

Gist of YOJANA

VOL.01

July 2020

Self-Reliant India



Ethical Wealth Creation
for a Self-reliant India

Export Strategy

JAM Trinity

Making Farmers Self-Reliant

Rural Development

Outstanding performance by BYJU'S students in IAS 2019

Congratulations to our toppers

04

Ranks in
Top 10

09

Ranks in
Top 20

13

Ranks in
Top 50

22

Ranks in
Top 100



RANK 03

Pratibha Verma



RANK 06

Vishakha Yadav



RANK 08

Abhishek Saraf



RANK 10

Sanjita Mohapatra



RANK 11

Nupur Goel



RANK 12

Ajay Jain



RANK 14

Anmol Jain



RANK 16

Gunjan Singh



RANK 19

Shresta Anupam



RANK 23

Nidhi Bansal



RANK 24

Abhishek Jain



RANK 30

Pari Bishnoi



RANK 34

Apurv Chauhan



RANK 52

Om Kant Thakur



RANK 56

Pankaj



RANK 66

Saurav Pandey



RANK 69

Navneet Mittal



RANK 81

Anil Kumar Rathore



RANK 84

Jivani Kartik Nagjibhai



RANK 85

Shubhank Mishra



RANK 96

Hardik Aggarwal



RANK 98

Y Megha Swaroop

INCREDIBLE RESULTS

CSE 2018 Results

11 Ranks in Top 50

28 Ranks in Top 100

183 Ranks in the Final List



Rank 11
Puja Priyadarshni



Rank 16
Dhodmise Trupti Ankush



Rank 21
Rahul Jain



Rank 24
Anuraj Jain

CSE 2017

5 Ranks
in top 50

34 Ranks
in top 100

236 Ranks
in the final list



Rank 3
Sachin Gupta



Rank 6
Koya Sree Harsha



Rank 8
Anubhav Singh



Rank 9
Soumya Sharma



Rank 10
Abhishek Surana

CSE 2016

8 Ranks
in top 50

18 Ranks
in top 100

215 Ranks
in the final list



Rank 2
Anmol Sher
Singh Bedi



Rank 5
Abhilash Mishra



Rank 12
Tejaswi Rana



Rank 30
Prabhash Kumar



Rank 32
Avdhesh Meena

CSE 2015

5 Ranks
in top 50

14 Ranks
in top 100

162 Ranks
in the final list



Rank 20
Vipin Garg



Rank 24
Khumanthem
Diana Devi



Rank 25
Chandra Mohan
Garg



Rank 27
Pulkit Garg



Rank 47
Anshul Agarwal

CSE 2014

6 Ranks
in top 50

12 Ranks
in top 100

83 Ranks
in the final list



Rank 4
Vandana Rao



Rank 5
Suharsha Bhagat



Rank 16
Ananya Das



Rank 23
Anil Dhameliya



Rank 28
Kushaal Yadav



Rank 39
Vivekanand T.S

CSE 2013

5 Ranks
in top 50

62 Ranks
in the final list



Rank 9
Divyanshu Jha



Rank 12
Neha Jain



Rank 23
Prabhav Joshi



Rank 40
Gaurang Rath



Rank 46
Udit Singh

BYJU'S IAS presents another comprehensive learning program for UPSC aspirants. The **BYJU'S Home Learning Program (BHLP)** provides you with the opportunity to attend live classes conducted by India's best IAS faculty, from the comfort of your homes, assuring you uninterrupted learning so that you can clear the IAS exam with ease. Check the program details below.

Here's how you can get started:

- Attend Live Classes by India's Leading IAS Trainers
- Choose a slot that works best for you

Morning Batch	Evening Batch	Weekend Batch	
Monday to Friday 06:30 AM to 09:00 AM	Monday to Friday 05:30 PM to 08:00 PM	Saturday 02:00 PM to 08:00 PM	Sunday 10:00 AM to 06:00 PM

- Participate in the 'Doubt Destroyer' session

How will **BYJU'S Home Learning Program** help you in your preparation?



Test Yourself: Evaluate your performance by attending weekly MCQ-based and descriptive tests.



IAS Tab: Get a complimentary IAS learning tab with pre-recorded video lectures for revising important concepts and topics.



Comprehensive Study Material: Study material provided is complete and includes well-known books like Indian Polity by M Laxmikanth, Ancient History by R S Sharma, etc.



Current Affairs Webinars: Be a part of the two-hour live sessions every Tuesday and Thursday for Current Affairs analysis of major newspapers, magazines, and RSTV debates.



Exclusive access to BYJU'S IAS Student Portal: This provides you with unlimited access to Prelims and Mains based questions, Monthly Magazines covering Current Affairs, 'Issues In News', and recorded webinar sessions.



Mentor Support: You will be assigned a mentor who will guide you throughout your preparation process.

For more information about the program contact us at iaslive@byjus.com or call us on **+91 9241333666**.

Stay safe and Keep Learning!

Team BYJU'S

YOJANA – JULY 2020 ISSUE

SELF-RELIANT INDIA

TABLE OF CONTENTS:

Sl. No.	CHAPTER
1	Ethical Wealth Creation for a Self-Reliant India
2	Export Strategy
3	JAM Trinity
4	Making Farmers Self-Reliant
5	Rural Development
6	Resilient Health Systems
7	Effective Resource Management
8	Harnessing Skills of Incoming Migrants
9	Improving Livelihood Opportunities
10	Gandhiji's Approach of Self-Reliance
11	Swachh and Smart Cities
12	Digital Defence against COVID-19
13	Technology and Learning
14	TID-BITS: iFLOWS: Flood Warning System

Chapter 1: Ethical Wealth Creation for a Self-Reliant India

Self-reliant Citizens for Self-reliant India:

- The wealth of nations stems from the drive and creativity of its people. A self-reliant India will be built by self-reliant citizens.
- For Indians to be self-reliant, social compact between the government and citizens has to be one where government actively supports personal responsibility, rather than the government support substituting personal responsibility.
- Therefore, subsidies, especially those that go to the relatively well-off, cannot be consistent with a self-reliant India. The expenditure that is spent on subsidies must instead be utilized for education, continuous skill and resource development of the citizens.

