Defence & Security · GS - III

In contemporary conflicts, control over information and its verification has become an important dimension of national security. Analyse the role of open-source intelligence and geospatial technologies in countering misinformation during military operations.

EXAM YEAR	PAPER	SUBJECT
DAILY PRACTICE 22/11/2026	GS - III	Defence & Security

MARKS	WORD LIMIT
15	~250 words

Answer Hint

Open-source intelligence, satellite imagery, geolocation, digital verification, information warfare, strategic communication, operational security, misinformation.

Model Answer

Introduction

Modern conflicts increasingly involve information warfare alongside conventional military operations. Conflicting claims about military incidents, such as the reported targeting of an American F-16 in the Gulf, highlight the importance of independent verification.

Role of OSINT and Geospatial Technologies

1. **Geolocation:** Terrain, landmarks and infrastructure help establish where a purported military incident occurred.

2. **Satellite imagery:** Commercial satellite images can independently examine claims about damage and military movements.
3. **Temporal verification:** Shadows, weather conditions and metadata can help assess when footage was recorded.
4. **Information corroboration:** Cross-checking independent sources reduces dependence on unverified claims.
5. **Strategic awareness:** OSINT supports situational awareness for governments, researchers and journalists.

Limitations and Risks

- Manipulated videos and AI-generated content can mislead audiences.
- Restricted battlefield access makes independent verification difficult.
- Deliberate misinformation can influence public opinion and diplomatic relations.
- Excessive disclosure of geospatial information may compromise operational security.

Way Forward

India should strengthen defence-oriented OSINT capabilities, develop digital forensic expertise, encourage inter-agency information sharing and establish credible public communication mechanisms.

Conclusion

Information verification is increasingly integral to national security. Combining technological tools with independent corroboration and responsible communication can reduce misinformation without compromising operational security.