



# 3 YEARS OF MODI GOVERNMENT



**Continuous Progression on Prosperity Path**



**Ministry of Agriculture & Farmers Welfare**  
**Government of India**



**Shri Radha Mohan Singh**

Hon'ble Minister of Agriculture & Farmers Welfare



**Shri S S Ahluwalia**

Minister of State for  
Agriculture & Farmers Welfare  
and Parliamentary Affairs



**Shri Parshottam Rupala**

Minister of State for  
Agriculture & Farmers Welfare



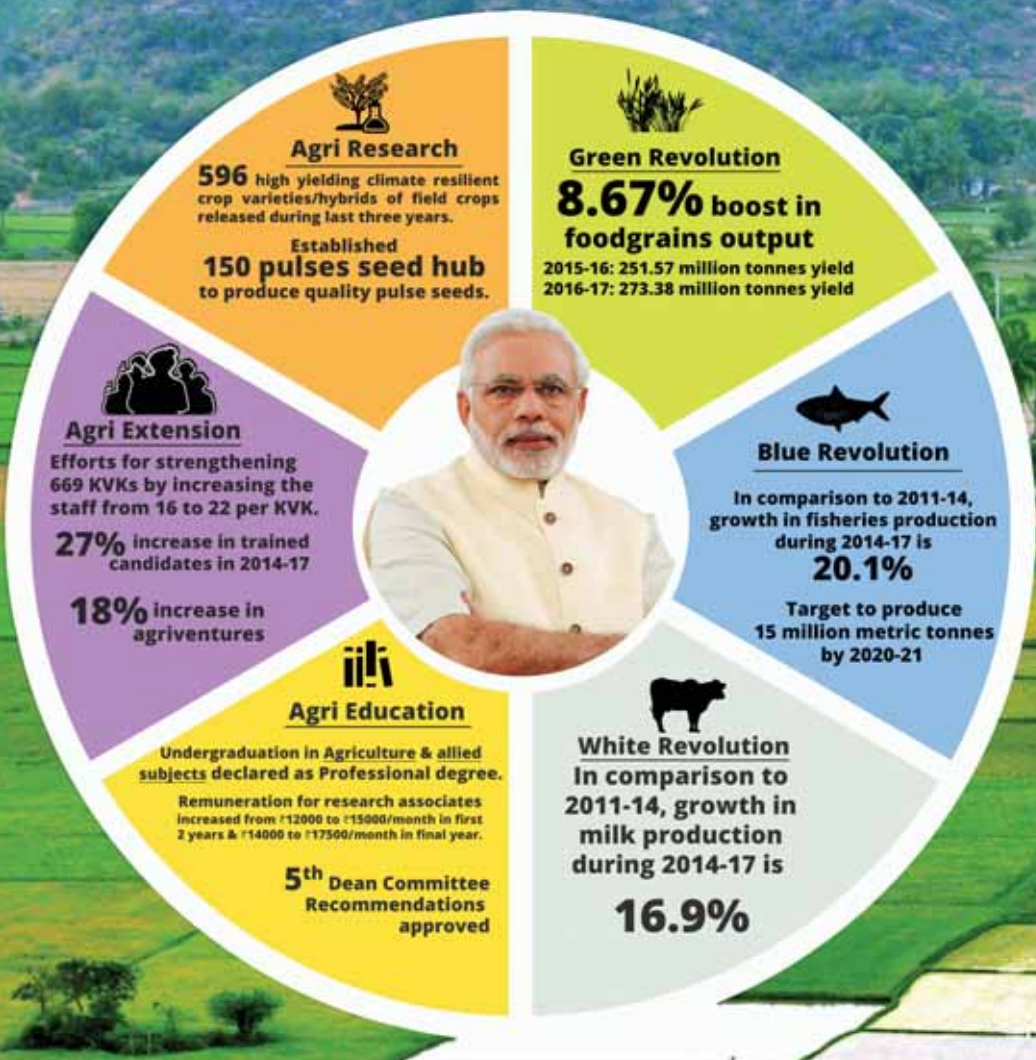
**Shri Sudershan Bhagat**

Minister of State for  
Agriculture & Farmers Welfare



**Healthy Soil, Wealthy Farmer**

# 2016-17: Agricultural Growth Rate: 4.4%



## Agriculture Budget Estimate & Expenditure

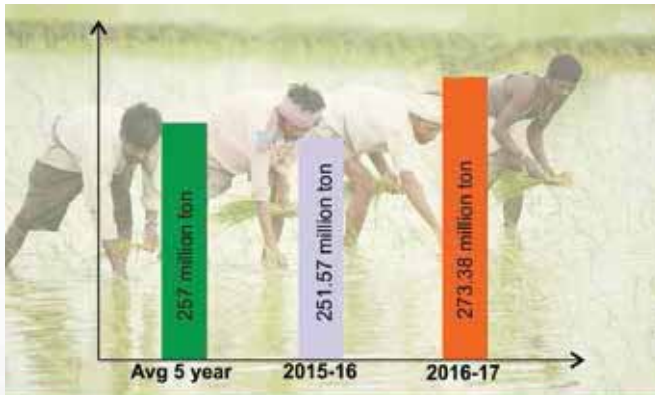
### During UPA Government

Budget Year	Budget Estimate	Expenditure
2011-12	₹ 24,526 crore	₹ 23,290 crore
2012-13	₹ 28,204 crore	₹ 24,630 crore
2013-14	₹ 30,224 crore	₹ 26,896 crore

### During Modi Government

Budget Year	Budget Estimate	Expenditure
2016-17	₹ 45,053 crore	₹ 57,503 crore

## Highest ever food grain production during 2016-17



Record food grain production in 2016-17 which is 6.37% higher than last 5 years average production and 8.6% more as compare to 2015-16

## More budget allocation to agriculture by Modi Government

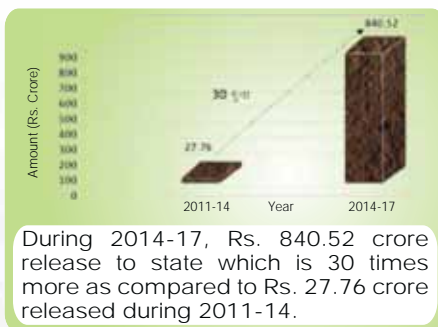


## SOIL HEALTH CARD SCHEME (SHC)



- Soil Health Card was launched in February, 2015.
- Soil Health Cards will be issued every two years for all land holder in the country.
- Nation-wide program to conduct farm level soil analysis.
- Provide customized crop specific recommendation for nutrient application.
- 2.80 Crore samples have been collected of which 14 Crore cards are being made.
- 7.1 Crore 'Soil Health Cards' have been distributed till 2nd May 2017 to the farmers and rest within the next 3 months.
- The Cycle Second commenced from May 1st 2017.

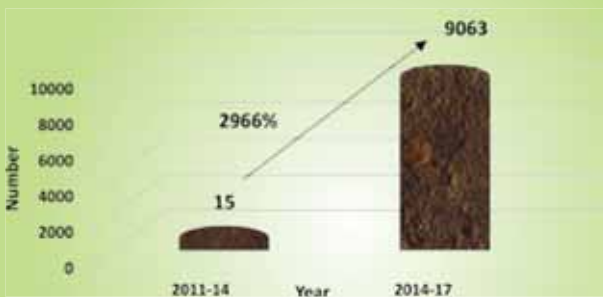
Amount Released under Soil Health Management Scheme



Hon'ble PM Inaugrated Soil Health Card on 19 February, 2015 at Suratgarh(Rajasthan)



### Soil Testing Labs (Statistic + Mobile + Mini-Labs) Sanctioned



In the year 2011-14 there was only 15 mini laboratory sanctioned which has increased upto 9063 during 2014-17.

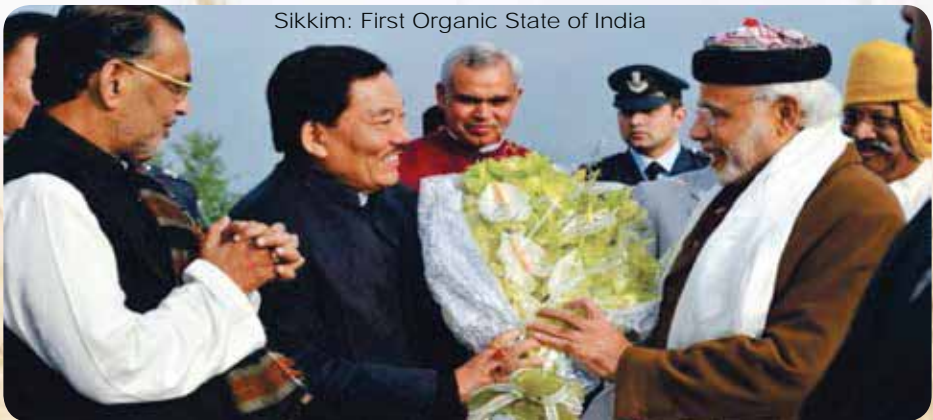
### Amount Released under Soil Health Card Scheme



Under Soil Health Card no amount was released during 2014. During 2014-17 Rs. 253.82 crores was released under this scheme.

# PARAMPARAGAT KRISHI VIKAS YOJANA (PKVY)

- Assistance to farmers for cluster formation, mobilization of farmers, PGS certification, conversion of land to organic farming, establishment of vermi compost unit, labelling or branding of organic products, etc.
- Financial assistance is provided for collection and transportation of organic produce to market at Rs. 1,20,000 maximum assistance for one cluster.
- Every farmer of a cluster will be provided financial assistance Rs. 50,000 per ha. during 3 years period. 10,000 organic clusters of 20 ha. will be developed to cover certified area by 2 lakhs ha. during the 3 years. So far 9,186 clusters have been formed.
- Government will promote organic farming with usage of traditional resources, adoptive eco-friendly low cost technologies and for higher returns, etc.



Sikkim: First Organic State of India

Hon'ble Prime Minister inaugurated National Conference on Organic Farming at Gangtok (Sikkim) on 17<sup>th</sup> January 2016.



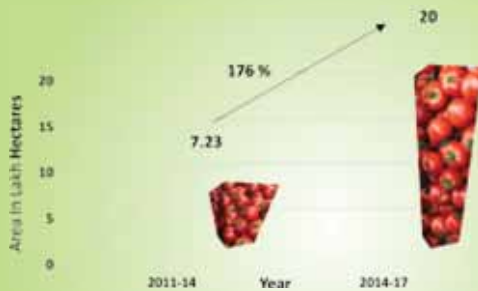
## PARAMPRAGAT KRISHI VIKAS YOJANA (PKVY)

Budget Estimate (PKVY)



Paramparagat Krishi Vikas Yojna is first Big skim of India. So far 9186 Cluster have been approved.

Cumulative Area Under Organic Farming



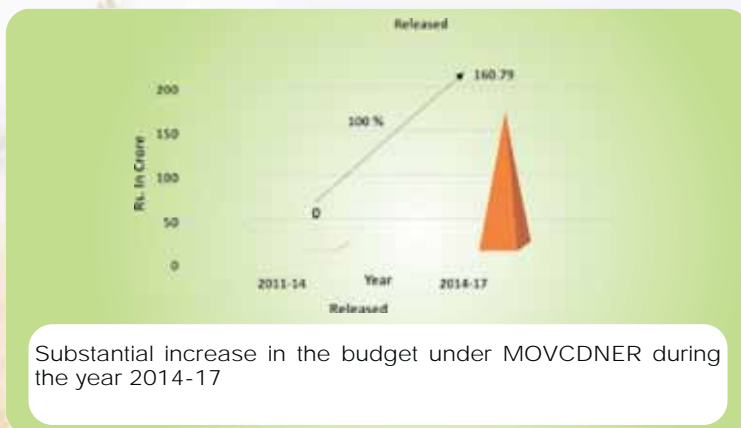
Substantial increase of 176% area of organic during 2014-17 has compare to year 2011-14.