Inclusive Growth through Employment:

- The most important objective of a development strategy that focuses on self-reliance is inclusive growth. GDP growth cannot be the sole objective of economic development.
- Trickle-down economics (With the GDP growth, income of all will come up) simply does not seem to work. It leads to an inequitable pattern of economic development and cannot be consistent with a self-reliant India.
- Employment generation is central to inclusive growth.
- When one member of the family is employed in the formal sector, it contributes to mobility of future generations as the kids are likely to get better education and healthcare facilities and thereby uplift themselves.
- Leaving large fractions of the labour force underutilised or unutilised is extremely inefficient for the economy.

Wealth and Skill through Private Enterprise and Government:

- Self-reliance means recognizing the complementary roles of the private sector and the government.
- It cannot be achieved without recognising that market forces can take care of our needs during normal times.
- As market forces allocate resources based on prices and profits, they promote economic efficiency in normal times.
- Self-reliance does not mean a return to the "License Permit Raj"; nor does it mean that Government itself will once again occupy the "Commanding Heights."
- The Government must support the development through skill development; supporting MSMEs by providing skilled labour; investing in R&D and innovation like Digital Economy, Medical Research, using the available natural resources meaningfully.
- At the same time, as the current COVID-19 crisis has demonstrated, market forces and private enterprise can often be too slow or incapable to step up during calamities and war-like situations. Therefore, in strategic sectors such as healthcare, life saving medicines, payment systems, mobile communication etc, the government must retain economic presence through one or two public sector firms.
- More broadly, self-reliance implies that the Government has to identify the critical sectors and ensure manufacturing capabilities in these sectors.
- Also, focus must be on increasing the efficiency and efficacy of government, which includes overall governance.

Produce for the Bottom of the Pyramid:

- Self-reliance means that Indian firms focus on producing goods and services that cater to the needs

of our huge population.

- The business models that Indian firms generate in catering to the needs of the poor can enable them to tap into markets in many underdeveloped economies in Asia and Africa.
- In this way a self-reliant India can help others and thereby occupy its rightful place as a global economic power.

Importance of Agriculture:

- Agriculture is crucial to India's economic transformation.
- Increasing productivity and output in the agricultural sector would create employment and boost incomes across the economy.
- Successful agricultural transformation will reduce the pressure arising from urban migration (excessive migration can be very destabilizing).
- The increase in productivity in agriculture will result in higher incomes, giving rise to multiplier effects and supporting increase in aggregate demand.

India Must Rediscover its Spiritual Ethos of Ethical Wealth Creation

- A Responsible developmental strategy should not ignore its impact on the environment.
- The covid-19 induced lockdown has illustrated how excessive economic activity influences our environment detrimentally.
- Ethical wealth creation advocated in the Indian ethos now needs to become a global model for development. For that, India needs to take the lead in exemplifying it domestically.

Conclusion - Self-Reliance is not Doing Everything Yourself:

- Building a self-reliant economy does not mean building an economy in isolation.
- Self-reliance implies building the necessary capability to be independent at the most vulnerable times.
- It requires delineating sectors that are strategically critical to the nation and investing in these sectors so that our dependence during vulnerable times is minimized.

Chapter 2: Export Strategy

An effective export promotion strategy hinges on robust and competitive domestic manufacturing. Manufacturing is competitive when it can compete with the best – globally, while simultaneously facing imports, particularly the duty-free imports.

- The word "Aatmanirbhar" refers to both self-reliance and self-sufficiency.
- The former has a pragmatic positive connotation aimed at developing capabilities indigenously without shunning imports. The latter is unpragmatic, inward looking and has a negative denotation.
- It is against the Ricardo's theory of "Comparative Advantage" which holds that international trade is a result of differences in the relative opportunity costs of countries in the production of different goods (therefore even if a country is self-sufficient, it should still trade).

Why is Self-reliance important?

- COVID-19 has taught us a lesson to not be excessively dependent on others for ensuring critical supplies, especially when the sources of such supplies are not fairly distributed.
- Even if domestic production is not the most efficient, India should encourage to provide it scalability to become competitive in the medium to long term.
- If we want to retain the tag of the "Pharmacy of the World", we have to produce formulations and

Active Pharmaceutical Ingredients (APIs) in our country.

Issues:

- The evolution of our exports has not followed a classical pattern as we have a traditionally advanced services sector exporting high technology services and a lagging manufacturing sector exporting relatively low value products.
- The top 5 products in global exports, accounting for over 50% of the trade are electrical and electronics products, petroleum goods, machinery, automobile and plastic goods. However, the share of these products in our exports is less than 33%. Our global share in these 5 products is a little over 1% though our share in overall global exports stood at 1.7% in 2019.
- A related issue is the low share of India in high technology exports. High technology exports account for 6.3% of our aggregate exports while this proportion stands at 29% for China and 32% for South Korea.
- The recent initiatives taken to encourage manufacturing diagnostic of electronics, and surgical equipment along with the efforts to attract global FDI will help in correcting this.
- India is amongst the lowest spenders on R&D. The fiscal support to R&D in the form of tax deductions has been lowered in the last few years.
- More than 50% of the global trade happens through inter- regional value chains which includes countries from several regions. Unfortunately, India is not a part of such value chains.
- Joining the FTAs late, cumbersome customs processes and high logistics cost have contributed to this anomaly.

Is Import Substitution the solution?

- Import substitution is focused on developing domestic capabilities and prowess to reduce dependence on imports.
- Some countries adopt an FDI-tariff linkage which enhances tariff for attracting FDI and encourages foreign suppliers to set up bases in their country to serve their consumers.
- Import substitution requires that the market be of a certain minimum size to make manufacturing viable. Not many countries in the world possess such a market and hence they are unable to pursue an import substitution strategy.
- However, tariff hike is not only the strategy. It works only to address the inverted duty structure or for a specific objective and it should have a definite sunset that clause.
- It is required so companies scale up and get investment. Such tariffs can result in domestic cartelization or monopolies which push prices up, thereby adversely impacting the upstream production.

Way forward:

- Ensuring that there exists a level playing field for domestic manufacturers will help in increasing the exports. It involves extending concessional credit to such manufacturers along with competitive electricity tariffs and efficient logistics.
- China's image as a supplier has taken a hit. This presents a huge opportunity for India in the export of fruits, vegetables, marine products etc.
- However, exports of many agro-commodities are unavailable due to the rising MSP which at times is much more than the international prices. The government must provide some mechanism to reimburse the differential price (MSP less the international price) to exporters.
- The freight disadvantage has been largely nullified through the new Transport and Marketing Scheme for agri-products.
- The path breaking reforms in agriculture would push agricultural exports.
- Relaxation in the Essential Commodities Act will encourage exporters to procure such products

without fear.

