BACS CZ 2020 VOI 23



Inside the MODI Government's AGRICULTURAL OVERHAUL





CONTENTS

04

Prime Minister Shri Narendra Modi addresses G20 Agriculture Ministers' Meet 06

Remarks of BJP President Sri J P Nadda 07

Message from the BJYM President Shri Tejasvi Surya 08

Editorial

ADVISORY BOARD

Abhinav Prakash National Vice-President, BJYM

Varun Jhaveri
National In-charge Policy and Research,
BJYM

Animesh Biswas NEC member, BJYM

EDITORIAL BOARD

Rahul Bhaskar Adarsh Tiwari Saurabh Kumar Pandey Dr. Mrittunjoy Guha Majumdar Kunal Tilak Mutum Yoiremba

BJYM website: https://bjym.org

BJP E-Library: http://library.bjp.org/jspui/handle /123456789/3082

- 10 Cultivating Diversity:
 Modi Government's Support for
 Emerging and Allied Sectors
- 12 The Modi Government's Blueprint for a Modern Indian Agriculture
 - Gaurav Gautam

- Rohit Chahal

- 14 The Bharatiya Revolution in Agrivoltaics
 - Dr. Mrittunjoy Guha Majumdar
- 16 नये भारत में खुशहाल हो रहा किसान: मोदी सरकार की उपलब्धियाँ
 - Dr Vivek Singh
- 19 एक भारत, श्रेष्ठ भारत में किसान सर्वोपरी - एडवोकेट नेहा धवन
- 21 कृषि व संबद्ध क्षेत्र में विकास की बयार - सन्नी कुमार
- 23 मोदी ने किसानों को क्या दिया ? - रोहित शुक्ला
- 26 Sowing Seeds of Progress: How the Modi Government is Bolstering Indian Agriculture
 Dr Shashi Bhushan

- 29 Harvesting Hope: Empowering Tribal Women through Millet Cultivation
 - Rahul Singh
- 31 Empowering Farmers: Agricultural Schemes Under the Modi Government
 - Rahul Singh
- Organic Agriculture: Sowing the Seeds of a Sustainable Future
 - Gourav Lama
- **35** Farming a new alternative to fossils
 - Rajarshi Roychowdhury
- 37 Sowing the Seeds of Self-reliance: Agricultural Reforms & Pradhan Mantri Atmanirbhar Bharat Abhiyan (ABHA)
 - Dr. Pooja Paswan
- 39 Agriculture Under Modi Government A Journey From Tradition To Transformation
 - Udit Pathak

Prime Minister Shri Narendra Modi addresses G20 Agriculture Ministers' Meet

xcellencies, Ladies and gentlemen,

Namaskar!
I welcome you all to India. Agriculture is at the heart of human civilization. And so, as Agriculture Ministers, your task is not simply that of handling one sector of the economy. You shoulder a big responsibility for the future of humanity. Globally, agriculture provides livelihood for over two point five billion people. In the Global South, agriculture accounts for almost 30 percent of GDP, and over 60 percent of jobs. And today, this sector faces several challenges. The supply chain disruptions caused by the pandemic have been worsened by the impact of geo-political tensions. Climate Change is causing extreme weather event more and more frequently. These challenges are felt most by the Global South.

Friends,

I want to share with you what India is doing in this most vital sector. Our policy is a fusion of 'back to basics' and 'march to future'. We are promoting Natural Farming as well as Technology-enabled Farming. Farmers all over India are taking up natural farming now. They are not using synthetic fertilizers or pesticides. Their focus is on rejuvenating the mother earth, protecting soil health, producing 'per drop, more crop', and promoting organic fertilizers and pest management solutions. At the same time, our farmers are proactively using technology to boost productivity. They are generating and using solar power on their farms. They are using Soil Health Cards to optimize crop selection, and drones to spray nutrients and monitor their crops. I believe this "fusion approach" is the best way to address several issues in agriculture.

Friends,

As you know, the year 2023 is being celebrated as the International Year of Millets. You will find a reflection of this on your plates in Hyderabad, with many dishes based on millets, or Shri Anna, as we call it in India. These superfoods are not only healthy to consume, but they also help raise the incomes of our farmers by using less water, needing less fertilizer, and being more pest-resistant. Of course, Millets are not new. They have been cultivated for thousands of

years. But markets and marketing had influenced our choices so much that we forgot the value of traditionally grown food crops. Let us embrace Shri Anna Millets as the food of our choice. As part of our own commitment, India is developing an Institute of Millets Research as a Centre of Excellence - for sharing best practices, research and technologies in millets.

Friends,

I urge you to deliberate on how to undertake collective action to achieve global food security. We must find ways to build sustainable and inclusive food systems, focussed on marginal farmers. We must find ways to strengthen global fertilizer supply chains. At the same time, adopt agricultural practices for better soil health, crop health and yield. Traditional practices from different parts of the world may inspire us to develop alternatives for regenerative agriculture. We need to empower our farmers with innovation and digital technology. We must also make solutions affordable for small and marginal farmers in the Global South. There is also an urgent need to reduce agricultural and food waste, and instead, invest in creating wealth from waste.

Friends,

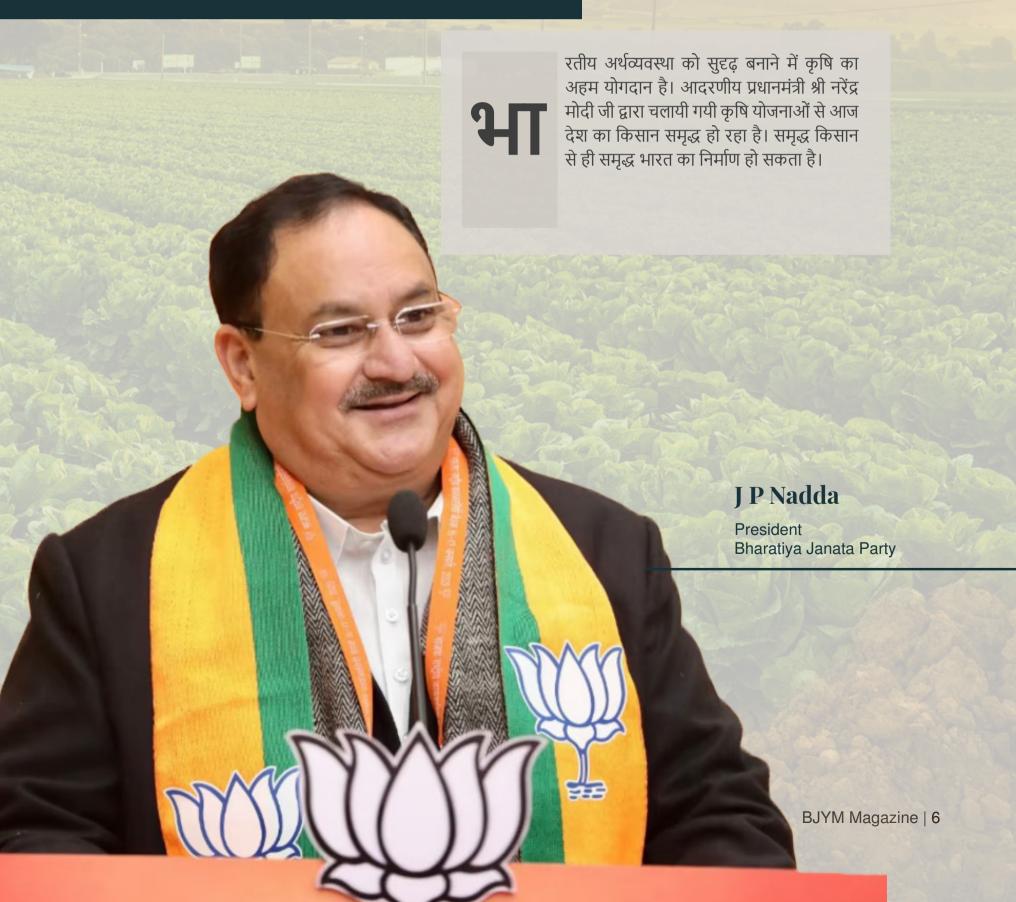
India's G20 priorities in agriculture focus on healing our 'One Earth', creating harmony within our 'One Family' and giving hope for a bright 'One Future'. I am happy to learn that you are working on two concrete outcomes. The "Deccan High level Principles on Food Security and Nutrition"; And, the "MAHARISHI" initiative for Millets and other grains. The support to these two initiatives, is a statement in support for inclusive, sustainable, and resilient agriculture. I wish you all success in your deliberations.

Thank you.











Message from the BJYM President Shri Tejasvi Surya

Namaskar!

Our farmers have always been the lifeblood of our nation, working tirelessly to feed our people and contribute to our country's economic growth. The government led by Prime Minister Shri Narendra Modi recognizes the vital role that farmers play in nation-building and is committed to ensuring their prosperity and welfare.



nder the leadership of Prime Minister Narendra Modi, the government has launched several initiatives aimed at empowering farmers and transforming the agricultural sector. The Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) is one such scheme, providing income support to all landholding farmers' families across the country, enabling them to take care of expenses related to agriculture and allied activities and domestic

needs.

In addition to financial support, the government is working towards the modernization of agriculture. The focus is on promoting technological advancements to make farming more sustainable, profitable, and productive. The government is encouraging farmers to adopt modern farming methods, including using high-yielding varieties of seeds, advanced machinery, and efficient irrigation systems.

The Modi government is also investing in strengthening agricultural infrastructure. Creating more Krishi Vigyan Kendras (Agricultural Science Centers) and establishing the National Agriculture Market (e-NAM) are significant steps in this direction. e-NAM provides farmers with a unified national market for agricultural commodities, ensuring they get a fair price for their produce.

Understanding the impact of climate change on agriculture, the government is promoting sustainable and climate-resilient agricultural practices. Initiatives such as the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) aim to ensure that more agricultural areas are brought under irrigation and water is used more efficiently.

Not only this, but the government has focused on allied

activities like horticulture, dairy, fishery, animal husbandry, and forestry for community-led holistic development. Recognizing the immense potential of these sectors, the Modi government has initiated various programs to enhance productivity and sustainability. The Pradhan Mantri Matsya Sampada Yojana (PMMSY) is a prime example, aiming to bring about a blue revolution through the sustainable development of fisheries and creating a robust framework for fishers and fish farmers. Similarly, efforts are being made to boost the dairy and animal husbandry sectors by providing financial assistance, technological support, and market access to the stakeholders involved.

The Modi government is making a concerted effort to ensure the prosperity of farmers and the overall growth of the agricultural sector in India. The initiatives and schemes launched by the government are a testament to its commitment to empowering farmers, modernizing agriculture, and strengthening agricultural infrastructure. Let us all support these endeavours and work together towards a more prosperous and self-reliant India, where our farmers thrive and our agricultural sector reaches new heights of success and sustainability.

Tejasvi Surya

National President Bharatiya Janata Yuva Morcha

Editorial

n the grand mosaic of India's economic landscape, agriculture and its allied sectors emerge as the vibrant hues that bring life and vitality to the nation. The Modi government, under the visionary leadership of Prime Minister Shri Narendra Modi, has embarked on

a resolute journey to fortify these sectors, recognizing their indispensable role in propelling India towards a future of abundance and prosperity. The government's multifaceted approach, encompassing a spectrum of initiatives, reflects a holistic vision that transcends traditional boundaries, embracing not just agriculture but also vital allied sectors such as horticulture, fisheries, and animal husbandry.

6,000

farmer

(PMFBY)

Pradhan Mantri Kisan

Samman Nidhi (PM-KISAN)

stands as a beacon of hope

for the agrarian community.

This pioneering initiative,

ensuring a direct cash

of INR

to

families, epitomizes the

government's commitment

to providing a robust

financial foundation to

those who feed the nation.

The Pradhan Mantri Fasal

Yojana

as

The

transfer

annually

Bima

shield

against the

emerges

farmers

protective

for

unpredictable forces of nature. This comprehensive insurance scheme, covering myriad risks from natural calamities to pests, underscores the government's resolve to safeguard the farmers' tireless toil.

The Electronic National Agriculture Market (e-NAM) is a revolutionary step towards unifying the nation's agricultural markets. It offers farmers a vast arena to sell their produce at optimal prices, thus weaving a web of prosperity that spans the length and breadth of India.

In the realm of horticulture, the Modi government's initiatives have sown seeds of innovation and growth. The emphasis on modern, sustainable, and technology-driven practices has propelled India's horticultural output, ensuring a steady income stream for farmers and bolstering the nation's food security.

The fisheries sector, too, has witnessed a transformative change under the Modi government. The Pradhan Mantri Matsya Sampada Yojana (PMMSY) is a testament to the government's commitment to the blue revolution, aiming to enhance fish production, augment income, and ensure a sustainable pathway for the sector's development.

In the sphere of animal husbandry, the government's focus on enhancing infrastructure, healthcare, and breeding has revitalized the sector,

fostering

livelihoods and ensuring the welfare of the animal population.

In an era marked by technological advancements, the Modi government has astutely integrated technology into its agricultural and allied sector initiatives, taking a giant leap towards a prosperous future. Launching the 'Kisan Suvidha' mobile application is a notable stride in this direction. This platform provides farmers timely information on weather, market prices, and agricultural practices, bridging the information gap and empowering them to make informed decisions.

Additionally, the emphasis on promoting digital literacy and technological skills among the farming community reflects the government's foresight in preparing them for the challenges and opportunities of the digital age. The integration of technology not only enhances efficiency and productivity but also sows the seeds for a resilient and self-

sufficient agricultural sector poised to flourish in the global arena. The Modi government's embrace of technology underscores its commitment to propelling India's agriculture and allied sectors into a future of boundless potential and prosperity.

In the verdant fields of India's agriculture and allied sectors, the Modi government's initiatives have blossomed into a harvest of triumph. The unwavering commitment to the welfare and prosperity of farmers, the innovative approach to horticulture, fisheries, and animal husbandry, and the relentless pursuit of sustainable and inclusive growth echo the government's political pitch of a self-reliant, robust, and flourishing India. Amidst the symphony of progress, the Modi government stands as a steadfast guardian, nurturing the roots and sowing the seeds for a bounteous future for the nation's agriculture and allied sectors.



Cultivating Diversity: Modi Government's Support for Emerging and Allied Sectors

- Rohit Chahal, National General Secretary, BJYM

he Modi government has shown a significant commitment to promoting traditional agriculture and various allied sectors like forestry, dairy, animal husbandry, bamboo farming, horticulture, and fisheries. These sectors ensure food and nutritional security, generate employment and enhance farmers' incomes. Below is an exploration of the initiatives and policies introduced by the Modi government to boost these sectors.

The Modi government has launched the Green India Mission in forestry, aiming to increase forest and tree cover, restore degraded ecosystems, and enhance biodiversity. The mission promotes afforestation activities, community participation, and technology integration for monitoring and management, contributing to sustainable forest management and conservation.

Agroforestry, which involves the integration of trees and shrubs into crop and livestock systems to enhance productivity, biodiversity, and sustainability, is being actively promoted. The government encourages farmers to adopt agroforestry practices by providing saplings, technical knowledge, and market linkages. Agroforestry contributes to environmental conservation, climate change mitigation, and the diversification of income sources for farmers.

The dairy sector has received a significant boost with the National Dairy Plan (Phase I) launch. This initiative aims to increase milk production by enhancing the productivity of milch animals and providing rural milk producers with greater access to the organized milk-processing sector. The government has also facilitated the creation of dairy cooperatives and farmer-producer organizations, empowering small and marginal dairy farmers.

The government has introduced the National Animal Disease Control Programme for Foot and Mouth Disease (FMD) and Brucellosis in animal husbandry. This program aims to control and eradicate these diseases, ensuring livestock health and productivity and enhancing animal rearers' income. The government is also promoting scientific management, breeding, and healthcare services for livestock through various schemes and programs.

