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Current Agricultural Scenario of India

- Indian agriculture has come a long way since the inception of planning in 1951.
- Food grain production was **50.8 MT** (1950-51)
- We faced nightmare of absolute shortage of food grains supplies in the 1960s.
- India attained self-sufficiency in food grains in the 1970s.
- Present food grain production **252 MT** (2014-15)



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Agriculture In India

- Agriculture plays a vital role in India's economy.
- As per census 2011, 54.6% of the population is engaged in agriculture and allied activities (243 million persons were employed in agriculture).
- Agriculture contributes 17% to the country's Gross Value Added.



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Agriculture In India... (2)

- **Total geographical area of the country is 328.7 million hectares.**
- **Net sown area is 141.4 million hectares.**
- **The net sown area works out to be 43% of the total geographical area.**
- **Gross cropped area is 200.9 million hectares.**
- **Cropping intensity of 142 %.**
- **The net irrigated area is 68.2 million hectares.**



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Agriculture In India... (3)

- The agriculture sector's contribution to the Gross Domestic Product (GDP) decreased from **54% in 1950-51** to **15.4% in 2015-16**.
- Agricultural output has been volatile over the past 10 years, with annual growth ranging from **8.6% in 2010-11**, to **-0.2% in 2014-15** and **0.8% in 2015-16**.



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Present Crop Production Scenario

Area, production and yield of major Crops

Crops	Area (Lakh hectare)			Production (Million Tonnes)		
	2013-14	2014-15	2015-16*	2013-14	2014-15	2015-16*
Rice	441.36	441.10	433.88	106.65	105.48	104.32
Wheat	304.73	314.65	302.27	95.85	86.52	93.50
Coarse cereals	252.19	251.70	237.75	43.29	42.86	37.93
Pulses	252.12	235.54	252.59	19.25	17.15	16.47
Food grains	1250.41	1243.00	1226.50	265.04	252.02	252.22
Oilseeds	280.50	255.96	261.34	32.74	27.51	25.30
Sugarcane	49.93	50.66	49.53	352.14	362.33	352.16
Cotton @	119.60	128.19	118.72	35.90	34.80	30.15
Jute & Mesta #	8.38	8.09	7.85	11.69	11.12	10.47

* 4th advance estimates; @ Production in million bales of 170 kg each; # Production in million bales 180 Kg. each.



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National Policy for Farmers (NPF), 2007

- Government of India approved the National Policy for Farmers (NPF) in 2007.
- The NPF are being operationalised through various schemes and programmes which are being implemented by different Central Government Departments and Ministries.



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Focus of NPF, 2007

- Asset reforms in agriculture;
- Support services and application of frontier technologies;
- Agricultural bio-security systems;
- Supply of quality seeds and disease-free planting material;
- Improving soil fertility and health, and integrated pest management systems;



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Focus of NPF, 2007 ...(2)

- support services for women like crèches, child care centres, nutrition, health and training;
- timely, adequate, and easy reach of institutional credit at reasonable interest rates,
- farmer-friendly insurance instruments;
- use of ICT and setting up of farmers' schools to revitalize agricultural extension;



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Focus of NPF, 2007 ...(3)

- Effective implementation of MSP across the country, development of agricultural market infrastructure, and rural non-farm employment initiatives for farm households;
- Integrated approach for rural energy and others.



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Announcement of a slogan

**‘Doubling the
income of farmers
by 2022.’**

HOW?



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Strategies adopted

- The strategy of the GOI is to focus on farmers' welfare by making farming viable.
- Farm viability is possible, when cost of cultivation is reduced, yield per unit of farm is increased and farmers get remunerative prices on the produce.
- The department of agriculture, GOI is implementing various schemes to meet this objective with a mission mode approach.



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Rashtriya Krishi Vikas Yojana (RKVY)

- **RKVY is having a background. National Development Council (NDC), in its meeting held on 29th May, 2007 resolved that a special Additional Central Assistance (ACA) Scheme be introduced to incentivize States to draw up comprehensive agriculture development plans.**
- **Accordingly, Department of Agriculture & Cooperation (DAC), Ministry of Agriculture, in consultation with the Planning Commission, launched RKVY in 2007-2008.**



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Objectives of RKVY Scheme

- i. To **incentivize the States** so as to increase public investment in agriculture and allied sectors.
- ii. To provide **flexibility and autonomy to States** in the process of planning and executing agriculture and allied sector schemes.



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Objectives of RKVY Scheme ...2

- iii. To ensure the **preparation of Agriculture Plans for the districts and the States** based on agro-climatic conditions, availability of technology and natural resources.
- iv. To ensure that the **local needs/crops/priorities** are better reflected in the agricultural plans of the States.



