



Note: You can discuss your evaluated copy with the Mentor. Raise a ticket from your portal to schedule a mentor call or visit the offline centre to meet mentor (all 7 days, Timings – 11 AM to 6 PM). Further if you are unsatisfied with the evaluation, you can seek re-evaluation of the copy.

Parameters	Excellent	Very Good	Good	Average	Poor	Very Poor
Language						
Structure						
Presentation						
Handwriting						
Content						
Attempt						

ADDITIONAL REMARKS

①

Recently, PLFS report highlighted that India's unemployment rate is at historic high of 6.1%, with poor Labour force participation in both rural/urban areas.

However unemployment in both the regions differ:

Rural

- ⇒ ① Largely driven by Agricultural distress
- ⇒ ② Mainly dependent on Primary Sector (Textiles/Agriculture)
- ⇒ ③ Poor investment in Rural Industries

Urban

- ⇒ ① ~~High~~ Low level formal employment
- ⇒ ② Depending on Services Sector. (Only 25% Employment)
- ⇒ ③ Poor investment in Urban Manufacturing.

# U.P.S.C.

⇒ ④ ~~However~~, Disguised unemployment, especially women in agriculture

⇒ ④ Poor employment across women in Urban areas

However, the solutions are interdependent/interrelated

⇒ ① Creation of Rural-Urban linkages such as Agro Processing Industries (Mega Food Parks)

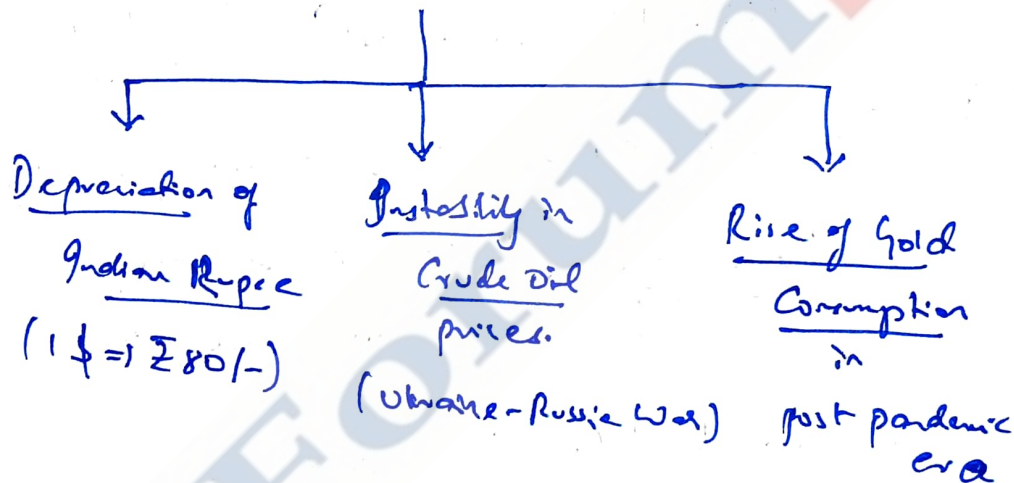
⇒ ② Sustainable Migration, through absorbing excess rural labour in urban areas.  
(Manufacturing/ Real Estate)

⇒ ③ Development of Peri Urban-Rural connectivity for better investments in rural infrastructure.  
(RURBAN)

∴ this way, Urban-rural employment issues can be solved.

②

Imported inflation is the rise of prices in domestic economy on the account of rising imports and price instability in global markets.



This has led to challenges for our V-shaped recovery as seen through: →

- ① High level depreciation of currency, due to fuel crisis, gold consumption.
- ② Hitting Industries due to rise of cost of raw materials. (Pharma/Agri)

(Many distressed due to high input costs)

⇒ ③ Rising Subsidy Burden on government in providing fertilizers, food (Imported) gas (UJwala)

⇒ ④ Growing inequalities, due to low levels Consumption on account of price rise.

(Rising LPG Cylinder Cost) [High Tax Burden]

⇒ ⑤ Damage to sectors such as Logistics, Aviation, Infrastructure. (High rise of ATF, Rise of Coal prices)

So, we need to take steps such as:

→ ① Shifting to Renewables to reduce dependencies on crude/oil.

→ ② Strengthening Domestic Competitiveness of Industries (to reduce imports)

→ ③ Rationalizing Custom Duties / Taxes to reduce costs.



- = ③ Sustainable modes of fertilizers/irrigation  
which is less energy/chemical intensive
- = ④ Promotes preservation of Agro-Biodiversity
- = ⑤ Synthesised with Agro-forestry/Agro-ecological  
systems for better returns.
- = ⑥ Doubling of farmer income, with improved  
yield, decline of input cost.

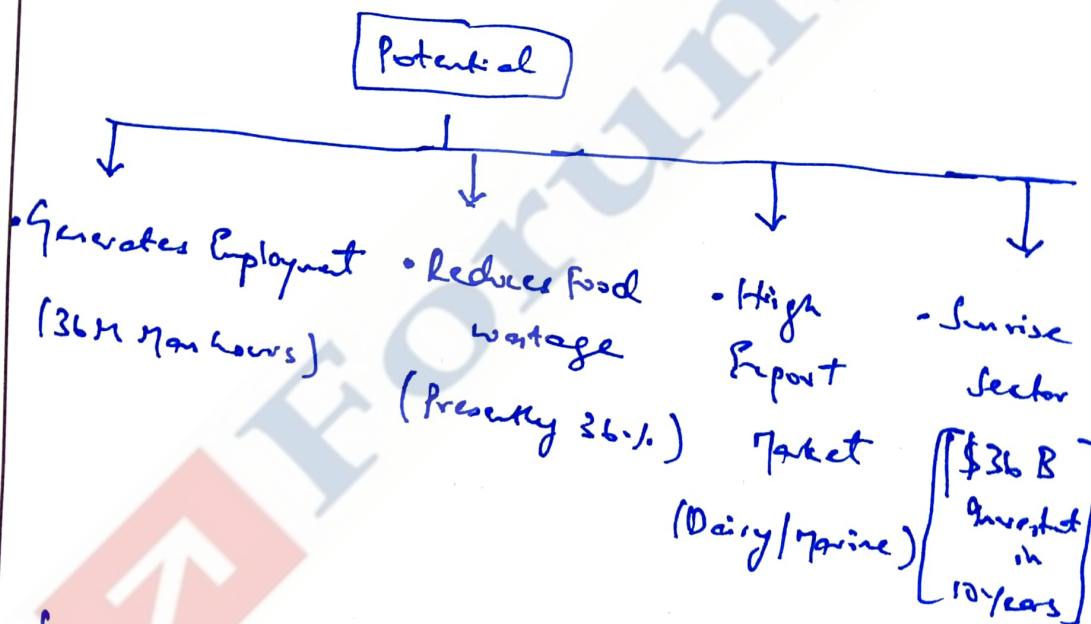
So, we have to step up our schemes such  
as National Mission on Sustainable Agriculture,  
by strengthening knowledge in farmers to adopt  
such farming with help of institutions such  
as NICRA, ICAR and ATARI.



④

Food Processing Sector

Provides an essential forward linkage to agriculture ensuring farm-folk connect and thus promoting better price realisation.



So, food processing sector, ensures proper

Rural-Urban Linkage, thus provides for a need to develop the industry.

# U.P.S.C.

इस भाग में कुछ  
न लिखें  
(Don't write anything  
in this part)

प्रश्न संख्या  
(Question No.)