The Modi government has recognized the potential of bamboo farming for income generation and employment. The reclassification of bamboo as a grass (from a tree) has made it easier for farmers to cultivate and harvest bamboo. The National Bamboo Mission has been revitalized to promote the cultivation, processing, and marketing of bamboo products, providing new opportunities for farmers and entrepreneurs.

The government has been actively promoting horticulture through the Mission for Integrated Development of Horticulture (MIDH). This mission aims to enhance

The government is providing financial assistance, technical guidance, and market linkages to farmers who cultivate medicinal and aromatic plants. This initiative is boosting farmers' income and contributing to the conservation of these valuable plant species.

horticultural production, improve nutritional security, and increase farmers' incomes. It supports the holistic growth of the horticulture sector through various interventions, including the development of clusters, post-harvest management, and marketing infrastructure.

In the fisheries sector, the Pradhan Mantri Matsya Sampada Yojana (PMMSY) has been launched to ensure the sustainable and responsible development of the fisheries sector. The scheme focuses on enhancing fish production, modernizing the fisheries value chain, improving the socioeconomic status of fishers, and promoting aquaculture.

The Modi government has taken significant steps to promote beekeeping as an important allied activity. The National Beekeeping & Honey Mission (NBHM) is a comprehensive scheme that aims to promote scientific beekeeping, enhance honey production, and ensure the holistic development of the beekeeping sector. The government is providing training, financial assistance, and support for marketing and branding to beekeepers, enabling them to make beekeeping a profitable venture.

Sericulture, or silk farming, is another area where the government is making considerable efforts. The government is promoting the cultivation of various types of silk, such as mulberry, eri, and muga, through financial assistance, technical support, and research and development initiatives. The focus is on enhancing silk production, improving the quality of silk, and ensuring the welfare and livelihood of silk farmers.

Poultry farming is another sector receiving attention. The government is supporting the establishment of poultry farms, vaccination programs, and marketing assistance to ensure healthy poultry production and fair income to poultry farmers. Training and awareness programs are being conducted to educate farmers about modern poultry farming techniques, bio-security measures, and disease management.

Beyond traditional beekeeping, the government is promoting apiculture for the production of other bee-related products such as bee wax, royal jelly, and propolis. The focus is on enhancing the quality and quantity of these products, ensuring better returns for apiculturists.

The cultivation of medicinal and aromatic plants is being promoted as a lucrative and sustainable farming option. The government is providing financial assistance, technical guidance, and market linkages to farmers who cultivate medicinal and aromatic plants. This initiative is boosting farmers' income and contributing to the conservation of these valuable plant species.

Mushroom farming is being promoted as a profitable agribusiness. The government is providing farmers training, spawn, and other necessary inputs to encourage mushroom cultivation. This is helping in generating additional income, especially for small and marginal farmers.

Camel rearing and wool production, especially in arid and semi-arid regions, are being supported. The government is working towards conserving and improving camel breeds, promoting camel milk production, and enhancing the quality of wool production.

The government is also encouraging innovative farming techniques like aquaponics and hydroponics. These soilless farming techniques are sustainable and efficient, allowing farmers to grow high-quality produce with minimal resources.

The government is also working on strengthening the infrastructure and logistics for allied activities. Cold storage, warehousing, and efficient transportation systems are being developed to reduce post-harvest losses and ensure the smooth flow of products from producers to consumers. The creation of farmer-producer organizations (FPOs) is being encouraged to empower farmers, provide them with better market access, and enhance their bargaining power.

Research and development in allied activities are being given a boost to bring innovation,

technology, and scientific methods to these sectors. The government is collaborating with agricultural universities, research institutions, and international organizations to research various allied activities, including breeding, healthcare, nutrition, and management.

Financial and policy support are crucial for the growth and development of allied activities. The government is providing subsidies, grants, and low-interest loans to farmers and entrepreneurs engaged in these activities. Policies are being formulated and implemented to create a conducive environment for the growth and development of these sectors.

The multifaceted approach of Prime Minister Shri Narendra Modi to promoting forestry, dairy, animal husbandry, bamboo farming, horticulture, fishery, and other allied activities is evident in the range of policies and initiatives launched. These efforts are crucial for diversifying and strengthening the rural economy, ensuring sustainability, enhancing food and nutritional security, and improving the livelihoods of millions of farmers and rural communities across India. These initiatives provide multiple avenues for farmers and entrepreneurs to engage in profitable and sustainable agri-businesses, contributing to the overall growth and prosperity of the rural economy and the nation. The continued focus and investment in these sectors will play a significant role in realizing the vision of an Aatmanirbhar Bharat (self-reliant India), fostering inclusive and sustainable development across the country.



The Modi Government's Blueprint for a Modern Indian Agriculture

- Gaurav Gautam, National Secretary, BJYM

he Indian agricultural sector, a significant contributor to the nation's GDP and a primary source of livelihood for a substantial portion of the population has been facing numerous challenges. These include fragmented landholding, outdated farming practices, insufficient access to modern technology, and vulnerability to climate change. Recognizing these issues, the Modi government has initiated various programs and policies aimed

at modernizing Indian agriculture, enhancing productivity, and improving the welfare of farmers.

Technological Advancement

One of the Modi government's key strategies is integrating technology into agriculture. The government has launched several mobile applications and platforms, such as e-NAM (National Agriculture Market), which enables farmers to sell their produce online to a wider audience, ensuring better prices and reducing the role of middlemen. The 'Pradhan Mantri Krishi Sinchayee Yojana' (PMKSY) is another initiative that focuses on enhancing water-use efficiency through technological solutions.

Financial Support

Financial support is crucial for the modernization of agriculture. The government has introduced the 'Pradhan Mantri Kisan Samman Nidhi' (PM-KISAN), a scheme that provides income support to all farmer families across the country. Under this scheme, vulnerable farmer families receive a direct cash transfer of INR 6,000 per year, enabling them to invest in modern agricultural tools and practices.

Infrastructure Development

Infrastructure development is another area where the Modi government is making significant strides. The government is investing in the construction of rural roads, electrification, and irrigation projects to create a robust infrastructure that supports modern agriculture. The 'Pradhan Mantri Gram Sadak Yojana' (PMGSY) aims to connect rural areas with paved roads, enhancing connectivity and access to markets, inputs, and services.

Skill Development and Training

The Modi government recognizes the importance of skill development and training in modernizing agriculture. Various programs have been launched to provide farmers with knowledge and skills related to modern agricultural practices, crop management, and the use of technology in farming. The 'Atmanirbhar Krishi' initiative is designed

to make farmers self-reliant and knowledgeable about the latest advancements in agriculture.

Climate-Resilient Agriculture

Climate change poses a significant threat to agriculture, and the government is working towards making Indian agriculture more resilient to climate variations. Initiatives such as the 'Pradhan Mantri Fasal Bima Yojana' (PMFBY) provide insurance cover to farmers against crop failure due to extreme weather events, ensuring their financial security.

Promoting Organic and Sustainable Farming

The government is also promoting organic and sustainable farming practices to ensure the long-term health of the soil and environment. The 'Paramparagat Krishi Vikas Yojana' (PKVY) is an initiative that promotes organic farming through a cluster approach, encouraging farmers to adopt eco-friendly practices.

Expanding Market Access

In addition to technological and financial initiatives, the Modi government is working towards expanding market access for farmers. The 'Agriculture Export Policy 2018' aims to double farmers' income by providing a boost to agricultural exports. It focuses on creating an export-friendly ecosystem, reducing export restrictions, and establishing comprehensive product standards. This policy is a step towards integrating Indian farmers into the global agricultural market, allowing them to benefit from international demand and prices.

Digitalization and Data-Driven Agriculture

The government is also emphasizing the role of digitalization and data-driven approaches in agriculture. The 'Digital Agriculture Mission' uses digital technology and data analytics to enhance agricultural productivity and sustainability. It includes initiatives such as soil health cards, which provide farmers with detailed information about the health of their soil, enabling them to make informed decisions regarding crop selection and fertilization.

Research and Development

Investment in research and development is essential for modernizing agriculture. The government is supporting agricultural research to develop high-yielding, disease-resistant, and climate-resilient crop varieties. Collaborations with international agricultural research organizations are being fostered to bring global expertise and technology to Indian agriculture. The 'Indian Council of Agricultural Research' (ICAR) is playing a pivotal role in conducting research and disseminating knowledge and technology to

farmers.

Enhancing Supply Chain and Logistics

Efficient supply chains and logistics are crucial for the modern agricultural sector. The government is focusing on strengthening the agricultural supply chain by developing cold storage, warehousing, and logistics infrastructure. The 'Pradhan Mantri Kisan SAMPADA Yojana' is aimed at reducing post-harvest losses by creating modern infrastructure for food processing, storage, and transportation.

The 'Paramparagat Krishi Vikas Yojana' (PKVY) is an initiative that promotes organic farming through a cluster approach, encouraging farmers to adopt eco-friendly practices.

Public-Private Partnerships

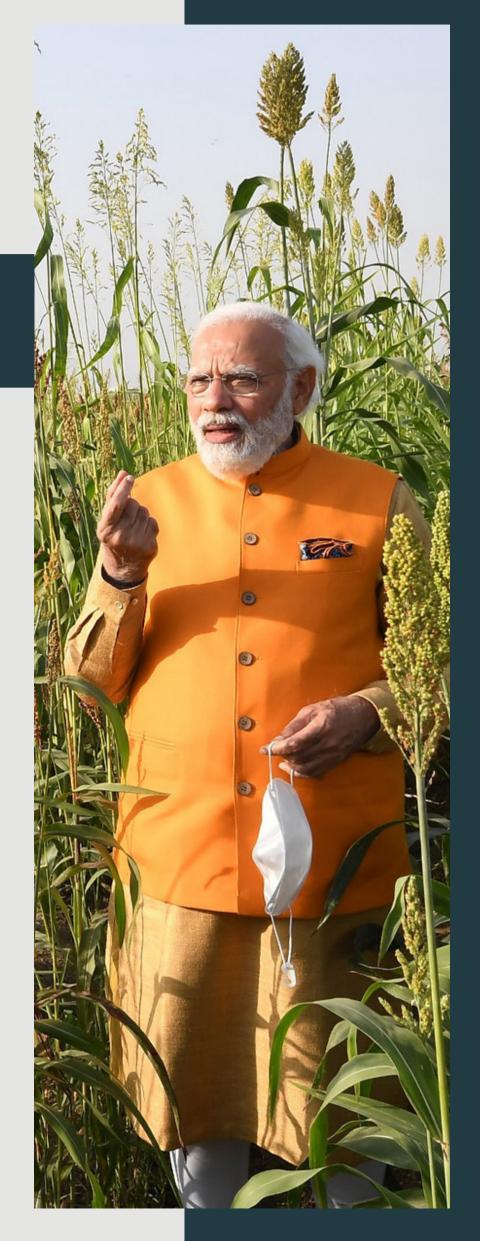
Public-private partnerships (PPPs) are being encouraged to bring private investment and expertise to the agricultural sector. The government is facilitating collaborations between farmers and agribusiness companies to enhance productivity, market access, and value addition. PPPs in agriculture are contributing to the development of agri-infrastructure, technology transfer, and skill development.

Challenges and the Way Forward

While the government is making commendable efforts to modernize Indian agriculture, challenges such as the slow pace of implementation, bureaucratic hurdles, and resistance from certain quarters persist. It is crucial for the government to work collaboratively with farmers, agricultural experts, and other stakeholders to ensure the effective implementation of policies and programs.

In conclusion, the modernization of Indian agriculture is a multifaceted endeavour that requires concerted efforts from various quarters. The Modi government's initiatives in technology integration, financial support, infrastructure development, skill enhancement, and climate resilience are significant steps towards transforming the agricultural landscape of India. Continued focus, innovation, and collaboration will be essential to realize the vision of a modern, productive, and sustainable agricultural sector in India.

In essence, the Modi government is employing a multi-dimensional approach to modernize Indian agriculture. The focus on technology, financial support, infrastructure development, market access, digitalization, research, supply chain enhancement, and public-private partnerships is aimed at creating a robust and resilient agricultural sector. Despite the challenges, these initiatives signify a positive trajectory towards the comprehensive development of agriculture in India, ensuring food security, sustainability, and enhanced income for farmers. The continued commitment to these efforts will undoubtedly yield significant dividends for Indian agriculture, contributing to the overall economic growth and well-being of the nation.



The Bharatiya Revolution in Agrivoltaics

- Dr. Mrittunjoy Guha Majumdar, Assistant Professor in Quantum Technology, UPES and Editorial Board Member of the BJYM Magazine



ndia, a country of diverse landscapes and climates, faces a multifaceted challenge as it grapples with climate change-induced water scarcity, energy demands, and food security concerns. In recent years, various

regions across the country have reported significant drops in crop yields due to hotter temperatures, increased weeds, pests, and fungi. Punjab, for instance, accounts for more than 10% of food grains nationally and is projected to see a decline of up to 13% in major Kharif and Rabi crops by 2050 due to environmental changes. Maize is projected to have the most significant decline, being the most responsive to variations in rainfall and temperature. Cotton yields will also decline by about 11%, while potato and wheat will fall by 5% in this period. These prospects have not only affected local incomes but have also led to elevated food prices.

Inspired by the success of the Central Arid Zone Research Institute (CAZRI) project in Jodhpur and Bhuj, the farmers of Sitapur in Uttar Pradesh decided to explore a promising solution called `agrivoltaics'. This innovative approach combines solar panels with agricultural land, offering shade to crops and generating extra solar energy to support farming operations. Agrivoltaics is a novel concept that seeks to address the challenges posed by climate change and water scarcity in agriculture. By integrating solar panels into agricultural land, this approach provides shade to crops, reducing water loss due to transpiration. Moreover, the surplus solar energy generated can be harnessed to power essential agricultural equipment and lighting, further enhancing the

productivity and resilience of farming communities. The implementation of agrivoltaics in Sitapur began in early 2021, with local farmers creating small-scale systems using savings from rural government subsidies. Sustenance farmers in Sitapur have witnessed firsthand the benefits of this approach when wheat crops were cultivated in the shade of solar panels. Not only have the farms experienced more than a 40% increase in land productivity in arid conditions, but the solar panels also generated enough electricity to power three-night lamps in a single farm unit, contributing to energy sustainability on farms.

India has been grappling with the adverse effects of climate change on its agriculture sector. Between 2017 and 2019, the country lost approximately 18 million hectares of agricultural land to extreme weather events, according to a government report. The increasing frequency of

heavy rains coupled with longer dry spells has disrupted the reliability of rainfall, leading to a significant decline in soil moisture. This volatile climate poses a significant threat to food security in India, where nearly 195 million people, including approximately 43% of children, suffer from chronic malnutrition. On the other hand, around 50 GW of India's installed solar capacity consists of ground-mounted photovoltaic (PV) systems.

Finding land lots for major solar projects is getting harder, according to recent trends. Creative and practical solutions are required to meet the 450 GW renewable energy target for 2030. According to early estimations by industry experts, India has an estimated 2.8 TW of agriPV potential, demonstrating the broad application of this technology. Currently, a few solar parks have been put into operation on arid terrain that was leased from farmers. Over 1,800 farmers have agreed to a 28year lease on roughly 13,000 acres in the Pavagada Solar Park (>2 GW) in Karnataka. Moreover, India has set ambitious net-zero targets for 2070, making sustainable practices like agrivoltaics crucial to achieving these goals. The success of agrivoltaics is exemplified by CAZRI's pilot projects in Jodhpur and Bhuj, which reported a 41% increase in land productivity in arid regions. The initiative has gained momentum and is being replicated in northern states such as Gujarat, Delhi, Madhya Pradesh, and Bihar.

