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Welcome...



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**STRENGTHING EXTENSION
POLICY INTERFACE;
GENERATING EVIDENCE ON
IMPACT OF EXTENSION AND
POLICY RELEVANT
COMMUNICATION**



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Introduction

Public research and extension played a major role in bringing about the green revolution.

In the post Green revolution era , however , extension faces important challenges in the area of relevance , accountability and sustainability.

The changing economic scenario in India and the need for appropriate agricultural technology and Agro management.

It is becoming increasingly evident that public extension by itself can no longer respond to the multifarious demands of farming community.

Public funding for sustaining the vast extension infrastructure is also under considerable strain.



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Evolution of Extension Reforms in India

Extension reforms in India span more than 6 decades and their Selection aim to provide a historical background on the evolution of reforms growing areas over this time period.

Extension system in traditionally only conducted village-level crop demonstration.

The advent of the Green revolution , information, demand of farmers increased because of the introduction of new technology and inputs for rice production.

Extension services were largely provisioned by the public sector during the phase and were fairly standardized were disbursed through various agricultural development program.



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Timeline of Rice Extension in India

Sustainability the large rice extension system without contributing the increase in rice productivity was big challenge for the government. A new training and visit System was piloted in the state of Rajasthan in 1974.

The program involved extension workers regularly visiting selected farms to conduct training was also accompanied by technical training sessions for extension workers to keep them updated. The program was scaled up introduction in other states by 1977. The T&V system continued until the early 1990's when the world Bank funded ended ,after which the government slopped the recruitment of new staff.

During this phase extension services for crop were provided primarily by the state Department of Agriculture through its state, district, and block-level arms , as other ministries.



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Timeline of extension reforms in rice extension

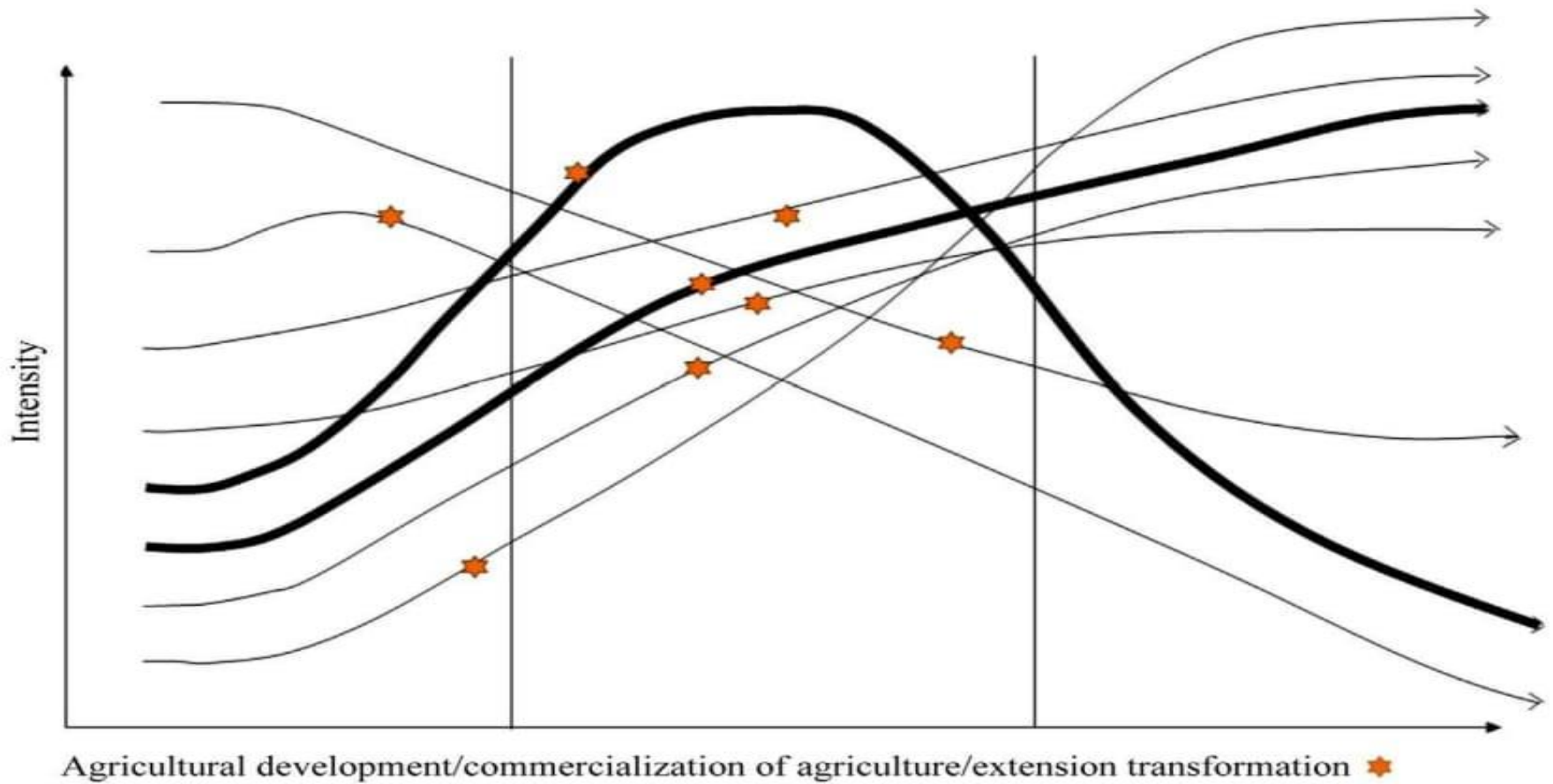
Broad categories of extension	Traditional extension	Green Revolution extension	T&V system	Pilot ATMA + agriclinics	ATMA rollout and private extension	Pluralistic extension system
Specific description	Crop demonstrations in villages, limited linkage between research and extension	Demonstrations of HYV seeds, irrigation, price support, and timely delivery of subsidized inputs; established the role of adaptive trials	Frequent training and visits of extension workers to selected farmers; technical training and updating sessions for extension workers	Customized extension services, encouraging private-sector participation	Integrate various extension services, link research with extension provision, decentralize decision-making	Provision of extension services by public, private, and NGO sector
Broad timeframe	1947–65	1965–80	1980–2000	2000–05	2005–11	2011–present
Phases of reforms	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6