- ⇒ ① Better Connect with farmers, through  
extension and knowledge support. [KVKs]  
Support
- ⇒ ② Strengthening FPI infrastructure in rural  
areas by Mega Food Parks.
- ⇒ ③ Strong Human Resource through promotion  
of academic courses / institutions. [SHRISD]  
Scheme
- ⇒ ④ Promotion of strong supply chain through  
multimodal connectivity - Cold Chain Infrastructure.  
(KISAN RAIL / FRISHI UDAN)
- ⇒ ⑤ Better retail & marketing by involvement  
of SHGs / NGOs (lead enterprise)

So, it is a sunrise sector,  
that ensures increase in value addition to  
agriculture from 25% (Presently) to 60%  
by 2030.

5

Space based technologies

Such as GPS/GIS/Remote sensing with help  
of LEO/GTO satellites provide for meaningful  
insights in development planning.

Use in development monitoring:

- ⇒ ① Used in urban planning monitoring such as  
Real Estate, Wetland status etc. (GIS)  
(AWAS Yojana)
- ⇒ ② Technologies of Remote sensing can be used  
in monitoring forest cover and violations (ISFR  
Report)
- ⇒ ③ Military applications such as development of  
border infrastructure, planning defence  
(EMISAT)

Enhancing development :

= ① Promotion of Rural development such as

Geo Tagging Rural Assets, Digitisation of Land Records.

Using GIS (PM-SWAMITVA)

= ② Use of technologies such as GPS for

promoting efficiency in logistics, E-governance

and food distribution,

= ③ Strengthening of Border Resilience by using

Remote Sensing, GPS Tractors - (BOLD & IT)

= ④ Maintained in Agriculture through use of

Smart Agriculture.

[ GPS Tag of Markets (Wae Hases)  
Soil Mapping - Land zoning ]

So, Space Sector has multi dimensional impact on

developmental activities reality pools of

IT Economy.

6

Fuel Cell Electric Vehicles

are based on principles of Electrolysis where DC Current is produced from  $H_2 - CO_2$  whereas Battery Vehicles are based on Electrochemical Conduction where DC Current stored in Batteries.

<u>Fuel Cells</u>	<u>Battery Vehicles</u>
→ ① <u>Constant Generation</u> on running where $H_2$ reacts with $CO_2$ to produce <u>Water/Electricity</u>	→ ① <u>fixed amount of Electricity</u> , needs to be charged after battery drains
→ ② <u>Principle of Electrolysis</u>	→ ② <u>Electrochemical Conduction</u>
→ ③ <u>Low Cost</u> , due to less cost of electrolytes	→ ③ <u>High Battery Cost</u>
→ ④ <u>Generates Water</u>	→ ④ <u>Doesn't generate Water</u>

→ ① Generation of Electricity  
on Braking

→ ⑤ Electricity Generated  
by Batteries

Advantages of  
EV

- (10% Adoption of 20% fuel of  
Cruises)
- ① Sustainable Mobility  
with low emissions
  - ② Reduces import dependency  
of Crude
  - ③ Rise of demand of  
Renewables  
such as Solar / Wind
  - ④

→ Suggestions for E-mobility

→ ① Scaling up of FAME Mission, to promote  
higher adoption of 2/3 Wheelers

→ ② Improving battery storage by implementing  
NITI Aayog's National Transformation Plan

→ ③ Setting up of Charging Infrastructure and  
Battery Exchange Policies

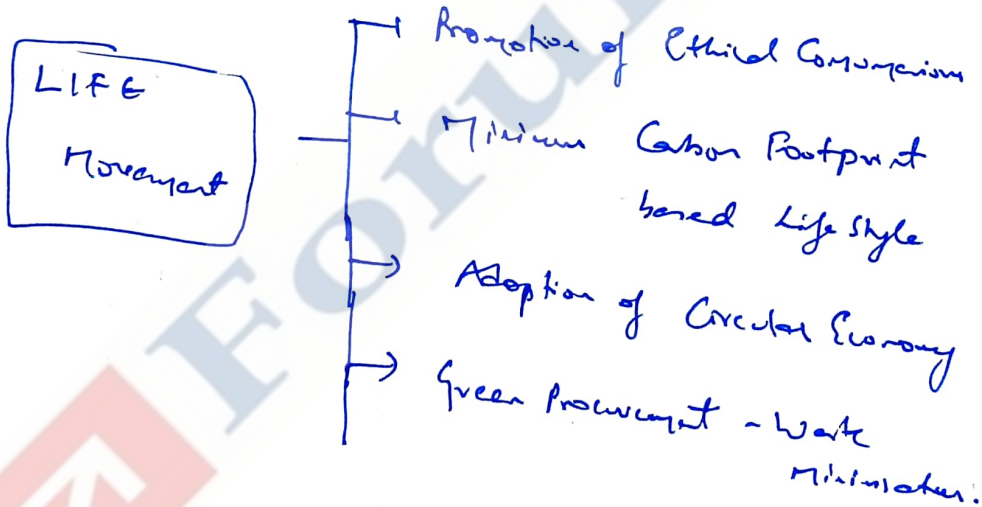
# U.P.S.C.

इस भाग में कुछ न लिखें  
(Don't write anything in this part)

प्रश्न संख्या  
(Question No.)

7

Sustainable Consumerism is essential for bottom-up approach in promoting environmentalism through fundamental changes in lifestyle.



Adopting Sustainable - Consumer - Production :

Production

- a) Promoter of Organic Farming - Crop Diversity
- b) Use of Circular Economy in Industries by

## Industrial Symbiosis, Green Procurement

- c) Reducing use of 1<sup>o</sup> materials, promoting market of 2<sup>o</sup> Materials. (Scrapping of Iron)
- d) Sustainable Energy - ~~Transition~~ Industries by Solar/Wind/Hz energy.

## Consumption

- ① Sustainable Clothing, by use of recycled materials
  - ② Sustainable Food through Millet / Veganism / Organic Food
  - ③ Use of sustainable items such as Jute/Cloth instead of Plastic
  - ④ Domestic Recycling of Waste (Bio Enzymes from Wet Waste)
  - ⑤ Reduced Energy Consumption (Public Transporter) , EV
  - ⑥ Eco-Tourism with less Carbon Foot Print
- It helps in realising goals of Sustainable Development



प्रश्न संख्या  
(Question No.)

①

Senda Frameworkprovides for Build Back Better whereMitigation and Adaption by managing risks is  
important than input managementDisaster Strategy① Strengthening resilience of livelihoods  
through social security② Vulnerability and Hazard Mapping to  
adopt mitigation③ Fool Proof disaster resilient infrastructure  
to manage risks of Cyclone / Earth Quake

## Flood Risk Profile:

→ 36M people vulnerable to  
floods

→ \$100B Annual Loss (1.8-4.9M)

⇒ ① North East India

↳ Annual Brahmaputra Flooding

↳ Erosion of Embankments

⇒ ② Mountains of Kerala - Himalayas

↳ Rising Land Slides ↳ Deforestation.

