# AATMNIRBHAR VILLAGE

## Comprehensive & In-depth Analysis

## Simple & Lucid Language

## Usage of Flow Chart, Diagrams & Figures



**Dhyeya IAS**
**Kurukshetra Gist**

# Towards Making Villages Self-reliant: Role of Ministry of Panchayati Raj

Villages, districts, and states should achieve self-sufficiency in meeting their basic needs. The nation as a whole must aim for self-reliance, reducing dependence on external sources. Gram Panchayats play a vital role in this, serving as the foundation for self-sufficiency in villages.

PM Modi envisions self-sufficient villages as the cornerstone of a self-reliant nation. With a majority of India residing in rural areas, empowering villages is crucial for national progress. The government, over the past decade, has undertaken significant steps to make villages self-reliant. Gram Panchayats, numbering over 2.5 lakh, play a vital role in implementing these efforts. The Ministry of Panchayati Raj actively contributes to financial empowerment, resource generation, digital readiness, environmental consciousness, and climate change preparedness. Various schemes and initiatives support the goal of making Panchayats self-reliant.

## Empowerment with Funds from Central Finance Commission

- **Financial Support:** The Government of India provides funds to supplement Panchayats' financial resources.
- **Fifteenth Finance Commission Allocations:**
  - Grants of Rs. 60,750 crore for FY 2020-21.
  - Rs. 2,36,805 crore allocated for FY 2021-26.
  - Benefitting Panchayats, Local Bodies, and Sixth Schedule areas in 28 States.
- **Types of Grants:**
  - Basic (Untied) Grants.
  - Tied Grants for facilities like drinking water and sanitation.
- **Utilization**:
  - Untied Grants for diverse needs, excluding salaries.
  - Tied Grants for specific facilities.
- **Impact of Central Finance Commission Grants:**
  - Improved basic services in villages.
  - Per capita allocation increased from Rs. 54 (12th Finance Commission) to Rs. 674 (15th Finance Commission).

## Localisation of Sustainable Development Goals (LSDG)

- **2030 Agenda Commitment:** India, as a signatory to the 2030 Agenda for Sustainable Development, is dedicated to achieving 17 Sustainable Development Goals (SDGs).
- **National Approach:** Embracing Prime Minister Shri Narendra Modi's motto 'Sabka Saath - Sabka Vikas,' India focuses on collective efforts to progress toward SDGs.
- **Rural Emphasis:** With almost 68% of the population residing in rural areas, achieving SDGs nationally necessitates grassroots actions, especially at the Panchayat level.
- **Ministry's Roadmap:**
  - The Ministry of Panchayati Raj has devised a roadmap integrating 17 SDGs into nine thematic areas.
  - Aims to facilitate Panchayats in accomplishing SDGs through evidence-based Panchayat Development Plans, notably Gram Panchayat Development Plans (GPDP).
- **Localized SDGs:**
  - Approximately 2.5 lakh Panchayats across the country commit to local-level determined activities to saturate their villages with SDGs.
  - The Ministry, through the Rashtriya Gram Swaraj Abhiyan (RGSA) Scheme, provides training to reorient their capacities for SDG achievement.
- **Self-Reliance Campaign:** Localizing and achieving SDGs is a crucial step in building a self-reliant India.

## Making Panchayats Financially Self-reliant

- **Crucial Role of Own Source Revenue (OSR):** OSR plays a pivotal role in granting autonomy to Panchayati Raj Institutions (PRIs) for independent decision-making.
- **Strengthening OSR:** Strengthening OSR involves initiatives to boost revenue from local sources such as property taxes, fees, fines, and other levies.
- **Revenue Enhancement Strategies:** Strategies include improving tax compliance, fostering economic activities, and efficiently utilizing local resources.
- **Fifteenth Finance Commission Estimate:**
  - The Fifteenth Finance Commission estimates the potential revenue from house taxes in rural areas to be around Rs. 42,159 crore (2019 rates) across 28 States.
  - However, the actual OSR collected from all sources amounted to just Rs. 4953 crore for the fiscal year 2019-20 across 25 States.
- **Current OSR Status:** Presently, OSR generated by States and Union Territories (UTs) constitutes an average of only 6-7% of the overall revenue allocated to Panchayats from 2017-18 to 2021-22.
- **Enhancement Potential:** There exists a significant potential to enhance OSR in rural India, offering a considerable opportunity for improvement.
- **Importance for Panchayats:** OSR is critical for Panchayats as they undertake various activities, ensure economic development, implement central and state government schemes, and strive for social justice.
- **Expected Growth:** It is anticipated that OSR may experience rapid growth, gradually providing Rs. 1 lakh Crore to Panchayats over eight years, increasing from Rs. 5000-6000 crore.
- **Ministry's Initiatives:** The Ministry of Panchayati Raj has established an expert committee on creating own revenue sources for local rural bodies, and its findings will guide Panchayats in enhancing OSR.

## Leveraging Digital Technology in Panchayats

- **Digitization in Panchayats:** Digitization and Information Technology have transformed Panchayats, integrating them into global decision-making channels.
- **National e-Governance Plan (NEGP):** Under NEGP, e-Panchayat is a comprehensive mission aiming for transparent, accountable, and effective self-governance in Panchayati Raj Institutions through technology.
- **Objective of e-Panchayat:** The project seeks to automate internal work processes in over 2.5 lakh Panchayats, fostering public participation and making self-governance more efficient.
- **Gram Manchitra (2019):** Launched in 2019, Gram Manchitra integrates spatial and non-spatial data from various Ministries, providing a comprehensive view for better planning and development.
- **e-Gram SWARAJ (April 2020):**
  - e-Gram SWARAJ, a work-based accounting software, was launched by the Prime Minister in April 2020.
  - Integration with PFMS (eGSPI) facilitates online payments for expenditures under the Central Finance Commission, benefiting over 2,63,043 PRIs.
- **e-Gram SWARAJ and GeM Integration:**
  - To enhance procurement transparency, e-Gram SWARAJ is integrated with Government e-MarketPlace (GeM).
  - The integration allows Panchayats to procure goods and services through GeM, promoting 'Vocal for Local' and supporting local producers, cooperatives, artisans, and Self Help Groups.
- **National Panchayati Raj Day (April 2023):**
  - On National Panchayati Raj Day in April 2023, the Prime Minister launched the eGramSwaraj-GeM interface in Rewa, Madhya Pradesh.
  - This integration facilitates direct selling of products by local entities to government bodies, promoting self-reliance goals and social inclusion in economic development efforts.

## Initiatives towards Gram Urja Swaraj

- **'Gram Urja Swaraj' Vision:** The Ministry of Panchayati Raj promotes self-reliance in energy through the 'Gram Urja Swaraj' vision for rural areas.
- **Objectives**: 'Gram Urja Swaraj' addresses rural concerns by promoting renewable energy.
- **Zero Carbon Emissions Initiatives:** The Ministry aims for zero carbon emissions, facilitating local climate action plans and launching the 'Gram Urja Swaraj' dashboard.
- **Implementation Models:** Gram Panchayats develop unique models, e.g., windmills, Biogas plants, and micro hydel projects, supported by Renewable Energy Development Agencies.
- **Solar Energy Adoption:** Panchayats implement solar models like rooftop systems and solar streetlights, ensuring self-sufficiency and revenue generation.
- **Circular Economy Contribution:** Sustainable energy models help Panchayats meet needs, produce surplus energy for revenue, and contribute to a circular economy.

## SVAMITVA Scheme Conferring Property Rights- A Way to Monetise the Assets

- **SVAMITVA Scheme:** Launched by PM Modi on April 24, 2020, SVAMITVA aims to provide property cards to rural owners for credit and financial services.
- **Economic Impact:** Empowering rural youth, increasing property values, and aiding economic development.
- **Drone Survey Benefits:** High-resolution maps from SVAMITVA's drone surveys help update property records and assess tax potential for Panchayats.
- **Village Development:** Panchayats use SVAMITVA maps for well-planned Gram Panchayat Development Plans.
- **Scheme Achievements:** Over 1.61 crore property cards generated for 1 lakh+ villages, contributing to India's goal of becoming a developed nation by 2047.