HYV, High-yielding variety; T&V, training and visit.



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In 2007 the ATMA program was implemented throughout the country and in 2010 revised guidelines were issued to incorporate lessons learned so far. However, the ATMA still faces several capacity and institutional constraints. Even after 5 years of scaling up, with limited evaluation, it is not able to encourage innovation by researchers in the public sector and has not been able to establish strong links between farmers and researchers. This is part of the reason for the low productivity and capacity of rice producers in India, particularly smallholder rice farmers who rely on government channels of extension provision.



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Support to state Extension programmes for extension Reforms

Extension Reforms in India pilot tested in 28 districts of 7 states during November 1998 April ,2005 Innovations in Technology Dissemination (ITD) Component of the world Bank funded National Agricultural Technology project (NATP)

This successful experiment served as basis Launch the support to state experiment programmes for Extension Reforms” by the ministry of Agriculture, Govt of India.

The scheme focuses on operationalizing agricultural reform across the country through new institutional arrangement with restructured autonomous bodies at District/Block level ,are flexible , bottom up , farmer driven and promote public private partnership.



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The earlier institutional mechanism for extension under the scheme was SAMETI at the state level Catering to Training and HRD needs of extension functionaries.
Agriculture Technology Agency (ATMA) .
Block Technology Team (BTT)
Farmers Advisory Committees (FAC's)



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The Scheme was subsequently modified and strengthens as indicated here

Strengthens as indicated here

Provision of specialists and functionary support at different level namely state co ordination, faculty and supporting staff for SAMETI as state level , project Director , Deputy project Directors and supporting staff at District level and Block Technology manager and subject matter specialists at the Block level.

Innovative support through a “Farmer Friend ” to every two villages.

Revision in ATMA Cafeteria to include additional activities and to provide for enhanced unit costs for some of the activities.

Farmers Advisory Committee's (FAC) at state District and Block levels to advise and provide inputs to administrative bodies at respective level.



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Support to SAMETI for creating essential infrastructure.
Delegation of powers to state level sanctioning committee set up under to approve the state extension work plan prepared under the scheme





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Limited focus of objectives on

Agriculture as Enterprise

Working along the value chain.

Promoting Good Agriculture practices.

