

GS Mains Daily Answer Writing

Week 7 - Day 5

Model Structures

1. “Over the past decades, there has been a doctrinal shift in India’s defence policy from defensive deterrence to offensive deterrence.” Analyse. (150 words)

Model Structure

Introduction

- Defensive deterrence is also known as deterrence by denial is the practice of discouraging or restraining a nation from taking unwanted actions, such as an armed attack. It involves an effort to stop or prevent an action.
- Offensive deterrence or deterrence by punishment on the other hand is to carry the fight to the enemy through means such as exploiting internal contradictions, international isolation, etc.

Main Body

- Shift in India’s defence policy:
 - India carried out surgical strikes in Pakistan Occupied Kashmir in the aftermath of Uri Attack.
 - India responded to the February 14 Pulwama terror attack with an aerial surgical strike on targeting the training facility of the perpetrators within mainland Pakistan
 - The raising of two new army divisions in 2009, Mountain Strike Corps since 2013 and the positioning of Sukhoi Su-30MKI squadrons in Northeast India are intended to provide a shift in military strategy from a defensive posture (deterrence by denial) towards deterrence by punishment vis-à-vis China.
 - More recently, virtually all Indian Army and Air Force acquisitions have been aimed at reducing the Chinese operational advantage in Tibet, from the US-made Apache and Chinook helicopters and M777 artillery to the French Dassault Rafale fighter squadrons, armed with SCALP and Meteor missiles.

- In a contingency with China, the capacity to interdict Chinese operational and logistic infrastructure in Tibet is the key to India's operational plans. This is the main rationale for stationing Sukhoi Su-30MKI fighters and BrahMos Block III missiles in Northeast India, providing the capability to strike targets deep inside Tibet.
- Development of India's Integrated Missile Development Programme
- India's Nuclear Weapons programme
- Reasons for the shift:
 - Lack of positive results with India's traditional and preferred defensive strategy
 - The offence on the other hand was unmindful of the nuclear threshold. This left India with the strategic doctrinal choice of 'defensive offence'.
 - India's hostile neighbourhood is also the reason for the change in this doctrine.
 - Rising number of offensive actions by China and Pakistan on Indian borders

Conclusion

- The choice of security doctrine is a prerequisite for a government as it informs its actions in preserving, creating and securing the conditions of security for the state. With changing tactics and nature of warfare, India too must evolve its security doctrines.

2. Effective water management calls for a multidimensional approach that addresses both ecological and socio-economic concerns regarding water use and exploitation. Discuss in the Indian context. (250 words)

Model Structure

Introduction

- According to a Niti Aayog Composite Water Management Index Report 2018, India is currently suffering from the worst water crisis in its history with the country ranked at 120 among 122 countries in the quality of water (Water Quality Index released by WaterAid).

Main Body

- Ecological and Socio-economic concerns regarding Water use and exploitation:
 - The Composite Water Management Index (CWMI) acknowledged that the country is suffering from the worst water crisis in history and about 45% of the Indian population suffer from high to severe water stress.
 - Vast numbers of flora and fauna might be under threat due to severe water stress.
 - India is an agriculture dependent economy, water stress can lead to severe impact on agriculture sector → thereby impacting millions of people
 - According to ICAR the per capita availability of water is estimated to decline to 1,465 cubic meter by 2025 and 1,235 cubic meter by 2050. If it declines further to around 1,000-1,100 cubic meter, then India could be declared as a water-stressed country.
 - FAO estimates that poor drainage and irrigation practices have led to waterlogging and salinization of about 10 percent of the world's irrigated lands. These practices also contribute to the spread of water-borne diseases, such as diarrhoea, cholera, typhoid and malaria.
 - Virtual water exports – the molecules of H₂O embedded in exported goods, alongside those rendered unusable by the production of those goods – Examples - Rice, sugarcane, cotton, etc.
 - Sociocultural implications of the crisis are far less noticed. India's patriarchal society puts the burden of household chores on girls and women. To complete their daily tasks, they are made to travel miles each day to collect water.
- Effective Water Management for addressing Ecological and socio-economic concerns:
 - Replace conventional surface irrigation (60-70% efficiency) by higher efficiency sprinkler (70-80%) and 90% efficient drip irrigation system.
 - Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) which focuses on "more crop per drop".
 - New agronomic practices like sub-surface irrigation, raised bed planting, ridge-furrow method of sowing, and precision farming etc which have the potential to reduce water-use in agriculture should also be adopted.
 - Northwestern and central part of the country which is severely water stressed should stop producing water-intensive crops like rice and sugarcane. Farmers

should be given adequate incentives to switch to shift to crops like millets which require much less water and are climate resilient. For Example: #LetsMillet Campaign by the Karnataka government.

- Effective water management on a broader level needs strong political will and setting up the Jal Shakti Mantralaya is a step in the right direction.
- The 'Draft Water Framework Bill 2016', as proposed by the Water Resources Ministry, and pending for enactment, should be urgently finalised.
- Using behavioral economics and social influence techniques to promote efficient water use.
- As per the UN's Dublin Principle (1992), water is an economic good and hence should reflect its scarcity value. The National Water Framework Bill lays down the principle of water pricing, it says that water used for commercial agriculture and industry should be priced on full economic pricing basis and for domestic use, a graded pricing system may be adopted.
- With the increasing population and dependence on water, it becomes pertinent for households to start investing in rain-water harvesting systems (RWH). Govt, both at the centre and state must take a proactive step towards making it mandatory for buildings and complexes to install Rainwater Harvesting System.

Conclusion

- A rapidly urbanizing and developing India needs to drought-proof its cities and rationalize its farming. Water-harvesting must be a priority, alongside mechanisms for groundwater replenishment.