

NATION MARCHING FROM ENTERPRISE TO SELF-RELIANCE

- Based on positive efforts being made with the world's largest young population, labour force, and abundant resources, India is poised to become the world's skill Capital.
- The government framed the National Skill Development and Entrepreneurship Policy in 2015 which laid the foundation for major changes in this direction.
- Presently, the working people in the age group of 15 to 59 years are more than the dependent population.
- The Economic Survey 2018-19 also points out that **India's demographic dividend will be at its peak around the year 2041** when the share of working people in the age group of 20 to 59 is expected to reach 59 percent of the total population.

Several Measures to Reap the Benefits of Demographic Dividend

- The government has set up the **National Skill Development Corporation** to provide skill-related training to 500 million individuals by 2022. It is promoting the private sector in skill training programs.
- Skill and knowledge are the driving force of socio-economic development for any nation. Several important initiatives are being taken by the **Ministry of Skill Development and Entrepreneurship** to bridge the gap between demand and supply of skilled workers.
- **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** has proved to be a milestone in this direction. Through this scheme, the youth are provided with short-term training in industry-relevant skills. According to the local market's requirement, **vocational training is also imparted** to illiterate, neo-literates and school dropout youths.
- Under the **Recognition of Prior Learning program**, the skills of youths are being certified.
- To promote start-ups, the government, in 2019, has changed its definition. According to it, now a **start-up will be treated as a start-up for ten years after its establishment** and continue to get benefits.
- To provide financial assistance to start-ups, the government has created a '**Fund of Funds for Start-ups**' with a corpus of Rs. 10,000-crore in the SIDBI.
- The MSDE has also launched an **AatmaNirbhar Skilled Employee-Employer Mapping (ASEEM) portal**. This portal provides **real-time data of skilled workforce** based on demand and supply.
- Digital skills will certainly play an important role in the post-COVID-19 era. The Directorate General of Training has launched a **free digital learning platform (Skills Build Reignite)** in June 2020. In the field of entrepreneurship and skills, Indian genre has also been added.
- The **Pradhan Mantri Yuva Udyamita Vikas Abhiyan (PMYUA)** is under implementation by the MSDE to promote young entrepreneurs. Through this scheme, training, mentoring and other support for setting up enterprises is provided to young entrepreneurs.
- The **National Entrepreneurship Award (NEA)** has also been instituted in 2016 to promote entrepreneurship. The award is given to *honour young first-generation entrepreneurs and ecosystem builders* who create a constructive environment for entrepreneurship and women entrepreneurs.
- The government has also taken several measures to **encourage women entrepreneurs** to begin start-ups. Together with GIZ, a German institution, the government has launched a **pilot project for the economic empowerment of women entrepreneurs** and women start-ups.
- Recently, the government has passed three laws related to agricultural reforms in Parliament. Freedom to sell agri-produce anywhere besides the mandis, e-platforms for agricultural marketing will provide opportunities to young entrepreneurs to thrive in

agriculture sector. **The warehousing, cold storage, and processing units are set to expand in the private sector due to abolishing the storage limit of produce.**

- Under 'AatmaNirbhar Bharat Abhiyan, the provision of agricultural infrastructure with a corpus of Rs. 1 lakh crore aims to create Infrastructure facilities such as warehouses, cold storages, and food processing units in rural areas.
- The Govt., under 'AatmaNirbhar Bharat Abhiyan', has made a provision of **Rs.10 thousand crores to formalize micro food enterprises.**
- In the field of food processing, strategy is to establish **Cluster based enterprises.** For instance, industries related to mangoes in Uttar Pradesh, tomatoes in Karnataka, Chilies in Andhra Pradesh and Oranges in Maharashtra need to be established.
- A provision of Rs. 500 crore has been made for **Operation Greens** to help in cold storage, transportation and processing of vegetables like potato, onion, and tomato.
- In the area of organic agriculture, there is immense potential for start-ups. The **National Medicinal Plants Board** has assisted in the cultivation of medicinal plants to promote herbal and medicinal plants' cultivation under the 'AatmaNirbhar Bharat Abhiyan' Package.
- The National Medicinal Plants Board will develop a **corridor in an area of 800 hectares on the Ganga banks for cultivating medicinal plants.**
- Deendayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) has taken path-breaking steps in promoting skills and entrepreneurship among rural youths.
- **Start-up Village Entrepreneurship Programme (SVEP)** was launched in 2016 by the Ministry of Rural Development under the **Deen Dayal Antyodaya Yojana - National Rural Livelihood Mission (NRLM)**. It can be called an effective effort to empower women entrepreneurs in the villages and develop entrepreneurship spirit.
- The people living in rural areas are not financially strong. Initial protection and guidance are not available to start-ups and they lack appropriate resources and environment for developing skills. **SVEP was successful in resolving these issues.**
- This scheme has also yielded excellent results in social inclusion. According to a midterm review of SVEP conducted by the Quality Council of India in September 2019, 82 percent of this scheme's entrepreneurs belong to scheduled castes, scheduled tribes and backward classes.
- In view of the COVID-19 pandemic, the Prime Minister had given a far-sighted call to turn crisis into opportunity. In rural areas, DAY-NRLM women self-help groups not only played a significant role in checking infection by producing masks, sanitisers and hand wash, but these women entrepreneurs also proved their entrepreneurial skills by earning extra income.

