Environment & Ecology · GS - III

Explain how avian influenza outbreaks threaten wildlife and poultry health. Suggest measures for strengthening India's preparedness against such outbreaks.

EXAM YEAR	PAPER	SUBJECT
DAILY PRACTICE 28/11/2026	GS - III	Environment & Ecology

MARKS	WORD LIMIT
15	~250 words

Answer Hint

Zoonotic disease, wild bird migration, poultry biosecurity, surveillance, One Health approach, disease containment

Model Answer

Avian influenza, commonly known as bird flu, is a viral disease primarily affecting birds. Certain strains, particularly highly pathogenic avian influenza viruses, can cause severe mortality among domestic and wild birds.

Major concerns:

1. **Wildlife impact:** Outbreaks can cause mortality among wild bird populations and disrupt ecological balance.
2. **Poultry sector:** Infection can result in mass culling, production losses and disruption of poultry trade.
3. **Human health:** Certain strains can infect humans, particularly through close or unprotected contact with infected birds.
4. **Cross-border transmission:** Migratory birds and movement of poultry products can contribute to the geographical spread of infection.

Strengthening preparedness:

- **Early warning:** Establish systematic surveillance of wild birds, wetlands and poultry farms.
- **Farm biosecurity:** Regulate movement of birds, disinfect equipment and prevent contact between wild and domestic birds.
- **Rapid response:** Ensure prompt laboratory testing, containment and scientifically guided culling where required.
- **Public awareness:** Educate farmers and communities against handling dead or sick birds without protection.
- **One Health approach:** Coordinate animal husbandry, wildlife, public health and environmental authorities.

Conclusion: An integrated surveillance and response system based on the One Health approach is essential to limit avian influenza outbreaks while protecting biodiversity, livelihoods and public health.