However, for widespread adoption, substantial financial and technical support is needed. The government is looking towards scaling up agrivoltaics and making it accessible to all. A farmer or farmer producer organisation (FPO) must have an inherent stake in an agriPV project. The success of the business depends on this. Farmers can invest in agriPV system(s) similarly to Component A of the PM KUSUM plan. Power can be sold to a distribution firm (DISCOM) at a set price. In India, agrivoltaic installations typically range from 3 kWp to 3 MWp, with no utility-scale projects exceeding 3 MWp to date. As a result, there is limited practical experience in assessing their technical, economic, and agricultural governmentviability. Notable

backed agrivoltaic farms include 1 MW installations such as GSECL's Harsha Abakus plants in Gujarat and GIPCL's facilities in Amrol and Vastan, Gujarat, as well as a 110 kW project at Krishi Vigyan Kendra (NHRDF) in Delhi. These 1 MW pilot projects reflect the Indian government's commitment to exploring agrivoltaics' Effective coordination potential. between solar power generation and crop cultivation, as demonstrated in GIPCL's Amrol plant, offers valuable lessons for future initiatives.

One of the key advantages of agrivoltaics is its potential to enhance water efficiency in agriculture. The water used for cleaning solar panels can be recycled to irrigate the crops growing beneath the solar panel area. Furthermore, prototypes with integrated water harvesting systems are under development, offering the potential for even greater water conservation in the future. Despite its promise, agrivoltaics presents challenges that must be addressed for successful implementation. These challenges include shading on cultivable land and microclimatic impacts on crop growth. To overcome these obstacles, crop profiling and shadow analysis are essential tools for optimising agrivoltaic systems. Agrivoltaics can be classified into open and closed systems. Open includes agrivoltaics interspace PV and overhead PV, while closed agrivoltaics involves greenhouse structures.

To facilitate the adoption of agrivoltaics, several interventions are recommended, including preparation of detailed project reports (DPR), helplines for crop-related queries in agrivoltaic systems, awareness

campaigns conducted by government agencies, development of project design tools, local support and guidance through government agencies, procurement-based incentives, accessible loans through financial institutions, technical support and guidance through agricultural research organisations and feasibility assessment. The feasibility of agrivoltaic projects can be determined through various criteria. including agricultural revenue, farmer commitment to leasing arrangements, willingness to adapt crops for agrivoltaics, site conditions, agroclimatic regions, and the availability of evacuation infrastructure.

Agrivoltaics represents a sustainable solution that addresses multiple challenges facing India, including water scarcity, energy demands, and food security. By combining solar panels with agriculture, agrivoltaics enhances crop yields and water efficiency and contributes to India's renewable energy targets and net-zero goals. As India faces an increasing demand for energy and water resources, agrivoltaics could play a pivotal role in securing a sustainable and prosperous future for the country.

The Modi government is undertaking initiatives and deliberations to ensure that the formulation and implementation of agrivoltaic technology on a mass scale is successfully realized. In our bid to ensure food and energy security, the nuanced approach that the Union government has embarked upon is truly commendable in moving towards a developed India by 2047.



नये भारत में खुशहाल हो रहा किसानः मोदी सरकार की उपलब्धियाँ

- Dr Vivek Singh, Assistant Professor, Ramjas College, University of Delhi

0

रतवर्ष आज़ादी की 75वीं सालिगरह के उपलक्ष्य में आज़ादी का अमृत महोत्सव मना रहा है। बीते साढ़े सात दशकों की अगर बात की जाए तो हमारी संसद देश के इस सफ़र की साक्षी रही है। कैसे इस देश की सर्वीच पंचायत ने तमाम बड़ी योजनाएँ, नियम क़ानून को लागू किया जिससे देश को आगे बढ़ने में मदद हुयी।

आज़ादी के समय जो सबसे बड़ी चुनौतियाँ थी उनमें से एक थी कि देश आख़िर अपना पेट भरेगा कैसे क्योंकि खधायन का उस समय संकट था लेकिन हरित क्रांति के सहारे देश के अन्नदाताओं ने वो कर दिखाया जिसका दुनिया लोहा मानती है लेकिन कमोवेश अगर किसानों की समस्याओं की बात की जाए तो वो आज भी बहुत बड़े पैमाने पर विद्यमान है। बीते सात बरसों में मोदी सरकार ने तमाम ऐसी कोशिश संसद के माध्यम से किसानों के आय को 2022 तक

दोगुना करने के लिए, ढाँचागत विकास को सुदृढ़ करने के लिए। कैसे ये योजनाएँ भारत के किसानों और ग्रामीण अंचल की तस्वीर को बदल रहीं हैं हम इस लेख के माध्यम से समझने की कोशिश करेंगे।

न्यूनतम समर्थन मूल्य में बढ़ोत्तरी (MSP)

देश में किसानों की 22 फसलों की ख़रीद सरकार न्यूनतम समर्थन मूल्य पर करती है जिसमें सबसे ज़्यादा गेहूं और धान की ख़रीद उत्तर प्रदेश, हरियाणा, पंजाब राजस्थान जैसों राज्यों से होती है। मोदी सरकार ने पिछले वरसो में फसलों के न्यूनतम समर्थन मूल्य को दो से तीन गुना बढ़ा दिया है। ऑकड़ों के हिसाब से बात करें तो धान 1310 रुपए प्रति क्रिटल से बढ़ाकर 1940 रुपए, गेहूं 1400 से 1975 रु प्रति क्रिटल, ज़्वार 1520 से 2620 रु प्रति क्रिटल, बाजरा 1250 से 2250 रु प्रति क्रिटल, सोयाबीन 2560 से 3880 रु प्रति क्रिटल, उड़द 4300 से 6000 रु प्रति क्रिटल, मूँग 4500 से 7196 रु प्रति क्रिटल, मक्का 1310 से 1850 रु प्रति क्रिटल, चना 3100 से 5100 रु प्रति क्रिटल कर दिया गया है। हालाँकि नए कृषि क़ानूनों के तहत किसान अब अपनी फसल को खुले बाज़ार में कहीं भी और किसी भी दाम पर बेंच सकता है साथ ही साथ मंडियों में भी सरकारी ख़रीद जारी रहेगी और किसान मंडियों में सरकार द्वारा निर्धारित एमएसपी पर बेच सकता है।

सत्र २०२१ में अब तक 416.44 लाख मैट्रिक टन गेहूं की ख़रीद की गयी है जोिक अब तक की ख़रीद का उच्चतम स्तर है, लगभग 45.56 लाख किसान मौजूदा रबी विप्रन्ननन सत्र में MSP मूल्यों पर ख़रीद कार्यों से लाभान्वित हो चुके हैं और उन्हें 82287.51 करोड़ रुपए का भुगतान किया जा चुका है।

ख़रीफ़ 2020-21 और रबी 2021 के तहत अभी तक सरकार द्वारा अपनी नोडल एजेन्सीयों के माध्यम से 7069289.7 मीट्रीक टन मूँग उड़द तुअर चना मसूर मूँगफली सरसों के बीज और सोयाबीन की ख़रीद MSP मूल्यों पर की गयी है। इस ख़रीद से तिमलनाडु कर्नाटक, आंध्र प्रदेश, मध्य प्रदेश, महाराष्ट्र, गुजरात, उत्तर प्रदेश, तेलंगाना, हरियाणा और राजस्थान के 454340 किसानों को 4020.62 करोड़ रुपए की आय हुयी है।

करोना महामारी विपदा काल में ये योजना किसानों के लिए वरदान साबित हुयी है तथा इस कठिन समय में भी 60000 करोड़ रुपए की राशि किसानों के खातों में DBT के माध्यम से भेजी जा चुकी है। वर्तमान ख़रीफ़ 2020-21 में अब तक 808.42 लाख मिट्रीक़ टन से अधिक धान का क्रय किया जा चुका है जबिक पिछले वर्ष की इसी समान अविध में 732.93 लाख मीट्रीक टन धान ख़रीदा गया था। मौजूदा ख़रीद विपरन सत्र में लगभग 119.88 लाख किसानों को MSP पर 152630.09 करोड़ रुपए का भुगतान करके लाभान्वित किया जा चुका है।

पीएम किसान सम्मान निधि

पीएम किसान सम्मान निधि योजना को 24 फ़रवरी 2019 को प्रधानमंत्री नरेंद्र मोदी के द्वारा शुरू किया गया था। अब तक इस योजना के अंतर्गत लगभग 12 करोड़ किसानों को पीएम किसान सम्मान निधि योजना के माध्यम से लाभ पहुँचाया गया है जिससे किसान आत्मनिर्भर बन रहे हैं तथा उनकी आर्थिक इसस्थि में भी सुधार हो रहा है। अब तक इस योजना के माध्यम से 135000 करोड़ की राशि खर्च की जा चुकी है।

करोना महामारी विपदा काल में ये योजना किसानों के लिए वरदान साबित हुयी है तथा इस कठिन समय में भी 60000 करोड़ रुपए की









राशि किसानों के खातों में DBT के माध्यम से भेजी जा चुकी है। छोटे और सीमांत किसानों को आर्थिक सहायता प्रदान करने के उद्देश्य से इस योजना को डिजिटल इंडिया के अंतर्गत शुरू किया गया था जो किसानों की तक़दीर और तस्वीर दोनों को बदल रही है।

FPO के माध्यम से किसानों के लिए सस्ता ऋण

वर्ष 2022 तक किसानों की आय दोगुनी करने के साथ ही युवाओं को खेती की ओर आकर्षित करने तथा रोज़गार के अवसर बढ़ाने के लिए ठोस कदम उठाएँ जा रहे हैं। 10 हज़ार एफ़पीओ की योजना के लिए 6.865 करोड़ रुपए का प्रावधान किया गया है इससे 85 प्रतिशत छोटे किसानों को लाभ मिलेगा। छोटे किसानों का रक़बा उत्पादन उत्पादकता बढ़ाने की दृष्टि से इन एफ़पीओ की बड़ी भूमिका होगी। सामूहिक रूप से सिंचाई खाद बीज आदि सुविधाएँ मिलने से खेती की लागत अब कम हो रही है।

किसान रेल की भूमिका

भारत में किसान खेती के अलावा पशुपालन मछली पालन और मधुमखी पालन जैसे व्यवशयों की तरफ़ भी तेज़ी से रुख़ करते दिख रहे हैं इसका कारण है केंद्र सरकार द्वारा शुरू की गयी योजनाएँ। इन योजनाओं से केंद्र सरकार कई असस्तरों पर मदद कर रही है ताकि उनकी आय बढ़ सके। किसान रेल एक तरह की पार्सल रेल हैं जिसमें अनाज फल

और सब्ज़ियों को लाने ले जाने के लिए इस्तेमाल किया जा रहा है। केंद्र सरकार ने वर्ष 2022 तक किसानों की आय दोगुनी करने का लक्ष्य रखा है, वर्ष 2020 में ही किसान रेल 27 हज़ार टन माल की ढुलाई कर चुकी है ये उन रास्तों से होकर गुजरती है जो बड़े कृषि षेत्र माने जाते है।

किसान रेल के माध्यम से आज नासिक से अनार पटना के मज्जफरपुर पहुँच रहा है और असम के डिब्रूगढ़ से अदरक हैदराबाद तक पहुँच रही है। आज किसान रेल, देश के सीमांत किसानों के लिए उम्मीद की नई किरण बनकर उभरी है वो अब अपनी उपज को दूरदराज़ के बाज़ारों तक भेजकर उनका उचित मूल्य प्राप्त कर रहे हैं।

मोदी सरकार की इन तमाम योजनयों से किसान आज आर्थिक रूप से सशक्त और मज़बूत बन रहे हैं और उनकी आय में अप्रत्याशित बढ़ोतरी देखी जा रही है। इतना ही नहीं मोदी सरकार की इन्ही योजनाओं के बल पर राष्ट्रीय कृषि निर्यात नीति देश के कृषि निर्यात को 2022 तक दोगुना अर्थात् 60 अरब डालर तक करने का लक्ष्य रखा गया है जिसमें भारत के लिए शीर्ष दस कृषि निर्यातकों में शामिल होने का मार्ग प्रशस्त होगा।

आधुनिक तकनीकी का प्रयोग

केंद्र की मोदी सरकार का ध्येय शुरू से ही कृषि और किसान को मज़बूत करना रहा है इसी के चलते प्रधानमंत्री नरेंद्र मोदी ने कृषि को तकनीकी











से जोड़ने की शुरुआत की। कृषि सिंचाई तकनीकी में काफ़ी बदलाव हुए हैं अब किसान टपक और सूक्ष्म बूँद सिंचाई जैसी तकनीकी को अपना रहे हैं। कृषि सिंचाई की इन तकनीकी के प्रयोग से पैदावार में बढ़ोत्तरी, पानी के सही मात्रा में उपयोग और पौधों को संतुलित रूप से पोषक तत्वों की पूर्ति करने जैसे लाभ किसानों को मिल रहे हैं।

सबसे पहले मोदी सरकार ने मिट्टी की उर्वरता की जाँच की शुरूआत की, इसे देश भर में Soil Health Card योजना के नाम से जानते हैं। जिलास्तर पर कृषि विज्ञान केंद्रों में किसान वैज्ञानिकों से अपनी मिट्टी की जाँच कराते हैं और मिट्टी में किन पोषक तत्वों की कमी है उसी के अनुसार किटनाशकों और खाद का उपयोग करते हैं।

सरकार ने कृषि बाज़ारों को भी कृषि तकनीकी से जोड़ते हुए कृषि मंडियों को ऑनलाइन कर दिया है इसी के साथ कुछ निजी खेस्त्र की कम्पनियों ने भी इस पर काम शुरू कर दिया है। किसान आसानी से घर बैठे कृषि से जुड़ी अधिकतर जानकारी अपने फ़ोन पर पा लेता है, यह आधुनिक तकनीकी के कारण ही सम्भव हो पाया है। इसमें कोई संदेह नहीं की आधुनिक तकनीकी के चलते कृषि षेत्र में क्रांतिकारी बदलाव हुए हैं इसका सीधा फायदा कृषि से जुड़े हर व्यक्ति को मिल रहा है। देश के किसानों को सस्ता क़र्ज़ उपलब्ध कराने के लिए मोदी सरकार किसानों को किसान क्रेडिट कार्ड के दाएरे में लाने के लिए फ़रवरी 2020 से एक खास अभियान चला रही है इसके तहत दो लाख रुपए तक का क़र्ज़ मिल सकेगा। खेती किसानी, मचलीपालन और पशुपालन से जुड़े किसान इस योजना का लाभ उठा रहे हैं चाहे वो किसान भले ही किसी और के ज़मीन पर खेती करता हो।

योग्य किसानों को उनके खेती के कामों के लिए आसानी से और समय पर कृषि ऋण मिल सके इसके लिए सरकार ने किसान क्रेडिट कार्ड योजना (KCC) शुरू की थी। KCC के ज़िरए किसान बीज, उर्वरक और कीटनाशक आदि ख़रीदने के लिए आसानी से लोन ले रहे हैं, इस योजना को पहले से ज़्यादा सरल बनाया गया है ताकि ज़्यादा से ज़्यादा किसानों को इसका लाभ मिल सके। मोदी सरकार द्वारा देश के लगभग 2.5 करोड़ किसानों को किसान क्रेडिट कार्ड मुहैया करने का लक्ष्य बनाया गया था जिसमें से अब तक लगभग 1.82 करोड़ किसानों को लाभान्वित किया जा चुका है। यदि लाभार्थी अपना ऋण एक साल के अदेर का भुगतान कर देते हैं तो लाभार्थी को ब्याज दर में 3 फ़ीसदी की छूट मिलती है और 2 फ़ीसदी की सब्सडी भी यानी किसानों को कल 5 फ़ीसदी की छूट मिल जाएगी। इस योजना के तहत दुग्ध संघों और दुग्ध उत्पादक कोम्पनियों से जुड़े 1.5 करोड़ डेयरी किसानों को भी जोड़ा गया है जिन्हें किसान क्रेडिट कार्ड उपलब्ध करवाया जा रहा है।