Conclusion:

- Entrepreneurship, skill and start-up are at the core of the resolve of 'self-reliance' under the 'AatmaNirbhar Bharat Abhiyan'. It is true, this is not a time to seek government job, but to provide others employment by setting up one's own enterprise.

INNOVATION AND ENTREPRENEURSHIP FOR SUSTAINABLE GROWTH

- India, over the centuries, has never had a dearth of great thinkers, scientists, engineers, doctors, innovators, philosophers, artists.
- However, what has been lacking is a holistic innovation and entrepreneurial ecosystem that stimulates, enables and supports Inspiration, Imagination and Innovation in our schools, universities, industries across the length and breadth of the nation.

Atal Innovation Mission: Powering AatmaNirbhar Bharat through Innovation and Entrepreneurship

- Creating a nation of job-creators and not just job-seekers is the key. And central to this, is the need for an extensive collaboration between corporate industry, academia, and governments. Such synergies have indeed gained momentum with the COVID-19 crisis.

Five Pillars of AatmaNirbhar Abhiyan and Atal Innovation Mission

1. Demographic dividend

- India enjoys a demographic dividend like no other in the world. It is imperative that we enable the channelisation of this youthful energy. Innovative ways of leveraging emerging digital technologies can create and promote such ecosystems.
- Existing government initiatives—such as Atal Tinkering Labs and AI curricula at school levels must also be accelerated to strengthen this pillar.

2. Infrastructure

- Innovation and entrepreneurship will be key to ensuring the development of both physical as well as digital infrastructure across all regions in the country.
- The nation needs smart villages and several hundred smart cities to become active hubs of livelihood enablement, innovation and job creation. This is vital to prevent a lopsided development of our economy and an unsustainable urban migration to a handful of tier-1 cities.
- The pillar of infrastructure would also require construction of digital highways, which would ensure that **innovations reach every common citizen** be it in education, healthcare, housing, or job enablement.

3. Demand

- India has over 1.3 billion people, a youthful population, a growing middle class, one of the fastest-growing economies of the world.
- The pillar of demand presents an **unprecedented opportunity for Make in India** in every industry.
- There has been an increasing number of challenges launched by various ministries—MeitY, AIM (Atal New India Challenges), DST (Kawach), DBT BIRAC (biotech challenges)—as well as COVID-19 challenges for preventive assistive solutions, spurring a remarkable slew of innovative solutions.

4. Technology

- The remarkable growth of the fast-growing \$180 billion IT/ITES and biotech industry in India over the past decade has showed the world India's scientific, engineering and technological prowess and capabilities.
- AatmaNirbhar Bharat has now turned the gaze of this world-class innovative talent inwards, to create products and services for the Indian market at par with other countries.

5. Socio-economic Growth

- With 22 percent of its population still below the poverty line, 44 percent of its economy still agri- based, many districts still combating unacceptable percentages of infant mortality and maternal mortality, and only a mere 13 percent of women entrepreneurs, India needs to ensure that rapid economic progress encompasses societal progress.

Atal Innovation Mission (AIM)

- Gol launched AIM to **promote a culture of innovation and entrepreneurship** in the country. AIM has taken a holistic approach to ensure creation of a problem-solving innovative mindset in schools and creating an ecosystem of entrepreneurship in universities, research institutions, private and MSME sector.

Different Programmes Under AIM

1. **Atal Tinkering Labs** - At School Level
2. **Atal Incubators** — At Universities, Ins Industry Level
3. **Atal Community Innovation Centers** - serving Unserved and Under-Served regions of India (To promote the benefits of technology led innovation to the unserved/underserved regions of India including Tier 2, Tier 3 cities, aspirational districts, tribal, hilly and coastal areas)
4. **Atal New India Challenges** - Product and Service Innovations with National Impact (To create product and service innovations having national socio-economic impact, AIM has launched over 24 Atal New India Challenges)
5. **Applied Research and Innovation for Small Enterprises** (ARISE)-to stimulate MSME industry innovation
6. **Mentor of Change** (Mentorship and Partnerships-with Public, Private sector, NGOs, Academia, Institutions) - To enable all the initiatives to succeed, AIM has launched one of the largest mentor engagement and management program “**Mentor India - The mentors of Change**”.

Conclusion: Promoting Entrepreneurship and Start-ups for Sustainable Growth truly will help India to ignite the innovative entrepreneurial spirit of New India by focusing on strengthening the above pillars which will ensure an unprecedented wave of long deserved growth, prosperity and well-being that can serve the interests of the rest of the world as well.

FINANCIAL AND INSTITUTIONAL SUPPORT FOR RURAL STARTUPS

Rural Challenges

- **Unemployment** is the major challenge faced by rural youth and more so by female rural youth. A large number of rural youths **lack the skills required** for job opportunities.
- For agriculture to continue to remain the mainstay, it needs to modernise itself in order to attract more or at least retain rural youth.
- Development efforts have been low on usage of innovative tech i.e. the deep-tech encompassing artificial intelligence, machine learning, computer vision, blockchain etc. These technologies are the key to transform agriculture and other rural businesses.