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Objectives of RKVY Scheme ...3

- v. To achieve the **goal of reducing the yield gaps** in important crops through focused interventions.
- vi. To **maximize returns** to the farmers.
- vii. To bring about **quantifiable changes in the production and productivity** of various components by addressing them in a holistic manner.



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Sub-Schemes under RKVY

- i. Bringing Green Revolution to Eastern India (BGREI)**
- ii. Crop Diversification Programme (CDP)**
- iii. Reclamation of Problem Soil**
- iv. Rice Fallow Areas in Eastern India for Pulses and Oil Seeds**
- v. Foot and Mouth Disease Control Programme**



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Administration of RKVY

- RKVY is administered by the Union Ministry of Agriculture & Farmers Welfare.
- Funds under this scheme are provided to the States as grant-in-aid by the Central Government (GOI).



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BGREI

- Bringing Green Revolution to Eastern India (BGREI), a **sub scheme of RKVY** was initiated in 2010-11 to address the constraints limiting the productivity of “rice based cropping systems” in eastern India comprising **seven** states namely, **Assam, Bihar, Chhattisgarh, Jharkhand, Odisha, Eastern Uttar Pradesh and West Bengal.**



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Interventions under BGREI

Block demonstrations of rice and wheat in cluster mode;

- **Asset building activities such as construction of shallow tube, Dug well / Bore well, farm implements.**
- **Need based site specific activities**
- **Marketing support.**



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Crop Diversification Programme (CDP)

- Crop Diversification Programme is being implemented in Original Green Revolution States viz: Punjab, Haryana and Western Uttar Pradesh **as a sub scheme of RKVY** since 2013-14 to divert the area of water guzzling paddy to alternate crops like pulses, oilseeds, maize, cotton and agro forestry.



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Objective of CDP

- Tackling the problem of declining of soil fertility and depleting water table in those states (Punjab, Haryana and Western Uttar Pradesh).



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Another initiative under CDP

- In order **to encourage tobacco growing farmers** to shift to alternate **crops/cropping systems**, CDP has been extended to tobacco growing states of **Andhra Pradesh, Bihar, Gujarat, Karnataka, Maharashtra, Odisha, Tamil Nadu, Telangana, Uttar Pradesh and West Bengal** w.e.f. 2015-16.



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National Food Security Mission (NFSM)

- NFSM was launched in **2007-08** (in 11th plan) to increase the production of **rice, wheat and pulses through area expansion and productivity enhancement; restoring soil fertility and productivity; creating employment opportunities; and enhancing farm level economy.**



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National Food Security Mission (NFSM)...2

- The Mission has been continued during 12th Plan with **new target of additional production and promotion of commercial crops like cotton, jute and sugarcane.**
- During 12th Plan, in 2016-17, NFSM is implemented in **638 districts of 29 states.**
- A **three-tier monitoring mechanism** was inbuilt at **National, State and District** levels.



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National Food Security Mission (NFSM)...2

- The basic strategy of the Mission is to promote and extend improved technologies, i.e., **seed, micro-nutrients, soil amendments, integrated pest management, farm machinery and implements, irrigation devices along with capacity building of farmers.**



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Outcome of NFSM since inception

2006-07

2015-16

- Wheat: **75.81** **93.50**
- Rice: **93.36** **104.32**
- Pulses: **14.20** **16.47**

Figures in MT



National Mission on Oilseeds and Oil Palm (NMOOP)

Crop wise average production of nine major oilseeds during the 12th plan period and for the year 2013-14
(Production in million tonnes)

Crop	Average of XI Plan (2007-08 to 2011-12)	2013-14
Groundnut	7.40	9.71
Castor	1.38	1.73
Sesamum	0.74	0.72
Niger	0.11	0.10
Rapeseed & Mustard	6.89	7.88
Linseed	0.16	0.14
Safflower	0.18	0.11
Sunflower	0.93	0.50
Soybean	11.16	11.86
Total Nine Oilseeds	28.93	32.75



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National Mission on Oilseeds and Oil Palm (NMOOP)

NMOOP launched during **12th Plan (2014-15)**

- The **strategy** of NMOOP includes:
 - 0** increasing Seed Replacement Ratio (**SRR**) with focus on **varietal replacement**;
 - 0** increasing **irrigation** coverage under oilseeds, diversification of area to oilseeds crops;
 - 0** **inter-cropping** of oilseeds with cereals/ pulses/ sugarcane;



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National Mission on Oilseeds and Oil Palm (NMOOP)

The strategy of NMOOP: (contd...)