- Farmers can then engage with agri processors, exporters and even large retailers for the sale of farm produce at mutually agreed upon prices.
- Such platforms will also help farmers get information about phyto-sanitary standards which is vital for getting access to advanced economies.
- The revised definition of MSME will also encourage exports as the government has excluded exports turnover from the aggregate turnover for eligibility purposes resulting in more companies qualifying for MSME status.
- The increased limit on investment in plant and equipment for medium companies, from Rs. 10 crore to Rs. 50 crore, will encourage adoption of more advanced technology in manufacturing which is the key to competitiveness in exports.
- We should improve the business environment and expedite regulatory and other clearances at all levels to translate greater liberalization into higher inflows.
- FDI in exports should be supplemented by concluding FTA/CECA/CEPA with our trade partners.
- To promote growth of accounting and financial services, we should allow FDI in the domestic accounting and auditing sector, introduce a transparent regulatory framework, and ease restrictions on the client base in the accounting and auditing sector.
- For the education sector, foreign universities should be allowed to set up campuses in India, provide easy visa regimes for students and education service providers, remove regulatory bottlenecks, provide recognition to online degrees and set up appropriate evaluation techniques for online courses.
- An institutional set-up to address the problems and challenges faced by exports in the shortest time frame possible is the need of the hour. A three-tier structure with the district, state and central level working on an electronic platform would be ideal and the officers attending such meetings should be empowered to take quick decisions.

Chapter 3: JAM Trinity

The government has been actively promoting the use of digital technology and establishing nationwide online platforms for boosting policy implementation, essential operation and transparency in the current pandemic situation. JAM trinity is acting as a safety net and helping millions who need immediate monetary aid.

There have been, two main pillars of the use of digital technology in the pandemic:

1. Monitoring
 2. Governance (especially delivery of public goods).
- Monitoring has been made possible by the Aarogya Setu mobile app.
 - By assisting in the recording, enumeration, and location-tracking of COVID-19, Aarogya Setu has proved to be an invaluable tool in the fight against the pandemic.

Why is the Jan Dhan-Aadhaar- Mobile (JAM) Trinity so Powerful?

- The JAM trinity has given a boost to the Direct Benefit Transfer (DBT) programme and expanded its coverage from partial to ubiquitous.
- By eliminating the need for middlemen, JAM has helped minimise avenues of corruption, irregularities and pilferages. It has also promoted the ease of doing business.
- Given the need for physical distancing to curtail the spread of COVID-19, JAM is promoting online transactions among the beneficiaries, instead of physical visits to the banks.

- In the longer run, JAM will make the rural population get acquainted with the concept of 'saving' thus contributing to the GDP of the country as a whole.

Digital Technology in Governance:

- Platforms like Aarogya Setu and MyGov have been widely appreciated.
- Social media and online platforms have emerged as key mediums that connect citizens with governments to access the most credible information.
- Technology is alleviating the pressures placed on the supply chains and public distribution networks.
- The Aadhaar scheme provides all the citizens with a unique and verifiable digital identity. This enables the beneficiaries to avail entitled services and benefits without hassle.
- The Jan Dhan accounts take banking to the most impoverished and marginalised consumers.
- Digitisation has also helped in monitoring and evaluation of schemes whilst plugging loopholes.
- Technology to a large extent has demolished bureaucratic hierarchies, eliminated middlemen and accelerated welfare measures.

Relief and Reforms to Fight COVID-19:

- Digital payments infrastructure has enabled cash transfer to more than 31 crore beneficiaries under the financial assistance scheme Pradhan Mantri Garib Kalyan Yojana (PMGKY).
- 93 crore farmers were benefited through the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) to help farmers tide over the COVID-19 crisis. Under the scheme, the government transfers Rs. 2,000 cash directly to the farmers' bank accounts through DBT.
- 1,400 crore disbursed to about 2.82 crore old age person, widow and disabled people under the National Social Assistance Programme (NSAP).
- 16 crore construction workers received financial support from the Building and Construction Workers' Fund managed by state governments.
- The government is providing free LPG refills for the next three months to over 8.3 crore poor women under the Ujjawala scheme and Rs. 50 lakh insurance cover for healthcare workers.

Global Recognition for the Efficacy of the JAM Platform:

- The Center for Global Development has noted that the JAM trinity enables the Indian government to make payments "more effectively and inclusively."
- The Center has created a JAM Index based on Findex data to rank countries on their use of ID systems, mobile phones, and financial accounts, to effectively make government payments.
- India and Kenya are two top ranking countries in this index.

Chapter 4: Making Farmers Self-Reliant

Agriculture for self-reliance:

In terms of agriculture and food production, India is a self-reliant nation having record output of cereals, fruits, vegetables and highest production of milk in the world. India is maintaining sustainable food security despite the steady increase in population and rising living standard of people that trigger demand for diverse food items.

Concerns:

- The farmers, who are the drivers of self-reliance have remained at the edge, struggling with low

income, diminishing profitability and risk-laden livelihood.

- Concerned with the plight of the farmers, the government has sought to double farmers' income by 2022 and has devised a sound road map to reach the target. Reforms have been initiated along several verticals ranging from crops, livestock, easy credit flow, income support schemes etc.

Mitigating Risks, Securing Livelihood:

- The Government launched a comprehensive crop insurance scheme in 2016 that provides coverage from pre-sowing to post-harvest against natural non-preventable risks.
- 'Pradhan Mantri Fasal Bima Yojana (PMFBY)' is a low premium policy in which farmers are required to pay only 2%, 1.5% for and 5% of the sum insured for kharif, rabi and commercial/horticultural crops respectively. Not only farmers, but tenant farmers and sharecroppers engaged in cultivation of notified crops are eligible for crop insurance policy.
- The government has comprehensively revised the operational guidelines making provision for payment of 12% interest per annum to farmers if claims are not settled within 10 days of prescribed time-limit.
- A new provision also envisages add-on coverage for damage by wild animals on pilot basis.
- The scheme envisages increase in coverage from the existing 23% to 50% of Gross Cropped Area in the country.
- To address the specific concern of small farmers, the government started organising them into Farmer Producer Organisations (FPOs) who have better bargaining power.
- The major impetus was given in the Union Budget 2019-20 by making budgetary provision for formation of 10,000 new FPOs over the next five years.
- FPOs have ensured benefits to the small and marginal farmers through economies of scale, improved market reach, improved access to extension services and reduction in transaction costs.
- Taking a cue, National Rural Livelihood Mission (under Deendayal Antyodaya Yojana) has initiated organising small and marginal women farmers into producer groups to increase market access and value addition of farm produce.