इस तरह से इस लेख के माध्यम से हमने देखा की भारत के किसान के जीवन में बड़ा बदलाव आ रहा है, किसानों की आय को दोगुना करने का जो लक्ष्य रखा गया है उसके लिए संसद से निकली जो तमाम योजनाएँ हैं कैसे देश के किसानों को मज़बूती प्रदान कर रहीं हैं। पीएम मोदी ने जब देश के किसानों से आह्वान किया तो दलहन और तिलहन का record उत्पादन हुआ है। साफ़तौर पे दिखाई पड़ता है की कैसे पीएम के आह्वान पे किसान एकजुट हो गए और आगे बढ़ने को तैयार खड़ा हुआ है। चाहे ढाँचागत विकास की बात हो खेती किसानी को लेकर या export पॉलिसी को लागू करने की बात हो कोशिश यही है की कैसे किसानों को उधमी बनाया जाए और उनके जीवन को खुशहाल किया जाए।

एक भारत, श्रेष्ठ भारत में किसान सर्वोपरी

- एडवोकेट नेहा धवन, प्रदेश मंत्री भाजयुमो हरियाणा

ज

ब भी एक भारत, श्रेष्ठ भारत की बात होती है सच्चे अर्थों बात उठती है सभी को रोज़गार, बहुमुखी विकास, प्रोद्योगिकी व वैज्ञानिक अनुसंधान के क्षेत्र में परचम लहराने की अभिलाषा साथ ही बात उठती है कृषि और

उद्योग में समन्वय, किसानों और मजदूरों का समग्र विकास । अंग्रेजों से आज़ादी के बाद देश के हालत कृषि उत्पादन को लेकर इतने अच्छे नहीं थे। धीरे- धीरे हालत सुधरे और हमने 21वीं सदी में प्रवेश किया। आये दिन किसानों की बढती दिक्कतों को दूर करने के कोई ठोस प्रयास केंद्र की पिछली सरकारों के द्वारा नहीं किए गए थे। ऐसे प्रयास कि देश का किसान आत्मनिर्भर बनें, वैज्ञानिक तकनीक कृषि करने के लिए अपनाए, अंतर्राष्ट्रीय बाज़ार तक कृषि उत्पादों को पहुंचाए, कर्ज़ और मौसम की मार से अपनी फसलों को बचा कर अपने जीवन स्तर को ऊँचा उठा सकें। देश को ऐसे नेतृत्व की तलाश थी जो एक भारत श्रेष्ठ भारत के सपने को सकार कर सके। पिछले एक दशक से देश की कमान एक ऐसे ही कर्तव्यनिष्ठ, ईमानदार, अनवरत परिश्रमी, त्याग-तपस्या और कर्मशीलता की कसौटी पर खरा उतरने वाले जनप्रतिनिधि के हाथ में है जो अन्तोदय के सपने को साकार करते आज अनेक मानक तय कर चुके हैं। 2014 से जब से नरेंद्र मोदी भारत के प्रधानमंत्री बने हैं उन्होंने किसानों की आय दोगुना करने के लिए अनेक सफल योजनायें बनाई और उनको क्रियान्वित भी किया और देश का किसान आज ख़ुशहाली की राह पर अग्रसर हुआ। कृषि क्षेत्र में स्टार्टअप की संख्या 9 साल पहले लगभग ना के बराबर थी जो अब बढ़कर 3,000 से अधिक हो गई है। आज देश के सहकारी क्षेत्र में एक नई क्रांति हो रही है| सहकारी क्षेत्र पहले केवल कुछ राज्यों तक सीमित थे लेकिन अब पूरे देश में इसका विस्तार हुआ है| यह संभव हुआ है तो केवल प्रधानमंत्री नरेंद्र मोदी के दूरगामी नीतियों की बदौलत|

पीएम मोदी के 9 सालों में मोदी सरकार द्वारा शुरू की गई 9 बड़ी किसान कल्याण योजनाएं प्रधानमंत्री फसल बीमा योजना (पीएमएफबीवाई) से लेकर प्रधानमंत्री किसान सम्मान निधि (पीएमकेएसएन) तक, नरेंद्र मोदी सरकार ने कृषि क्षेत्र में बदलाव लाने और देश भर के किसानों को सशक्त बनाने के उद्देश्य से कई पहल की हैं। मोदी सरकार केंद्र में आते ही कृषि क्षेत्र को किसानों को सशक्त बनाने और उत्थान के लिए जुट गए। उनके ड़ीम प्रोजेक्ट्स में से एक यह था कि देश का किसान खुशहाल हो। गरीबी से कोई किसान दम ना तोड़े । उनका उद्देश्य था कृषकों को वित्तीय सुरक्षा, उनमें कौशल विकास, फसल उत्पादों को बाजार तक पहुंच और टिकाऊ कृषि पद्धतियां प्रदान करके

किसानों के जीवन में सुधार करना। इस लेख के माध्यम से मैं मोदी सरकार द्वारा शुरू की गई नौ महत्वपूर्ण किसान कल्याण योजनाओं और उनके प्रभावों की चर्चा करूंगी।

प्रधानमंत्री फसल बीमा योजना (पीएमएफबीवाई) जो 2016 में शुरू की गई, पीएमएफबीवाई किसानों को किफायती प्रीमियम पर व्यापक फसल बीमा कवरेज प्रदान करती है। यह प्राकृतिक आपदाओं, कीटों या बीमारियों से होने वाले फसल नुकसान के लिए समय पर मुआवजा सुनिश्चित करता है। इस योजना से लाखों किसानों को वित्तीय सुरक्षा और स्थिरता मिली है, उनकी आजीविका सुरक्षित हुई है।

प्रधान मंत्री किसान सम्मान निधि (पीएम-किसान): 2019 में शुरू की गई पीएम-किसान, छोटे और सीमांत किसानों की सहायता के लिए बनाई गई एक आय सहायता योजना है। इस योजना के तहत पात्र किसानों को तीन समान किस्तों में सालाना 6,000 रुपये की सीधी वित्तीय सहायता मिलती



है। इस योजना से 120 मिलियन से अधिक किसानों को लाभ हुआ है, इससे उनकी आय में उल्लेखनीय वृद्धि हुई है और उनके जीवन की गुणवत्ता में सुधार हुआ है।

मृदा स्वास्थ्य कार्ड योजना: 2015 में शुरू की गई, मृदा स्वास्थ्य कार्ड योजना किसानों को व्यक्तिगत मृदा स्वास्थ्य रिपोर्ट प्रदान करती है, जो मिट्टी के पोषक तत्वों पर मूल्यवान अंतर्दृष्टि और संतुलित उर्वरक के लिए सिफारिशें प्रदान करती है। उचित मृदा प्रबंधन प्रथाओं को बढ़ावा देकर, इस योजना ने पैदावार को अनुकूलित किया है, इनपुट लागत को कम किया है और कृषि भूमि में मिट्टी के स्वास्थ्य को बढ़ाया है।

प्रधान मंत्री कौशल विकास योजना (पीएमकेवीवाई): 2015 में शुरू की गई, पीएमकेवीवाई का उद्देश्य किसानों और ग्रामीण युवाओं को कौशल प्रशिक्षण प्रदान करना है। राष्ट्रीय कौशल विकास निगम (एनएसडीसी) द्वारा कार्यान्वित इस योजना ने 40 मिलियन से अधिक किसानों और ग्रामीण युवाओं को आवश्यक कृषि कौशल से लैस करके, उत्पादकता में सुधार और रोजगार के अवसर पैदा करके उन्हें सशक्त बनाया है।

ई-एनएएम (राष्ट्रीय कृषि बाजार): 2016 में लॉन्च किया गया, ई-एनएएम एक इलेक्ट्रॉनिक ट्रेडिंग पोर्टल है जो पूरे भारत में कृषि बाजारों को एकीकृत करता है। यह किसानों को अपनी उपज ऑनलाइन बेचने, प्रतिस्पर्धी कीमतों की खोज करने और देश भर के खरीदारों से जुड़ने में सक्षम बनाता है। इस डिजिटल प्लेटफॉर्म ने कृषि व्यापार में क्रांति ला दी है, बिचौलियों को खत्म कर दिया है, पारदर्शिता सुनिश्चित की है और किसानों को उचित बाजार पहुंच प्रदान की है।

प्रधान मंत्री आत्मनिर्भर भारत अभियान (ABHA): 2020 में शुरू किया गया ABHA एक राष्ट्रीय मिशन है जो भारत को कृषि और खाद्य उत्पादन में आत्मनिर्भर बनाने पर केंद्रित है। फसल विविधीकरण, उत्पादकता वृद्धि और मूल्य संवर्धन जैसे घटकों के साथ, इस योजना ने किसानों की आय में वृद्धि की है, उनके वित्तीय बोझ को कम किया है और टिकाऊ कृषि पद्धतियों को बढ़ावा दिया है।



परम्परागत कृषि विकास योजना (पीकेवीवाई): 2015 में शुरू की गई, पीकेवीवाई जैविक खेती प्रथाओं और पारंपरिक और स्वदेशी तरीकों को अपनाने को बढ़ावा देती है। वित्तीय सहायता और तकनीकी मार्गदर्शन के माध्यम से, यह योजना किसानों को जैविक खेती प्रमाणीकरण, टिकाऊ कृषि, बेहतर मिट्टी की उर्वरता और स्वस्थ कृषि पद्धतियों में योगदान देने के लिए प्रोत्साहित करती है।

प्रधान मंत्री कृषि सिंचाई योजना (पीएमकेएसवाई): 2015 में शुरू की गई, पीएमकेएसवाई का उद्देश्य जल दक्षता को बढ़ाना और टिकाऊ सिंचाई प्रथाओं को बढ़ावा देना है। 'हर खेत को पानी' हासिल करने पर ध्यान देने के साथ, यह योजना नए जल स्रोत बनाने, जल भंडारण और वितरण बुनियादी ढांचे में सुधार और सूक्ष्म सिंचाई तकनीकों को प्रोत्साहित करने पर केंद्रित है। पीएमकेएसवाई ने पूरे देश में कृषि उत्पादकता और जल संरक्षण पर सकारात्मक प्रभाव डाला है।

पीएम कृषि संपदा योजना: 2017 में शुरू की गई पीएम कृषि संपदा योजना का उद्देश्य खाद्य प्रोसेसिंग क्षेत्र को आधुनिक बनाना और कृषि-उद्योग के लिए एक मजबूत बुनियादी ढांचा तैयार करना है। यह योजना फसल के बाद के नुकसान को कम करने, प्रोसेसिंग क्षमताओं में सुधार और मूल्य संवर्धन को बढ़ावा देने पर केंद्रित है। इसने खाद्य प्रोसेसिंग क्षेत्र के विकास को बढ़ावा दिया है, रोजगार के अवसर पैदा किए हैं और किसानों की आय में वृद्धि की है।

ये उन कई योजनाओं और पहलों में से कुछ हैं

जो पीएम मोदी ने भारत में किसानों और कृषि क्षेत्र के जीवन को बेहतर बनाने के लिए शुरू की हैं। इन योजनाओं से किसानों की आय में सुधार, उनके वित्तीय बोझ को कम करने और कृषि क्षेत्र को बेहतर बनाने में मदद मिली है। इसके साथ-साथ नरेंद्र मोदी ने देश के बजट में कई गुना बढौतरी की है | 2014 से पहले देश में कृषि बजट 25000 हज़ार करोड़ से भी कम था | 2023-24 का केंद्रीय बजट, 2014 से ही कृषि पर केंद्रित है। आज देश का कृषि बजट 1.25 लाख करोड़ रुपये से भी अधिक है। परम्परागत कृषि के अलावा सब्जियों, फलों, दालों, फूलों आदि की खेती के लिए सरकार की तरफ से भी मदद उपलब्ध करायी जाति है। बाजरा, तिलहन व् अन्य मोटे अनाजों के उत्पादक कृषक परम्परागत खेती से ज्यादा आमदन कर रहे हैं | देश के किसानों को गरीबी से मुक्ति दिलाने का सपना अगर किसी ने साकार किया है तो केवल नरेद्र मोदी जैसे नेतृत्व के कारण। प्रधानमंत्री का मानना था कि दुनिया के विभिन्न हिस्सों की पारंपरिक प्रथाएं हमें फिर से कृषि के विकल्प विकसित करने के लिए प्रेरित कर सकती हैं। किसानों को नवाचार और डिजिटल प्रौद्योगिकी के साथ सशक्त बनाने की जरूरत है। यह समय कृषि और खाद्य अपशिष्ट को कम करने और अपशिष्ट से संपत्ति बनाने में निवेश करने का है। पिछले 9 वर्षों में उन्होंने यह सिद्ध भी कर दिखाया हैं। 2023 बाजरा वर्ष मनाते हुए उन्होंने G20 जैसे अंतर्राष्ट्रीय सम्मेलन में मीलेट खाने के रूप में विदेशी अतिथियों को परोसा | इन्हीं प्रयासों की वजह से पूरा विश्व उनके प्रयासों की सराहना कर रहा है। आज भारत का किसान उनके साथ कदम से कदम मिलाते हुए एक भारत, श्रेष्ठ भारत की दिशा में अपने कदम बढ़ा रहा है।

कृषि व संबद्ध क्षेत्र में विकास की बयार

- सन्नी कुमार, लोकनीति विशेषज्ञ

ज

रतीय अर्थव्यवस्था के लिए कृषि उसी तरह बुनियादी है जैसे मानव शरीर के रीढ़। रीढ़ जितनी मजबूत होगी शरीर उतना ही तना होगा। ठीक इसी प्रकार कृषि जितनी मजबूत होगी भारतीय अर्थव्यवस्था उतनी ही बेहतर स्थिति में होगी। इसलिये यह देखना दिलचस्प होगा कि वर्तमान सरकार ने इस ओर कितना ध्यान दिया है।

कृषि उत्थान के नवाचारी प्रयास : प्रधानमंत्री नरेंद्र मोदी के नेतृत्व में केंद्र सरकार ने कृषि के क्षेत्र में अभूतपूर्व नवाचारी प्रयास किए हैं।

जिसके परिणाम अब जमीनी स्तर पर दिखने लगा है।

राष्ट्रीय कृषि बाजार :

यह एक अखिल भारतीय इलेक्ट्रॉनिक व्यापार पोर्टल है। इसका उद्देश्य कृषि उत्पादों के लिये एकीकृत बाजार उपलब्ध कराना है ताकि किसानों को मांग-आपूर्ति श्रृंखला का सर्वोत्तम लाभ मिल सके। इसके तहत हजार से अधिक मंडियों को जोड़ा जा चुका है। केंद्र सरकार की इस योजना को एग्री टेक इन्फ्रास्ट्रक्चर फंड (AITF) से वित्तपोषण प्राप्त होता है। इस पहल ने निश्चित ही कृषि आय को बढ़ाने का कार्य किया है।

राष्ट्रीय कृषि विस्तार और प्रौद्योगिकी मिशन

इस मिशन का उद्देश्य कृषि कार्य को उन्नत और नवीन प्रौद्योगिकी से लैस करना है। इसके लिए यह संस्थागत प्रयास की बात करता है। यह भी केंद्र सरकार की एक योजना है जिसे कृषि प्रौद्योगिकी प्रबंधन एजेंसी (ATMA) के प्रायोजन में प्रारंभ किया गया था। इसके अंतर्गत कृषि यंत्रीकरण उप मिशन (SMAM), बीज एवं पौधरोपण सामग्री पर उप मिशन (SMSP), पौध संरक्षण पर उप मिशन (SMPP) जैसे अनेक उपमिशन संचालित हो रहे हैं जिनका उद्देश्य क्रमशः लघु एवं सीमांत किसानों तक कृषि मशीनों को पहुँचाना, गुणवत्तायुक्त बीज का उत्पादन और आपूर्ति तथा जैव सुरक्षा के उपाय करना है।