Rural Startups: Status and Challenges

- There are **52 crore mobile phone users in rural** areas as on March 31, 2020. Of the estimated 56.6 crore active internet users in India in November 2019, around 23 crore reside in rural India. These users are driving the growth of rural startups.
- Further, many rural areas have patchy internet/broadband coverage, low levels of e-literacy and digital skills, limited access to digital services and these areas run the risk of being left behind in the digitalisation process.
- The **rural startup ecosystem suffers from the following challenges:** 1. Lack of incubation centres 2. Lack of venture capital funds 3. Lack of bankable entrepreneurs 4. Scale up challenges

Government Support

- The startup movement has gained momentum after the launch of “**Digital India**” and “**Startup India**”. The Startup India initiative envisions building a strong ecosystem for nurturing innovation and entrepreneurship in the country.

Institutional and Financial Support for Rural Startups

- **Incubation Centres:** Through the Atal Innovation Mission, around 47 incubation centres have been funded so far. Agriculture is one of the focus areas of AIM. The agricultural universities and NABARD have taken the lead in setting up agri incubation centres.
- **Venture Capital Funds:** The first set of venture capital funds that invested in a few rural startups space included impact funds like Aavishkar (set up in 2001), Acumen and Rural Innovations Network. SIDBI had a rural oriented VC fund with a corpus of Rs. 60 crore and has made a few investments in agri SMEs from Samridhi fund.
- **Seed Fund:** A National Seed Fund was announced in Budget 2020-21 to support ideation and development of early stage startups. Recently, RBI has allowed lending to startups as part of priority sector lending.

Way Forward:

- **Incubation/acceleration of rural startups:** There is scope for more accelerators and incubators in rural India focused largely on agritech, foodtech, affordable housing tech, rural healthtech/edutech, fintech, payments etc.
- **Creation of a National Rural Seed-cum-- Impact fund** to invest in startups benefiting large number of farmers/rural population
- **Creation of a National Agri/Rural Startups Fund:** This fund would make direct investments in agri/food/rural startups at all stages.
- **Creation of a National Rural Fund of Funds:** This fund would make indirect investments in third party Alternative Investment Funds (AIFs) that would in turn invest in agri/food/ rural startups at the seed (post incubation/ acceleration) to early stages.
- **Creation of a National Venture Debt Fund:** Practically, no bank lends to startups including agri startups. The creation of a National Venture Debt Fund would solve this problem.

Conclusion:

- Rural areas have lot of untapped entrepreneurial potential. Agriculture and rural businesses are the areas of maximum social impact but remain underinvested in India from an equity/ start-up investment standpoint.
- The policy making stance for startups needs to **shift from indirect investing through government funds to direct investments through a government owned VC fund(s)** with ability to invest through multiple equity and equity linked instruments.

OPTIMISING CSR FOR SKILLING RURAL INDIA

- India is well placed to harness the opportunities emerging out of globalisation by engaging its young workforce for economic growth. Around 55 percent of India's population is below 25 years of age, and the **average age is 29**.
- About 62 percent of its population is in the working age group (15-59 years), and it is in increasing trend.
- Despite these favourable numbers, India has been reeling under the dearth of skilled workforce, which leads to the problems of unemployment, under-employment and disguised unemployment.

Need for Skill

- More than 70 percent of India's population belongs to its rural parts. Hence, the "demographic dividend" can be fructified only when the enormous segment of rural youth possesses appropriate skill.

- However, due to 'low skill' or 'mismatched skill' levels, the **rate of unemployment in rural areas is higher** than the rate in urban areas. And, those having some amount of skill prefer to migrate to urban areas in search of livelihood, thus causing further a deep paucity of skill in villages.
- Farming sector is gradually being perceived by rural youth as non-lucrative. Traditional and ancestral livelihood activities, arts and crafts in rural areas are getting extinct.
- Inadequate focus on vocational training is rendering the young population academically qualified but unskilled.

Steps Taken

- A new **Ministry for Skill Development and Entrepreneurship (MSDE)** has been established.
- The **"Skill India" mission**, launched in 2015, aims to empower youth by imparting skill and make them employable and productive. Under this mission, a flagship scheme - **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** is promoting skill development by providing industry-designed training and certification to youth.
- Short-term training in compliance with **National Skill Qualification Framework (NSQF)** is provided to unemployed youths. Also, youths with prior experience and knowledge are certified after assessment under the Scheme's **Recognition of Prior Learning (RPL)** part.
- Model training centres in the name of **"Pradhan Mantri Kaushal Kendra (PMKK)"** are being operated.
- Ministry of Rural Development is also executing a skilling programme **"Deen Dayal Upadhyaya Grameen Kaushal Yojana (DDUGKY)"** especially for rural youth as a part of its **National Rural Livelihood Mission (NRLM)**.
- The **New Education Policy (NEP 2020)** is also a welcome step to integrate Vocational Education and skill-based learning in school and college curriculum.