# MISSION ORGANIC VALUE CHAIN DEVELOPMENT FOR NORTH EASTERN REGION (MOVCDNER)

- The Central Sector scheme was launched on 11th January, 2016 with an outlay of Rs. 400 crore for 3 years from 2015-16 to 2017-18. The scheme is being implemented in NER states of Assam, Manipur, Meghalaya, Nagaland, Mizoram, Arunachal Pradesh, Sikkim and Tripura through State Lead Agencies (SLA) to cover an area of 50,000 hectares in 3 years.
- So far as 2321 farmer cluster and 8 farmer producer organization has been formed.

Amount Released during 2014-17 under MOVCDNER



# NATIONAL AGRICULTURE MARKET (E-NAM)

- National Agriculture Market (e-NAM) scheme was approved on 1st July, 2015 with an initial allocation of Rs. 200 crore to link 585 wholesale APMC mandis across the country through a common e-platform.
- 417 mandis of 13 states have been integrated with e-NAM so far.
- In principle approval given to integrate 542 mandis in 16 States with e-NAM.
- To facilitate assaying of commodities for trading on e-NAM, common tradable parameters have been developed for 69 commodities.
- By 15th May 2017, 83.57 lakh tonnes of agricultural produce worth Rs. 19,802.98 crores has been transacted; 45,45,850 farmers, 89,934 traders and 46,411 commission agents were registered on e-NAM platform.
- The portal is available in English, Hindi, Gujarati, Marathi, Telugu and Bengali.

## Reforms in Agricultural Marketing

- Department of Agriculture, Cooperation and Farmers Welfare (DAC&FW) has drafted a new model "Agricultural Produce and Livestock Marketing (Promotion and Facilitation) Act 2017" in place of earlier model APMC Act, 2003. The Act was released to States for adoption on 24 April 2017 by the Hon'ble Union Agriculture Minister.



On 14th April, 2016 Hon'ble Prime Minister Sh. Narendra Modi launched the pilot of e-NAM on the 125th Birth Anniversary of Baba Saheb Dr. Bhimrao Ambedkar in 21 markets of 8 states.

# SMALL FARMERS AGRIBUSINESS CONSORTIUM (SFAC)

## Venture Capital Scheme (VCA)

- Venture Capital Assistance Scheme is being implemented for Agribusiness Development to catalyze private investment in setting up agribusiness projects for increasing rural income and employment.

## Equity Grant Scheme (EGS)

- In order to support the equity base of FPCs, a matching Equity Grant upto a maximum of Rs 10 lacs is given to FPCs. During

2014-17, equity grants have been sanctioned to 94 Farmer Producer Companies (FPCs).

## Credit Guarantee Fund Scheme (CGFS)

- The Credit Guarantee Fund offers a cover of 85% to loans extended by banks to FPCs without collateral, upto a maximum of Rs. 1.00 Crore. During 2014-17, a total of 21 FPCs have taken benefit under the scheme.

Venture Capital Scheme (VCA)

Farmer Producer Organizations (FPOs)



773 VCA projects set up during 2014-17 as against 459 during previous 3 years (2011-14)

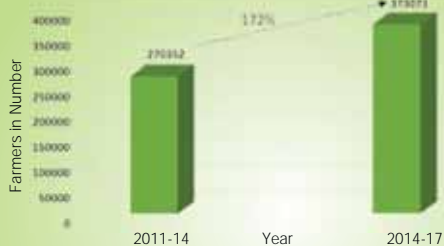
383 FPOs have been registered during 2014-17 as compared to 223 FPOs during 2011-14 with total increase of 71.74% towards collectivization of farmers.

# BUSINESS ACHIEVEMENTS OF NAFED

## Business Achievements of NAFED

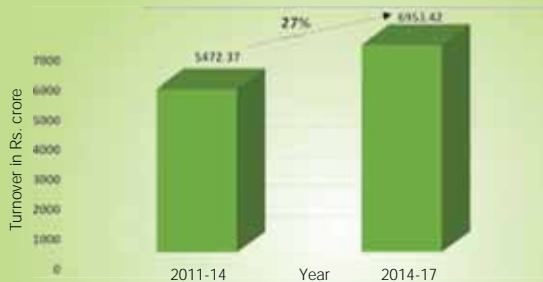
- NAFED is one of the Central Nodal Agencies for procurement of 16 notified agricultural commodities of Oilseeds, Pulses and Cotton.
- During the year 2016-17, NAFED procured record quantity of 877222.09 MT Pulses and recorded highest gross Profit of Rs 132.69 crore in last two decades.
- Procurement of Pulses, Oilseeds and other commodities by NAFED improved significantly in 2014-17 against the performance during 2011-14.

### Farmers Benefited from Procurement of NAFED



737071 numbers of farmers benefited from procurement between 2014-17 against 270352 between 2011-14, which is 172% higher.

### Increase in Business of NAFED



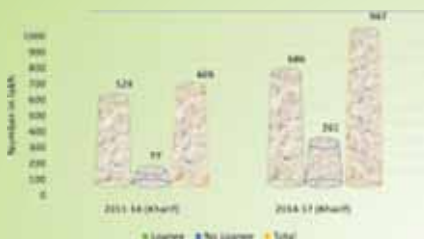
Total 6953.4 crore business as increased in the year 2014-17 which is 27% more as compared to Rs. 5472.37 crore in the year 2011-14.

# PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY)



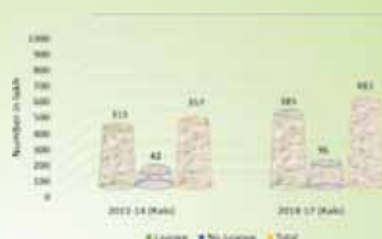
- Covers all food grains, oilseeds and annual commercial/ horticultural crops.
- One season one rate - maximum 2% for Kharif, 1.5% for Rabi and 5% for Annual Commercial/ Horticultural Crops.
- Covers all risks of crop cycle – preventive sowing; risks to standing crops and post harvest losses.
- For losses due to hailstorm, landslide and inundation assessment of yield losses at individual field level.
- Post harvest losses for cut & spread crops on field upto 14 days due to cyclone/ cyclonic rains and unseasonal rains.
- On account payment upto 25% of sum insured due to prevented sowing or mid season adversity.

Farmer Covered Under Crop Insurance Schemes



## Kharif Season

Total farmer covered under loanee and non loanee during Kharif 2014-17 has increased 56.52% as compared to Kharif 2011-14. For non loanee coverage has increased by 238.96%.



## Rabi Season

Total farmer covered under loanee and non loanee during Rabi 2014-17 has increased 34.73% as compared to Rabi 2011-14. For non loanee coverage has increased by 128.50%.

# AGRICULTURAL CREDIT AND JOINT LIABILITY GROUP

## Agricultural Credit

Ground Level Credit Flow (Short Term and Total Credit)



There was 47.18% increase in ground level agriculture credit flow during the year 2014-17 as compared to 2011-14.

Agricultural Credit: Short Term Crop Loan



The achievement of short term credit exceeded 35.63% during 2014-17 as against the 2011-14.

## Joint Liability Group

Formation of Joint Liability Group (JLG)

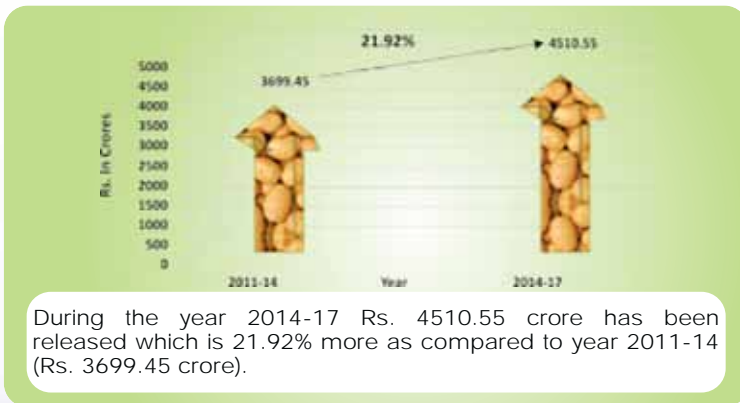


In the seven years from 2007-14 only 6.72 lakh JLG were formed and Rs. 6630 crore given to JLG while during 2014-17 total 15.85 lakh JLG formed and Rs. 16268 crore given.

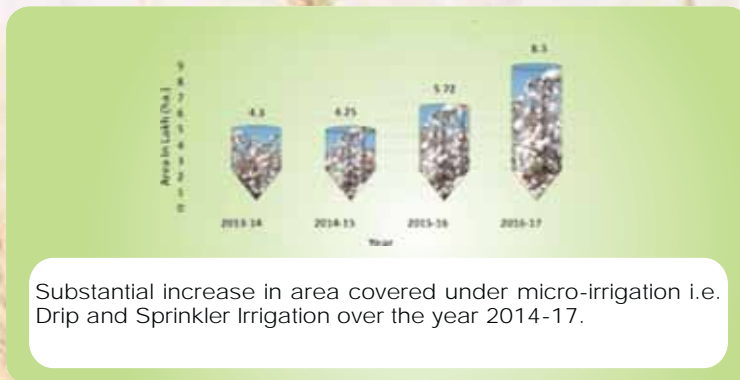
# PRADHAN MANTRI KRISHI SINCHAYEE YOJANA (PMKSY)-MICRO IRRIGATION

- With the mission of **PER DROP MORE CROP**, the present government has allocated more funds under PMKSY so that more area can be covered over irrigation.

## Fund Released for Micro-Irrigation



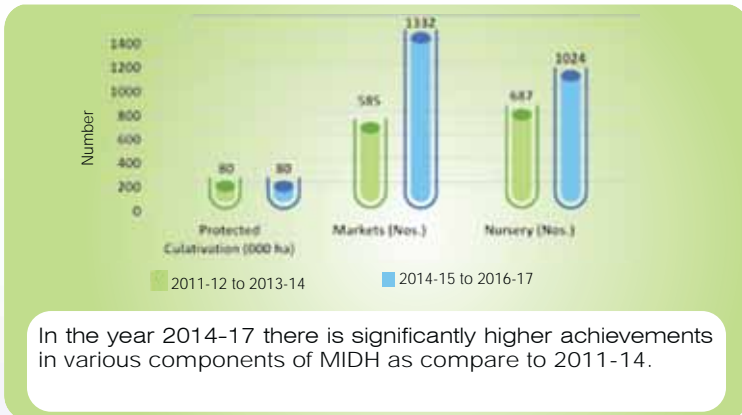
## Area Covered Under Micro-Irrigation



# HORTICULTURE DEVELOPMENT

## Horticulture Development Mission

### Achievement under Major Component of MIDH during 2011-14 & 2014-17



### National Horticulture Board

- NHB assisted over 3100 Cold Storage projects with installed capacity of 140.10 Lakh MT across the country.
- During 2016-17 Board assisted 32 Cold Storage with installed capacity of 1.88 Lakh MT.
- During 2017-18 Board has set target of creation of 3.00 Lakh MT cold storage capacity.
- Technology Development and Transfer for Promotion of Horticulture:
- NHB supported 674 projects/events for Transfer of Technology which includes 127 projects during 2016-17
- NHB accredited 1591 nurseries for production of superior quality planting material.