# Aspirational Districts and Blocks Programmes: A Model for Socio-economic Transformation through Grassroots Empowerment

Nestled in the Himalayas, Chamba, a district in Himachal Pradesh, faces challenges due to its hilly terrain. Despite its natural beauty, providing cost-effective services to remote, sparsely populated areas was difficult. In the last five years, Chamba has made significant progress, reaching the last mile to ensure inclusive development. Initiatives like Mobile Medical Units improved antenatal care, doubling institutional deliveries and positively impacting maternal and infant mortality rates. Through scheme convergence and CSR funds, Chamba established community libraries and micro-irrigation facilities on mountain slopes. Many districts, like Chamba, face unique challenges rooted in geography or demographics. India's vast diversity leads to socioeconomic disparities, and the Aspirational Districts Programme (ADP) addresses these issues for equitable growth across regions, focusing on grassroots governance.

## Origin and Outcomes

- **ADP's Vision:**
  - Originated from the Prime Minister's vision to rapidly transform over 100 districts for India's development.
  - NITI Aayog formulated the Aspirational Districts Framework to identify under-developed districts across States and Union Territories.
- **Selection Process:**
  - Intricate and scientifically designed process involved extensive field visits for ground-level data in addition to secondary statistics.
  - Rigorous selection identified Aspirational Districts, ensuring balanced regional representation.
- **Decentralized Development:**
  - Implemented as a mass movement (Jan Andolan) across 112 districts over five years.
  - Significant grassroots improvement observed across socioeconomic parameters.
- **Guiding Principles:**
  - Guided by principles of Convergence (of schemes), Collaboration (between stakeholders), and Competition (among districts on key indicators).
  - Aims to be among the top 10 schemes implemented by the Government of India since Independence.

## Innovative and Collaborative Approach

- **Competitive Cooperative Federalism:**
  - ADP introduced a model of competitive cooperative federalism focused on improved governance for accelerated and inclusive human development.
  - Shifted the narrative from seasonal silo-driven schemes to regular outcome-based reviews.
- **District-Driven Approach:**
  - States were primary drivers, with district collectors catalyzing grassroot participation to prepare integrated Local Action Plans.
  - Emphasis shifted from inputs to outcomes, defining clear success metrics for districts to catch up with State averages.
- **Technology Integration:**
  - Leveraged technology with a real-time dashboard tracking 49 socioeconomic indicators monthly across five sectors.
  - Enabled continuous monitoring and healthy competition through data-based rankings.
- **Capacity Building and Service Delivery:**
  - Focused on building capacity at the district administration level to ensure saturation of government service delivery to the last mile.

- o Emphasis on providing basic services like pucca houses, all-weather roads, electricity, tap water connections, health infrastructure, financial inclusion, quality education, and skill development.
- **Impact on SDGs:**
  - o Significant progress in key performance indicators across districts, contributing to India's progress in localizing the Sustainable Development Goals (SDGs).
  - o Near-saturation levels achieved in indicators like household electricity connections and individual toilets.
- **Flagship Government Schemes:** Flagship schemes such as Pradhan Mantri Gram Sadak Yojana, Pradhan Mantri Awas Yojana, Mission Indradhanush, Swachh Bharat Mission, Poshan Abhiyan, Samagra Shiksha Abhiyan, and Pradhan Mantri Kisan Samman Nidhi formed a strong base for rapid transformation under ADP.
- **Expansion of Socioeconomic Wellbeing:** Enabled visible expansion of socioeconomic wellbeing in India's hinterland.

## Critical Success Factors

- **Positive Nomenclature:**
  - o Referred to as 'Aspirational' districts, fostering a positive outlook.
  - o Aims to inspire districts to become the best in their State and the country.
- **Theory of Prioritization:**
  - o Adopts a theory of prioritization, identifying critical geographies, sectors, and communities.
  - o Selects ADs based on priority socioeconomic indicators and identifies basic social services for saturation.
- **Innovation in Governance:**
  - o Encourages dynamic district administration with stable tenures.
  - o ADs adopt innovative solutions to overcome traditional challenges.
  - o Top leadership commitment at all levels contributes to progress.
- **Competitive and Cooperative Federalism:**
  - o Emphasizes robust monitoring and data-driven governance.
  - o 49 socioeconomic indicators, covering input, process, output, and outcome indicators.
  - o Periodic ranking fosters healthy competition and benchmarking.
- **Horizontal Convergence and Collaboration:**
  - o Encourages collaboration between district departments to achieve common goals.
  - o Promotes convergence with civil society organizations and development partners.
- **Vertical Collaboration:**
  - o Focuses on collaboration between Central Ministries, State Departments, and District Administration.
  - o Appoints senior-level Central Prabhari Officers for each AD to mentor and bridge administrative levels.
- **Peer Learning and Behavior Change:**
  - o Facilitates learning among ADs through sharing best practices and benchmarking.
  - o Inter-State workshops, cross-visits, and digital masterclasses promote peer-to-peer learning.
- **Achievements of ADP:**
  - o Enabled holistic improvement through optimal resource allocation, real-time monitoring, and capacity building.
  - o Empowered even remote regions, demonstrating that collective commitment drives development.
  - o UNDP appraises ADP as a successful model aligned with the 'leave no one behind' principle of the SDGs.
  - o Recognized as a best practice for other countries grappling with regional development disparities.

## Aspirational Blocks Programme (ABP)

While Aspirational Districts (ADs) have shown progress, intra-district variations persist. To address this, the Aspirational Blocks Programme (ABP) was launched in January 2023. It aims to decentralize development further, concentrating on challenging and underdeveloped blocks, ensuring 100% scheme saturation.

**Key Features:**

- **Customized Approaches:**
  - Development Blocks ensure tailored approaches based on regional needs.
  - Prevents a 'one-size-fits-all' approach, bringing decision-making closer to the ground.
- **Launch and Selection:**
  - Launched in January 2023 by the Prime Minister.
  - Selection of 500 Aspirational Blocks (ABs) based on various parameters, covering major aspects of human development.
  - Spread across 329 districts in 31 States and UTs, with a focus on challenging regions like tribal districts and the Northeast.
- **Main Strategies:**
  - Strengthen basic service delivery through improved governance at the grassroots level.
  - Focus on social development (Samajik Vikas) and regional development (Kshetriya Vikas).
- **Approaches:**
  - **Capacity Building:**
    - Empowers block-level officials (BLOs) through continuous capacity building.
    - Over 5,000 BLOs benefited from leadership training.
  - **Block Development Strategy (BDS):**
    - Supports ABs in developing a robust BDS.
    - Utilizes SWOT analysis to identify key interventions across 40 Key Performance Indicators (KPIs).
  - **Knowledge Portal:**
    - Includes a knowledge portal for documentation and dissemination of best practices.
    - Regular contributions from States, Districts, and Blocks to foster continuous learning.
  - **Institutional Support:**
    - Provision for an Aspirational Block Fellow and tech support for every AB.
    - Envisages awards and recognition for innovations in governance.
- **Awareness and Behavior Change:** Conducts 'Sankalp Saptaah' to spread awareness and induce behavior change in Gram Panchayats.
- **Ranking and Progress Measurement:**
  - Focuses on each AB's strengths, identifies implementable actions for immediate improvement, and measures progress.
  - Rankings to be determined, with States as the main drivers.

ABP aims to deepen the impact of development, concentrating on challenging blocks. With States leading the initiative, it focuses on empowering BLOs, developing robust BDS, fostering knowledge sharing, providing institutional support, and recognizing innovations in governance. The program seeks to enhance the overall well-being of the selected blocks, aligning with the broader national development goals.