## NIDMA Guidelines

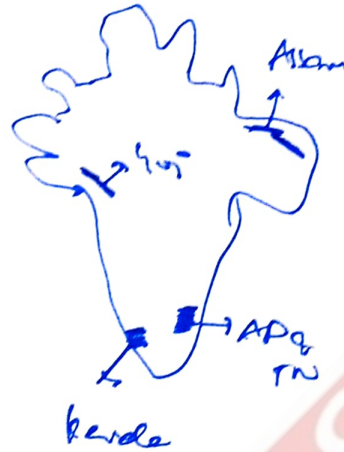
→ ① Improving River channel ⇒ Velocity / Area

→ ② Water shed Management

→ ③ Embankment approval for physical system

→ ④ River Walls / Dykes ⇒ Structural Resilience

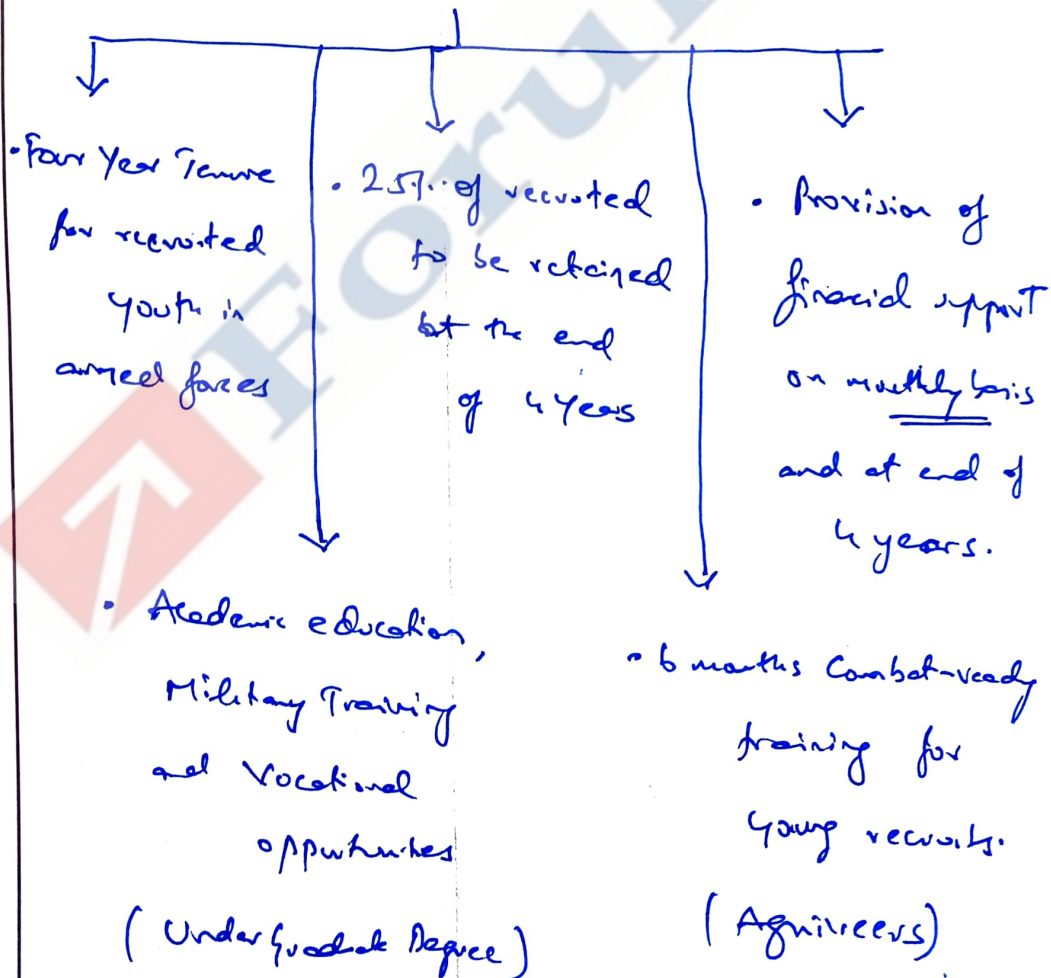
→ ⑤ National Hydrology Mission ⇒ Monitor River Basin



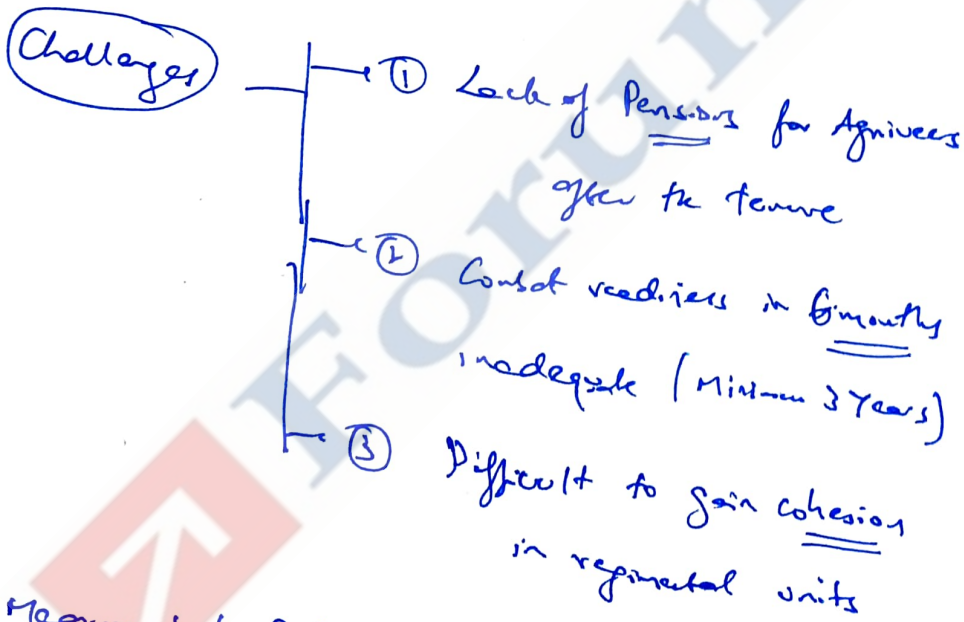
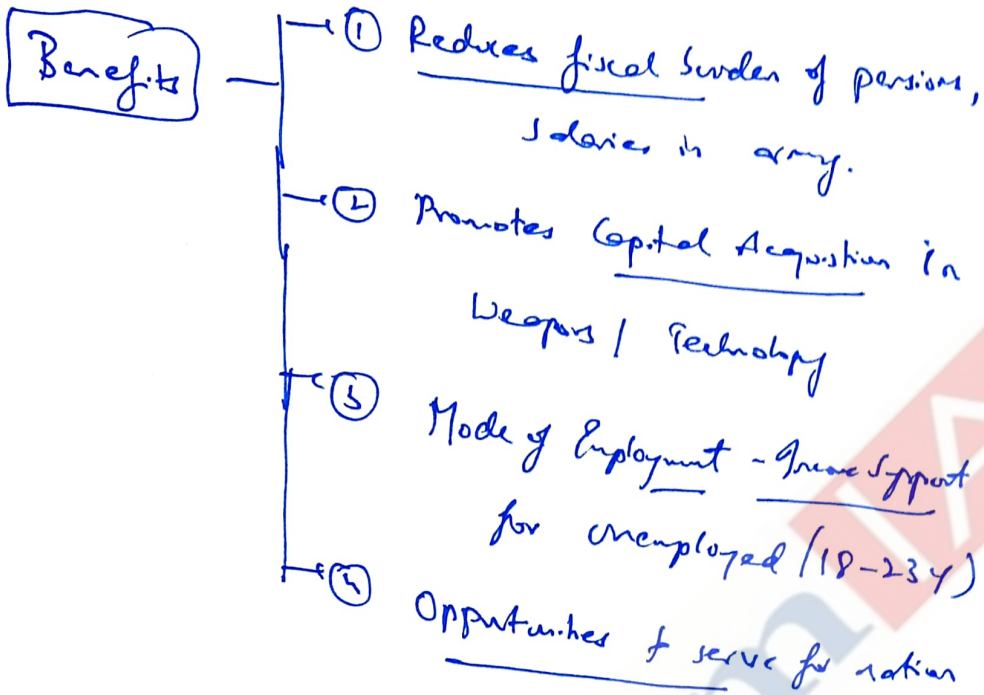
9

Recently, Agnipath Scheme  
was announced for Short-Term recruitment  
of youth in armed forces on contractual  
basis.