## Prime Minister Package for J&K

- Rs. 500 crore special package announced on 07.11.2015 towards restoration of damaged horticulture areas and development of horticulture in J&K.
- J&K Govt. submitted its 3 year Action Plan for Rs. 500 crore for 2016-17 to 2018-19.
- Cabinet Committee on Economic Affairs approved one time relaxation of MIDH cost norms for;
- Import of planting material at the maximum cost of Rs. 460 per plant.
- Import of four wire trellis system @ of Rs. 9.8 lakh per hectare.
- Enhanced rate of subsidy @ 90% for provision of planting material.

- Administrative approval for implementation of CCEA's decision has been issued on 08/12/2016.
- Rs. 47.89 crore of (Gol Share) released in 2016-17.

## Saffron Park

- DAC&FW assigned NHB the task of setting up of Saffron Park at Pampore Pulwama (J&K) at a total cost of Rs. 24.45 crores. Park will have facility for Quality Control Lab, Export Promotion Activity and E-auction Centre.
- Civil work of park is almost complete. Plant & Machinery supplied and ready for installation.
- Park likely to become operational during November 2017.



Hon'ble Union Agriculture Minister laid the foundation stone of Saffron Park at Pampore, Pulwama, J&K on 23rd August, 2014.

# COCONUT DEVELOPMENT BOARD (CDB)



- During the period 2011-14, CDB established 7 Nucleus Coconut Seed Gardens, 39 small Coconut nurseries and 295 organic manure units while in 2014-17 CDB established 15 Nucleus Coconut Seed Gardens, 90 small Coconut nurseries and 331 organic manure units.
- Trained 2601 Neera Technicians since scheme started in 2014-15.
- 8851 Ha has been brought under New Plantation during 2014-15 to 2016-17 as compare to 6934 hectare during 2011-14.
- Export of various coconut products was 8500 million tonnes during 2015-16 against import of 5400 million tonnes. This indicates that during 2015-16 India become one of the exporting countries.
- In new Foreign Trade Policy 2015-20, to promote export of coconut products provision is made to provide 5% of FOB(Frieght on Board)

value as incentives.

- As a result, since the beginning of the financial year 2016-17, India started exporting coconut oil to Malasia, Indonesia and Sri Lanka. While during the previous year we were importing coconut oil from these countries.
- For the first time, India is exporting dry coconut in large quantity to USA and European countries.

## Achievement Under Various Component of Coconut Development



Substantial increase in the output under various component of Coconut Development Board.

## Society, Federeation and Coconut Development Company Under CDB



Substantial increase in Coconut Producer Society, Federtion and Producer Companies during last 3 years.

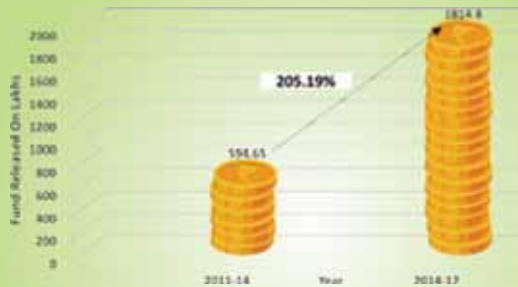
# NATIONAL BEE BOARD (NBB)

## BEE KEEPING

- 6636 beekeepers/beekeeping & honey societies/firms/companies

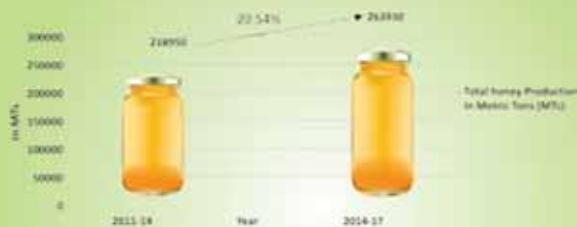
etc. with 10.86 lakh colonies have been registered upto March 31, 2017.

### Fund Released for Promotion of Bee Keeping



Budget for beekeeping has increased almost 205.19% in last 3 years (2014-17) as compared to the period 2011-14.

### Total Honey Production in Metric Tonnes (MTs)

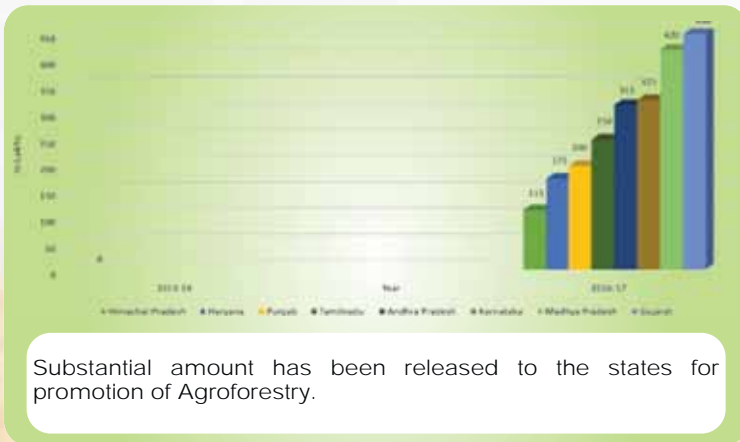


20.54% increase in Honey Production due to increase in assistance and other facilities/support of farmers/beekeepers by NBB.

# SUB MISSION ON AGROFORESTRY

- National Agroforestry Policy formulated to augment farmer's income and achieve climate resilience.
- A dedicated scheme "Sub-Mission on Agroforestry" is launched with aim **"HAR MEDH PAR PED"** during 2016-17.
- Budget provision for central share of Rs. 50 crore (RE) for the year 2016-17.
- Relaxation of transit regulations is pre-requisite for assistance under Sub- Mission on Agroforestry (SMAF).
- 13 States (2016-17 in 8 states and 2017-18 in 5 states) have relaxed this regulation; and all states is being motivated in this direction.

**Fund Released for Promotion of Agroforestry (Rs. Lakh)**



# NATIONAL FOOD SECURITY MISSION (NFSM)

## Pulses

### Steps Taken to Increase Production of Pulses:

- A special scheme under RKVY "Targeting Rice Fallow Areas in Eastern India for Pulses" has been initiated from Rabi 2016 to bring rice fallow areas under cultivation.
- Pigeonpea on rice bunds has been encouraged.
- 31,000 clusters front line demonstrations through 574 KVKs during 2016-17 have been conducted.
- 150 seed hubs established in SAUs/ KVKs/ICAR institutes for production of quality seeds of pulses.
- 15% allocation of pulses component of NFSM is earmarked for production of quality seeds from Kharif 2016.
- After taking above mention

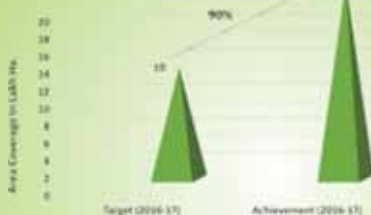
efforts the total production of pulses during 2015-16 was 16.35 million tonnes whereas in 2016-17 production has reached upto 22.15 million tonne which is 35.8% increased over the year 2015-16.

## National Mission on Oilseeds and Oil Palm (NMOOP)

### Oil Seeds:

- NMOOP aims to enhance production of oilseeds from 28.93 million tonnes to 35.51 million tones palm by end of 2016-17.
- Subsidy on water carrying pipes increased from Rs. 25/- per mt to Rs.50/- per mt for HDPE pipes, Rs. 35/- per mt for PVC pipes and inclusion of HDPE laminated woven lay flat tubes with subsidy of Rs. 20/- mt from Kharif- 2016.
- Seed subsidy for certified seed distribution oilseeds was increased by more than 100%.

### Promotion of Oilseeds and Pulses in Rice Fallows of Eastern States



Area under Oilseed and Pulses in rice fallow areas in Eastern India has increased by 90%.



## PROMOTION OF OILPALM IN THE COUNTRY

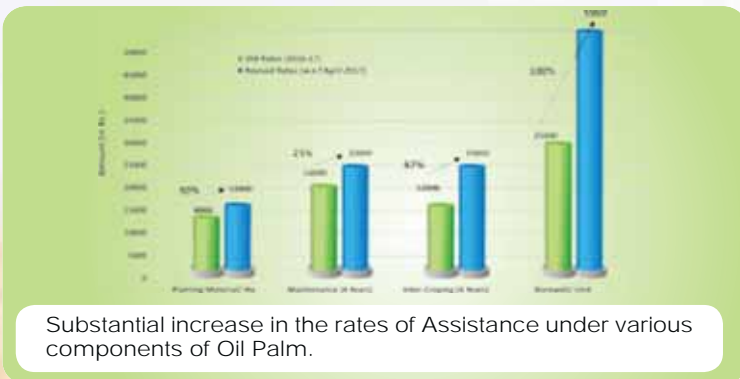
- NMOOP aims at bringing additional area of 1.25 lakh ha under Oil Palm with focus on productivity improvement of Fresh Fruit Bunches (FFBs).
- Oil palm growers have been supported through Market Intervention Scheme (MIS) to assured FFBs prices as and when the international price of CPOs falls below \$ 800.

## CABINET DECISION DATED 12TH APRIL 2017.

Decision 1: In order to encourage large scale plantation under Oil Palm cultivation, assistance has been approved for undertaking plantation in more than 25 ha. area under Oil Palm.

Decision 2: Enhanced assistance for the components of Oil Palm such as planting material, maintenance cost, intercropping and Bore-well.

### Increase in Assistance for Various Components of Oil Palm Development



# PLANT PROTECTION

## Reforms Made in the last Three Years

- Four new Plant Quarantine Station has been opened at Lucknow, Bagdogra, Goa and Port Blair.
- Under 'Single Window System', the integration of Customs EDI System (ICEGATE) with PQIS at 51 PQ Stations at national level has been implemented through online message exchange system for according import clearance.
- The online issuance of the phytosanitary certificates is in advance stage. Digital signatures of the phytosanitary issuing Officers are being prepared for issuing e-phyto.

Plant Protection Pesticides Export Registration



Increases of 62% in Plant Protection Pesticide Export Registration over 2011-14.

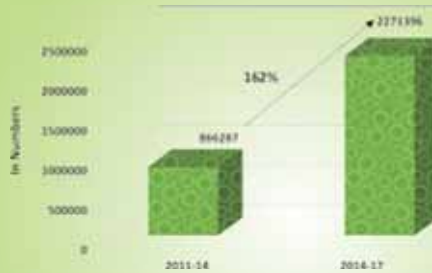
Plant Protection Pesticides Registration



The number of Pesticide Registration has been increased by 210% on account of better monitoring and use of technology.

# AGRICULTURAL MECHANIZATION

## Numbers of Machinery Distributed to Farmers



An increase of 162% in number of machineries distributed to farmers under various schemes during 2014-17 as compared to the number of machinery distributed during 2011-14.

## Allocation of Funds



Allocation of funds increased almost by 527 % in 2014-17, under Agriculture Mechanization as compared to allocation of funds during 2011-14.



# SEED

## Initiatives and Achievements of the Seed Devison

- The Department has issued Cotton Seed Price Control Order, 2015 under Section 3 of the Essential Commodities Act, 1955 for regulating the maximum sale price (MSP) of Bt cotton hybrid seeds. The maximum sale price of Bt cotton seed for Kharif 2016 was as under:

BG I Cotton	BG II Cotton
Rs. 635/- (with zero trait value) as per pkt. of 450 grams.	Rs. 800/- (with Rs. 49/- trait value) as per pkt. of 450 grams.