# Lab to Land: Empowering Farmers Technically

The Lab to Land program, led by the Indian Council of Agricultural Research (ICAR), responds to the pressing challenges posed by population growth, shrinking arable land, and climate change, particularly in the context of India's burgeoning population projected to reach 1.64 billion by 2050. This initiative represents a bridge between the extensive agricultural research and the practical needs of farming communities. With India boasting one of the largest networks of agricultural R&D institutions globally, the Lab to Land program focuses on expeditiously translating the wealth of research findings into actionable solutions for farmers. This is especially critical given the significant proportion of small and marginal farmers who own nearly 80% of land holdings but often lack access to essential technologies, quality inputs, and pertinent information. The program aligns with the Prime Minister's vision articulated in 2014, emphasizing the need for farmers to adopt new products and initiatives to enhance production, increase income, and contribute to global food security. The 'Lab to Land' phrase, initially coined in 1979, encapsulates the comprehensive efforts involved in transferring technologies, innovations, and information to the farming community, with a robust agricultural extension system supporting these endeavors. While historically driven by the public sector, recent private sector participation has expanded the landscape of agricultural extension services. In navigating the challenges of population growth and resource constraints, the Lab to Land program stands as a beacon of innovative and effective outreach to ensure sustainable agricultural practices, improved livelihoods, and enhanced food security for the nation.

## Missions and Modes

- **Support to State Extension Programmes for Extension Reforms:**
  - Implemented in 704 districts through ATMA at the district level.
  - Over 6.31 crore farmers and 1.71 crore farm women participated since 2005-06.
  - Activities include exposure visits, training, demonstrations, farm schools, and kisan melas.
  - More than 1.94 farm schools organized on the fields of outstanding farmers.
- **Mass Media Support to Agricultural Extension:**
  - Uses All India Radio and Doordarshan networks for dissemination.
  - Supports print and social media through awareness campaigns.
  - Over 4100 programs telecasted on DD and 22,700 broadcasted through AIR in 2022-23.
  - Kisan Call Centres, launched in 2004, received over 598.21 lakh calls until December 2022.
- **Agri-clinics and Agri-business Centres Scheme:**
  - Launched in April 2022 to provide self-employment opportunities to agriculture graduates.
  - Around 84,000 candidates trained, and 36,600 agri-ventures established till December 2022.
- **Capacity Building and Skill Development:**
  - Supports Central- and State-level institutions in capacity building of extension functionaries.
  - Focus on skill development for rural youth, farm women, and farmers.
- **Participation in Farmer-centric Activities:**
  - Involvement in organizing farmer-centric exhibitions, fairs, and seminars.
  - Supports five Regional Agricultural Fairs annually to showcase technological advancements.
  - Disseminates first-hand information to the farming community through various events.

## Bridging the Gap

The Indian Council of Agricultural Research (ICAR) leads the Lab to Land program through its network of Krishi Vigyan Kendras (KVK) with key activities and achievements:

- **Introduction and Mandate of KVKs:**
  - KVKs were established in 1974 for the transfer of agricultural technologies and knowledge to farmers.
  - Currently, the only institution at the district level acting as a knowledge and resource center with a two-way link between farmers and researchers.
  - Mandate includes technology assessment, on-farm testing, capacity development, and acting as a knowledge center.

- **Core Activities of KVKs:**
    - On-farm testing to assess technology location specificity.
    - Frontline demonstrations to establish production potential on farmers' fields.
    - Capacity development of farmers and extension personnel.
    - Serving as a knowledge and resource center for improving the agricultural economy.
    - Providing farm advisories to farmers using various means.
- **Assessment of Technologies:**
    - Assessment under various verticals, including crops, livestock, enterprises, and women empowerment.
    - Thematic areas covered under women empowerment include health, nutrition, and value addition.
    - Cluster frontline demonstrations for major pulses and oilseed crops with a national average yield advantage of 37.42% and 38.40%, respectively (2022-23).
- **Promotion of Farm Machinery:**
    - Popularization of farm machinery through demonstrations and training.
    - Over 17,000 demonstrations on improved tools and farm implements in 2022-23.
    - Drudgery reduction technologies covering 9,750 hectares.
- **Training and Extension Activities:**
    - Trained 21.16 lakh farmers/farm women, rural youth, and extension personnel.
    - Organized 5.68 lakh extension or Lab to Land programs, including field days, exhibitions, exposure visits, kisan melas, etc.
- **Soil, Water, and Plant Analysis Services:**
    - Continued services with 2.22 lakh Soil Health Cards issued to farmers.
    - Production of high-quality technological products, benefiting 11.18 lakh farmers, including seeds, planting materials, bio-products, and elite species of livestock, poultry, and fish.

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**Success Story**

Shri Namichand Dhakar, a 32-year-old farmer from Sripura village in Chittorgarh district, Rajasthan, transformed his farming practices after realizing the limitations of traditional crops. Seeking innovative solutions, he consulted agriculture scientists and, in 2015, received training at KVK, Chittorgarh, on improved strawberry cultivation. Encouraged by positive outcomes, he expanded strawberry farming to 1.00 ha in 2020, employing modern techniques and importing mother plants. His 'Shiv Shakti' branded strawberries earned him a net income of Rs. 11.60 lakh per ha. Further diversifying, he raised 2.00 lakh strawberry plants in 2021, generating additional income. Namichand's success not only improved his livelihood and social standing but also inspired other farmers in the region to adopt strawberry cultivation, seeking his guidance for sustainable practices.

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## Going an Extra mile

- **ATICs for Technology Delivery:** Approximately 50 agricultural R&D institutions and universities operate in-campus Agricultural Technology Information Centres (ATICs) to provide technology, information, and advisory services.
- **KVKs and Specialized Programs:** Krishi Vigyan Kendras (KVKs) are pivotal in implementing specialized initiatives like 'KSHAMTA,' targeting tribal areas for increased agricultural production and income.
- **Combatting Residue Burning:** KVKs raise awareness and combat the issue of burning paddy crop residues, especially in states like Punjab, Haryana, Uttar Pradesh, and Delhi.
- **CSC Collaboration:** Over 3.5 lakh Common Service Centres (CSCs) collaborate with KVKs, offering technological solutions for farmers' agricultural challenges.
- **Supporting 'Jal Shakti Abhiyan':** KVKs actively support 'Jal Shakti Abhiyan' by conducting various awareness activities on improved water resource management.
- **Agro-Met Advisory through District Agro-Net Units:** District Agro-Net Units, established at 200 KVKs, provide agro-meteorological advisory services in local languages.

- **'Mera Gaon, Mera Gaurav' Initiative:** ICAR's initiative involves scientists adopting villages for technology dissemination, visiting farms, and delivering advisories through smartphones.
- **Projects**: Farmer FIRST, ARYA, NICRA, Student READY: Initiatives like 'Farmer FIRST,' 'ARYA,' 'NICRA,' and 'Student READY' focus on participatory demonstrations, youth employment, climate-smart agriculture, and student exposure.
- **Atal Tinkering Labs and Innovation:** Atal Tinkering Labs connect with KVKs and ATMAs to encourage agricultural innovation among school students.

## Way forward

- **Leveraging Modern Technologies:**
  - Continue embracing modern information and communication technologies for increased efficiency and cost-effectiveness.
  - Expand the use of digital SMS, call services, farmer-centric portals, and mobile apps.
- **mKISAN Portal:**
  - Promote the versatile mKISAN portal for quick knowledge transfer to farmers using mobile/smartphones.
  - Encourage Central and State Government organizations to release information and advisories to farmers in their languages.
- **Value-Added Services:**
  - Enhance IVRS (Interactive Voice Response System) and Pull SMS to provide web-based services on mobile phones without internet.
  - Increase the provision of mobile agro-advisories, reaching over five crore farmers through KVKs.
- **Kisan Suvidha App:**
  - Encourage farmers to use the 'Kisan Suvidha' mobile app for critical information on weather, market prices, plant protection, and other essential parameters.
  - Ensure multi-language support to cater to diverse linguistic needs.
- **ICAR Mobile Apps:**
  - Promote more than 100 mobile apps compiled by ICAR, Agricultural Universities, and KVKs for quick downloads.
  - Cover a wide thematic area, including farming, livestock, poultry, fisheries, and other commodities.
- **Social Media Platforms:**
  - Utilize various government and private agencies to support Lab-to-Land initiatives through social media platforms.
  - Leverage these platforms for real-time information dissemination and engagement with the farming community.