Procurement and Support:

- Government has increased the Minimum Support Prices (MSPs) at levels of one and half times of the cost of production. Elaborate and effective arrangements are in place for maximum procurement of produce by government agencies at MSP.
- Taking note of large scale indebtedness of farmers, a unique and innovative Kisan Credit Card (KCC) scheme was launched to provide institutional credit to farmers.
 - It supports small and marginal farmers, sharecroppers, oral lessees and tenant farmers as well.
 - Recently, to expand the beneficiary base of KCC, the Government has waived processing fee, inspection and other service charges for short term crop loans up to Rs. 3 lakhs.
 - Interest subvention is also provided on such loans for a period of one year in case of timely repayment. Interest rate of 7% per annum gets reduced to 4% in such cases.
- The facility of KCC was extended to dairy farmer and fishers, and recently under 'Atmanirbhar Bharat Package' a special drive is launched to provide KCC to 1.5 crore dairy farmers associated with milk unions and milk producing companies within two months.
-

Trade and Marketing:

- eNAM is a unique pan-India electronic trading portal, launched for business and marketing of agricultural commodities in India.
- This digital initiative aims to existing agricultural mandis on an online platform to realise the vision

of 'One Nation, One Market'.

- During COVID-19 lockdown crisis, three new modules of eNAM were launched to facilitate farmers.
- eNAM enables FPOs to conduct trade of commodities from their own collection centres declared as
- Another module facilitated warehouses for Electronic Negotiable Warehouse Receipts (eNWRs) trading.
- Logistics module facilitates transportation of commodities from farm to mandis, and from mandis to warehouses or consumption centres.
- The Government has recently initiated a comprehensive 'Agriculture Export Policy' aimed at doubling agricultural exports and integrating Indian farmers and agricultural products with the global value chains.
- To promote and facilitate export of Indian agri-produce at new destinations, it has created agri- cells in many Indian embassies abroad.
- Export of all varieties of pulses and edible oils (except mustard oil) has been allowed.
- Import duties have been raised and provision of 'Minimum Import Price' (MIP) was imposed on selected commodities to protect the domestic growers and their livelihood from cheap import of the commodity.

Building Infrastructure, Creating Value Chains:

- In the recently announced 'Aatmanirbhar Bharat Package', an agri-infrastructure fund of Rs. 1 lakh crore will provide finance to Primary' Agricultural Co- operative Societies (PACS), FPOs, agripreneurs, agri-startups etc.
- A cluster-based approach in aspirational districts will be promoted to realise the vision of 'Vocal for Local with Global Outreach'.
- Under Pradhan Mantri Matsya Sampada Yojana, Rs. 20,000 crore has been allocated; of which Rs. 9,000 crore is exclusively dedicated towards infrastructure development. More valued productions, such as cage culture, seaweed farming, ornamental fisheries, will be supported for increasing income of fishers substantially.
- An Animal Husbandry Infrastructure Development Fund of Rs. 15,000 crore is being created to support private investment in dairy processing.
- Pradhan Mantri Kisan Sampada Yojana is financing and supporting development of mega food parks, integrated cold chains and infrastructure for agro-processing and value addition.
- With an outlay of Rs. 4,000 crore, herbal cultivation will be promoted for next two years covering an area of 10 lakh hectare.
- Beekeeping will be supported with a fund of Rs. 500 crore for infrastructure development.

Special Welfare Schemes by States:

- In addition to centrally sponsored schemes, various state governments have also launched special welfare schemes for farmers to augment their income.
 - The 'KALIA' scheme, of Odisha.
 - Krishi Ashirwad Yojana of Jharkhand and Rythu Bandhu of Telangana are some of the noted schemes that have shown positive impact on income and livelihood of farmers.

Chapter 5: Rural Development

Majority of India's population resides in the rural areas. Therefore any development in the rural areas would be significant for India.

- Bringing in better healthcare facilities to the rural areas has reduced the mortality rate, and healthier lifestyles can thus be seen emerging in the country.

- The creation of new job opportunities and new business avenues within the rural domain has been the hallmark of science & technology's positive intervention in rural development.
- Bringing in automation in villages based small scale industries have a direct effect on the growth of rural economy.
- Bringing in technologically advanced communication systems into vogue has also changed the way education is being imparted in the rural India.

Science and technology in agriculture:

- The advent of science and technology in the rural sector, particularly in agriculture, has seen enormous change and thus, scientific awareness among the farmers.
- Be it is soil science, entomology, agronomy, economics, animal husbandry, or pathology, name any branch of agricultural sciences, research & development news from the labs reaches the farmers quite quickly.
- Water, soil, and seeds are the key driving forces for agricultural development.
- Adaptive technology in agriculture, for example the one that focuses on demand-side water identify more efficient technology and practices that save more water in agriculture.
- Accurate weather forecasting has also played a significant role.

Conclusion:

- Besides the Government of India's relentless efforts to make the citizens in the rural sector duly aware of its efforts, a number of scientists and technocrats have come forward to help the rural sector.
- Science and technology have made greater inroads into rural development.
- The role of science & technology in rural development should be treated in a holistic manner.
- Social Media is also a powerful medium to aide S&T development outreach in rural domain.

Chapter 6: Resilient Health Systems

India has exhibited consistent progress in ensuring strengthened health systems and infrastructure over the years. It is committed to building effective and efficient health delivery systems and attaining the highest possible level of health and well-being for all, at all ages, through a preventive and promotive health care orientation in all developmental policies, and universal access to good quality health care services without anyone having to face financial hardship as a consequence.