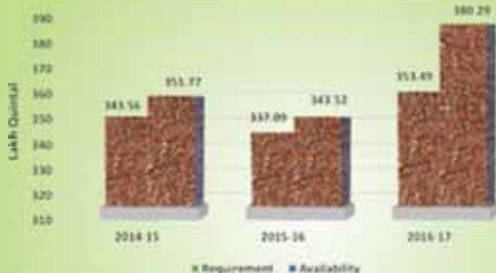
- The same maximum sale price of Bt cotton seeds for Kharif 2017 was retained at par with Kharif 2016.
- In the last three years, 96,778

Seed Village Programmes were organised and 316.31 lakh Qtl. seed were produced involving 66.56 lakh farmers under Seed Village Programme.

- Proposals for transfer of Germplasm/plant genetic resources under Multilateral Systems of the International Treaty on Plant Genetic Resources for

Food and Agriculture (ITPGRFA) were examined and 3158 accessions of various crops were recommended for export to various countries.

## Initiatives and Achievements of the Seed Devison



Due to effective implementation of Govt schemes, availability of certified / quality seeds are adequately available than the requirement.

# NATIONAL SEED CORPORATION (NSC)

- 661 varieties of agricultural crops and 136 varieties of horticulture crops were released and notified during the period 2014-15 to 2016-17.
- 528 cases for export and 579 cases for import of seeds and planting material were recommended by the EXIM committee during the period 2014-15 to 2016-17.

National Seed Corporation Turnover



# PROTECTION OF PLANT VARIETIES & FARMERS RIGHTS AUTHORITY (PPV&FRA)

## For the Benefit of Farmers New Initiatives Taken by Protection of Plant Varieties & Farmers Right Authority (PPV&FRA)

- Three New Branch Offices of PPV&FR Authority have been approved recently for

establishment at Palampur (H.P.) which will cover the States of Northern Hill Zone, another at Pune (Maharashtra) which will cover the Central and Western Zone States and third one at Shivamogga (Karnataka) for Southern States.

Applications received under PPV&FR ACT, 2001



Under PPV&FRA 120% increase in application received during 2014-17 as compared to the year 2011-14.

Number of Varieties Registered under PPV&FR ACT, 2001



Under PPV&FRA 164% increase in Varieties registered during 2014-17 as compared to the year 2011-14.



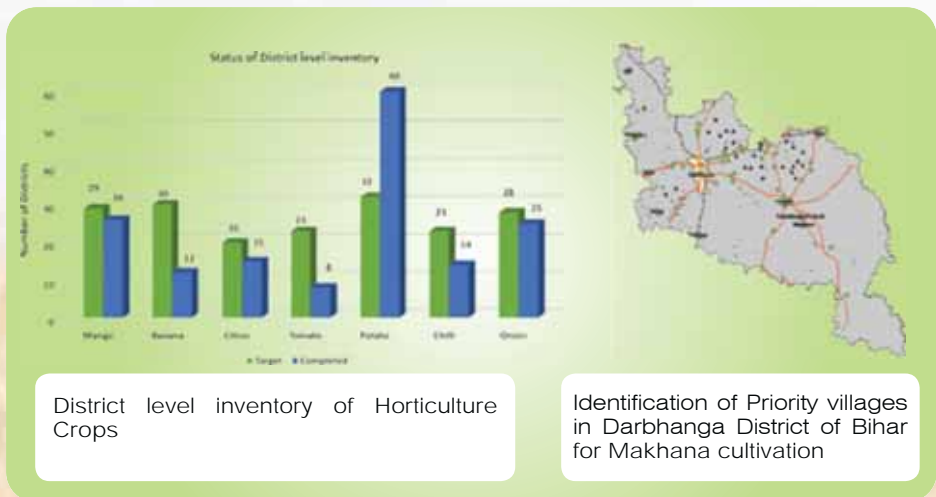
On 19th April, 2017 at Motihari, East Champaran, Bihar 5 Plant Genome Saviour Community Award, 10 Plant Genome Saviour Farmers Reward and 20 Plant Genome Saviour Farmers Reorganization Award were conferred by Hon'ble Union Minister of Agriculture.

# MAHALANOBIS NATIONAL CROP FORECAST CENTRE (MNCFC)

## Program of Mahalanobis National Crop Forecast Centre (MNCFC):

- CHAMAN (Coordinated Horticulture Assessment and Management using geo-Informatics)
- FASAL (Forecasting Agricultural output using Space, Agro-meteorology & Land based observations)
- NADAMS (National Agricultural Drought Assessment and Monitoring System).
- KISAN (C[K]rop Insurance using Space technology and geo-informatics).
- Crop Intensification in post kharif rice-fallow area.

## Status of District Level Inventory

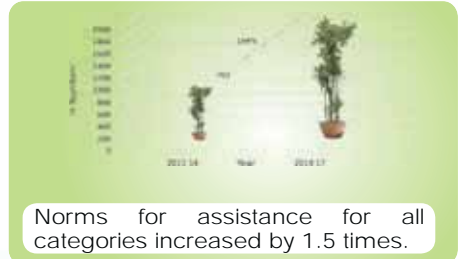


District level inventory of Horticulture Crops

Identification of Priority villages in Darbhanga District of Bihar for Makhana cultivation

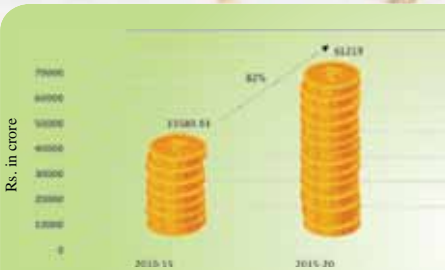
# DROUGHT MANAGEMENT- CHANGES IN NORMS FOR ASSISTANCE

- Norms for assistance for all categories increased by 1.5 times.
- The threshold for eligibility for assistance due to crop loss lowered to 33% from 50%.
- The admissibility for assistance raised from 1 ha. to 2 ha. in all cases.
- The financial assistance paid to the farmers in the event of death increased to Rs. 4 lakh from Rs. 1.5 lakh.
- To execute relief assistance to the



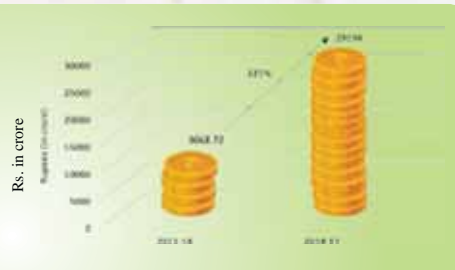
affected persons due to natural calamities, first time, UT-DRF fund has been created with an allocation of Rs. 50 crore.

## Allocation of the Funds to States under State Disaster Response Fund (SDRF)



Allocation of Funds to states under SDRF has increase 82% during 2014-17 as compared to 2011-14.

## Central Assistance Approved to States by Gov. under National Disaster Response Fund (NDRF)



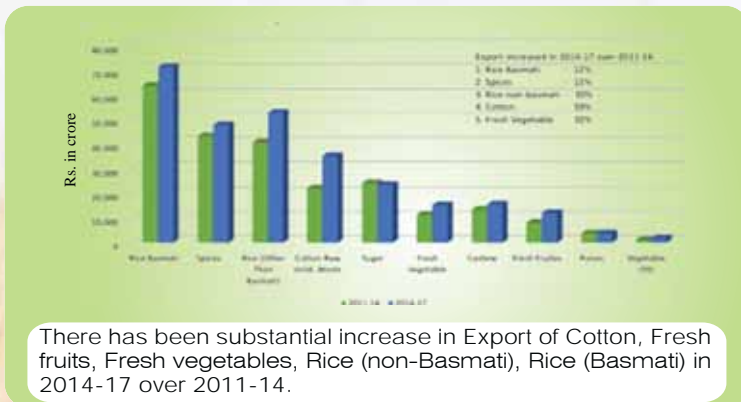
Assistance of Fund under NDRF to states as increase 215% during 2014-17(Rs. 28605.38 crore) as compared to year 2011-14(Rs. 9068.72 crore) While states of Karnataka, Kerala and Pondicherry are under consideration

# AGRICULTURE TRADE

## Steps Taken for increasing Agriculture Export

- Import duty on wheat was raised from zero to 10% with effect from 28.3.2017.
- Import duty on Tur (Arhar) was raised from zero to 10% with effect from 28.3.2017.
- Export restriction (packaging norms) were relaxed for edible oil (sesame oil, groundnut oil, soybean oil, and maize (corn oil) by reviewing the packaging restriction w.e.f. 27th March, 2017.
- Import duty on crude edible oil was increased from 7.5% to 12.5% and refined edible oil from 15% to 20% w.e.f. 17.9.2015.
- Import duty on sugar was raised from 25% to 40% with effect from 30.4.2015.

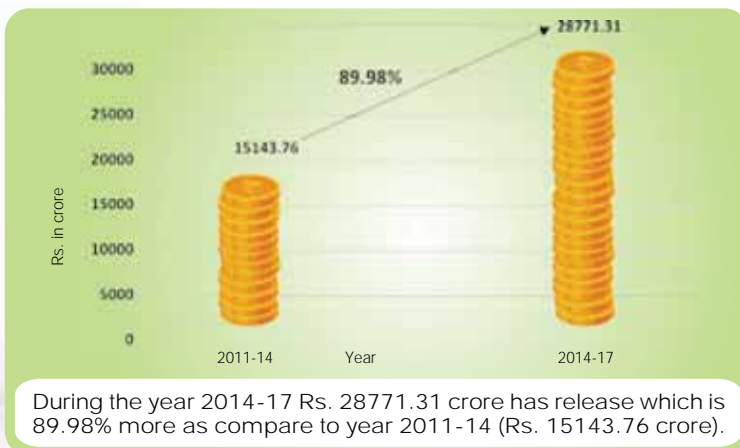
## Export of Major Agri-Item from 2011-14 to 2014-17



# NATIONAL COOPERATIVE DEVELOPMENT CORPORATION (NCDC)

- National Cooperative Development Corporation (NCDC) gives comprehensive support to cooperative sector in terms of government grant and loan.

## Disbursement of amount by NCDC



# INFORMATION TECHNOLOGY AND KAUSHAL VIKAS

## Following Mobile Apps developed for the Farmers:

- Kisan Suvidha
- Pusa Krishi
- Crop Insurance
- Crop Insurance Portal
- AgriMarket
- CCE Agri

## Skill Development in Agriculture

- First time during 2016-17, skill training programme conducted by DAC&FW from RKVY funds in collaboration with Extension Division of ICAR and Agriculture Skill Council of India (ASCI).
- Accredited 100 KVKs and 8 Training Institutes by Agriculture Skill Council of India (ASCI) for skill training during 2016-17.
- Rs. 3.52 crores sanctioned for conducting 216 skill training during 2016-17; 206 training programmes were organised.
- 168 QPS developed by ASCI for skill training in agriculture and allied sector.



National Skill Development Workshop, "Kaushal Vikas Se Krishi Vikas" organised by DAC&FW on January 5, 2017 at New Delhi.



Regional Skill Development Workshop organised by DAC & FW in collaboration of MANAGE at Hyderabad on February 20, 2017 for Southern States.