### Features



# U.P.S.C.



## Measures to be Taken

- ① Provision of viable alternatives for Agriweers after 4 years. (Mokishra offer for Recruitment)
- ② Improve cohesion in regiments by Team Building
- ③ Follow models of USA / Israel.

(10)

Organised Crime has deep

links with Terrorism - Insurgents acting as  
threat to national security with diversification  
of their tactics.

Advancements in Tech

- ① Rise of Block Chain - led to Crypt money led  
to improved money laundering activities.
- ② Use of Deep Web for planning logistics,  
sharing information.
- ③ Advancements of Cyber Threats by Organized Crime  
using Ransomware, Phishing, DDOS  
attacks.

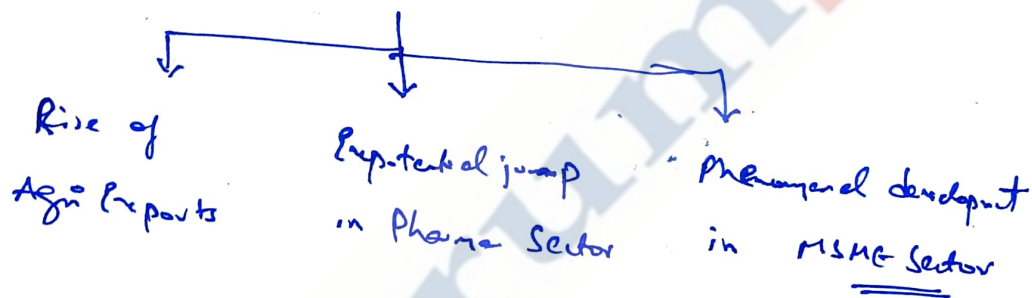
→ ④ Diversification of trafficking into Narco Trafficking,  
Cyber Trafficking utilizing the role of  
social media

### Measures to Tackle

- ① Proper Cyber Surveillance through g4c,  
CEPT - gms of Crime syndicates
- ② Strengthen border management to prevent  
trafficking - smuggling (CIBMS - BOLDnet)
- ③ Strong Intelligence Sharing among institutes  
of CBI-ED-DRG
- ④ Strengthening laws of Money Laundering,  
Piracy and Counterfeit Currency

(11)

India recently ~~checked~~ <sup>checked</sup>  
 \$400B exports and showed Current Account  
Surplus in the post-pandemic era largely  
 driven by goals of Atmanirbhar Bharat.



Factors Responsible:

- ① Strong support to MSMEs through Partial Credit Guarantee / Loan Restructure
- ② Large scale development in logistics through schemes of Sagarmala - Bharat Mala and e-Way Bill  
 (Reduced Logistics cost to 12% GDP [from 14%])

- ③ Agri-resilience in COVID era through  
Labour support by MGNREGS, Financial  
Support (PM-KISY)
- ④ Infrastructure development through  
National Infra Pipeline and Product linked  
Incentives  
promoted Bulk Pharma Parks. (Support of  
Vedantas)
- ⑤ PLI Scheme promoted domestic  
competitiveness in field of pharma,  
agro processing leading to export rise.
- ⑥ Reduction of Export Compliance through  
Export infrastructure, insurance and Credit  
(Multinodal logistics / NIRVIK → Export Insurance)

Thus, all these contributed to rise of exports.



Measures to place India at GVC :

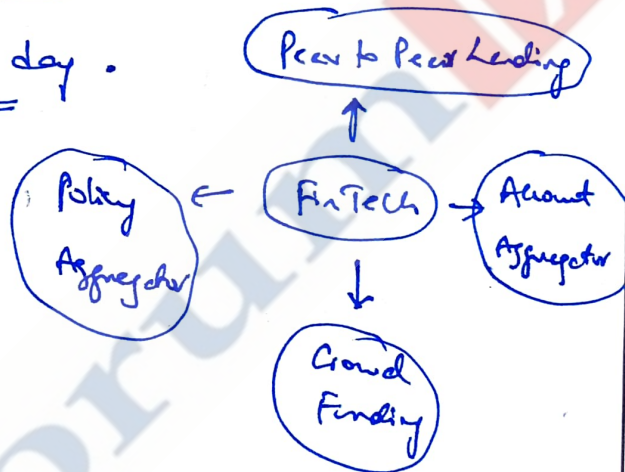
- ① Strategy of "Assemble in India", by setting up of strong assembling infrastructure. [6 Times Jump in Exports]
- ② Strong domestic competitiveness in labour elastic sectors such as Textiles - Pharma etc.  
⇒ [Quality of Goods]
- ③ Promote foreign investments through labour reforms, reduced land acquisition costs. (Make in India)
- ④ Signing FTAs with ~~to~~ <sup>multilateral</sup> regional groups such as BIMSTEC / SCO.
- ⑤ Skilling of Labour, suitable to needs of Industry 4.0 (IoT / Big Data)

This can ensure that we can improve foreign value addition to our goods and be <sup>key</sup> player in GVCs

(12)

Fintech is thedevelopment and providing of financial servicesthrough technological means which are beinginnovated day by day.So, it has facilitated  
financial inclusion

through various ways:

⇒ ① Promoted financial literacy through info services.

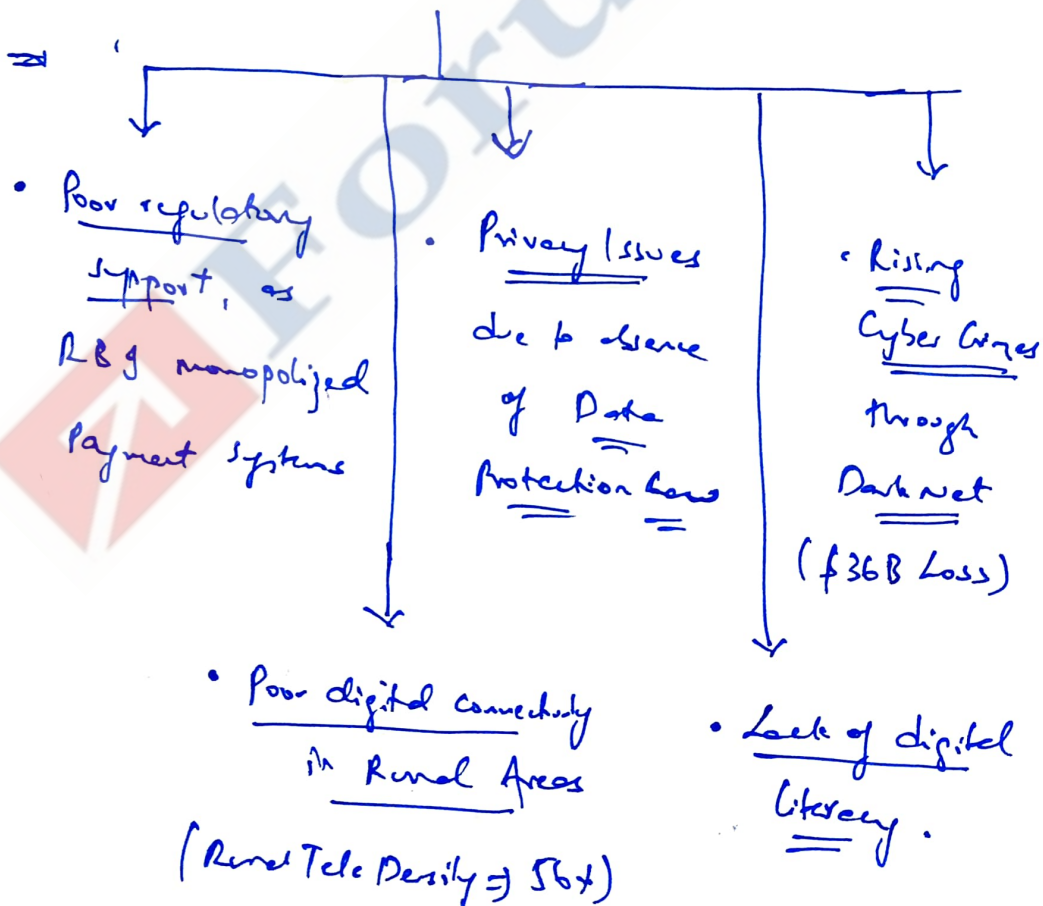
(Policy Bazaar ⇒ knowledge on services)