कृषि विज्ञान केंद्र

ये केंद्र भारतीय कृषि अनुसंधान परिषद द्वारा संचालित किये जाते हैं। इन केंद्रों के माध्यम से ग्रामीण युवाओं और किसानों के कौशल विकास प्रशिक्षण पर बल दिया जाता है। ये केंद्र संपूर्ण कृषि प्रक्रिया में नवीनतम इनपुट प्रदान करते हैं और राष्ट्रीय कृषि अनुसंधान प्रणाली से जुड़कर जलवायु अनुकूल प्रौद्योगिकी से कृषि उत्पादन को जोड़ते हैं।



इसके अलावा भारतीय अंतिरक्ष अनुसंधान संगठन तथा भारतीय मौसम विभाग से प्राप्त सूचनाओं के आधार पर किसानों को अनुकूल कृषि हेतु समुचित जानकारी दी जा रही है। इसी प्रकार कृषि क्षेत्र में नवाचारी प्रयासों को लागू करने के लिए विश्व बैंक की सहायता से 'राष्ट्रीय कृषि नवाचार प्रोजेक्ट' कार्यरत है। यह प्रोजेक्ट निम्नांकित उद्देश्यों के साथ कार्य कर रहा है:

- कृषि को एक व्यावसायिक उद्यम बनाने व ग्रामीण भारत के लिए कृषि को सुरक्षित आजीविका बनाने के लिए प्रौद्योगिकी विकास पर बल।
- सार्वजनिक, निजी व नागरिक समुदाय को साथ लेकर कृषि शोध पर कार्य करना।
- साझे उद्देश्य व साझी जिम्मेदारी तथा लाभ की दिशा में कार्य करना।
- प्रतिस्पर्धात्मक नवाचार के लिए वित्तीयन।

कुछ अन्य सरकारी प्रयास देखें तो आज स्थिति यह है कि करीब 1.25 लाख पंचायत ब्रॉडबैंड सेवा से जोड़ दिए गए हैं जबिक पाँच वर्ष पूर्व इसकी संख्या मात्र 100 थी। इसी प्रकार 'सामान्य सुविधा केंद्र' की संख्या भी बढ़कर 3 लाख हो गई है। 24 अप्रैल को पंचायत दिवस के अवसर पर पंचायत प्रतिनिधियों से संवाद में प्रधानमंत्री ने 'एकीकृत ई-ग्राम स्वराज' पोर्टल तथा मोबाइल एप को लाँच किया। इसके साथ ही 'स्वामित्व' योजना भी शुरू किया गया। इस योजना का उद्देश्य राजस्व वसूली एवं ग्रामीण क्षेत्रों में संपत्ति संबंधी अधिकारों को पारदर्शी बनाना है।इसके अतिरिक्त सरकार 'डिजिटल इंडिया' के माध्यम से देश को डिजिटली सशक्त अर्थव्यवस्था बनाने की कोशिश कर रही है। इसके अंतर्गत 'NeGP' जैसा कार्यक्रम शुरू किया गया, जिसका उद्देश्य आईसीटी के उपयोग के माध्यम से नागरिक सेवाओं को उपलब्ध कराना था। साथ ही ग्रामीण जनसंख्या को तकनीकी रूप से साक्षर बनाने के लिए 'प्रधानमंत्री ग्रामीण डिजिटल साक्षरता अभियान' शुरू किया गया जिसका उद्देश्य 6 करोड ग्रामीण परिवारों को डिजिटल रूप से साक्षर बनाना है। ऐसी तमाम सरकारी योजनाएँ चलाई गई जिसका उद्देश्य ग्रामीण अर्थव्यवस्था को तकनीकी रूप से उन्नत बनाना है। कृषि उत्पादों को भी प्रौद्योगिकी

की मदद से आगे बढ़ाने का प्रयास किया गया है। कृषि बाजार (NAM) इसी उद्देश्य को पूरा करता है। इससे किसान अपनी उपज सीधे बाजार तक पहुँचा सकेंगे और बिचौलियों की समाप्ति से उन्हें अधिक कीमत मिल सकेगी। वस्तुतः, राष्ट्रीय कृषि बाजार एक ऑनलाइन प्लेटफार्म है जिससे देश की लगभग 500 मंडिया जुड़ी हुई हैं। इस प्रकार देश भर के व्यापारी सीधे स्थानीय किसानों से जुड़कर उत्पादों की खरीद कर सकेंगे। इसके अतिरिक्त इस ऑनलाइन प्लेटफार्म से 'ग्रामीण खुदरा कृषि बाजार(GrAMs)' को जोड़ दिया जाएगा जिससे कृषि विपणन क्षेत्र का विकास होगा और किसानों का उपभोक्ताओं से सीधा जुड़ाव हो जाएगा।

संबद्ध क्षेत्रों के विकास पर बल

अगर कृषि अर्थव्यवस्था से ही जुड़े संबद्ध क्षेत्रों को लाभदायक बनाने की कोशिश की जाए तो

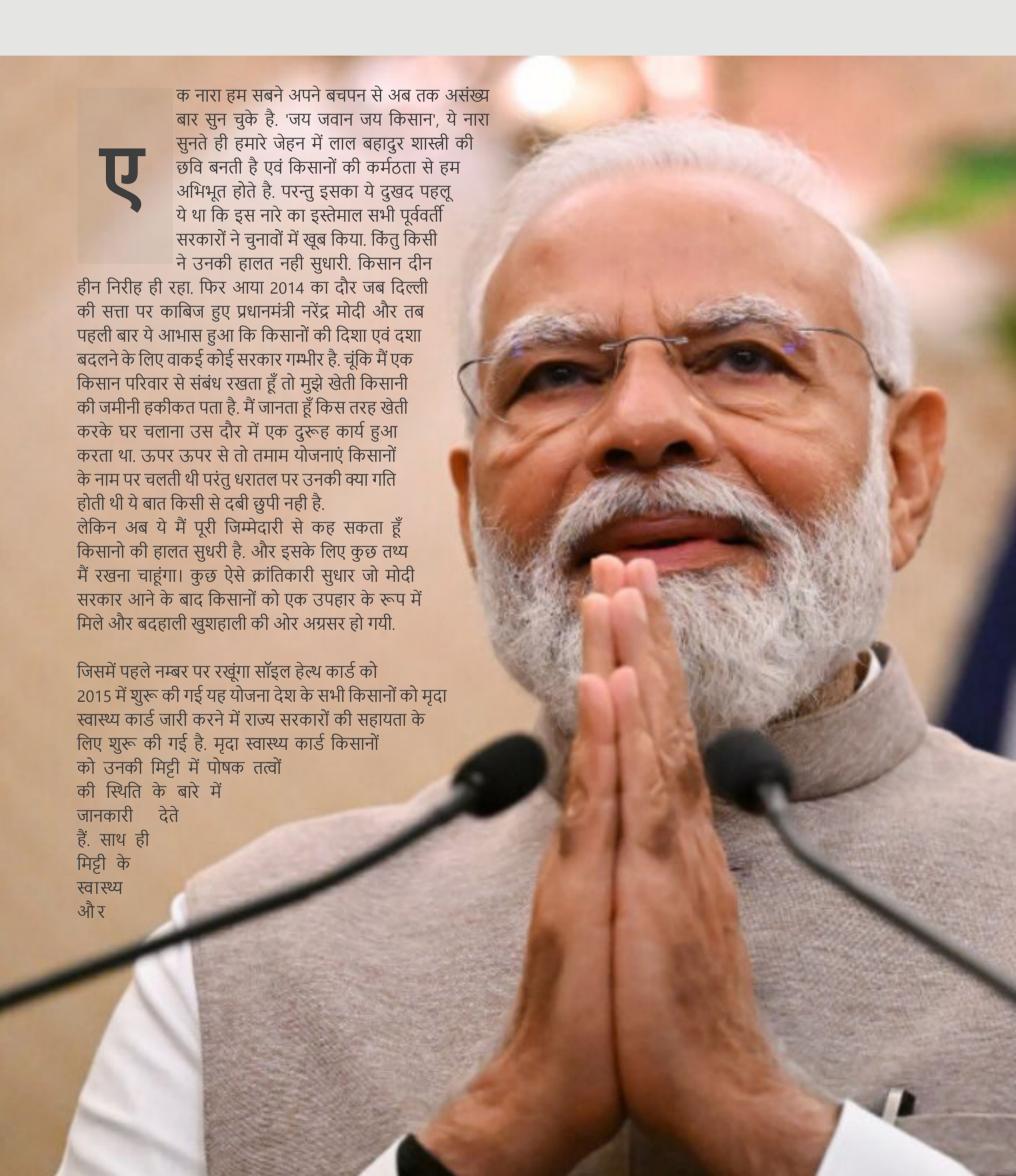
काफी हद तक कृषि से भार कम होगा और रोजगार की संभावनाएं भी बढ़ेंगी। अत: संबद्ध क्षेत्र यानी पशुपालन, डेयरी और मत्स्य पालन में नवीन प्रयोगों को शामिल करना होगा। पशुपालन का महत्व इसी बात से समझा जा सकता है कि वर्ष 2014-15 से 2018-19 के दौरान इस क्षेत्र ने 8.24 प्रतिशत दर से विकास किया। राष्ट्रीय लेखा सांख्यिकी के अनुसार कुल कृषि एवं संबद्ध क्षेत्र में पशुपालन का योगदान 2018-19 में लगभग 28.63 प्रतिशत रहा। इस क्षेत्र को गति देने के लिये सरकार निरंतर प्रयास भी कर रही है। पिछले कुछ समय से इस क्षेत्र से संबंधित कुछ नई योजनाएँ शुरू की गई हैं। बीते वर्षों में पशुपालकों के लिए 5,000 करोड़ रूपये की अतिरिक्त वित्तीय तरलता भी प्रदान की गई। इससे करीब 2 करोड़ किसानों को लाभ प्राप्त हुआ। मत्स्यपालन के क्षेत्र में 'प्रधानमंत्री मत्स्य संपदा योजना' के तहत समुद्री एवं अंत:क्षेत्र के मत्स्यपालन को एकीकृत, संधारणीय एवं समावेशी बनाने की योजना है। इसमें कुल 20,000 करोड़ रूपये खर्च किए जाएंगे। इसी प्रकार 'पशुपालन अवसंरचना विकास कोष' के तहत 15000 करोड़ रूपये की राशि जारी की गई है जिसका उद्देश्य डेयरी उद्योग में निजी निवेश आकर्षित करना है। इसी प्रकार हर्बल उत्पादों के विकास के लिए 4000 करोड़ रूपये तथा मधुमक्खी पालन के लिए 500 करोड़ रूपये के निवेश की योजना है। इन योजनाओं से निश्चित ही ग्रामीण बाजार बेहतर विकल्प के साथ विकसित हो सकेगा।

वर्तमान में यह उद्योग लगभग 10 प्रतिशत की वार्षिक दर से वृद्धि कर रहा है। अगर कृषि कार्य को बाजार की मांग से जोड़ दिया जाता है तो निश्चित ही कृषि और खाद्य प्रसंस्करण उद्योग दोनों को लाभ मिल सकेगा। इससे स्थानीय स्तर पर रोजगार के अवसर भी सृजित होंगे। इसमें आर्टिफिशियल इंटेलीजेंस आधारित स्टार्ट अप क्रांतिकारी भूमिका निभा सकते हैं। वस्तुतः, किस क्षेत्र में किस प्रकार के खाद्य उत्पादों की संभावना उर्वर है, अगर किसानों को रियल टाइम में प्रामाणिक जानकारी प्राप्त हो जाती है तो निश्चित ही वो बाजार के अवसर को भुना सकता है। सार रूप में कहें तो कृषि संबद्ध क्षेत्र में नवाचारी प्रयोग क्रांतिकारी बदलाव लाने में सक्षम है।



मोदी ने किसानों को क्या दिया ?

- रोहित शुक्ला (लेखक सिविल इंजीनियर हैं एवं जैविक खेती के क्षेत्र में सराहनीय कार्य किया है)



उसकी उर्वरता में सुधार के लिए पोषक तत्वों की उचित खुराक का सुझाव भी देते हैं. अब तक देश के करोड़ों किसानों को यह कार्ड दिया जा चुका है.

दूसरा नम्बर आता है नीम कोटेड यूरिया का.

यूरिया के उपयोग को कम करने, फसल के लिए नाइट्रोजन की उपलब्धता बढ़ाने और उर्वरक की लागत को कम करने के लिए योजना शुरू की गई है. नीम कोटेड यूरिया उर्वरक के रिलीज को धीमा कर देता है और इसे फसल को प्रभावी तरीके से उपलब्ध कराता है. खास बात ये है कि देश में बने और आयातित यूरिया की पूरी मात्रा को अब नीम कोटेड कर दिया गया है. खेतों में इसका असर भी पॉजिटिव देखा जा रहा है. नीम कोटिंग करने से यूरिया की खपत 10 परसेंट तक कम हो गई है. इससे खेती की लागत कम होगी और मृदा स्वास्थ्य प्रबंधन में सुधार होगा.

फिर एक और आमूलचूल परिवर्तन हुआ परंपरागत कृषि विकास योजना को लेकर

देश में जैविक खेती को बढ़ावा देने के उद्देश्य से परंपरागत कृषि विकास योजना (पीकेवीवाई) लागू की गई है. इसे 2015 में लॉन्च किया गया. इससे मिट्टी के स्वास्थ्य और कार्बनिक पदार्थ की मात्रा में सुधार होगा और किसान की शुद्ध आय में वृद्धि होगी. इस योजना के अंतर्गत खेती का क्लस्टर बनाकर जैविक खेती को बढ़ावा दिया जाता है. इस योजना में किसानों को लाभार्थी बनाया जाता है. इस योजना के लिए 60 परसेंट फंड केंद्र से और 40 परसेंट राज्य की ओर से दिया जाता है. इस योजना का लक्ष्य है कि एक गांव में कम से कम जैविक खेती का एक क्लस्टर बनाया जाए और उसे विकसित किया जाए. इसमें कई किसान एक साथ इस योजना का लाभ लेते हैं.

सिंचाई की समस्या कृषि जगत में एक प्रमुख समस्या रही है इस दिशा में मोदी जी की सरकार ने प्रधानमंत्री कृषि सिंचाई योजना के तहत 1 जुलाई, 2015 को 'हर खेत को पानी' के नारे के साथ शुरू की गई प्रधानमंत्री कृषि सिंचाई योजना (PMKSY) पानी की बर्बादी को कम करने और पानी के उपयोग में सुधार करने के लिए लागू किया गया है. पीएमकेएसवाई न केवल सिंचाई के लिए स्रोत बनाने पर ध्यान केंद्रित करता है, बल्कि पानी बचाने और सुरक्षित सिंचाई के माध्यम से सूक्ष्म स्तर पर फसलों को पानी उपलब्ध कराने पर जोर देता है. 'प्रति बूंद-अधिक फसल' सुनिश्चित करने के लिए सब्सिडी के माध्यम से सूक्ष्म सिंचाई को भी बढावा दिया जाता है.

जैसा कि हमारे देश में कहीं अतिवृष्टि तो कही अल्पवृष्टि से फसलों के उत्पादन पर काफी असर पड़ता है. कोई आपदा या बाढ़ हो तो फसलों का समूल नाश हो जाता है इस दिशा में प्रधानमंत्री फसल बीमा योजना लाकर मोदी सरकार ने किसानों के प्रति कृतज्ञता व्यक्त की है.