Government Initiatives:

- The National Health Mission launched in 2005 has provided much needed national framework for advancing the public health agenda.
- Mission Indradhanush was rolled out on World Health Day, 7th April 2015 with an aim of Full Immunisation Coverage (FIC).
 - Before 2014, the national immunisation coverage stood at 65%.
 - India set up an ambitious target of achieving 90% FIC by 2020.
 - The Government strengthened the basket of vaccination services via a life-cycle continuum of care approach for both pregnant women and children.
 - In 2016, vaccines pertaining to Japanese Encephalitis, Rubella, Inactivated Polio Vaccine (IPV) and Rotavirus were added, and 2017 saw the addition of Pneumococcal Conjugate Vaccine (PCV).
 - Pentavalent vaccine (Diphtheria, Pertussis, Tetanus, Haemophilus influenzae type b [Hib] and Hepatitis B) was expanded to all the states in the year 2015.
- As a result of collaboration with different international agencies and extensive intervention, the

annual immunisation coverage shot up from 1 % to approximately 6.7% per year in 2016 itself.

- Mission Indradhanush has been rightly cited as one of the 12 best global health practices in the world.
- To enhance the quality of vaccines and supply chain, the Government effectively introduced the indigenously developed eVIN (Electronic Vaccine Intelligence Network).
 - It seeks to ensure supply of vaccines and cold chain maintenance through technological solutions.
 - The initiative has been successful in saving 90 million vaccine doses with the adherence rate of 99% in maintaining the vaccine supply and temperature norms, thereby improving the coverage and quality of vaccination program in India.
 - eVIN has been successfully piloted by countries like Indonesia, Sudan and Malawi.
- Various initiatives such as Ayushman Bharat, with its twin pillars of Health & Wellness Centres and Pradhan Mantri Jan Arogya Yojana (PMJAY) have bolstered India's march towards achieving UHC.
- Besides reducing out-of-pocket expenditure on medical care and securing health services, these initiatives are also bound to positively impact our realisation of SDGs in general and SDG-3 (Good Health and Well-being) in particular.
- All the key Reproductive and Child Health indicators namely Maternal Mortality Rate, Neonatal Mortality Rate (NMR), Infant Mortality Rate, Under-Five Mortality Rate (U-5MR) and Total Fertility Rate etc., have recorded appreciable improvements.
- India successfully eliminated Maternal and Neonatal Tetanus in April 2015. This was another achievement of the Government after achieving Polio Eradication in March 2014.
- Scaling of Special Newborn Care Units (SNCUs) have been at the forefront of improved newborn and infant healthcare in India.
- Universalisation of Vitamin K injection at birth, Antenatal Corticosteroids during preterm labour, Kangaroo Mother Care (KMC) and administration of Gentamycin injection to newborns by ANMs in order to treat newborn sepsis; all have boosted the prospects of saving so many newborns and infants in India over the last six years.
- Under Pradhan Mantri Surakshit Matritva Abhiyan, all pregnant women in the country are provided fixed and free Antenatal Care services on 9th of every month with the participation of the private sector.

Transformation of Aspirational Districts (TADP) Programme:

- NITI Aayog has spearheaded the "Transformation of Aspirational Districts" (TADP) Programme.
- This programme aims to uplift those backward 117 districts in India that are lagging behind in specific development parameters of health and nutrition, education, basic infrastructure etc.
- It is interesting to note that the maximum weightage (30%) amongst the six core thematic areas of this programme has been accorded to health and nutrition.

Conclusion:

In the wake of the global pandemic, there is a renewed realization that investment in resilient and sturdy health system is an investment in strong foundations of a prosperous nation.

Chapter 7: Effective Resource Management

- In 2019, the World Economic Forum's Risks Report indicated that a global water crisis is the fourth most impactful risk and the ninth likeliest.
- According to the World Bank, in 2019, India specifically is one of the most water- stressed countries globally.
- NITI Aayog has found that many Indian cities were on track to run out of water in the next few

years, if not already in the midst of the COVID- 19 crisis.

Government initiatives:

- The government has introduced programmes over the past few years such as Jal Shakti Abhiyan, SBM, Jal Jeevan Mission which seek to prioritise solutions that improve water security and supply and sanitation access.
- These programmes do not only address needs in terms of resource management, but also in terms of the potential to provide livelihoods to a growing youth population.
- Atmanirbhar Bharat focuses on developing infrastructure and support to the micro, small and medium enterprises.
- Focus on government projects with clear social development objectives such as water, sanitation, nutrition, rural development goes a long way in developing self-reliant community.

Chapter 8: Harnessing Skills of Incoming Migrants

Case Study of Bihar

- According to recent statistics from the Bihar State Disaster Management Department, the state received more than 1.5 million returnees in the state's quarantine centres.
- These returning migrants would require employment opportunities in the short term as well as in the long run.
- In the short-term, the state wants to recruit manpower for waged labour for existing social development schemes.
- In the longer term, the state wants to lay down an ecosystem that supports establishing large and decentralized industrial opportunities within the states.

The Government of Bihar employed a two-pronged strategy to leverage this suddenly available manpower towards developing the state.

1. Map skillsets of all incoming migrants - to understand what supply exists to meet demands, and estimate employment needs. Initial data, suggests that approximately 50- 70 per cent of the returnees were working in construction industry.
2. Develop comprehensive district employment plan - which would include details of both wage employment and self- employment both under the State Rural Livelihood Mission and other development projects. It is also seeking to entice industries to set up in Bihar by providing concessions and promotions under its new Industrial Investment Promotion Policy.

Engaging Migrants Labour in Existing Developmental Activities:

The government of Bihar has large projects which will benefit the population in the form of better hygiene, lower morbidity, availability of tap water at home, increased availability of soil moisture and overall greener environment.

- Jal Jeevan Hariyali (JJH) programme envisions a disaster-resilient Bihar by investing in environment sustainability through afforestation, to revival of water bodies, and rainwater harvesting.
- Lohiya Swachh Bihar Abhiyan (LSBA) has potential of providing opportunities for employment of skilled labourers.
- The Government of Bihar is also implementing the ambitious scheme- Har Ghar Nal Ka Jal - under the national umbrella of the Jal Jeevan Mission (JJM), in order to provide functional household tap connections to all households in the state.
- These village and town level schemes require trained plumbers and mechanics available to keep

them functional.

- Similarly, the state government's flagship programme, Jeevika, the state's rural livelihood mission, has a membership of more than 10 million households.
- After the migrants' skills are mapped, training is organised at quarantine centres and their services are being utilised in various development initiatives.
- Trained or already skilled migrants have already been deployed to support work under the MNREGS, for JJHM and LSBY.