# RASHTRIYA KRISHI VIKAS YOJANA (RKVY)

- Government launched revised RKVY Scheme in 2014-15 to provide more flexibility to the State for boosting investment and enhancing productivity in agriculture and allied sector.
- Sub-scheme on Targeting Rice Fallow for Pulses & Oilseeds was introduced under RKVY as special scheme during 2016-17. The Allocation of Sub-Scheme was Rs. 50 crore.
- In order to address the problem of soil acidity, alkalinity and salinity, a sub scheme of Reclamation of Problematic Soils was introduced under RKVY in 2016-17. The Allocation of Sub-Scheme was Rs. 50 crore.
- During 2014-15 to 2016-17 Maharashtra, Karnataka have taken up 5 projects under Public Private Partnership for Integrated Development of Agriculture.
- During 2014-15, Additional Fodder Development Programme was initiated under RKVY to address the fodder needs of cattle in drought affected states. During 2014-15, 2015-16 AND 2016-17 an amount of Rs 78.14 crores was released to the states.

## Project Taken by States Under RKVY in Various Sector



Project Taken up By States Under RKVY in Various Sector During Financial Year 2011-12 & 2012-13  
(in per centiles share by states in RKVY RDMS Portal)

SERI = Sericulture, Other = Innovative Programme, NONF = Non Farm Activities, ITEC = Information Technology, AGRE = Agri/Horti/Animal Husbandary

Substantial increase in the projects under RKVY.

# INTERNATIONAL COOPERATION



## Bilateral Cooperation (MoU / MoC / Agreements / Work Plans)

- DAC&FW has signed a Memorandum of Understanding (MOU) on cooperation in the field of agriculture and its allied sectors with 9 countries during the last three years:- Armenia, Madagascar, Lithuania, Japan, Kyrgyzstan, Portugal, Kenya, Mauritius and UAE.
- An MoU was signed by Govt. of India with UN-World Food Programme on 18<sup>th</sup> Aug. 2015 and the Global Crop Diversity Trust (GCDT), Bonn, Germany on 7<sup>th</sup> Nov. 2016.

## International Events

- Brics Agriculture Minister's Meeting: The Department successfully organized the 6th meeting of Agriculture Ministers of the BRICS countries on September 23, 2016 in New Delhi.
- MoA&FW in collaboration with FICCI successfully organized the India Africa- Agribusiness Forum, at New Delhi on 10-11<sup>th</sup> February, 2016 in which several Ministers, Government officials and company representatives participated.

# SWACHHTA PAKHWADA



## Ek Kadam Swachhta Ki Aur

- 271 Agricultural Mandis were covered in Swachhta Drive during the Pakhwada and cleaning drives were also undertaken in Krishi Bhawan Hqr. as well as attached offices.
  - It has been decided to make provision of Rs. 5 lakhs each mandi for setting up waste management plants under e-NAM scheme.
  - It was decided to formulate a solid & liquid waste management in agriculture plan as a Sub Scheme of Rashtriya Krishi Vikas Yojana (RKVY) for which 1% of the allocation of RKVY be made under
- this sub scheme for release to the states.
- A video conference was held on 27.10.2016 with representatives of States/ UTs and they have been briefed about the "Swachhta Pakhwada Activities". They have also been requested to make adequate provisions in their existing Schemes to prepare Compost from farm wastes.
  - During 16th to 31st May 2017 again Swachh Pakhwada organized by different Divisions of this department in Agriculture and Mandies.





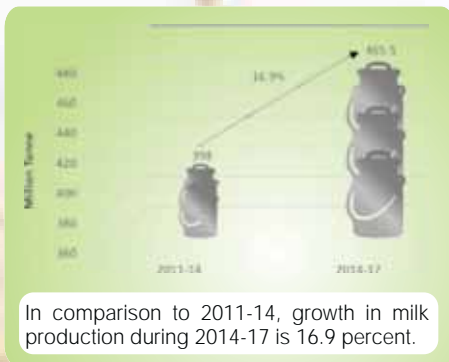
DEPARTMENT OF ANIMAL HUSBANDRY,  
DAIRYING & FISHERIES



## DAIRY DEVELOPMENT: RASHTRIYA GOKUL MISSION

- Rashtriya Gokul Mission has been started with manifold increase in budget allocation for Development and Conservation of Indigenous Breeds in a scientific and holistic manner. Budget allocation 13 times more during last three years compared to 2011-14.
  - Two new National Kamdhenu Breeding Centre ( one in north India in Madhya Pradesh and one in the south India in Andhra Pradesh ) are being set up for
- which an amount of Rs. 50 crore has been released.
- First time in the country for development and conservation of indigenous breeds 14 gokul grams approved.
  - India is on First place in milk Production and it contributes 19% of the total world milk production.
  - The earnings of dairy farmers registered an average increase of 13.79% during last three years.

Milk Production



Increase in average price paid to farmers



### DAIRY PROCESSING AND INFRASTRUCTURE DEVELOPMENT FUND

- Dairy Processing and Infrastructure Development Fund to be set up with a corpus of Rs. 2000 crores for 2017-18 and will be increased to Rs. 8000 crores over 3 years. This Department has initiated
- steps to finalize the scheme in consultation with the Ministry of Finance, NITI Ayog, Ministry of Rural Development and Ministry of Food Processing Industries.

# NATIONAL BOVINE PRODUCTIVITY MISSION

- In order to enhance milk production and productivity and to make dairying more remunerative to the farmers, Government of India has initiated new scheme National Mission on Bovine Productivity with an allocation of Rs 825 crore over a period of three years with the aim of genetic upgradation of cattle and buffalo population through delivery of breeding inputs at farmers' doorstep and it includes establishment of Multi Purpose AI Technicians in Rural India (MAITRIs) on self sustainable basis and streamlining of liquid nitrogen transport and distribution system. The components of the scheme are as under:
  1. Pashudhun Sanjivni: an animal wellness programme encompassing: i) animal health cards (Nakul Swasthya Patra); ii) Unique Identification number and iii) national data base.
  2. Advanced Breeding Technology: including assisted reproductive technique improving availability of disease free female bovines.
  3. Creation of e-pashudhanHaat: an e-market portal for bovine germplasm for connecting breeders and farmers of indigenous bovine breeds.
- 4. National Genomic Centre: National Genomic Centre would be established to enhance milk production and productivity of indigenous breeds through rapid genetic upgradation.

## Benefits of e-pashudhan haat

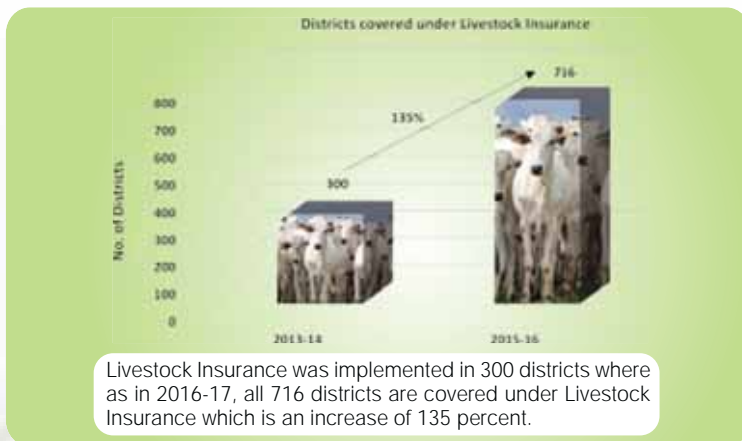
- Through this portal farmers will be aware about breed wise information on indigenous breeds. Farmers/breeders can sale animals of indigenous breeds through this portal. Information on all forms of germplasm has been uploaded on the portal. Farmers may obtain benefits of the portal Immediately.
- Through the portal there will be no involvement of middlemen in sale and purchase of animals. Portal for sale and purchase of germplasm in all the forms is not available even in developed dairy countries.



E-pashudhan Haat Web Portal

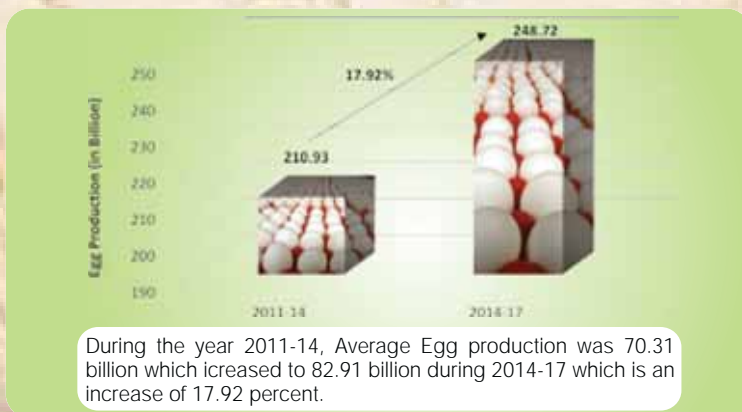
# NATIONAL LIVESTOCK MISSION

- The scope and coverage of Livestock Insurance has been increased from 300 districts to all 716 districts. Simultaneously, the coverage of livestock insurance has been extended from only 2 milch animals to 5 milch animals/ other animals or 50 small animals.



- The annual growth rate of egg production is 5%.
- Per capita availability has increased to 66 eggs per annum.

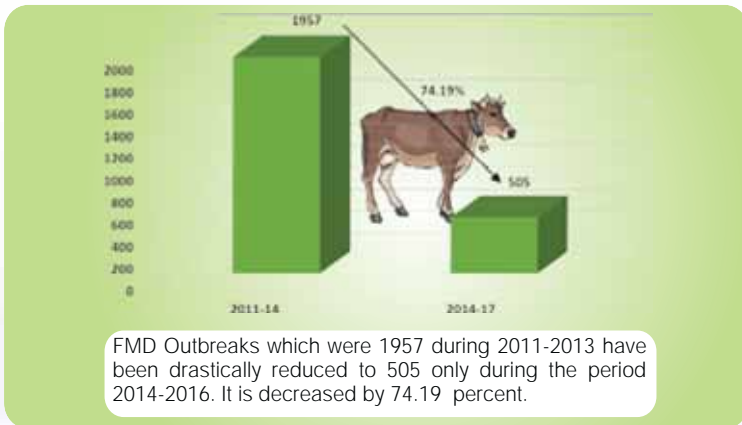
## Egg Production



# LIVESTOCK HEALTH

- Based on effective implementation of FMD control programme, three zones have also been established as FMD free zones with vaccination.

## Reduction in Foot and Mouth Disease Outbreaks



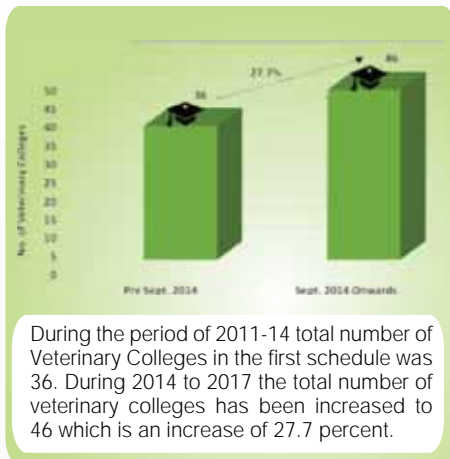
- HS outbreaks which were 698 during 2011-2014 have been reduced significantly to 300 during 2014-2017.



