



Kurukshetra Summary

February 2019



KURUKSHETRA SUMMARY FEBRUARY 2019

Boosting Agricultural Growth

Present Government's Contribution to Agriculture Sector

- Budgetary allocation of **Rs. 2,11,694 crore** for agriculture from 2014-2019.
 - Constitution of two corpus funds - Micro Irrigation Fund and Dairy Processing and Infrastructure Fund
 - Approval of **PM-AASHA scheme**
 - Constitution of a **working group** by NITI Ayog
 - Under **Pradhan Mantri Fasal Bima Yojana** payment of 25% of the loss claims is being made immediately.
 - e-NAM portal was launched to bring transparency in the agriculture market sector.
 - Promotion of organic farming under "**Paramparagat Krishi Vikas Yojana**"
 - **Soil Health Scheme** is providing feedback to the farmers on the fertility of their agricultural land.
 - Large scale activities under "**National Mission on Oilseed and Oil Palm**" to meet the requirement of edible oil in the country.
 - **Agricultural Mechanization Promotion Scheme** has been launched in Punjab, Haryana, Uttar Pradesh and NCR to decrease cost of farming and increase crop yield.
 - **E-Pashudhan Haat Portal** has been set up to link breeders of native bovine breed and the farmers.
 - **Deep Sea Fishing scheme** was launched to increase fish production by 2019-20 to the level of 15 million tonnes.
 - **ARYA** has proved successful in making agriculture an attractive occupation for youth
 - **Rural Entrepreneurship Awareness scheme** has been launched for students.
- **Fact Box:** At present the number of livestock in India is around 30 crore which of 18% of the livestock in the world.
- **Fact Box:** India is at the first place in milk production and contributes 19% of the world's total milk production
- **Fact Box:** It is an annual exercise that the Commission for Agricultural Costs and Prices announces the minimum support prices of two dozen of crops, but only four are being procured by the Government at those announced prices.
- Wheat and Paddy are procured by Food Corporation of India
 - Sugarcane is procured by Sugar Mills of the state
 - Cotton is procured by Cotton Corporation of India.

New Crop Procurement Policy

The new procurement policy was announced by the central government would help mitigating the uncertainty as well as the fear of volatile and unvafoavourable prices of crops. In this policy, three alternatives have been suggested:

- (i) Additional crops will be procured by the central government with partnership of the concerned state government.
- (ii) The seller of the crops would be paid the balance of Minimum Support Price and the market price by the government, but the farmers would have to register themselves with the regulated market of the area.
- (iii) The private traders can procure those products but those traders would have to pay the MSP as announced by the central government.

➤ **Fact Box:** Agriculture sector in India accounted for 14.8% of the GDP at 2011-12 prices in 2017-18

- National Youth and Parliament Festival 2019 was launched on 12th January 2019 by the Minister of State for Youth Affairs and Sports col. Rajyavardhan Singh Rathore to begin the celebration of the National Youth Day.
- It was organized on the theme “Find Solutions and Contribute to Policy”.
- Youth in the age bracket of 18-25 years are invited to participate in the district youth parliaments.

Government of India, with its commitment to double farmers' income by 2022 launched several new and innovative initiatives to accelerate agricultural growth rate sustainably.

New Varieties, New Hopes

- ICAR developed and released a total of 796 new crop varieties during last four years and 136 varieties of horticultural crops.
- HD CSW-18 (wheat) will reduce the water requirement and will help in residue management.
- Virat is an extra early (52-55 days) high protein variety to of Mungbean.
- Eight GM Bt Cotton varieties were developed for commercial cultivation. These varieties are tolerant to cotton bollworm and its seeds can be used by farmers for 2-3 years.

To fight against malnutrition through agricultural research, an array of biofortified crops and horticultural crops have been developed. For instance:

- Rice variety **CR Dhan 310** is protein rich.
- Wheat **HPBW01** carries high iron and zinc.
- Pomegranate “**Solapur Lal**” has iron, zinc and vitamin C
- **Medika Grape** is full of anti-oxidants that help fight cancer.

Improved Livestock for Livelihood Security

Breeds of popular livestock species were developed through systematic research mainly for higher production. In this regard, four backyard poultry varieties were developed and released having more than double the egg production as compared to the native/local breeds 50-70 eggs/annum.

- Jharsim poultry bird released for Jharkhand and Bihar has a capacity of producing 1230-13- eggs per annum.
- Narmada Nidhi for Madhya Pradesh- 180 eggs/annum
- Kamrupa for Assam- 118-130 per annum
- Himsamridhi for Himachal Pradesh- 140/150 per annum
- A new breed of sheep “Abhishan” has been developed for dry areas of the country.
- In fisheries sector, the technology of marine cage culture of high-value Cobia and Silver Pompano fish is proving a change changer technology in coastal regions.
- To address the challenge of climate change at village level, ICAR and Department of Agriculture Co-operation and Farmers Welfare are working collaboratively to demonstrate 100 climate resilient and integrated farming technologies at farmers’ fields. So far, 151 climate resilient villages have been established.
- During last 4 years, scientists have developed 490 crop varieties with significant climate resilience characteristics.