Development of Industrial Clusters:

As part of the 2016 policy to develop local and sustained industries, the state identified four high priority sectors with potential for significant gainful employment:

1. Food Processing
 2. Leather
 3. Textile
 4. IT, ITeS and Electronics System Design & Manufacturing.
- There is already a pool of supply as some returning migrants had been previously employed by export houses in other states dealing in textile and leather.
 - The Bihar government is working to connect them with initial capital sourced from scheme such as Mudra Yojana, and provide them with better transportation access so that they can connect their products from anywhere in the state to the bigger consumer pools in cities.
 - Bihar having lower overhead costs and cost of living can potentially offset the cost of starting business in the state.

Chapter 9: Improving Livelihood Opportunities

Importance of water and sanitation:

- Access to Water, Sanitation and Hygiene (WASH), specifically water, plays a critical role in improving the rural economy of households by offering livelihood opportunities for people living on the margins.
- Not only do access to toilets, hygiene products and safe water sources improve correlated health and nutritional outcomes, they also improve the productivity potential of income earners by reducing risk of illness and morbidity.
- This in turn feeds back into the cycle of generating more jobs, education opportunities.
- In particular, investment in the WASH sector can ameliorate the participation of women and girls, who often are burdened with the task of collecting water for the household, thereby trading away opportunities for betterment and income generation.

Case Study: Odisha

- An example is Balangir, a tribal district of Odisha with acute water scarcity.
- Insufficient water availability, frequent droughts and inadequate quality over the years affected the livelihood and nutrition security of thousands in the rural regions of the district.

Addressing the issue:

- Over the last five years, Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has become the main force that is driving water conservation efforts all across rural India.
- The scheme has evolved into focused campaign to raise rural incomes through work on national

resource management (NRM).

- In 2014, the amendment to MGNREGA Schedule-I was done which mandates that at least 60 per cent expenditure on agriculture and allied activities.

Strategy adopted by Odisha:

- Under the lead of the Department of Panchayati Raj and Drinking Water in Odisha, a two-pronged approach was adopted by the state in four districts including Balangir: one would ensure that jobs were provided and the other, necessary water security.
- The Odisha Livelihood Mission (OLM) and Buxi Jagabandhu Assured Water Supply to Habitations (BASUDHA) Scheme promoted access to both livelihood prospects and WASH services, With MGNREGAs policy to support recruiting manpower.
- The Jal Shakti Abhiyan initiated complementary investing in ground water recharging, rain water harvesting, renovation of water bodies etc.
- By involving beneficiaries from the start, a sense of ownership was achieved and a self-reliant approach was promoted.
- The state is continuing to invest in this convergent approach to improve water security while also providing work opportunities.

Chapter 10: Gandhiji's Approach of Self-Reliance

In modern history, one of the earliest proponents of the notion of self-reliance was Mahatma Gandhi. He provided a distinct and alternative paradigm of development to strengthen rural economy and promote indigenous production to attain self-sufficiency. His earliest undertakings got reflected in the Hind Swaraj (1909) where he presented his views about localism and grass root level participation, role of local community, its capacity to produce, generate and provide to all, within a community, a sustainable living. Later, he also placed his agenda in The Constructive Programme (1941), where he stated about construction of Poorna Swaraj through truth and non-violent means and with independence of each and every unit.

- Self-reliance is a vision that indicates towards activities that are self- supporting in economic terms and indicate reliance on one's own resources and having means to an end.
- India had a self-reliant economy and society since the Indus Valley Civilisation, which was based on traditional methods of production, be it agriculture or non-farm practices.

The Hind Swaraj:

- The Hind Swaraj was Mahatma Gandhi's initial treatise which described his vision about self-sufficiency of village communities in basic aspects of life.
- His concepts can be placed under two categories. These are:
 1. Self-control and moral development: According to Gandhiji, "if national life becomes so perfect as to become self-regulated, no representation becomes necessary".
 2. Local Governance and Economic Development: Gandhiji believed in participatory governance and successive linkages of it with agencies above, in the hierarchy.
- Economic development to him, did not mean about having more, but about being more. His idea of economic development focused on making villages self-reliant.
 - His ideas also got reflected in his concept of Swadeshi.
 - His scheme of village revival spoke about self-sufficiency in cloth and food production. For this he emphasized on weaving and spinning.
 - He also stressed on all other crafts that formed a part of the hereditary occupation of the

villagers, hence promoting the artisan economy.

Gandhiji's views on machine civilization:

- Gandhiji expressed his aversion to modern machine civilisation and believed that consumption should be limited to objects that could be produced without machinery.
- He also opposed the mass production of commodities because it eventually gets dumped down to the village market, thus leading to destruction of the village production system.
- He was not against industries but against industrialism, which led to concentration of wealth and where the driving force is not to save labour but greed.

The Constructive Programme:

- Gandhiji described Constructive Programme as complete independence through truth and non-violent means, with independence of each humble unit without distinction of race, colour or creed.
- It was a programme of individual change, followed by social change and faith in the following for Poorna Swaraj.
- He envisioned to build a strong civil society so that the benefits of independence could percolate down to the masses and for this, he intended to create a network of local leaders who would work for creative change of the nation.
- Khadi and other village industries were always in focus within his schemes.
 - According to him Khadi "connotes the beginning of economic freedom and equality of all within the country" and indicated "decentralisation of the production and distribution of the necessities of life".

Gandhiji's idea of Self-Sufficient Villages:

- Villages becoming small unit of production (should not be labour replacing).
- Protection of artisan economy.
- Revival of agriculture and allied activities
- Generation of economic activities which are not dependent on land but yet provide livelihoods.
- Check on village out migration due to seasonal unemployment in agriculture.
- Lessening of ecological impact on environment.
- Utilization of local specificities in terms of resources and traditional knowledge.
- Self-sufficiency in terms of power through renewable sources.
- Lessening of development divide and contrasts between villages and cities.

The Contemporary Relevance:

- However, in this era of mass production, materialism and consumerism, there appears to be quite a drift from the environment, traditions and traditional knowledge, facilitating science and technology, that was perceived and proposed by Gandhi.
- Inclusive development demands a comprehensive planning with inclusion of elements from the grass root level.
- The development experience has shifted from a Statist model in the initial decades to gradual withdrawal of the State in the later decades.
- For a diverse country like India, there cannot be a uniform action plan for development.
 - The local specificities, identities and endowments need to be taken into consideration for any development approach.
 - Gandhiji mentioned that the Constructive Programme is designed to build the nation bottom up.
- The first potential sector lies in the handicraft tradition of India. The raw material is localised and the

production involves labor assistive technologies.

