

India's Drone Modernisation

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India's Drone Modernisation : From Reconnaissance to Strategic Dominance

Context

The **second Nagorno-Karabakh conflict (2020)** marked a significant transformation in modern warfare, with drones becoming a decisive element in combat. This evolution was reinforced for India and Pakistan during **Operation Sindoor (May 7-10)**, where **Unmanned Aerial Vehicles (UAVs)** and **Unmanned Combat Aerial Vehicles (UCAVs)** moved beyond surveillance to deliver precision strikes. The shift from reconnaissance to decisive strike capabilities has created new opportunities and challenges for India in both national defence and the **Indo-Pacific drone market**.

Introduction

The changing nature of warfare has placed UAVs at the centre of military strategy. For India, the lessons from Operation Sindoor have highlighted the urgent need to **modernise its UAV fleet**, diversify procurement strategies, and explore opportunities for **defence diplomacy** in the Indo-Pacific. The decline of U.S. dominance in the drone export market, coupled with rising **China-India strategic competition**, has further underlined the importance of indigenous capacity-building and export potential.

India's Push for Drone Modernisation

- Following Operation Sindoor, India has intensified its focus on modernising UAV capabilities.
- In **2024**, India procured **31 MQ-9B Reapers** from the U.S., including **SkyGuardian** and **SeaGuardian** variants, to boost **maritime surveillance** and **strategic cooperation**.
- These meet only part of India's diverse defence needs, which include **high-altitude, long-range fixed-wing drones** for heavy payload strikes and **smaller, cost-effective systems** for targeted missions in contested border regions.

- Current assets include older Israeli systems such as the **Harop loitering munition** and **Heron medium-altitude drones**, which remain effective but lag behind cutting-edge models.
 - Much of the UAV fleet consists of **legacy imports** from before the last decade, with limited indigenous platforms, indicating the need for faster and broader upgrades.
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India's Evolving Procurement Strategy

- India is shifting from reliance on complete U.S. UAV systems to acquiring **critical American components** like power plants and electronic payloads, while sourcing or manufacturing the rest domestically.
 - The global UAV market is led by the **U.S., China, Türkiye, and Israel**, but the U.S. held only **8%** of the export market by the end of **2023**, partly due to strict **Missile Technology Control Regime (MTCR)** compliance.
 - India is addressing capability gaps through imports, **joint ventures**, and domestic production, with Israel and select European suppliers as main partners.
 - Strained ties with **China** and **Türkiye** limit the possibility of sourcing technology from these countries.
 - India aims to develop capabilities to become a **fixed-wing UAV supplier** for the Indo-Pacific, catering to both domestic and regional needs.
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China's Influence and India's Strategic Opportunity

- Several Indo-Pacific nations, including **Vietnam, the Philippines, Taiwan, South Korea, and Japan**, face maritime disputes with China.
- **Maritime Domain Awareness (MDA)** is essential to counter China's **gray-zone tactics**, which involve coercive actions short of open warfare.
- Israel's defence export capacity is currently constrained by the ongoing West Asia conflict, while Türkiye has become a major global drone supplier.
- Given adversarial ties with Türkiye, India has a strategic interest in limiting Ankara's

influence in the region through **drone diplomacy**.

- Many Indo-Pacific nations share operational needs similar to India's, such as **high-altitude border surveillance** and **maritime monitoring**, making them potential markets for Indian UAV exports.
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India's Opportunity in the Indo-Pacific Drone Market

- The decline of U.S. dominance in the region's drone market has created a strategic gap India can fill.
 - By building **tailored UAV systems**, India can meet its own defence requirements and expand geopolitical influence through exports.
 - Challenges include bureaucratic inefficiency and an over-reliance on the public sector in defence manufacturing.
 - Leveraging strong defence ties with **Israel** and joint venture experience can accelerate indigenous capacity-building.
 - Technology-sharing frameworks with like-minded Indo-Pacific nations can enhance trust and strategic cooperation.
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Conclusion

India's ability to **develop and export customised UAVs** offers a dual advantage: securing national security interests and strengthening strategic partnerships in the Indo-Pacific. This approach can help counter China's growing influence, reduce dependence on traditional suppliers, and position India as a **key regional defence partner**.