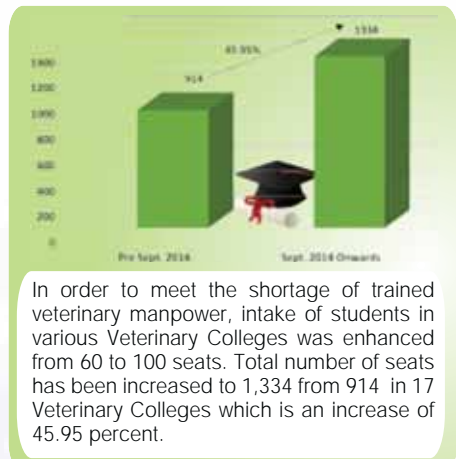


# VETERINARY EDUCATION

Increase in Veterinary Colleges



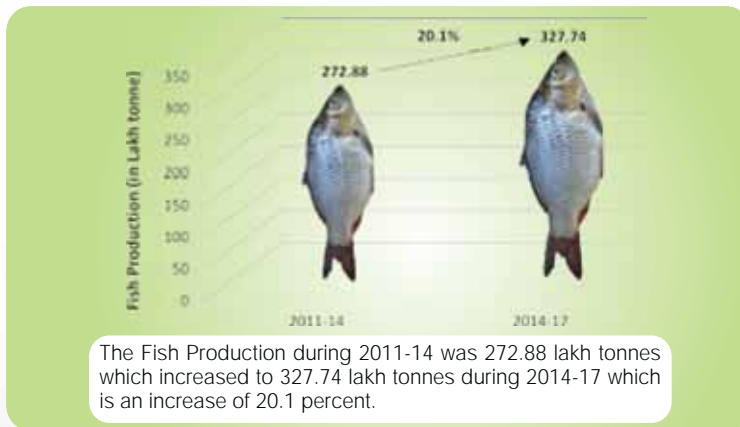
Increase in seats of Veterinary Colleges



- Due to increase in the number of colleges in the first schedule, total number of veterinary graduates increased to 3398 each year during 2014-17 which was 2160 during 2011-14.
- The VCI has amended the existing MSVE Regulations, 2008 and now MSVE Regulations, 2016 has been notified on 8.07.2016. The salient features in the Revised MSVE are as under:
  - a) Increase in annual admissions in B.V.Sc and AH course to 80 from 60 in the present MSVE.
  - b) Increased in time for B.V.Sc & A.H. courses from 5 years to 5 and half years with enhance internship programme from six months to one year and course work for four and half years.
  - c) Introduction of reservation policy for SC, ST, OBC and Physically Handicapped which was not in the earlier MSVE.
  - d) The credit hours for B.V. Sc & A.H. courses have been reduced from 179 hr to 81 hr. and the courses will be of annual basis instead of semester.
  - e) Introduction of Additional courses / Syllabus such as Animal Welfare, Hazard Analysis and critical control points, Risk Analysis, sanitary and phytosanitary measures etc.

# FISHERIES - BLUE REVOLUTION

## Fish Production



## DEEP SEA FISHING

- This Department, on 09 March, 2017 has introduced a sub component namely, "Assistance for Deep Sea Fishing" under the existing component 'Development of Marine Fisheries, Infrastructure and Post Harvest Operations' of Blue Revolution Scheme. This will promote capacity building in traditional fishermen to venture into deep sea fishing and to support

their livelihood with comparatively higher income generation. The sub-component aims to introduce intermediate size of modern deep sea fishing vessels (DSFVs) to the traditional fishermen for operating in the Indian Exclusive Economic Zone (EEZ), beyond territorial waters to enable our fishers to harness fishery resources in the deep sea.



# WELFARE OF FISHERMEN

## Saving-cum-relief amount enhanced for welfare of fishermen



Blue Revolution : Under Integrated Development Management of Fisheries, Saving Cum Relief Amount increased by 150 percent during fishing ban period of 3 months for welfare of fishermen.

- Annual Insurance premium for fisher folk brought down to Rs. 20.34 from Rs. 29.00.
- Insurance cover increased to Rs. 2.00 lakh from Rs. 1.00 lakh for accidental death and permanent disability.

## Fisheries Infrastructure Development



Central Fund for central fisheries infrastructure development has increased by 27.09 percent.

# TRADE - OUR PRIORITY

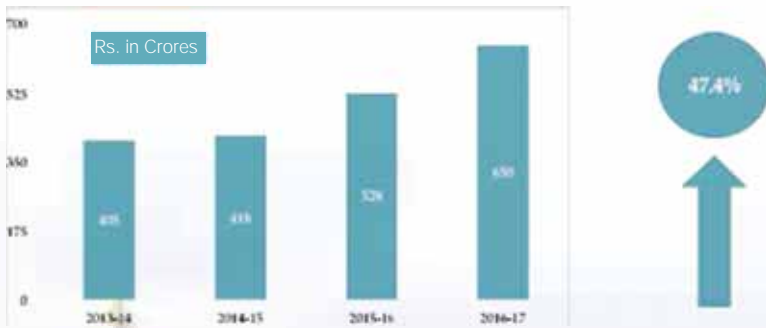
- Implementation of Single Window System for on-line clearance of livestock and livestock products by all six Animal Quarantine & Certification Services Stations at Delhi, Mumbai, Kolkata, Chennai, Hyderabad and Bengaluru.
- Sanitary Import Permit(SIP) website for online receipt and processing of SIP applications for import of livestock products fully implemented since 01.10.2016.
- 10 new additional entry points viz, Atari (Punjab), Raxaul (Bihar), Sunauli Land Custom Station, Jogbani (Bihar), Kandla, Kochi, Krishnapatnam, Vishakhapatnam, Mundra and land port of Agartala (Tripura) notified vide notification S.O. 948(E) 22nd March, 2017 for the import / export of livestock and livestock products.
- AQCS office at Petrapole ICP, West Bengal has been inaugurated to facilitate export/import of livestock and livestock products from Bangladesh.



# DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

## AGRICULTURAL EDUCATION

### Enhanced Agricultural Education Budget



### Revised Curricula by Fifth Deans' Committee

#### New Programmes introduced

- B. Tech (Biotechnology)
- B.Sc. Community Science
- B.Sc. Food Nutrition & Dietetics
- B.Sc. Sericulture

#### Degrees in Agricultural Sciences declared Professional

#### Holistic distribution of courses in UG

- Traditional Courses in I Year
- Technology based Courses in II Year
- Talent based Courses in III Year
- Trade based Courses in IV Year

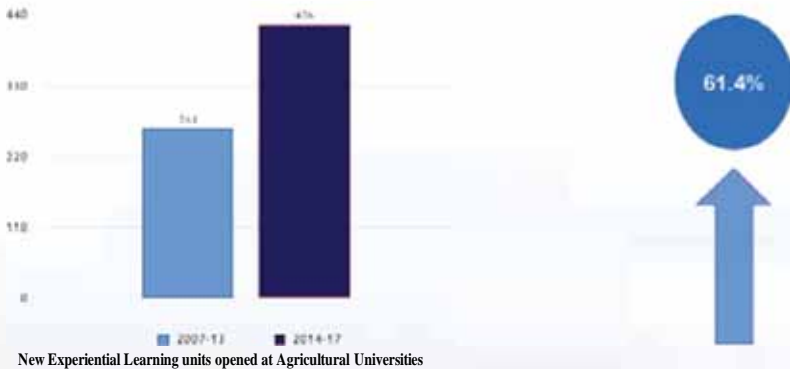
#### Compulsory common courses introduced



Approval of Fifth Deans' Committee  
Report 29 June 2016



## New Experiential Learning Units opened at Agricultural Universities



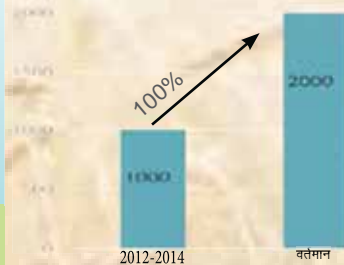
New Experiential Learning units opened at Agricultural Universities

These units apart from training, offer real time experience of profit earning to the farmers.

## National Talent Scholarship for UG doubled



- From Rs 1000 p.m. to Rs 2000 p.m.
- Number of beneficiaries: 1351





### Financial Support to New Universities

Funds worth Rs. 122.5 Crores each released to ANGRAU, Andhra Pradesh & SKLTSHU, Telangana.



### Efforts made to bring green revolution in Eastern and North-Eastern States

- The Rajendra Prasad Agricultural University Upgraded as Dr. Rajendra Prasad Central Agricultural University
- On the Lines of Indian Agricultural Research Institute (IARI), Pusa, New Delhi, two new Institutes namely IARI, Jharkhand and IARI, Assam are being established. The establishment of IARI, Jharkhand is in progress and the laying of foundation stone of IARI, Assam will be done by Hon'ble Prime Minister on 26th May 2017.



## Student READY

Under the Student Ready Scheme, launched by Hon'ble Prime Minister on 25 July 2015, the fellowship for all the students for the 6 months training has been revised to Rs 3,000 pm from Rs. 1,000 pm from 2016-17.

### Components of Student READY

- 1 Experiential Learning (EL)
- 2 Rural Agriculture Work Experience (RAWE)
- 3 In Plant Training/ Industrial Attachment/Internship
- 4 Skill Development Training
- 5 Student Project



## Netaji Subhas – ICAR International Fellowships

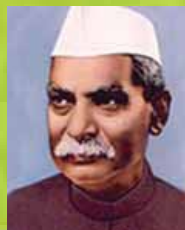
- To develop competent human resources that are trained in the identified best laboratories in the world (for Indian candidates) - 79 students
- To expose overseas candidates to the best Indian Agricultural Universities (AUs) in the ICAR-AU system for creating a pool of scientist-envoys for enhanced future co-operation – 23 students

### Annually 30 Fellowships

- @ US \$ 2000 p.m. for Indian candidates and
- @ Rs 40,000 p.m. for Overseas candidates
- Fresh and in-service (ICAR/ SAUs)







### **Pt. Deendayal Upadhyay Unnat Krishi Shiksha Yojana**

- 130 training programmes on Organic Farming/Natural Farming and Cow based Economy initiated in 32 State Agricultural Universities
- Identified 100 Centers with budget - Rs. 5.35 crores
- Organized 5 regional workshops-cum-training (Lucknow, Kolapur, Avikanagar, Amritsar and Jhansi)

### **National Agricultural Education Day**

Declared 3rd December as National Agricultural Education Day in the memory of First Food and Agriculture Minister

Dr. Rajendra Prasad

### **National Agricultural Higher Education Project**

- Proposed with an outlay of USD 165.0 million (Rs.1000 crores)
- Funded by the World Bank and Government of India on 50:50 cost sharing basis
- Duration of the Scheme: six years (2016-17 to 2021-22)
- EFC circulated among the Departments concerned

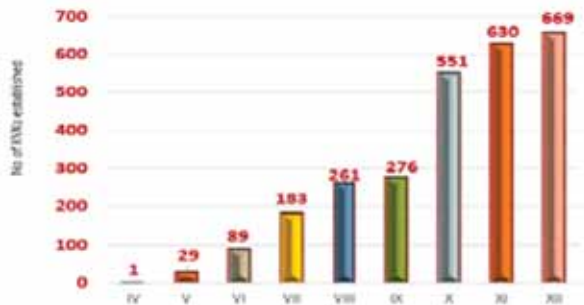
### **Four New Annual ICAR Awards Instituted**

<b>Name of Award (Numbers)</b>	<b>Year of Institution</b>	<b>Value of the Award</b>
1) ICAR Administrative Awards (3 awards one each in Technical, administrative & supporting categories)	2014	Rs. 51,000/- each
2) Haldhar Organic Farmer Award (1)	2015	Rs. 1,00,000/-
3) Pandit Deendayal Antyodaya Krishi Puruskar (1 National & 11 Zonal Awards)	2016	National :Rs. 1,00,000/- Zonal Rs. 51,000/- each
4) Pandit Deendayal Rashtriya Krishi Vigyan Protsahan Puraskar (1 National & 11 Zonal awards)	2016	National :Rs. 25,00,000/- Zonal :Rs. 2,25,000/- each

# AGRICULTURAL EXTENSION

## Growth of KVKs

Period	New KVKs established
2014-17	32
2012-14	07



## Pulses Demonstrations by KVKs





## Oilseeds Demonstrations by KVKs

Area in Hectares



Demonstrations



## Farmer FIRST

Enriching Knowledge: Integrating Technology



- Enhancing Farmers –Scientist Interface
- Technology Assemblage, Application and feedback
- Partnership and Institution Building
- Content Mobilization
- 52 Projects sanctioned to ICAR Institutes/AUs with an outlay of Rs. 14.22 crore covering 45000 farmers





## Mera Gaon Mera Gaurav (My Village My Pride)

- Group of 4 Agricultural Scientists (Multidisciplinary) working with 5 identified villages
- Facilitation of knowledge, skill and information to farmers
- Issuing timely alerts and advisories
- Providing information on inputs, service providers etc.
- Developing convergence with different departments and organizations for the development of villages
- 2500 villages are to be covered



## Attracting and Retaining Youth in Agriculture (ARYA)



- Attract and empower the youth in rural areas
- Take up various agriculture, allied and service sector enterprises for sustainable income and gainful employment
- Emphasis on processing, value addition, marketing and networking
- Entrepreneurship and value chain management
- 200-300 youth per district are involved to 25KVKs in 25 states
- ARYA is to be expanded in 75 more districts



## Krishi Unnati Mela 2016 and 2017

Krishi Unnati Mela was organized in 2016 & 2017 during which the various Agro Industries from all over the country participated. More than 5 lakh farmers attended and got benefited from these events.