इसे शॉर्ट में PMFBY कहते हैं. यह योजना किसानों की समृद्धि के लिए चलाई जा रही ऐसी योजना है जो न केवल किसानों को आर्थिक सुरक्षा देती है बल्कि आधुनिक तकनीकों का उपयोग करके उन्हें आगे बढ़ने में मदद करती है. उचित समय पर लिए गए बीमा से किसान बिन मौसम वर्षा और जलभराव जैसे कारणों से होने वाले आर्थिक नुकसान की स्थिति में अपना बचाव कर सकते हैं. प्रधानमंत्री फसल बीमा योजना में



2015 में शुरू की गई यह योजना देश के सभी किसानों को मृदा स्वास्थ्य कार्ड जारी करने में राज्य सरकारों की सहायता के लिए शुरू की गई है

गैर-रोकथाम योग्य प्राकृतिक जोखिमों के खिलाफ बुआई पूर्व से लेकर फसल कटाई के बाद के नुकसान तक फसल बीमा कवरेज दिया जाता है. इसे साल 2016 में शुरू किया गया था.

आर्थिक सुरक्षा देती है बल्कि आधुनिक तकनीकों का उपयोग करके उन्हें आगे बढ़ने में मदद करती है. उचित समय पर लिए गए बीमा से किसान बिन मौसम वर्षा और जलभराव जैसे कारणों से होने वाले आर्थिक नुकसान की स्थिति में अपना बचाव कर सकते हैं. प्रधानमंत्री फसल बीमा योजना में गैर-रोकथाम योग्य प्राकृतिक जोखिमों के खिलाफ बुआई पूर्व से लेकर फसल कटाई के बाद के नुकसान तक फसल बीमा कवरेज दिया जाता है. इसे साल 2016 में शुरू किया गया था.

एक योजना जिसके बारे में सबसे ज्यादा बात होती है. उसका यदि यहां

उल्लेख न करूं तो न्यायोचित नहीं होगा. पीएम किसान सम्मान निधि योजना

पीएम किसान सम्मान निधि योजना भारत सरकार से 100 परसेंट फंडिंग वाली एक केंद्रीय योजना है. इसका पैसा सीधे लाभार्थियों के बैंक खातों में भेजा जाता है. अभी तक इसकी 14 किस्तें जारी हो चुकी हैं. इसमें हर साल पात्र किसानों के खाते में तीन किस्तों में छह हजार रुपये दिए जाते हैं. एक किस्त में दो हजार रुपये दिए जाते हैं. पैसे का ट्रांसफर डीबीटी यानी कि डायरेक्ट बेनेफिट ट्रांसफर के जिरये किया जाता है. पीएम-किसान योजना फरवरी 2019 में शुरू की गई थी. पिछले वित्तीय वर्ष यानी 2022-23 में कुल राशि पात्र लाभार्थियों को 58,201.85 करोड़ रुपये वितरित किए गए.

ये सिर्फ योजनाएं नहीं देश के अन्नदाताओं की तकदीर और तस्वीर बदलने की एक मुहिम है जो मोदी जी ने शुरू की है. इसके लिए उनकी पूरी टीम साधुवाद की पात्र है. सही मायने में अब जाकर जय जवान जय किसान और जय विज्ञान का नारा सार्थक हुआ है.



Sowing Seeds of Progress: How the Modi Government is Bolstering Indian Agriculture

- Dr Shashi Bhushan, Meteorologist and Scientist at The Institute of Environmental Research and Rural Development, Patna

n the last nine years, Indian agriculture has received new impetus under the dynamic leadership of Prime Minister Shri Narendra Modi's 'Beej Se Bazaar Tak' approach, which stands out for its comprehensiveness. The government has extended income support with PM Kisan Samman Nidhi, providing farmers with an assured cash transfer through Direct Benefit Transfer(DBT). Addressing the inherent risks, such as unseasonal rain, pest damage, post-harvest losses, etc., associated with agriculture, the BJP government introduced an agricultural insurance system named the Pradhan Mantri Fasal Bima Yojana. Similarly, the Pradhan Mantri Krishi Sinchayee Yojana has expanded irrigation coverage. The results are par excellent. Even during the COVID-19

period of 2021-22, India's food-grain production touched a new horizon,

with estimates for 2022-23 indicating

even higher production and buoyant

growth in the horticulture sector.

The allied sectors of Indian agriculture - livestock, forestry & logging and fishing & aquaculture are witnessing landmark growth and becoming a potential source for improving farmer's income. The dairy sector, which employs more than eight crores of farmers, is also on the move. India ranks first in the world in milk production, third in egg production, third in fish production, and eighth in meat production. To unlock the growth potential of the agriculture and allied sector, the BJP Government has introduced the Agricultural Infrastructure Fund, a financing facility operational from 2020-21 to 2032-33 to create post-harvest management infrastructure and community farm assets.

A priority for the BJP's Union government since its formation in 2014 has been the modernisation of Indian agriculture. The use of Soil Health Cards issued by the government has

A priority for the BJP's Union government since its formation in 2014 has been the modernisation of Indian agriculture. The use of Soil Health Cards issued by the government has helped farmers efficiently use various inputs and maximise their yield.

helped farmers efficiently use various inputs and maximise their yield. With the help of several programs, such as the National Mission on Natural Farming (NMNF), which promotes chemical-free and climate smart agriculture; small farmers are encouraged to adopt natural and organic farming. It has led to lower investments in inputs, higher income for the farmers and protection from the perils of climate change and various uncertainties.

AGRICULTURAL ACHIEVEMENTS: AT A GLANCE

- 5.7-fold rise in agriculture budget in 2022-23 over 2013-14
- Nearly 23 crore Soil Health Cards distributed

- 7350% increase in pulses procurement at MSP
- Over Rs. 1.33 lakh crore settled in claims under PM Fasal Bima Yojana
- Rs. 1 lakh crore through the Agriculture Infrastructure Fund
- 109.7% growth in non-basmati rice exports from FY 2013-14 to 2021-22
- Total Fertiliser subsidy increased by 500% in 2022-23 from 2021-22
- Rs. 93,068 crore allocated for PM Krishi Sinchayee Yojana for 2021-26
- More than 11 crore PM Kisan beneficiaries
- 1500% increase in oil-seeds procurement at MSP
- Rs. 20 lakh crore agriculture credit to be provided in 2023-24
- 1,260 Mandis now linked through e-NAM

MILESTONES IN AGRICULTURE AND FARMERS' WELFARE

- 5.7 fold rise in budget allocation for agriculture: Rs. 21,933 Crore in 2013-14 raised to Rs. 1,25,036 Crore in 2023-24
- Highest ever Record food grain production: 265.05 MMT in 2013-14 jumped to 323.55 MMT in 2022-23
- MSP payment for wheat: Rs. 2.39 lakh crore during 2006-14 arose to Rs. 4.52 Lakh Crore during 2014-22
- MSP payment for wheat: Rs. 1400 per quintal in 2013-14, while Rs. 2125 per quintal in 2022-23
- MSP payment for paddy: Rs. 3.09 lakh crore during 2006-14 shifted to Rs.10.64 lakh crore during 2014-22
- MSP payment for paddy: Rs. 1310 per quintal in 2013-14, whereas Rs. 2040 per quintal in 2022-23
- 54.08-fold rise in pulses procurement at MSP: 1.52 LMT during 2009-14, while 82.21 LMT during 2019-23

PROTECTING FARMERS:

- The historic rise in MSP: MSP at 50% more than cost has protected farmers from price distortions.
- Assured income through PM Kisan: Over 11 crore farmers get Rs. 6,000 annually as assured income.
- Crop insurance at nominal cost: Rs. 1.33 lakh crore worth of claims paid to insured farmers.
- Reducing rainfall dependence: 99 irrigation projects with an investment of Rs. 77,595 crore have been taken up.
- Compensation more accessible: The percentage of crop loss for which compensation is paid capped at 33%, while it was 50% earlier.

BEEJ SE BAZAAR TAK:

The Modi government has stood by Indian farmers and provided support across various stages of the agriculture cycle. From seeds to soil health, insurance to irrigation, MSP to markets. A comprehensive approach has led to the empowerment of farmers at every step.

MARKET LINKAGES TO IMPROVE FARMERS' INCOME

eNAM: A unified national market has increased competition and provided better price discovery.

Farmer Producer Organisations: Sale through FPOs facilitates better prices and higher returns for farmers. Forward linkages: The number of mega food parks has increased from 2 in 2014 to 23 as of 31.03.2023.

1138 start-ups in agriculture and allied sectors from 2019-20 to 2022-23 were sanctioned 124.2 crores of grant-in-aid.

ADDING TO FARMERS' SOURCES OF INCOME

- **Solar Panels:** Promoting income generation by installing solar panels on barren land.
- Rise in Milk Production: Annual milk production rose 51.05% from 2014-15 to 2021-22
- Unleashing a Blue Revolution: Separate Department of Fisheries for increased focus.
- Sweet Revolution: Export of honey doubled in the last 9 years.
- Ethanol Procurement: Ethanol procurement is up from 38 crore litres in 2013-14 to over 434 crore litres in 2021-22.

IMPORTANT FARMER WELFARE



SCHEMES OF THE MODI GOV-ERNMENT

Under the charismatic leadership of PM Shri Narendra Modi, the BJP's Union Government's initiatives have aimed to improve the lives of farmers by providing financial security, skill development, market access and sustainable agricultural practices.

Pradhan Mantri Fasal Bima Yojana (PMFBY): Launched in 2016, PMFBY offers comprehensive crop insurance coverage to farmers at affordable premiums. It ensures timely compensation for crop losses caused by natural calamities, pests, or diseases. This

scheme has brought financial security and stability to millions of farmers, safeguarding their livelihoods.

Pradhan Mantri Kisan Samman Nidhi (PM-KISAN): PM-KISAN, initiated in 2019, is an income support scheme designed to assist small and marginal farmers. Under this scheme, eligible farmers receive direct financial assistance of Rs 6,000 annually in three equal instalments. With over 120 million farmers benefitting from this scheme, it has significantly boosted their income and improved

their quality of life.

Soil Health Card Scheme: Launched in 2015, the Soil Health Card Scheme provides personalised soil health reports to farmers, offering valuable insights on soil nutrients and recommendations for balanced fertilisation. By promoting proper soil management practices, this scheme has optimised yields, reduced input costs, and enhanced soil health across agricultural lands.

Pradhan Mantri Kaushal Vikas Yojana (PMKVY): Introduced in 2015, PMKVY aims to provide skill training to farmers and rural youth. Implemented by the National Skill Development Corporation (NSDC), this scheme has empowered over 40 million farmers and rural youth by equipping them with essential agricultural skills, improving productivity, and generating employment opportunities.

e-NAM (National Agriculture Market): Launched in 2016, e-NAM is an electronic trading portal that integrates agricultural markets throughout India. It enables farmers to sell their produce online, discover competitive prices, and connect with buyers across the nation. This digital platform has revolutionised agricultural trade, eliminating intermediaries, ensuring transparency, and providing fair market access to farmers.

Pradhan Mantri Atmanirbhar Bharat Abhiyan (ABHA): Initiated in 2020, is a national mission that focuses on making India self-reliant in agriculture and food production. With components such as crop diversification, productivity enhancement, and value addition, this scheme has increased farmers' income, reduced their financial burden, and fostered sustainable agricultural practices.

Paramparagat Krishi Vikas Yojana (PKVY): Launched in 2015, PKVY promotes organic farming practices and the adoption of traditional and indigenous methods. Through financial support and technical guidance, this scheme encourages farmers to pursue organic farming certification, contributing to sustainable agriculture, improved soil fertility, and healthier farming practices.

Pradhan Mantri Krishi Sinchai Yojana (PMKSY): Introduced in 2015, PMKSY aims to enhance water efficiency and promote sustainable irrigation practices. With a focus on achieving 'Har Khet Ko Pani,' this scheme focuses on creating new water sources, improving water storage and distribution infrastructure, and encouraging micro-irrigation techniques. PMKSY has positively impacted agricultural productivity and water conservation across the nation.

PM Krishi Sampada Yojana: Launched in 2017, it aims to modernise the food processing sector and create a robust infrastructure for the agro-industry. The scheme reduces post-harvest losses, improves processing capabilities, and promotes value addition. It has fostered the growth of the food processing sector, generating employment opportunities and enhancing farmers' income.

These nine may be termed as the NAVRATNAS among

many schemes and initiatives taken by the BJP Government at the Centre.

International Year of Millets (Shree Anna): Recognising the importance of coarse grains in providing nutritious food along with ample amount of roughage to the people and creating indigenous and global demand, the Government of India, on the initiative of Prime Minister Modi, played a vital role in declaring 2023 the International Year of Millets in the United Nations General Assembly. 72 countries supported India's proposal. In the words of the Prime Minister himself, "Millets are good for the consumer, cultivator and the climate".

These schemes have helped improve farmers' income, reduce their financial burden, and make the agriculture sector more sustainable. The last nine years have seen a paradigm shift in the Indian agriculture sector, making it modern, scientific, futuristic, profitable, reliable and prosperous. Today, the Indian farmer isn't merely cultivating for India but confidently eyeing the world as a marketplace for its varying range of products. The Modi Era is the era devoted to Farmers' Welfare.



Harvesting Hope:

Empowering Tribal Women through Millet Cultivation

- Rahul Singh, MA (Buddhist Studies), University of Calcutta

U

nder the visionary leadership of Prime Minister Shri Narendra Modi, Bharat's agricultural landscape has witnessed a significant transformation with a renewed focus on promoting millet cultivation. This strategic move not only boosts the nutritional health of the nation but also brings about positive changes in the lives of Bharatiya tribal women farmers and the agriculture sector as a whole.

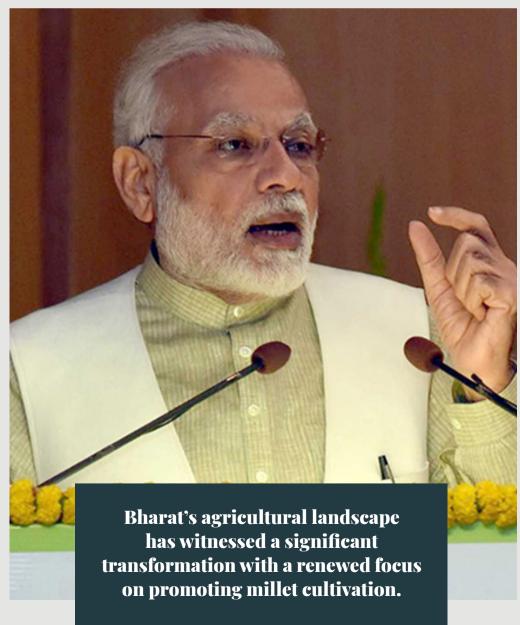
In recent years, there has been a growing recognition of the vital role tribal women farmers play in ensuring food security and sustainable agricultural practices. Amidst this backdrop, Prime Minister Modi is garnering global appre-

ciation for his relentless efforts to promote millets worldwide while uplifting marginalized communities, especially tribal women farmers.

Millet grains are a group of small-seeded grasses that have been cultivated for thousands of years across various regions of the world. They are highly nutritious, and packed with essential vitamins, minerals, and dietary fibre. Millets are gluten-free, making them suitable for those with dietary restrictions, and they have a low glycemic index, which is beneficial for managing blood sugar levels.

The United Nations has declared 2023 as the International Year of Millet (IYOM) due to the initiative of Prime Minister Modi. Union Agriculture Minister Narendra Singh Tomar also has said, "2023 will provide an opportunity to increase global production, efficient processing and better use of crop rotation and promote millets as a major component of the food basket".

At the G20 conferences, where world leaders gather to discuss global issues, Prime Minister Modi has continuously highlighted the importance of sustainable agricultural practices and the role of tribal women farmers in achieving food security. By promoting millet as an alternative grain, he effectively sheds light on its nutritional value, resilience to climate change, and ability to combat malnutrition in developing nations.