The Lab-to-Land initiatives have made significant strides in incorporating modern technologies to benefit farmers. Continuing this trajectory, the focus should be on widespread adoption of mobile apps, value-added services, and leveraging social media. Enhancing agricultural productivity and profitability, coupled with the prosperity of farmers, remains the overarching goal. By harnessing the potential of digital platforms, India's agricultural landscape can undergo a transformative and sustainable evolution.

# Towards the Goal of Aatmanirbhar Gaon

The rich heritage of India forms its distinctive identity, encompassing both material and non-material aspects, not in isolation but interconnected with the global milieu. Happiness, enjoyment, and freedom are attributed to this heritage. The 'Aatmanirbhar Gaon' movement is depicted as a people-driven initiative, with the success of such a program contingent on active community engagement. The 'Unnat Bharat Abhiyan' involves higher education institutions in providing knowledge and technology support to enhance livelihoods, contributing to the realization of 'Aatmanirbhar Gaon.' Prof. (Dr.) Virendra Kumar Paul emphasizes the significance of India's cultures, reflecting its unity in diversity, with villages serving as the essence of the nation. Historical references, including Sir Charles Metcalfe's connection to Indian villages and Gandhiji's advocacy for self-sufficient village communities, underscore the importance of villages in India's past and present. Gandhiji envisioned villages as 'little republics,' possessing everything for their needs and desires, promoting self-sufficiency and environmental sustainability. In the face of contemporary environmental challenges, 'Aatmanirbhar Gaon' emerges as a viable solution.

## Paradox of Urbanisation vis-a-vis Village Existence

- **Rapid Urbanization's Threat to Villages**
  - One-third of the Indian population residing in cities in 2021.
  - Growth of urban areas contributing to economic prosperity but raising concerns about resource consumption and environmental sustainability.
- **Challenges of the Self-Reliant City Concept**
  - Urban development model's hypothetical nature in meeting resource demands.
  - The paradox of insatiable consumption leading to GDP prosperity but raising questions about the environment and village sustainability.
- **The Essence of Self-Reliance in Villages**
  - Self-reliance based on meeting habitation necessities and maintaining environmental suitability.
  - Autonomy leading to a sense of pride and social cohesion in villages.
- **Late Realization of Globalization and Urbanization**
  - Challenges and limitations of globalization and urbanization realized later.
  - Impact on the youth, with migration to urban centers resulting in challenges and drudgery.
- **Villages as Self-Sufficient Entities**
  - The potential of villages as self-sufficient and self-reliant units.
  - The overshadowing of village importance by the inevitability of urbanization.
- **Villages' Relevance During Crises**
  - Villages playing a crucial role during crises, such as the Covid-19 pandemic.
  - Recognition of the resilience and support provided by villages.
- **Opportunity in Crisis: Aatmanirbhar Bharat and Gaon**
  - The Prime Minister's call for 'Aatmanirbhar Bharat' and 'Aatmanirbhar Gaon' during the Covid-19 pandemic.
  - Viewing the Covid-19 experience as an opportunity to reconsider urbanization and promote self-reliant villages.

## Challenge of Reigning Urbanisation

- **Counter-Urbanization:**
  - Counter-urbanization is the process of people moving from urban to rural areas.
  - Linked to deprivation of facilities and quality of life in inner-city areas, leading to 'shrinking cities.'
- **Entrepreneurial Opportunities in Villages:**
  - Aatmanirbhar Bharat's dependence on limited area necessitates increased agro-based productivity.
  - **Hypothesis**: Entrepreneurial opportunities in villages will counter urbanization and strengthen villages.
- **Role of Telecommunication Technology:**

- o Advances in telecommunication enable remote work, reducing the need for migration.
  - o Rural sourcing becomes economically viable due to lower cost of living, offering optimism in the village's existence.
- **Enablers for Village Sustainability:**
  - o Villages need enablers like amenities and social infrastructure.
  - o Recent improvements in infrastructure (electricity, water, connectivity) lay the foundation for Aatmanirbhar Gaon.
- **Village as an Institution:**
  - o Traced back to the Vedic period, the village evolved with identity, occupation, and social infrastructure.
  - o Three aspects: Identity, occupational interdependency, and amenities/social infrastructure strengthen the village as an institution.
- **Transformation for Modern Relevance:**
  - o Rejuvenation of village institutions needed in contemporary times.
  - o Emphasis on sustainability, self-sufficiency, and self-reliance for identity, social bonding, and pride.

## Proactive Interventions for Revival of Village Institution

- **Entrepreneurship Development for Livelihoods:**
  - o Essential for both existential self-sufficiency and meeting aspirational quality of life needs.
  - o Government initiative 'Unnat Bharat Abhiyan' commercialized 53 technologies, focusing on rural livelihoods.
- **Research and Development for Rural Needs:**
  - o Scientific and technological interventions should align with rural needs.
  - o Research in agro-produce-based supply chains anchors the economic base at the village level.
- **'Unnat Bharat Abhiyan' Social Dimension:**
  - o Engages 3000 higher education institutions with about 15000 villages.
  - o Utilizes locally available resources, empowers weaker sections, and commits to long-term outcomes.
- **Distinct Approach to Village Development:**
  - o Architects, engineers, and planners need specific training for rural development.
  - o Proactive interventions needed to prevent unorganized growth, preserve the village structure, and support its institutional character.
- **Rurbanisation and Shyama Prasad Mukherji Rurban Mission:**
  - o SPMRM aims at developing clusters of villages preserving rural community life with urban facilities.
  - o A significant milestone towards realizing 'Aatmanirbhar Gaon' by channelizing the physical growth of villages.
- **Developing Competencies in Villages:**
  - o Challenge to develop competencies to meet emerging opportunities in rural India.
  - o Professional education and skilling initiatives should evolve with hands-on experience, breaking free from stereotyped curricula.

## Engaging Communities for Instilling Conviction

- **Aatmanirbhar Gaon as a People's Movement:**
  - o Aatmanirbhar Gaon is a people-centric movement.
  - o Success relies on engaging with communities and instilling confidence to counter migration inertia.
- **Role of NGOs and Higher Education Institutions:**
  - o NGOs and higher education institutions play a critical role in handholding, possessing superior community engagement capabilities.
  - o The 73rd Amendment empowers village-level institutions, transitioning responsibility for self-sufficiency with reduced direct government involvement.
- **Balancing Traditional Knowledge and Modern Expertise:**

- o Village development in a fragile ecosystem requires balancing traditional knowledge with modern science, technology, and management expertise.
- o Entrepreneurial activities need to align with complex natural settings, with modern knowledge complementing traditional wisdom.
- **Complexity of Village Development:**
  - o Village development is complex, especially in contemporary times.
  - o Reviving village communities is crucial for them to take ownership of the institution's revival.
- **Unnat Bharat Abhiyan and Higher Education Support:**
  - o Under Unnat Bharat Abhiyan, subject experts from higher education institutions provide knowledge and technology support.
  - o The initiative facilitates experiential learning and community engagement through the adoption of villages.

To achieve 'Aatmanirbhar Gaon,' there must be a firm belief that India's path to prosperity hinges on the leadership of its villages. Gandhiji emphasized the significance of villages, stating, 'The cities can fend for themselves; it is the village we must turn to.' Urgently, he warned, 'If the village perishes, India will perish too; it will be no more India's will.' Hence, policies and actions should align with the principle that 'India's development is synonymous with the development of Aatmanirbhar Gaon.'