⇒ ② Improved credit support through P2P Lending  
and Crowd Funding. (Fair Cent / Mobikwik)⇒ ③ Diversified financial services such as  
Insurance / Bitcoin Investment (DCXO → Bitcoins)

⇒ ④ Larger reach to untapped sectors through  
rise of UPI [BHIM / Paytm]

⇒ ⑤ Catering to distressed sectors such as  
MSMEs, farmers and promoting inclusion.  
(MSME ⇒ Invoice Trading)

However, it needs to overcome hurdles such as:



So, Subash Garg Committee suggested measures

such as:

⇒ ① Development of RegTech Solutions for  
better regulation of FinTech

⇒ ② Promoter of Sand Boxes / Test Beds  
for FinTech models

⇒ ③ Strengthen Cyber Technologies to safeguard  
FinTech.

⇒ ④ Adoption of Digital Banks such as  
Monzo Bank in USA that provides 100%  
AntiTech services

⇒ ⑤ Creation of New Verticals in FinTech in  
PSBs [ Credit Analysis / AS in Customer Worthiness ]  
Account Aggregators

This can ensure the goals of Inclusive Growth  
by Financial Inclusion.

# U.P.S.C.

प्रश्न संख्या  
(Question No.)

इस भाग में कुछ  
न लिखें  
(Don't write anything  
in this part)

13

Agriculture in India is

said to be resource intensive with high

burden on inputs of land - water - finances.

However, Agriculture's contribution still remains stagnant  
at 18% to GDP due to inefficient use of resources.

Strong Banking  
system.

(Priority Lending,  
RRB/NABARD)

Availability  
of  
Resources

Large scale land  
availability

(36% Area  $\Rightarrow$  Net Sown)

Water Abundance  
through ground/  
water surface.

(Largest user of ground  
water)

Low cost inputs

such as subsidy

on electricity/fertilizer

However Agriculture is still facing issues such

as:

- ① Poor productivity and yield.
- ② High Indebtedness (99% of Agri-households indebted)
- ③ Climate Change induced stress (Droughts)
- ④ Poor value addition (Only 25%)

Inefficient Use of Resources:

- ① Land:
- ① Irregular Land Fragmentation
  - ② Over use of fertilizers  
leading to poor soil health
  - ③ Intensive tilling of land

- ② Water:
- ① Poor irrigation efficiency  
(GW ⇒ 55%, Surface Water ⇒ 39%)
  - ② Monocropping (Rice-Wheat)
- ⇒ High burden on Water.

- ③ Technology :
- ① Poor mechanisation of farming  
(India - 25%. Brazil - 40%)
  - ② Lack of knowledge support  
(Poor role of KVVs)

- ④ Finances
- ① High informal credit  
(60% credit - informal)
  - ② Rising debt waivers acting as moral hazard.

So, we need to take steps such as:

- ① Crop diversification reducing burden on water, land (millets)
- ② Innovations in farming such as Conservation Agriculture, Integrated Farming
- ③ Provision of Timely Irrigation / Organic Farming
- ④ Reducing subsidies on electricity (Use DBT)

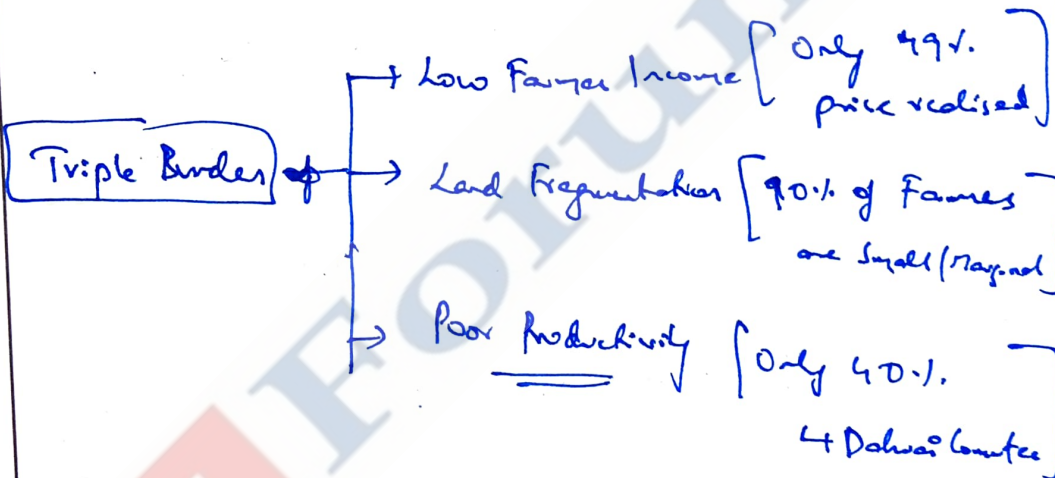
(14)

Mixed Farming Systems

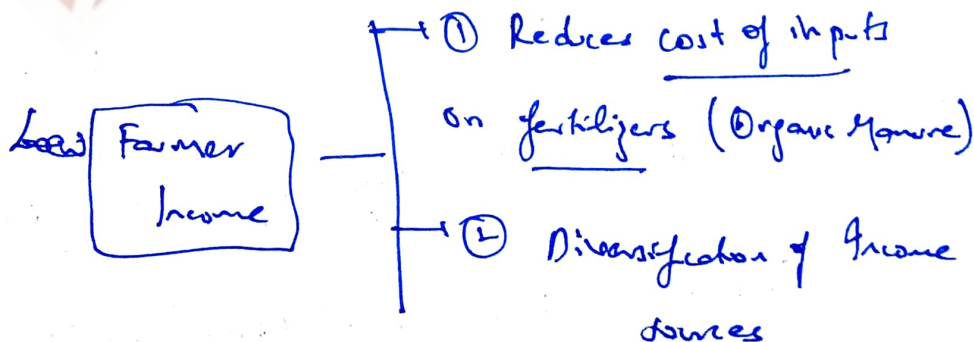
एक ही क्षेत्र में ~~हो~~ livestock and agriculture on

single piece of land can promote development

and productivity in Agriculture.