Prime Minister Modi's efforts have been instrumental in increasing global awareness about millets and their potential as a nutritional staple. By showcasing the dietary benefits of millets to the world, he has facilitated the inclusion of these ancient grains in national policies, leading to increased cultivation and consumption. Tribal women farmers, who often face social and economic adversities, have been at the forefront of this movement, empowered by their newfound recognition as key contributors to food security.

Through focused initiatives and policy interventions, Prime Minister Modi's has encouraged tribal women farmers to engage in millet production and

provided them with financial and infrastructural support. These women have been empowered with training, access to modern technology, and easy market access to sell their produce at fair prices. As a result, Tribal women farmers have witnessed a significant increase in their income due to the cultivation and sale of millets. This newfound financial stability has transformed their lives. They became self-reliant and improved their overall living standards, escaping poverty's clutches. Also, empowered tribal women have gained a stronger voice in their communities and households, contributing to gender equality and social progress.

Being naturally gluten-free and rich in essential nutrients, millets play a crucial role in ensuring adequate nutrition and addressing malnutrition. With Modi's emphasis on promoting millets worldwide, tribal women farmers have emerged as primary cultivators of these miracle grains by integrating millets into their diets locally and through international export. These women have enhanced their nutritional intake and their communities, combating issues of malnutrition prevalent in tribal areas.

One of the most significant advantages of millet cultivation is its adaptability to diverse agro-climatic conditions and resilience to climate change impacts. By encouraging tribal women farmers to cultivate millets, Modi has facilitated sustainable agriculture practices that require fewer irrigation resources and are more resilient to extreme weather events. It ensures food security and contributes to global efforts in combating climate change, making millets a crucial component of a sustainable food system.

Recently, External Affairs



Minister S Jaishankar was also seen making efforts to underscore the increasing importance of millets in the backdrop of the Covid-19 pandemic, climate change and Russia-Ukraine conflict. Jaishankar stressed that millets are essential for food security and international cooperation to combat hunger. Asia and Africa are the primary producers, and tribal populated areas are the consumption centres of millet crops. Bharat, Niger, Sudan and Nigeria are the primary producers of millet.

Promoting traditional millet cultivation methods helps preserve the cultural heritage of tribal communities by ensuring the continuity of traditional knowledge. Prime Minister Shri Narendra Modi's unwavering commitment to promoting tribal women farmers by endorsing the cultivation and consumption of millets globally has brought about significant positive change. Through his initiatives at the G20, he has successfully elevated the status of these marginalized farmers, empowering them economically, socially, and nutritionally. By cementing millets as a sustainable and nutritious alternative, Prime Minister Modi has addressed food security and contributed significantly to climate resilience and the overall well-being of tribal communities. By emphasizing the importance of millets as a sustainable and highly nutritious crop, Prime Minister Modi showcased India's commitment to global agricultural sustainability and highlighted the role of millets in achieving the United Nations Sustainable Development Goals. His efforts have set a powerful precedent for future agricultural policies empowering marginalized farmers worldwide.

Empowering Farmers:

Agricultural Schemes Under the Modi Government

- Reem Talukdar, State Invitee Member, BJYM Assam

arming is a major occupation in India, with approximately 60 per cent of the country's population engaged in agriculture and related activities. Most Indian farmers are small and marginal farmers with less than 2 hectares of land. Not surprisingly, they face several challenges, including access to credit, inputs, and markets, over-reliance on monsoons for irrigation needs, low productivity, and crop losses due to natural disasters,

pests, and diseases. To target farmers' welfare and provide adequate support on various fronts, the government of India has implemented several schemes and programs to support our 'annadaatas' ranging from crop insurance, financial assistance, technology dissemination and more.

Farmer Empowerment is significant for any government that intends to push the nation to greater heights. The present-day government, led by the visionary Prime Minister Shri Narendra Modi, has taken strategic steps to accelerate a transformation in the farming sector with an ambition to empower farmers. Doubling farmers' income, securing them and their endeavours, making them well-informed about modern technology, boosting agriculture research and education, and building farm-related infrastructure are some of the primary goals set and being worked upon to grow the agriculture sector and farmers' welfare. The New India envisioned by Prime Minister Narendra Modi runs on

Doubling farmers' income, securing them and their endeavours, making them well-informed about modern technology, boosting agriculture research and education, and building farm-related infrastructure

his motto of Sabka Saath, Sabka Vikas' and farmer welfare is an integral part of it.

The Ministry of Agriculture & Farmers Welfare has been striving to empower farmers by implementing government schemes scrupulously. This work is happening quickly because the government led by Prime Minister Modi is aware that a nation like ours, where about half the workforce is involved in farming, cannot flourish without making agriculture sustainable. From technology to crop insurance, from easier credit access to modern irrigation methods, we are implementing a comprehensive action plan to empower farmers throughout the farming cycle - a facilitating umbrella of Beej Se Bazaar Tak (BSBT).

Here's a list of major schemes that the Government of India has implemented for farmers' well-being:

i) Pradhan Mantri Fasal Bima Yojana (PMFBY) The Pradhan Mantri Fasal Bima Yojana (PMFBY) aims to provide farmers in India with affordable crop insurance. The PMFBY aims to provide farmers with financial assistance in the event of crop failure or damage caused by natural disasters, pests, or diseases. Farmers pay a nominal premium under PMFBY, and the central and state governments bear the remaining insurance costs. All food and oilseed crops, as well as horticultural and commercial crops, are covered by the scheme.

ii) Pradhan Mantri Kisan Samman Nidhi

The Pradhan Mantri Kisan Samman Nidhi scheme was launched in February 2019 by the Government of India to provide income support to small and marginal farmers. Under it the government of India gives farmers up to Rs. 6,000 per year as minimum income support.

iii) Kisan Credit Card Scheme (KCC)

Kisan Credit Card is a credit scheme launched to provide farmers with affordable credit for agricultural and related activities. The scheme is implemented in collaboration with public and private sector banks by the National Bank for Agriculture and Rural Development (NABARD). Farmers are given a credit card under the KCC scheme that can be used to obtain credit for agricultural and allied activities such as crop production, livestock, fisheries, and agro-processing. Banks issue credit cards, which provide access to credit based on the farmer's creditworthiness and the value of the landholding.

iv) Soil Health Card Scheme

The Soil Health Card Scheme is a government initiative launched to promote soil testing and improve soil health in

India. The scheme's primary goal is to help farmers make informed decisions about nutrient management practices by providing them with soil health cards that contain information on their soil's nutrient status.

Soil samples from agricultural land are collected and tested under this scheme for parameters such as pH, organic carbon, available nitrogen, phosphorus, potassium, sulphur, micronutrients, and salinity. Based on the test results, the farmer is given a soil health card that contains information about the soil's nutrient status and recommendations for fertiliser and soil amendment dosage.

v) National Agricultural Market (eNAM)

The National Agriculture Market is an online trading platform for agricultural commodities in India. It was launched to create a unified national market for agricultural commodities and promote transparency and competition in the agricultural market. The eNAM platform enables farmers, traders, and buyers to sell and buy agricultural commodities from anywhere in India.

vi) Pradhan Mantri Krishi Sinchai Yojana (PMKSY) The Pradhan Mantri Krishi Sinchai Yojana is a central government scheme launched to provide farmers nationwide with comprehensive irrigation solutions. The scheme focuses on increasing farm water use efficiency, increasing the adoption of precision irrigation technologies, and increasing the cultivable area under irrigation.

vii) Rashtriya Krishi Vikas Yojana (RKVY)

Rashtriya Krishi Vikas Yojana is a central government scheme that was launched to promote agricultural growth and development in India. The scheme assists states and union territories financially for agricultural and allied sector development. The primary goal of RKVY is to incentivise states to increase their investment in agriculture and related sectors while ensuring that the investments are directed toward specific areas with the potential to contribute to agricultural growth. The programme funds various activities, including agricultural research and development, extension services, infrastructure development, and marketing assistance.

The initial thrust of any transformation comes from awareness. The present government's focus is wide enough to ensure sustainable rural livelihood, social security system and support services for farmers, overall biosecurity and prevention of environmental degradation, food security and enhancement of focused nutritional support through a dynamic combination of schemes and holistic vision.



Organic Agriculture: Sowing the Seeds of a Sustainable Future

- Gourav Lama, Assistant Professor, Presidency University, Kolkata & Vice-President, BJYM, West Bengal



National Mission on Organic Farming (NMOF): Pioneering Sustainable Agriculture

The National Mission on Organic Farming, introduced in 2015, is a pioneering effort to promote organic farming throughout Bharat. Prime Minister Modi's far-reaching vision for Bharat's agricultural future includes enhancing farmers' income and ensuring consumers' health and well-being. By championing chemical-free agriculture through NMOF, he has set Bharat on a path towards greater food safety and ecological sustainability.

Pradhan Mantri Krishi Sinchai Yojana (PMKSY): Water Management for Sustainable Farming

Prime Minister Modi understands the pivotal role of water management in sustainable agriculture. Under the Pradhan Mantri Krishi Sinchai Yojana, his government focuses on improving irrigation efficiency, ensuring that farmers have the necessary resources to adopt organic farming techniques. This visionary approach underscores the importance of providing farmers with the tools they need to succeed in the evolving agricultural landscape.

Soil Health Card Scheme: Empowering Farmers with Knowledge

Another hallmark of Prime Minister Modi's leadership is the Soil Health Card Scheme, initiated in 2015. This program empowers farmers with knowledge by helping them analyze the nutrient content of their soil. Prime Minister Modi

Yojana,

his

recognizes that informed decisions about organic inputs can significantly reduce the reliance on synthetic fertilizers and pesticides, aligning with his vision for sustainable agriculture.

Rashtriya Krishi Vikas Yojana (RKVY): Holistic Agricultural Development

The Rashtriya Krishi Vikas Yojana is a testament to Prime Minister Modi's commitment to holistic agricultural development. By allocating funds for developing organic farming infrastructure, training, and capacity building, this visionary leader encourages farmers to embrace organic cultivation methods. His vision extends beyond mere production; it encompasses the entire ecosystem of agriculture, ensuring the sector's long-term sustainability.

National Agriculture Market (e-NAM): Digital Management for the Agricultural Trade

The National Agriculture Market (e-NAM) scheme was launched in 2016 by Prime Minister Modi. e-NAM is an electronic trading portal that integrates agricultural markets throughout Bharat. It enables farmers to sell their produce

online, discover competitive prices, and connect with buyers nationwide. This digital platform has revolutionized agricultural trade, eliminating intermediaries, ensuring transparency, and providing fair market access to farmers.

The Kisan Credit Card scheme (KCC): Easy Access to Credit

The Kisan Credit Card (KCC) scheme is a revolutionary initiative taken by the Modi government which provides farmers with access to formal credit from financial institutions. This scheme, while not exclusively designed to promote organic agriculture, played a key role in promoting organic farming in Bharat because many KCC schemes include insurance components, which can be crucial for organic farmers. Under the KCC scheme, farmers are provided with credit cards that grant them access to formal credit institutions. This easy access to credit has been instrumental in supporting farmers who wish to shift from conventional to organic farming methods. Organic farming often requires changes in cultivation practices and investment in organic inputs, and the KCC provides the necessary financial support for this transition.

Support for Organic Certification: A Push for Global Leadership

Certification is a critical aspect of organic farming, and Prime Minister Modi's government recognizes this fact. By providing financial support to farmers seeking organic cer-

tification, he encourages them to adopt sustainable practices and position Bharat as a global leader in organic agriculture. His vision extends to global markets, where Bharatiya organic products can command a premium price and uphold the nation's reputation for quality.

In conclusion, the Modi government's initiatives have not only revitalized Indian agriculture but have also ushered in a new era of sustainable and environmentally conscious farming practices. These initiatives have empowered farmers, improved the health of consumers, and strengthened Bharat's position in the global organic market. Prime Minister Modi's visionary leadership and commitment to a greener and more prosperous future for Bharatiya agriculture will continue to shape the landscape of the nation's farming sector for years to come. The organic farming revolution in Bharat, catalyzed by these initiatives, is an inspiring model for the world, demonstrating that sustainable agriculture can thrive and flourish, benefiting both the planet and its people.



Under the Pradhan Mantri Krishi Sinchai

improving irrigation efficiency, ensuring

that farmers have the necessary resources

to adopt organic farming techniques.

government focuses

Farming a new alternative to fossils

- Rajarshi Roychowdhury, BJYM West Bengal



rom time immemorial up till a few decades back, agriculture in India was said to be a gamble on the monsoon. It was a gamble that sometimes paid off, but just like all gambles, it had its share of failures that left the Indian farmer a victim of the vagaries of weather. Any layperson with a modicum of interest in parliamentary proceedings would see the same issues crop up time and again whenever agriculture & farmers' welfare was

discussed in parliament. From farmers' suicides to the lack of interest of the next generation of farmers in taking up farming to stagnant income levels to the unsustainable debt burden of small farmers, the primary sector in India was in a vicious cycle of debt, suicides & crop failures.

The Green Revolution touched only India's bread basket, i.e., erstwhile undivided Punjab & parts of western Uttar Pradesh. Elsewhere in India, landholdings got progressive-

ly fragmented, water tables got depleted, cheap agricultural produce from foreign shores kept coming in, newer farming techniques were not rapidly adopted & lack of value addition to farm products made them unviable for the sustenance of farming families. The BJP-led NDA government, under the leadership of Prime Minister Shri Narendra Modi, took office in 2014 & took determined steps to double farmers' income within a decade. A key component of this promise was the ancient yet efficient mantra of waste to wealth, which has been beautifully summed up by union minister Shri Nitin Gadkari as "Nothing is waste, it depends on the capability of the leadership to convert waste into wealth".

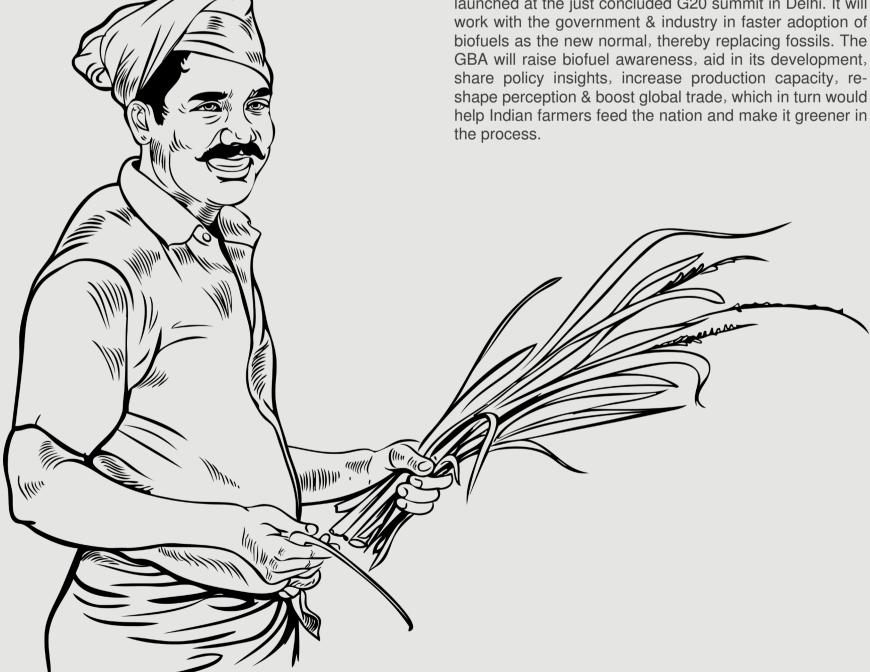
The future is green, and this oft-repeated adage has no modicum of exaggeration. To change rapidly to a greener future, urgent steps must be taken by both government & civil society alike in the face of catastrophic extreme climate events around the globe. California & Greece see an

unusually large number of forest fires, which only increase every year. Record-high temperatures are being witnessed in 2023, possibly the warmest year since records started being kept. Rising sea levels threaten submerging low-lying island states like Maldives & Vanuatu. The root cause is global warming in which fossil fuels are an inordinately large contributor. Technology can't be changed overnight & newer forms of energy require long gestation periods. The solution lies in going hybrid. Ethanol-blended petrol is not only cleaner & greener than regular fuel, but it also reduces our costs on imported crude while giving a boost to the domestic agriculture sector. Ethanol or Ethyl alcohol is a biofuel primarily made up of agricultural waste like cane molasses, damaged grain & vegetable waste. Indian farmers earned above Rs. 40,600 crores in the last 9 years by selling Ethanol made only from waste products, thereby zero input costs.