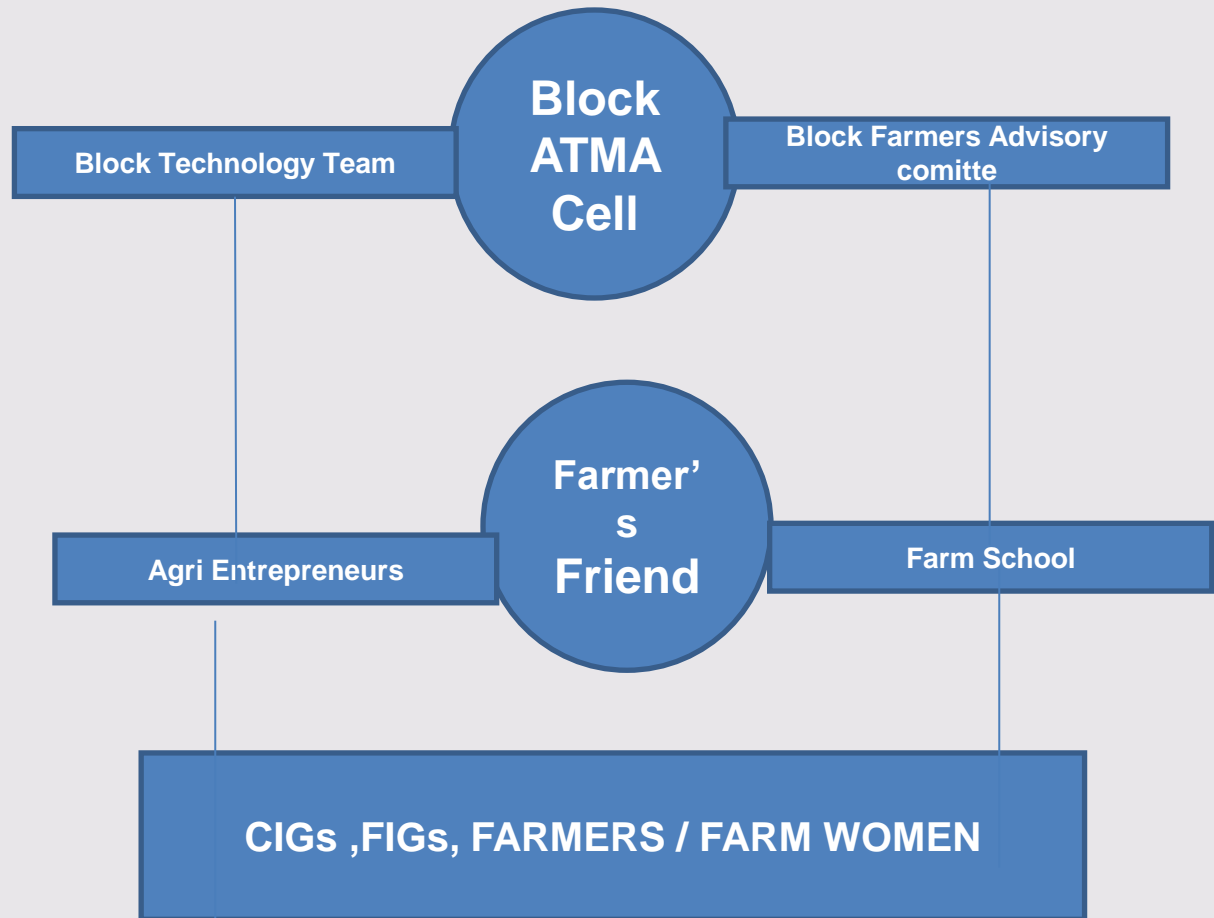
Preparing farmers to participate in Global Trade System.

Promoting Innovations in Agriculture Extension.



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Institutional Structure at block level





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CHANGING ROLE OF AGRICULTURAL EXTENSION

Community Development Approach to Extension ;

Public sector extension has undergone several changes since the early 1950 's .

Beginning with the community Development programme in 1952.

District programme started in 1961-1962 ,followed by the Intensive Agriculture Area programme in 1964 -65.

High yielding varieties programme 1966-67.

Farmer's Training and Education programme 1966-67.

Small and marginal Farmers Development programme in 1969-70.



