developed by CPCB in collaboration with IIT Kanpur. The index is based on the measurement of the eight pollutants. Choose the correct answer using the codes given below:
  - (a) 1 Only
  - (b) 2 Only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2

ANSWER: C

### MAINS BASED QUESTION-

Evaluate the role of women in climate action and propose strategies for incorporating gender-transformative approaches into national and state-level climate action plans in India.

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