The target of achieving 10% ethanol blending has already been achieved by Oil Marketing Companies (OMC) 5 months ahead of schedule in Ethanol Supply Year (ESY) 2021-22. The revised target is now achieving a 20% blending of Ethanol in Petrol by ESY 2025-26. OMCs are entering into long-term contracts with sugar cooperatives for

buying Ethanol produced on-site & taking care of transportation charges and promising assured payments. It has largely acted as an insurance for farmers from the various vagaries of nature, from draught to hailstorms. Similarly, Compressed Natural Gas (CNG), a cleaner automotive fuel than petrol, thanks to its sulphur & lead-free character, is being made greener in the same way as Ethanol blended petrol. Bio CNG starts its journey with agricultural residue, bovine dung & sugarcane press mud being used to create biogas by breaking down these waste products by using microorganisms without oxygen through anaerobic digestion. Biogas has 40-60% methane & the rest is Nitrogen and carbon dioxide. The methane content is enriched by removing N2 & CO2, thereby producing bio CNG. Producing biogas not only helps farmers earn but also ensures free & higher quality bio fertiliser is extracted free of cost during the conversion process.

The Annadaata is now the Urjaadaata of the nation due to the untiring & holistic efforts of the government of India. The sky is truly the limit as Sustainable Aviation Fuel will soon become a reality with mandatory blending levels, further augmenting farmer incomes. Some food for thought: petrol could be available to the Indian consumer for Rs.15/litre if we were to achieve a 60% blending of Ethanol. The next game changer would be the Global Biofuel Alliance (GBA), launched at the just concluded G20 summit in Delhi. It will work with the government & industry in faster adoption of biofuels as the new normal, thereby replacing fossils. The GBA will raise biofuel awareness, aid in its development, share policy insights, increase production capacity, reshape perception & boost global trade, which in turn would help Indian farmers feed the nation and make it greener in the process.



Sowing the Seeds of Self-reliance: Agricultural Reforms & Pradhan Mantri Atmanirbhar Bharat Abhiyan (ABHA)

- Dr. Pooja Paswan, Assistant Professor of Public Administration, Jamia Millia Islamia University, New Delhi

he Pradhan Mantri Atmanirbhar Bharat Abhiyan (ABHA), commonly referred to as the "Self-reliant India" initiative, is a bold and transformative step undertaken by the Indian government to bolster the nation's economy and enhance its resilience in the face of global challenges. Launched by Prime Minister Narendra Modi in May 2020, this initiative was not merely a response to the economic slowdown induced by the COVID-19 pan-

demic but a visionary step towards a more self-sustaining and robust Indian economy.

The ABHA initiative aims to reduce India's dependency on imports and promote indigenous industries, leading to job creation, innovation, and overall economic growth. By focusing on sectors such as manufacturing, infrastructure, agriculture, and technology, the Indian government hopes to attract both domestic and foreign investments. The long-term goal is to establish India as a global manufacturing hub, leveraging its vast human resources, improving the ease of doing business, and fostering innovation.

ABHA package provides essential infrastructure support, including financing facilities for agri-businesses, farmer cooperatives, and startups involved in agricultural value chains. This funding is designed to foster the growth of storage facilities, cold chains, and post-harvest management systems, which are critical in reducing the enormous post-harvest losses India traditionally suffers.

In addition, the ABHA recognizes the pivotal role of technology in modern-day agriculture. There is an evident push towards promoting digital solutions in agriculture, be it e-trading agricultural produce or leveraging technology for supply chain management. The intent is to ensure that farmers, even in the remotest parts of the country, can access national and global markets, fetch better prices, and enhance their income. e-NAM, an online trading platform for agricultural produce, is being promoted to ensure farmers get better prices without intermediaries.

Agri-Infrastructure Fund: A special infrastructure fund has been set up to finance initiatives in agriculture. It is targeted at improving post-harvest management and community farming practices. The Agri-Infrastructure Fund, a significant component of the Pradhan Mantri Atmanirbhar Bharat Abhiyan (ABHA), is allocated Rs. 1 lakh crore to bolster agricultural infrastructure in India. Targeting post-harvest management and community farming, the fund aids Farmer Producers Organizations, Primary Agricultural Credit Societies, and individual farmers. The initiative focuses on enhancing post-harvest storage facilities, warehouses, and supply chain management, aiming to reduce post-harvest losses, ensure better prices for farmers, promote community farming, and support agri-startups by providing the necessary infrastructure. Through interest subvention and credit guarantees, it also seeks to provide favourable financial terms to its beneficiaries.

Strengthening of Cold Chains: In the Pradhan Mantri Atmanirbhar Bharat Abhiyan (ABHA), a significant emphasis is placed on strengthening cold chains across the nation. Recognizing the essential role of cold chains in preserving agricultural produce and reducing post-harvest losses, the initiative aims to develop robust cold storage facilities, refrigerated transport, and associated infrastructure. This enhancement ensures a longer shelf life for produce, enables farmers to fetch better prices by preventing distress sales, and ensures consumers have access to fresh and nutritious products throughout the year.

Fisheries Sector: The Pradhan Mantri Matsya Sampada Yojana (PMMSY), as an integral part of the Pradhan Mantri Atmanirbhar Bharat Abhiyan (ABHA), is an initiative focused on sustainable and responsible development of the fisheries sector in India. The program aims to increase fish production, bolster exports, and generate employment. With a focus on modernizing the fisheries sector, PMMSY emphasizes infrastructure development, like building fish farms, hatcheries, and cold storage, and incorporates measures to reduce post-harvest losses, benefiting both the fishing community and consumers.

Animal Husbandry Infrastructure Development Fund: Under the Pradhan Mantri Atmanirbhar Bharat Abhiyan (ABHA), the Animal Husbandry Infrastructure Development Fund (AHIDF) has been established to bolster infrastructure in the animal husbandry sector. This fund stimulates private sector investment in dairy processing, value addition, and cattle feed infrastructure. By providing financial support and incentives, the AHIDF seeks to enhance the production and processing of high-quality milk, meat, and feed, ensuring better returns for farmers and contributing to the sustainable growth of the animal husbandry sector in India.

National Medicinal Plants Board: Within the Pradhan Mantri Atmanirbhar Bharat Abhiyan (ABHA), the role of the National Medicinal Plants Board (NMPB) has been highlighted and emphasized. The board will bring an 800-hectare area under herbal cultivation to promote the cultivation and trade of herbal and medicinal plants. The NMPB, while not a new entity, is being leveraged to foster the large-scale cultivation of herbal and medicinal plants. This drive aligns with promoting India's vast traditional knowledge of herbal remedies, ensuring the conservation of endangered species, and offering farmers an alternative and potentially lucrative avenue for cultivation, thereby contributing to biodiversity and the nation's economy.

Promotion of Beekeeping: The initiative aims to increase farmers' income, particularly in rural and remote areas, through investments in beekeeping initiatives and infrastructure.

As part of the Pradhan Mantri Atmanirbhar Bharat Abhiyan (ABHA), promoting beekeeping has been identified as a strategic avenue to enhance rural incomes. Recognizing the multifaceted benefits of beekeeping, from honey production to crop pollination, the initiative aims to provide beekeepers with infrastructural support, training, and financial assistance. This drive not only seeks to boost the production of honey and other bee-related products for domestic and export markets but also emphasizes the ecological significance of bees in enhancing agricultural productivity through natural pollination processes.

Promotion of Herbal Cultivation: Under the Pradhan Mantri Atmanirbhar Bharat Abhiyan (ABHA), there's a pronounced emphasis on promoting herbal cultivation across India. Recognizing the country's rich heritage in traditional medicine and the growing global demand for herbal products, the initiative supports the large-scale cultivation of medicinal and herbal plants. This effort not only taps into the potential of alternative medicine but also provides farmers with diversified, sustainable, and profitable cultivation options, thereby contributing to the nation's health and economy.

The Pradhan Mantri Atmanirbhar Bharat Abhiyan (ABHA) in agriculture symbolizes the Modi government's visionary approach to rejuvenate and fortify India's agrarian land-scape. The government showcases its commitment to empowering farmers, modernizing agricultural practices, and ensuring food security by addressing multifaceted aspects from herbal cultivation to cold chain development. Prime Minister Modi's leadership in this initiative reflects a deep understanding of the nation's agrarian challenges and an

unwavering determination to transform them into opportunities. The comprehensive policies under ABHA aim to make India self-reliant and position the country as a global leader in sustainable and innovative agricultural practices.



Agriculture Under Modi Government A Journey From Tradition To Transformation

 Udit Pathak, Law graduate and founder of agri start-up, RGP Agronomics. Research intern at the office of Shri Vinod Tawde, National General Secretary, BJP

ndian economy since its inception has been based on agriculture due to the majority of the population being dependent directly or indirectly on it. The diversity of geo-climatic zones, landforms, and irrigation availability has provided Indian farmers an opportunity to experiment with cropping in a way that may not be possible in other parts of the world. During British rule, systemic devastation of the Indian agrarian system by using it as a hub for raw material sources has resulted in many calamities one of which was the turning of agriculture field owners into agricultural laborers.

After Independence Agriculture sector had to be the prime focus of the government but the obsession of First PM Nehru with soviet planning resulted in more focus on heavy public sector enterprises which caused more deprivation for the farmer community in India which had no access to modern irrigation, seeds or agriculture technologies unlike other countries. Avoidance of the agricultural situation also made the country dependent on foreign grains

ation also made the country dependent on foreign grains and it took decades to realize that focus on self-sustainability is needed for a country like India.

Poor economic growth in India during 1950-1970 is termed as "Hindu rate of growth" which is a mala-fied attempt by a section of academia to hide the failure of early Governments by transferring blame on the general psyche of Hindu-dominated nations like India. India is one of the rare countries that shifted from primary to tertiary sector growth without properly developing primary sector like agriculture. China a country that was poorer than India in the 1950s was able to manage its agricultural potential which helped it to pave the way for a more stable Industrial transformation.



On 2nd March 2015, PM Modi surprised everyone when he reached the parliament canteen for Lunch, after he had his lunch, he was asked by canteen staff to write something in the visitor book as a memoir.PM Modi wrote just three words "Annadata Sukhi Bhav". These words are enough to understand the emotions our prime minister has when it comes to farmer welfare.

The focus of the Narendra Modi government since 2014 has been to provide opportunities to farmers in a way that even a small marginal farmer can have a say in the march of development. The decision of the government to raise MSP from time to time has helped in increasing the income of the farmers. The minimum Support Price for various crops has increased from 50 % to 83 % over the years during NDA rule The diversity of crops included in the MSP portfolio also shows the commitment of the government to cater needs and aspirations of southern states, which was not so in the earlier case where major focus was only on wheat and rice procurement. Food grain production under Modi Government has increased to 323.5 Million Tonnes in 2022-2023 and agriculture produce export has increased to 4.4 lakh crore during 2021-2022.

Government warehousing has seen a transformational shift and the government is keen to enhance the quality of agriculture infrastructure aiming the same, an amount of Rs. one lakh crore is dedicated under the Agriculture Infrastructure fund to help in better logistics and storage of Agri produce. A negotiable warehouse receipt scheme announced in the recent budget will help in the exchange of commodities without physical movement. Food processing industry development has remained a major thrust of government because adding value to the produce of farmers who have small holdings can be done only by food processing and for that government has approved 41 mega food parks. In order to provide quick transportation for farmers to sell their perishable Agri produce, the government has started dedicated Kisan rails which have helped more than 34 lakh farmers.



To provide security to farmers of India in terms of unpredictability of climatic conditions PM Fasal Bima Yojana has covered over 37 crore farmers and has disbursed claims worth 1.30 lakh crore. In order to provide a nationwide market for farmers government has started e-NAM which has integrated technology with farmers. Now over 1.75 crore farmers and traders are registered on this platform which is empowering farmers to get a better place to sell their produce across India. The government has started the initiative to establish Over 10,000 Farmer-producer organizations (FPOs) which will provide a more competitive platform and corporate advantage to the farming sector. The government even tried to bring transformative farm laws to improve opportunities for farmers but unfortunately, Indian opposition parties chose to oppose it for their petty political reasons without thinking about long-term benefits for farmers.

The use of solar power for irrigation purposes by the PM KUSUM scheme has not only helped farmers save money but has also given them an opportunity to commercially sell the extra units of electricity generated. "Per drop, more crop "is a mantra given by PM Modi to make farmers use water as a resource in a more sustainable way by focusing on micro irrigation facilities under PM Krishi Sinchayi Yojna which has been allocated a fund of 93,068 Crore from 2021 to 2026.

Chemical-free Natural farming has seen a boost like never before during 2014-2023. Organic produce exports are now above 7000 crore and it is growing at a rapid pace which will help in increasing farmer income. Not only con-

ventional farming but also allied sectors including Fisheries, Bee produce, Meat, and Poultry have seen remarkable growth. The decision to remove bamboo from tree to grass has transformed the life of tribal farmers across India and a new bamboo economy is visible which is helping Farmers to raise their income even in difficult terrains. TRIFED is also actively working to provide direct marketplaces to tribal farmers by developing Van Dhan Kendras to sell forest produce.

India has a huge number of small and marginal farmers; optimum sharing of resources can reduce expenses in farming. With an aim to increase the impact of co-operatives, the Ministry of Co-operatives was established to realize the strength of cooperatives for farming. Financial inclusion and government outreach to farmers is a result of the Jan Dhan Account scheme which now has over 50 crore bank accounts. Institutional credit for the agricultural sector has increased to 18.5 Lakh crore during 2022-2023. All the direct benefit transfers have helped in increasing the financial inclusion of farmers as a result over 7.13 crore farmers have active operative Kisan credit cards now. The government has decided to provide a 1.5% interest subvention to all the banks and financial institutions for loans up to 3,00,000 given to farmers.

PM KISAN scheme has helped marginal and small farmers manage their minor needs of farming without discrimination. today PM KISAN has spent more than 2.4 lakh crore to help over 11.5 crore farmers with an annual direct transfer of 6,000 which includes more than 3 crore female farmers. Not only this a total of 23.7 crore Soil health cards are issued to farmers to access their soil health for the first time in India. Today government provides an amount of 2.25 lakh crore to fertilizer subsidy which is the largest in the world. The decision of the government to bring neem-coated urea has helped in checking urea misuse other than farming purposes and it has saved a major chunk of government subsidies. A lower leaching rate of neem-coated urea over normal urea lowers the need for urea which improves soil health. Nano urea developed by IFFCO is aimed to reduce logistics and subsidy costs by replacing conventional urea with Nano Urea.

There is still a lot to express which can tell about the intention of the government regarding farmer welfare but one thing which can sum up the vision of PM Modi-led BJP government is the fact that we want our farmers to get empowered so that they can become self-sustainable in every aspect in the longer run. There are challenges in terms of small land holdings and the need for rapid farm mechanization so that the income of farmers can be further increased but the government is focused on solving the issues in a result-oriented planned manner. New India in 2047 would be incomplete without a happy farmer and each step of our government is dedicated towards the same which can ensure an "evergreen revolution" as coined by Dr M.S.Swaminathan.