Scope of Corporate Social Responsibility (CSR)

- Companies with their CSR agenda can complement and supplement the action of Government towards skill development. Investing in skill building of youths makes a strong business sense for companies. In the long run, this investment shall yield sustainable dividends and create a workforce that is future-ready.
- It also provides the **opportunity to engage in socially responsible behaviour**. By creating pools of trained manpower and enabling them for better livelihood options companies can contribute to local and national economy in a sustainable way. In this way they can **enhance their brand image** and reputation. By helping in creation of a vibrant labour market, they also improve their access to the market.
- Social capital of such companies, which develop human capital is improved because of enhanced relationship with larger communities. Also, the relationship of companies with government is boosted by aligning with the national agenda of skill development.
- From the **ethical perspective**, there is social expectation from companies that they should build the skill of local human resources as they use them in their operations and management.
- Further, as per **Section 135 of the Companies Act 2013**, profitable companies are mandated to spend 2 percent of their profit in CSR activities. And, Schedule VII of the Act prescribes areas like skill development, livelihood generation and rural development among many to be taken up under CSR initiative.
- **Sustainable Development Goals (SDGs)** have created scope for engagement of corporate sector in all its 17 goals. Skill development has direct and indirect bearing on all these goals.

- **SDG-4, Target 4.3** aims for equal accessibility to affordable and quality technical and vocational education. **SDG-4, Target 4.4** stresses on increasing the number of youths who have relevant technical and vocational skills for employment and entrepreneurship.
- Therefore, companies can contribute to the SDGs through their involvement in skill building of human resources.

Why Role of Corporate Becomes Important?

- Corporate sector is always connected with the skilling ecosystem. They can easily gauge the skill gap and requirement of any definite skill for the industries because they understand the market better.
- Industries create and affect the demand for different skill sets as skill sector is market driven. Corporate houses have resources to contribute towards expansion of the skill capital.

Conclusion:

- In order to make the villages smart in all respects, its young manpower is to be trained and empowered. And, for this involvement of the corporate sector, through its CSR, needs to be more strategic and effective.

RURAL WOMEN ENTREPRENEURS: EMPOWERING A NEW INDIA

Statistics:

- According to the Periodic Labour Force Survey, 2018-19, **59.7 percent of women in rural India are self-employed**, 11 percent are regular wage or salary earners while 29.3 percent are casual workers. In comparison, **57.4 percent men in rural India are self-employed**, 14.2 percent are regular wage or salary earners and 28.3 percent are casual workers.
- While the share of nature of work among men and women in rural areas is not different, there is a **huge difference in the type of self-employment between men and women**. Most self-employed women in rural India (63 percent) **work as helpers** in household enterprises.
- According to the the PLFS 2017-18 survey, **self-employed women in rural areas earned the lowest wage** among men and women from rural and urban areas.

Why this inequality in Income?

- The inequality in income could be because women, especially in rural areas, are expected to be the **primary caregivers for children and older household members**. Household chores like cooking, cleaning, and fetching water are also usually the primary responsibility of the women in rural areas.
- There are some impediments that limit a woman's participation and efficiency as an entrepreneur. These impediments range from **poor education levels to lack of financial support to information asymmetry**.
- **Financial inclusion** can help improve the economic prospects of female entrepreneurs in rural areas. While conventional banking channels improved access to financial services in rural areas, **lack of a universal, government issued identity card and limited financial literacy limited financial inclusion of women**. The government of India addressed these issues through a three-pronged approach, popularly known as the **JAM Trinity**.
- Due to persistent efforts by the government and enabling market conditions, between 2014 and 2017, the **gender gap in bank account ownership fell from 20 percentage points to 6 percentage points**.

Case Study

- A recent joint-publication from the World Bank, Better Than Cash Alliance, and Women World Bank cites the example of **Romita Heisnam from Manipur**, who was a loan beneficiary under the Prime Minister's Employment Generation Programme (PMEGP) and bought a power-loom.
- Under the scheme, she received a loan and a subsidy to buy a power loom. Along with business skills, she learnt to use the ATM, save money in her bank account, and picked up prudent financial management skills to meet the fixed installment payments.

PMEGP Scheme

- The PMEGP scheme is implemented by the **Khadi and Village Industries Commission (KVIC)** as the nodal agency at the national level.
- The beneficiary **gets the subsidy** under the scheme through her bank into her account which in turn gets the subsidy from the KVIC.
- Rural Women fall under the special category of beneficiaries where they are expected to contribute only **5 percent of the project cost** and get a subsidy at the rate of 35 percent.
- The balance amount of the total cost is given to the beneficiary as a loan from her bank.

Steps Taken by the Govt.