- 0 use of fallow land after paddy/potato;
- 0 expansion of cultivation of Oil Palm, increasing availability of quality planting materials of Oil Palm & TBOs maintenance cost; 0 inter-cropping during gestation period of oil palm and Tree Borne Oilseeds (TBOs).



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National Mission for Sustainable Agriculture (NMSA)

Launched in 2014-15.

- A dedicated website of NMSA has been operationalized (<http://nmsa.dac.gov.in/>).

The major components of NMSA are:

- Rainfed Area Development (RAD)
- Soil Health Management (SHM)



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National Mission for Sustainable Agriculture (NMSA)

- A new scheme “**Soil Health Card**” has been approved for implementation during the remaining period of 12th Plan to provide 14 crore Soil Health Cards to the farmers.
- Under the scheme **444.58 lakh soil Health Cards issued by States, as on 03.01.2017.**



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PMKSY

• Union Cabinet on 27th July, 2016 approved implementation of Pradhan Mantri Krishi Sinchayee Yojana .

- Motto: ***‘Har Khet Ko Pani’***.
- Period: 5 years (2015-16 to 2019-20).
- The aim is not only the creation of assured irrigation but to create protected irrigation by using rainwater by **“Jal Sanchay”** & **“Jal Sinchan”**.



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PMKSY

The website of PMKSY:

<http://www.pmksy.gov.in>

- The major objective of PMKSY:
 - To achieve convergence of investments in irrigation at the field level,
 - To expand cultivable area under assured irrigation, practices etc,



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PMKSY

- To improve on-farm water use efficiency to reduce wastage of water,
- To enhance the adoption of precision irrigation and other water saving technologies (More crop per drop),
- To promote sustainable water conservation.



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PKVY

Paramparagat Krishi Vikas Yojana (PKVY) is one of the schemes under **NMSA**.

- Objective is) to promote certified organic cultivation in **2 lakh ha covering 10,000 clusters**.
- Financial assistance of **Rs 50,000 per ha per farmer is provided in 3 years**.



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PKVY...2

Major interventions include:

- **Mobilization of farmers:** training of farmers and exposure visit by farmers.
- **Quality control:** soil sample analysis, process documentation, inspection of fields of cluster members, residue analysis, certification charges and administrative expenses for certification.



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PKVY...3

- **Conversion practices:** transition from current practices to organic farming, which includes procurement of organic inputs, organic seeds and traditional organic input production units and biological nitrogen harvest planting etc.
- **Integrated input management:** procurement of Liquid Bio fertilizer consortia/Bio pesticides, Neem cake, Phosphate Rich Organic Manure and Vermicompost.



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PKVY....4

- **Custom hiring centre charges:** to hire agricultural implements.
- **Labeling and Packaging assistance & transport assistance.**
- **Marketing through organic fairs.**



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ATMA

- The Scheme '**Agricultural Technology Management Agency (ATMA)**' implemented since 2005 under **National Mission on Agricultural Extension and Technology (NMAET)**.
- It is now under implementation in **652 districts of 29 states & 3 UTs** of the country.



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ATMA...2

The 'important features' of ATMA Scheme are

- **Support for specialists and functionaries** at State, District and Block Level
- Innovative support through a '**Farmer Friend**' @ **1 Farmer Friend per two villages**
- **Farmers Advisory Committees** at State, District and Block levels Farm (**including 3-5 Farm Schools/ block**).



ATMA...3

- **Farmer-to-farmer extension support** to be promoted through Farmers' Group.
- **Funding window** provided at both State and District levels for innovative extension activities are not covered under the Programme.
- **Farmers' Awards** instituted at Block, District and State levels.
- **Community Radio Stations** (CRS) to be set up by KVKs.



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ATMA...4

- Involving **NGOs and agripreneurs** for dissemination of technologies.
- Provision of Subject Matter Specialists (SMSs) as **Assistant Technology Managers** (ATMs).
- Provision of average **three** ATMs per Block.



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ATMA...5

Public extension functionaries are being made more effective through **trainings and exposure visits.**

- Use of interactive and innovative methods of information dissemination like **pico-projectors, low cost films, and hand held devices and mobile phone based service**, etc.



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Kisan Call Centres (KCC)

- The KCC Scheme was launched on **21.01.2004**.
- A country wide common eleven digit number '**1800-180-1551**' has been allocated for KCC.
- The replies to the queries are being given in **22 local languages**.
- Calls are attended from **6.00 am to 10.00 pm** on all **7 days of a week**.



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Kisan Call Centres (KCC)...2

- Since inception of the scheme till 30th November, 2016 over 300.63 lakh calls have been registered in the KCCs.
- The farmer calling KCC can also register for receiving SMSs from experts on the subject area and their providing and also for receiving regular updates on mandi price of selected mandis and crops.