- The secondary important potential activities include most of the non-farm practices that have the capability to provide sustained livelihoods. Since land as a resource is limited, the agro-based allied activities also have considerable potential to create income.
- The mission and measures towards self-reliant India with emphasis on the micro, small and medium enterprises align with the vision of Gandhi fundamentally.
- The revision and roadmap could go a long way in protecting and promoting the interests and earnings of the rural masses.

Chapter 11: Swachh and Smart Cities

A self-reliant India will stand on five pillars:

1. Economy, which brings in quantum jump and not incremental change.
2. Infrastructure, which should become the identity of India.
3. System, based on 21st century technology-driven arrangements.
4. Vibrant Demography, which is our source of energy for a self-reliant India.
5. Demand, whereby the strength of our demand and supply chain should be utilised to full capacity.

Smart Cities Mission (SCM):

- It promotes cities that provide core infrastructure and give a decent quality of life to its citizens, and a clean and sustainable environment and application of smart solutions.
- Many smart cities in India have started to use the Integrated Command and Control Centre (ICCC) built under the Smart Cities Mission to fight against COVID-19.

Jal Shakti Mission:

- The government has proposed comprehensive measures for one hundred water stressed districts.
- Safe water mission with a focused approach (Jal Jeevan Mission) and comprehensive sanitation program (Swachh Bharat Mission) have been launched to support the health vision.
- **Water Supply:** aimed at providing piped water supply to all households. The components of smart water management are:

1. Smart meters & management
2. Leakages identification, preventive maintenance
3. Water quality monitoring

- **Urban Waste Water Reuse:** In urban areas, plans/approvals with time-bound targets to be developed for waste water reuse for industrial and agriculture purposes.
- **Sewage Collection, Treatment and Disposal System:** The government is committed to open defecation free (ODF). Now, more needs to be done towards liquid and grey water management. Focus would also be on solid waste collection, source segregation and processing.

Swachh Bharat Mission:

- According to Mahatma Gandhi “Sanitation is important than freedom”.
- SBM was launched to accelerate the efforts to achieve universal sanitation coverage and to put focus on sanitation.

- The smart solutions for Swachhata in terms of waste management are:
 1. Waste to energy & fuel
 2. Waste to compost
 3. Waste water to be treated
 4. Recycling and reduction of waste

The Ministry of Rail ways is the frontrunner of the SBM. It has installed bio-toilets in coached coaches with a coverage of about 99.3%. Indian Railways banned single use plastic material on 2nd October 2019.

Atal Mission for Rejuvenation and Urban Transformation (AMRUT):

- Provision of basic facilities to households and building amenities in cities which improve the quality of life for all, especially the poor and the disadvantaged is a national priority.
- The purpose of AMRUT is to
- Ensure that every household has access to a tap with assured supply of water and a sewerage connection.
- Increase the amenity value of cities by developing greenery and well-maintained open spaces (e.g. parks); and
- Reduce pollution by switching to public transport or constructing facilities for non-motorised transport.
- Earlier, the MoHUA used to give project-by-project sanctions. In the AMRUT, this has been replaced by approval of the State Annual Action Plan once a year by the Central Ministry and the States have to give project sanctions and approval at their end.
- In this way, the AMRUT makes states equal partners in planning and implementation of projects, thus actualising the spirit of cooperative federalism.
- Mission components of AMRUT Water Supply, Sewerage, Septage, Storm water Drainage, Urban Transport, Green Space and Parks, Reform Management & Support, Capacity Building

Challenges and Way Forward:

- The cities must be prepared for the security and hacking of the entire software system.
- There should be a balance between the quality of life and invasion of privacy.
- Swachh Bharat Mission (urban) faces two major challenges: Disposal of solid waste and Sewerage/liquid waste.
- Disposal of solid waste has three key components - waste collection, transfer of the waste, and lastly, proper disposal at the landfill site.
- The task of waste collection and its transfer to the landfill site requires both manpower as well as an efficient transportation system. The segregation of waste can either be at the source or at the landfill. Segregation at source is more economical.
- The cleanliness is primarily related to the behavioral aspect of individual and the society.

Chapter 12: Digital Defence against COVID-19

Digital Technology has been at the forefront of fighting the pandemic and prevented health systems from becoming overwhelmed. Recognising its far-reaching impact, WHO in 2019, released recommendations for countries to use digital health technology, accessible via mobile phones, tablets and computers in order to improve people's health and delivery of essential services.

Digital Initiatives:

Mobile Applications:

- Mobile App based contact tracing has been found to be tremendously useful in identifying potential cases and gathering information about the spread of disease.
- India has launched its own Bluetooth and GPS enabled contact tracing app, Aarogya Setu. It provides an opportunity to self-assess and actively reach out to health system with one's own status of well-being.
- Some countries have even gone to the extent of giving paired wristbands to those who are put under disease surveillance and thereafter utilise geofencing technology to help catch violators.

Open-sourced Analytics and Modeling Tools:

- Rapid data sharing is critical during epidemics and pandemics as it allows for a better understanding of the origins and spread of the infection.
- Open-source technologies can help in improving accessibility of information, formulating open standards that enable all stakeholders to contribute and developing rapid prototypes that can lead to rapid discoveries.
- The placement of the first genome of the 2019-nCoV virus in an open database on 8th January 2020, paved the way for scientists around the world to start working on the development of a treatment or vaccine.

Tele-health Technologies:

- Tele-health technologies allow patients to be seen and diagnosed remotely by doctors.
- Many countries are now providing virtual care on a war footing.
- E-Sanjeevani is the Indian teleconsultation service launched by MoHFW during this pandemic.