- The government launched the **Sukanya Samriddhi Account** (Girl Child Prosperity Account) in 2015, which is a savings scheme to encourage parents to build a fund for the education and marriage expenses of their daughters.
- The Finance Minister had announced provision of **collateral free loans up to Rs. 20 lakh for women self- help groups** to tackle hardships due to the lockdown.
- Another government scheme to support female entrepreneurs is **Stand-Up India**, launched in 2016. The scheme offers loans between Rs.10 lakh to Rs. 1 crore to women for setting up businesses outside the non-farm sector.
- To strengthen financial literacy, RBI has also released the **National Strategy for Financial Education (NSFE 2020-25)** that acknowledges the need to improve financial literacy among women.
- Information asymmetry is another weak link in value chain of women entrepreneurs from rural areas. **NITI Aayog's Women Entrepreneurship Platform (WEP)** is one such digital initiative that aims to reduce the information asymmetry for women entrepreneurs.
- This scheme uses **three pillars**—*Ichha Shakti* to motivate inspiring women entrepreneurs to start new business; *Gyan Shakti* to provide knowledge and ecosystem support to foster budding entrepreneurs; and *Karma Shakti* to provide hands-on support in setting up and scaling businesses. In a nutshell, the platform provides information on funding and financial assistance, incubation and acceleration support, entrepreneurship mentorship, community networking and compliance and tax assistance among others.
- During the COVID-19 lockdown, *WEP connected home based women workers with both raw material suppliers and potential buyers to produce and sell more than 1,00,000 masks that ensured a minimum income of Rs. 4,500 for each such worker during the lockdown period.*
- **Mahila e-haat** is another government initiative for women entrepreneurs and self-help groups for showcasing their products that are made or manufactured by them on an online platform.

Way Forward:

- The next step should be to educate and support rural women entrepreneurs to start selling their products directly on channels like Flipkart and Amazon that have a lot of traffic.

- Schemes that incentivise businesses (like tax credits or exemption) that source their inputs or products from rural women entrepreneurs will help increase private sector participation that will in turn benefit women entrepreneurs.
- The need of the hour is now to channelise market forces so that they can leverage their true potential.

INDIA'S NEW FARM BILLS: USHERING IN AGRICULTURE 2.0

- India's new farm regulations are designed to have an impact in the country's agriculture sector in many ways. The long-awaited unshackling of the agrarian sector should be studied in conjunction with numerous other steps taken by the government to kickstart an entrepreneurial ecosystem in Indian agriculture.
- Key among these is the creation of a seminal **Agriculture Infrastructure Fund** which is a "medium-long term debt financing facility for investment in viable projects for post-harvest Management infrastructure and community farming assets through interest subvention and credit guarantee".
- This is a decade-long scheme between FY 2020 to FY 2029, and under this, a sum of one lakh crore rupees will be provided by the banks and the financial institutions as loans with interest subvention of 3 percent per annum and credit guarantee coverage under CGTMSE scheme for loans up to two crore rupees.

Key Reforms:

- The **Farmers' Produce Trade and Commerce (Promotion and Facilitation) Bill** seeks to completely open-up the sale of produce outside the APMCs. It not only **creates an e-highway for trading and transactions**, but also creates a structure for e-trading of agriculture produce.
- The **Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Bill** creates a framework for contract farming. It provides a template at the national level of farming agreements, with regard to agribusiness, processing, and the entire range of services including wholesalers, exporters and large retailers for sale of farming produce at a mutually pre-agreed price. These bills have been passed by the Parliament.

Benefits:

- Smart implementation of the new farm bills will lead to **four significant changes: An increase in farmer's income, the rise of agri-entrepreneurs, massive private investments in agriculture, and a jump in farm product exports.**
- Put together, this package of legislations **seeks to open up the farming at both ends — production** (through contract farming) and **sale** (through complete deregulation).
- These bills will diffuse technology and innovation into the most traditional sector of the Indian economy.
- These reforms could also garner better **negotiating power for farmers** which allow them to set the price bar at the level of their choice, with greater flexibility of moving up or down the price chain. Such aggregation would also fuel deeper interests and investments in **building cold chains and other storage and processing mechanisms.**

Government of India, along with Microsoft, has begun empowering smallholder farmers in India to increase income through higher crop yield and greater price control **using AI sensors. Microsoft is enabling precision agriculture capabilities** and thus, helping farmers to make informed decisions.

New Farm Bill Would Promote Data Driven Agriculture

- Data would be needed in every aspect — from analysing climatic transitions to the impact of new kinds of pests. Data would also be important in determining the volume and quality of organic produce which is fast becoming a key area of growth in Indian agriculture.
- By unshackling farms and allowing for greater possible integration, the **new farm regulations have created the path towards more data integrated farming in India** which will make the country and its food security systems better prepared for climate change transitions.

Conclusion

- These farm acts will initiate the process of connecting Indian farms to large scale buyers by allowing a merger of produce from fragmented land holdings and ensuring that a standardised quality can be maintained which could get long-term premium value.
- The entry of suitably organised large buyers would, in turn, help further organise the Indian agricultural market which would boost sales, volumes, and importantly, farm productivity.
- India is already a world leader in the production in a range of fruits and vegetables and among the biggest in staples. All that is needed now is for India to restructure its agriculture sector so that its productivity and farmer incomes rise exponentially.
- This can be done by moving steadily towards streamlining operations, more data-driven production and a focus on processing and branding its farm products, not just for the domestic market but also for the world.
- The new farm bills in India therefore mark an important pivot in the conceptualisation of Indian agriculture and should be considered a new beginning in the sector.