# Sustainable Industries: The Backbone of Self-reliant Villages

The promotion of sustainable industries in rural villages involves empowering local communities for economic advancement while ensuring environmental sustainability. This includes implementing sustainable practices, providing skill development and training in organic farming and renewable energy, and supporting green sectors such as sustainable agriculture, renewable energy production, and waste management. In Jammu and Kashmir (J&K), there is a notable focus on the Government's homestay initiative, the development of the pencil industry, the growing demand for Kashmir bat, adventure tourism, as well as the handicraft and handloom industry.

## Nurturing Self-Reliance in Jammu and Kashmir Through Sustainability

- Acknowledging Jammu and Kashmir's traditional role as an agrarian and tourist hub.
- Recognizing the contemporary need for self-reliance amid evolving global dynamics.
- **Role of Sustainable Industries:**
  - Emphasizing how sustainable industries drive economic self-sufficiency.
  - Highlighting their contributions to economic development, environmental preservation, and community empowerment.
- **Defining Sustainable Industries:**
  - Describing sustainable industries as those that endure without depleting essential resources.
  - Underlining their importance in preserving the fragile natural environment of Jammu and Kashmir.
- **Preservation of Natural Assets:** Exploring how sustainable industries contribute to preserving the region's natural beauty and resources for future generations.
- **Economic Impact:**
  - Discussing the economic benefits, including job creation and income generation for local communities.
  - Showcasing the diverse opportunities offered by eco-friendly tourism, agro-based businesses, and renewable energy initiatives.
- **Government Promotion:**
  - Highlighting recent government initiatives to promote sustainable industries.
  - Focusing on measures empowering local communities and enhancing economic control.
- **Local Empowerment:**
  - Demonstrating how self-reliance empowers residents to shape their economic future.
  - Stressing the role of sustainable industries in fostering social empowerment and community-driven development.

## Sustaining Jammu and Kashmir Through Diverse Industries

- **Aatmanirbhar Villages:**
  - **Visionary Approach:**
    - Aatmanirbhar Villages, or self-reliant villages, signify a visionary approach to community development in Jammu and Kashmir.
    - Encompasses the establishment of self-sustaining local economies.
  - **Key Focus Areas:** Prioritizes holistic development, including resource utilization, skills development, entrepreneurship, infrastructure improvements, cultural preservation, social connectivity, and environmental sustainability.
- **Economic Diversification:**
  - **Importance in Traditional Regions:** Recognizes the significance of economic diversification, especially in regions heavily dependent on traditional sectors like agriculture and tourism.
  - **Stability and Growth:**
    - Sustainable industries, such as renewable energy, handicrafts, and agro-processing, offer stability and growth.
    - Mitigates vulnerability to economic fluctuations and promotes resilience.

- **Job Creation and Social Stability:**
  - **Addressing Unemployment:**
    - Acknowledges the critical issue of unemployment in regions like Jammu and Kashmir.
    - Sustainable industries play a pivotal role in providing employment opportunities, contributing to social stability.
  - **Economic Resilience:** Promotes economic resilience and overall well-being by reducing dependence on a single sector.
- **Practical Application in Jammu and Kashmir:**
  - **Homestays:**
    - **Rising Popularity:**
      - Homestays gain popularity due to an increasing desire for authentic cultural experiences among travelers.
      - Cost-effectiveness and smaller ecological footprint attract environmentally conscious tourists.
    - **Government Initiatives:**
      - Government actively promotes homestays through incentives, training programs, and infrastructure development.
      - Ensures transparency and extensive information for informed decision-making.
  - **Pencil Industry:**
    - **Unique Craftsmanship:**
      - The 'pencil village' in Jammu and Kashmir produces exquisite handcrafted wooden pencils, reflecting unique craftsmanship.
      - Reduction in the need to import pencil wood promotes self-sufficiency.
    - **Recognition and Support:**
      - Recognized in Prime Minister Narendra Modi's radio programme, Mann Ki Baat.
      - Highlights the significance of local industries in promoting self-reliance.
  - **Saffron Cultivation:**
    - **Sustainable Potential:**
      - Saffron cultivation, deeply rooted in Jammu and Kashmir's traditions, holds sustainable potential.
      - Traditional and low-impact farming methods minimize environmental impact.
    - **Economic Opportunities:**
      - Offers economic opportunities to local farmers, supporting livelihoods.
      - Government initiatives, like the National Saffron Mission, aim to revitalize and promote the saffron industry.
  - **Handicraft and Handloom Industry:**
    - **Cultural Preservation:**
      - The handicraft and handloom industry contributes to cultural preservation by promoting traditional crafts and designs.
      - Preserves the rich cultural heritage of Jammu and Kashmir.
    - **Economic Growth:**
      - Provides employment to a substantial number of people, particularly in rural areas.
      - Government's 'Wool Processing, Handloom and Handicrafts Policy-2020' supports artisans and aims for sustainable growth.
  - **Cricket Bat Industry:**
    - **Heritage and Craftsmanship:**
      - Kashmir's cricket bat industry, centered in Pulwama and Anantnag, reflects the region's rich heritage and craftsmanship.
      - Local artisans meticulously craft high-quality cricket bats using traditional methods.
    - **Economic Significance:**

- The industry sustains numerous families and businesses, providing a source of livelihood to approximately 50,000 individuals.
- Kashmiri cricket bats remain in high demand globally.

o **Agro-Processing:**

- **Significance in Jammu and Kashmir:** Agro-processing holds immense significance in extending the shelf life of agricultural goods and adding value.
- **Economic Benefits:**
  - Job creation, economic diversification, and market expansion are key benefits.
  - Government support and infrastructure development play a vital role in overcoming challenges.

Sustainable industries are essential for fostering self-reliant villages in Jammu and Kashmir. They bring economic diversification, employment opportunities, and environmental sustainability. Overcoming challenges in infrastructure, skills, finance, and marketing requires government support through strategic policies. This approach not only boosts economic growth but also preserves the region's natural beauty for future generations, creating a win-win situation for all stakeholders.

# Empowering Rural India: Digital Transformation as a Sustainability Catalyst

The concept of 'rural e-commerce' stands apart from mainstream e-commerce by creating electronic platforms specifically for rural products. Its primary goal is to link rural areas with urban markets, ultimately boosting income levels. Government initiatives such as 'Make in India,' 'Digital India,' and 'Skill India' are designed to support the growth of small and medium enterprises (SMEs) and facilitate their participation in the e-commerce sector.

In India, where a significant portion of the population resides in villages, the idea of 'smart villages' is gaining traction. This innovative concept aims to transform underdeveloped villages into economically, socially, environmentally, and physically sustainable communities. The fundamental premise behind 'smart villages' is that the application of digital technology can serve as a catalyst for holistic rural development, providing rural areas with 21st-century amenities while preserving their unique rural character.

Considering the United Nations' projection that the global food system must sustain over 9 billion people by 2050 without harming the ecosystem, it becomes imperative to rethink our approach to food production. Simultaneously, rural communities face challenges such as market inaccessibility, aging populations, depopulation, and inadequate public services, all of which can impact sustainable food production. In response to these challenges, 'Digitalisation' emerges as a viable solution, enhancing agricultural resource efficiency and improving rural services. This approach also aligns with the United Nations' Sustainable Development Goals, contributing to progress in rural areas by addressing interconnected issues such as poverty, food security, and climate change.

**Industrial and Agricultural Revolutions**

Challenges in achieving universal digital connectivity, particularly in rural areas, persist due to access, skills, and affordability limitations. Simultaneously, the agricultural sector is experiencing its revolution, Agriculture 4.0, integrating digitalization, automation, and artificial intelligence to address various challenges. The timeline from Agriculture 1.0 to Agriculture 4.0 illustrates significant transformations in the agricultural landscape (Liu et al., 2021).