Fact Box: Recently PM Narendra Modi dedicated the Nanaji Deshmukh National Phenomics Facility to the nation that is located at the Indian Agricultural Research Institute, New Delhi

Government Scheme:

- In a novel extension scheme named, “**Mera Gaon Mera Gaurav**”, four agricultural scientists work with five identified villages and share their experience on agriculture and allied enterprises to solve the issue and problems of farmers at the field level.
- **Attracting and Retaining Youth in Agriculture (ARYA)** is an extension program which emphasizes entrepreneurship development and value chain management to attract and empower the youth in rural areas. The program is being implemented in 25 states through 25 KVKs.
- **Farmers First scheme** is enriching farmers-scientists interface through which scientists are working with more than 48,000 farm families to increase their income.

ICAR- Driver of Agricultural Research and Extension in India

- ICAR stands for- Indian Council of Agricultural Research
- It was established in- 1929
- Why- To serve the nation as an apex body of agricultural research, education and extension.
- Works under- Ministry of Agriculture and Farmers’ Welfare
- National level research institute: 101
- Krishi Vigyan Kendras- 692

Micro-Irrigation for Agricultural Growth

Fact Box: India accommodates more than 17% of the world's population but the country has only 4% water resources and 2.5% land resources of the world.

*According to **National Water Policy 2012**, water saving irrigation has been given vital importance to achieve water use efficiency. Micro irrigation is an innovative water saving technology in which water is directly supplied to the crops.*

Different types of irrigation system:

- Drip irrigation
- Sprinkler irrigation
- Micro sprinkler irrigation
- Porous pipe
- Rain gun

Drip irrigation and sprinkler irrigation dominate among all these systems.

- Major crops cultivated under **drip irrigation** are: sugarcane, banana, cotton, lemon, grapes, oranges, mangoes and wide variety of vegetables.
- **Sprinkler irrigation** system is used for groundnut, wheat, millet, sorghum and mustard.

Scheme

Har Khet ko Pani “Prime Minister Krishi Sinchayee Yojana”

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) has been formulated with the **vision of extending the coverage of irrigation ‘Har Khet ko pani’ and improving water use efficiency ‘More crop per drop’** in a focused manner with end to end solution on source creation, distribution, management, field application and extension activities. The Cabinet Committee on Economic Affairs chaired by Hon’ble Prime Minister has accorded approval of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) in its meeting held on **1st July, 2015**. PMKSY has been approved for implementation across the country with an outlay of Rs. **50,000 crore in five years**.

Fact Box: Gujarat has established “Gujarat Green Revolution Company Limited in 2005 for successful implementation of government schemes for micro irrigation.

Agriculture Produce Marketing Committee Regulation Act

- All the wholesale markets for agricultural produce that adopted the Agricultural Produce and Market Committee Regulation Act are terms as regulated markets.
- All the states have enacted the act except Kerala, Jammu and Kashmir and Manipur.
- The act mandates that the sale or purchase of agricultural commodities notified under the act is to be carried out in a specified market areas, yards or sub-yards. These markets must have a proper infrastructure for sale of farmers’ produce.
- Prices are determined by open auctions in the presence of an official of the market committee.

The Inter-Ministerial Task Force of Agricultural Marketing Reforms 2002 recommended that the APMC act be amended to allow for direct marketing and the establishment of agricultural markets in the private and co-operative sectors. On the recommendations of the committee, the government had come up with a Model APMC Act in 2003.

APMC Act 2003

- Private sector and co-operatives can be licensed to set up markets
- Provision of contract farming and direct marketing by private players

e-Nam Portal

- The electronic National Agriculture Market (e-NAM) was launched in April 2016. It networks the existing Agricultural Produce Market Committees mandis to create a unified national market for agricultural commodities.
- Small Farmers Agri-business Consortium is the leading agency for the implementation of e-NAM.
- At present 585 regulated markets in 14 states are linked with e-NAM which helps farmers/producers to discover real-time price in a transparent manner.

Scheme

Paramparagat Krishi Vikas Yojana

- It was launched in April 2015 as an elaborated component of Soil Health Management under the centrally sponsored scheme, National Mission on Sustainable Agriculture.
- It aims at supporting and promoting organic farming.
- Under PKVY Organic farming is promoted through adoption of organic village by cluster approach and PGS (Participatory Guarantee System) certification.
- Funding pattern is in the ratio of 60:40 in plain areas
- 90:10 for north eastern and Himalayan states
- 100% centrally funded in Union Territories