### Objective:

To acquaint the farmers about new varieties and technologies developed by ICAR.

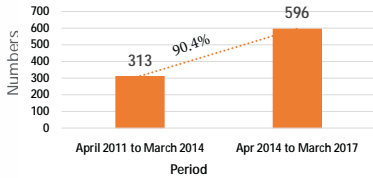
- Live demonstrations of production technologies of crops
- Farmers' visits to experimental fields of IARI
- Technologies for protected cultivation of vegetables and flowers
- Display and sale of farm equipment and machinery by the ICAR Institute and private companies
- Live Demonstration of Farm Animal
- Sale of seeds of HYV's of crops, swaplings, and seedlings by IARI and other public and private organisations
- Free testing of soil and water
- Display and sale of bio-fertilizers and agro-chemicals
- Irrigation technology for water saving



- Display and sale of Innovative Farmers products
- Kisan Gosthi
- Farm women empowerment workshop

# AGRICULTURAL RESEARCH

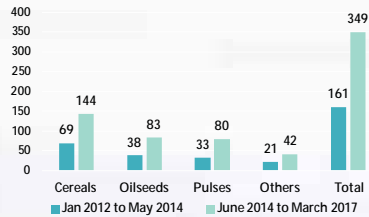
## Crop varieties released during the last five years



Crop group	April 2011 to March 2014	April 2014 to March 2017
Cereals	184	329
Pulses	43	84
Oilseeds	47	92
Others	39	91
<b>Total</b>	<b>313</b>	<b>596</b>

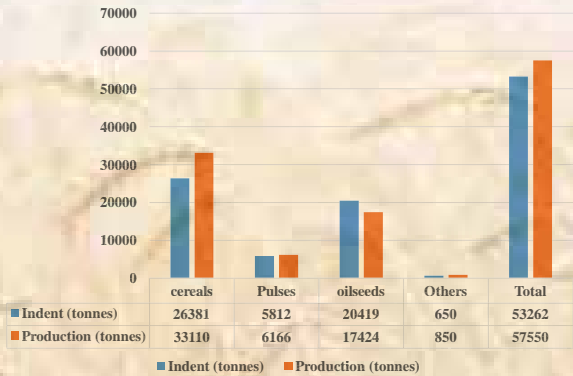
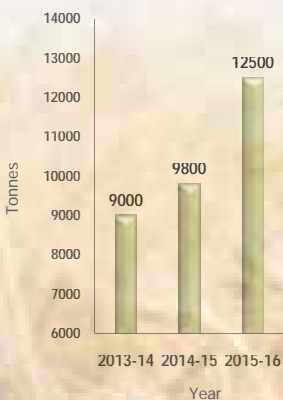
### Number of climate-resilient released varieties tolerant/resistant to abiotic stresses

Crop	Jan 2012 to May 2014	June 2014 to March 2017
Cereals	69	144
Oilseeds	38	83
Pulses	33	80
Others	21	42
<b>Total</b>	<b>161</b>	<b>349</b>



## Breeder Seed Production

Breeder seed production was higher than indent in most of the crops



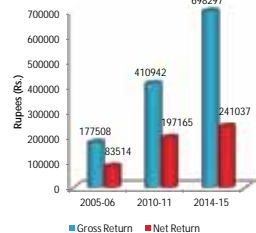


## Integrated Farming System Model for Doubling Farm Income



Household size: 1.20 ha, 7 member family

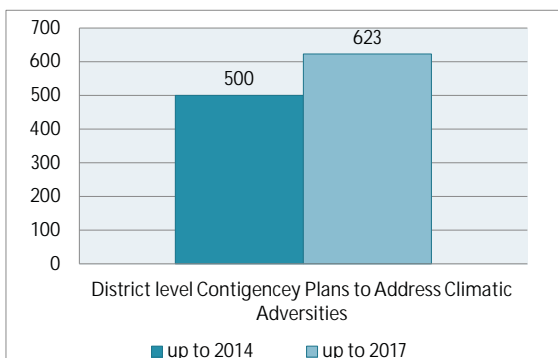
Field crops	0.84 ha
Hort. crops	0.22 ha
Dairy	2 Buffalo + 1 Cow
Fishery	0.10 ha
Vermi-compost	0.01 ha
Mushroom	12 nos. 4 tier racks
Boundary Plantation (200m running length)	



- 45 IFS models developed for different agro-ecological regions of the country.
- IFS linked to profitability, livelihood generation and risk minimization.
- IFS provide more stable incomes even during years of extreme weather events
- Need dedicated scheme for promotion of multi-entrepise IFS.
- Net Profit (mean of 3 years): Rs 2.5 lakhs during 2014-15
- Recycling: 34 % of total inputs except labour
- Value of additional employment: Rs. 88,000

## District Contingency Plans

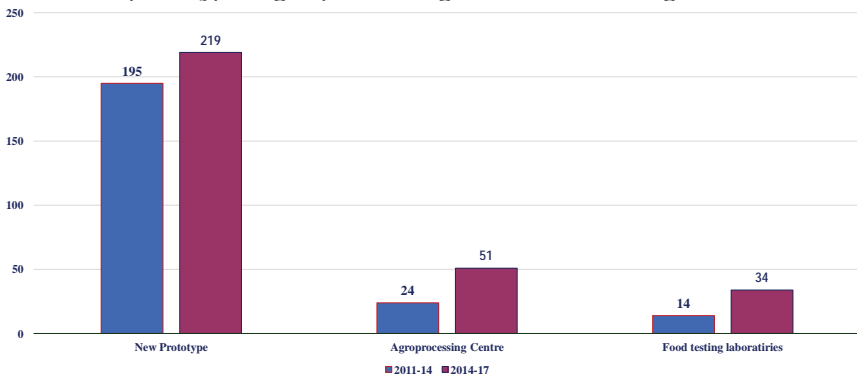
Developed 623 District agricultural contingency plans: Technological interventions for various weather aberrations addressing different sectors of agriculture including horticulture, livestock, poultry, fisheries.





## New prototypes of farm machinery developed, agro-processing centers and food-testing laboratories established

New prototype, agro-processing unit & food testing laboratories



## Vaccines developed

- Johne's disease
- Peste des petits ruminants (PPR)
- Goat Pox
- Equiherpabort
- Classical Swine Fever



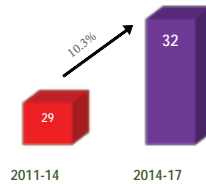




## Diagnostic kits developed

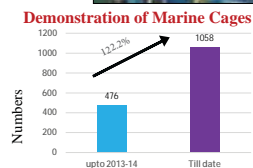
32 Diagnostic kits were developed during the period 2014-17 which is 10.3% more than 29 kits developed during the period 2011-14.

- ELISA kit - *Theileria equi*
- ELISA kit - Japanese encephalitis
- Lateral Flow Assay - Brucellosis
- Lateral Flow Assay - *Trypanosoma evansi*
- Paper strip assay - Pesticides residues in milk
- DBT-Biotech Product Award to NIVEDI
- For the development of ELISA kits
- for diagnosis of brucellosis



## Open-Sea Cage Aquaculture

- Marine cage culture of cobia (*Rachycentron canadum*) and silver pompano (*Trachinotus blochii*) - technology demonstration
- Demonstrated avg. production levels of 3.0 tonnes in 6 months (6 m dia x 6 m depth) 25-30 kg/m<sup>3</sup>
- Cost of production Rs. 180/kg for cobia and pompano. Farm gate price - Rs. 350/kg (cobia) & Rs. 300/kg (silver pompano)
- 1058 cages installed all along the coast of India with the technical support of ICAR-CMFRI



# DEVELOPMENT OF AGRICULTURAL TECHNOLOGIES

## New landmark crop varieties & technologies developed by ICAR during the last 3 years

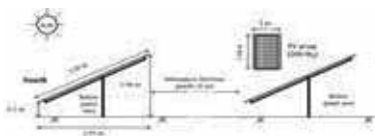
- High yielding rice varieties resistant to draught (1), Blast (3) and Bacterial leaf blight (5) developed using marker assisted selection
- Rice Variety (CR Dhan 310) with high protein content (10.3%) developed
- Rice Variety (DRR Dhan 45) with high Zn content (22ppm) developed
- Dual purpose wheat (grain & fodder) variety (VL Gehun 829) developed
- Low Erucic Acid (<2%) containing mustard variety Pusa Mustard 30
- Three Bt. cotton cultivars viz; PAU-1, RS- 2013 and F-1861 have been identified and recommended for commercial release by ICAR.



Central Cotton Research Institute, Nagpur has developed a new BT Cell, CISR-RS 2013 which yields 3046 Kg per hectare, highest among cotton varieties.

## Agri-Voltaic System/Solar Farming

### Agri-voltaic system



- Model area: 1 ha
- Solar PV generation capacity: 0.5 MW
- Electricity generation per day: 2500 kWh
- Investment : Rs. 2.5 crores
- Income generation from electricity: About Rs 45 lakhs per annum
- Life of the system : 25 years
- Total cost recovery in 7 years
- Moong bean yield: 4 q/ha

### Ridge furrow seed drill for in-situ soil moisture conservation in solar farming system



### Development of solar PV sprayer for spraying agricultural chemicals in solar farming system



## New improved varieties of pig and poultry developed

- New crossbred Pig varieties; Rani, Asha, HD-K75 and Jahrsuk developed
- Three new varieties of Poultry birds (Kamrupa, Narmadanidhi and Jharsim) developed



## Development of New-Generation Fishing Vessels

- Design of a new-generation, fuel-efficient and multi-purpose fishing vessel developed and commissioned.