## Digitally Self-Reliant Village and Digital Transformation

- **Digital Education and Healthcare:**
  - Digitally Self-Reliant Villages provide high-tech education with internet access, e-content, educational apps, smart classes, and video conferencing.
  - E-health services offer online consultations with specialist doctors.
- **E-Governance and Infrastructure:**
  - Ensures efficient e-governance, including public utility services and social welfare schemes.
  - Equipped with intelligent ICT infrastructure and eco-friendly amenities.
  - Robust hard infrastructure includes all-weather roads, transportation facilities, healthcare centers, well-maintained schools, advanced anganwadi centers, banks, and water supply systems.
- **Security Measures:** Surveillance through CCTV cameras enhances village security.
- **Economic Opportunities:** Fosters entrepreneurial interventions, paving the way for a self-sufficient, technologically advanced rural economy.
- **Innovation Hub:** Transforms the village into a thriving hub of innovation and progress.
- **Digital Hubs:** Digital hubs are strategic tools for promoting digital engagement among rural communities and businesses.
- **Revolution in Agriculture:**
  - Digital technologies revolutionize agriculture, integrating smallholders into a tech-driven agrifood system.
  - Digitalization optimizes resource management with individualized, intelligent, and real-time solutions.

- **Enhanced Value Chains:** Hyper-connected by data, agrifood value chains become traceable to minute details.
- **Precision Agriculture:** Fields, crops, and animals are precisely managed through digital agriculture.

## Conditions for a Digital Transformation

- **Government Initiatives for Digital Empowerment**
  - **Digital India Program:**
    - Launched in 2015 to bring government services to every corner.
    - Bharat Net Project enhances e-banking, e-governance, and e-education in villages.
    - Pradhan Mantri Jan Dhan Yojana (PMJDY) promotes financial and digital inclusion.
  - **AI for All: NITI Aayog's Initiative:**
    - Targets key sectors for AI implementation: Healthcare, Agriculture, Education, Smart Cities, and Smart Mobility.
    - Aims at improving access, affordability, farmer income, education quality, and urban connectivity.
  - **Self-Reliant India (SRI) Fund:**
    - Empowers MSMEs for Aatmanirbhar Bharat.
    - Mother Fund-Daughter Fund structure provides growth capital to viable MSMEs.
    - Utilizes various financial instruments like equity, quasi-equity, and equity-like structures.
  - **Fintech Companies Initiatives:**
    - Collaborate with the Government to advance digital accessibility in rural India.
    - Establish digital infrastructure in rural areas, facilitating digital payments.
    - Focus on need-based products, financial literacy, and social/physical infrastructure investments.
- **Smart Entrepreneurship for a Self-Reliant Smart Village Economy**
  - **Entrepreneurial Funnel Framework:**
    - Developed to identify potential entrepreneurs within smart villages.
    - Involves a step-by-step process with interlinked and interdependent activities.
    - Approximately 5-8% emerge as potential entrepreneurs prepared to launch enterprises.
  - **Rural Entrepreneurship Schemes:**
    - Government introduces schemes to harness rural entrepreneurial potential.
    - Aims to catalyze economic development, bridge income gaps, and generate employment opportunities.
  - **Entrepreneurial Funnel Activities:**
    - Sequential activities to identify and prepare potential entrepreneurs.
    - Gradual reduction in participation rates through successive stages.
    - Successful candidates contribute to building self-reliant village economies.
  - **Benefits of Rural Entrepreneurship:**
    - Utilizes abundant natural resources and skilled workforce in rural areas.
    - Bridges income gaps between rural and urban regions.
    - Generates employment opportunities and fosters economic development.

## E-Commerce in Rural India

- Concept distinct from mainstream e-commerce, connecting rural areas with urban markets.
- Government initiatives like 'Make in India,' 'Digital India,' and 'Skill India' promote SME growth in e-commerce.
- ONDC initiative aims to transform e-commerce, breaking entry barriers and fostering innovation.
- ITC Limited's e-choupal initiative successfully empowers farmers with vital information, reducing dependency on intermediaries.
- **Challenges in Rural E-commerce:**

- o **Payment-related Issues:**
    - Limited access to online payment solutions and banking services.
    - Lack of trust in financial systems.
  - o **Lack of Digital Infrastructure:**
    - High internet costs impede rural engagement with digital platforms.
    - Issues with fibre optic lines, cell towers, internet routers, and wireless spectrum.
  - o **Logistics Challenges:**
    - Inefficient postal services.
    - Limited logistics providers, high costs, poor road infrastructure.
  - o **E-commerce Awareness:**
    - Lack of knowledge among rural populations, farmers, and entrepreneurs.
    - Training needed in mobile phone use, mobile banking, and e-commerce platforms.
  - o **Business Competence:**
    - Lack of knowledge in drafting business and financial plans, branding, packaging, and marketing.
    - Limited awareness of new product technologies.
  - o **Product Quality:** Poor packaging, low quality, and competitiveness compared to imported goods.
  - o **Language Barriers:** E-commerce websites primarily use English, posing a language barrier for rural users.
  - o **Currency Challenges:** Handling international currencies can be challenging for e-commerce businesses operating within India.
- **International E-commerce Initiatives:**
  - o **China**:
    - Growth in rural e-commerce led by companies like Alibaba and Jingdong.
    - Taobao villages and innovative logistics, including drone delivery.
  - o **Japan**: 'One Village One Product (OVOP)' initiative rejuvenates rural communities post-World War II.
  - o **Republic of Korea:**
    - Information Network Village (INVIL) project empowers rural communities with high-speed internet.
    - Aims to close the digital gap between urban and rural areas, create new revenue sources, and build sustainable communities.

## Digital Technologies in Agrifood Systems: Examples and Impact

- **Mobile Apps:**
  - o **Example**: M-Farm in Kenya.
  - o **Impact**: Empowers farmers with real-time price information, altering cropping patterns. FAO's EMA-I App supports early livestock disease reporting, enhancing food security in Africa.
- **Agrobots and AI Startup Innovations (AgTech):**
  - o **Examples:**
    - Dino Agrobot in soil health preservation.
    - Indian startups like Intello Labs (image recognition), Aibono (agri-data science), Trithi Robotics (drones), and SatSure (machine learning).
  - o **Impact**: Revolutionizes farming, addresses concerns about pesticides, mitigates labor shortages, and stabilizes crop yields. AI-driven solutions reduce labor costs and improve efficiency, e.g., facial and voice recognition in pig farms.
- **Internet of Things (IoT) in Precision Agriculture:**
  - o **Technologies**: Guidance systems, Variable Rate Technologies (VRT), and drones.
  - o **Impact**: Optimizes resource use, reduces costs, and enhances productivity by providing precise data on planting, fertilization, and irrigation.
- **Blockchain Technology:**

- o **Example**: Mycrop ERP software.
  - o **Impact**: Streamlines processes, enables adaptation to environmental challenges, and facilitates data-driven decision-making. Ensures food traceability, enhancing transparency and consumer trust. Walmart's adoption detects food quality issues for swift responses.
- **Skill Programs for Digital Literacy:**
  - o **Initiatives**: National Digital Literacy Mission (NDLM), DigiNXT, Manipal ProLearn.
  - o **Impact**: Imparts digital literacy, upskills the workforce in transformation technologies, and provides job opportunities through partnerships with corporate entities.

The imperative of empowering rural areas through digital transformation extends beyond being an opportunity—it is a necessity for sustainable development. Bridging the digital gap between urban and rural regions holds the key to unlocking the vast potential of these areas, fostering economic growth, enhancing livelihoods, and making meaningful contributions to environmental conservation.

# Accelerating Economic Growth of Villages

Rural growth should hinge on agriculture-based industrialization, gradually shifting to the non-farm sector. Investments in post-harvest activities like agro-processing and improved farm-to-market connectivity are vital for income generation and job creation in rural areas.

The concept of self-sufficiency in Indian villages, advocated by Sir Charles Metcalfe in 1830 and further developed by Mahatma Gandhi, emphasizes the significance of balanced growth, particularly starting from villages where 65% of the population resides. The Institute of Rural Management, Anand (IRMA), founded by Dr. Verghese Kurien, exemplifies visionary rural development, with Amul as a successful farm-led model.