SMART VILLAGES: DRIVERS OF INCLUSIVE GROWTH

- The **Vision of New India 2022**, an India free from poverty and corruption rests largely on the growth and development of rural India.
- According to the 2011 census, 68.84 percent of Indians live in 640,867 villages. Rural economy contributes half of the manufacturing, one-third of the services sector and the complete agricultural sector. The villages contribute a great deal to the national economy.
- However, Indian villages are **not homogenous** and are **deeply rooted with varied socio-cultural diversifications**. Each village has a different story and history and follow a unique path of development and growth trajectory.
- COVID-19 pandemic and the subsequent intense and prolonged lockdown not only created a livelihood crisis but also led to public health, education and humanitarian crisis.
- At this critical juncture, Smart village could be an effective strategy for creating a strong, sustainable and self-reliant rural economy.

Steps

- Of late, the term 'smart village' as an idea has gained importance in rural development planning and policy.
- There are many central government schemes implemented by various ministries such as Unnat Bharat Abhiyan (UBA), Pradhan Mantri Adarsh Gram Yojana, Shyama Prasad Mukherji Rurban Mission (SPMRM) and the Sansad Adarsh Gram Yojana (SAGY) with an aim to bring transformative changes in our villages.

What is Smart Village?

- There is no universally accepted definition of a Smart village. The conceptualisation varies from scheme to scheme. In the scheme, Pradhan Mantri Adarsh Gram Yojana (PMAGY), an 'Adarsh Gram' is defined as one wherein **people have access to various basic services so that the disparities are reduced to a minimum.**
- In simple terms, smart village initiatives envisage holistic and integrated development of villages on multiple areas, health, education, livelihood and community development and so on.

Smart Village
<ul style="list-style-type: none"> • Education • Health • Living Standard • Environment • Local Institution and community development • Good governance • Cultural Resilience and promotion • Infrastructure • Innovation, ICT • Resources

Funding

- In recent past, a substantial amount of funds are being allocated by various ministries, under national flagship schemes.
- In addition, transfer of funds under 15th Finance Commission, State Finance Commission and own source revenues provide opportunities to carry out various initiatives to convert villages into model or Smart villages.

What is needed?

- There is a need to have a close assessment of the existing smart village models with a focus on infrastructure creation, introduction of Internet of things (IOT) and use of ICT and IT enabled services.
- There is a need to **deal firmly with the digital divide in the rural areas** of the country as low penetration of internet and ICT usage can be noticed in the rural India.
- It is necessary to promote development of rural areas in tune with **Gandhian vision of self-sufficient 'village republics'**, based on local resources and using decentralised, eco-friendly technologies so that the basic needs of food, clothing, shelter, sanitation, health care, energy, livelihood, transportation, and education are locally met and the goal of faster and inclusive growth is realised.

Good Cases of Smart Village

- **Mawlynnong** (Meghalaya—Asia's cleanest village); **Ralegan Siddhi and Hiware Bazar** (Maharashtra— environmental conservation and irrigation system and water conservation program); **Chhotkei village in Angul district** (Odisha —micro grid, solar power); **Mori Village in East Godavari district** (Andhra Pradesh-fully digital with internet and wifi); **Nandangram** in Itahar administrative block in Uttar Dinajpur district (West Bengal - ICT equipped schools); **Punsari Gram Panchayat** (Gujarat-Wi-fi facility in the village, installation of CCTV in several places of the villages); **Anandwadi**, (Maharashtra-gender equality, the nameplates outside the houses proudly display the name of the woman in ownership of the house); **Hazipalli Gram Panchayat** (Telengana-ODF, Solid Waste Management, underground drainages and zero mosquitos).

Conclusion:

- To revive, rebuild and reconstruct the rural economy especially after the outbreak of COVID19 pandemic, smart village initiatives could be an effective strategy.
- It is time to reach out to each and every village and start a fresh conversation on smart village for realising an inclusive, sustainable and self-reliant India.

START-UP ECOSYSTEM IN RURAL INDIA

- In today's world, no nation can survive without making innovation and creativity pivotal to its ideas and actions. Start-ups have also become drivers of growth and prosperity, delivering jobs, and bringing socioeconomic development to the countries both developed and developing.
- In the recent times, **unicorn term has been used for the start-ups with a valuation of over \$1 billion**. India has also seen its share of success in the Start-up world. **InMobi became India's first Unicorn to get the recognition in 2011**.
- Today **India is 4th across the world in producing unicorns**. Even in the pandemic, India has added 6 new unicorns to the list, with RazorPay being the latest addition.

Opportunities

- India with a population of nearly 1.3 billion, has become a significant market for the products. The country has one of the fastest growing economies and the changing socioeconomic scenario, which has further strengthened the purchasing power of the middle and lower middle class.
- This coupled with the need for innovative solutions to improve the living conditions as well as alleviate poverty provide ample opportunity.
- The technological intervention has further reduced the costs to setup the companies. **Startup India programme** has been a game changer and has brought us to become third largest Start-up ecosystem.