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2. Transfer of Technology Approach through T&V

Extension management system, starting in the mid 1970's T&V extension was well •

Suited to the rapid dissemination of broad-based crop management practices for the high yielding wheat and rice varieties that was released since the mid 1960s.

The T&V System profoundly influenced extension practices and registered impressive gains in irrigated areas. •





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3. Post Green Revolution period ;

The transfer of (T&V) extension approach to fainted farming areas where fundamentally different production system predominate and more importantly, local conditions vary widely ,resulted in serious limitations and failure.

Wheat and rice varieties, failed to respond to the more location specific ,risk prone agriculture of the unirrigated tracts.





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4. Towards a Farming system Approach ;

The extension approaches of the 1950's and 1960's centred around 'Farmers ' ignorance as an explanation of non – adoption of agricultural technology .

In the decade of the 1970's and 1980's farm well constraints were considered to be explanation of non-adoption.

The basic philosophy of these extension approaches centred on “technology transfer”.

By the early 1990's and the completion of the third National Agricultural Extension project (NAEP). There was growing recognition that the T&V extension approach needed to be overhauled in meeting the technology needs of farmers during the 21st century.

Farmer participation in programme planning, and research extension linkages, marketing and value addition would have to be concurrently addressed.



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PROPOSED EXTENSION POLICY FRAMEWORK

Reforms in the system envisage an extension services more broad based and holistic in content and scope, this beyond Agricultural technology transfer. Extension agencies, services and workers will need to exercise a more proactive and participatory role. Serve as knowledge/information agents, imitating and facilitating mutually meaningful and equitable knowledge based transactions among agriculture researches, trainers and primary producers.



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Reforms in Agricultural extension already initiated and proposed to be undertaken on wider scale are discussed under the following sub heads

1. Policy Reforms.
2. Institutional Restructuring.
3. Management Reforms.
4. Strengthening Research – Extension linkages.
5. Capacity building & skill upgradation.
6. Mainstreaming of women in Agriculture.
7. Empowerment of Farmers.
8. Mainstreaming of women in Agriculture.
9. Use of Media & Information Technology.
10. Financial Sustainability.
11. Changing role of Government.



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POLICY REFORMS

Farming system Approach ;

The Farming system Approach consider the farm , the farm household and off-farm activities in a holistic way to take care not only of framing but also accepts of nutrition, food security, Sustainability, risk minimisation, income and employment which make up the multiple objectives of farm households.

Farming system considers interdependences of the components under the control of members of the household as well as those components interact physical, biological and socio economic factors not under like household control.



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Multi Agency Extension ;

The new extension regime recognizes the role of a multi-agency dispensation comprising different strengths.

Policy environment will promote private extension to operate in roles that complement, supplement, work in partnership and even substitute for public extension.

The three arms of the agricultural extension network are:

Public extension services:

State government line departments operated extension (Departments of Agriculture, Horticulture & Livestock development)



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State agriculture universities based extension
(Directorates of Extension, Krishi Vigyan Kendras
(KVKs) and Krishi Gyan Kendras (KGKs)
ICAR extension (Zonal Research Stations/ Krishi
Vigyan Kendras,
Agriculture Technology Information Centres (ATICs)
Institute Village Linkage Programme (IVLP) etc.)



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Private extension services

Community Based Organization (Farmers' Organizations, Farmers' Cooperatives, Self Help Groups etc.)

Para Extension Workers (contact farmers, link farmers, gopals, mitra kisans, mahila mitra kisans, etc.)

Agro-Clinics & Agribusinesses Input Suppliers/ Dealers (Pesticides, Seeds, Nutrients, Farm Implements, etc.)

Corporate Sector (Commercial Crops – tobacco, tea, coffee, oilseeds (sunflower), vegetables, Seeds, Farm Implements – tractors, threshers, sprinklers, drip irrigation, etc.)

Implements – Tractors ,threshers , sprinkler s ,crop irrigation etc)



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Mass Media & Information Technology

Print Media – Vernacular Press

Radio, Television, Private Cable Channels, etc.

Electronic Connectivity through Computers, NICNET,
Internet, V-SAT, etc.

Farm Information and Advisory Centre's (FIACs)

Private Portals Public & Private Information Shops



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Promotion of demand-driven and farmer

Thrust on Marketing Extension.

