

**12. What are the advantages of precision irrigation methods over traditional one? Discuss the components of Pradhan MantriKrishiSinchai Yojana for the use of precision irrigation in Indian agriculture.**

Micro – drip sprinkler

- (a) Water saving.
- (b) Efficient and economic use of fertilizers.
- (c) Easy installation, flexibility in operation.
- (d) Suitable to all types of land terrain also suitable to waste lands.
- (e) Enhanced plant growth and yield and uniform and better quality of produce.
- (f) Less weed growth.
- (g) Labour saving.
- (h) No soil erosion, saves land as no bunds, etc. are required.
- (i) Minimum diseases and pest infestation.

*Discuss- Essentially this is a written debate where you are using your skill at reasoning, backed up by carefully selected evidence to make a case for and against an argument, or point out the advantages and disadvantages of a given context. Remember to arrive at a conclusion*

This scheme has amalgamated three ongoing programmes of three different ministries as follows: Accelerated Irrigation Benefit Programme of the Ministry of Water Resources Integrated Watershed Management Programme of the Ministry of Rural Development Farm water management component of the National Mission on Sustainable Agriculture.

Component - Enhance adoption of precision-irrigation and other water saving technologies under More Crop Per Drop. This component promotes efficient water conveyance and precision water application devices like drips, sprinklers, pivots, rain-guns in the farm  
At least 10% of the command area to be covered under micro/precision irrigation.

However there is nothing new in it. Such components are in the past also but without any good result. New thinking is required regarding effective implementation focusing upon capacity building of stakeholders, technology demonstration, extension services and regulatory measures

**13. Genetically modified Bt cotton triggered a revolution but not without costs.Examine in the light of recent controversy between the Government and a MNC.**

*Examine- Look in close detail and establish the key facts and important issues surrounding a topic. This should be a critical evaluation and you should try and offer reasons as to why the facts and issues you have identified are the most important, as well as explain the different ways they could be construed*

After the Union government proposed a cut in royalties paid on Bt cotton seeds, which are seeds genetically modified to give pest-resistance to cotton crop and most of which are sold by the joint venture Mahyco Monsanto Biotech Limited, the parent firm declared that it will have

to reevaluate its India business and also pulled out from introduction of new variety in series. Monsanto termed it “arbitrary and innovation-stifling government regulations”. Govt responded saying the MNC is free to leave the country. Farmers associations are cheering the move saying it will bring relief to cotton farmers.

At present, 96% of India cotton cultivation area is under Bt cotton crops but it wasn't always so. The introduction of Bt cotton led to a dramatic increase in production across the cotton producing states and soon Bt cotton took over most of the acreage under cotton cultivation. Cotton production rose from 14 million bales in the pre-Bt year of 2001-'02 to 39 million bales in 2014-'15, a rise of almost 180%. India's cotton imports fell, exports grew and as of 2015-16 India is expected to have overtaken China as the biggest cotton producer in the world.

But with the adoption of Bt cotton came with side effects, which farmers and food activists have been protesting for the past decade. The first qualifier in the adoption of Bt cotton is that the seeds are more expensive than local, non-genetically modified varieties. The second is that the seeds cannot be reused and farmers need to buy new stock for every growing season. This, along with licencing agreements with local seed companies, has given Monsanto a near monopoly on cotton seeds in India that has been the biggest worry for activists. The third worry was the diffusion of illegal Bt hybrids that hadn't been cleared for biosafety standards, leading to fears of environmental toxicity. Activists have also raised the issue of the actual efficacy of the Bollgard seeds with reports of bollworm infestations even in Bt cotton crops. After admitting that the bollworm has developed resistance to Bollgard, Monsanto developed Bollgard II, which is the most widely-used hybrid in India now. In reality, Bt provides protection only against one type of cotton pest but leaves the plant open to attack from others like aphids, which might be another reason that cotton yields have stagnated in recent years.

Meanwhile, agricultural economist Ashok Gulati has said the government's interference in cotton prices will cost the sector. Gulati contends that the move will hit India's credibility on the issue of protecting intellectual property rights at a time when Prime Minister Narendra Modi has been calling for global companies to “make in India” and invest in India. If Monsanto leaves then India will lose access to the new iterations of its Bollgard seed that farmers might need in the next three to five years.

