

The “porcupine doctrine”

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In news— Recently Taiwan has invoked the ‘porcupine strategy’ to protect itself if China attacks.

What is a porcupine strategy?

- The “porcupine doctrine”, which was proposed in 2008 by US Naval War College research professor William S Murray, is a strategy of asymmetric warfare focused on fortifying a weak state’s defences to exploit the enemy’s weaknesses rather than taking on its strengths.
- It is about building defences that would ensure that Taiwan could be attacked and damaged but not defeated, at least without unacceptably high costs and risks.

Experts have identified three defensive layers in the porcupine approach. They are:

- The outer layer is about intelligence and reconnaissance to ensure defence forces are fully prepared.
- Behind this come plans for guerrilla warfare at sea with aerial support from sophisticated aircraft provided by the US.
- The innermost layer relies on the geography and demography of the island.
- The ultimate objective of this doctrine is that of surviving and assimilating an aerial offensive.
- While the outer surveillance layer would work to prevent a surprise attack, the second one would make it difficult for China to land its troops on the island in the face of a guerrilla campaign at sea using agile, missile-armed small ships, supported by helicopters and missile launchers.

Asymmetric systems of defence-

- In its 2021 Quadrennial Defence Review, **Taiwan's Ministry of National Defence defined asymmetric systems as ones that are** "small, numerous, smart, stealthy, mobile and hard to be detected and countered", and "associated with innovative tactics and employments".
- Taiwan's 2021 Defence Review also spoke of efforts to build a multi-layered maritime strike power using "coastal mobile anti-ship missiles, light and rapid maritime force, and advanced naval mines", apart from using "**new offensive and defensive technologies of EW (electronic warfare) and cyber warfare**", as well as multi-functional unmanned systems for surveillance and strike".
- These asymmetric capabilities will be aimed at striking the "operational centre of gravity and key nodes of the enemy.
- **Taiwan underlined its shift to an asymmetric approach by adopting the Overall Defence Concept (ODC) in 2018.**
- **The ODC is Taiwan's current strategy for dealing with a potential Chinese invasion in a resource-constrained environment while using its "natural advantages, civilian infrastructure and asymmetric warfare capabilities.**

China's live-fire exercises-

- Amidst the visit of a US speaker to Taiwan, China has started the live-fire exercises.
- Live-fire exercises are **exercises primarily used by military personnel, in which live ammunition is used to create training conditions that are as close to real combat scenarios** as possible.
- Live-fire exercises are also **used by law enforcement and firefighters as a form of field training**, to train them to act calmly in real-life emergency situations in the future.
- **During live-fire training, soldiers are placed in**

simulated combat situations and are given the opportunity to use their weapons and equipment (like ships, aircraft, tanks and drones).

- Such exercises are **invaluable in maintaining combat readiness of troops**, the cohesiveness of units, and instilling confidence in their ability to use their weapons and equipment correctly.
- It **also involves testing the effectiveness of vehicles, weapon platforms** and weapons systems (such as intercontinental ballistic missiles, cruise missiles, anti-aircraft weapons), so that any design flaws can be resolved before the weapons are fully operational.
- In the recent case in the Taiwan Strait, live-fire exercises allow countries to brandish their military prowess and capacity for destruction.
- The drills involving warplanes, ships and missiles are designed to show the level of lethal force that China could unleash on Taiwan, if the country refuses to toe the line set by Beijing.
- **China had previously undertaken a similar show of force during the Third Taiwan Strait Crisis in 1995-1996**, when it fired missiles into the waters near Taiwan, after former President Lee Teng-hui visited the US, despite China's strong objections.