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NeGP-A

- The Government implemented **National e-Governance Plan in Agriculture (NeGP-A)** for helping farmers to access information related to latest technology.
- Dissemination of information has been aimed through various delivery channels including **Common Service Centres, Web Portals, SMSs and Kisan Call Centres, Mobile apps** etc.



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NeGP-A...2

The services include Information on:

Pesticides, Fertilizers and Seeds; Soil Health;
Information on crops, farm machinery,
training and Good Agricultural Practices
(GAPs); Weather advisories; Information on
prices, arrivals, procurement points, and
providing interaction platform.



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NeGP-A...3

The services include Information on:

Electronic certification for exports and import;
Information on marketing infrastructure;
Monitoring implementation / evaluation of schemes and programmes; Information on fishery inputs; Information on irrigation infrastructure; Drought Relief and Management; Livestock Management.



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mKisan Portal

- This Portal **subsumes** all mobile based initiatives in the field of Agriculture & Allied sectors. **(initiated on July-2013).**
- It brings together **SMS, Interactive Voice Response System, Mobile Apps and Services.**
- Officers, Scientists and Experts from all Govt. Organizations and Departments, SAUs, KVKs,) and Agro –Meteorological Field Units (AMFUs) are using this Portal.



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mKisan Portal

● The mKisan Portal was initiated on July-2013).

- The content may include information about the **Schemes, Advisories from Experts, Market Prices, Weather Reports, Soil Test Reports** etc.



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Mobile Apps

- DAC&FW has already launched five mobile apps (**Kisan Suvidha, Pusa Krishi, Crop Insurance, Agrimarket & Bhuwan Hail storm**).
- **Kisan Suvidha** weather, input dealers, market price, plant protection and expert advisories.
- Available in **Google Play Store** and on mKisan – Mobile Apps section (**mkisan.gov.in**).
- Till **December 2016** more than **3.7 Lakh users** have downloaded the App.



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AGRISNET

- The Government is implementing a Central Sector Plan Scheme “Strengthening /Promoting agricultural Informatics & Communications”, of which one of the components is **AGRISNET**.
- The objective of AGRISNET is **to provide improved services to the farming community through use of ICT.**



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Crop Insurance

National Agricultural Insurance Scheme (NAIS) was implemented from 1999.

- **National Crop Insurance Programme (NCIP)** was implemented from Rabi season of 2013-14.
- **Pradhan Mantri Fasal Bima Yojana (PMFBY)** has been approved for implementation from Kharif 2016.



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Crop Insurance

- Besides, two more insurance schemes are there: **Unified Package Insurance Scheme (UPIS)** and **Weather Based Crop Insurance Scheme (WBCIS)**.
- **PMFBY** provides a comprehensive insurance cover against failure of the crop.
- During Kharif 2016 about 374 lakh farmers for a sum insured of Rs. 141487 crore have been covered under PMFBY & WBCIS.



Look into Horticulture

Area, Production and Productivity of Horticulture Crops (Area : m.Ha, Production: m. MT, Productivity: MT/ha)

Year	Area	Production	Productivity
2007-08	20.2	211.0	10.4
2008-09	20.5	214.4	10.5
2009-10	20.8	223.2	10.7
2010-11	21.8	240.4	11.0
2011-12	23.2	257.3	11.1
2012-13	23.7	268.8	11.3
2013-14	24.2	277.4	11.5
2014-15	23.4	280.99	12.01
2015-16	23.7	283.36	11.91



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Progress of Horticulture during XII Plan

During XII Plan, with effect from 2014-15
DAC&FW has launched

**Mission for Integrated
Development of Horticulture
(MIDH).**



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Initiatives under MIDH

- **(i) National Horticulture Mission (NHM),**
- **(ii) Horticulture Mission for North East and Himalayan States (HMNEH),**
- **(iii) National Bamboo Mission (NBM),**
- **(iv) National Horticulture Board (NHB),**
- **(v) Coconut Development Board (CDB),**
- **(vi) Central Institute of Horticulture (CIH), Nagaland.**



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National Horticulture Mission (NHM)

- This Centrally Sponsored Scheme was launched in the year **2005-06** aims at the holistic development of horticulture sector.
- **384 districts in 19 States and 4 Union Territories** were covered under NHM.



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Focus of NHM

Supply of quality planting material through establishment of nurseries and tissue culture units production and **productivity improvement programmes** through area expansion and rejuvenation, **technology promotion, technology dissemination, human resource development, creation of infrastructure for post harvest management and marketing.**



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Thank You...