

UPSC EDITORIAL ANALYSIS 30 JUL 2021

EDITORIAL 1: THE WINGS OF PEGASUS, THE EPOCH OF CYBERWEAPONS

Topic: General Studies Paper 2 (Cybersecurity)

Context:

- The misuse of Pegasus spyware across the World has reignited the debate on the role of cyber weapons.
- Previously, there were occasional and sporadic instances of a cyberattack, but in recent times, cyberattacks on institutions such as banks and critical infrastructure have proliferated to an alarming extent, signalling the emergence of the cyber weapon epoch.
- The Pegasus spyware has given a chance for nations to emerge from their deep slumber about the threat posed by such new-age Cyberweapons.



An evolution

- One of the earliest incidents of Cyber Crime occurred in the 1990s when Yahya Abd-al-Latif Ayyash, who served as the chief bomb maker for Hamas, was assassinated by Israel's

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domestic Intelligence Agency, Shin Bet, using a doctored phone containing explosives, Where he responded to a call from an unknown person.

- Similarly, then there was the destruction of the Vemork power station (in Norway) during the Second World War which took months of planning, and the extensive resources of the Allied Powers.
- Norsk Hydro, an aluminium and energy producer, also became the victim of a cyberattack that involved less time but huge efforts.
- The exploits of the past, took months of effort, and the utilisation of large numbers of people and resources to achieve, but In 2019 the same can be achieved with very little effort and without life loss.
- Moore's Law democratised access to computing, and the advent of the Internet opened a whole new avenue for communication,
- However, along with Benefits there came side effects such as Privacy has been eroded and the Internet has become a powerful weapon in the hands of those seeking to exploit its various facets.

Now, a preferred weapon

- In recent times, in addition to land, sea, air and space, Cyber has become the fifth dimension of warfare.
- However, cyber, as the domain of military and national security, also co-exists with cyber as a domain of everyday life due to which War is directly inside one's drawing-room, with cyberweapons becoming the weapon of choice.
- In recent times, along with Americans, Russians, Koreans Chinese and Israelis too dominate the cyber domain.
- In the 21st century, cyberspace along with the domain of warfare has become a domain of Civilian Space, due to which cyberweapons are now ranked as special weapons, not unlike nuclear devices of earlier times.
- For Example, In 2010, Stuxnet Worm helped disable several hundred centrifuges at the Iranian nuclear facility in Natanz which was unleashed by the joint U.S.-Israeli effort.
- Thus cyber weapons are the new weapons that have in sense crossed the Rubicon.
- The Israeli Company claims that Pegasus spyware is sold only to governments and official agencies are unproven and may be untrue as in 2019, WhatsApp had sued NSO over allegations that several hundreds of its users were the targets of the Pegasus spyware. Israel has now considered Pegasus as a cyberweapon and claims that its exports are controlled.

Work in progress

- The Pegasus spyware can copy messages that are sent or received, 'harvest photos and record calls, secretly film through the phone's camera, or activate the microphone to record conversations.
- It can also track the location of where you are, where you have been, and whom you have met.
- The spyware once injected into the phone can extract any information from the phone.
- In 2016, An earlier version of Pegasus, infected phones through the 'spearphishing' technique.

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- And now, it employs 'zero clicks' attacks, where there is no interaction required with the part of the phone owner.
- It is used to exploit certain 'zero day' vulnerabilities found in operating systems, about which the manufacturers themselves are unaware.
- The Pegasus spyware can be installed over a wireless trans-receiver located near a target using the 'root privileges' technique, which enables communication with its controllers through an anonymised network on Internet addresses and servers and transit data.

CyberAttacks in the Past Decade:

- In 2007 devastating cyberattack on Estonia's critical infrastructure, followed by the Stuxnet worm attack a few years later on Iran's nuclear facility.
- In 2012, The Shamoon virus attack on Saudi Aramco, followed by a 2016 cyberattack on Ukraine's State power grid and the 2017 Ransomware attack (NotPetya) which affected machines in as many as 64 countries.
- Later in 2017, there was a Wannacry attack on the United Kingdom's National Health Service; followed by series of attacks on Ireland's Health Care System in 2021.
- Even in the United States, there was a cyber-attack named 'SolarWinds', a cyber attack on Colonial Pipeline and JBS, etc.

Grave threat

- Cyberweapons becoming the weapon of choice not only during a conflict but even during peacetime is a serious matter of concern.
- Cyberweapons are very dangerous as they have the capacity to distort systems and structures, civilian or military and also interfere with democratic processes, aggravate domestic divisions and unleash forces over which established institutions or even governments have little control.
- The Pegasus spyware is currently anonymous but the reprieve is likely to be only temporary. Cyber methods which remain unrecognisable can be only for a limited period, later it poses a grave threat.
- There is a need to guard against, a new epoch of cyber threats which is employing newer, state-of-the-art cyberweapons, thus intensifying cyber insecurity across the board.
- In the world of the Internet, the cyber threat is only bound to intensify, both in the short and the medium term.
- Cyber Crime has advanced so much that, instruments of everyday use can be infected or infiltrated without any direct involvement of the target.
- Due to several misuses in the past and the graver consequences it gives to individuals, an establishment, or the nation, Cyber Crime from wholesale espionage, is on verge of becoming sabotage.

Need for analysis

- Cyber threats need careful analysis and assessment having greater rationale or depth analysis of critical threats posed by sophisticated spyware such as Pegasus.
- To overcome 'zero day' vulnerabilities, there is a need for more research and introspection than merely creating special firewalls or special phones that are 'detached' from the

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Internet. Along with understanding cyber technologies, there is a need to understand the mindsets of those who employ spyware of the Pegasus variety, and those at the helm of companies such as the NSO.

