DAILY CURRENT AFFAIRS ANALYSIS LAKSHYA JICHDEMY

06 JANUARY 2025

1 – About Operation Ajay:

GS III

Internal Security

• Important information:

- This will be the second evacuation of this year, following the return of several thousand Indian citizens from the war-torn Sudan via Operation Kaveri.
- Operation Ajay is being launched by the government to help nationals who want to return from Israel.
- Days after Air India halted operations on the Delhi-Tel Aviv route in response to a devastating attack on Israel by Hamas, the statement was made.
- Demand will determine Operation Ajay's scope, and the government will increase capacity in response to further needs.

• Source → The Hindu

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2 – About Infections at the surgery site:

GS II

Health related issues

• What is an infection at the surgery site?

- Surgical site infections are a prevalent global surgical complication.
- It is an infection that develops at the body's surgical site.
- It could be a superficial skin infection or a more serious tissue-related infection.
- An estimated 11% of surgical patients get these infections, per a 2018 WHO report.

• Main conclusions of the recent study:

- The resource costs for patients who had abdominal surgery across 13 hospitals in four countries were examined in the recent study by the researchers:
- Russia
- Spain
- Nigeria
- Ghana.

• Two categories were established for the procedures:

• Clean surgeries:

• whereby surgeons perform controlled, sterile incisions into the urinary tract, intestines, or respiratory system.

• Unclean and contaminated surgeries:

- which covers unintentional cuts, gastrointestinal leaks, or a break in the sterile environment.
- The study was a component of the broader FALCON randomised controlled trial (RCT), which
 examined the impact of interventions on surgical site infections across seven countries and 57
 institutions.
- This is the first surgical cost study of its sort to look at surgical site infections across multiple continents, and it shows that these infections significantly increase postoperative expenses in a variety of contexts.

Indian context:

- At ₹ 46,000, India had the largest rise in healthcare expenses related to surgical site infections after clean-contaminated procedures.
- At ₹ 20,000, it also had the least increase in healthcare expenses due to surgical site infections following contaminated, unclean procedures.
- Semi-urgent and emergency procedures account for a large percentage of surgical site infections, and the financial burden of these infections is severe for patients in India, where insurance coverage is limited and out-of-pocket costs are high.
- Additionally, India has continuously had a higher rate of surgical site infections than the global norm.
- This is due to a number of factors, including a rise in emergency surgery, shoddy hospital
 procedures, and the widespread use of antibiotics.

- Errors and morbidity can be decreased even with a basic checklist of steps including skin washing and proper site labelling prior to surgery.
- Source → The Hindu

3 – Antarctica's large ozone hole found:

GSI

Geography related issues

• Important information:

- The hole was almost three times the size of Brazil, measuring 26 million square kilometres (10 million square miles), or what scientists refer to as an ozone-depleted area.
- In order to track the ozone layer and climate, the European Space Agency's Copernicus Sentinel-5P satellite detected trace chemicals in the atmosphere.
- It demonstrated that the ozone hole this year had a significant expansion and had begun earlier than usual.
- According to experts, there is little chance that the ozone hole will cause more warming on Antarctica's surface.

• Is there cause for concern?

- One of the four layers of the Earth's atmosphere is the stratosphere, where the ozone layer is a trace gas.
- It serves as a barrier gas shield that absorbs UV rays, shielding ecosystems and people from harmful UV exposure.
- Since exposure to high UV radiation levels is the primary cause of most skin cancers, anything that protects us from UV rays lowers the incidence of cancer.
- The Antarctic ozone hole's magnitude varies annually; it opens in August and closes again in November or December.
- Because of the Earth's rotation, which creates unique winds over Antarctica's enclosed continent, the ozone hole opens up.
- Antarctica is shielded from the outside air by the winds, which produce a miniature climate.
- The hole closes when the winds stop.

Why did this year's massive ozone hole occur?

- The massive ozone hole of this year may have resulted from the volcanic eruptions that occurred at Hunga Tongain Tonga in December 2022 and January 2023.
- Normally, gas emitted during a volcanic eruption stays below the stratosphere, however a significant amount of water vapour was released during this eruption and entered the stratosphere.
- Through chemical interactions, the water altered the rate of heating of the ozone layer.
- In addition to these ozone-depleting substances, the water vapour also contained iodine and bromine.

Ozone holes caused by humans:

- Although a volcanic explosion is most likely to blame for this year's Antarctic ozone hole, scientists first noticed that human activity was causing massive ozone holes in the 1970s.
- The purpose of the 1987 Montreal Protocol was to phase out the production of dangerous compounds in order to preserve the ozone layer.
- Ozone holes shrank in the decades following the limitation of ozone-depleting petrol emissions, demonstrating the effectiveness of the protocol. Source → The Hindu

4 – New Plan by Odisha Government for Rural Development:

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Government Policies and Interventions

Important information:

- Each panchayat in the state will receive Rs 50 lakh in funding under this to pursue initiatives for:
- safeguarding houses of worship,
- renovating historically significant locations, and
- enhancing internet access and infrastructure in rural areas.
- As part of the new plan, the government has given money for a number of initiatives based on recommendations from the state's 80% rural population.

• These initiatives consist of:

- enhancing connectivity to the internet.
- creating science parks and playgrounds.
- facilities for training.
- centres of expertise and employment for rural business owners.
- initiatives to overcome the infrastructure gap in education.
- offering banking services, and
- technological framework at the community level.
- Source → The Hindu