GIS and Smart City's Integrated Control and Command Center (ICCC):

- Geographic interpretation and insight are essential in detecting, understanding and responding to the pandemic.
- GIS helps epidemiologists to map disease occurrence against multiple parameters including demographics, environment, its spread pattern etc. to implement preventive and surveillance measures.
- WHO unveiled its ArcGIS Operations Dashboard for COVID-19, which maps coronavirus cases and total number of deaths by country and other related informations.
- In India too, GIS has been extensively deployed to fight the pandemic.
 - A GIS platform has been developed by an eminent team of researchers in IIT Chennai and integrated with Aarogya Setu to provide extremely important information about the spread of coronavirus.
 - ICCC across 45 smart cities have transformed into war rooms for operations to contain the spread of the COVID-19.
 - ICCC are being used to carry out CCTV surveillance of public places, GIS mapping of COVID-19 positive cases, GPS tracking of healthcare workers, predictive analytics (heat maps) for virus containment across various zones of the city etc.

Drones:

- From disinfection and street patrols to food and medicine delivery in containment zones; drones are being deployed on the front line in the fight against coronavirus.
- Indian cities have also effectively deployed drones to disinfect over-congested slums and colonies. Moreover, police in various states have made effective use of drones to expand surveillance and

make live announcements.

- Ministry of Civil Aviation has launched GARUD portal to fast track conditional exemptions given to government agencies for COVID-19 related drone operations.

Robots:

- Robots have been used by many countries to provide services and care for those quarantined or practicing social distancing.
- Humanoids like Sayabot in Kerala are used to raise awareness & automate sanitisation processes.

3D Printing:

- 3D printing can play an important role as a disruptive digital manufacturing technology by boosting production and optimising the supply of specialised and critical medical equipments to treat COVID-19 patients.
- HP India responded to the critical need of making ventilators available in large numbers by getting over 1.2 lakh key ventilator parts printed in a short span of time.

Conclusion:

- As the pandemic's prolonged existence necessitates looking beyond short-term measures, it is time for structural & legal frameworks around increased digitisation to be firmly entrenched in material economy.
- The shift to virtual operations demands not only an accelerated pace of metabolic learning but also scaling up analytics and quality.
- Innovation must be both at faster speed and bigger scale which is the key to 'survival of the fittest'.

Chapter 13: Technology and Learning

Recent Initiatives in Education:

- SWAYAM Prabha, which consists of a bouquet of 32 DTH educational TV channels, was launched in 2017 to telecast high- quality educational programs round the clock.
- Considering the success of SWAYAM Prabha channels and the fact that they have a large catchment area, the government has decided to start 12 educational TV channels on DD platforms for classes; dedicating one channel for each class.
- The government is also promoting the use of radio in learning. Community radio and radio streaming on internet (podcasts) have emerged as viable technological solutions for reaching out to hitherto unreached students and teachers in the country.
- SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds) is an online digital platform which hosts several courses offered by the best teachers of universities/colleges/schools free of cost to the students living in any part of the country. One needs to pay only for examinations and certificates. Such courses are also known as Massive Open Online Courses (MOOCs).
- In 2015, NCERT and MHRD, launched ePathshala portal and mobile app. This app and portal hosts all text book titles of NCERT as ePubs and flipbooks.
- The Government's push for "One Nation, One Digital Platform for Learning" has resulted into the creation of Digital Infrastructure for Knowledge Sharing (DIKSHA).
 - The DIKSHA app was launched in 2017.
 - Although it is just one app for the entire country, it seeks to decentralise the creation of

Conclusion:

- The way technology is being used in education, a new discipline, called educational technology (ET) has emerged.
- Given the huge gap in access to ICT infrastructure in the country, any technology mediated solutions must first seek to bridge the digital divide.
- The draft National Education Policy (NEP) 2019 identifies a few important concerns related to technology integration in education in the country. One such concern is the availability of the local expertise in resolving and maintaining hardware and software at remote locations.
- It recommends deploying local talents for managing technological issues in schools. In this way, technology use in education has ramifications for the employment at the local level too.

Chapter 14: TID-BITS

iFLOWS: Flood Warning System

- iFLOWS is a state-of-the-art Integrated Flood Warning System.
- Using this system, it will be possible to have an estimate of the flood inundation 3 days in advance, along with 3 hours-6 hours Nowcast (immediate weather updates).
- It is built on a modular structure and comprises seven modules.
- It will help make Mumbai become more resilient, by providing early warning for flooding especially during high rainfall events and cyclones.
- It has been developed by the Ministry of Earth Sciences using its in-house expertise.

Why choose the BYJU'S IAS Learning Program?



Classroom sessions

Prepare for Prelims and Mains with India's leading IAS trainers



Student Portal

Get access to recorded sessions of the Weekly Webinar, Issues in News, Current Affairs Magazine, Gist of Yojana and Practice Sets



Stay Up-to-date

Regular and in-depth current affairs updates



Mentor Support

Personalised feedback from our mentors



Study Material

In-depth coverage of syllabus which includes the following guides: Indian Polity by M Laxmikanth, India's Ancient Past by R S Sharma, History Of Modern India by Bipan Chandra, Ethics, Integrity and Aptitude by P N Roy Chowdhury and G Subba Rao +16 more titles



Test Your Knowledge

Perfect your exam writing skills and knowledge with - modular tests (MCQ and descriptive), question paper discussions, personalised analysis of answers and answer writing strategies



Current Affairs Webinar

Twice a week live webinar classes to discuss current affairs followed by revision notes



Ease of Accessibility

Prepare at your own convenience, anywhere and anytime with the BYJU'S IAS tablet

Course Highlights

Daily news analysis based on The Hindu

Practice to perfection with Prelims and Mains Test Series

Post Mains Interview Guidance Program

Delhi

B-1/8, Lower Ground Floor, Apsara Arcade, Sadhu Vaswani Marg, Pusa Road, Karol Bagh, Rajinder Nagar, Delhi 110005

Shop No. 19, Vardhaman Central Mall, Nehru Vihar, Delhi. nearest metro- Vishwa Vidyalaya metro station

Hyderabad

Srishti Tower, Hitech City Rd, VIP Hills, Silicon Valley, Madhapur, Hyderabad, Telangana 500081

3-6-196/197, 2nd Floor, Prime Plaza, Himayatnagar Main Road, Himayatnagar, Hyderabad, Telangana 500029

Bangalore

BYJU'S Classes, Tavarekere Main Rd, Opp: Forum back gate, Venkateshwara Layout, S.G. Palya, Bengaluru, Karnataka 560029

Chennai

St Patricks School, Kasturba Nagar 3rd Cross St, Gandhi Nagar, Adyar, Chennai, Tamil Nadu 600020

To know more about our courses contact: +91 92435 00460