- Instead of Short-term remedies, one should focus on long term permanent solutions.

Conclusion:

- ✓ As cybercrime increases, technology that is perceived as a friend could well become a matter of despair.
- ✓ With the pace at which cyber technology is evolving, erecting proper defences may be difficult.
- ✓ Artificial Intelligence (AI) is which is seen as the greatest advancement in technology is a double-edged sword because it has the capability of turning all information warfare, including cyber-related impossible to detect, deflect.
- ✓ There is a need for steps with much analysis and research otherwise security in the era of ever-expanding cyberweapons could become an ever-receding horizon as cyber technology may expand with newer crimes.

Reference:

The wings of Pegasus, the epoch of cyberweapons: <https://thg.page.link/i9fK7BukoBoe9LUM9>

EDITORIAL 2: THE LONG ROAD TO WINNING THE BATTLE AGAINST TRAFFICKING

Topic: General Studies Paper 2 (Vulnerable Sections & Social Justice)

Context:

- July 30 is celebrated as United Nations World Day against Trafficking in Persons.
- In India, when the analysis was made Child Rights non-governmental organisation (NGO) on human trafficking crisis it was found that Between April 2020 and June 2021, around 9,000 children have been rescued after being trafficked for labour.
- In other words, 21 children have been trafficked every day for nearly 15 months and the Childline India helpline received more than 44 lakh distress calls over the same period.
- Out of 9000, only 2,000 children have arrived at its shelter homes and 800 rescued from hazardous working conditions.

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Increased vulnerability

- Due to the pandemic, Children as young as 12 are trafficked across the States to work in factories in appalling conditions, where owners are turning to cheap labour to recoup their losses.
- For Example, In November 2020, four children, between 12 and 16 years, died after being trafficked for labour from Bihar to Rajasthan, while others had injuries.
- Even Child marriages have increased during the Pandemic, 10,000 cases were tracked between April to August 2020. In Madhya Pradesh, about 391 child marriages were stopped in April-May 2021, Similarly, in Odisha, 726 child marriages were prevented between January-May 2021.
- Child Rights NGO has highlighted that the recent huge increase in Child labour is due to pandemic which has resulted in the loss of income and economic crisis, causing families' reduced capacity to care for children in the long-term whose advantage is taken by the traffickers.
- Also, in few cases there has been a loss of parental care due to death, illness or separation, thereby placing children at heightened risk for violence, neglect or exploitation.

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- Along with these factors, lack of checks against child labour and child marriage provided by law, as well as the scrutiny of schools and society led to increased trafficking.
- In recent times, Cyber trafficking is popular, in which trafficker or middleman lures the person to a place under the pretext of offering him employment, Once removed from their locality, they face challenges of limited resources, unfamiliarity with the area and perhaps the local language and it becomes easy for the traffickers.
- The traffickers nowadays, spend huge time online to entrap victims, by advertising false jobs on social media. Also, there is an increased demand for child sexual exploitation material online due to lockdowns.
- Threats of violence from the trafficker, and the absence of any identifiable authority to approach other than the police makes it very difficult for trafficked persons to report the incident.

Scant data, other gaps

- There is no national-level data specific to cyber trafficking cases.
- Further, various schemes implemented by the Ministry of Home Affairs is not effective in the investigation and prosecution of cybercrimes.
- U.S. Department of State in its report on global human trafficking classifies India as a Tier-2 country as India doesn't meet the minimum standards under U.S. and international law for eliminating trafficking.
- The lack of implementation can be illustrated, by the state of the Anti-Human Trafficking Units (AHTUs).
- AHTUs are specialised district task forces comprising police and government officials.
- It was planned that 330 AHTUs would be set up, but as of now, only 225 AHTUs had been set up, that too only on paper.
- AHTUs, If properly staffed and funded, would help to provide crucial ground-level data on the methods and patterns of traffickers, which would help to strengthen community-based awareness and vigilance activities.
- Insights can be taken from Nigeria, Africa, and a larger framework to protect women and children by incentivising education and creating safe employment opportunities should be the next course of action.

Draft Bill, judicial issues

- The government is introducing a new anti-trafficking bill, it has to be highlighted that in India, there exists already several laws, but there is a lack of implementation of the laws.
- There need to bring in the National Investigation Agency and increase the punishment for offences, including the death penalty as an option in some cases.
- The draft Bill also Suggests for AHTUs/committees at the national, state and district levels, but as seen earlier their implementation is not done and it's only on paper.
- Special attention must also be paid to the challenges prosecutors and judges face in trafficking cases.
- For example, In 2019, There were 140 acquittals and only 38 convictions highlighting the failure of investigation which cannot be solved by the draft Bill's provision that accused traffickers must be presumed guilty unless they can prove the contrary.

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- Trials drag on for years, due to which, victims sometimes withdraw their complaints after being intimidated by traffickers.
- Hence, there is a need for fast-track courts, monetary compensation to beneficiaries and the provide consistent access to psychological counselling.
- The draft Bill recognises the importance of rehabilitation, but how far it's going to be implemented is the point.

Conclusion:

- ✓ During the pandemic, low-income communities, who have faced much financial distress are also the major victims of trafficking.
- ✓ With schools continuing to be closed in India and a never-ending pandemic, it cannot be assumed that incidents of trafficking will decline with a return to “normalcy”.
- ✓ It's high time that the Government and other stakeholders take immediate preventive action now to further aggravate the crisis and protect Child Rights.
- ✓ July 30 should be the beginning of the end of human trafficking in India.

Reference:

The long road to winning the battle against trafficking: <https://thg.page.link/ZxdoRcUBjwhEj3Fu8>

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