**14. Entire country has now come under the sway of National Food Security Act. Discuss the essential reforms needed in PDS which is a critical feature of NFSA.**

Under the NFSA, passed by parliament in 2013, the government provides five kg of food grain per person at highly subsidized rates. Subsidy amounts to 1,40,000 crore rupees. The entire country has now come under the National Food Security Act sway as Kerala and Tamil Nadu too have come on board. NFSA distribution is through PDS.

Problems:

- Taking into account all the inefficiencies of PDS, it is found that GOI spends Rs. 3.65 to transfer Re 1 to the poor.

- A study was conducted by the Tata Economic Consultancy Services to ascertain the extent of diversion of commodities (from the distribution system) supplied under the PDS. At the national level, it is assessed that there is 36% diversion of wheat, 31% diversion of rice.
- The grain available at PDS outlets is often of low quality – spoiled in storage
- The PDS has benefited the poor only marginally. NSS consumption data indicates that PDS provided only about 8 to 20 percent of the food purchases of the poor
- Fraudulent dealers replace good supplies received from the FCI with inferior stock and sell FCI stock in the black market
- Illicit fair price shop owners have been found to create large number of bogus cards to sell food grains in the open market

Reforms needed:

- Plugging the leakages in present PDS
- End to end computerizations for transparency
- Right of consumers with regard to certain information
- Social audit - formation of an FPS Committee by each Gram Panchayat

**15. What are the environmental hazards associated with e-wastes? Discuss the main features of E-wastes Management Rules, 2016 and bring out the differences from earlier set of rules.**

e-waste describes discarded electrical or electronic devices. India ranks fifth in the world in generating e-waste according to the UN's Global E-Waste Monitor generating 1.81 million tonnes a year.

Informal processing of electronic waste in developing countries causes serious health and pollution problems. Some electronic scrap components, such as CPUs and CRTs, contain contaminants such as lead, cadmium, beryllium, mercury, and brominated flame retardants having serious health effects.

The processes of dismantling and disposing of electronic waste in the third world lead to a number of environmental impacts. Liquid and atmospheric releases end up in bodies of water, groundwater, soil, and air and therefore in land and sea animals – both domesticated and wild, in crops eaten by both animals and human, and in drinking water.

E-wastes Management Rules, 2016 – in March 2016

- The key difference between the previous set and the current one is the "reverse chain" that is mandated to be created by the producers under the Extended Producer Responsibility (EPR) to ensure electronic products are recovered for safe recycling
- Incentive - A "buy back" policy for electronics has also been suggested meaning that the producers can buy the products back for safe recycling
- the new set has taken cognizance of and has tried to include the informal sector which handles over 90 per cent of e-waste generated in India, in the mainstream. The informal sector will be formalised and the workers will be trained to handle e-waste rather than burning them after extracting the precious metals from them

- The rules have been extended to the bulk consumers like companies that buy electronic goods in masses. “The bulk consumers must collect the items and hand them over to authorised recyclers and it will be the responsibility of the one buying in bulk,”
- The new rules have for the first time included the Compact Fluorescent Lamp (CFL) and other mercury containing lamps and equipment in their ambit

**16. Man-animal conflicts are common in various parts of the country. Analyze the reasons & outcomes of such incidences and suggest suitable steps to neutralize them.**

Reasons –

The increase in man-animal conflict is likely due to the greater resilience and adaptability of wild animals in face of their shrinking habitats, which allow them to live successfully close to human habitation. Degradation of habitats, encroachment of human being in wildlife habitat for development purpose, depletion of the natural prey base, changing crop patterns, suitability of man modified habitats to wild animals, presence of stray dogs and cattle in forest fringe areas, injured old animals, etc are other reasons. Crops like sugarcane and tea estates are reported to provide excellent cover for wild animals.

Outcomes –

Human-wildlife conflict is fast becoming a critical threat to the survival of many endangered species, like wild buffalo, elephants, tiger, lion, leopard etc. such conflicts affect not only its population but also has broadened environmental impacts on ecosystem equilibrium and biodiversity conservation.

- Injury and loss of life of humans and wildlife.
- Crop damage, livestock depredation, predation of managed wildlife stock.
- Damage to human property.
- Trophic cascades.
- Destruction of habitat.
- Collapse of wildlife populations and reduction of geographic ranges.