Government Efforts to Promote Agri-Business

- ICAR has taken a lead to initiate a network of 25 agri-business incubation centres in different states under National Agriculture Innovation Fund scheme.
- ARYA Scheme is being implemented in 25 states through KVKs, one district from each state.
- **Student Rural Entrepreneurship Awareness Development Yojana (READY)** was started in 2015-16 which is an essential course module for the award of degree at the bachelors level.
- To provide better marketing facilities to the farmers, the government has come out with a new model named as **"The Agricultural Produce and Livestock Marketing Act 2017"**.
- Market Research and Information Network scheme is covering 3355 wholesale mandis across the country linked to Agmarknet Portal.
- GoI has launched an umbrella scheme "Pradhan Matri Annadata Ay Sanrakshan Abhiyan (PM-AASHA) which implements the Price Support Scheme for procurement of pulses, oilseed and copra

- GoI has approved the increase in MSPs for all Rabi crops for 2018-19 at the level of at least 150% of the cost production.
- Under Pradhan Mantri Kisan Sampada Yojana promotion, modernization and capacity enhancement of food processing industries in the country has been initiated with a total allocation of Rs. 6000 crore
- A new scheme "Operation Green" for integrated development of tomato, onion and potato (TOP) crops value chain was launched in November 2018 with an outlay of Rs. 500 crore

Scheme

Interest Subvention Scheme

- To provide credit at reasonable rate of interest at 7% to the farmers, GoI is implementing Interest Subvention Scheme of 2% for short-term crop loans upto Rs. 3 lakh through public and private sector banks.
- Besides 2% interest subvention, the farmers on prompt repayment of crop loans are also provided 3% additional interest subvention.
- In case of prompt payee farmers, the short term crop loans are provided at an effective interest rate of 4% per annum.
- The benefit of interest subvention is extended for a period of upto 6 months to small and marginal farmers having KCC on loan against negotiable warehouse receipts with the purpose of preventing distress sale of produce.

Accelerated Irrigation Benefit Program (AIBP)

The Union Government launched the Accelerated **Irrigation Benefits Programme (AIBP) in 1996-97** for providing financial assistance, to expedite completion of ongoing Major/Medium Irrigation (MMI) including Extension, Renovation and Modernization (ERM) of irrigation projects and Surface Minor Irrigation schemes, as well as Lift Irrigation Schemes(LIS). Recently the government improved the program and prioritized 99 irrigation projects which were supposed to be completed by December 2019. This program is now included under the Pradhan Mantri Krishi Sinchayee Yojana and is being monitored regularly.

Improved Irrigation Techniques

- A number of simple and innovative irrigation management technologies are now available which can accelerate agricultural growth:
- Laser land leveling replaces the inefficient operations of traditional soil scraping after tillage operations.
- Farmer eye judgment is replaced by sharp laser beam.
- Laser land leveling considerably lowers irrigation time for rice by 47-69 hours per hectare per season and for wheat by 10-12 hours per ha per season.
- Permanent raised beds are suitable for regions with higher and uncertain rainfalls, heavy soil, wide thermal variations and farming system requiring shorter crop turn-around time
- Successful rice crop with lesser water inputs can be cultivated with raising the bund heights to capture all the rain water, scheduling irrigation through "Alternate Wetting and Drying" where irrigation is provided only after all the standing water has disappeared, delayed transplanting of paddy (beyond 10 june) so as to synchronize with onset of monsoon.

- The success of System of Rice Intensification is based on synergetic development of both tillers and roots. Rice yields under SRI are increased by 20-50% sometimes >100%

Scheme

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

- GoI has recently taken several steps to provide improved access to irrigation and to enhance water efficiency primarily through “Pradhan Mantri Krishi Sinchayee Yojana.
- PMKSY is operationalized from 1st July 2015
- It focuses on enhancing irrigation coverage and improving delivery system at farm level.
- The major objective of the scheme is to achieve convergence of investment in irrigation at field level, expand cultivable area under assured irrigation, improve on-farm water use to reduce wastage of water, enhance the adoption of precision-irrigation and other water saving technologies.
- The scheme was approved with an outlay of Rs. 5000 crore for a period of five years (2015-16 to 2019-20)
- It is administered by Ministry of Water Resources, River Development and Ganga Rejuvenation.
- It covers all states and UTs.

The scheme has four components

- Accelerated Irrigation Benefit Programme (AIBP) – to focus on faster completion of ongoing Major and Medium Irrigation projects
- PMKSY (Har Khet KoPani) – to focus on source augmentation, distribution, ground water development, lift irrigation, diversion of water from water plenty to water scarce areas, supplementing rain water harvesting beyond IWMP & MGNREGA, repair, restoration, renovation of traditional water bodies etc.
- PMKSY (Per Drop More Crop) – to focus on micro level storage structures, efficient water conveyance & application, precision irrigation systems, topping up of input cost beyond MGNREGA permissible limits, secondary storage, water lifting devices, extension activities, coordination & management
- PMKSY (Watershed Development) - to focus on ridge area treatment, drainage line treatment, soil and moisture conservation, water harvesting structure, livelihood support activities and other watershed works.