Steps

- Govt. is creating a **pool of mentors**, to even out the mentorship for startups working out of tier-2 and tier-3 cities besides various challenges and hackathons they host, to find affordable solutions.
- The **Incubation programmes** supported by the government has today played an important role in bridging the gaps and the eco-system has started to develop in tier 2 and tier 3 cities.
- **Atal Innovation Mission**, works under the aegis of NITI Aayog. Another, flagship program that they run is Atal Tinkering Labs for schools, to provide a platform for the young minds to express their creativity at a young age.
- **Seed fund** becomes one of the most important investment a Start-up receives. This is covered by the various programs run by the government under Biotechnology Industry Research Assistance Council (BIRAC) with a major focus on promotion of Biotechnology through Research & Development.

Case Study:

- **Daskdan Innovations**, a Srinagar, J&K based Start-up is one such example of start-up struggles and glory. It provided solution to intercept the "**AMR evolution in livestock**" before it impedes all "preventive measures". The Start-up was recently awarded the Biotechnology Ignition Grant (BIG) from Biotechnology Industry Research Assistance Council (BIRAC).

Conclusion:

- Start-ups do not work in isolation and hence, are a part of the larger economic scene of the country. It depends on the factors such as of ease of doing business, the easy exit option, time bound registration, government documentation etc.
- Government should formulate standard operating procedure keeping in mind the start-ups.

AGRO ENTREPRENEURSHIP

Opportunities in Agro-Entrepreneurship

- India has the 10th largest arable land resources in the world and with 20 agri-climatic regions, all 15 major climates in the world exist in India. The country also possesses 46 of the 60 soil types in the world.
- Growing population, rising urban and rural incomes have added to the growth in demand for agriculture products. The **Indian food and grocery market is the world's sixth largest**, with retail contributing 70 percent of the sales.
- The **Indian food processing industry** is one of the largest industries in India and is **ranked fifth** in terms of production, consumption, export, and expected growth.
- India is also the largest producer of spices, pulses, milk, tea, cashew, and jute; and the second-largest producer of wheat, rice, fruits and vegetables, sugarcane, cotton, and oilseed. India is currently the world's fourth largest producer of agrochemicals.
- The Government of India has allowed 100 percent FDI through automatic route in agriculture, animal husbandry, and Plantation sector.

Agro Entrepreneurship

- Transformation of Agriculture to Agri-business is one of the important strategies where enterprising farmers practice profitable agriculture. **Every 9th Agritech startup in the world is from India.**
- Startups are Providing missing links in the Agri value chain and delivering efficient products, technologies, and services to the farmers.

Challenges:

- **Postharvest loss** in India amounts to INR 95,706 crore (\$13bn). Demand-driven cold chains, warehouse Monitoring solutions, and market linkage can resolve the existing bottlenecks.
- **Agriculture is a fragmented**; Most of the regions depending on rainfall for irrigation; Penetration of advanced technology is also low.
- Agriculture sector employs 50 percent of India's workforce but contributes only 18 percent of the GDP. **Solutions that enable farm automation and aggregation** will rationalise and gainfully redistribute the workforce.
- India ranks among the top countries in food Processing. By 2024, the sector will employ 9 million individuals. The organised sector of food processing has only 60 percent share.
- With the spread of digitalisation in all the sectors, this trend is yet to **fully penetrate in the agriculture sector**.
- There is an acute **lack of data and insights** at the ground and farmer level.

Promotion of Startups

Start Up India

- Start-Up India has also focused agricultural sector. Out of the startups that have received recognition certificates, approximately **5 percent belong to the agriculture sector**.

Agriculture Grand Challenge

- The Ministry of Agriculture in partnership with Startup India launched the Agriculture Grand Challenge in December 2017 wherein 12 pre-identified problem statements were noted for seeking solutions from the startups.

- **National Startup Awards 2020** — Agriculture - Startup India launched National Startup Awards 2020 with an aim to recognise and reward outstanding startups and ecosystem enablers.

Central Schemes: RKVY RAFTAAR

- **Rashtriya Krishi Vikas Yojna (RKVY)** scheme was initiated in 2007 as an umbrella scheme for ensuring the holistic development of agriculture and allied sectors by allowing states to choose their agriculture and allied sector development activities as per the district or state agriculture plan.
- As of 1st November 2017, the Cabinet approved the Continuation of the ongoing Centrally Sponsored Scheme (State Plans) - **Rashtriya Krishi Vikas Yojana (RKVY) as Rashtriya Krishi Vikas Yojana- “Remunerative Approaches for Agriculture and allied Sector Rejuvenation (RKVY-RAFTAAR)** for three years.
- The broad objectives aim at making farming a remunerative economic activity through strengthening the farmer's effort, risk mitigation, and promoting agri-business entrepreneurship.
- The component of Innovation and Agri-entrepreneurship Development under the scheme **promotes innovation and agripreneurship** by providing financial support and nurturing the incubation ecosystem via supporting the startups in various categories such as agro-processing, artificial intelligence, digital agriculture etc.