Livestock through Mixed Farming :

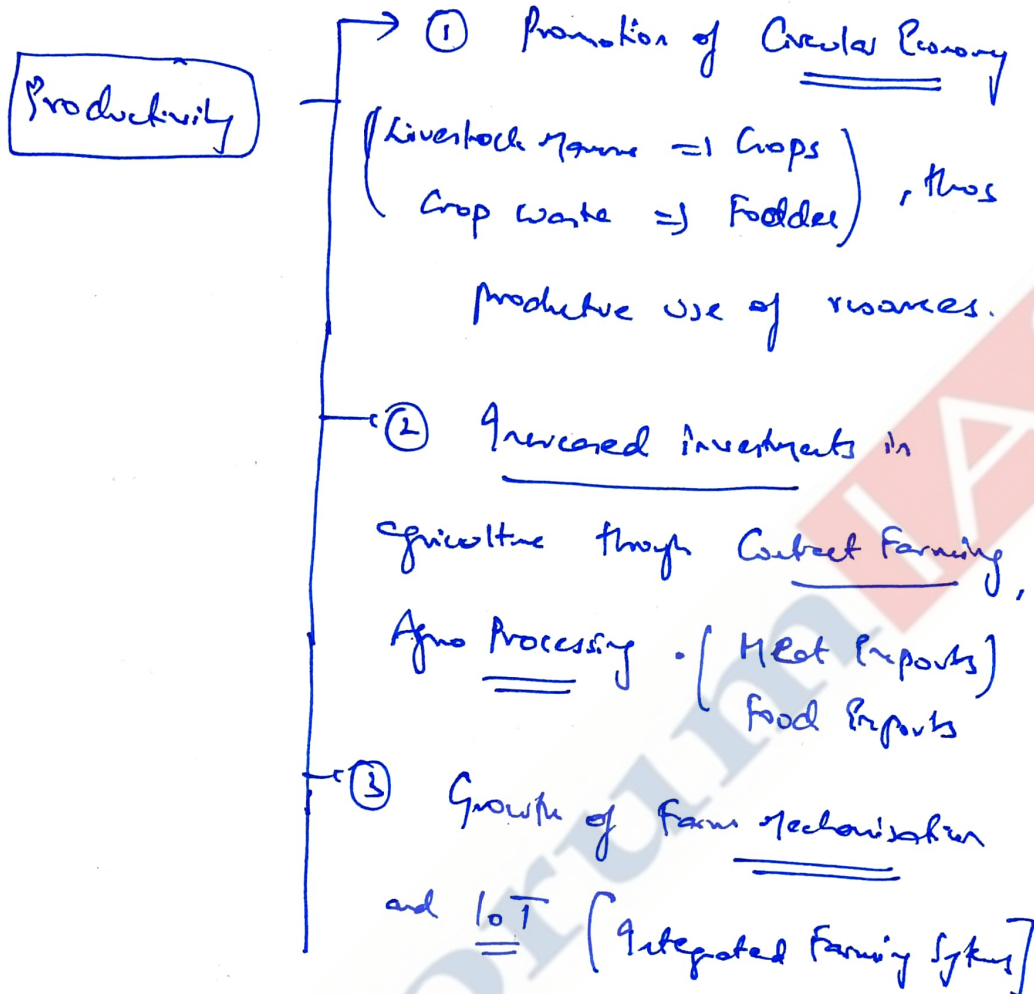




- ⇒ Rise of <sup>Dairy</sup> Dairy Industry; Meat Exports  
 ↳ High Income to Farmer
- ③ Resilient Income during distress such as drought
- ④ Reduced fodder costs for livestock.

Land  
Fragmentation

- ① Efficient land use, by livestock activities during fallow.  
 (Currently, livestock ⇒ Land Intensive)
- ② Promotes Agro-Dairy Cooperatives, that promotes land consolidation (Sangam Milk / Amul Milk)
- ③ Increased investment on land through Land Leasing with growth of livestock.



So, Government has announced schemes such

as RAFTAAR - KRISHANWATI,

Integrated Farming Scheme and Nehru Mission

on Farm Extension to support

Mixed Farming.

15

Industry 4.0, is the  
current age revolution, where Creative disruption  
is transforming our livelihoods promoting  
ease of living - Economic development, but also  
posing some threats.

New Age Technologies - Disruptions:

① Revolutions in Economic Activities, such as  
Additive Manufacturing, Smart Agriculture improving  
productivity.

② Rising digitisation through growth of  
Internet of Things, Artificial Intelligence. (Growth of  
FinTech)

- ③ Base of living, improving quality of life  
such as AG Aged Assistive Aids to old Aged,  
Wearable Technologies.
- ④ Improvement of Social Sector through growth  
of Tele Health / Tele Education [Robotic Surgeries]  
AG Assessment]
- ⑤ Petn breeding innovations in Block Chain /  
Quantum Technologies leading to rise of technical  
Competence.

However, they pose significant threats such as:

- ⇒ ① Infringing Individual privacy, through  
growth of Dark Net - Deep Fakes - AG Rapid  
Progress  
(10048 Aadhar Data Base - Breached)

- ② Threats to national security through  
Growth of Cyber Terrorism - Drone Technologies  
threatening Critical Infrastructure.
- ③ Damage to Social Life through rise of  
Cyber Stalking - Hate Verge - Cryptocurrencies  
leading to poor interactivity (Blue Whale Game)
- ④ Issues in Global Order, due to rise of  
technological prowess of nations such as USA (China.  
( Huawei 5G issue, Rise of Cyber Espionage )
- So, we need strong models of Global Governance  
on such emerging technologies leading to  
sustainable use of them.

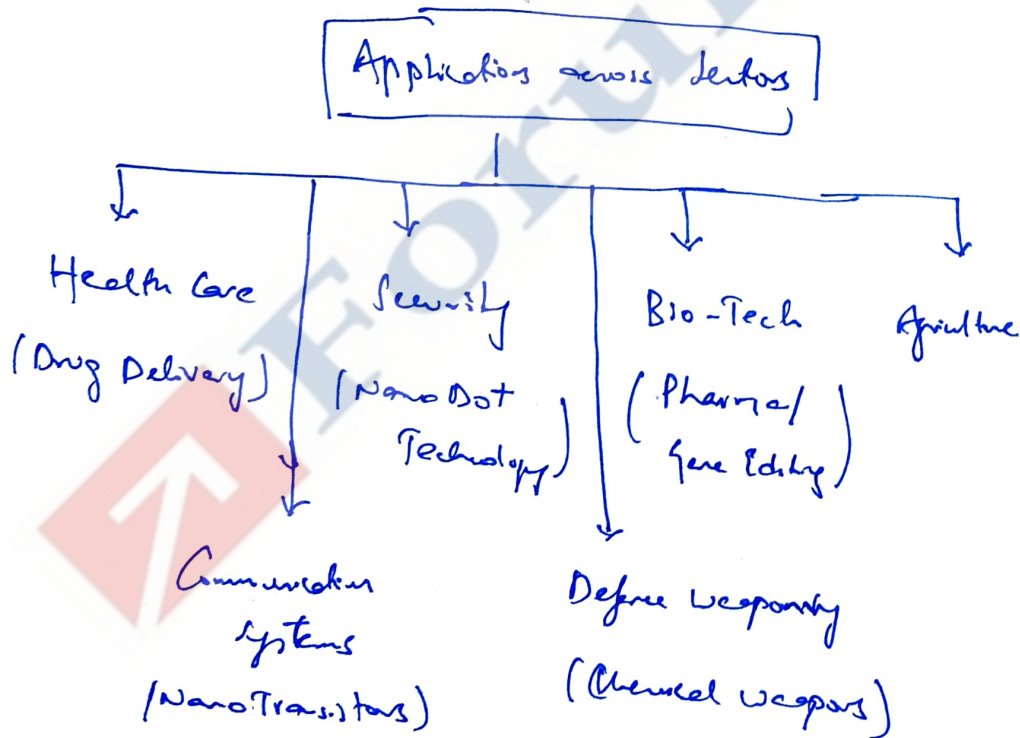
# U.P.S.C.