The T&V system the technology dissemination regime was more supply-driven .

A key factor in improving these feedback system is it organize farmer's into functional System such as self – help Groups (SHGs) ,Farmers Interest Group(FIGs),Commodity Association (CAs), and /Or Other types of farmer organisation (Fos).

Farmers have increasingly begun to perceive Marketing rather than production as the major constraint to enhancing farm income. With major thrust of extension agencies on production techniques, marketing extension so far has not received the attention it deserves.



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Public funds for private extension services

Charging for extension services

Promotion of private extension needs to be matched by corresponding shifts in the allocation of public resources. Public funds would be made available to NGOs, Farmer Associations, Para-professionals or private foundation for extension work.

The emergency of a market for private extension or consultancy services will be encouraged.

Processors with contracted producers, also commercial suppliers of seed, agro chemicals, machinery, vaccines, artificial insemination and the like should recover the costs of providing advice to their clients out of profit margins.



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Different Agricultural Schemes launched by Government of India after 2010



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What is a central government scheme?

The central government aims to maximize farm output and generate employment in the agriculture sector.

To achieve this aim it intends to introduce various schemes and plans for the benefit of the farmers.

The goal of the central government is to develop innovative services that tends to increase the employment rate and better agriculture output.



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Why Government Schemes are Necessary?

The government schemes are necessary **to provide better and sustainable livelihood** to its citizens. Like other sectors, the agriculture sector also needs the attention of the government. The majority of the population in India is dependent on agriculture and allied activities for their livelihood.

The government is quite aware that the agriculture sector contributes a major chunk of the GDP of the economy.

During the days of complete lockdown, the Indian economy suffered a drawback by recording almost 24% negative development during the primary quarter of FY 2020-21. Agriculture was the only sector that recorded a positive growth of 3.4 per cent.



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1. NATIONAL MISSION FOR SUSTAINABLE AGRICULTURE (NMSA)-2014-15

To make agriculture **more productivity, sustainable, remunerative and climate resilient.**

Goals are the mission promotes location specific sustainable and best farming practices, soil conservation & moisture protection measures, soil nutrient management, efficient and sustainable water management practices with mainstreaming rainfed methods.

Major component is **‘On Farm Water Management’** is being implemented to increasing water use efficiency by promoting modern technologies such as micro irrigation & sustainable water management practices, efficient water consumption, better distribution channels along with secondary storage facilities.



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2. Pradhan Mantri Fasal Bima Yojana (PMFBY)- 2016

It is a crop insurance scheme where multiple stakeholders are integrated on a single platform.

Vision

To provide the farmers a **stable source of income**.

Farmers need not worry about income during natural calamities.

Mission

Farmers to be given financial support by way of insurance.

Farmers continue to do farming even when faced with crop loss.

Make the farmers **self-reliant**

Credit flow is ensured in case of crop loss due to pests and natural calamities.



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3. Pradhan Mantri Krishi Sinchai Yojana (PMKSY)

The cabinet committee on economic affairs had approved the irrigation scheme on July 1st 2015

Har Khet ko Pani "Prime Minister Krishi Sinchayee Yojana"

Vision

commitment toward **conservation and management** of water.

Improve the water-use efficiency.

Mission

More crop per drop

Solution on source creation and management of water.

Solution about field application and activities.



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4. Paramparagat Krishi Vikas Yojana (PKVY)

An initiative launched by the NDA government in 2015

Vision

To promote organic farming

Use of traditional resources.

Mission

Farmers are encouraged to form clusters or groups.

The aim is to form **10,000 clusters** over the coming years.

To bring **five lakh acres** of agricultural land under organic farming.

Certification costs are to be borne by the government.

Each cluster or group has **50 farmers** willing to take up organic farming.

Each farmer who enrolls in the scheme is to be provided **Rs 20000 per acre**.



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5.Pradhan Mantri Kisan Maan-Dhan Yojana (PM-KMY) 12 sept 2019

This scheme is especially for farmers between the age of 18-40 years. To avail of the benefit of this scheme, the farmer has to register under the pension fund.

Vision

The Welfare of small and marginal farmers

Provide monthly income to farmers above 60 years of age

Mission

To provide a minimum monthly income of Rupees **3000** for farmers after the age of 60.

The Scheme is administered through the farmers' cooperation and welfare department of agriculture.