Conclusion:

- The agriculture startups are not only flourishing in the fast-paced and dynamic economy of today but are also developing innovative solutions and technologies and generating employment.
- The Vision of AtmaNirbhar Bharat is rooted deeply in the Startup Ecosystem and shall continue to prevail in the coming years.

START LOCAL TO GO GLOBAL

- Despite the falling contribution to the national economy, the agriculture sector cannot be ignored as food is the necessity for survival and it can never go out of business.
- In the backdrop of the ongoing pandemic, it stands as a bright spot with the projected growth rate of 3 percent in the year 2020-21.

Recent government Policies

1) Income

- The **PM KISAN** (Pradhan Mantri Kisan Samman Nidhi) is a great relief to small and marginal farmers as this scheme provides an income support of Rs. 6,000 per year in three equal installments.
- However, there is no provision for landless labourers who accounts 14.43 crore of agriculture workforce indicating.

2) Infrastructure

- The recent **agricultural infrastructure funds** worth Rs.1.0 lakh crores for aggregators, cooperative societies and farm entrepreneurs for setting up of community farming assets, storage structures and post-harvest Management infrastructure is welcome step.
- As a part of '**vocal for local with global outreach**' a scheme worth Rs. 10,000 crore fund was announced for **the micro food enterprises**. The branding, modernising, ramping up of the capacity and marketing are the part of the scheme.

3) Entrepreneurial Activity: Augmenting the Startup Culture

- As a part of rural bio-entrepreneurship, Department of Biotechnology's initiative for setting up of **Rural Bioresource Complex** in aspirational district of India in biotechnology innovation or technology is appreciable.
 - As **biotic and abiotic stress** is a major issue in agricultural field, implementation of biotechnological innovation in rural areas will definitely answer a major challenge.
 - Further government's scheme of fund for regeneration of traditional industries including **khadi, village and coir** is a great step towards rural entrepreneurship.
 - The **establishment of mega food parks** is a tremendous effort towards value addition and engagement of rural youth.
- 4) Skilling Programme**
- There is existence of exclusive programme and schemes by Ministry of Skill Development and Entrepreneurship and Agriculture Skill Council of India (ASCI) which works towards capacity building by bridging gaps, and upgrading skills of farmers, wage workers etc.
- 5) Initiative for Migrant Labourer: Opportunities for Entrepreneurship**
- The ongoing pandemic brought a tough time to them.
 - Along with Garib Kalyan Rojgar Abhiyaan, Government has initiated **Kisan Mitr**, a seven-phase project with an aim to support farmers, migrants and agriculturist to become AatmaNirbhar by scientific research and technologies.

Conclusion

- The most important aspect emerging out of the recent government announcement is its increased emphasis on rural entrepreneurship opportunities through various direct or indirect incentives.
- Going forward, we need an integrated approach to understand the centrality of rural agrarian economy and long-term strategy to bridge the gap between policy planning and implementation, input objectives and project output, which will empower the local economy and help us to reach from local to global and beyond.

NEW HORIZONS OF AGRI-ENTREPRENEURSHIP AND AGRE MSMES

- Agri-tech (Agriculture technology) is the application of various technological tools to enhance productivity and profitability in Agri-sector.
- The **Agri-entrepreneurship** refers to the establishment, development, growth and expansion of the Agri-business enterprises in Agriculture and allied sectors.
- Indian Agri-entrepreneurship has seen significant growth in rice, sugarcane, coconut, coffee, tea, fruits/vegetables etc.
- The Agro MSMEs are increasing owing to organised farm-based activities, influence of technology supported by enabling government policies and keen investment interest.

Agri-entrepreneurs and Inclusive Agri-business Ecosystem

- The new wave of Agri-preneurship was conceived and effectively implemented by **National Institute of Agricultural Extension Management (MANAGE)**, Hyderabad through its "**Agri-Clinics and Agri-Business Centers Scheme**".
- The Agri-business scheme has been nurturing and accelerating the existing process both Agri- Extension network and enabling the Transfer of Technology in Agriculture and also facilitating integrated input-supply and Agri-services.

New Initiatives with Agro MSME Policy in India

- The recent announcement by the Government of **implementation of agro MSME policy** is a welcome step in creating in situ employment in the rural economy.

- Gol through its upcoming Agro MSME policy is mainly focusing on **entrepreneurial development in Agri-based, rural, forest and tribal areas**.
- Its primary aim is to utilise the local raw materials and manpower to produce finished goods, for meeting the local needs.
- The Agro MSME policy is expected to give a push to 'rural-entrepreneurship' and empower the 'Panchayat' to become part of industry clusters.
- As complementary to the Agro MSME Policy, and further to magnetise its effect, **ASPIRE (A Scheme for Promotion of Innovation, Rural Industries and Entrepreneurship)** has primary objectives to create employment through skills and training development, by strengthening the grass-root level development and in creating in situ livelihood opportunities.

Conclusion:

- The COVID-19 pandemic has negatively impacted majority of the Industry sectors, while the **Agri and allied sectors has got renewed thrust focus** as it remains the backbone of human existence.
- It is anticipated that mankind has realised supreme importance of health and safety, when compared to material possessions of 21st Century, hence there is hope for building the ecosystem for profitable Agri-enterprises.