इस भाग में कुछ न लिखें  
(Don't write anything in this part)

प्रश्न संख्या  
(Question No.)

16

Nanotechnology deals with materials of nano order, having unique electro-chemical characteristics, that has various applications promoting resource security.



So it is an inter-disciplinary and interconnected science.

## Role in Socio-Economic Development :

- ① Improves health care outcomes through  
Use Drug Delivery - Diagnostic technologies  
(Use of Carbon Nano Tubes for delivery of vaccines)
- ② Innovations in Agriculture, through low cost.  
Nano fertilizers, Gene-Editing of Crops.
- ③ Industrial development of sectors such as Pharma /  
Bio-Tech / Communication through use of Nano-Tech.  
(Nano Drugs / Nano Robotics)
- ④ Improves efforts in nutrition / food processing  
through food fortification by nano-materials.
- ⑤ Growth of technology Competence through  
Innovations in Communication systems / Defence Systems  
(Nano Computers)

However it has challenges such as:

- ① Rise of Nano Pollution due to rise of bio accumulation in crops.
- ② Evidences of health issues on using Carbon Nano Tubes.
- ③ High cost, leading to inequities
- ④ Poor regulatory systems on Nano-Tech.

So, in this regard Government announced "National NanoTech Mission" setting Centres of Excellence for better R&D and social outcomes.



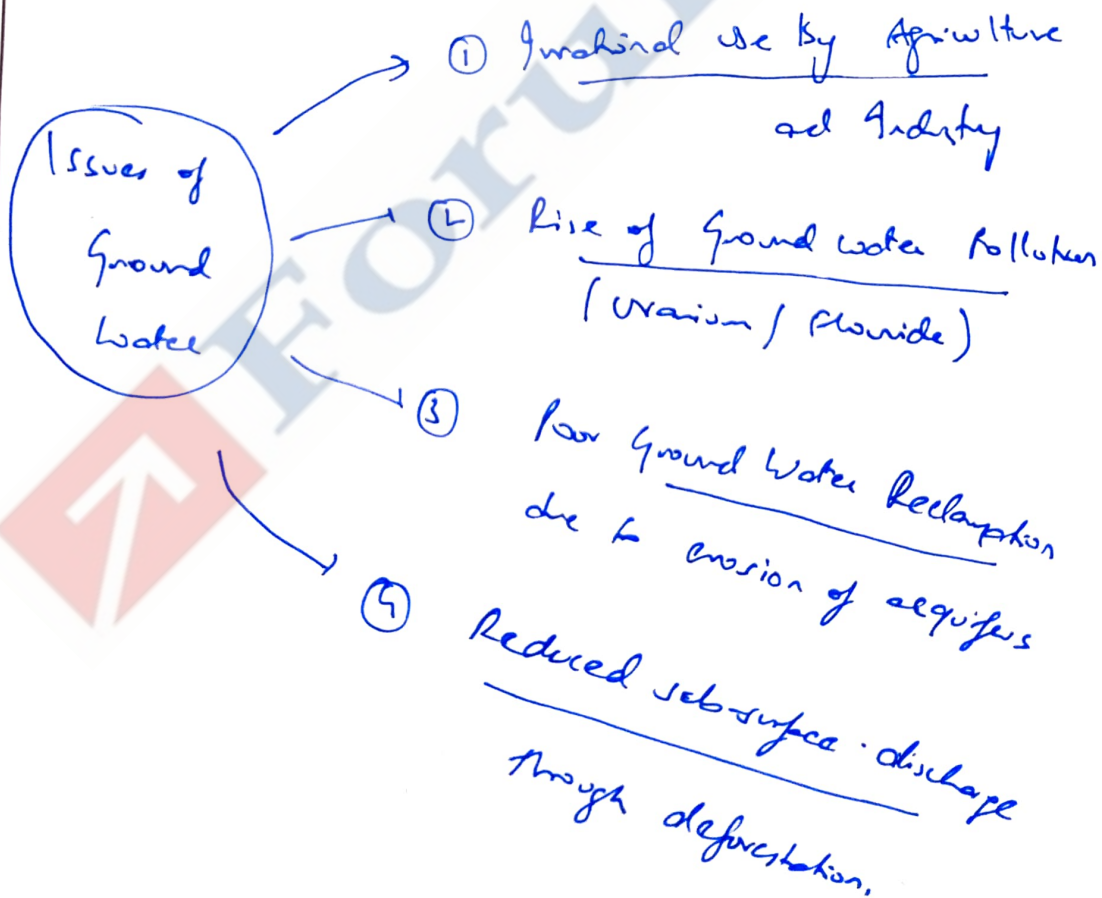
(17)

Recently UN Water

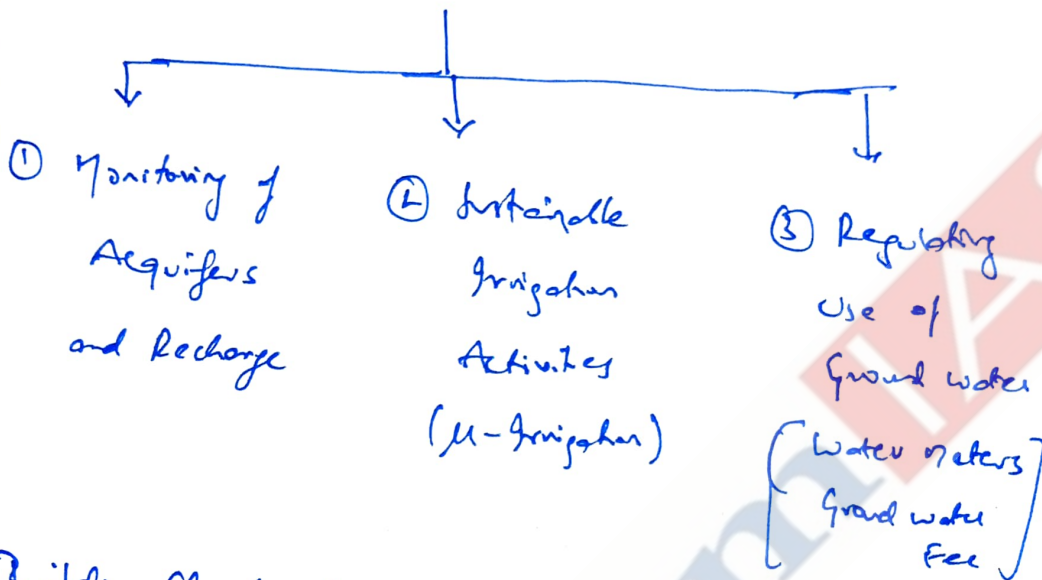
highlighted that Global groundwater is decreasing

at alarming pace, that could lead to

Zero Day in 90% Global Cities by 2050.



## Making Invisible Ground Water Visible :



## Building Climate Resilience :

- ① Water Security through Sustainable Management Practices such as Water Budgeting, Restoration of Traditional Storages (Bhungroo)
- ② Improving Ground Water Recharge through afforestation (water shed project), Rain Water Harvesting, by visible management ⇒ Improves Water Availability
- ③ Countering Land Desertification through recharge of ground water.