Rural areas, contributing 25-30% to the GDP, heavily depend on agriculture for income and employment, with a need to transform into self-sustainable micro-economic units. International assessments by IFAD, the World Bank, and others highlight the positive impact of rapid agricultural growth on poverty reduction.

Increased investment in agriculture, both in capital and technology, proves 2.5 to 3.0 times more effective in uplifting the income of the poor compared to non-agricultural investments. Villages can serve as economic models, focusing on agriculture. The success of Maraug, a village in Himachal Pradesh, producing over 2 lakh apple boxes annually, showcases the potential for rural prosperity.

## Financial Support in the Rural Areas

- Rural growth should pivot on agriculture-based industrialization, gradually transitioning to the non-farm sector.
- Key investments in post-harvest activities, such as agro-processing and improved farm-to-market connectivity, are crucial for income generation and job creation in rural areas.
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- Rural areas, contributing 25-30% to the GDP, heavily rely on agriculture for income and employment, necessitating a transformation into self-sustainable micro-economic units.
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- Villages can serve as economic models, with a focus on agriculture.
- The success of Maraug, a village in Himachal Pradesh, producing over 2 lakh apple boxes annually, exemplifies the potential for rural prosperity.

## Skill Building in Rural Areas

Revitalizing villages necessitates the infusion of skills and technologies to create meaningful employment, enhancing the quality of life in rural areas. To bolster the rural economy, providing suitable livelihood opportunities during lean periods for agricultural workers and farmers is imperative. Employability is increasingly reliant on upskilling to meet the demands of the evolving, knowledge-intensive economy.

The Central Government is presently executing three schemes for employment generation:

- **Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS):** Provides employment opportunities to unskilled workers of all age groups.

- **Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY):**
    - Launched in 2014, uniquely focuses on rural youth aged 15 to 35 from poor families.
    - Over 14.51 lakh candidates have been trained under this program.
- **Skill Development through Rural Self Employment and Training Institutes (RSETIs):**
    - Supports the development of self-employment in unemployed rural youth, especially those below the poverty line.
    - Offers periodic skill upgrades to keep them abreast of the latest technologies.
    - Facilitates the launch of profitable micro-enterprises, contributing to both individual standards of living and the national economy.

RSETIs are promoted and managed by banks in active cooperation with state governments. Furthermore, the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), part of the Skill India Mission, focuses on skill-based training for rural youth. The Prime Minister's Employment Generation Programme (PMEGP) is an additional initiative aiming to generate self-employment opportunities through the establishment of micro-enterprises in the non-farm sector.

A new centrally-sponsored scheme, the "Vibrant Villages Programme," with a financial allocation of Rs. 4,800 crore for the years 2022-23 to 2025-26, has received approval. This initiative is directed at boosting infrastructure development and livelihood opportunities in villages along the northern border, contributing to overall rural development.

## Need for Micro, Small and Medium Scale Industries for Non-Farm Sector Jobs

- **Rural Growth Strategy:**
    - Advocates for agriculture-based industrialization as the primary driver of rural growth.
    - Emphasizes the need for gradual transition to the non-farm sector for sustainable development.
- **Investment Areas:**
    - Highlights the necessity of investing in post-harvest rural activities, including agro-processing, packaging, cold storage, and transportation.
    - Stresses the importance of developing strong linkages between farm and non-farm sectors to boost income and job creation in rural areas.
- **MSMEs in Rural Development:**
    - Underscores the critical role of Micro-Small and Medium Enterprises (MSMEs) in rural industrialization.
    - Notes the significant presence of 63.4 million MSME units in the country, with 51.25% in rural areas, providing employment to around 111 million workers.
    - Highlights MSMEs as absorbers of surplus agricultural labor, addressing the issue of disguised unemployment in rural regions.
- **Forest Fringe Villages:**
    - Recognizes the importance of forest fringe villages, constituting approximately 26% of the total villages in India.
    - Notes that these villages are home to around 22% of the country's population, and 60-70% of the income of forest dwellers is derived from minor forest produce (MFP).
    - Emphasizes the socio-cultural and livelihood significance of forests for about 300 million tribal and local people.
- **Legal Empowerment:**
    - Highlights legislative measures such as the Panchayats (Extension of the Scheduled Areas) Act, 1996 (PESA 1996) empowering Gram Panchayats in Scheduled Areas.
    - Discusses the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, providing ownership rights to forest dwellers.
- **Van Dhan Yojana:**

o Introduces the Van Dhan Yojana launched in 2018 under the 'Mechanism for Marketing of Minor Forest Produce (MFP) through Minimum Support Price (MSP) & Development of Value Chain for MFP.'
o Designates TRIFED as the nodal agency at the national level for the socio-economic development of the tribal population through the Van Dhan Yojana.

## Villages as Tourism Hubs

- **Employment in Tourism:**
  o Currently employs 14 million people in the travel and tourism industry.
  o Expected to grow at a rate of 2.5% per annum until 2027.
- **Rural Tourism Opportunities:**
  o Emphasizes the need to open villages for tourism, providing necessary infrastructure.
  o Envisions boosting development, creating job opportunities, and generating income.
  o Aims to preserve and promote community-based values and products.
- **Micro-Economic Units:**
  o Highlights the potential of rural tourism to transform villages into independent micro-economic units.
  o Provides direct market access for farmers, supporting local economies.
- **Global Recognition:**
  o Mentions the 'Best Tourism Villages 2022' initiative by the World Tourism Organization (UNWTO).
  o Evaluation based on criteria covering cultural and natural resources, economic, social, and environmental sustainability, tourism development, infrastructure, and safety.
- **Indian Recognition:**
  o Acknowledges a similar initiative by the Government of India.
  o Cites Chitkul village in Himachal Pradesh as India's best 'tourism village' for the year.
- **Chitkul Village:**
  o Describes Chitkul in Himachal's tribal Kinnaur district as a picturesque village with the Kinner Kailash in the backdrop, Baspa river flowing through, and snow-clad mountains.
  o Recognizes Chitkul as a popular destination for tourists and trekkers.
- **Infrastructure Development:**
  o Advocates the need for creating required infrastructure in villages to enhance the comfort of visitors.
  o Stresses the potential of thousands of such villages in India enriched with nature's bounties.

## Smart Villages

- **Agricultural Revamp with Smart Technologies:**
  o Agriculture, the primary village occupation, requires a technological overhaul for economic strengthening.
  o Startups are emerging as technology hubs, utilizing Artificial Intelligence, IoT, Big Data Analytics, drones, and ICT for precision farming and supply chain management.
  o These technologies aim to enhance productivity, reduce costs, and increase farmers' income.
- **Villages of Tomorrow Initiative:**
  o 'Villages of Tomorrow' initiative by UNDP and Trendyol focuses on promoting e-commerce platforms in rural areas.
  o Aims to create holistic and sustainable hubs in pilot rural settlements, addressing gender-sensitive digitalization.
- **Government Initiatives:**
  o The Union Government introduced the 'Agriculture Accelerator Fund' in the 2023 Budget to support agri startups founded by young entrepreneurs in rural areas.
  o SBI's YONO Krishi app caters to farmers' finance, inputs, and advisory needs.
- **Corporate Initiatives:**

- o Agritech startups, including major stakeholders like Indian Tobacco Company, leverage smart technologies for direct-from-farm procurement.
  - o ITC MAARS (Meta Market for Advanced Agricultural Rural Services) super app enhances farmers' income and procurement efficiency through digital platforms.
- **Provision of Urban Amenities in Rural Areas (PURA):**
  - o Proposed by former President Dr. APJ Abdul Kalam, PURA advocates developing urban infrastructure and services in rural hubs.
  - o Aims to create economic opportunities, improve road networks, education, health, drinking water, power, sanitation, and social safety nets.