Multipurpose fishing vessel for Trawling, Gill-netting and Long-lining





## New ICT Apps and Portals

- Web Portal-Krishi Vigyan Kendra Knowledge Network
- PUSA KRISHI- Technology Mobile App
- Mobile app "riceXpert"
- E-Kapas Network and Technology Documentation
- PulsExpert for pests & diseases
- e-Pest Surveillance and Advisory System for Horti Crops
- Online Pest Monitoring and Advisory Services
- Pest Forewarning application
- KRISHI-Digital data portal



जय किसान  
जय विज्ञान



## THREE YEAR ROADMAP (2017-2019)

Government is working on realizing the vision of Hon'ble Prime Minister for doubling of farmers' income by 2022. Towards this, the Ministry of Agriculture Cooperation & Farmers' Welfare will initiate and implement the following over the next three (3) year period of 2017-18 to 2019-20.

### 1. Agriculture Inputs:

#### 1.1 Seeds:

- Seed Village Programme will be expanded from 30,000 villages to 60,000 villages and 500 Seed Production and Processing Units will be set up at Panchayat Level.
- For self-sufficiency in pulses production, 1.5 lakh quintal hybrid seeds will be produced through 150 Seed Hubs.
- Seed Bill will be passed for effective regulation and mandatory registration of seeds.

#### 1.2. Soil Health Management:

- The present cycle of distribution of Soil Health Cards (SHCs) will be completed and the next cycle started in May, 2017 and completed in May 2019. The third cycle will commence thereafter.

- 1000 mini labs will be promoted through the local entrepreneurs. Hand held devices for quick soil testing will be developed through start-ups.
- Software will be developed to generate fertilizer recommendations any time/any site/any crop.
- Customized/micro nutrient coated fertilizers will be promoted in additional 70 districts.
- 80,000 ha to problem soils (alkaline, saline and acid) will be reclaimed.

#### 1.3. Water:

- A dedicated corpus fund of Rs. 5,000 crore through NABARD will be operationalized and 4.8 million hectare will be brought under micro irrigation.

#### 2.0. Productivity improvement and Diversification:

### 2.1. Crops:

- Cropping intensity will be increased by 1 million ha per year through utilization of rice fallow areas for pulses and oilseeds to cover 3 million ha by 2020.
- Climate Resilient Crops will be promoted in chronically drought hit districts (100 nos.) by up-scaling NICRA programme.
- Cultivation of oil palm in wastelands will be promoted by increasing the area of cultivation from 3 lakh ha to 3.75 lakh ha in AP, Arunachal Pradesh, Assam, Karnataka, Mizoram, Nagaland, Tamil Nadu and Tripura and with this intervention, crude palm oil production will be increased from 2 lakh ton to 3 lakh ton in 4 years.
- Pulse production will be increased to 24 million MTs by 2019-20.

### 2.2. Horticulture:

- Bring 4.5 lakh ha of area under improved varieties of horticulture i.e. fruits, vegetables, plantation and other crops including flowers, spices and aromatic plants by 2019-20; and increase protected cultivation for high value crops in additional 1.2 lakh hectare by 2019-20.
- To strengthen post-harvest infrastructure, 5 lakh MT cold storage, 1000 Pack Houses and 150 ripening chambers will be set up.
- Present area under cashew cultivation will be increased from 10.3 lakh ha to 11.5 lakh ha and its production will be enhanced from present 6.7 lakh ton to 9 lakh ton with 3 years gestation period.
- Area under cocoa production as an inter-crop in the states of AP, TN and Karnataka in coconut, oil palm and areca nut will be increased from the present 78,000 ha to 100,000 ha in 2 years.
- Saffron Park under National Saffron Mission will be completed by December 2018.
- Integrated Bee Develop Centres will be set up in the States of Bihar, Haryana, MP, Uttarakhand and Manipur for pollination support in cross-pollinated crops.
- For collection and marketing of honey through milk cooperatives, SAFAL brand of honey has been launched in Delhi. This initiative will further be expanded by NBB via Milk Federations in 2 more States (Gujarat and Rajasthan).

### 2.3. Natural Resource Management:

- Under Agro-forestry Mission (Har Medh Par Ped), 3 lakh ha. area will be brought under agro-forestry (Har Medh Par Ped) by 2019-20.

### 2.4. Rainfed Area Development:

- National Rainfed Area Authority (NRAA) has been revived to act as repository of knowledge for dryland agriculture besides other mandates. Action plans for 150 most vulnerable drought prone districts will be prepared by October 2017 and initiate appropriate interventions.

### 2.5. Organic Farming:

- Organic farming will be promoted in 2.5 lakh ha. through 350 Farmer Producer Organizations (FPOs).
- Under Paramparagat Krishi Vikas Yojana, Government will increase the cluster size from 20 ha to 1000 ha (from 500 ha to 1000 ha under Mission Organic Value Chain Development for NE States) for efficient marketing and to realize potential of organic farming.

### 3.0. Marketing, Storage and other Post-production Infrastructure

- Orient, persuade and handhold States & UTs in adoption of

Model Agricultural Produce and Livestock Marketing (Promotion & Facilitation) Act, 2017.

- Roll out Model Contract Farming Act, 2017 by October 2017.
- Roll out Guidelines on 'Strengthening Warehouse Storage and Warehouse Receipt Based Pledge Loan System' by October 2017.
- Onboard a cumulative of 585 agricultural markets on e-NAM platform by March 2018; consolidate online trading and inter-market transactions.
- Prepare a map of all the dry and cold storage infrastructure in the country and provide information & access to the producers & other stakeholders on Google.
- Under Grameen Bhandar Yojana, link financial assistance to District Storage capacity derived from demand-supply status.

### 4.0. Credit and Crop Insurance

- Agricultural credit
  - Increase coverage of small & marginal farmers under short term credit from the present 43 per cent to 50 per cent by 2018-19.

- Special focus on enhancing credit absorption in Eastern and North-Eastern States of the country.
- Computerization of Primary Agricultural Cooperative Societies (PACSS).
  - Complete computerization of all the 63,000 PACSS in the country by 2019-20.
- Crop Insurance
  - Coverage of Gross Cropped Area (GCA) under PMFBY and WBCIS will be increased from the current 30 per cent (2016-17) to 40 per cent and 50 per cent by 2017-18 and 2018-19 respectively.

## 5. Animal Husbandry, Dairy & Fisheries

### 5.1. Dairy

- Upgrade indigenous breeds/non-descript cows by setting up 50 embryo transfer labs to produce 1.1 lakh number of female cows.
- Under GOKUL Mission, triple artificial insemination (AI) coverage to 80 per cent by 2019-20.
- Ensure 100 per cent vaccination coverage for Foot & Mouth Disease

(FMD) and Brucellosis; and track vaccinated animals through Pashu Sanjeevani App & Health Card.

- Strengthen milk procurement infrastructure:
  - Increase bulk milk collection from 16,000 to 50,000 villages by March, 2018.
  - Under Dairy Infrastructure Development Fund (DIDF), modernize old (10 to 30 years) cooperative dairies.
  - Work towards declaring five states as disease free by March, 2019 and tap export markets in Russia, Middle East and Asia.
  - Promote fodder development at the rate of 10,000 ha. per year through milk cooperatives and Gram Panchayats.

### 5.2. Fisheries

- Enhance productivity by setting up 474 no. of hatcheries in 20 states and introduce 1140 crores finger lings per year into these; and promote ornamental fish culture in 100 of these hatcheries of 8 states.
- Promote 20,000 cage culture & 500 re-circulatory aqua-culture.
- Promote deep sea fishing and



mari-culture by replacing 1600 bottom trawlers with tuna-long liners, introduction of 2800 ocean cages and investment of Rs.44 crore in island development Plan of Andaman & Nicobar and Lakshadweep.

- Promote tilapia/integrated paddy fish farming in Assam & Nagaland by tilapia cage culture; promote paddy fish farming in Kerala, West Bengal and North-Eastern Region.

### 5.3. Small Livestock (goat, sheep, piggery & poultry)

- Under National Livestock Mission (NLM) upgrade 2,50,000 no. of sheep and 5,00,000 no. of goats per year to benefit 2 lakh farmers.
- Set up National Livestock Development Agency (NLDA) on the lines of the National Dairy Development Board (NDDB).
- Transform 18000 backyard poultry units into boilers/layer farms under National Livestock Mission.

### 6.0. Agricultural Extension and Space Technology

- Promote and consolidate use of Information Technology through mobile and web-based services

as integral to man-power based extension services.

- Expand the services of Kissan Call Centres for easy reach to farmers (2018-19).
- Make provision to enable the companies investing in various extension services including Agriculture Technology Management Agency (ATMA), to avail themselves of the tax benefit u/s 35 ccc of the Income Tax Act (by 2018-19).
- Launch 'National Programme for Space Application in Agriculture (NPSAA)' as a comprehensive platform to harvest the advantages of space technology in agriculture & allied sectors.
- Space and Information Technologies will be leveraged to improve efficiency, speed & accuracy of Crop Cutting Experiments (CCEs) and ensure timely settlement of claims of the farmers in accordance with prescribed timelines in the Guidelines. This to be ensured in 2017-18.
- Other reforms
  - Effect amendments to Multi-State Credit Cooperative

Society Act, 2002 to make multi-state societies more efficient & accountable.

- Set up an independent office of the Central Registrar of Cooperative Societies (CRCS) with 4 Regional Offices by 2017-18. This will improve efficiency of administration and effectiveness of supervision & monitoring.

#### 7.0. Agriculture Research

- ICAR to undertake research in Genomics/Gene editing technologies for breakthrough in yield levels and inducing multiple stress tolerance in crops.
- Research in Bio-fortification for nutrient rich food (protein, zinc, vitamin A, anti-oxidants) will be undertaken.
- Address the issue of burning of crop residues through research on scientific management of crop residues by focusing on deconstruction of lignocelluloses for cattle feed and microbial-consortia based conversion for organic manure.

- Indigenous technology for sex sorted semen production will be developed and research undertaken on development of thermo-tolerant vaccines for animals.
- Long staple cotton and high yielding jute varieties will be released.
- For focused research, 75 schemes of ICAR will be restructured into 35 thematic areas.

#### 8.0. Governance Framework

- Adopt the following as the basis of governance:
  - For all schemes of the Ministry:  
**Identify** through Aadhaar  
**Eligibility** through SECC/Gram Sabha  
**Focus** on small & marginal farmers  
**Aggregation** through SHGs, Cooperative and FPOs.  
**Accountability** through use of IT, DBT & Space Technology; and social audit by GPs.

## **IMPORTANT DAY**

<b>1</b>	<b>World Forest Day</b>	<b>21 March</b>
<b>2</b>	<b>World Veterinary Day</b>	<b>Last Saturday of April</b>
<b>3</b>	<b>World Milk Day</b>	<b>1 June</b>
<b>4</b>	<b>National Fish Husbandry Day</b>	<b>10 July</b>
<b>5</b>	<b>Foundation Day of ICAR</b>	<b>16 July</b>
<b>6</b>	<b>World Honey Day</b>	<b>20 August</b>
<b>7</b>	<b>World Coconut Day</b>	<b>02 September</b>
<b>8</b>	<b>World Egg Day</b>	<b>Second Friday of October</b>
<b>9</b>	<b>National Women Farmers Day</b>	<b>15 October</b>
<b>10</b>	<b>World Food Day</b>	<b>16 October</b>
<b>11</b>	<b>World Fish Day</b>	<b>21 November</b>
<b>12</b>	<b>National Milk Day</b>	<b>26 November</b>
<b>13</b>	<b>National Agriculture Education Day</b>	<b>3 December</b>
<b>14</b>	<b>Worlds Soil Day</b>	<b>5 December</b>
<b>15</b>	<b>Jai Kisan Jai Vigyan Week</b>	<b>23 to 29 December</b>