Strategy – Forest and wildlife are subjects listed in the Concurrent List of the Constitution

- Improvement of habitat to augment food and water availability and to reduce movement of animals from the forests to the human habitations
- Creation of a network of Protected Areas and wildlife corridors for conservation of wildlife
- Awareness programmes to sensitize the people about the Do’s and Don’ts to minimize conflicts
- Training programmes for forest staff and police to address the problems of human-wildlife conflicts
- Providing substantial compensation to people in case of crop/livestock loss to prevent revenge killing
- Use of technology – geo fencing, drones, solar fences

- Bee hive fencing
- eco-development activities in villages around Protected Areas to elicit cooperation of local community

**17. Critically evaluate India's first-ever National Disaster Management Plan released recently by the government.**

It aims to make India disaster resilient and significantly reduce the loss of lives and assets. The plan is based on the four priority themes of the "Sendai Framework," namely:

1. understanding disaster risk,
2. improving disaster risk governance,
3. investing in disaster risk reduction (through structural and non-structural measures) and
4. disaster preparedness, early warning and building back better in the aftermath of a disaster

**Salient Features of the Plan**

The plan covers all phases of disaster management: prevention, mitigation, response and recovery. It provides for horizontal and vertical integration among all the agencies and departments of the Government. The plan also spells out the roles and responsibilities of all levels of Government right up to Panchayat and Urban Local Body level in a matrix format. The plan has a regional approach, which will be beneficial not only for disaster management but also for development planning.

Experts say there are several problems in the National Disaster Management Plan.

- First, it fails to lay down a clear and practical roadmap. It is too generic in its identification of the activities to be undertaken by the central and states governments for disaster risk mitigation, preparedness, response, recovery, reconstruction, and governance.
- Second, the plan refrains from providing a time frame for undertaking these activities beyond vaguely prescribing that these must be taken up in short, medium, mid- and long-term basis.
- Third, the plan does not project the requirement of funds needed for undertaking these activities, nor does it provide any clue as to how funds shall be mobilised for this purpose. The plan further does not provide any framework for monitoring and evaluation of the plan.
- It may fulfil the formal requirement of law of having a plan but it may not be very effective in achieving its grandiose vision of building resilience.

The activities listed in the plan are nothing new: These are already provided in the Act and in nearly two dozen national guidelines that were developed by the National Disaster Management Authority (NDMA) since 2007. Some of the earlier guidelines did have a timeframe

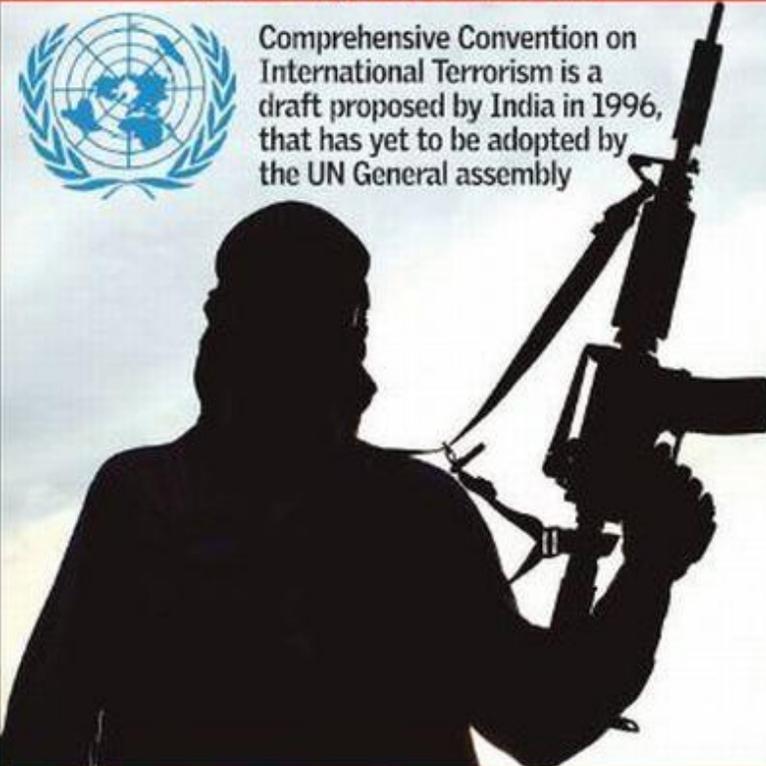
for implementation, but the national plan cautiously refrains from providing any roadmap, probably due to the complexities of the tasks involved. The plan is aligned with the Sendai Framework for Disaster Risk Reduction and Sustainable Development Goals, but unlike in the Sendai Framework or the SDGs, the plan does not set any goals or targets, nor does it spell out how the Sendai goals and targets shall be achieved.