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6. PM Kisan Samman Nidhi Yojana

24 February 2019

The main objective of the scheme is to transfer an amount of Rupees **6000** to the account of farmers annually. This scheme is very helpful to all those small and marginal farmers who need to buy various farm implements and meet other agricultural expenses.

Vision:

The scheme is intended to make the small and marginal farmers strong.

The small and marginal farmer is in a position to sustain his activities.

To make the farmer attentive and active.

Mission:

Income support to all land-holding farmers.

Ensure the sustainable growth of small and marginal farmers.

Small farmers can buy various farm implements.



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Cont.

It makes transferring of Rs 6,000 per annum directly to the farmers' bank accounts through Direct Benefit Transfer (DBT) in three instalments of Rs 2,000 each.

Objective

To provide income support to all eligible land-holding farmers and their families.

PM-KISAN scheme also aims to supplement the financial needs of the farmers in procuring various inputs to ensure proper crop health and appropriate yields, commensurate with the anticipated farm income.



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7. Micro Irrigation Fund scheme 1st January 2015

The scheme is aimed to remove the hurdles of irrigation. Most farmers are depended on rain for their crops. Through this scheme, the government aims to provide irrigation facilities to the farmers.

Vision:

Farmers can take up new and upcoming irrigation projects.
To make the farmer self-reliant for his irrigation needs.
Farmers are no longer dependent on rain only.

Mission:

Expand the coverage of irrigation facilities.
Micro-irrigation projects are undertaken by the farmers.
Micro-irrigation systems are installed throughout the country.



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8. Mission Organic Value Chain Development for North Eastern Region (MOVCDNER)

It aims to develop the certified organic production in a value chain mode to link farmers with consumers and to support the **development of entire value chain starting from organic inputs, seeds, certification and creation of facilities for collection, aggregation, processing, marketing and brand building initiatives.**

Scheme is being implemented in north eastern states Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura



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9. National Agriculture Market (e-NAM)

14th April, 2016

E-NAM is an **electronic National Agriculture Marketing portal** that pans India and connects the existing mandis. The purpose is to create a pan India market for agricultural produce.

Vision:

- Promote uniformity among agriculture markets.
- Eliminate the role of the middle man in agriculture markets.
- Offer competitive prices to farmers for their produce.

Mission:

- Integrate all APMCs across the country.
- Provide an online marketing platform for agriculture.
- Facilities are available pan India.



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10. Soil Health Card 19.02.2015

The Soil Health Card Scheme was launched in India by the Ministry of Agriculture and Farmers' Welfare on February 19, 2015 at Suratgarh, Rajasthan. The project was rolled out with an initial budgetary allocation of ₹568.54 crore to be utilized over a period of 3 years.

The Scheme is a part of the National Mission for Sustainable Agriculture (NMSA). For the fiscal year of 2021-22, ₹315 crore has been allocated for the National Project on Soil Health and Fertility.

Objectives

The program also aims to identify the different types of soils in different parts of the country and to educate farmers on the proper usage of fertilizers, particularly organic fertilizers, for optimal agricultural produce. Additionally, the scheme will also generate employment.



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11. PM-Kusum

Launched in February 19, 2019.

Objectives

The primary objective of PM KUSUM Yojana is to make the latest technology available to every farmer in India.

To make the farmers familiar with the **de-dieselized** irrigation system in the agricultural sector.

The solar pumps will enable the farmers to work more effectively and use an eco-friendly irrigation system, as solar pumps will produce safe energy.

The pump sets comprise an energy grid that will generate more energy than diesel-driven pumps.



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Cont.

The Farmers will be able to generate extra power and sell it to the Government directly and enhance their income.

The scheme aims to add solar and other renewable capacity of **25,750 MW** by 2022 with total central financial support of Rs. **34,422 Crore** including service charges to the implementing agencies.



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12. Interest Subvention Scheme (ISS)

The Government provides interest subvention of 3% on short-term crop loans up to Rs.3.00 lakh.

Presently, loan is available to farmers at an interest rate of 7% per annum, which gets reduced to 4% on prompt repayment.

Further, under Interest Subvention Scheme 2016-17, in order to provide relief to the farmers on occurrence of natural calamities, the interest subvention of 2% shall continue to be available to banks for the first year on the restructured amount