Achieving Sustainable Goals :

- ① Achieving SDG 3 of Quality Health through and SDG 5 of Clean water and Sanitation by visible management of Ground Water. (WASH Services)
- ② Promotion of Safe life on land/water as per SDG 13, SDG 14 through ecosystem protection
- ③ Visible management of Ground water through setting up of stray and Test Aquifers as per SDG 16
- ④ Achieving SDG 2 of Zero Hunger through stray food security driven by water security (Irrigation)

Thus, Accessible Ground water can be made visible by sustainable exploration and Management.

(18)

Recently, Plastic Waste  
Management Rules 2021, has provided for  
ban on Single Use Plastic i.e. Cutlery spoons,  
Forks, Plastic Flaps, Straws that by July 01,  
2022, as it has detrimental impact on  
health - economy - environment.

Impact on  
Health

- ① Endo-crine issues due to plastic in intestine / blood stream.
- ② Adds toxins to food in packaging materials, such as Lead / Arsenic.
- ③ Burning of SWP waste releases toxins leading to Respiratory Issues.

# U.P.S.C.

→ ⑦ Damage to Animal Health  
Like as Stray Cattle / Birds

## Environment

- ① Rise of Bio-accumulation  
as it is non-bio degradable
- ② Leads to growth of Micro Plankton  
and PM 2.5 pollution
- ③ Soil degradation and Water Pollution.  
(Ecosystem Damage)

## Economy

- ① Rise of operational costs by  
using SOP
- ② Largely promotes Green Economy.

So we need Governments to regulate:

- ① Stray Waste Management Rules, regulating  
Market to shift to sustainable materials
- ② Ensuring Extended Producer Responsibility  
as laid in Waste Management Rules, 2018

- ③ Support to market for effective transition  
| Incentives, Loans = (Packaging Industry)
- ④ Role of Pollution Control Boards - Local Govts  
to monitor usage of SUP

### Business to Innovate:

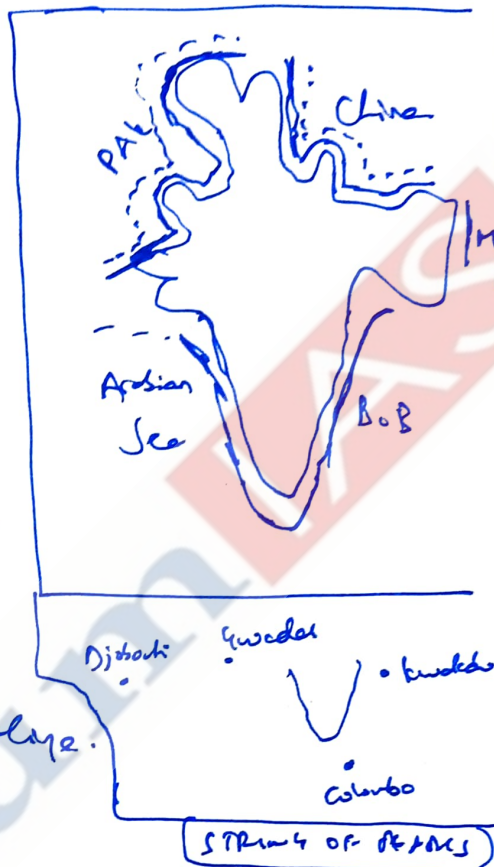
- ① Shift to sustainable products of Jute / Paper /  
Recycled Plaste for packaging (Paper cups)  
Jute Bags
- ② Proper Collect Back systems to reduce  
Waste generation.

### Individuals to Act:

- ① Proper monitoring of Plastic Foot Print
  - ② Innovations in Sustainable Livelihoods, such as  
glass ware in kitchen, Car Cloth Bags for shopping
  - ③ Promotion of Sustainable Consumerism
  - ④ Report usage of SUP to authorities
- To not is an allowed effort.

(19)

Andra has  
around 13,000 km of  
territorial borders sharing  
with China / Pak / Myanmar  
and Bangladesh and  
~~India~~ 7,700 km of coastline.



Thus, management of Maritime - Territorial Borders  
differ largely as seen by:

Territorial

- ① Requires strong  
coordination between  
Army and Border Police  
(BSF/SSB)

Maritime

- ① Requires coordination  
between Navy,  
Coast Guard, State Police  
in coastal states

Territorial

- ① Porous Borders with terrain complexities such as Mountains - Lakes - Deserts (Sunderbans / Thar Desert / Siachen)
- ② Faced with threats of Smuggling - Trafficking - Infiltration
- ③ Multiplicity of border agencies such as BSF / Sashstra Seema Dal / ITBP
- ④ Main aim to provide safety in border regions, prevent infiltration.

Maritime

- ① Large maritime border with overlap between defence and merchant vessels.
- ↳ Dynamic Sea Behaviours (Cyclones)
- ② Faced with threats of Piracy, Military Drills (String of Pearls)
- ③ Largely driven by role of Navy - Coast Guard
- ④ Protect coastal regions, ports and nuclear establishments.



# U.P.S.C.

Vulnerabilities from Large Maritime Boundary:

- ① Threat to Critical Information Infrastructure  
such as ports / nuclear plants / Communication networks.
- ② Emerges as hub for Piracy such as  
• Western Coast (Yemen Coast - Gujarat)
- ③ Counter multiple nation threats from  
Pakistan - China (String of Pearls → Sri Lanka  
→ Djibouti  
→ Myanmar  
→ Pakistan)
- ④ Difficult for navy to monitor large coastline  
making it easy for infiltration (26/11 Attacks)
- ⑤ Difficult to secure cooperation from States  
Police across Coast Line by way.

So, we took steps such as

- 1) National Committee for Strengthening Coastal Security
- 2) Coastal Security Scheme
- 3) Maritime Domain Awareness

(20)

Cyber threats are  
long, disguised and transboundary in nature  
 leading to huge impact on nation's security  
 especially making our Critical Information Infrastructure  
 vulnerable. (Space/ Finance/ Defence)

It is a war on <sup>State</sup> ~~State~~ damaging Nation Security.

→ (1) Rise of Advanced Persistent Threats (APT) by nations  
 such as Pakistan/China. (China → Red Wave  
 Attack)  
 ↳ Hacked Mumbai Electricity Grid

→ (2) Threat to Critical Infrastructure by attacking  
 defence/nuclear establishments such as  
Stredelberg attack on Kudankulam Nuclear Plant

→ ③ Rise of Cyber Espionage, tracking  
military communications, nuclear developments.  
(Use of Pegasus, <sup>Israel</sup> ~~USA~~ Cyber Attack on Iran Centrifuges)

→ ④ Growth of Cyber Terrorism through use of  
Dark Net for money laundering, Social Media for  
Radicalization.

→ ⑤ Attack on Election processes [Russia's Cozy Bear  
Attack on  
USA Elections]

War on Citizens - Issues to Social Stability

① Growth of financial frauds through threats  
of Ransomware, phishing, voice faking [Petya  
Wanna  
Cry]

② Infrusion of Privacy, by Cyberstalking,  
Pornography as seen in Blue Whale Game

③ Threats on Public Infrastructure such as  
Navigation - Electricity grids disrupting livelihoods

④ Growth of Cyber Crimes in darknet such as

Identity thefts, Leaking Exam Papers etc.

(Deep web)

So we have taken steps such as:

① National Cyber Security Policy, 2013

↳ Cyber Surveillance ↳ Human Resource

② Indian Cyber Crime Coordination Centre (I4C)

↳ Threat Analysis ↳ Cyber Forensics

③ Cyber Swachh Bharat = Awareness

④ CERT-IN (NTRP) ⇒ Flag Cyber Violators

⑤ National Critical Information Infra Centre

↳ 24x7 Surveillance

We also need strong cyber security standards by  
private sector to prevent Cyber threats