18. Even after twenty years when it was first proposed by India before UN General Assembly the Comprehensive Convention on International Terrorism is not yet adopted. What does it call for? Discuss the reasons for deadlock.

**HITTING HURDLES**



Comprehensive Convention on International Terrorism is a draft proposed by India in 1996, that has yet to be adopted by the UN General assembly



**What does it call for?**

- ➔ **Universal definition of terrorism:** No good terrorist or bad terrorist
- ➔ Ban on all groups regardless of country of operation, cut off access to fund and safe havens
- ➔ Prosecution of all groups, including cross-border groups
- ➔ Amending domestic laws to make cross-border terror an extraditable offence

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**Why has CCIT been blocked?**

- ➔ **US+allies:** Concerns over definitions of terrorism, including acts by US soldiers in international interventions without UN mandate
- ➔ **Latin American countries:** Concerns over international humanitarian laws and HR being ignored
- ➔ **OIC:** Concerns that convention will be used to target Pakistan, and restrict rights of self-determination groups in Palestine, Kashmir etc



**Terror striking every day now -Turkey, Somalia, Afghanistan, Kenya & Bangladesh. Mere condemnation & commiseration @un won't do. Need CCIT**

– Syed Akbaruddin, India's ambassador to UN, on Twitter



19. Critically analyze existing policies to manage India's border with Pakistan. Also discuss the challenges to the same.

### Existing Policies

- The indo-pakistan border ground rules, 1960-61 are supposed to form the basis for the management of the international border. However, both the countries are yet to officially sign the corresponding agreement.
- In Kashmir, the Indian army claims to operate in accordance with the stipulations of the Karachi agreement of 1949. This includes provisions like no bunker construction within 500 yards of the LoC.
- Ceasefire agreement of 2003, which came into existence after a telephone conversation between the two directors of military operations is yet to be officially formalized

Thus in the absence of firm ground rules, and given the disagreements between India and Pakistan over the International Border and the Line of Control, border management is driven by ad hocism

### Challenges

- 1) Cross border Infiltrations - This continues to lead to large scale civilian and military casualties besides fuelling unrest in Kashmir. The militants often use the gaps in the fencing done across the LoC in Kashmir to enter into India.
- 2) Illicit smuggling rackets operate with impunity, in the border regions of Punjab/Rajasthan and Kashmir. They utilize the gaps in the border fencing and border patrolling.
- 3) No clarity on line of control in the J&K regions. This leads border management difficult and frequent transgressions.
- 4) Physical problems - The fencing often gets damaged due to snowfall in Kashmir, shifting sand dunes in Rajasthan, heavy rains & floods in Punjab. These gaps render the borders porous.
- 5) Challenges faced by security personnel - Inadequate number of personnel on ground puts stress on the serving members of BSF/army. Besides, they have to operate in environments where temperatures reach as high as 55 degrees or sub-zero, which often drains the moral & physical strength.

Read article 'Disquiet on western front' – The Hindu, Aug 18, 2016

## **20. The decision of Government to ban a news channel for a day has revived the debate 'Media Freedom and National Interest/Security'. Comment on the issues involved.**

*Comment - Pick out the main points on a subject and give your opinion, reinforcing your point of view using logic and reference to relevant evidence, including any wider reading you have done*

This is the first order of the Government under a newly amended provision of the Cable TV Networks (Regulation) Act, 1995 which gives power to the Government to prohibit operation of a channel if it shows live coverage of any terror attack and the counter terror operations. The action against the channel was taken because it revealed strategically sensitive details during the terror attack on Pathankot airbase which could have potentially compromised national security. However, this action of Government has come in for severe criticism for impinging on the freedom of the press. The one-day ban on NDTV's Hindi channel, widely

condemned, was put on hold by Information and Broadcasting Ministry. The decision came after the Supreme Court agreed to hear NDTV's application for a stay on the ban.

The question that arises here is who decides national security. It is the Government that takes the final call whether the security of the nation is breached or not or something is against national interest. There should be an independent body may quasi judicial one or committee that comprises of impartial expert people. Ideally, this should be the mechanism to decide whether national security has been breached or not.

There is a strong requirement of guidelines to be issued for all the channels informing them what should and should not be done at the time of a terrorist or counter terrorist attack.

Watch The Big Picture - RStv