# Aatmanirbhar Villages through Agricultural Development

The Aatmanirbhar Bharat Abhiyan, or Self-Reliant India campaign, has gained momentum recently, specifically focusing on the development of self-reliant villages known as Aatmanirbhar Villages. This initiative aims to reduce reliance on foreign resources and instill self-sufficiency across various sectors. The emphasis on promoting self-reliance at the village level is crucial due to a significant portion of India's population residing in rural areas, facing economic challenges such as poverty, unemployment, and inequality.

Aatmanirbhar Villages are particularly highlighted in the context of agricultural development. The rural landscape, characterized by its vast area, vibrant culture, and a substantial population, holds a central position in the nation's identity. The overarching goal is to foster self-sufficiency across diverse sectors, with agriculture and allied activities playing a pivotal role in driving economic development. This approach is seen as imperative for achieving comprehensive and sustainable growth on a national scale.

## Need for Aatmanirbhar Villages

- **Significant Rural Population:**
  - India has a considerable rural population, with nearly two-thirds residing in rural areas.
  - Over 70% of the workforce is based in rural regions.
  - Rural areas grapple with economic challenges like poverty, unemployment, and inequality.
- **Addressing Economic Challenges:**
  - Crucial to fostering sustainable growth and preventing rural-urban migration.
  - Aatmanirbhar Villages hold the potential to create livelihood opportunities, improve quality of life, and reduce income disparities.

## Significance of Agriculture in Rural India

- **Central Role of Agriculture:**
  - Agriculture and allied sectors play a pivotal role in rural economic development.
  - Essential for the socio-economic fabric of rural areas.
- **Food Security:**
  - A self-reliant nation must be self-sufficient in domestic food grain production.
  - Enhances food security and reduces dependence on external sources.
- **Employment Opportunities:**
  - Agriculture is a major source of livelihood for a significant portion of the rural population.
  - Generates employment directly and indirectly, fostering job creation in various sectors.
- **Diversification of Rural Labor Market:**
  - Promotes job creation in agribusiness, food processing, and allied sectors.
  - Mitigates rural-urban migration issues, contributing to balanced socio-economic development.

## Sustainable Development

- **Eco-Friendly Practices:**
  - Promotion of self-reliance in villages catalyzes eco-friendly practices.
  - Adoption of regionally appropriate solutions for water, energy, and waste management.
- **Local Industries and Small Businesses:**
  - Fosters local industries and small businesses in villages.
  - Promotes ventures like manufacturing, crafts, agro-processing, etc.
  - Bolsters rural self-sufficiency, sustainability, and ecological responsibility.

## Role of Women

- Essential for attaining self-sufficiency and comprehensive socio-economic development.
- Women in rural areas play a pivotal role in agricultural and allied activities.
- Initiatives should focus on gender equality and women's access to education, health, land, and credit.

## Infrastructure Development:

- **Basic Requirements for Self-Reliance:**
  - Investments in infrastructure, including roads, electricity, irrigation, sanitation, and storage facilities.
  - Enhances overall quality of life in rural areas and attracts business and investment.
- **Market Connectivity:** Better infrastructure connects villages to markets, facilitating easier sale of produce and resource access for farmers.

## Technology Integration

- Adoption of modern technology and information systems in agriculture.
- Empowers farmers with tools and knowledge for cutting-edge farming practices.

## Present Status of Agricultural Exports and Imports:

- **Positive Trade Balance for Agricultural Goods:**
  - India has achieved self-sufficiency in food grains and emerged as a net exporter of agricultural products.
  - Agricultural trade balance has consistently remained positive and grown nearly 30-fold over three decades.
- **Diversification of Export Basket:**
  - Shift towards higher value-added items in agricultural exports.
  - Reflects adaptability and ability to cater to emerging global market demands.
- **Export Growth:**
  - Remarkable growth in agricultural exports from Rs. 6,013 crore in 1990-91 to Rs. 3,75,742 crore in 2021-22.
  - Positive compound annual growth rate (CAGR) demonstrating the pivotal role of agriculture in generating foreign exchange.
- **Export Destinations:** Major export destinations include Bangladesh, China, Iran, Indonesia, Japan, Malaysia, the UK, the USA, etc.
- **Potential for Further Growth:**
  - India's agricultural export basket represents just over 2.5% of global agricultural trade.
  - Significant potential exists for further growth through targeted interventions.

## Government Initiatives for Aatmanirbhar Villages

- **Aatmanirbhar Bharat Abhiyan:**
  - Launched on May 12, 2020, with an economic package of Rs. 20 lakh crores.
  - Focused on promoting local products, synergizing with 'Make in India' initiative.
  - **Aatmanirbhar Bharat Vision:**
    - A vision empowering individuals and enterprises for prosperity and national strength.
    - Recognizes the essence of India's soul in its villages, emphasizing rural development.
- **Agriculture's Role in Aatmanirbhar Bharat:**
  - **Significance of Agriculture:**
    - Plays a pivotal role in realizing Aatmanirbhar Bharat goals.
    - Influences every citizen directly or indirectly.
  - **Ordinances for Aatmanirbhar Krishi:**
    - Ministry of Agriculture enacted three ordinances on June 5, 2020.

- Aims at mitigating market risks, encouraging contract farming, and promoting private investments in agricultural supply chains.
    - **Free-Market Regime:**
        - Ordinances considered a significant stride towards liberalization.
        - Expected to make Agricultural Produce Market Committees (APMCs) more proficient and cost-effective.
- **National Agriculture Market (e-NAM):**
    - **Innovative Agricultural Marketing:**
        - Launched on April 14, 2016, funded by the Central Government.
        - Implemented by the Small Farmers Agribusiness Consortium (SFAC).
    - **Online Trading Platform:**
        - Provides marketing opportunities for farmers through an online competitive and transparent system.
        - Ensures fair prices based on the quality of produce.
    - **Expansion and Reach:**
        - Expanded to 1361 mandis across 23 states and 4 Union territories by March 2023.
- **Farmers Producers Organisations (FPOs):**
    - **Government Scheme:**
        - Launched in February 2021, aims to form and promote 10,000 new FPOs by 2027-28.
        - Budgetary provision of Rs. 6,865 crore.
    - **Cluster-Based Approach:**
        - Formation and promotion based on produce cluster area and commodity-based approach.
        - Focus on 'One District One Product' for product specialization.
    - **Support to Members:**
        - Offers end-to-end services covering cultivation inputs, technical services, processing, and marketing.
        - Intends to augment farmers' income and shift towards Aatmanirbhar Bharat.
- **Vibrant Villages Programme:**
    - **Union Budget 2022-23 Initiative:**
        - Introduced to elevate infrastructure in villages along India's northern border.
        - Targets states like Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Ladakh, and Sikkim.
    - **Objectives of the Programme:**
        - Enhance quality of life for border village residents.
        - Improve infrastructure, create vibrant tourist hubs, expand road connectivity, and provide decentralized renewable energy sources.
    - **Financial Commitment:**
        - Union Cabinet approved Rs. 4,800 crore allocation on February 15, 2023.
        - Emphasizes government dedication to progress and prosperity in border communities.

Government has launched numerous schemes to foster self-reliance in villages, focusing on agricultural development and rural entrepreneurship. These initiatives present an excellent opportunity for marginalized sections to actively participate in the Aatmanirbhar Bharat Abhiyan. To attract educated unemployed youth to agribusiness and entrepreneurship, there is a need for emphasis on instilling scientific temper and fostering innovation among rural youth. A top priority should be a well-crafted policy and robust strategy to strengthen the rural non-farm sector. A comprehensive approach involving rural infrastructure development, support for local entrepreneurs, establishment of agro-based industries, easy access to finance, education, skill development, and sustainable natural resource management is crucial. Additionally, promoting digital literacy, encouraging community participation, facilitating financial inclusion, and improving market access are vital components. Success hinges on collaborative efforts between the government, NGOs, the private sector, and local communities. The ultimate goal extends beyond mere village self-sufficiency to creating thriving and sustainable rural communities contributing significantly to overall economic growth, aligning with the objectives of the Aatmanirbhar Bharat Abhiyan.